

**GENERAL CONDITIONS OF CONTRACT (GCC)  
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**1.0 DEFINITIONS**

The Contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of FEDO-FACT and the contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-in-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.

1.1 FACT ENGINEERING AND DESIGN ORGANISATION, hereinafter called 'FEDO-FACT' propose to get the works executed as mentioned in the Contract on behalf of the OWNER/CLIENT as Implementing agency/Executing Agency.

1.2 In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them: -

- (a) **APPROVAL** means approved in writing including subsequent written confirmation of previous verbal approval.
- (b) **BILL OF QUANTITIES (BOQ) or SCHEDULE OF ITEMS OF WORK or SCHEDULE OF QUANTITIES** means the priced and completed Bill of Quantities or Schedule of Quantities forming part of the tender.
- (c) **CONTRACTOR** shall mean the individual, firm, Private or Public Limited Company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company.
- (d) **CONTRACT VALUE** means the sum for which the tender is accepted as per the Letter of Intent (LOI)/Initial Work Order.
- (e) **DRAWINGS** mean the drawings referred to in the contract document including revisions if any and such other drawings as may from time to time be furnished and/ or approved by FEDO-FACT.
- (f) **DATE OF COMMENCEMENT OF WORK:** The date of commencement of work/ date of start of contract shall be reckoned from 10<sup>th</sup> day after the date of issue of Letter of Intent or from the date of issue of Work to proceed notice whichever, is later.
- (g) **ENGINEER-IN-CHARGE** means the Engineer designated by FEDO-FACT, who shall supervise and be in-charge of the work.
- (h) **LANGUAGE:** All documents and correspondence in respect of this

- contract shall be in English Language.
- (i) **"LETTER OF INTENT"** shall mean FEDO-FACT's letter or notification conveying its acceptance of the tender subject to such conditions as may have been stated therein.
  - (j) **'MONTH'** means English Calendar month and 'Day' means a Calendar day of 24 Hours each.
  - (k) **FEDO-FACT shall** mean FACT ENGINEERING AND DESIGN ORGANISATION, a division of Fertilisers and Chemicals Travancore Limited, A Government of India Undertaking with its registered office at Udyogamandal, Kerala or its Administrative officers or its engineer or other employees authorized to deal with any matter with which these persons are concerned on its behalf.
  - l) **OWNER/ CLIENT** means **the Organization, Ministry, Department, Society, Companies, JV entities, Society, Local Self Government Departments, Institutions etc.** who has awarded the work/ project to FEDO-FACT and/ or appointed FEDO-FACT as Implementing / Executing Agency/ Project Manager and/ or for whom FEDO-FACT is acting as an agent and on whose behalf FEDO-FACT is entering into the contract and getting the work executed.
  - m) **PROJECT** means the facility being set up by OWNER/CLINT as per details and location specified in Schedule D.
  - n) **SITE** means the land in possession of OWNER/CLIENT where PROJECT is being set up and WORK is to be performed by CONTRACTOR.
  - o) **INITIAL CONTRACT PRICE** means the value of WORK contracted initially as per Schedule F and excluding value of Equipment, Services and any materials provide by FEDO-FACT/OWNER/CLIENT free of cost to CONTRACTOR.
  - p) **FINAL CONTRACT PRICE** means the aggregate sum payable by FEDO-FACT to CONTRACTOR for work performed as per CONTRACT but excluding value of Equipment, Services and any materials provided by FEDO-FACT/OWNER/CLIENT free of cost to CONTRACTOR.
  - q) **WRITING** means any manuscript typed written or printed statement under or over signature and/or seal as the case may be.
  - r) **WORK** means all duties, responsibilities and obligations to be discharged by CONTRACTOR pursuant to CONTRACT.
  - s) The headings in the clauses/ conditions of tender document is for convenience only and shall not be used for interpretation of the clause/ condition.
  - t) Words imparting the singular meaning only also include the plurals and vice versa where the context requires. Words importing persons or parties shall include firms and corporations and organizations having

legal capacities.

- u) **Excepted Risk** are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the FEDO-FACT or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to FEDO-FACT's faulty design of works.
- v) **Market Rate** shall be the rate as decided by the Engineer-in-Charge on the basis of the prevailing cost of materials and labour at the site where the work is to be executed plus the percentage mentioned elsewhere in the tender document to cover, all overheads and profits.

## **2.0 SECURITY DEPOSIT CUM PERFORMANCE GUARANTEE:**

2.1 Within fifteen (15) days of the ZERO DATE, CONTRACTOR shall provide FACT with a Bank Guarantee as per Proforma given in SCHEDULE-L hereof, from a Nationalized Bank in India for a sum calculated at TEN Percentage (10%) of the initial Contract Price, towards security for due and faithful performance of CONTRACTOR. The Bank Guarantee shall be kept valid until all obligations of CONTRACTOR including the warranties vide Article-41 are fulfilled and a discharge certificate is issued by FACT.

2.2 DELETED

## **3.0 SECURITY DEPOSIT/RETENTION MONEY**

3.1 DELETED

3.2 DELETED

3.3 The release/refund of security deposit cum performance guarantee of the contractor shall be subject to the observance/compliance of the conditions as under and whichever is later:

- a) Expiry of the defect liability period inconformity with provision contained in Clause 41.0 (Defect liability Period). The expiry of defect liability period shall be extended from time to time depending upon extension of time granted by FEDO-FACT.
- b) The contractor produces a clearance certificate from the labour office.

c) As soon as the work is virtually completed, the contractor shall apply for the labour clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge. The Engineer-in-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate.

3.4 FEDO-FACT reserves the right for part or full forfeiture of Security Deposit in addition to other claims in the event of contractor's failure to fulfill any of the contractual obligations or in the event of termination of contract as per terms and conditions of contract.

#### **4.0 SCOPE OF SERVICES**

**4.1 CONTRACTOR shall carry out WORK as described in detail in SCHEDULE - A - Scope of Work /Schedule - F- Schedule of Items of Work or Schedule of Quantities, all in conformity with the drawings, specifications, codes, standards and instructions provided by FEDO-FACT from time to time or specified herein as applicable.**

**4.2 CONTRACTOR'S responsibility includes preparation of any detailed working drawings, cutting diagrams, fabrication drawings and / or such other technical documentation as may be necessary to elaborate the information provided by FEDO-FACT in the manner described in Clause 13.4 hereof.**

**4.3 CONTRACTOR shall also purchase and provide for use in carrying out WORK, pre-fabricated or otherwise, such items of materials and supplies as are required for carrying out WORK in addition to EQUIPMENT and materials if any, directly provided by FEDO-FACT.**

4.4 The quantities indicated in Schedule - F are only approximate and CONTRACTOR shall carry out all items of WORK in required quantities as per drawings and specifications provided by CONSULTANT, subject to provisions of Clause 18.0 hereof.

4.5 Work shall be executed with all due diligence, in the manner specified herein, to the satisfaction of Engineer-in-Charge within the time schedule agreed to herein for the respective item. CONTRACTOR shall post at SITE appropriate number of qualified and competent supervisory staff for day-to day supervision of work.

4.6 Workmen engaged by CONTRACTOR shall be qualified, experienced and competent for the respective item of works and will be subject to craft-test prescribed by ENGINEER - IN -CHARGE. Where necessary, supervisors and workmen engaged by CONTRACTOR shall hold licences / permits for carrying out the respective work.

4.7 CONTRACTOR further undertakes to co-operate with FEDO-FACT as well as other Contractors appointed by FEDO-FACT and operating at SITE and agrees to freely exchange technical information as may be reasonably asked for by FEDO-FACT.

#### **5.0 OWNER'S REPRESENTATIVE**

5.1 All obligations of OWNER /CLIENT under the CONTRACT shall, unless otherwise specifically mentioned, be carried out through FACT Engineering & Design Organization (FEDO-FACT). The Resident Construction Manager appointed by FEDO-FACT at SITE shall be FEDO-FACT'S REPRESENTATIVE, and shall represent OWNER/ FEDO-FACT for all matters concerning this CONTRACT except as otherwise provided herein.

5.2 All instructions and orders to CONTRACTOR shall be issued by FEDO-FACT'S REPRESENTATIVE and /or an ENGINEER - IN CHARGE nominated by him and communicated in writing to CONTRACTOR'S REPRESENTATIVE, if available at SITE or to CONTRACTOR at the address provided by the CONTRACTOR. WORK shall be executed under the direction and to the satisfaction of the ENGINEER - IN CHARGE, all in accordance with the provisions of Contract. CONTRACTOR shall proceed with WORK in accordance with the decisions, orders and / or instructions issued by FEDO-FACT'S REPRESENTATIVE or the ENGINEER - IN - CHARGE provided that,

- i) If the CONTRACTOR shall without undue delay after being given a decision, order or instruction otherwise than in writing, require it to be confirmed in writing, such decision, order or instruction shall not be effective until written

confirmation thereof has been received by CONTRACTOR, and

- ii) If the CONTRACTOR disagrees with or questions a written decision, order or instruction given by ENGINEER - IN CHARGE he may give notice in writing to ENGINEER - IN CHARGE within seven (7) days of receipt of such decision, order or instruction stating reasons there for; but issue of such notice shall not relieve CONTRACTOR of the obligation to proceed with WORK in accordance with the decision, order or instruction in respect of which the notice has been issued, without prejudice to other remedial measures provided herein.

- 5.3 FEDO-FACT may change the FEDO-FACT'S REPRESENTATIVE and/or ENGINEER IN CHARGE at any time, and shall inform CONTRACTOR promptly, in writing, of such changes.

#### **6.0 CONTRACTOR'S REPRESENTATIVE**

- 6.1 CONTRACTOR shall be represented at SITE by a technically qualified, competent and experienced Engineer whose name along with qualification and experience shall be intimated to FEDO-FACT/OWNER in writing at least 2 weeks prior to commencement of CONTRACTOR'S activities at SITE for approval by FEDO-FACT/OWNER. The said representative shall be present at SITE during working hours and any orders, instructions or other communications delivered to him by FEDO-FACT, OWNER and / or ENGINEER- IN - CHARGE shall be deemed to have been received by CONTRACTOR.
- 6.2 Any communication received by FEDO-FACT/OWNER from CONTRACTOR'S REPRESENTATIVE shall be deemed issued by CONTRACTOR and shall be binding on CONTRACTOR.
- 6.3 CONTRACTOR shall not change the Representative at SITE without prior written approval of FEDO-FACT/OWNER.

#### **7.0 CONTRACTOR TO INFORM HIMSELF**

- 7.1 Certain information pertaining to SITE and considered relevant for the execution of WORK are given in SCHEDULE - D - SITE CONDITIONS. Some of the information given therein are likely to be typical and are intended only to give a general idea about SITE. CONTRACTOR is deemed to have visited the SITE and the locality and to have gathered clear idea of the locality, weather conditions, access to SITE space availability, sub - soil conditions, availability of materials, availability and terms of

service by labour and such other information that may have influence on execution of WORK.

- 7.2 CONTRACTOR is deemed to have carefully examined specifications, schedules and drawings and also to have satisfied himself on the nature and extend of WORK to be executed before submission of a tender and entering into CONTRACT.

**8.0 SUPPLIES BY OWNER**

There will not be any free issue materials by OWNER for this work.

**9.0 CONTRACTOR'S SCOPE OF SUPPLY**

- 9.1 The contractor shall, at his own expense, provide all materials, required including Cement & Steel for the works. The contractor shall at his own expense and without delay; supply to the Engineer-in-Charge samples of materials to be used on the work and shall get the same approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The contractor shall at his risk and cost, submit the samples of materials to be tested or analyzed and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications.
- 9.2 CONTRACTOR shall procure in time at his own cost and use in WORK all materials required in carrying out WORK other than any EQUIPMENT and materials issued by FEDO-FACT/OWNER. Materials so procured and brought to SITE shall be stored by CONTRACTOR at place allotted for the purpose by ENGINEER - IN - CHARGE and security arrangements shall be made by CONTRACTOR. CONTRACTOR shall provide such materials in sufficient quantities and in time so that WORK can be proceeded with uninterruptedly and shall take advance action in procurement of items which are in scarce supply or availability of which are seasonal.
- 9.3 Materials provided by CONTRACTOR shall be brand new and of specification agreed to herein or as approved by ENGINEER - IN - CHARGE. Materials brought to SITE shall be used in WORK only after approval by ENGINEER - IN - CHARGE and if so required by him, CONTRACTOR shall provide test certificates and / or samples for verifying the quality. Mill certificates covering physical and analytical tests are to be produced as called for by ENGINEER - IN-CHARGE at no extra cost. If any further tests are to be carried out CONTRACTOR shall arrange for the same at no additional cost to FEDO-FACT/OWNER. CONTRACTOR shall declare the

manufacturer's name of such materials and provide, if asked for, evidence relating to the source and purchase there from. Decision by ENGINEER - IN - CHARGE shall be final and binding on CONTRACTOR in respect of whether the material provided is conforming to agreed specification or not. The brands of all materials, articles fittings etc. approved together with the names of the manufacturers and firms from which supplies have been arranged shall be recorded in the site order book.

- 9.4 Rejected material shall be removed by CONTRACTOR from SITE immediately and the costs for removal of such materials shall be borne by the contractor.
- 9.5 The approved samples shall be kept in the custody of the Engineer-in-Charge of FEDO-FACT till completion of the work. Thereafter the samples except those destroyed during testing shall be returned to the contractor. No payment will be made to the contractor for the samples or samples destroyed in testing.
- 9.6 The contractor shall set up and maintain at his cost, a field testing laboratory for all day to day tests at his own cost to the satisfaction of the Engineer-in-Charge. This field testing laboratory shall be provided with equipment and facilities to carry out all mandatory field tests as per MORTH/CPWD (as the case may be) specifications. The laboratory building shall be constructed and installed with the appropriate facilities. Temperature and humidity controls shall be available wherever necessary during testing of samples. All equipment shall be provided by the Contractor so as to be compatible with the testing requirements specified: The Contractor shall maintain all the equipment in good working condition for the duration of the contract. The Contractor shall provide approved qualified personnel to run the laboratory for the duration of the Contract. The number of staff and equipment available must at all times be sufficient to keep pace with the sampling and testing program as required by the Engineer-in-charge. The Contractor shall fully service the site laboratory and shall supply everything necessary for its proper functioning, including all transport needed to move equipment and samples to and from sampling points on the site, etc. The Contractor shall re-calibrate all measuring devices whenever so required by the Engineer-in-charge and shall submit the results of such calibration without delay. All field test shall be carried out in the presence of FEDO-FACT's representative. All costs towards samples, materials, collection, transport, manpower, testing etc. shall be borne by the

Contractor and are deemed to be included in the rates quoted by him in the bill of quantities.

- 9.7 The contractor(s) shall display the calibration certificate of each equipment at the location of equipment & shall get recalibrated at least one week before its expiry date.

**10.0 MOBILISATION ADVANCE (Mobilisation advance is not applicable)**

10.1 DELETED

10.2 DELETED

10.3 DELETED

10.4 DELETED

10.5 DELETED

**11.0 SECURED ADVANCE (Not Applicable)**

11.1 DELETED

11.2 DELETED

11.3 DELETED

**12.0 TIME-SCHEDULE**

- 12.1 CONTRACTOR shall carry out work in a phased manner and hand over the respective items to FEDO-FACT after carrying out such tests as are prescribed herein within the programme given in SCHEDULE B - PROGRAMME OF WORK. The responsibilities of CONTRACTOR in respect of programme vide SCHEDULE - B will be effective from the date on which Letter of Intent has been issued by FEDO-FACT.

- 12.2 Time is the essence of CONTRACT and CONTRACTOR understands the necessity of achieving the stage-wise targets in the specified sequence as set-forth in SCHEDULE - B and hereby undertakes to mobilise the required resources and exercise due diligence to adhere to them. During the implementation of CONTRACT, FEDO-FACT may issue to CONTRACTOR, where applicable, instructions/ requirements in respect of priorities and sequence in the overall interest of the PROJECT and CONTRACTOR shall fully co-operate with FEDO-FACT in following these instructions and submit to FEDO-FACT a detailed working programme for

achievement of these, which shall be reviewed and approved by ENGINEER-IN-CHARGE of FEDO-FACT.

12.3 In the event FEDO-FACT is not satisfied that the programme proposed by contractor is adequate to meet targets set forth in SCHEDULE-B, CONTRACTOR shall modify the programme suitably to the satisfaction of FEDO-FACT and carry out the activities accordingly.

12.4 CONTRACTOR recognizes possibility of inclement weather conditions at SITE and agrees to take all reasonable precautions and measures necessary to permit execution of WORK as per agreed programme despite such adverse conditions and CONTRACTOR shall not be entitled for any additional payment what so ever, on this account.

12.5 CONTRACTOR shall not be entitled for extension of time - schedule for any reason whatsoever except as provided in Clauses -15.2,15.7,16.4 and 44.0 hereof.

### **13.0 TECHNICAL DOCUMENTS**

13.1 The Technical Documents enclosed as part of SCHEDULE-C hereof are, unless otherwise specified, preliminary and typical and are intended only to generally represent the nature of WORK to be executed. FEDO-FACT will be issuing to CONTRACTOR, from time to time, final and more detailed drawings and documents as are listed in SCHEDULE-C as also new drawings whenever necessary to depict the scope of work. CONTRACTOR shall execute WORK only based on documents bearing the stamp "GOOD FOR CONSTRUCTION".

13.2 Documents once issued by CONSULTANT for construction may subsequently be revised without prejudice to Clause-15.0 (Change in work) hereof and as soon as the revised issues are received CONTRACTOR shall withdraw the previous issue from the field and return to Engineer-in-Charge of FEDO-FACT for cancellation.

13.3 CONTRACTOR shall carryout the WORK in strict conformity with the

drawings, specifications and such other documents and instructions provided by FEDO-FACT and standards and codes of practice prescribed by FEDO-FACT for the respective items of WORK. Where FEDO-FACT's own standards are referred to, the same will be provided by FEDO-FACT, but where other published standards/codes of practice like CPWD/MORTH specifications are prescribed, CONTRACTOR shall make own arrangements to be equipped with copies of such documents for use in execution of WORK and failure to do so shall be deemed negligence in performance of CONTRACT. In the event of any conflict or contradiction between any two or more of the documents provided by FEDO-FACT or between such documents and the prescribed codes/standards, CONTRACTOR shall bring the same to the attention of ENGINEER - IN CHARGE as soon as it is noticed by CONTRACTOR; and the decision of the ENGINEER - IN CHARGE shall be followed.

13.4 Wherever necessary CONTRACTOR shall prepare detailed working drawings, cutting diagrams, fabrication drawings and/ or such other technical documents all in conformity with Technical Information provided by FEDO-FACT and as may be necessary for execution of WORK and submit same to FEDO-FACT in required number of copies well in advance in commencement of related WORK. FEDO-FACT shall return one copy to CONTRACTOR with comments, if any, within Ten (10) working days of receipt from CONTRACTOR and CONTRACTOR shall execute WORK only based on documents reviewed / approved by FEDO-FACT. However, CONTRACTOR is solely responsible to ensure that WORK is executed as per designs, drawings, specifications and other technical information provided by FEDO-FACT and review /comments by FEDO-FACT in the aforesaid manner of CONTRACTOR'S documents shall not absolve CONTRACTOR of his responsibility.

13.5 Installation of special items of EQUIPMENT shall be taken up only after thorough study of Manufacturer's instructions for handling, assembly and installation, detailed circuit diagram, etc. as may be applicable as per

SCHEDULE - A/ Schedule -F and where such information is not received CONTRACTOR shall ask for the same.

#### **14.0 QUALITY OF WORK**

14.1 CONTRACTOR shall execute WORK in the most substantial, professional and workman -like manner in full conformity to the drawing and specifications and instructions provided by FEDO-FACT.

14.2 CONTRACTOR shall be responsible for the dimensional accuracy of WORK carried out within the measurement tolerance specified. In case where no measurement tolerance is specified, decision of ENGINEER-IN-CHANGE shall be final in respect of whether an item of WORK carried out conforms to required standard of dimensional accuracy or not.

14.3 Any designs carried out by CONTRACTOR shall be done in a professional and engineer - like manner in conformity with applicable standards and codes of practice.

14.4 CONTRACTOR shall be responsible to ensure that WORK executed conforms to applicable statutory regulations in force on the date on which Letter of Intent is issued by FEDO-FACT. In the event of any change in such statutory regulations or any new regulations becoming effective after the date of Letter of Intent that have influence on WORK, CONTRACTOR shall promptly notify FEDO-FACT of the consequent changes required in WORK and its impact, if any, on cost and time - schedule agreed to herein and the provisions of Clause - 15.0 (Change in Work) hereof will thereafter apply.

14.5 All items of work in the bill of quantities/ schedule of quantities shall be carried out as per the CPWD/ MORTH (as the case may be) specifications, drawings and instructions of the Engineer-in-Charge of FEDO-FACT and the rates shall include for supply of required materials including proper storage, consumables, skilled & unskilled labour, supervision and tools, tackles, plant & machinery complete as called for in the detailed specifications and conditions of the contract. Latest updated CPWD specification shall be followed for execution of work.

#### **14.6 ACTION IN CASE WORK NOT DONE AS PER SPECIFICATIONS**

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Engineer-in-charge, his authorized subordinates in

charge of the work and all the superior officers, officer of the Quality Assurance Unit of FEDO-FACT or any organization engaged by FEDO-FACT for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates in-charge of the work that any work has been executed - with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall rectify, or remove and reconstruct the work so specified in whole or in part as the case may require or remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under Clause 20.0 (Compensation for delay) of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in- Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the Engineer in charge may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

#### 14.7 ACTION IN CASE OF BAD WORK

If it shall appear to the Engineer-in-Charge or his authorized representative in charge of the work or to the Chief Technical Examiner or to any other inspecting agency of Government/ State Government/ Owner where the work is being executed, that any work has been executed with unsound, imperfect, or unskillful workmanship or with materials of any inferior description, or that any materials or articles provided by him

for the execution of the work are unsound or of a quality inferior to that contracted for or otherwise not in accordance with the contract, the contractor shall on demand in writing which shall be made within twelve months of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, Certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own proper charge and cost, and in the event of his failing to do so within a period to be specified by the Engineer-in-Charge in his demand aforesaid while the contractor's failure to do so shall continue, the Engineer-in-Charge may rectify or remove and re-execute the work or remove and replace with others, the material or articles complained of as the case may be at the risk and expense in all respects of the contractor.

## **15.0 CHANGE IN WORK**

15.1 Any modification in specification and / or quantity of WORK due to any of the following reasons will constitute a CHANGE IN WORK.

- i) Increase or decrease in quantity of WORK as per final designs provided by FEDO-FACT as compared to those specified in SCHEDULE - F (Schedule of Quantities) hereof, hereinafter referred to as "Variation in Quantity"
- ii) Variation in specifications for any item of WORK as per final design given by FEDO-FACT as compared to SCHEDULE - F hereof or consequent to changes made after date of Letter of Intent, in applicable statutory regulations hereinafter referred to as "Variation in Specification"
- iii) Any new items of WORK not specified or included in SCHEDULE - A (Scope of Work) and for which any price or rate of cost is not specified in SCHEDULE - F (Schedule of Quantities) hereinafter referred to as "Extra Item". Extra, substituted items and deviation in quantities of BOQ/SOW, items will be paid as per CPWD norms.
- iv) Any re-work necessitated by change in design by FEDO-FACT of an item of WORK already executed by CONTRACTOR as per CONTRACT,

hereinafter referred to as "Requested Re-work".

- v) Any modification or re-work executed by CONTRACTOR by way of rectification of mistakes or making good defective WORK shall not be treated as CHANGE IN WORK.

15.2 In the case of "Variation in Quantity" of an item of WORK, the Contract value for the item shall be adjusted pro-rata. In case aggregate increase or decrease in value of Contract due to Variation in Quantity and / or any other reason exceeds 25% of the Initial Contract Price as per Schedule - F the adjustment in price for such variations beyond the Initial 25% margin shall be discussed and agreed between the parties. However, CONTRACTOR'S prices shall be firm for variation upto (+) 25% of Initial Contract value.

15.3 DELETED

15.4 i) Deviation, Extra Items and pricing.

In the case of extra items ( Items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of work order or occurrence of the items, claim rates, supported by proper analysis, for the work and the Engineer in Charge shall within one month of the claims supported by analysis, after giving consideration to the analysis of rates submitted by the Contractor, determine the rates on the basis of market rates and the Contractor shall be paid in accordance with rates so determined .

In case of substituted Items (Items that are taken up with partial substitution or in lieu of Items of work in the contract), the rate for the agreement item (to be substituted) and the substituted item shall also be determined in the manner given below.

ii) Deviation, substitute items, Pricing:

a). If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item(to be substituted)

b). If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item(to be substituted).

- 15.5 In the event CONTRACTOR is called upon to carry out any Requested Re-work, he shall be compensated for any dismantling, demolishing or reconstruction as is applicable and determined in the same manner as provided in Clause 15.3 above
- 15.6 Notwithstanding the above, if specific provisions are made for the adjustment of price or method of determining the same in SCHEDULE - F or the Special Conditions of contract vide SCHEDULE-Q provisions therein shall prevail over such provisions in the Clause - 15.0 which are in conflict with them.
- 15.7 In the event CHANGE IN WORK is of a substantial nature and is likely to affect CONTRACTOR'S obligations in respect of Time Schedule, CONTRACTOR shall request ENGINEER - IN - CHARGE in writing of any extension of time schedule required giving reasons therefore as such extension shall be effective only when approved by CONSULTANT.
- 15.8 The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right. However, the Engineer-in-charge may authorize consideration of such claims on merits.
- 15.9 For the purpose of operation, the following works shall be treated as works relating to foundation unless and otherwise defined in the Contract:
- i. Buildings: All works upto 1.2 metres above ground level or up to floor 1 level whichever is lower.
  - ii. For abutments, piers and well sinking: All works upto 1.2m above the bed level.
  - iii. For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/tanks and other elevated structures: All works upto 1.2 metres above the ground level.
  - iv. For reservoirs/tanks (other than overhead reservoirs/tanks). All works upto 1.2 metres above the ground level.
  - v. For basement: All works upto 1.2m above ground level or upto floor 1 level whichever is lower.
  - vi. For Roads, all items of excavation and filling including treatment of sub base.

15.10 Any operation incidental to or necessarily has to be in contemplation of tenderer while filling tender or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not specifically indicated in the description of the item and the relevant specifications shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates as the case may be, nothing extra shall be admissible for such operations.

15.11 DELETED

### **16.0 TIME ESSENCE OF CONTRACT & EXTENSION FOR DELAY**

**16.1** The time allowed for execution of the Works is specified in the Notice Inviting Tender (NIT). Time shall be the essence of the contract and Contractor shall ensure completion of the entire work within the stipulated time of completion. The execution of the works shall commence within 10 days from the date of issue of Letter of Intent or the date on which the Engineer-in-Charge issues written orders to commence the work, whichever, is later. This date shall be reckoned as the ZERO date of Contractor. If the Contractor commits default in commencing the execution of the work as aforesaid, the FEDO-FACT shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the Earnest Money, Security Deposit & Performance Guarantee absolutely.

16.2 CONTRACTOR recognizes possibility of inclement weather conditions at SITE and agrees to take all reasonable precautions and measures necessary to permit execution of WORK as per agreed programme despite such adverse conditions and CONTRACTOR shall not be entitled for any additional payment what so ever, on this account.

**16.3** If the work(s) be delayed by:

- i. Force-majeure or
- ii. Abnormally bad weather, or
- iii. Serious loss or damage by fire, or
- iv. Epidemics, Pandemics, Civil commotion, local commotion of workmen, strike or lockout, affecting any or the trades employed on the work, or
- v. Delay on the part of other contractors or tradesmen engaged by Engineer-in-Charge in executing work not forming part of the Contract, or
- vi. Non-availability of stores, which are responsibility of the FEDO-FACT or,
- vii. Non-availability or break down of tools and plant to be supplied or supplied by FEDO-FACT or,
- viii. Any other cause which, in the absolute discretion of the FEDO-FACT, is beyond the Contractor 's control, then upon the happening of any such

event causing delay, the Contractor shall immediately give notice thereof in writing to the Engineer-in-Charge within 07 days but shall nevertheless use constantly his best endeavour to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

- 16.4 In case delay by FEDO-FACT is of a substantial nature and has affected WORK or part thereof in such a manner that it cannot be proceeded with as per agreed schedule, the time- schedule for the part so affected shall be extended correspondingly. Decision of ENGINEER-IN-CHARGE shall be final in respect of any extension of time.
- 16.5 Request for extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay in the prescribed form. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. In any such case FEDO-FACT may give a fair and reasonable extension of time for completion of work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge in writing within a reasonable time from the receipt of such request. Non application by the contractor for extension of time shall not be a bar for giving a fair and reasonable extension by the Engineer-in- Charge and the extension of time so given by the Engineer-in-Charge shall be binding on the contractor.
- 16.6 In any case CONTRACTOR shall not be entitled for any financial compensation or increase in Contract Price in consequence of such delay or interruption.

#### **17.0 TIME SCHEDULING & PROGRESS REPORTING**

- 17.1 Within 10 (Ten) days from issue of Letter of Intent, the Contractor shall submit a CPM network/ PERT chart/ Bar Chart for completion of work within stipulated time. This will be duly got approved from FEDO-FACT. This approved Network/ PERT Chart shall form a part of the agreement. Achievement of milestones as well as total completion has to be within the time period allowed.

The Chart shall be prepared in direct relation to the time stated in the contract documents for completion of items of the works. In the event, FEDO-FACT is not satisfied by the programme proposed by Contractor, he shall modify the programme suitably to the satisfaction of FEDO-FACT and the contractor is bound to carry out the activities accordingly.

- 17.2 The physical progress report including photographs shall be submitted by the contractor on the prescribed format & the intervals (not exceeding one month) as decided by the Engineer in Charge. The compensation for delay as per Clause 20.0 and as per Special conditions of contract clause 36" shall be leviable at intermediate stages also, in case the required progress is not achieved to meet the above time deadlines of the completion period and/ or milestones of time and progress chart, provided always that the total amount of Compensation for delay to be paid under this condition shall not exceed 2.45% of the tendered value of work".
- 17.3** Contractor shall mobilize and employ sufficient resources for completion of all the works as indicated in the agreed BAR CHART/PERT Network. No additional payment will be made to the contractor for any multiple shift work or other incentive methods contemplated by him in his work schedule even though the time schedule is approved by the Engineer-in-Charge.
- 17.4** During the currency of the work the contractor is expected to adhere to the time schedule on mile stone and total completion and this adherence will be a part. of Contractor's performance under the contract. During the execution of the work contractor is expected to participate in the review and updating of the Network/BAR CHART undertaken by the FEDO-FACT. These reviews may be undertaken at the discretion of Engineer-in-charge either as a periodical appraisal measure or when the quantum of work order on the contractor is substantially changed through deviation orders or amendments. The review shall be held at site or any of the offices of FEDO-FACT/OWNER/CLIENT at the sole discretion of FEDO-FACT. The contractor will adhere to the revised schedule thereafter. The approval to the revised schedule resulting in a completion date beyond the stipulated date of completion shall not automatically amount to a grant of extension of time to the contractor.
- 17.5 Contractor shall submit (as directed by Engineer-in-Charge) progress reports on a computer based program (program and software to be approved by Engineer-in-Charge) highlighting status of various activities and physical completion of work. The contractor shall send completion report with as built drawings to the office of Engineer-in-Charge, of FEDO-FACT in writing within a period of 30 days of completion of work.
- 17.6 The contractor shall also make sufficient arrangement for photography/videography so that photographs video can be taken of any specific activity at any point of time. The contractor shall also make arrangement of software like MS Project etc for the purpose of preparing progress report.

17.7 The photographs of the project taken on last day of every month indicating progress of work (in soft copies) shall be attached along with the physical progress reports to be submitted to Engineer-in-charge.

#### **18.0 VARIATIONS & OMISSIONS**

18.1 CONTRACTOR shall not alter any of WORK except as directed in writing by ENGINEER - IN- CHARGE. CONSULTANT shall have full powers during execution of CONTRACT to alter, amend, omit, add or otherwise vary WORK, from time to time by issue of written notice therefore to CONTRACTOR and CONTRACTOR shall carry out such variations and be bound by CONTRACT so far as applicable as though the said variation is stated in CONTRACT. In case, in the opinion of CONTRACTOR, the said variation will involve an increase or decrease in the Contract Price or any of the other obligations of CONTRACTOR hereunder, subject to provisions under Clause 6.0, CONTRACTOR shall within seven (7) days of receipt of the said notice advise ENGINEER - IN - CHARGE of that effect and only on receipt of written acceptance of same from ENGINEER - IN - CHARGE, CONTRACTOR shall give effect to the requested variation.

18.2 The difference in Contract Price; if any, occasioned by such variations shall be added to or decreased from the Contract price and paid in the same manner as Contract Price.

#### **19.0 ESCALATION**

NO ESCALATION SHALL BE APPLICABLE ON THIS CONTRACT.

#### **20.0 COMPENSATION FOR DELAY (Please refer Special Conditions)**

20.1 DELETED

20.2 In case, the contractor does not achieve a particular milestone mentioned elsewhere in the tender document, or the re-scheduled milestone(s) the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. With-holding of this amount or failure to achieve a milestone, shall be automatic without any notice to the Contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount.

20.3 Applicable GST rules shall be considered on the amount of Compensation for Delay. GST at the prevailing rate, if applicable on Compensation for Delay shall be recovered extra from the Contractor on the amount of such Compensation for Delay levied as per the contractual terms. Owner shall raise separate tax invoice for recovery of Compensation for Delay along with applicable GST.

### **21.0 RECOVERY OF DUES FROM CONTRACTOR**

FEDO-FACT shall have recourse to CONTRACTOR for any costs, claims, demands, proceedings, damages and expenses whatsoever arising out of or in connection with any failure of CONTRACTOR to perform any of his obligations under the terms of CONTRACT. Any amount due from CONTRACTOR as per CONTRACT shall be deducted from money due or becoming due to CONTRACTOR under CONTRACT or under any other account or may be recovered by action at law.

### **22.0 CONSEQUENTIAL LOSSES**

22.1 Liabilities of either party to the other are limited to those specifically provided for herein.

22.2 Neither FEDO-FACT nor CONTRACTOR shall under any circumstances be liable in respect of any in direct or consequential loss or loss of business or loss of profit suffered by the other party in connection with or arising out of CONTRACT except as specified in Clause-20- Compensation for delay hereof and as per Special conditions of contract clause 38.

### **23.0 TAXES AND DUTIES (For GST, Please refer the respective clauses in SCC and elsewhere mentioned in this tender document)**

23.1 Except GST which shall be extra, all other taxes / duties/cess/ levies etc as applicable shall be included in the quoted amount. GST details shall be quoted separately in the column provided in BOQ

#### **23.2 INCOME TAX DEDUCTION (TDS)**

Income tax deductions shall be made from all payments made to the contractor including advances against work done, as per the rules and regulations in force, in accordance with the Income Tax act prevailing from time to time

23.3 DELETED

23.4 DELETED

23.5 The imposition of any new and/or increase in the aforesaid taxes, duties levies (including fresh imposition of any other Tax) is imposed by Statute, after the last stipulated date for the receipt of tender

including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of Engineering-in charge attributable to delay in execution of work within the control of contractor. The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, give a written notice thereof to the Engineering-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto. In the event of non-payment/default in payment of any of the above taxes, FEDO-FACT reserves the right to with-hold the dues/payments of contractor and make payment to local/state/Central Government authorities or to labourers as may be applicable.

23.6 DELETED

23.7 The stamp duty and registration charges, if any, on the contract agreement levied by the Government or any other statutory body, shall be paid by the contractor as applicable in the state of work.

23.8 It will be incumbent upon the Contractor to obtain a GST registration certificate and necessary evidence to this effect shall be furnished by the Contractor to FEDO-FACT.

23.9 DELETED

23.10 In the event of decrease I relaxation and I or waiver of any of the existing 1 prevailing tax(es), duties, levies, cess by Central I state Govt. Or any other statutory body(ies), after the last stipulated date for the receipt of tender including extension (if any), and the contractor thereupon has been paid or has raised claims of such tax(es), duties, levies, cess; such sums shall be recovered I deducted (from claims raised but which has not been paid) effective from the date as reckoned in the relevant statutory order / law /ordnance etc. The contractor, shall, within a period of 30 days of any such waiver/relaxation/decrease in tax(es), duties, levies, cess, give a written notice thereof to Engineer-in-charge stating the statutory change with documentary proof thereto. Provided always that Engineer-in-charge shall have full powers to effect recovery/deduction on account of any such statutory change even if contractor has not intimated in the event when any such statutory action comes to his notice.

#### **24.0 INSURANCE AND LIABILITY FOR DAMAGE**

**24.1** Contractor is required to take contractor's all risk policy or erection all risk policy (as the case may be) from an approved insurance company in the

joint name with FEDO-FACT and bear all costs towards the same for the full period of execution of works including the defect liability period for the full amount of contract against all loss of damage from whatever cause arising other than excepted risks for which he is responsible under the terms of the contract and in such manner that the FEDO-FACT and the contractor are covered during the period of construction of works and/or also covered during the period of defect liability for loss or damage

- a. The work and the temporary works to the full value of such works.
- b. The materials, constructional plant, centering, shuttering and scaffolding materials and other things brought to the site for their full value.

Whenever required by FEDO-FACT, the contractor shall produce the policy or the policies of insurance and the receipts for payment of the current premium.

#### 24.2 INSURANCE UNDER EMPLOYEE'S COMPENSATION ACT

Contractor is required to take insurance cover under the Employee's Compensation Act, 1923 amended from time to time from an approved insurance company and pay premium charges thereof. Wherever required by FEDO-FACT the contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

#### 24.3 THIRD PARTY INSURANCE

Contractor is required to take third party insurance cover for an amount of 5%(five percent) of contract value from an approved insurance company for insurance against any damage, injury or loss which may occur to any person or property including that of FEDO-FACT, arising out of the execution of the works or temporary works. Wherever required by FEDO-FACT the contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums. These Policies apply only to insurance risks at SITE and no other location.

In case of failure of the contractor to obtain contractors all risk policy, insurance under Employee's compensation act and third party insurance as described above within one month from the date of commencement of work, running account payments of the contractor shall be withheld till such time the aforesaid insurance covers are obtained by the contractor.

- 24.4 The contractor shall at all times indemnify FEDO-FACT / OWNER against any loss, damage or other liabilities in consequence due to any negligent act or omission by Contractor or his workmen or compensation under the provision of Payment of Wages Act-1936, Minimum Wages Act-1948,

Employer's liability Act-1938, the Employee's Compensation Act-1947, Industrial Disputes Act-1947 and Maternity Benefit Act-1961 or any modifications thereof or any other law in force. Without limiting his obligations and liabilities as above provided, the contractor shall insure against all claims, damages or compensation payable under the Employee's Compensation Act 1923 or any modification thereof or any other law relating thereto.

**25.0 ROYALTY ON MATERIALS:**

- 25.1 The contractor shall deposit royalty and obtain necessary permit for supply of bajri, stone, kankar, sand and other materials etc. from the local authorities and quoted rates shall be inclusive of royalty.
- 25.2 The contractor shall be deemed to have inspected the site, its surrounding and acquainted itself with the nature of the ground, accessibility of the site and full extent and nature of all operations necessary for the full and proper execution of the contract, space for storage of materials, constructional plant, temporary works, restrictions on the plying of heavy vehicles in area, supply and use of labour, materials, plant, equipment and laws, rules and regulations, if any, imposed by the local authorities.
- 25.3 The rates and prices to be tendered in the bill of quantities are for completed and finished items of works and complete in all respects. It will be deemed to include all constructional plant, labour, supervision, materials, transport, all temporary works, erection, maintenance, contractor's profit and establishment/overheads, together with preparation of designs & drawings pertaining to casting yard, shop drawing, fabrication drawing (if required), staging form work, stacking yard, etc. all general risk, all taxes, royalty, duties, cess, octroi and other levies, insurance liabilities and obligations set out or implied in the tender documents and contract.
- 25.4 If any temporary/ permanent structure is encountered or safety of such structure in the vicinity is endangered due to execution of the project, the contractor has to protect the structures by any means as per direction of Engineer-in-Charge. If any damage is caused to any temporary or permanent structure(s) in the vicinity due to execution of the project, the contractor has to make good the same by any means as per direction of Engineer-in-Charge. The contractor should inspect the site of work from this point of view. The cost to be incurred in this regard shall be deemed to be included in his quoted rates of BOQ items and the contractor shall not be entitled for any extra payment in this regard.

**26.0 WATER AND ELECTRICITY**

The contractor shall make his own arrangement for Water & Electrical power for construction and other purposes at his own cost and pay requisite electricity and water charges. The contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

**27.0 ACCOMMODATION-SITE OFFICE, LABOUR HUTS & COMMUNICATION**

- 27.1 On acceptance of tender, the contractor at his own cost will construct a suitably equipped office at site with basic facilities such as telephone(s), fax, internet, photocopier, computer(s) and printer(s) along with operator(s), regular electric & drinking water supply and staff carrying vehicles for the supervisory staff with driver, fuel and maintenance etc. as per the requirement of the project. The contractor shall maintain the aforesaid facilities intact/operational during the tenancy of the contract or maximum up to 6 months beyond the stipulated contractual completion date if the work is delayed due to any reasons. Operation and maintenance cost of all such materials, equipments I services shall be borne by the contractor.
- 27.2 FEDO-FACT/OWNER shall allot land at convenient place in SITE within reasonable distance of the place of WORK where CONTRACTOR may build temporary structures for site office, store and fabrication shop and CONTRACTOR shall make arrangements for fencing and security.
- 27.3 CONTRACTOR shall make his own arrangements for residential accommodation of staff and workmen, facilities for food and canteen and shall not set up any hutments, barracks or other form of residential units, at any place within SITE or other land belonging to OWNER/CONSULTANT unless specifically agreed to.
- 27.4 CONTRACTOR shall also make suitable arrangements for sanitation and hygiene in the places allotted to CONTRACTOR as per provisions under the Contract labour (Regulation & Abolition) Act 1970 and the Contract Labour Act (Regulation & Abolition) Central Rules 1971 as specified under Clause 56.0.
- 27.5 The security deposit of the contractor shall be released only after contractor demolishes all structures including foundations and gives back clear vacant possession of this land.

27.6 In the event the contractor has to shift his labour campus at any time during execution of the work on the instructions of local authorities or as per the requirement of the work progress or as may be required by FEDO-FACT, he shall comply with such instructions at his cost and risk and no claim whatsoever shall be entertained on this account.

## **28.0 SPECIFIC CONSTRUCTION REQUIREMENTS**

### **28.1 CEMENT AND CEMENT GODOWN**

Cement shall be procured by Contractor confirming to BIS: 8112 and I or BIS: 1489 Specification latest edition or higher Grade as per approved list attached. The cement shall be procured directly from the reputed manufacturers/ stockiest as per approved list of FEDO-FACT. Relevant vouchers and test certificates will be produced as and when required. The cement shall be stored by the contractor in such suitable covered and lockable stores, well protected from climate and atmospheric effects. The cement go-down shall be constructed by the contractor as per the drawing in CPWD specifications at his own cost. The cement will remain under 'double lock, one from FEDO-FACT and other from Contractor. The cement in bags shall be stored in go-downs in easy countable position. Cement bags shall be used on first in first out basis. Cement stored for beyond 90 days will be required to be tested at contractors cost, before use in works.

### **28.2 STEEL & STEEL STOCKYARD**

Steel confirming to BIS –Specifications (latest edition) shall be procured by the contractor directly from reputed manufacturers/producers as per approved list of FEDO-FACT. The manufacturer has to give a certificate that the material supplied is not a re-rolled product. Relevant vouchers & test certificates will be produced by the contractor. Re-rolled sections will not be allowed. Reinforcement steel, structural steel shall be stored and stacked in such manner so as to facilitate easy identification, removal etc. The contractor shall take proper care to prevent direct contact between the steel and the ground/water for which he shall provide necessary arrangement at his own cost including ensuring proper drainage of area to prevent water logging as per directions of the Engineer-in-Charge. Steel shall also be protected, by applying a coat of neat cement slurry over the bars for which no extra payment shall be made. Test certificates for each consignment of steel shall be furnished and tests to be got carried out from the authorized laboratory as per the directions of Engineer-in-Charge, before incorporating the materials in the work.

**28.3 BITUMEN WORK**

The contractor shall collect the total quantity of tar or bitumen required for the work as per standard formula, before the process of painting started and shall hypothecate it to the Engineer-in-Charge. Although the materials are hypothecated to FEDO-FACT the Contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the written consent of the Engineer-in-charge.

If any bitumen or tar remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material return to the contractors.

**28.4 WATER PROOF TREATMENT**

28.4.1 The water proof treatment shall be of type and specifications as given in the schedule of quantities.

28.4.2 The water-proofing of basement, roofs, water retaining areas shall be and remain fully effective for a period of not less than 10 (Ten) years to be reckoned from the date of expiring of the Defect Liability period, prescribed in the contract. At any time during the said guarantee period if FEDO-FACT/OWNER find any defects in the said treatment or any evidence of re- infestation, dampness, leakage in any part of buildings or structure and notifies the contractor of the same, the contractor shall be liable to rectify the defect or give re-treatment and shall commence the work or such rectification or re-treatment within seven days from the date of issue of such letter to him. If the contractor fails to commence such work within the stipulated period, the FEDO-FACT may get the same done by another agency at the Contractor's cost and risk and the decision of the Engineer-in-Charge of FEDO-FACT for the cost payable by the contractor shall be final and binding upon him.

28.4.3 The FEDO-FACT reserves the right to get the quality of treatment checked in accordance with recognized test methods and in case it is found that the chemicals with the required concentration and rate of application have not been applied, or the water proofing treatment is not done as per specifications, the contractor will be required to do the re-treatment in accordance with the required concentration & specifications at no extra cost failing which no payment for such

work will be made. The extent of work thus rejected shall be determined by FEDO-FACT.

28.4.4 Water proofing shall be got done through approved/ specialized agencies only with prior approval of Engineer-in-Charge.

28.4.5 The contractor shall make such arrangement as may be necessary to safe guard the workers and residents of the building against any poisonous effect of the chemicals used during the execution of the work.

28.4.6 During the execution of work, if any damage shall occur to the treatment already done, either due to rain or any other circumstances, the same shall be rectified and made good to the entire satisfaction of Engineer-In-Charge by the contractor at his cost and risk.

28.4.7 The contractor shall make his own arrangement for all equipment required for the execution of the job. The contractor whose tender is accepted shall execute Guarantee Bond in the prescribed form as appended for guaranteeing the water proofing treatment.

#### 28.5 CENTERING & SHUTTERING

Marine plywood or steel plates or any material mentioned elsewhere in the tender document or as approved by Engineer-in-Charge shall be used for formwork. The shuttering plates shall be cleaned and oiled before every repetition and shall be used only after obtaining approval of FEDO-FACT's Engineers at site. The number of repetitions allowed for plywood and steel shuttering shall be at the discretion of Engineer-in-Charge of FEDO-FACT depending upon the, condition of shuttering surface after each use and the decision of Engineer-in-Charge in this regard shall be final and binding on the contractor. No claim whatsoever on this account shall be admissible.

#### 28.6 SETTING OUT OF THE WORKS

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. If at any time during the progress of works, shall any error appear or arise in the position, levels, dimensions or alignment of any part of the works, the contractor shall at his own expenses rectify such error to the satisfaction of Engineer-in-charge. The checking of any setting out or of any line or level by the engineers of FEDO-FACT shall not in any way relieve the contractor of his responsibility for the correctness.

#### 28.7 BORROW AREAS

The contractor shall make his own arrangements for borrow pits and

borrow disposal areas including their approaches and space for movement of man, machinery, other equipment as required for carrying out the works. The contractor shall be responsible for taking all safety measures, getting approval, making payment of royalties, charges etc. and nothing extra shall be paid to the contractor on this account and unit rates quoted by the contractor for various items of bill of quantities shall deemed to include the same.

#### 28.8 SITE CLEARANCE

28.8.1 The contractor shall ensure that the working site is kept clean and free of obstructions for easy access to job site and also from safety point of view. Before handing over the work to the FEDO-FACT the contractor shall remove all temporary structures like the site offices, cement godown, stores, labour hutments etc., scaffolding rubbish, debris etc. left over materials tools and plants, equipment etc., clean the site to the entire satisfaction of the Engineer-in-charge. If this is not done the same will be got done by FEDO-FACT at the risk and cost of Contractor.

28.8.2 The contractor shall clean all floors, remove cement/ lime/ paint drops and deposits, clean joinery, glass panes etc., touching all painter's works and carry out all other necessary items of works to make the premises clean and tidy before handing over the building, and the rates quoted by the contractor shall be deemed to have included the same.

#### 28.9 NOTICE BEFORE COVERING UP THE WORK

The contractor shall give not less than seven days notice before covering up or otherwise placing beyond the reach of measurement any work, to the Engineer-in-charge in order that the same may be inspected and measured. If any work is covered up or placed beyond the reach of inspection/measurement without such notice or his consent being obtained the same shall be uncovered at the contractor expenses and he shall have to make it good at his own expenses.

#### 28.10 WATCH, WARD AND LIGHTING OF WORK PLACE

The contractor shall at his own cost take all precautions to ensure safety of life and property by providing necessary barriers, OBSTRUCTIONS, lights, watchmen etc. during the progress of work as directed by Engineer-in-charge.

#### 28.9 WORK IN MONSOON AND RAIN

The execution of the work may entail working in the monsoon also. The contractor must maintain labour force as may be required for the

job and plan and execute the construction and erection according to the prescribed schedule. No special/ extra rate will be considered for such work in monsoon. The contractors' rate shall be considered inclusive of cost of dewatering due to rains required if any and no extra rate shall be payable on this account. The stipulated period for completion of project includes the monsoon period, holidays & festivals.

#### 28.10 WORK ON SUNDAYS, HOLIDAYS AND DURING NIGHT

For carrying out work on Sunday and Holidays or during night, the contractor will approach the Engineer-in-Charge or his representative at least two days in advance and obtain his permission. The Engineer-in-Charge at his discretion can refuse such permission. The contractor shall have no claim on this account whatsoever. If work demand, the contractor shall make arrangements to carry out the work on Sundays, Holidays and in two, three shifts with the approval of Engineer-in-Charge at no extra cost to FEDO-FACT.

#### 28.11 RECORDS OF CONSUMPTION OF CEMENT & STEEL

- i. For the purpose of keeping a record of cement and steel received at site and consumed in works, the contractor shall maintain a properly bound register in the form approved by the FEDO-FACT, showing columns like quantity received and used in work and balance in hand etc. This register shall be signed daily by the contractor's representative and FEDO-FACT's representative.
- ii. The register of cement & steel shall be kept at site in the safe custody of FEDO-FACT's Engineer during progress of the work. This provision will not, however, absolve the contractor from the quality of the final product.
- iii. In case cement or steel quantity consumed is lesser as compared to the theoretical requirement of the same as per MORTH/CPWD (as the case may be) specifications/ norms, the work will be devalued and/ or a penal rate (i.e. double the rate at which cement/ steel purchased last) recovery for lesser consumption of cement/ steel shall be made in the item rates of the work done subject to the condition that the tests results fall within the acceptable criteria as per MORTH/CPWD (as the case may be) specifications otherwise the work shall have to be dismantled and redone by the contractor at no extra cost . In case of cement, if actual consumption is less than 98% of the theoretical consumption, a recovery shall be effected from the contractors bills at the penal rate for the actual quantity which is lower than 98% of theoretical

consumption.

**28.12 TESTS AND INSPECTION**

The contractor shall carry out the various mandatory tests as per specifications and the technical documents that will be furnished to him during the performance of the work. All the tests on materials, as recommended by CPWD, MORTH and relevant Indian Standard Codes or other standard specifications (including all amendments current at the last date of submission of tender documents) shall be got carried out by the contractor at the field testing laboratory or any other recognized institution/laboratory, at the direction of the FEDO-FACT. All testing charges, expenses etc. shall be borne by the contractor. All the tests, either on the field or outside laboratories concerning the execution of the work and supply of materials shall be got carried out by the contractor or FEDO-FACT at the cost of the Contractor.

**28.13 WORKS TO BE OPEN FOR INSPECTION**

All works executed or under the course of execution in pursuance of this contract shall at all times be open for inspection and supervision of the FEDO-FACT. The work during its progress or after its completion may also be inspected, by Chief Technical Examiner of Government of India (CTE) and/ or an inspecting authority of State Government of State in which work is executed and/or by third party checks by owner/ clients. The compliance of observations/improvements as suggested by the inspecting officers of FEDO-FACT/CTE/ State authorities/ Owners shall be obligatory on the part of the Contractor at the cost of contractor.

**28.14 CARE OF WORKS**

From the commencement to the completion of works and handing over, the contractor shall take full responsibility for care thereof all the works and in case of any damage/loss to the works or to any part thereof or to any temporary works due to lack of precautions or due to negligence on part of Contractor, the same shall be made good by the Contractor.

28.15 The contractor shall make all arrangements for ground breaking ceremony/inaugural function etc. for the project as required.

**29.0 TERMS OF PAYMENT**

29.1 FEDO-FACT shall make payments to CONTRACTOR in instalments as specified in SCHEDULE -G PAYMENT SCHEDULE.

29.2 Claims for part - payments shall not be more frequent than once a month.

29.3 All part - payments shall be treated as payments on account and not as

value of WORK done and on satisfactory completion of WORK and issue of taking over certificate CONTRACTOR will be paid the total amount due after deduction of any liquidated damages due under CONTRACT, less payments already made and any other recoveries due from the CONTRACTOR.

29.4 The final bill shall be submitted by the contractor within three months of the completion of work, otherwise FEDO-FACT's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on contractor. Each Running Bills should be accompanied by two sets of at- least 20 (twenty) photographs as per direction of Engineer-in-charge taken from various points depicting status of work as on Report/ Bill date and Monthly Progress Report for the concerned month in the pro-forma to be given/ approved by Engineer-in-Charge. Intermittent progress Photographs as and when required shall also be provided by the Contractor at his own cost as per direction of Engineer-in-Charge. No payment of running account bill shall be released unless it is accompanied by photographs and Monthly Progress Report as above.

29.5 It is clearly agreed and understood by the Contractor that notwithstanding anything to the contrary that may be stated in the agreement between FEDO-FACT and the contractor; the contractor shall become entitled to payment only after FEDO-FACT has received the corresponding payment(s) from the Client.

Owner for the work done by the contractor. Any delay in the release of payment by the client/ Owner to FEDO-FACT leading to a delay in the release of the corresponding payment by FEDO-FACT to the contractor shall not entitle the contractor to any compensation/ interest from FEDO-FACT.

29.6 All payments shall be released by way of e-transfer through RTGS in India directly at their Bank account by FEDO-FACT.

### **30.0 MEASUREMENTS OF WORKS**

Engineer-in-charge shall, except as otherwise provided, ascertain and determine by measurement, the value of work done in accordance with the contract.

All measurements shall be in Metric system. All the works in progress shall be measured jointly by the Engineer-in-charge or his authorised representative and by the Contractor or his authorised representative and recorded in the measurement book and signed in token of acceptance.

Except where any general or detailed description of the work expressly shows to the contrary, measurement shall be taken in

accordance with the procedure set forth in the CPWD Specification. In the case of items which are not covered by specifications, mode of measurement as specified in the Technical Specifications of the contract and if for any item no such technical specification is available, then a relevant standard method of measurement issued by the Bureau of Indian Standard shall be followed.

Provided further that, in case of Suspension/Termination of Contract in Full or in Part in accordance with Clause 32.0 (and its sub-clauses), following methodology shall be adopted in respect of measurements in addition to what has been mentioned in foregoing: -

- All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer-in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties.
- If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and FEDO-FACT shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor. The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

**31.0 COMPUTERISED CONTRACTOR'S BILLING SYSTEM**

31.1 Without prejudice to stipulation in General Conditions of Contract, CONTRACTOR should follow the following billing system.

31.2 The bills will be prepared by the CONTRACTOR on their own PC's as per the standard formats and codification scheme proposed by FEDO-FACT. The CONTRACTOR will be provided with data entry software to capture relevant billing data for subsequent processing. CONTRACTOR will submit these data to

FEDO-FACT in an electronic media along with the hard copy of the bill, necessary enclosures and documents. The CONTRACTOR will also ensure the correctness and consistency of data so entered with the hard copy of the bill submitted for payment. FEDO-FACT will utilise these data for processing and verification of the CONTRACTOR's bill.

31.3 The final copy of each Bill along with detailed measurements, abstract of bill etc shall be submitted by the Contractor in bound Measurement Book (M Book) form, with its pages serially numbered. No cutting or over writing in the measurements would be allowed in the bound books. If required Contractor shall submit a draft copy of bill and detailed measurements for the checking of Engineer-in-Charge and the corrections, if any, shall be incorporated in the computerised bill before final submission. The contractor shall submit two spare copies of such computerized Bill, measurement book etc. for the purpose of reference and record by the various officers of the FEDO-FACT.

31.4 The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements /levels by the Engineer-in-Charge or his representative.

31.5 The contractor shall give not less than seven days' notice to the Engineer-in-Charge or his authorized representative in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked : and/or test checked and correct dimensions thereof be taken. before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or the Engineer-in- Charge's consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge or his authorized representative may cause either themselves or through another officer of the FEDO-FACT to check the measurements recorded by contractor and all provisions stipulated herein above or anywhere in the tender document shall be applicable to such checking of measurements or levels. It is also a term of this contract

that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

**32.0 SUSPENSION AND TERMINATION OF CONTRACT**

32.1 In the event FEDO-FACT/OWNER is unable or unwilling to complete or is compelled to postpone its activities relating to PROJECT at any stage during the currency of CONTRACT, FEDO-FACT/OWNER may either suspend or terminate CONTRACT by giving CONTRACTOR thirty (30) days' notice.

32.2 If CONTRACTOR shall fail or neglect to execute work with all due diligence and expedition or shall refuse or neglect to comply with any reasonable orders given to him in writing by FEDO-FACT in connection with work or shall otherwise commit breach of any of the provisions of CONTRACT, FEDO-FACT may give CONTRACTOR notice in writing requiring to make good such failure, neglect or breach. Should CONTRACTOR fail to comply with the notice within the time specified therein, then FEDO-FACT shall, without prejudice to other rights of FEDO-FACT under CONTRACT, be at liberty to have such WORK or portion of WORK as CONTRACTOR has failed or neglected to execute, executed directly or through any other agency FEDO-FACT deems fit at the risk and cost of CONTRACTOR; and FEDO-FACT shall have the free use of all of CONTRACTOR'S equipment, materials and other things for the time being available at SITE for getting the WORK completed in the above- said manner to the exclusion of any right of CONTRACTOR for fair wear and tear thereof.

FEDO-FACT shall further be entitled to apply the proceeds of such equipment and unused materials of CONTRACTOR and any balance amount that may be due to CONTRACTOR for WORK actually executed towards any claims on FEDO-FACT from third parties in consequence of failure, neglect, refusal or contravention by CONTRACTOR and / or towards any expense that FEDO-FACT might have incurred in getting the WORK completed in the above -said manner, in excess of what FEDO-FACT would have had to pay CONTRACTOR as per CONTRACT.

- 32.3** If CONTRACTOR shall become bankrupt or insolvent or have a receiving order made against him or shall compound with his creditors or shall commence to be wound up otherwise than for the purpose of reconstruction or shall carry on its business under a Receiver for the benefit of its creditors, FEDO-FACT may at its sole discretion either;
- a) terminate CONTRACT forthwith by notice in writing to CONTRACTOR or the Receiver or the Liquidator or to any other person in whom the CONTRACT may become rested and have the remaining WORK executed at the risk and cost of CONTRACTOR in the same manner as specified in Clause 12.2 above, or
  - b) give such Receiver, Liquidator or other person as aforesaid the option of carrying out the CONTRACT subject to his providing security for the due and faithful performance of CONTRACT up to such amount as may be mutually agreed upon.
- 32.4 In the event of suspension of CONTRACT vide Clause-32.1 above, immediately on receipt of notice therefore from FEDO-FACT, CONTRACTOR shall suspend all activities at SITE except those essentially to be carried out to safe-guard and secure WORK for the time being in progress in a safe manner without wastage of materials and temporarily disband or reassign CONTRACTOR'S workmen except those essentially required at SITE such as for security of CONTRACTOR'S equipments and materials. CONTRACTOR shall re-mobilise its workmen and re-commence WORK within fifteen (15) days of receipt of notice from FEDO-FACT requiring CONTRACTOR to do so. All costs reasonably incurred by CONTRACTOR in connection with temporarily winding up WORK, maintenance of SITE during period of suspension and re-mobilisation on withdrawal of suspension order shall be paid by FEDO-FACT in addition to Contract Price specified herein, and the amount of such additional sum shall be mutually agreed to between the parties base on detailed information provided by CONTRACTOR. CONTRACTOR shall further be entitled for extension of time- schedule corresponding to the period of suspension including permitted period for re-mobilisation.
- 32.5 In the event of termination of CONTRACT vide Clause- 32.1 above, immediately on receipt of notice therefore from FEDO-FACT, CONTRACTOR shall take all steps for winding up work such as cancellation of any pending orders and termination of any sub-contracts that CONTRACTOR might have entered into with others in connection with WORK, safe-guarding and securing of any WORK in progress in a

safe manner, disbanding of workmen, removal of temporary construction made by CONTRACTOR at SITE and return of all EQUIPMENT, special tools, un-used materials and documents that FEDO-FACT has supplied to CONTRACTOR. FEDO-FACT shall pay CONTRACTOR for the portion of WORK executed till such termination less amounts already paid, together with any reasonable cost necessarily incurred by CONTRACTOR pursuant to such termination as may be mutually agreed upon between the parties hereto based on detailed information provided by CONTRACTOR. CONTRACTOR shall not be entitled for any payment in respect of the portion of WORK left unexecuted.

32.6 Upon termination of CONTRACT for any reason, obligations of the parties hereto shall cease except for the liabilities of either party to the other in respect of obligations that accrued prior to the date of such termination.

32.7 Any excess expenditure incurred or to be incurred by FEDO-FACT in completing the part work/ part incomplete work of any item(s) or the excess loss of damages suffered or may be suffered by FEDO-FACT as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to FEDO-FACT in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

32.8 If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

32.9 In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

### **33.0 TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR**

Without prejudice to any of the right or remedies under this contract if the contractor dies, the Engineer in-charge shall have the option of terminating the contract without compensation to the contractor.

**34.0 FORECLOSURE OF CONTRACT BY FEDO-FACT/OWNER**

If at any time after the commencement of the work the FEDO-FACT shall for any reason whatsoever is required to abandon the work or is not require the whole work thereof as specified in the tender to be carried out, the Engineer-in-Charge shall give notice in writing of the fact to the contractor, who shall have no claim to any payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the foreclosure of the whole or part of the works

**35.0 WITH HOLDING AND LIEN IN RESPECT OF SUMS DUE FROM CONTRACTOR**

**35.1** Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, FEDO-FACT shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any, deposited by the contractor and for the purpose aforesaid, FEDO-FACT shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalization or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, FEDO-FACT shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract pending finalization or adjudication of any such claim.

35.2 It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or FEDO-FACT will be kept withheld or retained as such by the Engineer-in-Charge or FEDO-FACT till the claim arising out of or under the contract is determined by the competent court and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention - under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the FEDO-FACT shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited

company, as the case may be whether in his individual capacity or otherwise. FEDO-FACT shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc, to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for FEDO-FACT to recover the same from him in the manner prescribed in sub-clause 35.1 of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by FEDO-FACT to the contractor, without any interest thereon whatsoever.

**35.3 LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS**

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or by FEDO-FACT against any claim of the Engineer-in-Charge or FEDO-FACT in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the FEDO-FACT. It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the FEDO-FACT will be kept withheld or retained as such by the Engineer-in-Charge or the FEDO-FACT or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the competent court, as the case may be, and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

**36.0 RESPONSIBILITY OF CONTRACTOR:**

The Contractor shall be entirely responsible for executing the work covered under this Tender document in a workmanlike and expeditious manner as per the time schedule, specifications and drawings.

36.1 It shall be entirely the Contractor's responsibility to provide, operate and

maintain all necessary construction equipment, scaffoldings and safety, gadget, lifting tackles, tools and appliances to perform the work in a workman like and efficient manner and complete all jobs as per the specifications and within the schedule time of completion of work. Further, contractor shall also be responsible for obtaining temporary electric and water connection for all purposes. The contractor shall also make standby arrangement for water & electricity to ensure un-interrupted supply.

36.2 Existing drawings available with FEDO for the work, bill of quantities, etc., for all works shall be supplied to the contractor for their scope of work all buildings services and development works by FEDO-FACT. However, it shall be the duty and responsibility of the contractor to bring to the notice of the FEDO-FACT in writing as to any variation, discrepancy or any other changes required and to obtain revised drawings and designs and for approval of the FEDO-FACT in writing for the same. However if any additional drawings / specifications/ designs over and above the existing drawings/ designs are required, this shall be prepared by the contractor and submitted to FEDO-FACT for approval before proceeding with the work.

36.3 It is the responsibility of the Contractor to arrange necessary supervisory personnel, skilled, semi-skilled and unskilled labour etc. to achieve the monthly/weekly targets and the overall time schedule.

36.4 **The Contractor shall ensure that local labour, unskilled as well as skilled to the extent possible and available from local resources, are preferentially employed on the work.**

36.5 It is mandatory for the contractor to provide safety equipment and gadgets to his all workers, supervisory and Technical staff engaged in the execution of the work while working. The minimum requirement (but not limited to) shall be gum boots, safety helmets, Rubber hand gloves, face masks, safety nets, safety belts, goggles etc. as per work requirements. Sufficient nos. of these equipment and gadgets shall also be provided to FEDO-FACT by the contractor at his own cost for use of FEDO-FACT Officials and/ or workforce while working/supervision of work at site. No staff/ worker shall be allowed to enter the site without these equipment/ gadgets.

The cost of the above equipment/ gadgets is deemed to be included in the rates quoted by the contractor for the items & works as per Bill of Quantities and contractor shall not be entitled for any extra payment in these regard. The above norm is to be strictly complied with at site. In case the contractor is found to be deficient in providing Safety Equipment/ Gadgets in the opinion of Engineer- in-charge, the Engineer- in-charge at his option can procure the same at the risk & cost of contractor and

provide the same for the use of worksite and shall make the recoveries from the bills of the contractor for the same. The contractor shall abide by all rules & regulations pertaining to Health, Safety and Environment.

36.6 All expenses towards mobilization at site and demobilization including bringing in equipment, work force, materials, dismantling the equipment, clearing the site etc. shall be deemed to be included in the prices quoted and no separate payments on account of such expenses shall be entertained.

36.7 The Contractor may have to build temporary access roads to aid his/her own work which shall also be taken care while quoting for the work. The contractor has to dismantle these temporary approach roads after completion of job without any extra cost.

36.8 The procurement and supply in sequence and at the appropriate time of all materials and consumables shall be entirely the Contractor's responsibility and his/her rates for execution of work will be inclusive of supply of all these items. Contractor shall not use any of the equipment or materials issued to him/her by Owner for installation purposes for laying temporary lines, manufacturing erection aids etc. Misuse of materials will be seriously viewed and deductions at penal rates will be made from the Contractor's bills for such quantities that are misused.

36.9 Responsibility for obtaining all statutory approvals lies with the contractor.

36.10 The Contractor shall provide toilet and drinking water facilities at site for the contract workmen as per statutory requirements at his own cost.

36.11 Earth filled HDPE bags, Shoring and strutting, etc. required for effective retaining of earth fill and excavated pits has to be arranged by contractor without any extra claim for the entire satisfaction of the Engineer-in-charge. Cost for the same is included in the rates for earthwork in filling/cutting items.

36.12 The contractor should ensure safety of his materials such as cement/steel and all other construction materials, equipment, at his risk and cost. The contractor has to provide their own security arrangement. FEDO-FACT/OWNER will not be held responsible for any theft and damage that takes place during the performance of work at work site to the contractor's property.

36.13 One copy of contract documents including drawings furnished, to the contractor shall be kept at the site and the same shall at all reasonable times be available for inspection.

36.14 All materials, construction plants and equipment etc. once brought by the contractor within the project area, will not be allowed to be removed from the premises without the written permission of the

Engineer-in-charge. Similarly, all enabling works built by the contractor for the main construction undertaken by him, shall not be dismantled and removed without the written authority of the FEDO-FACT. All contractor's plant, machinery and equipment shall be kept in perfect condition during currency of the contract.

36.15 Contractor shall have to prepare the Bar Bending Schedule, shop and fabrication drawings free of cost, if required for any of the items of work. Three copies of these drawings each including for revision will be submitted to FEDO-FACT for approval. Before executing the item, shop drawings and bar bending schedule should be approved by FEDO-FACT.

36.17 All plants, machinery and equipment of Contractor shall be kept in perfect condition during the currency of the contract.

### **37.0 QUALITY ASSURANCE & QUALITY CONTROL PROGRAMME**

To ensure that the services under the scope of this contract are in accordance with the specifications, the Contractor shall adopt Quality Assurance Programme to control such activities at the necessary points.

37.1 The Contractor has to ensure the deployment of Quality Assurance and Quality Control Engineer(s) depending upon the quantum of work. This QA/QC group shall be fully responsible to carry out the work as per standards and all code requirements. In case OWNER/ FEDO-FACT feels that Contractor's QA/QC Engineer(s) are incompetent or irresponsible or insufficient, Contractor has to deploy other experienced Engineer(s) as per Site requirements.

37.2 In case Contractor fails to follow the instruction of OWNER/ CONSULTANT as Clause 37.1 above, next payment due to him/her shall not be released unless until he/she complies with the instructions to the full satisfaction of OWNER/FEDO-FACT.

37.3 Quality Assurance System Plans/procedures of the Contractor shall be furnished in the form of a QA manual. The Quality Assurance Programme of Contractor shall generally cover the following:

- a) His organization structure for the management and implementation of the proposed Quality Assurance Program.
- b) Documentation control system.
- c) The procedure for purpose of materials and source inspection.
- d) System for site controls including process controls.
- e) Control of non-conforming items and systems for corrective actions.
- f) Inspection and test procedure for site activities.

- g) System for indication and appraisal of inspection status.
  - h) System for maintenance of records.
  - i) System for handling, storage and delivery.
  - j) A quality plan detailing out quality practices and procedures, relevant standards and acceptance levels for all types of work under the scope of this contract.
- 37.4 This document should cover details of the personnel responsible for the Quality Assurance plans or procedures to be followed for quality control in respect of Procurement, Supply, Installation and Commissioning including laboratories for testing materials. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of work at site as well as at manufacturer's works and dispatch of materials.
- 37.5 The contractor shall prepare and finalize such Quality Assurance Programme within 15 days from date of issue Letter of Intent. FEDO-FACT shall also carryout quality audit and quality surveillance of systems and procedures of Contractor's quality control activities.
- 37.6 All the quality reports shall be submitted by the Contractors in the approved formats/check list furnished by FEDO-FACT. These filled in formats shall be prepared in two copies and duly signed by representatives of contractor and FEDO-FACT. All the costs associated with Printing of Formats and testing of materials required as per technical specifications or by Engineer-in-charge shall be included in the Contractor 's quoted rates in the Schedule/ Bill of quantities.
- 38.0 CONTRACT COORDINATION PROCEDURES**
- The Contractor shall prepare and finalize in consultation with FEDO-FACT, a detailed contract coordination procedure within 15 days from the date of issue of Letter of Intent for the purpose of execution of the Contract. The Contractor shall have to attend all the meetings at any place in India at his own cost with FEDO-FACT/ OWNER/ CLIENT or CONSULTANTS of FEDO-FACT during the currency of the Contract, as and when required and fully cooperate with such personal and agencies involved during these discussions. The Contractor shall not deal in any way directly with the OWNER/CLIENT or CONSULTANTS of FEDO-FACT and any dealing/correspondence if required at any time with CLIENT/ OWNER/ CONSULTANTS shall be through FEDO-FACT only. During the execution of the work, Contractor shall submit at his own cost a detailed Monthly progress & programme report to the Engineer-in-charge of FEDO-FACT by 5th of every month. The format of monthly progress & programme report shall be as approved by Engineer-in-Charge of FEDO-FACT.

**39.0 COMPLETION CERTIFICATE AND COMPLETION PLANS**

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge shall inspect the work and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, - surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls; floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off-such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof less actual cost incurred on removal of materials I debris etc.

**40.0 PROHIBITION OF UNAUTHORISED CONSTRUCTION & OCCUPATION**

No unauthorized buildings, construction of structures should be put up by the contractor anywhere on the project site, neither any building built by him shall be occupied in un-authorized manner by him or his staff. It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody in un-authorized manner during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is

occupied illegally, then the Engineer-in-Charge shall have the option to refuse the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy of compensation up to 5% of tendered value of work may be imposed by the Engineer-in-Charge whose decision shall be final both with regard to the justification and quantum and shall be binding on the contractor.

However, the Engineer-in-Charge, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

#### **41.0 DEFECTS LIABILITY PERIOD**

- 41.1 CONTRACTOR warrants that WORK will be carried out in full conformity with drawings, designs and specifications provided by FEDO-FACT, in compliance with applicable statutory regulations for the time being in force, in accordance with recognized standards and codes of practice, as per good engineering practice and in a professional and workman-like manner.
- 41.2 In the event of any defect being noticed in the quality or workmanship of WORK or any part thereof or any material provided and used by CONTRACTOR in WORK, within a period twelve (12) months from the date of issue of completion certificate by OWNER / FEDO-FACT it shall be rectified or replaced by CONTRACTOR at his own expense as deemed necessary by the Engineer-in-Charge. If CONTRACTOR fails to do so within reasonable period or if in the opinion of FEDO-FACT, CONTRACTOR is unable to do so, or the repair / replacement cannot wait till CONTRACTOR is able to do it, FEDO-FACT may either directly or through such other agencies as CONSULTANT may deem fit, get defective part of WORK made good, all at the risk and cost of CONTRACTOR. Notwithstanding the period specified above, in case of civil constructions, the period of warranty /maintenance period will extend at least up to the end of first monsoon after the WORK is taken over by FEDO-FACT/OWNER/CLIENT.
- 41.3 An item of WORK so repaired or replaced shall carry a further maintenance period as per Clause 41.2 above.
- 41.4 During the maintenance period, CONTRACTOR'S representative shall be available at SITE or at such place from where he can come to SITE

immediately on request by FEDO-FACT/OWNER and he shall be authorized by CONTRACTOR to carry out any repairs or maintenance as CONTRACTOR is obliged to carry out under the above maintenance period.

415 CONTRACTOR shall not be liable for any defect owing to defective design, specifications, drawings or information provided by FEDO-FACT in writing based on which WORK has been executed.

41.6 On expiry of the said maintenance period or on completion of CONTRACTOR'S obligations under the CONTRACT, whichever is later, FEDO-FACT shall issue to CONTRACTOR a Discharge Certificate, stating that CONTRACTOR is discharged of his obligations and release any amounts retained or other form of security held by FEDO-FACT for the fruitful Performance of work by CONTRACTOR.

#### **42.0 RESTRICTION ON SUBLETTING**

42.1 CONTRACTOR shall not sub-let or sub-contract any or all of its obligations under CONTRACT to any other party without prior written consent of FEDO-FACT. In the event of CONTRACTOR sub-letting the WORK or part thereof to any other party or engaging any sub-contractor, CONTRACTOR shall still be responsible to FEDO-FACT for performance of the whole CONTRACT and shall ensure that such other party to whom WORK or part thereof is sub-let or sub-contracted perform the portion of WORK so sub-let or sub-contracted as per provisions herein and the persons employed at SITE by such other party shall be deemed employed by CONTRACTOR. The provision of labour on piece work basis shall not be deemed to be a subletting under this clause.

42.2 The contractor may entrust specialist items of works like MEP services, HVAC, Lifts, Building Management System, Water Proofing, and Data & Communication networking, interiors, landscaping etc. to the agencies specialized in the specific trade. The contractor shall give the names and details of such firm whom it is going to employ for approval of FEDO-FACT. These details shall include the expertise, financial status, technical manpower, equipment, resources and list of works executed and on hand of the specialist agency. Further, prior written approval is required from FEDO-FACT to deploy such agency I sub-contractor.

**43.0 SPECIAL CONDITIONS OF CONTRACT**

- 43.1 The Special Conditions of Contract specified vide SCHEDULE-Q hereof shall form part of CONTRACT; and wherever the provisions under Special Conditions of CONTRACT are in conflict with any of the provisions vide Clause -2.0 to Clause-66.0 hereof, provisions in the Special Conditions of Contract shall prevail.
- 43.2 Definitions vide Clause-1 hereof shall apply to Special Conditions of Contract also and any supplementary Definitions given therein need not necessarily apply to other sections of CONTRACT.

**44.0 FORCE MAJEURE**

Any delay in or failure to perform of either party, shall not constitute default so as to give rise to any claim for damages, to the extent such delay or failure to perform is caused by an act of God, or by fire, explosion, flood or other natural catastrophe, governmental legislation, orders or regulation etc. Failure of the client I owner to hand over the entire site and I or release funds for the project, to FEDO-FACT, shall also constitute force majeure. The time for performance of the obligation by the parties shall be deemed to be extended for a period equal to the duration of the force majeure event. Both parties shall make their best efforts to minimize the delay caused by the force majeure event. If the failure I delay of the client /owner in handing over the entire site and I or in releasing the funds continues even on the expiry of the stipulated date of completion, FEDO-FACT, may, at the request of the contractor, foreclose the contract without any liability to either party. In the event of such foreclosure, the contractor shall not be entitled to any compensation whatsoever. If prior to such foreclosure the contractor has brought any materials to the site, the Engineer-in-Charge shall always have the option of taking over of all such materials at their purchase price or at the local current rates, whichever is lower.

**45.0 NO COMPENSATION CLAUSE**

The contractor shall have no claim whatsoever for compensation or idle charges against FEDO-FACT on any ground or for any reason, whatsoever.

**46.0 DIRECTION FOR WORKS**

- 46.1 All works under the contract shall be executed under the direction and subject to approval in all respect of the Engineer-in-Charge of FEDO-FACT who shall be entitled to direct at whatever point or points and in whatever

manner works are to be commenced and executed.

The Engineer-in-Charge and his representative shall communicate or confirm their instructions to the contractor in respect of the execution of work during their site inspection in a 'Works Site Order Book' maintained at the site office of Engineer-in-Charge. The contractor or his authorized representative shall confirm receipt of such instructions by signing against the relevant orders in the book.

#### 46.2 **WORKING HOURS**

46.2.1 All days observed as Holidays by FEDO-FACT shall be Holidays and all other days shall be working days at SITE, CONTRACTOR shall be given, on request, the calendar of such Holidays for each year. CONTRACTOR shall carry out WORK normally on working days.

46.2.2 Working hours shall normally be 8 hours per day per shift on all working days and timing will be as ENGINEER- IN-CHARGE may notify from time to time. Contractor's workmen will be permitted to enter SITE only thirty (30) minutes prior to commencement of working hours and shall leave SITE within thirty (30) minutes of close of working hours. The Contractor shall arrange works in multiple shifts if required for timely completion of work and any overtime wages or other costs receivable by CONTRACTOR'S workmen shall be fully borne by CONTRACTOR.

However in special circumstances such as when ENGINEER-IN-CHARGE is satisfied that nature of WORK for the time being carried out is such that it shall have to be proceeded with uninterruptedly even beyond normal working hours or when CONTRACTOR is behind schedule and would not be able to complete WORK within normal working hours FEDO-FACT shall permit CONTRACTOR to and CONTRACTOR shall perform WORK beyond normal working hours and any overtime wages or other costs receivable by CONTRACTOR'S workmen shall be fully borne by CONTRACTOR. CONTRACTOR shall seek for permission for engaging in WORK beyond normal hours well in advance.

#### 46.3 **SAFETY**

46.3.1 CONTRACTOR shall execute WORK in a safe and secure manner always ensuring safety of personnel engaged in WORK, EQUIPMENT, Materials, Construction Equipment and the WORK itself in all its phases. "Safety codes for Construction" and "Labour, safety, Health & sanitary Rules and

Regulations" specified in SCHEDULE-P shall be strictly adhered to and any violation of these will be deemed wilful negligence on the part of CONTRACTOR.

46.3.2 In the event of any accident occurring at SITE in connection with WORK, CONTRACTOR shall submit a report of same to ENGINEER-IN-CHARGE immediately, and/in any case within 24 hours of its occurrence, and shall fully co-operate with OWNER in any enquiry held in connection with the same.

#### **46.4 OWNER/FEDO-FACT'S REGULATIONS & RULES**

CONTRACTOR shall observe and ensure that this supervisors and workmen observe all rules and regulations of OWNER / FEDO-FACT applicable to SITE as may be communicated by FEDO-FACT from time to time. CONTRACTOR shall ensure that his supervisors and workmen engaged at SITE function in a disciplined manner.

#### **46.5 STATUTORY REGULATIONS**

46.5.1 CONTRACTOR shall in all matters arising out of performance of CONTRACT confirm at his own expense with all Acts, Orders, Regulations, Rules and By-Laws of Government of India, State Governments, local bodies and other authorities there under for the time being in force and applicable to WORK.

46.5.2 Where any temporary installations, facilities or apparatus set up by CONTRACTOR for carrying out WORK is subject to statutory regulations, CONTRACTOR shall ensure that these conform to such regulations applicable and also apply for pay necessary fees and obtain any approval required there under , prior to putting the same into use.

46.5.3 Where WORK or any part thereof, other than those covered by clause 46.5.2 above, is subject to statutory regulations / approval, FEDO-FACT/ OWNER shall apply for such approvals and pay the fees; but CONTRACTOR shall provide at his own expense all informations and assistance necessary to make such applications and to satisfy the inspecting Authority representing the related statutory body that WORK carried out conforms to applicable regulation. Any WORK or part thereof rejected for non-compliance with statutory regulations shall be

modified or replaced by CONTRACTOR at no cost to FEDO-FACT/OWNER within the agreed Time-Schedule so as to make it conform with applicable regulations. CONTRACTOR shall not be responsible for any such liability if it has occurred due to the sole reason that EQUIPMENT, designs or materials supplied by FEDO-FACT/OWNER do not conform to such applicable regulations.

#### 46.6 **TEMPORARY STRUCTURES**

46.6.1 Any temporary structure set up at SITE by CONTRACTOR shall be of sound construction taking into account safety of EQUIPMENT and workmen and CONTRACTOR shall be solely responsible for any damage or consequence thereof of the same. If in the opinion of ENGINEER-IN-CHARGE such constructions are not of appropriate design or construction and is likely to imperil safety of EQUIPMENT and/or workmen he may notify CONTRACTOR accordingly and Contractor shall forthwith forbid its use until it is replaced or suitably modified in an acceptable manner.

46.6.2 Any temporary construction made by CONTRACTOR in connection with WORK shall be dismantled and removed by CONTRACTOR and the entire area where WORK was performed cleared of any surplus or scrap materials, rubbish or debris within Thirty (30) days of issue of Taking Over Certificate or such earlier date as ENGINEER-IN-CHARGE may require.

46.6.3 If any temporary structure set up by CONTRACTOR at SITE including any power and water lines obstruct implementation of PROJECT in any manner at any stage of WORK, CONTRACTOR shall immediately on receipt of notice thereof from ENGINEER-IN-CHARGE dismantle and remove or shift the temporary structure or line, at his own cost, in such a manner that the obstruction is removed.

#### **47.0 SCHEDULE OF QUANTITIES / BILL OF QUANTITIES**

The quantities shown against the various items of work are only approximate quantities which may vary as per the actual requirement at site. No item which is not covered in the bill of quantities shall be executed by the Contractor without the approval of the FEDO-FACT. In case any Extra/Substituted item is carried out without specific approval, the same will not be paid.

**48.0 INDIAN STANDARDS**

Wherever any reference is made to any Indian Standards in any particular specifications, drawings or bill of quantities, it means the Indian Standards editions with up to date amendments issued till last date of receipt of tender documents.

**49.0 CO-ORDINATION WITH OTHER AGENCIES**

Work shall be carried out in such a manner that the work of other Agencies operating at the site is not hampered due to any action of the Contractor. Proper Co-ordination with other Agencies will be Contractor's responsibility. In case of any dispute, the decision of FEDO-FACT shall be final and binding on the contractor. No claim whatsoever shall be admissible on this account.

**50.0 SET-OFF OF CONTRACTOR'S LIABILITIES**

FEDO-FACT shall have the right to deduct or set off the expenses incurred or likely to be incurred by it in rectifying the defects and/or any claim under this agreement against the Contractor from any or against any amount payable to the contractor under this agreement including Security Deposit and proceeds of Performance Guarantee.

**51.0 POSSESSION PRIOR TO COMPLETION**

51.1 FEDO-FACT shall have the right to take possession of or use any completed or partially completed work or part of the work. Such possession or use shall not be deemed to be any acceptance of any work not completed in accordance with the contract agreement. If such prior possession or use by FEDO-FACT delays the progress of work an equitable adjustment in the time of completion will be made and the contract agreement shall be deemed to be modified accordingly. The decision of FEDO-FACT in such case shall be final binding and conclusive.

51.2 When the whole of the works or the items or the groups of items of work have been completed the contractor will give a notice to that effect to the Engineer in writing. The Engineer shall within 7 days of the date of receipt of such notice, inspect the works and give instructions in writing to the contractor specifying the balance items of work which are required to be done by the contractor and shall also notify the contractor of any defect in the works affecting completion.

51.3 The contractor shall during the course of execution prepare and keep updated a complete set of 'as built' drawings to show each and every change from the contract drawings, changes recorded shall be countersigned by the Engineer- in-Charge and the contractor. Four copies

of 'as built' drawings shall be supplied to FEDO-FACT by the contractor within 30 days of the completion. All costs incurred in this respect shall be borne by the contractor.

## **52.0 EMPLOYMENT OF PERSONNEL**

**52.1** The contractor shall employ only Indian Nationals as his representatives, servants and workmen after verifying their antecedents and loyalty. He shall ensure that no personnel of doubtful antecedents and any other nationality in any way is associated with the works.

**52.2** In case FEDO-FACT observed misconduct, negligence or incompetence etc. on the part of any representative, agent, servant and workmen or employees etc. of the contractor, the FEDO-FACT shall have full power and without giving any reason to the contractor, instruct the contractor to remove such engineer / staff / worker from site and provide suitable replacements. The decision of the Engineer-in-charge shall be final and binding on the contractor. The contractor shall not be allowed any compensation on this account.

## **53.0 TECHNICAL STAFF FOR WORK**

**53.1** The contractor shall employ at his cost the adequate number of technical staff during the execution of this work depending upon the requirement of work. For this purpose the numbers to be deployed, their qualification, experience as decided by FEDO-FACT shall be final and binding on contractor. The contractor shall not be entitled for any extra payment in this regard. The technical staff should be available at site, whenever required by FEDO-FACT to take instructions.

**53.2** Within 10 days of Letter of Intent/Work Order, the contractor shall submit a site organisation chart and resume including details of experience of the Project-in-Charge and other staff proposed to be deputed by him and the technical team shall be deputed by them on the Project after getting approval from Engineer-in-Charge. If desired by the contractor at later date, the Project-in-Charge and other staff whose resume is approved by FEDO-FACT can be replaced with prior written approval of FEDO-FACT and replacement shall be with equivalent or superior candidate only. Decision of Engineer-in-Charge shall be final and binding on the contractor.

**53.3** Even after approving the site organizational chart, the Engineer-in-Charge due to technical reasons and exigency of work can direct the contractor to depute such additional staff as in view of Engineer-in-Charge is necessary and having qualification and experience as approved by the Engineer-in-

Charge. The removal of such additional staff from the site shall only be with the prior written approval of Engineer-in-Charge. The contractor shall not be paid anything extra whatsoever on account of deployment of additional staff and decision of the Engineer-in-Charge shall be final and binding on the contractor.

53.4 In case the contractor fails to employ the staff as aforesaid he shall be liable to pay a reasonable amount not exceeding a sum of Rs. 50,000 (Rupees Fifty Thousand only) for each month of default in the case of each person. The decision of the Engineer-in-charge as to number of Technical Staff to be adequate for the project and the period for which the desired strength of technical staff was not employed by the contractor and as to the reasonableness of the amount to be deducted on this account shall be final and binding on the contractor as to the amount and the contractor's liability to pay the said amount.

**54.0 VALUABLE ARTICLES FOUND AT SITE**

All gold, silver and other minerals of any description and all precious stones, coins, treasure, relics, antiques and all other similar things which shall be found in, under or upon the site, shall be the property of the OWNER/ FEDO-FACT.

**55.0 MATERIALS OBTAINED DURING DISMANTLING TO BE OWNER'S PROPERTY**

All materials like stone, boulders and other materials obtained during the work of dismantling, excavation etc. will be considered FEDO-FACT/OWNER property and such materials shall be disposed off to the best advantage of FEDO-FACT/OWNER according to the instructions in writing issued by the Engineer-in-charge.

**56.0 LABOUR LAWS**

**56.1 LABOUR LAWS TO BE COMPLIED BY THE CONTRACTOR**

The contractor shall obtain a valid license under the contract labour (Regulation & Abolition) Act 1970 and the contract labour Act (Regulation & Abolition) Central Rules 1971 and amended from time to time, and continue to have a valid license until the completion of the work including defect liability period. The contractor shall also adhere by the provision of the child labour (Prohibition and Regulation) Act. 1986 and as amended from time to time.

The contractor shall also comply with the provisions of the Building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the Building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill above requirement shall attract the penal provisions of this contract arising out the resultant for non-execution of the work before the commencement of work. No labour below the age of 18 years shall be employed on the work.

**56.2 Payment of wages:**

- a) The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour(Regulation and Abolition) Central Rules, 1971, wherever applicable.
- b) The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- c) The Contractor shall maintain wage register /wage slip showing payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorisedly made, and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- d) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non- observance of the Regulations.
- e) Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.
- f) The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act,

1938, Employee's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made there under from time to time.

- g) The contractor shall indemnify and keep indemnified FEDO-FACT/OWNER against payments to be made under and for the observance of the laws aforesaid without prejudice to his right to claim indemnity from his sub-contractors.

The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.

### **56.3 LABOUR SAFETY PROVISION**

The contractor shall be fully responsible to observe the labour safety provisions:

The contractor shall at his own cost take all precautions to ensure safety of life and property by providing necessary barriers, lights, watchmen etc. during the progress of work as directed by Engineer-in-charge

In case of all labour directly or indirectly employed in work for the performance on the contractor's part of this contract, the contractor shall comply with all rules framed by Govt. from time to time for the protection of health and sanitary arrangements for workers.

### **56.4 OBSERVANCE OF LABOUR LAWS**

56.4.1 CONTRACTOR shall comply with all Acts, Rules, Orders, Regulations, By-laws of Government of India, State Government, Local Bodies or an Office, authority or unit, there under pertaining to employment or labour at SITE and procure any licence that is required for such employment.

56.4.2 CONTRACTOR shall be deemed Employer for these purposes and shall discharge all obligations of Employer. CONTRACTOR shall maintain such registers and records and display such information and notices as are required under these provisions and such registers shall at all time be available for inspection by FEDO-FACT/OWNER. Where the law require that any act of CONTRACTOR shall be carried out only in the presence of a representative of FEDO-FACT/OWNER and witnessed by FEDO-FACT/OWNER it shall be so carried and CONTRACTOR shall request ENGINEER-IN-CHARGE for the presence of FEDO-FACT/OWNER'S representative. Any information or reports required from CONTRACTOR by FEDO-FACT/OWNER, periodically or otherwise, for discharge of FEDO-

FACT/OWNER'S obligations under such laws shall be provided promptly.

- 56.4.3 Payment of workmen Compensation and implementation of labour laws with regard to workmen employed by CONTRACTOR are CONTRACTOR'S liability and in case FEDO-FACT/OWNER is compelled to incur any expense or any other amount on behalf of CONTRACTOR'S workmen, FEDO-FACT/OWNER is entitled to recover that amount from any bills payable to CONTRACTOR or in any other manner as is provided in Clause-35 hereof or otherwise.
- 56.4.4 Contractor shall be responsible for all obligations under ESI Act, P. F. Act, Building and Other Construction Worker's Welfare Cess Act, 1996, Rules and Regulations there under and such other Acts and Regulations as may be relevant. Deduction towards ESI, PF, Building and Other Construction Worker's Welfare Cess etc. required as per applicable statutory regulations shall be made by the Contractor and the amounts so deducted along with the Contractor's own contributions as applicable shall be deposited with appropriate authorities. Evidence of this shall be produced by the Contractor when called upon to do so by OWNER / FEDO-FACT and in any case every quarter. In case OWNER/FEDO-FACT is called upon to pay any such expenses, these shall be reimbursed fully by CONTRACTOR and OWNER / FEDO-FACT shall be entitled to recover the same from CONTRACTOR.
- 56.4.5 CONTRACTOR indemnifies OWNER / FEDO-FACT against any claims from any person or persons engaged by CONTRACTOR in connection with WORK and in the event OWNER/ FEDO-FACT becomes directly liable for any payment consequent to breach or non-observance by CONTRACTOR of the provisions hereof, such amounts shall be payable by CONTRACTOR to FEDO-FACT, and FEDO-FACT may recover such dues from any amount receivable by CONTRACTOR under CONTRACT without prejudice to any other mode of recovery.
- 56.4.6 In the event of any dispute between CONTRACTOR and persons engaged by CONTRACTOR at SITE, CONTRACTOR shall amicably resolve such disputes in such a way that WORK can be proceeded with uninterruptedly. In the event such disputes cannot be resolved in the above - said manner, CONTRACTOR shall immediately notify ENGINEER-IN-CHARGE of the existence of such a dispute and the nature thereof; but CONTRACTOR shall himself be responsible to take such measures as are necessary and permissible to have the situation resolved.
- 56.4.7 CONTRACTOR may have access to OWNER'S / FEDO-FACT'S qualified first-aid personnel and ambulance in case of accidents where such facility is

available. CONTRACTOR shall however provide a first-aid post for attending to minor injuries.

56.4.8 The Contractor shall submit proof of having valid EPF registration certificate. He shall within 7 days of the close of every month, submit to FEDO-FACT a statement showing the recoveries of contributions in respect of each employee employed by or through him and shall furnish to FEDO-FACT such information as the FEDO-FACT is required to furnish under the provisions of para 36 B of the EPF scheme 1952 to the EPF authorities and other information required by EPF authorities from time to time. He shall also submit a copy of challan every month in token of proof of having deposited the subscription and contribution of workers engaged on the project.

In case, the contractor is not complying the above provision FEDO-FACT shall withhold payment to the extent of 4.70% (Four point Seven Zero percent) of the value of the Running Account bill and shall release only after the submission of above mentioned details. If it is incumbent upon FEDO-FACT to deposit withhold amount with EPF authorities, the withhold amount shall be deposited by FEDO-FACT with EPF authorities. In such a case FEDO-FACT shall not refund this withheld amount to the contractor even after the production of EPF registration certificate.

56.5 **MINIMUM WAGES ACT**

The contractor shall comply with all the provisions of the minimum wages Act, 1948, contract labour Act (Regulation & Abolition) 1970, and rules framed there under and other labour laws/local laws affecting contract labour that may be brought into force from time to time.

56.6 **LABOUR RECORDS**

The contractor shall submit by the 4th & 19th of every month to the Engineer-in-Charge of FEDO-FACT a true statement, showing in respect of the second half of the proceeding month and the first half of the current month, respectively, of the following data:

- a) The number of the labour employed by him (category-wise).
- b) Their working hours.
- c) The wages paid to them.
- d) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused.
- e) The number of female workers who have been allowed Maternity Benefits and the amount paid to them.

## f) Any other information required by Engineer-in Charge

Failing which the contractor shall be liable to pay to FEDO-FACT, a sum not exceeding Rs.200/- for each default or materially incorrect statement. The decision of the FEDO-FACT shall be final in deducting from any bill due to the contractor the amount levied as fine and is binding on the contractor.

56.7 In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the FEDO-FACT and its contractor.

56.8 The contractor(s) shall at his/their own cost provide his/their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.

## (i)

- a. The minimum height of each hut at the eaves level shall be 2.10m (7ft.) and the floor area to be provided will be at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker's family staying with the labourer.
- b. The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6'x5') adjacent to the hut for each family.
- c. The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each, on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.
- d. The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.

## (ii)

- a. All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobi on both sides. The floor may be kutcha but plastered with mud gobi and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid

with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain water-tight.

b. The contractor(s) shall provide each hut with proper ventilation.

c. All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.

d. There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed.

(iii) Water Supply - The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/ their own cost make arrangements for laying pipe lines for water supply to his/ their labour camp from the existing mains wherever available, and shall pay all fees and charges thereof.

(iv) The site selected for the camp shall be high ground, removed from jungle.

(v) Disposal of Excreta- The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta. All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/authority. The contractor shall provide one sweeper for every eight seats in case of dry system.

(vi) Drainage - The contractor(s) shall provide efficient arrangements for drainage away sullage water so as to keep the camp neat and tidy.

- (vii) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
- (viii) Sanitation - The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.

**57.0 LABOUR CESS (IF APPLICABLE AT NIT-N)**

The rates of the contractor shall be inclusive of labour cess. FEDO-FACT shall make a recovery @ 1% on account of labour cess from each RA bill of the contractor and labour cess so recovered/deducted shall be deposited with the Labour Board of the concerned state. In case the Labour Board is not established in the state, recovery made by FEDO-FACT on account of labour cess shall be retained under suspense account and will be deposited with the Labour Board at later date as & when the Labour Board is constituted in the state .

Every contractor, sub contractor, affiliates, their legal assigns or heirs as the case may, shall be responsible for registration of every Building worker who has completed eighteen years of age but has not completed sixty years of age and who has been engaged in any Building or Other Construction Work for not less than Ninety Days during the preceding twelve months, with the Board I Funds as applicable under various sections of "THE BUILDINGS AND OTHER CONSTRUCTION WORKERS (REGULATION OF EMPLOYMENT AND CONDITIONS OF SERVICE) ACT, 1996 and THE BUILDING AND OTHER CONSTRUCTIONWORKERS' WELFARE CESS ACT, 1996.

The contractor shall also be responsible for maintaining register of beneficiaries i.e. the workers in such form as may be prescribed by the competent authority & the same shall be kept open at all reasonable times for inspection of relevant authority and officials of OWNERI FEDO-FACT.

The contractor shall be further responsible for maintaining such register & records; giving such particulars of Building workers employed by him, the work performed by them, the number of hours of work which shall constitute a normal working day, the wages paid to them, the receipts given by them and, such other particulars in such form as may be prescribed by the authority or FEDO-FACT.

In the event of contractor failing to comply with the above clause(s) in part or in full, FEDO-FACT, without prejudice to any other rights or remedy available under law or any other clause(s) of contract, shall be at absolute liberty to forfeit any sum or sums that are payable or

could become payable on account of execution of contract work and decision of Engineer-in-charge shall be final & binding in this regard on the contractor.

#### **58.0 IMPLEMENTATION OF APPERENTICES ACT 1961**

CONTRACTOR shall comply with provisions of the Apprentices Act, 1961 and any amendments thereto as well as any Rules made or orders issued there under from time to time.

CONTRACTOR shall submit to FEDO-FACT periodically statement giving the number of workmen engaged by CONTRACTOR in each category and the number of apprentices engaged in the corresponding category.

#### **59.0 LAW AND LEGAL JURISDICTION**

**59.1** CONTRACT shall be governed and construed by Laws of India.

59.2 Any legal proceedings relating to CONTRACT shall be limited to courts of law under the jurisdiction of the Kerala High Court at Ernakulam.

#### **60.0 CHANGE IN FIRM'S CONSTITUTION TO BE INTIMATED**

Any change in constitution of Contractor's firm must be done only with prior information to FEDO-FACT/OWNER.

#### **61.0 INDEMNITY AGAINST PATENT RIGHTS**

The contractor shall fully indemnify the FEDO-FACT from and against all claims and proceedings for or on account of any infringement of any patent rights, design, trademark or name or other protected rights in respect of any construction plant, machine, work or material used for in connection with the works or temporary works.

#### **62.0 SECRECY**

All drawings, designs, specifications, and other documents and information contained herein and any instruction given by FEDO-FACT in the performance of CONTRACT, whether patented or patentable or not, shall always remain the exclusive property of FEDO-FACT and CONTRACTOR at no time shall question or dispute such right of FEDO-FACT.

#### **63.0 LAWS, BYE-LAWS RELATING TO THE WORK**

The contractor shall strictly adhere by the provisions, for the time being in force, of law relating to works or any regulations and bylaws made by any local authority or any water & lighting agencies or any undertakings within the limits of the jurisdiction of which the work is proposed to be executed. The contractor shall be bound to give to the authorities concerned such notices and take all approvals as may be provided in the law, regulations

or bylaws as aforesaid, and to pay all fees and taxes payable to such authorities in respect thereof.

**64.0 LANGUAGE & UNITS**

CONTRACT is drawn up in the English Language. All correspondence between the parties in performance of CONTRACT shall be in the English Language. Metric system of measurement shall be followed.

**65.0 CONTRACT AGREEMENT**

The Contractor shall enter into a Contract Agreement with the FEDO-FACT within 15 (fifteen) days from the date of Letter of Intent/ Work Order or within such extended time, as may be granted by the FEDO-FACT failing which no payment shall be released to the contractor. The cost of stamp papers, stamp duty, registration, if applicable on the contract, shall be borne by the Contractor. In case, the contractor does not sign the agreement as above or start the work within 10 (Ten) days of the issue of letter of Award, his earnest money is liable to be forfeited and the Letter of award consequently will stand withdrawn.

The agreement as per prescribed Performa shall be signed at the office of the FEDO-FACT within ~~45 (Forty Five days)~~ 15 (Fifteen) days from the date of issue of Letter of Award. The Contractor shall provide for signing of the Contract, appropriate Power of Attorney and the requisite documents/materials. Unless and until a formal contract is prepared and executed, the Letter of Award read in conjunction with the Tendering Documents will constitute a binding contract.

The agreement shall be executed at FEDO-FACT, Udyogamandal on non-judicial stamp paper purchased in Ernakulam and the courts in Ernakulam will have jurisdiction to deal with matters arising there from, to the exclusion of all other courts.

**66.0 EFFECTIVE DATE AND VALIDITY**

66.1 CONTRACT shall become effective on signature by either party after the other.

66.2 Unless terminated by FEDO-FACT/OWNER, CONTRACT shall remain valid till obligations of both parties are fulfilled.

**67.0 ARBITRATION/DISPUTES**

1) If the 'contractor' is a Central Public Sector Enterprise or Central Government Department:

In the event of any dispute or difference relating to the interpretation and application of the provisions of this contract(s), such dispute/difference shall be taken up by either Party for resolution through AMRCD as mentioned in DPE OM No. 4(1)2013-DPE(GM)/FTS-1835 dated 22.05.2018.”

Or

(II) For contracts other than (i) above:

If any dispute arises out of or relating to or in connection with this CONTRACT, between the CONTRACTOR and the OWNER/FACT, the same shall be amicably settled through mutual discussions, failing which, the unresolved dispute(s) shall be referred to arbitration in accordance with the provisions of the Arbitration and Conciliation Act, 1996, as amended from time to time and number of Arbitrator shall be one. The venue of the Arbitration shall be at Ernakulam and the proceedings shall be in ENGLISH.

Any legal proceedings relating to this contract shall be limited to courts of law under the jurisdiction of the Kerala High Court at Ernakulam.

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## SCOPE OF WORK

Name of Work: VRF AC System for NIT Nagaland (Library block)

### **1. Introduction**

- 2.1 This work covers the design, supply, installation, testing and commissioning of VRF AC System to be installed in the Library Building of NIT, Nagaland Campus at Dimapur.
- 2.2 The Contractor shall carry out the work on the behalf of FEDO-FACT generally in accordance with the latest specifications.
- 2.3 In case any extra items not present in the tender /SOW are required to be carried out, this shall be carried out by the contractor in consultation with FEDO-FACT and the amount towards extra work shall be mutually discussed and finalized before carrying out such extra works.

### **3.0 SCOPE OF WORK**

- 3.1 The scope of work envisaged under this contract shall be as specified in the technical specification

**PROGRAMME OF WORK**

Name of Work: VRF AC System for NIT Nagaland (Library block)

- i. The work shall be completed in all respects within a period of 4 **(Four) MONTHS** from the date of **LOI or Work-to-Proceed Notice** issued by the Engineer-in-Charge, whichever is later and this shall be reckoned as the **ZERO DATE** of the Contract.
- ii. The priorities of execution shall be as fixed by the Engineer-in-Charge at the time of execution.
- iii. The bidder shall submit his programme of work in the form of a bar chart or PERT form so as to complete the work within the period specified in the NIT. The chart shall be prepared based on the milestones given under clause 38 of Special Conditions of Contract.

**TECHNICAL DOCUMENT**

Name of Work: VRF AC System for NIT Nagaland (Library block)

The technical documentation applicable for the WORK is attached herewith:

1. The work is to be carried out as per CPWD/Morth specification (as the case may be) as detailed in Schedule of quantities (BOQ). One copy of the latest specification should be made available at the site office by the Contractor.

**SITE CONDITION**

Name of Work: VRF AC System for NIT Nagaland (Library block)

The proposed site is located at Chumukedima Village at Dimapur District in Nagaland State. The bidder shall visit and examine the work site and its surroundings to obtain all information necessary for preparation of bid.

**Geographical condition:** Nagaland is an agrarian State located in an altitude ranging from 150m to 3800m above sea level. The total geographical area of the state is 16579 Sq. Kms, of which only 8.48% can be considered plain and rest is constituted by undulating and hilly terrain with altitude varies from 200m to 3840m.

**Climatic condition:** Nagaland has somewhat monsoonal climate, and have high humidity levels. From the month of June to October, temperature varies around 16° C - 32° C, while from October to February it is 4° C - 24° C.

**Monsoon in Nagaland:** The rainfall months are generally from May to September. The annual average rainfall varies from 180 cm to 250 cm. The state receives maximum rainfall from June to September.

**Summer in Nagaland:** Summer in Nagaland starts from March and lasts till May. The temperatures during summer months vary from 16 °C to 31 °C. Humidity is relatively high in summer but the temperature remains moderate.

**Winter in Nagaland:** Winter arrives in the state in the months of October and lasts till April. The temperatures during winter vary from 4°C to 24°C. Winter is characterized by frost at high altitudes and bitter cold days.

Strong North West winds blow through the state during the months of February and March

**SUPPLIES BY OWNER**

Name of Work: VRF AC System for NIT Nagaland (Library block)

**NO** tools / tackles / materials / scaffolding / machinery / manpower, any/all incidental items shall be supplied by the **OWNER**.

All materials required for this work are under the scope of supply of contractor unless otherwise specified

**SCHEDULE OF RATES FOR EXTRA ITEMS OF WORK**

Name of Work: VRF AC System for NIT Nagaland (Library block)

The following procedure shall be followed for arriving at unit rates for extra items of work

- a) Derive from rates for similar items of work already available in the Schedule of Items of Work
- b) If rates cannot be worked out on the basis of (a) above, then rates shall be derived on the basis of actual cost of materials used, labour engaged, hire charges of machinery used and all that is necessary for the work, plus a margin of 15 % towards Contractor's profit and overheads.

The contractor shall execute the excess quantities of items at the same rate as quoted by him for the original quantum of item in the work. The contractor shall compute the actual quantum of work based on the construction drawings and documents and inform the owner in advance in case of excess quantities and obtain approval for execution of the work with excess quantities prior to commencement of work.

The rate derivation along with rates of materials, labour (actual work labour without supervision charges), machinery and tools (hire charges only) required for the completion of work, supported by quotes from vendors / bills of same items purchased in the same project or similar ongoing project nearby / LMR rates published by CPWD shall be submitted for approval to the owner.

**PAYMENT SCHEDULE**

Name of Work: VRF AC System for NIT Nagaland (Library block)

All payments disbursed (Interim and final payments) to the contractor shall be on a back-to-back basis which means that FEDO-FACT will disburse payments to the contractor only after receipt of the corresponding amount from NIT-N.

Also the payments shall be made on the actual quantity of work done.

1. **Mobilisation Advance will NOT be paid for the work.**
2. **PAYMENT OF WAGES TO THE WORKERS** shall be made only through bank transactions and proof thereof to be submitted along with the bill. Payment of wages to the staff of the contractor shall not be linked to the clearance of bills by FEDO/FACT
3. **SECURED ADVANCE : Not applicable**
4. **RUNNING BILLS**

Interim payment will be made against running bills at 95% of the value of WORK executed and for which tests prescribed, if any, are completed within 30 days of receipt of invoice and certification by Engineer-in-charge. The retained amount of 5% shall be disbursed along with the final payment. The following deductions shall be made on the running bills:

  - a. Recovery of hire charges for OWNER'S Construction Equipment, if any, made available for the WORK.
  - b. Cost of departmental issues if any, proportionate to quantity used in work.
  - c. Income Tax or any other taxes applicable at prevailing rates.
  - d. TDS under GST Act., deduction towards GST.
  - e. Release of GST shall be after matching with GST input register "GSTR2B"
  - f. Any other amount due from CONTRACTOR to OWNER.
  - g. Recovery towards compensation for delay as noted in the SCC

Note: In case NIT-N makes timely disbursement of money to FEDO-FACT

**PAYMENT SCHEDULE**

towards the work or sufficient funds are made available by NIT-N to FEDO-FACT, then monthly payments shall be disbursed against monthly RAB's.

**5. FINAL PAYMENT**

Final Contract price based on WORK actually performed, will be paid after completion of work in all respects, issue of taking over certificate by OWNER, settlement of account of all departmental issues and reconciliation of its use / return, clearance of SITE and removal of Temporary Structures and debris and settlement of all pending claims on account of labour employment by CONTRACTOR at SITE, after adjustment for the following:

- i) D e d u c t i o n of all previous payments made.
- ii) Recovery of value of departmental supplies including penal recoveries if any.
- iii) Recovery of hire charges for OWNER'S Construction Equipment made available for the WORK.
- iv) Recovery of Liquidated Damages if any due
- v) Income Tax at prevailing rate.
- vi) Any other amount due from CONTRACTOR to OWNER.
- vii) TDS or GST (If applicable).

At the time of FINAL PAYMENT, CONTRACTOR shall submit, a Clearance Certificate from the OWNER/FEDO through the ENGINEER-IN-CHARGE of the WORK.

**PAYMENT OF GST PORTION OF THE BILL SHALL BE MADE ONLY AFTER THE CONTRACTOR'S BILL APPEARS IN OWNER'S GSTR 2B, WITHIN THE MAXIMUM TIME LIMIT AS SPECIFIED UNDER THE GST ACT/RULES, FOR AVAILING CREDIT.**

**SITE FACILITIES**

Name of Work: VRF AC System for NIT Nagaland (Library block)

The following site facilities will **NOT** be provided by OWNER.

1. **CONSTRUCTION WATER**
2. **CONSTRUCTION POWER**

The Contractor shall make his own arrangements for Water and Electricity required for Construction work.

FEDO/OWNER shall allot land at convenient place in SITE within reasonable distance of the place of WORK where CONTRACTOR may build temporary structures for site office, store and fabrication shop and CONTRACTOR shall make arrangements for fencing and security.

CONTRACTOR shall make his own arrangements for residential accommodation of staff and workmen, facilities for food and canteen and shall not set up any hutments, barracks or other form of residential units, at any place within SITE or other land belonging to OWNER/CONSULTANT unless specifically agreed to.

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**PROFORMA FOR RELEASE CERTIFICATE**

KNOW ALL MEN BY THESE PRESENTS, THAT .....  
..... (hereinafter referred to  
as CONTRACTOR), for and in consideration of the receipt of the sum of Rs. ....  
(Rupees ..... only) by Contractor from  
FEDO, representing the final payment under Contract No. .... dated the  
..... day of .....201. , between CONTRACTOR  
AND FEDO, hereby releases and forever discharges FEDO and their respective  
successors and assign, and the property of either of them from all claims and demands  
whatsoever in any manner arising out of, or related to said Contractor ,labour performed  
or material and equipment furnished by the Contractor in connection with, or incidental  
to the construction of  
.....  
..... for FEDO at .....

In consideration of, and for the purpose of including FEDO to make the aforesaid final  
payment, the Contractor hereby represents warrants and agrees that (1) all sums due or to  
become due all debts, accounts, damages, obligations, claims and demands of every  
nature and kind whatsoever in any manner arising out of, or related to labour performed  
or materials and equipment furnished in connection with, or incidental to said  
construction have been paid and satisfied, (2) there are no unsettled claims for injuries to,  
or death of any persons and damage to, or destruction of property in any manner arising  
out of, or related to, the aforesaid construction and (3) it shall indemnify and hold  
harmless FEDO and their respective successors and assigns from and against any claims,  
demands, liens, claims of lien, judgments, attachments and costs related hereto in any  
manner, arising out of , or related to, the aforesaid construction.

The Contractor acknowledges, the guarantee purposes, that the date of acceptance of the  
work performed under Contract No..... is  
hereby established as .....201...

Whenever used in the within instrument of release and indemnity, the name FEDO shall  
refer to FACT ENGINEERING AND DESIGN ORGANISATION.

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IN WITNESS WHERE OF, Contractor has caused this instrument to be executed by its duly authorized officers this .....day of ..... 201...

(CORPORATE SEAL)

WITNESS:

Name of Contractor

NAME:

SIGNATURE:

SIGNATURE:

TITLE:

TITLE:

PLACE:

DATE:

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### SAFETY PRACTICES

1. The contractor shall observe all statutory and legal requirements by Central and State Governments applying to the work as well as any local regulations applying to the site issued by OWNER/FEDO or any other authority.
2. Particular attention is drawn to the following:
  - a) In case of accident, OWNER'S/FEDO'S Safety Engineer/Engineer –in –Charge shall be informed in writing within 24 hours of occurrence of the accident. The Contractor shall strictly follow regulations laid by Factory Inspector and Government Authorities in this regard.
  - b) Fencing all Contractors plant, platforms, excavations
  - c) Compliance with all electricity regulations
  - d) Compliance with statutory requirements for inspection and test of all lifting appliances and auxiliary lifting gear.
  - e) Operation of concrete mixer machine, vibrator, poclain/JCB, Generator etc
3. Staircases, doors or gangways must not be obstructed in any way that will interfere with means of access or escape.
4. The Contractor shall notify OWNER/FEDO of his intention to bring on site any equipment or container holding liquid or gaseous fuel or other substances which might create a hazard. The OWNER/FEDO will have the right to prohibit the use of such equipments or to prescribe the conditions under which such equipment may be used.
5. Where it is necessary to provide and/or store petroleum products or petroleum mixtures and explosives, the Contractor shall be responsible for carrying out such provisions and/or storage in accordance with the rules and regulations laid down in Petroleum and Carbide of Calcium Manual published by the Chief Inspector of Explosives of India. All such storage shall have the prior approval of OWNER/FEDO. In case approvals are required from Chief Inspector of Explosives or any statutory authorities, the Contractor shall be responsible for obtaining the same.
6. The Contractor shall be responsible for the safe storage and use of any radiographic sources or those of his sub-contractor.
7. "Work Permit" in the prescribed proforma shall be obtained from FEDO'S Safety Engineer/Engineer-in-Charge before carrying out any work within the project premises in the following situations:
  - a) Any work involving open flames and sparks such as welding, gas cutting, soldering, grinding etc.
  - b) Sand blasting
  - c) Entry into hazardous and potentially hazardous areas
8. Good house-keeping must be practiced by Contractor's personnel at all times within the project area.

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9. For the safe execution of certain works, personal protective Safety devices as stipulated by Safety Codes/Safety Engineer shall be provided and maintained by the Contractor.
10. Any unsafe work practice/working conditions during execution of work shall be corrected immediately on bringing the same to the attention of Contractor by OWNER'S/FEDO'S Safety Engineer.
11. Contractor shall strictly adhere to safe traffic practices within project area with respect to speed limit, parking of vehicles etc.
12. Electrical Safety Regulations
  - 12.1 In no circumstances will the Contractor interfere with fuses and electrical equipments belonging to the OWNER or other Contractor.
  - 12.2 Before the Contractor connects any electrical appliances to any plug or sockets belonging to the other Contractors or OWNER he will
    - a) Satisfy OWNER/Engineer-in-Charge that the appliances in good working condition.
    - b) Inform the OWNER/Engineer-in-Charge of the maximum current rating, voltage and phase of the appliance.
    - c) Obtain permission from OWNER/Engineer-in-Charge for taking power connection from specified point.
  - 12.3 Permission for power connection will not be granted until OWNER/Engineer-in-Charge is satisfied that the appliance is in good working condition and proper earthing connection provided.
  - 12.4 No electric cable in use by other Contractor/OWNER will be disturbed without prior permission. No weight of any description will be imposed on any such cable and no ladder or similar equipment will rest against or be attached to it.
  - 12.5 No work must be carried out on any live equipment. The equipment must be made safe and a "WORK PERMIT" issued by Engineer-in-Charge before any work is carried out.
  - 12.6 Contractor shall employ a full time Electrician to maintain the temporary electrical installation of the contractor.
  - 12.7 Contractor shall follow detailed Safety Procedure issued by OWNER/FEDO at the time of commencement of work and updated from time to time.
  - 13.0 Contractor shall have arrangements to transport his workmen in the event of an accident at work site.

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**ANNEXURE –1**

PROCEDURE

FOR

SAFETY ASSURANCE

IN

CONSTRUCTION SITES

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## PROCEDURE FOR SAFETY ASSURANCE IN CONSTRUCTION SITES

### PART –A- PROCEDURE

#### 1.0 Scope

This document explains the safety procedures to be followed in construction sites; directly managed by FEDO.

#### 2.0 Responsibility

Safety activities in each construction site shall be under the control of a Resident Chief Construction Manage or Resident Construction Manager or Resident Engineer or a Safety Engineers as the case may be depending upon the magnitude of the work, as decided by GM (FEDO).

#### 3.0 Safety Field Organisation

In all the sites which are large in magnitude a safety engineer will be nominated, who will be responsible for the adherence of all safety aspects in the construction site and co-ordinate with each sub-contractors who are responsible for construction activities. For other project FEDO's RCCM/RCM/RE will be responsible for the safety activities at site.

#### 4.0 Contractor's Obligations

As the site activities are carried out through work contracts/packages, the contractors/vendors are totally responsible for the safety aspects of their individual sites and have to comply with all safety provisions as stipulated by FEDO/Bureau of Indian Standards/the Electricity Act/OISD and other acts as applicable, in respect of all personnel directly or indirectly employed by the Contractors for the concerned works.

The following practices shall be followed at construction sites by the Contractors so as to ensure safety, health of people working at construction sites and prevention of fire; which shall be strictly implemented in co-ordination with the FEDO Site-in-charge.

##### 4.1 Safety Policy

Each construction firm shall have a safety policy approved by FEDO which shall deal with the following matters.

Arrangements for training at all levels with particular attention to key workers such as scaffolders, crane operators, welders etc. whose mistakes can be especially dangerous to other workers.

- Safe methods or systems of work for hazardous operations: the workers carrying out these operations shall be involved in their preparations.
- The duties and responsibilities of Supervisors and key workers.
- Arrangements by which information on safety and health is to be made known.

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- Arrangements for setting up safety committees.
- The selection and control of sub-contractors.

#### 4.2 Safety-in-Charge

FEDO site-in-charge shall ensure that the contractors at all times shall designate a supervisor possessing required experience and skill for safety and health duties. Some example of duties which shall be assigned are :-

- Provision, construction and maintenance of safety facilities like access roadways, pedestrian routes, barricades and overhead protection.
- Construction and Installation of safety signs.
- Safety provisions peculiar to each trade.
- Modification of lifting machineries such as cranes and goods hoists and lifting gears such as ropes and shackles.
- Inspection and maintenance of access facilities such as scaffolds and ladders.
- Inspection and cleaning of welfare facilities such as toilets, clothing, accommodation and canteens.
- Transmission of the relevant parts of the safety plan to each work group.
- Emergency and evacuation plans.
- Information to management, quickly about unsafe practice and defective equipments.
- Dissemination of information on health and safety.
- Attend safety meetings and provide all information about safety and health and also implement at work spot resolutions taken during the meetings.
- Assist FEDO Engineers/Client in conducting the mock drill.
- Maintain vigil on use of personal protective equipment by the workers.

#### 4.3 Site Planning and Layout

Contractor shall make work plan, access to work spot, material storage and handling, vehicle movement (preferably one way), edge protection wherever there is drop of 2 M or more, placement of construction machineries, location of trade workshop / fabrication yard/laboratory, electrical installations (switchboard etc), medical and welfare facilities, lighting etc. In consultation

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with FEDO Engineers/Clients prior to commencement of the work and ensure implementation of the same.

Site tidiness must be maintained during construction by cleaning up rubbish/scrap/spilled oil and grease, keeping gangway, working platforms and stairways clear of equipment and material not in immediate use, removing or hammering down any nails projecting from timber etc.

#### 4.4 Conduct

No one shall enter any part of FEDO/Client premises including the worksite other than for the purpose of carrying out the work. All contractor, personnel needing access will be required to obtain a pass issued by FEDO/Client and produce it if asked for. Contractor's personnel shall abide by all rules and regulations stipulated.

- 4.4.1 Smoking inside the premises of a working location is strictly prohibited except in the designate areas.
- 4.4.2 No source of ignition shall be taken to the licensed premises or job site unless covered by a Hot Work Permit/Clearance.
- 4.4.3 Personnel must also strictly adhere to the approved protective clothing and equipment requirements.
- 4.4.4. It is essential that good house keeping is practiced at all times to keep the work area neat and clean. No material on any of the site of work shall be so stacked or placed as to cause danger and inconvenience to any person or public.
- 4.4.5 At no time during working house or at any time on site should any of the contractor's personnel be under the influence of nor consume liquor, drugs or other intoxicating substances.
- 4.4.6 No children shall be present at work spot.

#### 4.5 Occupational Health and Hygiene

The contractor shall be responsible for the medical welfare of its own personnel and shall provide for

First Aid Box – The contractors shall establish their own First Aid facilities at the site and arrange for emergency transports, when required. The contractor shall provide First Aid Boxes, contents of which shall be adequate for first aid treatment to basic emergencies which occur most frequently like burns, bleeding, insect bites, bone fracture etc. The boxes and containers shall be clearly identified as First Aid boxes and kept in easily accessible places which shall be made known to every employee of that location. Contents shall be regularly checked for expiry dates.

More serious injuries involving head injuries, fractures and severe wounds etc. shall be treated by a qualified and experienced medical personal.

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- The services of a Doctor shall be made available by contractor, at site on a part time basis, all major project sites.
- Arrangement for professional medical treatment/ Hospitalization.

The contractor shall ensure that his personnel are medically fit to perform their work and they shall maintain highest standards of hygiene.

4.5.1 All contractors who employ more than 50 workers or where the Contract Value exceeds Rs.50 crores the following facilities are to be provided by the Contractor at site at his own cost.

- Arrangement for clean drinking water.
- Toilet facilities
- Canteen where tea and snacks are available
- A creche where 10 or more women workers are having children below the age of 6 years.

4.6 Sub-contractors

The choice of sub-contractors if employed must be approved by FEDO Engineer responsible for work on site. Sub-contractor must comply fully with all safety rules and conditions applicable to the main Contractor.

4.7 Safety Equipment/Personal Protective Equipment

Safety equipments personal protective equipments shall be of approved make and are essential for avoiding injuries to workers on the job. A register showing stock and issue of PPE shall be maintained by the Contractor at site and must be available for inspection. The most common requirements of protective equipments are summarized below.

4.7.1 Boots & Shoes

Suitable safety footwear conforming to IS: 10667/1989 shall be worn by personnel, considering the nature of works as hazards such as :

- risk of crushing by heavy objects
- penetration by sharp objects
- penetration by chemicals or harmful liquids
- weld spatter

Leather safety shoes/boots with steel toe caps shall be used for all heavy manual work and general construction. Shoes shall be abrasion resistant and suitable for wet and muddy conditions. Slip resistant shoes are also required for most of the works.

4.7.2 Gloves

Gloves conforming to IS: 6994 shall be used to protect the hands from the following hazards.

- risk of abrasion
- risk of cutting

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- risk of tearing
- risk of burn
- risk of infection

Leather, plastic or cotton gloves coated with an impervious substance are recommended for most applications.

#### 4.7.3 Helmets/Hard hats

All personnel shall be issued with safety helmets/hard hats conforming to IS: 2925/1984, which shall be used at all times while the personnel are on site. Safety helmets shall be checked periodically for signs of wear/cracks and damage in which case these shall be rejected and replacements issued. Sufficient number of safety helmets shall be kept at site for visitors.

#### 4.7.4 Protective Clothing during Welding and Handling Toxic/Hazardous materials

For handling hazardous materials and welding, additional body protection is recommended. Welders must wear aprons or overalls and gloves made of flame retarding materials. Full face shields with respiratory fitters where required shall be used. Personnel handling toxic or hazardous materials must be fully protected to avoid any skin contact with these substances. This may include the wearing of impervious overalls, rubber boots, gloves, face mask and respiratory equipment like canister masks.

#### 4.7.5 Goggles

All personnel shall be provided with suitable eye protection wherever there is a risk from :

- flying particles/dust ingress
- chemical splash
- radiation glare
- hot sparks or metal splatter
- harmful vapours
- sand/grit blasting

Goggles shall be single piece constructed of clear impact resistant plastic and fitted with adjustable elastic straps, Goggles used for welding shall be fitted with recommended optical filters to reduce the intensity of radiation to safe level.

#### 4.7.6 Hearing protection

Hearing protection shall be worn by personnel involved with works in areas where noise level exceed 85 db (A noise level beyond which normal conversation becomes difficult) on a continuous or regular intermittent basis.

Protection is available in two basic types: (1) an external cup type defender which fits over the outside ear and 2) internal disposable type of earplugs usually made of compressible foam, which fits inside ear.

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Whenever practicable, equipment generating high noise levels shall be located at maximum distance from any works being performed, and sound mufflers fitted.

#### 4.7.7 Warning signs and Barriers

Care shall be taken to ensure that the Contractor has the necessary material to secure the work site and to warn the general public or other workers of dangers created by works. This shall include

- Construction warning signs
- Warning lights and signs in traffic control zone
- Barricades
- Necessary arrangements for illumination of the warning signs and barricades shall be made by the Contractor wherever the same is required for safety reasons.

#### 4.7.8 Respiratory protection

Respiratory equipment, whether static or bottled type, or self-contained breathing apparatus shall only be worn by trained personnel. Self contained breathing apparatus shall be used in emergency situations, whilst scheduled works shall utilize the static bottled-type. All equipments shall be thoroughly checked prior to use to ensure:

- cylinders are full and gauges function correctly
- all connections are tight
- face masks show no sign of possible leakage
- equipment to be used for tank entry must be as detailed in the Tank cleaning Manual

#### 4.7.9 Safety Belt/Harnesses

Safety belts/harnesses conforming to IS: 3521-1989 shall be worn by all people working at a height greater than 3 mts above ground level, where safe working platforms with suitable railing, toe board etc. are neither available, nor practical.

#### 4.8 Earth Excavation

All safety precautions as per IS: 3764 – 1992 shall be followed while carrying out excavation. In case of excavation by blasting or drilling operations Safety precautions stipulated in IS: 4081-1985 shall be adhered to.

- i. Shoring shall be provided to protect the sides of excavation against collapse. Proper slopes & shuttering shall be provided where excavation is deeper than 1.5 M
- ii. Barrier/fence shall be provided for preventing people from slipping into the pit. If the pit is in vehicular driveway additionally a prominent board shall be put up showing “Excavation in Progress”

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- iii. Pumping out of accumulated water from pit is to be done at regular intervals. Run-away water shall be prevented from entering the excavated areas as such water can cause erosion of soil and sudden collapse of earth.
- iv. If the excavation is carried out without shoring necessary angle of repose to be maintained at all times.
- v. No labour shall be allowed to sleep or take rest inside the pit.
- vi. Excavated earth shall be stacked away from cutting edge to avoid collapse of trench and sliding of heaped earth in to trench.
- vii. Contractor shall ensure that the excavation does not damage any existing underground cables, pipelines, foundation of adjoining buildings or structures etc. Wherever possible excavation shall not be so close and deep as to undermine safety of any adjoining building or structure.
- viii. Before working/ entering inside an existing excavated pit it has to be ensured that no toxic gases are present which can cause disaster. The contractor also has to ensure that the underground water present in the pit is not acidic in nature due to industrial effluents.
- ix. Adequate access to an escape from the trench or pit must be provided at all times. This may be by installing and securing ladders at regular intervals or by stepping the edge of excavation. Crossover shall be provided by the contractor over excavated trench at suitable interval for movement of workers.

#### 4.9 Piling and other Deep foundations

Safety precautions as stipulated in IS: 5121-1961 (Safety Code for Piling and Deep foundations) shall be adhered to while carrying out piling and other deep foundations. There are certain hazards which are common to all types of piling and the following precautions are necessary.

- Piling Machine Operators shall be over 18 years of age and properly trained.
- Prior to piling all underground services shall be located and made safe.
- There shall be a firm level base for the crane or crane mats shall be provided.
- Protective equipments like safety helmets, ear and eye protection shall be used by the workers.
- All cranes, lifting appliances and lifting gear must have appropriate certificates of testing and thoroughly examined.
- Particular attention shall be provided to the risk of damage to lifting gear from sharp edges.
- Cranes used for lifting or lowering workers must be fitted with a dead man's handle and lowering shall be done under power.
- Piling contractors shall submit a written statement to FEDO's Site-in-charge, setting out the precautions relevant to the type of piling they are to employ.
- Induction training and information shall be arranged by the Contractor.

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#### 4.10 Working in basement/underground tank

- i. Man entry into the underground areas is allowed only after specific approval from FEDO's Engineer in charge also, proper exit shall be provided for emergency escape by way of easily accessible ladders etc.
- ii. Air circulation must be there inside underground basement etc. Hot work in such places shall be taken up only after ensuring that ample supply of fresh air is available using additional blowers etc.
- iii. People shall be allowed entry in the underground spaces only after ensuring that no toxic gases are present inside. Purging of gases may be done by filling the U/G tank with water. No hot work is permitted unless the explosive meter reading is within acceptable limit and specific approval from FEDO's Engineer-in-charge obtained.
- iv. Whenever workmen are allowed to enter a vessel or U/G tank or confined space, it is necessary to keep minimum two persons (alert and trained) at the manhole or entry point holding the other end of the rope fitted with safety belt of the person working inside so as to enable pulling out he person working inside in case of emergency.
- v. Proper communication system and watch between people shall be kept.

#### 4.11 Demolition

All safety precautions as per IS: 4130-1991 (Safety code for demolition of buildings) shall be followed while undertaking demolition jobs. Demolition must be supervised by persons with thorough knowledge not only of demolition process but also of the principles of building construction. First, a survey of the physical characteristics and design of the building to be demolished must be carried out in order to choose a safe method of work. Then a demolition action plan shall be submitted by the Contractor for approval before execution. Demolition is an inherently dangerous process and every one at site must wear protective equipments including helmet, gloves, safety footwear etc. as necessary and decided by FEDO's Site-in-charge.

Before demolition begins, all services to the structure or building must be disconnected. Arrangements must be made to keep the unwanted persons as far away as possible from the site and wherever possible a fence not less than 2 M height shall be erected around it.

#### 4.12 Working at Height

##### 4.12.1 Safety Harness

All people working at heights more than 3 mts. must use safety harness. People working at lesser heights but exposed to greater risk (by way of material etc. lying one ground) must also use it.

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#### 4.12.2 Using ladder

Ladder used shall be of standard material like wooden/steel and be sufficiently strong conforming to IS:3696-1991 (Part 2). It shall be secured at top and bottom and in addition one person should be present at the ground to hold the ladder as a second check. If the ladder is used for carrying material as well, suitable foot holds and hand holds shall be provided on the ladder. The slope of the ladder shall not be too steep or flat (the ladder shall be given an inclination not steeper than 1 to 4 ie. 1 horizontal to 4 vertical) to cause slipping or falling off and it shall rest on firm surface. No portable single ladder shall be over 10 M in lengths, while the width between the side rails in ring ladder shall in no case be less than 30 cms for ladder up to and including 3 mts. in length. For longer ladders this width should be increased by atleast by 6 mm for each additional 30 cms of length, Uniform step spacing shall not exceed 15 cms. Rung of the ladder shall not be used for support or to tie, stiles or side members are meant for this.

#### 4.12.3 Scaffolding

Suitable scaffolding conforming to IS:3896 (PART-1) shall be provided for workmen for all works that cannot be safety done from the ground or from solid construction except such short period of work, as can be done safety from ladders. The height above which scaffolding is mandatory is 2 mts. Scaffolding shall be of good quality Bamboo or steel tubular structure conforming to IS: 4014 (Part-I and II). Scaffolds shall be designed for their maximum load and with safety factor of atleast 4 or as prescribed by the Site-in-charge. Scaffolds shall be provided with safe means or access, such as stairs, ladders or ramps. Joints in the scaffolds shall be tied up and clamped properly to avoid any slippage. Scaffolding or staging more than 30cm above ground or suspended from an overhead support shall have guard rails properly attached, bolted and braced atleast 1 M high above platform and extending along the entire length of the outside with only such openings as may be necessary for delivery of materials. Scaffolding shall be supported at different heights. Safety belt must be used while working on the scaffolding. Scaffolding shall be physically checked for load carrying capacity occasionally.

#### 4.12.4 Working Platform

Wherever possible, all works to be done at a height greater than 2 mts. above ground level, must be performed from a properly constructed and maintained working platform. Safe means of access shall be provided to all working platforms. Working platforms, gangways and stairways shall be so constructed that they shall not sag unduly or unequally. Every opening in a working platform shall be provided with suitable beams to prevent the fall of persons or materials. The working platform shall be :

- closely boarded.
- Atleast 70 cm wide if used only as a footing only: atleast 80 cm wide if used also for stacking material; and atleast 1.1 mts, if used for the support of a trestie platform.
- Provided with foe-boards of minimum 0.15 mts. in height.
- Provided with hand rails not greater than 0.85 mts. above toe-board.
- Constructed as close to the structure or building as possible.

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#### 4.12.5 Working on roof

People working on roof shall be properly protected by providing temporary railing/ hand rails/safety harness. Helmets shall be used by workers working underneath. Care shall be taken to prevent falling of material from top to adjoining area. In slant roofs more than 10° safety belt shall be used and belt end fastened properly to a fixed object. Workmen shall be not allowed to work on slippery roofs.

Fragile materials such as wired glass, corrugated plastic sheeting and unreinforced insulating slabs etc., shall be identified and necessary precautions taken while working on them. People working on fragile roof shall be properly protected by providing two Crawling Boards or Roof ladders so that one is available to stand on while the other is being moved. Crawling Boards shall have cross batons atleast 32 MM thick and not more than 380 MM apart and shall be secured in position.

Prominent working notices shall be displayed at the approaches to fragile roofs.

#### 4.12.6 Working on A/G Tanks

In addition to safety harness which is a common precaution for working at heights, no workmen shall be allowed to work with loose cloths, chappal or loose shoes. The temporary work platform/trolley with railing generally used for shell plates welding at a height shall be checked for its strength to hold and carry welder and fitter. People working below must wear helmet. Safety shoes shall be used by the workmen to protect against welding splatter, metal pieces etc. Earthing of work piece must be provided through an earthing cable. Only tested chain blocks, ropes and chains shall be allowed to be used for lifting steel plates, appurtenances, other equipments on top of tank.

#### 4.13 Access to site

Free access to site shall be provided with clear roads, passage, gangways, staircase and scaffolding etc. Access to work-site shall be leveled, open and free from any obstructions like construction material or scrap/waste. Any pit or ditch shall be covered. Sufficient lighting at night shall be provided. Scrap and debris generated out of construction work shall be removed/disposed off at a regular interval as directed. Emergency exist shall be provided in case of blockade of primary exit.

#### 4.14 Hot works

All fire precautions as stipulated in IS: 3016 (code of practice for fire precautions in welding and cutting operations) shall be followed while welding/gas cutting. Fire existiguishers, sand buckets, water and gunny bags shall be provided when hot work is in progress. Gas cylinders used for gas cutting and welding shall

- be of approved make

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- be stored upright and be kept away from hot work and care shall be taken to prevent heating of gas cylinders.
- Gas cylinder valves shall always be checked and shall be closed when not in use.
- be stored in a well ventilated area
- be fitted with safety caps when not in use
- Not be lifted by nozzle and rolled

All gas and oxygen regulators shall be fitted with Flashback arrestors, being non-return valves designed to prevent an explosive mix developing in cylinder.

Checking for leaks shall be by means of soapy liquid applied to each joint and under no circumstances shall a naked flame be applied to any part of the cylinder.

When working at a height, do not place cylinders directly beneath the working area, as molten metal may fall on to the hoses, causing leaks and possible igniting the gases.

During electric arc welding process, very high ultra violet radiation is generated. Suitable eye protection must be worn by the welder and any person working in close proximity, in order to prevent permanent damage to the eyes. When not in use, electricity to the holder and electrode shall be turned off.

Hose shall be in good condition, properly clamped as per specifications. Welding cable shall have proper insulation with minimum number of joints.

All equipments shall be properly earthed, and cables properly insulated and connected.

#### 4.15 General safety precautions in electricity

Safety precautions as stipulated in IS:5216:1982 shall be adhered to, while carrying out electrical works. Contractor shall ensure the following :

1. Only authorized persons shall carry out operation and maintenance of electrical systems.
2. Work permit and isolation of the electrical system before taking up the work must be ensured.
3. Proper protective equipments shall be used.
4. Check for defective cables, loose joints in conduits, damaged fuse boxes, loose pins, faulty sockets, and defective earth wire.
5. Do not overload electrical equipment. Do not fit make shift fuse wire.
6. Use right type of tools for the jobs.
7. After maintenance of flameproof fittings, ensure that the fittings meet requirements of flameproof standards.
8. Power supply cable shall be laid normally underground from source to the work place whether permanent or temporary.
9. Jointing of cable shall always be made using proper junction box and flameproof junction box when in hazardous areas even in case of temporary connections.

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10. All equipments LT or HT which are likely to cause hazard shall be turned off and segregated. All base terminals etc, shall be insulated. Rubber mats shall be used for LT/HT switch room, where applicable.
11. All electrical equipments like wires, switch board etc. shall be protected against rains or leaking water lines etc. in wet condition switches shall not be operated until it is dried up properly. Switches, starters shall be placed well above ground level.
12. Proper earthing shall be provided for all electrical items and effectiveness of earthing shall be checked from time to time]
13. Electrical items shall be handled after isolation and care shall be taken to identify and replace damaged electrical items. Guard wire shall be provided for A/G HT wires.
14. Ensure all fuses are of good quality and conform to correct ratings. Use MCB's as far as possible.
15. Electrical maintenance workmen working around a wet area near a fuse box must use wooden platform with rubber mat, insulated tools and rubber boots.
16. All electrical installation including incomer line, temporary distribution board, electric motor and machine must be installed as per IE Rules with proper earthing and must be inspected and certified by a licensed electrician/authority at periodic intervals.

#### 4.1.6 House keeping

- I) Arrange all machinery such as welding machine, generators, cutting machine, etc. in such a way that fire risk equipments are segregated and protected.
- II) Check the machines at periodic intervals.
- III) Do not accumulate unwanted material near the machines, which may cause fire hazards.
- IV) Storage place shall have proper ventilation.

#### 4.17 Safety In Radiography Works

Planning and procedure for radiography initially shall be formulated by Contractors and submitted to proper authority. Procedure shall be thoroughly discussed by all related persons for familiarization.

All radiation equipment and radioactive materials shall be stored, handled, transported or disposed off so that no person receives unnecessary dose of radiation.

Shield ability of the radioactive materials container shall be inspected every 6 months.

Warning signs and posters used internationally shall be displayed.

Radiography shall be performed under the direction of radioactive Supervisors / Officer responsible for this work.

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All workers shall have extensive experience/knowledge of the work such as radiation procedure, operation of radiation apparatus and effects of radiation on the body.

The following spaces or areas shall be classified as restricted areas.

- a) Storage place of radioactive materials
- b) Any area where the radiation exists at levels such that large portion of the body could receive a dose in excess of 30 milligram per week.
- c) Emergency storage area for radiation apparatus or radioactive material capsules.

Warning signs, labels and fence shall be provided for restricted area to prevent trespassing.

The area covered within a radius of 5 Mts. from the radiation working spot or location and subject to a dose of radiation in any one hour in excess of 50 milligrams shall be called the radiation area and trespassing in the area shall be strictly prohibited.

All workers entering a restricted area shall wear film badges sensitive to radiation. All workers who could receive a dose of radiation in excess of 100 milligrams per day shall wear a pocket dosimeter and the dose of radiation received shall be recorded everyday. The dose of radiation shall be checked by the supervisor for each radiation exposure when the dose of radiation exceeds 100 milligrams.

A Supervisor shall stand-by and suitable alternative such as shortening the radiation time, reinforcing the shield plate etc. shall be arranged.

During radiation work dose of radiation at the boundary shall be measured and recorded.

The radiography Supervisor shall measure and record the surface dose rate of restricted area every day as under.

- a) Date of measurement
- b) Measuring method
- c) Description and capacity of apparatus
- d) Measured condition
- e) Results of measurement
- f) Name of measurement
- g) Any action taken

Radioactive materials shall be stored separately from other material or equipments. The storage place shall be 10 cm or more above the ground and locked to prevent accidents. Radioactive materials shall be stored in a case made of lead of ample thickness with a lock on the exterior surface of the case. The description of materials, quantity and danger sign shall be distinctly visible.

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#### 4.18 Hazardous Zones

Hazardous (flammable atmosphere) zones are classified as zone-0, zone-1 and zone-11. All other areas are unclassified but not necessarily non-hazardous. In these areas, safety precautions must be observed in order to eliminate risk of explosion. Zone-0 is defined as the vapour space in and directly around product storage tanks. Zone-1 is defined as an area where vapours may be expected at all times. For zone-11, flammable vapours may be expected to be present only when a failure to equipment or plant has occurred. Unclassified area cannot be assumed to be always non-hazardous, therefore must still be checked prior to issue of work permits. Following precautions shall be taken while working in hazardous areas.

##### 4.18.1 Non-sparking equipment

Sparks can be produced from electrical tools / devices, and where two surfaces collide. In order to avoid risk of sparking, only tools approved for use in hazardous zone-1 shall be used. The condition of all equipments used within hazardous zones shall be checked by FEDO'S Site Engineer.

Where chipping or scraping is necessary in a hazardous area, several precautions shall be taken such as

- the surface being chipped or scraped shall be kept moist with water at all times.
- air driven jack hammers may be used where atmosphere has been certified to be safe and the impacting surfaces must be submerged in water.

##### 4.18.2 Workers

Workers are to be checked for match boxes, lighters and other spark producing items. This shall be taken into storage with security at the gate or office.

##### 4.18.3 Safety checks

In all cases where work is to be carried out within hazardous zones FEDO'S engineer/Client Safety Engineer must check the area using an explosimeter for the presence of flammable vapour. The explosimeter shall be verified before each use, for its smooth functioning. Should there be any indication of flammable vapours, the work permit must not be issued. Further steps will then be taken to reduce the vapour content of the surrounding atmosphere and the flammability check repeated and only then work permit issued. Authority to commence works in hazardous zones shall be continuously supervised by FEDO'S Engineer/Clients Engineer.

##### 4.18.4 Fire Screen Wall

Fire screen provided to segregate hot works in a hazardous area shall be erected foolproof and following precautions shall be taken in construction.

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- i) Members shall be made of standard size MS pipes, MS structures, strong enough to withstand the wind/dead loads. The bottom of uprights shall be properly grouted.
- ii) Good quality G.I. Sheets free of damage and holes shall be used as screening wall. G.I. Sheets shall be properly tied up with the structure.
- iii) The height of fire screen wall shall be decided based on the level at which hot work is carried out. Like, in case of above ground tanks fabrication by jacking up method, in operating location, a fire screen o 6 M height is sufficient whereas in the other case it is required to have a height equal to height of structure to be fabricated.

#### 4.19 Working with machineries / Material handling equipments

Safe practices as stipulated in IS:7293-1974 shall be adhered to while working with construction machinery. Safe working space for all these equipments must be provided. Mixers, winches, cranes, bending machines etc. used shall be overhauled regularly as per manufacture's advice / maintenance schedule. Proper warning boards / signs shall be provided when machineries like cranes, hoists are being operated. Brakes, clutches etc. of winches shall be checked on regular basis. Chains, ropes, belts shall be inspected and repaired / changed as necessary.

##### 4.19.1 Cranes

All works involving the use of crane shall be properly planned in advance and the following shall be ensured.

- the crane is capable of lifting the intended load
- the condition of the ground at the crane location is satisfactory to support the crane and load
- the rotation of the cab and, therefore the boom is not restricted-suitable matting or plates are available to protect underground services and paving
- all slings shackles, hooks etc. are of correct rating and in good condition
- cranes and lifting equipments must be inspected and ensured that they carry valid test certificate issued by an accredited testing agency
- crane hooks are to be fitted with properly functioning safety clips to prevent displacement of the sling from the hook during the lift
- driver of the crane must be watchful and must ensure before driving the vehicle either forward or reverse that no one is near the wheel of the vehicle and no one is trying to climb the vehicle while moving. Crane operators and signalers must be over the age of 18, trained and sufficiently experienced. Hand signal shall be clear and distinct and shall follow recognized code or system.
- safety practices as stipulated in IS:7293-1974 (Code of Practice for Working with Construction Machinery) shall be adhered to while working with cranes.
- all vehicles used by the contractor shall be in worthy conditions and in conformance to the land transport requirements.
- all drivers shall hold a valid driving license for the class of vehicle to be driven.

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#### 4.19.2 Vehicles

All vehicles used for carrying workers and construction materials must undergo predictive/preventive maintenance and daily checks. Contractor shall maintain a register for this purpose for each vehicle. All documents related to the vehicle must be submitted to for checking. Driver with proper valid license shall only be allowed to drive the vehicle. Routes shall be leveled, marked and planned. Speed limit must be specified. Wherever possible one-way system shall be followed. Head clearance must be ensured on the route of the vehicle and no vehicle shall be allowed to deviate from its route. Overloading, carrying unauthorized passengers etc. must not be allowed by the contractor.

#### 4.19.3 Plant, Tools and Equipments

The following four basic principles apply to and govern the safe use of hand and power tools

- to choose right tool for the job
- to use only tools in good condition
- to use tools correctly and only to the purpose they were intended
- **to maintain and store tools properly**

Electrical tools shall be checked to ensure that the supplied voltage is comparable to the machine's design. Where required, electrical tools shall be properly earthed. High speed rotating equipments such as grinders shall be fitted with protective guards. Power tools shall never be left operating unattended. Spark arrestors shall be fitted to all equipment exhausts where a risk of combustible gases in the atmosphere exists.

The contractor shall carry out periodical inspection of plant, tools and equipment.

#### 4.20 Health / Fire Protection against hazardous materials

Harmfulness of materials shall be identified and proper care shall be taken against fire/health hazardous e.g. against asbestos fibre / rope, sand / shot blasting, paints handling leaded container and tank, furfural liquid etc. Waste materials and consumables like woods, papers, plastic pieces etc. shall be cleared on regular basis. Petroleum products / solvents used for cleaning etc. shall be kept away from working site especially when hot work is in progress. No smoking board/signs etc. shall be used in sites where such materials are stocked.

Paints- Paints shall be stored in separated areas. The quantity of paint stored in actual working areas shall be as minimum as practicable. The ingestion of paint shall always be avoided. Food and drink shall not be brought, stored, prepared or consumed in areas where paints are stored, handled or used. Smoking in such areas shall be prohibited. The inhalation of paints, dusts or fumes shall always be avoided by the use of local ventilation or extraction. Where fumes or dusts are unavoidable, then suitable approved respirators or face masks shall be worn. All personnel who handle and use paints shall wear appropriate protective clothing (as a minimum gloves, eye protection and

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overalls). Splashes of paint on skin shall be treated promptly by copious washing with water or an approved cleaning agent. (Solvent shall not be used for personal cleaning).

## 5 Work Permit System

If work is to be performed in an operating location by any person other than the operating personnel of that area, a duly authorized written work permit shall be obtained by the person / agency executing the work. This is a document authorizing persons to carry out the work concerned, warning them of the possible hazards and spelling out precautions needed for the job to be done safely. The contractor shall be fully aware of the details of the work permit system and shall obtain the same signed by FEDO's authorized representative / Client's representative before starting the job. Based on the nature, the work shall be undertaken either under Hot work permit or Cold Work Permit. Hot work is an activity which may produce enough heat to ignite a flammable air-carbon mixture or a flammable substance. Cold work is an activity which does not produce sufficient heat to ignite a flammable air-hydrocarbon mixture or a flammable substance. The two types of permits are minimum requirement which must be fulfilled before commencing the work.

Permits and certificates are to be issued by the person with overall responsibility for the area, usually the Engineer-in-Charge of FEDO / Customer. Permits are to be kept with the site supervisor at all times.

For jobs like excavation, road/dyke cutting, electrical etc. where the work permit issuing authority may have to take clearances from other sections / personnel, the work permit must be accompanied by associated permits like, Excavation Permit, Electrical Certificate etc.

### Excavation Permit

When excavation work is to be undertaken, the site must be checked by persons with thorough knowledge of underground service systems. Cables scanning using instruments will be required in areas around high voltage cables. Hazardous situations arising from sparking during excavations and stone breaking must also be considered.

### Electrical Work Permit

This is issued to ensure that an authorized representative of the Project Engineer has electrically isolated the equipment to be worked on, and has taken suitable steps to prevent inadvertent reconnection. Some points of consideration are:

- Has the electrical supply been cut off and have precautions been taken to ensure that it cannot be reconnected eg. fuses removed, notices displayed and pad locks used.

## 6 Accident Reporting And Classification Of Accidents

### 6.1 Accident Reporting

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All employees must be encouraged to report any incident which has or could have caused injury, illness, damage to property, or interruption of work. The reporting of such accidents help in analyzing what went wrong and enables steps to be taken to prevent a recurrence. The accident report, forms the basis for objective investigation of the accident and will bring out essential and contributory factors leading to it. The necessary decisions then can be taken to prevent recurrence in future.

## 6.2 Classification of Accidents

Accidents are classified as follows and provide data for future accident investigation. The analysis of such classified accidents highlights typical locations / operations in need of immediate attention for preventing accidents.

### a) Near Miss

It is a 'narrow escape' where accident, major loss or injury did not occur. Such incidents must be reported locally and the working conditions leading to it must be investigated.

### b) Fatality

A death resulting from work injury is covered under this category irrespective of the intervening time between injury and death.

### c) Permanent total Disability

Personal injury which incapacitate a person completely and results in termination of employment.

### d) Permanent partial Disability

Any injury which results in complete loss or permanent loss of use of any part of body or any permanent impairment of the function of the body.

### e) Lost Work – Day case

Any injury excepting permanent partial disability which renders the injured person unable to perform any regular job or restricted work, on any day after the day of receiving the injury.

### f) Restricted work case

The injured person give up work on following the accident, which does not include all his normal duties or regular job as a result of the injury.

### g) Lost work days

The number of calendar days on which the injured person was temporarily unable to work.

### h) Restricted work days

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The total number of calendar days from the start of restricted work, by the injured person, till he returns to his regular job.

i) Medical treatment cases

The injury requiring medical treatment under order from a physician but does not involve lost work days or restricted work days.

6.3 Reporting

Contractors are required to notify by the FEDO'S Site-in-Charge, of accidents as follows:-

- Lost time injuries – immediately
- First Aid injuries – within a day
- Damage to plant or equipment – within a day
- Fires and Misc Events – immediately

7.0 Meetings on safety

7.1 Prior to job

All new contractors must be given an induction training by FEDO's/Customer's Engineer, before start of work. A minimum requirement for induction training will be familiarization with existing rules and regulations and the hazardous of work environment, including.

- Smoking restrictions
- Work permit procedures
- General hygiene and sanitation codes to be followed at site
- Traffic and parking regulations
- Restrictions on used of drugs and alcohol
- Allocation of pace for eating/drinking
- Restriction on movement within Company premises
- House keeping standards
- Danger and safe handling procedures for hazardous substances
- Use of safety equipments
- Hazardous of excavation operation eg. damage to underground cabling/piping
- Required action in case of fire and medical alarms
- Safety boards/notices to be provided.

7.2 Site meetings

For large or complex jobs, regular site meetings shall be held to review safety on the job as part of site meetings.

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7.3 Extraordinary events

After any extraordinary events or accidents it is recommended that FEDO's Engineer hold a site meeting to review the incident and formulate a safety policy to prevent its recurrence.

7.4 Contractor shall have arrangement to transport his workmen, for medical attention in the event of an accident at work site.

7.5 Documentation

All accidents or incidents must be immediately reported and recorded in the safety book of FEDO.



**TENDER**

**FOR**

**VRF AC System for NIT Nagaland (Library block)**

**PART I: COMMERCIAL**

**SPECIAL CONDITIONS OF CONTRACT**

**BACKGROUND:**

The FACT Engineering and Design Organisation (FEDO), a Division of The Fertilizers and Chemical Travancore Limited a Government of India Enterprise under Ministry of Chemicals and Fertilizers with its registered office at Udyogamandal, Kochi, Kerala – 683 501.

FEDO-FACT had entered into a contract with NIT–Nagaland vide MoU dt. 22-03-2014 for the second phase Development of Master Plan, Architectural Planning and Design, Project Management, Consultancy Service, Regular Supervision and Monitoring of Progress for carrying out civil construction and allied works from concept to completion of the new NIT complex. The whole project is to be carried out using the funds made available by NIT-N to FEDO-FACT.

For execution of works in line with the requirements of NIT-N, FEDO-FACT had entrusted the execution of the major part of the works to the contractors (a) Contractor-1 for residential portion and (b) Contractor-2 for academic portion respectively.

The construction of residential buildings for hostel, staff quarters external development works etc. under the scope of the Contractor-1 has been completed on 31-03-2019 and the buildings were taken over by NIT-N.

The work of Construction of Academic Buildings (5 Nos.) & Library Block including external Development Works, RCC Retaining Walls etc. (called academic portion) for the phase-2 expansion works of NIT, Nagaland are in progress.

This work covers the design, supply, installation, testing and commissioning of VRF AC System to be installed in the Library Building of NIT, Nagaland Campus at Dimapur.

**MODE OF BIDDING:**

The bidders shall be required to submit bids as given below;

Bid - 1: Eligibility cum Techno-Commercial bid

Bid - 2: Financial bid

Bid- 1: Eligibility cum Technical bid is opened first at notified time and date. The Bidder will have to meet the Prequalification criteria and the techno commercial conditions specified for techno commercial acceptance of the bid submitted.

Bid-2: Financial bid of qualified bidders are then opened at notified time, date and place in presence of bidders or the representatives. The validity of the tenders is reckoned from the date of opening of the technical bids.

**SUBMISSION OF BIDS:**

The Contractor shall carry out visit to NIT-N to assess the quantum of works, site and labour conditions prevalent in the area prior to submission of offers. Claims and objections due to ignorance of existing conditions or inadequacy of information will not be considered after



submission of the Bid and during implementation.

Based on the preliminary assessment of the balance works to be carried out, the bidders shall be invited for a pre-bid meeting with FEDO-FACT on a suitable date which shall be communicated. The bidders shall present the details of works to enable FEDO-FACT to inform their client NIT-N regarding the planning / scheduling of works, period of completion etc.

After the pre-bid meeting and receipt of feedback from prospective bidders and the client NIT-N, the revised technical specifications, will be published to the extent as required through a corrigendum at the sole discretion of FEDO-FACT in consultation with their client based on which the prospective bidders shall submit Bid -1(Eligibility cum Technical bid) and Bid 2 (: Financial bid-BOQ) separately within the specified time as noted if applicable.

In the BOQ enclosed, the bidders are required to quote rate as overall percentage above or below the specified amount for the works listed similar to percentage rate tender.

Special Note: The BOQ for the work is prepared as per the specifications applicable for the works. In case there is a conflict between the specifications noted in the BOQ with that mentioned in this SCC/ elsewhere in this tender specification, the respective clause(s) mentioned in this SCC/ elsewhere in this tender specification shall prevail.

Also in case any item(s) of the work are to be substituted during the execution of work, the respective CPWD clauses shall be applicable.

**EVALUATION AND SELECTION OF CONTRACTOR:**

The techno commercially acceptable bidder who has quoted the least overall percentage for the balance works in the financial bid/BOQ (L1 bidder) shall be selected as the successful “Contractor” for carrying out the work.

The successful contractor selected by FEDO/NIT-N for carrying out the works shall be hereafter called as “contractor”. Accordingly, a Letter of Intent (LOI) followed by Work order will be given by FEDO-FACT to the contractor with the concurrence of NIT-N for carrying out the works and the value of which shall be called as the “initial Work order value”.

The rates shall be firm throughout the period of contract

- 1.0 Special conditions of Contract shall be read in conjunction with the General Conditions of Contract, Schedule of Quantities/Schedule of Items of Work, specifications of work, drawings and any other document forming part of this contract wherever the context so requires.
- 2.0 Where any portion of the Special Conditions of Contract is repugnant to or at variance with any provisions of the General Conditions of Contract then unless a different intention appears, the provision(s) of the Special Conditions of Contract shall be deemed to override the provision(s) of the General Conditions of Contract only to the extent that such repugnance or variations cannot and shall be to the extent that such repugnance or variance cannot be reconciled with the General Conditions of Contract.
- 3.0 The items given in Schedule of Quantities/Schedule of Items of Work shall be read in

conjunction with materials and job specifications and in case of any irreconcilable conflict between them, the provisions in the item under Schedule of Quantities/ Schedule of Items of Work will override the corresponding provisions only of the material and job specifications, which cannot be reconciled. In such cases, the decisions of the FEDO shall be final and binding on the CONTRACTOR.

4.0 In case of contradiction between Standards, General Conditions of Contract, Special Conditions of Contract, Technical Specification, Drawings, Schedule of Quantities/Schedule of Items of Work, the following shall prevail in order of precedence:

- (i) Letter of intent along with statement of Agreed Variations and its enclosures.
- (ii) Schedule of Quantities/Schedule of Items of Work
- (iii) Special Conditions of Contracts.
- (iv) Drawings
- (v) CPWD Specifications and Standards.
- (vi) General Conditions of Contract

5.0 Wherever it is stated anywhere in this tender document that such and such supply is to be effected or such and such a work is to be carried out, it shall be understood that the same shall be effected/carried out by the CONTRACTOR at his own cost, unless a different intention is specifically stated.

6.0 The materials, design and workmanship shall satisfy the relevant CPWD specifications of Indian Standards, the job specifications contained herein and codes referred to. CPWD Specification applicable in this region and instructions/directions of Engineer-in-Charge will be binding to the Contractor. Contractor should make available one latest edition of CPWD Specification at site.

7.0 All the materials required for the construction work are under the scope of supply of the Contractor.

8.0 For concrete items, the consumption of cement shall be adopted as per CPWD practice, as the case may be.

9.0 Where controlled concrete is envisaged, the CONTRACTOR shall submit his Design Mix for the different grades of concrete, for the approval of the Engineer-in-Charge, keeping in view all requirements stipulated in IS:456, and specifically regarding slump, water-cement ratio and specific gravity of materials to be used. The theoretical consumption of cement for such controlled concrete shall be established before the mix is used on the work. For nominal mix concrete and other items involving cement, the theoretical consumption of cement shall be as per CPWD Specifications.

## **10.0 DISTINCTION BETWEEN FOUNDATION & SUPERSTRUCTURE**

To distinguish between work in foundations and superstructure, the following criteria shall apply:

10.1 For all Equipment Pedestals, pipe racks, foundations and other R.C.C. structures, work done up to 300mm level above finished grade level will be taken as work in

foundations and work above this level will be treated as work in superstructure and payments would be made accordingly.

- 10.2 Irrespective of what has been stated above, all pavements, RCC retaining walls and all pipe sleepers and any like structures would be taken as work done in foundations irrespective of the locations.
- 10.3 Where not specifically pointed out, all works in cellars/sumps, tank pads, cable trenches and other trenches or such similar items would be taken as work in foundations.
- 10.4 Unless otherwise stated, the rates for various items of work shall be for works at all heights.

### **11.0 CONSTRUCTION WATER**

The CONTRACTOR has to make his own arrangement for water required for construction at his own risk and cost till the construction of bore well (tube well) specified in the Schedule of Items of Work is completed. Once this is completed, contractor may draw water from this bore well and make his own arrangements for storage and distribution of water for construction purposes.

### **12.0 CONSTRUCTION POWER**

- 12.1 The CONTRACTOR has to make his/her own arrangement for the construction power required for construction at his own risk and cost.
- 12.2 All electrical works shall be carried out under the supervision of a licensed Electrician. The electrical connections carried out by the CONTRACTOR shall meet the statutory requirements. Changes, if any, as incorporated in the statutory rules and regulations from time to time shall be applicable to the electrical connection done by the CONTRACTOR. The following conditions shall also be fulfilled.
- 12.3 All the equipments/distribution boxes should have double earthing from the nearest earth pits or from the board earth bus.
- 12.4 All electrical connections have to be done by a competent licensed Electrician with valid license and to the satisfaction of the FEDO.
- 12.5 During working hours (including over time) one licensed competent Electrician shall be available at site to attend to the normal/emergency jobs.
- 12.6 All switch boards/welding machines shall be kept inside covered sheds to protect them from rain. No inflammable materials shall be used for constructing the covered sheds.
- 12.7 All electrical equipments shall be switched off after the job, every day by the CONTRACTOR's authorized Electrician.
- 12.8 Only metallic distribution boxes with double earthing shall be used at the site.

Wooden boxes shall not be allowed.

12.9 Supply for lighting/grinding shall be taken only using 3 pin plug/socket connectors with inter locking arrangements. Two pin plugs shall not be allowed.

12.10 CONTRACTOR shall submit in time the required forms like schemes, completion reports etc. as specified by FEDO.

12.11 No looping of Electrical supply is allowed.

12.12 For all three-phase supplies, only armoured aluminium cables of suitable sizes or flexible copper cables of 4 x 6 sq.mm and above shall be allowed.

### **13.0 SUPERVISION OF WORK**

The contractor is bound to deploy sufficient number of experienced Engineers and Supervisors (Technical and General) for the execution of work.

### **14.0 CONTRACTOR'S SCOPE OF SUPPLY**

All the materials and consumables including cement, steel etc required for the execution and successful completion of the work shall be supplied by the Contractor within his quoted rates. All incidental charges such as carriage, octroi, loading, unloading wastage, storing, safe custody, watch and ward etc. shall be borne by the Contractor for all the materials supplied by the Contractor.

#### **14.1 Cement**

The cement shall be OPC 43 grade / PPC and shall comply with the requirements of the relevant Indian Standards & specifications such as IS:8112/1989 or IS: 1489 (Part I - Fly ash based) 1991/ latest revision. Samples for the purpose of testing shall be taken from the site of construction, from time to time in accordance with the methods laid down in Indian Standards, and be tested by the contractor at his own cost in approved laboratories to ascertain that the cement has not been damaged or tampered during the storage or transport. Cement, concerning which there is any doubt, should be put to one side pending testing and cement that is condemned shall be immediately removed from the site.

Unless otherwise agreed, cement shall be supplied by the contractor in 50 Kg. bags and shall be used direct from the bags. Cement bags containing cement less than 96% of the stipulated quantity of 50 Kgs. will be rejected.

14.2 Quoted rates of the Contractor shall be deemed to include cement wastage. The permissible wastage of 3% of theoretical consumption shall be worked out as per CPWD specification. The theoretical consumption and actual consumption at site should tally each other within the permissible variation of 3%. If the actual consumption is lower than the theoretical consumption by an amount greater than the permissible variation of 3% (three percent) of the theoretical consumption, the contractor shall be penalised for such variation by means of penal recovery from his running bills. For effecting the aforesaid penal recovery, the cost of cement for such recovery shall be as determined by FEDO, and this



shall be applied on double the quantity shortfall between permissible theoretical consumption (i.e. 97% of theoretical consumption as determined by CPWD specifications) and actual consumption. Normally cement consumption less than 3% of theoretical consumption is not acceptable for payment unless otherwise it is proved that structural capacity has not endangered due to under consumption.

14.3 The wastage of cement above 3% of theoretical consumption, if any anticipated, shall be considered by the Contractor. No extra payment for this additional quantity of concrete will be made and the rates quoted by him shall be deemed to include such additional quantity of cement.

14.4 The contractor shall use any one of the following brands of Portland Pozzolana Cement conforming to IS: 1489 (Part 1) 1991/ latest revision for construction in consultation with Engineer-in-charge. a) Ultra Tech b) ACC c) Coromandal d) Zuari Cements e) Ramco Cements or any other brand approved by Engineer-in-Charge

14.5 Reinforcement Steel All reinforcement rods shall be clean and free from pitting, loose mill scales, dust, loose rust and coats of paint, oil or other coatings, which may destroy or reduce bond. The Engineer-in-charge may require contractor to produce quality certificate for the reinforcement steel brought to site. Reinforcement steel shall be tested steel from approved manufactures such as SAIL, RINL, TISCO, JINDAL or SRMB.

**15.0 STORAGE OF MATERIALS AND CONSTRUCTION OF SITE SHED**

15.1 CONTRACTOR has to find a suitable place with prior approval of Engineer-in-charge for the storage of all types of materials & consumables, working place and place for site shed. The quoted rate shall include all leads and lift of materials to the site of construction. No claim will be entertained for any extra cost on account of this. FEDO/Owner will not be responsible for any theft or damage to the material stored at site by the CONTRACTOR. CONTRACTOR has to make his own security arrangement to protect the material from theft at own cost.

15.2 Any excess materials/construction equipment, tools etc. owned by the CONTRACTOR shall be removed from the premises within a reasonable period of time and the area of work should be left in spic and span condition after the completion of work.

**16.0 EMPLOYEE'S COMPENSATION ACT AND EPF ACTS**

16.1 CONTRACTOR shall be responsible for all obligations under Employee's Compensation Act, Rules and Regulations there under and such other Acts and Regulations as may be relevant. Deduction towards this if any required as per statutory regulations shall be made from CONTRACTOR's bills and the amounts so deducted shall be deposited with appropriate authorities. In case OWNER is called upon to pay any additional expense on this account, these shall be reimbursed fully by CONTRACTOR and OWNER shall be entitled to recover the same from any amount due to CONTRACTOR.

16.2 Proof of compliance of Statutory requirements with regard to PF, Employee

Compensation, etc., shall be submitted by the CONTRACTOR on acceptance of the Work Order, and in any case, before putting up the First Running Bill for the work.

16.3 CONTRACTOR shall disburse wages to his workers only in the presence of a duly authorised nominee of OWNER (Principal Employer) who shall also certify the amounts paid as wages in such manner as may be prescribed.

16.4 The Contractor shall obtain valid registration under The Employees' Provident Funds and Miscellaneous Provisions Act, 1952 (PF) & The Employees' State Insurance Act, 1948 (ESI) and shall ensure full compliance with the above Acts. The workers deployed by the contractor for the work shall be covered under the Acts. The contractor shall regularly remit the PF/ESI contributions in respect of their employees and file regular returns, as prescribed under the respective acts. The copy of monthly PF/ESI remittance challans along with periodic returns shall be furnished together with the subsequent monthly bills. In case FACT is to incur any expenditure/loss in the capacity as Principal Employer due to non-compliance on the part of the contractor of these Acts, such expenditure/loss shall be recovered from the contractor.

## **17.0 SITE PARTICULARS**

Before submitting the bid, the bidder shall inspect the site and independently obtain all necessary information with regard to the nature of work, magnitude of work, materials and labour requirement and their availability, all the existing site conditions, locality, accessibility, Safety and Security regulations in force, state/local rules, regulations, living / working conditions etc. Non-familiarity or ignorance of these conditions will not be considered a reason for extra claims or for not carrying out the work as per the standards & specifications.

## **18.0 SITE LABORATORY OF CONTRACTOR**

Concrete work shall be supervised by a competent concrete technologist approved by the Engineer-in-Charge, whose duty will be to supervise all stages of designing the mix, preparation and placing of concrete. All cubes shall be made and site tests carried out under his direct supervision in the presence of the Engineer-in-Charge or his authorized representatives. In order to exercise the required degree of constant control over the concrete materials and their preparations, the Contractor shall set up and maintain at his own expense a testing laboratory at site. He shall provide all apparatus required for sensitive testing of concrete and concrete materials and in particular he must have the following equipment in the site laboratory:

- (i) Compression testing machine of adequate capacity to test cubes of concrete grade upto M 40.
- (ii) A set of standard sieves
- (iii) Measuring cylinders
- (iv) Slump cones
- (v) Adequate number of standard moulds
- (vi) Weigh balance
- (vii) Oven or other apparatus to dry aggregates

- (viii) Curing tank for cubes Any other apparatus deemed necessary by the Engineer-in-Charge for proper control shall be provided by the contractor at his expense. The laboratory shall be staffed by full time qualified technician. In addition to the above, the Contractor should have the equipment to test Optimum Moisture Content (OMC), Maximum Dry Density (MDD) of Soil etc., at site.

**19.0 FIELD TESTS**

19.1 Grading tests Grading test on fine and coarse aggregates shall be carried out as per IS: 2386 at intervals specified by the Engineer-in-Charge. Mandatory tests on Sand, Stone aggregates, bricks, concrete, etc.

Sl. No.	Material	Test	Field/Lab Test	Frequency of testing
1	Sand	Bulking of sand	Field	Every 20 m <sup>3</sup> or part thereof or more frequently as decided by the Engineer-in-Charge
		Particle size distribution	Field or Lab as decided by the Engineer-in-charge	1. Every 40 m <sup>3</sup> of fine aggregate / sand required in RCC works only. 2. Every 80 m <sup>3</sup> of fine aggregate / sand required for other items.
2	Stone aggregate	Particle size distribution	Field or Lab as decided by the Engineer-in-charge	For every 45 m <sup>3</sup> or part thereof as decided by the Engineer-in-charge
3	Bricks	As per IS: 3495 – 1976 or latest revision. 1. Water absorption 2. Compressive strength 3. Efflorescence 4. Dimensions	Field or Lab as decided by the Engineer-in-charge	For every 50,000 nos. or part thereof subject to change of make of bricks, as directed by Engineer-in-charge.
4	Compaction of earth fill	Dry density of compacted soil	Laboratory	One test for every 500 m <sup>2</sup> area or as per relevant code of practice in each layer of earth fill.
5	R.C.C works	Cube Strength test (IS: 456-2000)	Laboratory	For 1 – 5 m <sup>3</sup> - 1 sample 6 – 15 m <sup>3</sup> - 2 samples 16 – 30 m <sup>3</sup> - 3 samples 31 – 50 m <sup>3</sup> - 4 samples 51 & above - 4 plus one additional sample for each additional 50m <sup>3</sup> or part thereof.  For all other small items and where RCC done in a day is less



				than 5 m3 test may be carried out as required by Engineer-in-charge.
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**20.0 RULES AND REGULATIONS**

CONTRACTOR shall observe in addition to codes specified in respective specification, all national and local laws, ordinances, rules and regulations and requirements pertaining to the work and shall be responsible for extra costs arising from violations of the same.

**20.0 GENERAL ENVIRONMENT REQUIREMENTS**

The Contactor has to ensure efficient use of natural resources like water, fuel oil and lubricants. The CONTRACTOR should ensure proper awareness to workers to maintain a green and clean environment at work location. The CONTRACTOR must collect and dispose of all the waste and scrap materials at the designated place only as directed by OWNER/FEDO.

**21.0 REGISTRATION UNDER GST**

**GST Registration Certificate** issued by the Officer concerned of the State, where the work is to be carried out, in favour of CONTRACTOR shall be submitted to the OWNER/Engineer-in-Charge.

Declaration by the CONTRACTOR to be submitted to the Engineer-in-Charge that GST returns are filed properly.

GST details shall be quoted separately in the column provided in BOQ.

**22.0 SAFETY, FIRE & SECURITY REGULATIONS**

The CONTRACTOR shall submit a Safety Plan as directed and approved by the Engineer-in-Charge. CONTRACTOR shall observe and abide by all safety regulations and practices of OWNER mentioned elsewhere in the tender document.

**23.0 PROJECT SCHEDULING & MONITORING**

23.1 The Bidder is required to submit a Project Time Schedule in Bar Chart Form, along with the Bid. The Schedule shall cover all aspects like sub-ordering, manufacturing and delivery, sub-contracting and construction within the completion time indicated in the Bid Document. The OWNER/FEDO interface activities shall be clearly identified with their latest required dates. OWNER reserves the right to disqualify the Bidder if the above Schedule submitted by the Bidder is not in line with the overall project requirement.

23.2 The CONTRACTOR shall submit within 4 weeks of Letter of Intent, a sufficiently detailed overall Project Schedule in MS Project, clearly indicating the major milestones, inter-relationship/interdependence between various activities together

with analysis of critical path and floats.

23.3 The network will be reviewed and approved by Owner/FEDO and the comments if any shall be incorporated in the network before issuing the same for implementation. The network thus finalized shall form part of the contract document and the same shall not be revised without the prior permission from FEDO during the entire period of contract.

#### **24.0 PROJECT REVIEW MEETINGS**

The CONTRACTOR shall present the programme and status of work at various review meetings as required.

#### **25.0 PROGRESS REPORTS**

This report shall be submitted on a weekly basis, covering overall scenario of the work. The report shall include but not be limited to the following: (a) Brief introduction of the work. (b) Activities programmed and completed during the previous week. a. (c) Resource deployed men and machine. b. (d) Record of Man-days lost. c. (e) Construction percentage progress, scheduled and actual.

#### **26.0 ALTERATION IN SPECIFICATION AND DESIGNS**

During the execution of the work, the Engineer-in-charge may desire to make changes in design due to site condition or due any other reason. The CONTRACTOR shall carry out such changes shown by the Engineer-in-charge in writing, without any extra cost. These changes shall be either for partially or fully for the entire quantities put to tender, for these items

#### **27.0 FIRM PRICES**

Prices / Rates quoted by the bidder, shall remain firm and fixed and valid until completion of the contract performance and will not be subject to escalation / variation on any account. Unless otherwise specified the rates for various items of work shall be for works at all height / depths.

#### **28.0 DRAWINGS / DOCUMENTS**

Drawings accompanying the tender documents are indicative of the scope of work and issued for tendering purpose only. The available drawings/design data related to the works shall be furnished to the contractor. In case any additional drawings / specifications are to be prepared, this shall be prepared and furnished by the contractor which shall be reviewed and approved by FEDO-FACT/NIT-N.

#### **29.0 COMPUTERISED CONTRACTOR'S BILLING SYSTEM**

29.1 Without prejudice to stipulation in General Conditions of Contract, CONTRACTOR should follow the following billing system.

29.2 The bills will be prepared by the CONTRACTOR on their own PC's as per the

standard formats and codification scheme proposed by OWNER/FEDO. The Contractor shall submit all the measurements in M-Book format in soft copy for checking and 2 copies of the bound volume of the M-Book should be submitted along with the Monthly Bills. The CONTRACTOR will also ensure the correctness and consistency of data so entered with the hard copy of the bill submitted for payment. OWNER/FEDO will utilise these data for processing and verification of the CONTRACTOR's bill.

### **30.0 AS-BUILT DRAWING**

As-built drawing of the entire work executed by the CONTRACTOR, after certification and approval of the Engineer-in-charge, shall be prepared in Auto-CAD (release as instructed by OWNER) and submitted after completion of the work at no extra cost in computer Compact Disc with six hard copies of all the drawings.

### **31.0 APPROACH TO SITE**

The CONTRACTOR shall make his own arrangements for any approach road to the site of work, which are necessary for the execution and completion of all works without any extra cost on this account.

### **32.0 QUALITY ASSURANCE**

The CONTRACTOR has to ensure the deployment of Quality Assurance and Quality Control Engineer(s) depending upon the quantum of work. This QA/QC group shall be fully responsible to carry out the work as per standards and all code requirements. In case FEDO feels that CONTRACTOR's QA/QC Engineer(s) are incompetent or irresponsible or insufficient, CONTRACTOR has to deploy / replace them with, other experienced Engineer(s) as per site requirements, to the satisfaction of the FEDO.

Incase Contractor fails to follow the instruction of Owner/FEDO, next payment due to him/her shall not be released unless until he/she complies with the instructions to the full satisfaction of Owner/FEDO.

Quality Assurance System Plans/procedures of the CONTRACTOR shall be furnished in the form of a QA manual. This document should cover details of the personnel responsible for the Quality Assurance plans or procedures to be followed for quality control in respect of Procurement, Supply, Installation and Commissioning including laboratories for testing materials. The quality assurance system should indicate organizational approach for quality control and quality assurance of the construction activities, at all stages of work at site as well as at manufacturer's works and dispatch of materials.

### **33.0 CORRECTIONS**

All corrections and alterations in the entries of tender papers shall be signed in full by the tenderer with date. No erasures or over writing are permissible.

34.0 All the instruments used by the CONTRACTOR shall have valid calibration Certificate



meeting the National Standards.

35.0 The CONTRACTOR shall not cause any hindrance to the functioning of the offices, other agencies activities etc., in the project area.

36.0 The CONTRACTOR shall extend all facilities to the staff of Owner/FEDO for inspection/ supervision/ checking the activities involved in this work at all stages.

37.0 The bidders are requested to comply with the Fraud Prevention Policy of FACT-2012 (FPPF-2012). The Policy is available in our website [www.fact.co.in](http://www.fact.co.in) and also in FACT intranet

38.0 Time Schedule & Progress and Compensation for Delay (Ref. Clause No.16 & 17 of GCC)

The following is to be read in reference with clause 16 & 17 of GCC. The Contractor shall also furnish, within 10 days from the date of issue of Letter of Intent, a Time and progress Chart (Bar Chart) for completion of work within stipulated time. This chart shall be based on the milestones given below. This will be duly got approved from FEDO-FACT. This approved bar chart shall form a part of the agreement. Achievement of milestones as well as total completion has to be within the time period allowed. Non achievement of physical and financial milestone, the following shall be withheld on account of slow progress.

Mile stone	Description of Milestone	Amount withheld on non-achievement of Mile stone
I	12.5% of total value of work in 25% of whole time allowed for completion of work	0.5% of value of whole work (Awarded value)
II	37.5% of total value of work in 50% of whole time allowed for completion of work	Further 0.5% of value of whole work (Awarded value) totalling 1.0% of awarded value.
III	50 % of total value of work in 60% of whole time allowed for completion of work	Further 0.5% of value of whole work (Awarded value) totalling 1.5 % of awarded value.
IV	75 % of total value of work in 75% of whole time allowed for completion of work	Further 0.5% of value of whole work (Awarded value) totalling 2 % of awarded value.

Note: If the Contractor achieved the milestone in the subsequent mile stone, the amount withheld on the earlier milestone will be released; otherwise total amount shall be adjusted in the amount levied for compensation for delay. Please refer clause 20.2 of GCC and the clause in this schedule noted below for details. If there are registered delays for the reasons beyond the control of the contractor or as per relevant clauses of GCC, the milestones will be amended accordingly.

If the contractor fails to achieve final Completion within the completion time stipulated in this contract due to reasons attributable to the contractor, Mutually Agreed Damages at the rate of 0.50% of the total Lump-sum price of contract per week of delay or part thereof will be



provisionally withheld /deducted on a pro-rata basis from the contractor's invoices and/or any other payments due to the contractor subject to a maximum of Seven and Half Percent(7.50%) of the total LUMPSUM PRICE OF CONTRACT (excluding taxes).

However, if final completion of the project is delayed but Preliminary acceptance of the project is completed within the specified period, then Mutually agreed Damages (MAD) for delay shall not be applicable for the LSTK project. In such a case, any amount provisionally withheld/ deducted against MAD towards delay in final completion will be released.

However, in case the client (NIT-N) has not imposed any penalty or offered reduced rate of penalty on FEDO-FACT, it will be passed on "back to back" by FEDO-FACT to the "Contractor".

Also all payments shall be back to back only which means that payments to the "Contractor" shall be disbursed only on receipt of the corresponding payment from NIT-N.

However, the final decision for extension of time, termination, penalty clauses etc. rests with NIT-N which if imposed by the client to the extent on FEDO-FACT will be passed on "back to back" by FEDO-FACT to the same extent on the "Contractor".

