

SPICES BOARD

GAS PURIFICATION SYSTEM AND GAS PIPING FOR QUALITY EVALUATION LABORATORY, KOLKATA

TENDER DOCUMENT

Tender No: RE01/ SPICESBOARD/KITCO/MH/16/2017



The consultants

KITCO LTD.

P.B.No.4407, Femith's Building, Puthiya Road, NH Bypass, Kochi - 682 028

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NOTICE INVITING TENDER

1.0 Sealed two bid item rate tenders are invited by KITCO on behalf of Spices Board for Gas purification system and Gas piping for Quality Evaluation Laboratory of Spices Board at Kolkata from bidders meeting the following eligibility criteria.

2.0 Eligibility Criteria

- i. The bidder should have satisfactorily completed two works of similar nature of value not less than Rs.10.4 lakhs under each contract during the last three years.

Similar Works: Gas purification system and gas piping works completed satisfactorily at Central Government Education/Research Institute/ NIT's/ IIT's/ NABL accredited labs (Satisfactory completion certificate and work order from the Client for work done should be submitted along with application for issue of tender and also the experience certificate of works executed in private sectors/organisations shall be considered for qualification, only on submission of TDS certificate).

- ii. The average Annual Turnover of the bidder should be more than Rs.13 lakhs during the last three preceding years. (Audited Balance sheets showing turnover, Profit & Loss account of the firm for the preceding 03 years (2015-16, 2016-17, 2017-18) should be submitted along with the application for prequalification)
- iii. The tenderer should have valid GST registration, ESI (if applicable) & PF (if applicable). (A copy of the same shall be submitted along with the application for issue of tender document)
- iv. The contractor should not be blacklisted or debarred from participation of tendering by any Government department/institution.

3.0 The tender shall be in the prescribed Form.

4.0 If the rate quoted for individual item/items is unbalanced or unworkable the successful bidder shall provide additional performance guarantee for the unbalanced amount of the under quoted items and justification statement to be submitted for higher quoted beyond +125%. In view of the above, clarification on the estimate rates if any, can be availed from the office of KITCO Ltd during office hours, one day prior to the bid submission.

5.0 The works are required to be completed within **1 month**. This period shall be reckoned from the fifteenth day from the date of issue of work order.

6.0 Not more than one tender shall be submitted by a contractor or by a firm of contractors. More than one concern in which an individual is interested, as Proprietor and/or Partner shall tender for the execution of the same work. If they do so all such tenders shall be liable to be rejected.

7.0 The ACCEPTING AUTHORITY as mentioned in the Annexure of NIT shall be the Accepting Officer hereinafter referred to as such for the purpose of this contract.

8.0 Applications for issue of tender documents shall be submitted to KITCO Ltd, P.B.No.4407, Femith's Building, Puthiya Road, NH Bypass, Kochi -28. Last date and time of submission of tender will be on 28.09.2018 at 3.00 p.m.

- 9.0 Willing tenderers must attach with their application, particulars of financial and technical resources, registration certificate and list of similar works executed during last three years, along with satisfactory completion certificate from the client, list of works now in progress and audited balance sheet for the last three years. Tender documents will be sold only to those who are found eligible after scrutiny of applications.
- 10.0 Tender documents consisting of specifications, Schedule(s) of Quantities of the various classes of work to be done, the conditions of contract and other necessary documents will be open for inspection and sold on payment of Rs.2,800/- by way of Demand Draft payable at Ernakulam drawn in favour of M/s KITCO Ltd from 06/09/2018 to 28/09/2018 during office hours from the office of KITCO Ltd, P.B.No.4407, Femith's Building, Puthiya Road, NH Bypass, Kochi -28. **The tender document can also be downloaded from the website www.kitco.in. those who download the tender document from the website shall submit the cost of tender document by Demand Draft along with the tender document.**
- 11.0 Tenderers are advised to visit and examine the site and its surroundings, the means of access to the site, the accommodation they may require and, in general, shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or effect their tender. A tenderer shall be deemed to have full knowledge of the site and site conditions, whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed.
- 12.0 Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the works.
- 13.0 A tenderer should quote the rate(s) tendered in figures as well as in words. The amount for each item should be worked out and the requisite totals given in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words. In case of figures, the words, 'Rs' should be written before the figure of rupees and the words 'paise' after the decimal figure e.g. Rs.2.15 p and in case of words, the word 'Rupees' should precede and the word 'paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two places of decimal. In case of any discrepancy between the rates/prices given in figures and words, the rates/prices given in words shall prevail. In case of item rate tender, only the rate quoted shall be considered. In event no rate has been quoted for any item(s) leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this / these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly. The bidder should quote each and every items. The rate thus quoted will deemed to include the cost of all materials, labour, hire charges for all machinery's, cost of fuel, power, all leads and lifts, taxes, levies, royalties all over heads contingencies, profits, etc. and the quoted price is all inclusive. The total contract price shall also be worked out and entered in.
- 14.0 All rates shall be quoted on the tender form.
- 15.0 In the case of item rate tenders, only rates quoted shall be considered.

- 16.0 The tender for the Works shall not be witnessed by a Contractor or Contractors who himself/themselves has/have tendered or who may has/have tendered for the same works. Failure to observe this condition shall render the tender of the contractor tendering as well as of those witnessing the tender liable to rejection.
- 17.0 Tenders shall be received by the Accepting Authority/Consultant up to **3.00 PM** on **28/09/2018** and shall be opened on the same day at **3.30 PM** in the presence of tenderers who may be present.
- 18.0 The tender shall be accompanied by Earnest Money Rs. 26,000 (Rupees Twenty Six Thousand Only) in the form of Demand Draft on any Nationalised bank drawn in favour of **Spices Board payable at Ernakulam.**
- 19.0 Tender shall be submitted in two separate sealed covers as given below superscribing the name of work, address of Accepting Authority and the address of the tenderers.
- Cover 1. EMD in the form of Demand Draft, Tender Fee in the form of Demand Draft, Unconditional Acceptance Letter, All tender papers duly sealed and signed, All technical and other documents proving technical and financial eligibility as per Eligibility criteria clause 2.0 NIT
- Cover 2. Price Bid
- The Cover 2 of tender of those tenderers who submits all the documents detailed above and meeting technical requirements as per Eligibility criteria will be opened. The tenderers can offer a rebate in quoted rates along with his offer in Cover 2.
- 20.0 Notification of Award of contract will be made in writing to the successful Bidder by the Accepting Authority. The contract will normally be awarded to the qualified and responsive Bidder offering the lowest evaluated bid in conformity with the requirements of the specifications and contract documents and the Accepting Authority shall be the sole judge in this regard. The Accepting Authority does not bind himself to accept the lowest or any tender or to give any reason for his decision.
- 19.1 A responsive bidder is one who submits priced tender and accepts all terms and conditions of the specifications and tender documents without any modifications.
- 19.2 A modification is one which affects, in any way, the quality, quantity and period of completion of the work or which limits in any way the responsibilities or liabilities of the Bidder or any right of CONSULTANT/CLIENT/ACCEPTING AUTHORITY as required in the specifications and tender documents. Any modification in the terms and conditions of the tender, which is not acceptable to ACCEPTING AUTHORITY, shall also be treated as a major modification.
- 19.3 A tenderer shall submit a responsive bid, failing which his tender will be liable to be rejected.
- 19.4 The ACCEPTING AUTHORITY reserves to himself the right of accepting the whole or any part of the tender and tenderer shall be bound to perform the same at his quoted rate.
- 21.0 On acceptance of the tender, Earnest Money will be treated as part of the security deposit.

- 220 Upon acceptance of the tender, the successful tenderer shall, within 15 days of receipt of intimation of acceptance of the tender, deposit with ACCEPTING AUTHORITY an initial security deposit of 5% of the contract sum as performance guarantee in one of the following forms:
- i. Cash (In case the amount is less than Rs.10,000/-)
 - ii. Deposit at call Receipt/Banker's Cheque/Demand Draft.
 - iii. Fixed Deposit receipt of scheduled bank pledged to the ACCEPTING AUTHORITY
 - iv. An irrevocable bank guarantee bond of any scheduled bank or State Bank of India in the prescribed form
- 23.0 ACCEPTING AUTHORITY will return the earnest money without any interest, where applicable, to every unsuccessful tenderer.
- 24.0 Canvassing in connection with tenders is strictly prohibited and the tenders submitted by the tenderers who resort to canvassing will be liable to rejection.
- 25.0 The tenderer shall not be permitted for works with the CONSULTANT/CLIENT/ACCEPTING AUTHORITY if his near relative is working in any capacity with them. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any staff of CONSULTANT/CLIENT/ACCEPTING AUTHORITY. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors and also from further tendering in this company.
- 26.0 The tender for works shall remain open for acceptance for a period of 90 days (ninety days) from the date of opening of tenders. If any tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to ACCEPTING AUTHORITY then ACCEPTING AUTHORITY shall, without prejudice to any other right or remedy, be at liberty to forfeit the full said earnest money absolutely.
- 27.0 On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated to the Engineer-in-Charge.
- 28.0 Sale Tax or any other taxes or statutory levies applicable to this contract shall be payable by the contractor and ACCEPTING AUTHORITY will not entertain any claim whatsoever in this respect.
- 29.0 This Notice Inviting Tender shall form part of the contract document.

For and on behalf of
ACCEPTING AUTHORITY

Signature :

Designation :

Date :

Annexure of NIT

GENERAL INFORMATION OF THE PROJECT

- | | | |
|----------------------------------|---|--|
| Tender No. | : | RE01/ SPICESBOARD/KITCO/MH/16/2017 |
| 1. Name of Project | : | Gas purification system and Gas piping for Quality Evaluation Laboratory at Kolkata |
| 2. Site and Location | : | Kolkata |
| 3. Nature/Scope of work | : | Gas purification system and Gas piping |
| 4. Nearest Railway Station | : | Baruipur Railway Station, Sealdah Division, Kolkata |
| 5. Nearest Airport | : | Nethaji Subash Chandrabose International Airport, Kolkata |
| 6. Accessibility | : | By Road |
| 7. Owner/Client | : | SPICES BOARD,
Sugandha Bhavan, NH By-Pass,
PB No.2277, Palarivattom P.O.
Kochi – 682 025. |
| 8. Consultant | : | KITCO Ltd, PB.No.4407, Femith's Building,
Puthiya Road, NH By pass, Kochi -28, Kerala |
| 9. Accepting Authority | : | Spices Board,
Sugandha Bhavan, NH By-Pass,
PB No.2277,Palarivattom P.O.
Kochi – 682 025. |
| 10. Payment Authority | : | Spices Board,
Sugandha Bhavan, NH By-Pass,
PB No.2277,Palarivattom P.O.
Kochi – 682 025. |
| 11. Period of completion of work | : | As per NIT |
| 12. Schedule of rate adopted | : | Market rate |



ACCEPTANCE LETTER

(TO BE SUBMITTED IN COVER NO. 1)

(Refer Condition 17.0 of Notice Inviting Tender)

Sir,

ACCEPTANCE OF TENDER CONDITIONS

1. Tender Document for the “Gas purification system and Gas piping for Quality Evaluation Laboratory at Kolkata” has been sold to me/us by KITCO Ltd and I/We hereby unconditionally accept the tender conditions of KITCO’s tender documents in its entirety for the above work.
2. The contents of Notice Inviting Tender of the Tender Documents have been noted wherein it is clarified that the unconditional acceptance of the tender conditions in its entirety is a pre-condition for acceptance of the tender. It is further noted that it is not permissible to put any remarks/conditions (except unconditional rebate on quoted rates if any) in the tender enclosed. I/We agree that the tender shall be rejected and ACCEPTING AUTHORITY shall, without prejudice to any other right or remedy, be at liberty to forfeit the earnest money deposit.
3. The required earnest money for this work is enclosed herewith.

Yours faithfully,

(Signature of the tenderer) with rubber stamp

Date:

I) TENDER

To

M/s KITCO Ltd.,
PB No.4407,
Femith's Building,
Puthiya Road,
NH Bypass, Kochi-28.

I/ We have read and examined the following documents relating to the “Gas purification system and Gas piping for Quality Evaluation Laboratory at Kolkata”

- (a) Notice inviting tender
- (b) Schedules A, B, C and D.
- (c) General Conditions of Contract including Contractor's Labour Regulations, Model Rules for Labour welfare and Safety Code and forms of different deeds appended to these conditions.
- (d) Special Conditions of Contract
- (e) Technical Specifications.
- (f) Specification and Schedule of Quantities.
- (g) Drawings

I/We hereby tender for execution of the works referred to in the aforesaid documents upon the terms & conditions contained or referred to therein and in accordance in all respects with the specifications, designs, drawings and other relevant details at the rates contained in Schedule A and within the period (s) of completion as stipulated at serial No.4 of Notice Inviting Tender.

I/We agree to keep the tender open for acceptance for ninety days from the due date of submission thereof and not to make any modifications in its terms and conditions which are not acceptable to Accepting Authority.

A sum of Rs.26,000/- (Rupees Twenty Six Thousand Only) is hereby forwarded in the form of Demand Draft in favour of Spices Board as earnest money. If I/We fail to keep the tender open as aforesaid or make any modifications in the terms and conditions of the tender which are not acceptable to Accepting Authority, I/We agree that Accepting Authority., without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely and I/We shall not be considered as unsuccessful tenderer for the purpose of return of earnest money as provided in the Notice Inviting Tender. Should this tender be accepted, I/We hereby agree to abide by and fulfil all the terms, conditions and provisions of the aforesaid documents.

If, after the tender is accepted, I/We fail to commence the execution of the Works as provided in the Conditions, I/We agree that Accepting Authority shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely and take suitable actions against me/us as deemed fit under the terms and conditions of the tender.

I/We agree that should Accepting Authority decide to forfeit earnest money as aforesaid, unless a sum equal to the earnest money mentioned above is paid by



me/us forthwith, Accepting Authority may at its option recover it out of the deposit and in the event of deficiency, out of any other moneys due to me/us or otherwise.

If the tender is accepted, I/We agree that the earnest money deposited at the time of tender shall be treated as part of security deposit and the balance security deposit shall be paid by me/us or Accepting Authority shall collect the same by deductions from my/our running bill as per condition of contract.

Signature in the capacity of.....

Duly authorised to sign the tender on behalf of the (in block capitals

Date:

Witness

Postal Address

.....

Date

.....

Address

Telegraphic Address

.....

Telephone No.

1. Land

2.Mob.

Email ID :

Income Tax PAN:

GST TIN

GENERAL CONDITIONS OF CONTRACT

A. INTERPRETATION AND DEFINITIONS

1.0 Singular & Plural:

Where the context so requires, words importing the singular only also include the plural and vice-versa.

2.0 Headings and Marginal Notes to Conditions:

Headings and marginal notes to these General Conditions shall not be deemed to form part thereof or be taken to consideration in the interpretation or construction thereof or of the contract.

3.0 Definitions:

- a)
 - i) “Client/Owner” shall mean the Firm/Company/Department who authorises for arrangement of the work and is mentioned in NIT.
 - ii) “Consultant” shall mean Officer/firm/or other legal representative entrusted for the estimation/design/tendering/arrangement/ supervision etc of a work by the Client/Owner and is mentioned in NIT.
- b)
 - i) The “Accepting Authority” shall mean the Accepting Officer/firm with whom the Contractor executes the agreement and is mentioned in NIT.
 - ii) “The Payment Authority” shall mean the officer/Firm who makes payment of the bill for the works done and is mentioned in NIT
- c) The “Contract” shall mean the notice inviting the tender, the tender and acceptance thereof and the formal agreement, executed between ACCEPTING AUTHORITY and the Contractor together with the documents referred to therein including these Conditions with appendices and any special Conditions, the specifications, designs, drawings, schedule of quantities with rates and amounts and schedule of rates. All these documents taken together shall be deemed to form one Contract and shall be complementary to one another.
- d) The “Contractor” shall mean the individual or firm or company undertaking the works and shall include legal representative of such individual or persons composing such firm or incorporated company, or successors of such firm or company as the case may be and permitted assigns of such individual or firm or company.
- e) The term “Sub-Contractor” used herein refers to a party or parties having a direct contract with the Contractor to whom any part of the contract has been sublet by the Contractor with the consent in writing of the Engineer-in-Charge.
- f) The Contract Sum shall mean:
 - (i) in the case of Lump Sum Contracts the sum for which the tender is accepted.
 - (ii) in the case of percentage Rate Contracts the estimated value of the Works as mentioned in schedule of rates adjusted by the Contractor’s percentage.

- (iii) in the case of Item Rate Contracts the cost of the Works arrived at after extension of the quantities shown in Schedule of Quantities by the item rates quoted by the tenderer for the various items.
- g) “Contract sum/Price/Amount” means the sum mentioned in the Tender subject to such additions thereto or deductions there from as may be under the provisions hereinafter contained.
- h) “Probable Amount of Contract” shall mean the estimated/tendered amount of the work
- i) A “Day” shall mean a day of 24 hours from midnight irrespective of the number of hours worked in that day.
- j) A “Week” shall mean seven days without regard to the number of hours worked in any day in that week.
- k) “Month” shall mean the English Calendar month.
- l) “Temporary Works” shall mean all temporary works of every kind required in or about the execution, completion or maintenance of the Works.
- m) “Urgent Works” shall mean any urgent measures which, in the opinion of the Engineer-in-Charge, become necessary during the progress of the work to obviate any risk of accident or failure or which become necessary for security.
- n) The “Works” shall mean the works to be executed in accordance with the Contract or part(s) thereof as the case may be and shall include all extra or additional, altered or substituted works or temporary and urgent works as required for performance of the Contract.
- o) “Engineer-in-charge” shall mean the Engineering Officer appointed by the Accepting Authority or his duly authorised representative who shall direct, supervise and be in-charge of the works for purposes of this contract.
- p) “Excepted Risks” are risks due to riots (otherwise than among Contractor’s employees) and civil commotion (so far as both these are uninsurable), war (whether declared or not), invasion, act of foreign enemies, hostilities, civil war, rebellion, revolution, insurrection by military or usurped power, any acts of Government, damage from aircraft, acts of God, such as earthquake, lightning and un-precedented flood and other causes over which the Contractor has no control and accepted as such by the Accepting Authority.
- q) “Market Rate” shall be the rate as decided by the Engineer-in-charge on the basis of cost of materials and labour at the Site where the work is to be executed, plus 15 (fifteen) percentage to cover all overheads and profit.
- r) “Schedule(s)” referred to in these conditions shall mean CPWD schedule of rates prevailing at the time of tendering the work and amendments issued from time to time.
- s) The “Site” shall mean the lands and/or other places on, under, in or through which the work is to be executed under the Contract including any other lands or places which may be allotted by ACCEPTING AUTHORITY or used for the purposes of the Contract.

t) “Drawings” means the Drawings referred to in the contract and any modification of such drawings approved in writing by the Engineer-in-Charge and such other drawings as may from time to time be furnished or approved in writing by the Engineer-in-Charge, as well as shop drawings which may have to be prepared by the Contractor and are approved by the Engineer-in-Charge.

u) Terms of Approval, Judgment or Direction

When the words “Approved”, “Subject to approval”, “satisfactory”, “equal to” “determined by”, “accepted”, “permitted”, etc. are used, the approval, judgment, direction, etc. implied is understood to be a function of the Engineer-in-Charge and/or ACCEPTING AUTHORITY and shall have the same effect as if performed by ACCEPTING AUTHORITY.

B. SCOPE AND PERFORMANCE

4.0 Contract Documents:

The Contractor shall be furnished, free of charge, two certified true copies of the Contract Documents except standard specifications and the schedule of rates. All further drawings which may be issued during the progress of the works shall also be provided free of cost. He shall keep one copy of the documents on the Site in good order, and the same shall at all reasonable times be available for inspection and use by the Engineer-in-Charge, his representatives or by other inspecting Officers.

4.1 None of these Documents, which confidential shall be used by the Contractor for any purpose other than that of this Contract. (Except confidential disclosure to sub- contractors or Suppliers, if necessary).

4.2 The contractor shall take necessary steps to ensure that all persons employed on any work in connection with this contract have noticed that the Indian Official Secrets Act 1923 (XIX of 1923) applies to them and shall continue to apply even after the execution of such works under the Contract.

5.0 SCHEDULE OF QUANTITIES AND RATES

The schedule of quantities is to be read in conjunction with these special conditions, general conditions of contract, specifications, drawings and documents forming part of this contract. All corrections in the tender schedule shall be duly attested by the dated initials of the tenderer. Corrections which are not attested may entail the rejection of the tender. The tender document should be signed and returned without detaching any part of the document.

Rates shall include labour, materials, tools, plants, appliances, transport, equipment, taxes including GST, duties, octroi, levies, water and power supply metering and consumption charges, temporary plumbing, cost of cistern, sheds for materials, contractor’s supervision, overheads, profits, general risks or liabilities and all that is necessary for the satisfactory completion of the job. The rates shall be firm and shall not be subject to exchange variations, labour conditions or any conditions whatsoever other than what is approved in the contract.

The Contractor shall particularly note that the tender rates of the various items shall be inclusive of all incidental charges, such as bailing, shoring, bunding, barricading and lighting, etc. if found necessary during execution and no extra shall be due therefore on any account to the Contractor.

6.0 **Inspection of Site:**

The contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon transportation, disposal, handling and storage of materials, availability of labour, water, electric power, roads and uncertainties of weather, or similar physical conditions of the site, the conformation and conditions of the ground, the character, the quality and quantities of surface and sub-surface materials to be encountered, including the subsoil water levels, the character of equipment facilities needed preliminary to and during the progress of the work, and all other matters upon which information is reasonably obtainable and which can in any way affect the work or his cost thereof under this contract. Any failure of the contractor to acquaint himself with all the available information concerning these conditions will not relieve him from responsibility for not estimating properly the difficulty or cost of successfully performing the work. Non-familiarity with the site conditions will not be considered a reason either for extra claims or for not carrying out the work in strict conformity with drawings and specifications. The contractor shall note that if any clarifications regarding specifications, conditions of contract, schedule of quantities, scope of work, etc. are required, he should contact the ACCEPTING AUTHORITY. No claim on account of ambiguity in any respect will be entertained.

7.0 **Sufficiency of Tender:**

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the Works and of the rates and prices quoted in the Schedule of Quantities, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the Works.

8.0 **Discrepancies and Adjustment of Errors:**

The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawing being followed in preference to small scale drawing and figured dimensions in preference to scale and Special Conditions in preference to General Conditions.

8.1 In the case of discrepancy between Schedule of Quantities, the Specifications and/or the Drawings, the following order of preference shall be observed.

- a) Description in Schedule of Quantities.
- b) Technical Specification and Special Conditions, if any.
- c) Drawings.
- d) General Conditions.

8.2 If there are varying or conflicting provisions made in any one document forming part of the Contract, the Accepting Authority shall be the deciding authority with regard to the intention of the document.

8.3 Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the Works comprised therein according to drawings and specifications or from any of his obligations under the contract.

Should the Contractor notice any discrepancy or error in the tender document in the statement made, or quantities or units shown against items, he shall immediately bring to the notice of the ACCEPTING AUTHORITY and obtain the clarification before submitting the tender. The tender shall be based on such clarifications received and shall be recorded as such in the covering letter to the tender, failing which ACCEPTING AUTHORITY shall have the right to ask the Contractor to execute the work according to the corrected statement made or quantities or units shown in the tender, without any compensation, when the same has come to the notice of the Accepting Authority.

8.4 If on check there are found to be differences between the rates given by the contractor in words and figures or in the amount worked out by him in the schedule of quantities and general summary, the same shall be adjusted in accordance with the following rules:

- a) In the event of a discrepancy between description in words and figures quoted by a tenderer, the description in words shall prevail.
- b) In the event of an error occurring in the amount column of Schedule of Quantities as a result of wrong extension of the unit rate and quantity, the unit rate shall be regarded as firm and extension shall be amended on the basis of the rate.
- c) All errors in totalling in the amount column and in carrying forward totals shall be corrected.
- d) The total of various sections of Schedule of Quantities amended shall be carried over to the General Summary and the tendered sum amended accordingly. The tendered sum so altered shall, for the purpose of the tenderer, be substituted for the sum originally tendered and considered for acceptance instead of the original sum quoted by the tenderer. Any rounding off of Quantities or in sections of Schedule of Quantities or in General Summary, by the tenderer, shall be ignored.
- e) In case of lumpsum contracts based on Bills of Quantities (quantities not shown as provisional), should any error in quantities or any omission or items be discovered, the cumulative effect of which varies the Contract sum by more than 5% or Rs.20,000/- whichever is less, then the errors shall be rectified and the rectification dealt with as for deviations/variations under conditions 10 & 11 hereof, and the value thereof shall be added or deducted from the Contract Sum, as the case may be, provided that there shall be no rectification of any errors, omissions, or wrong estimates in the prices inserted by the Contractor in the Bills of Quantities.

9.0 Performance Guarantee and Security Deposits:

- a) Performance Guarantee:

Upon acceptance of the tender, the successful tenderer shall, within 15 days of receipt of intimation of acceptance of the tender, deposit with ACCEPTING AUTHORITY an initial performance security deposit of 5% of the contract sum as performance guarantee in one of the following forms:

- i. Cash (In case the amount is less than Rs.10,000/-)
- ii. Deposit at call Receipt/Banker's Cheque/Demand Draft.
- iii. Fixed Deposit receipt of scheduled bank pledged to the ACCEPTING AUTHORITY
- iv. An irrevocable bank guarantee bond of any scheduled bank or State Bank of India in the prescribed form

b) Security Deposit:

Security Deposit shall be collected by deductions from the running bills of Contractor @ 5% of the gross amount of the bill, till the sum along with the sum already deposited as earnest money amounts to Security Deposit @ 5% of the contract sum of the work. This is in addition to the performance guarantee already performed as per clause above.

1. The security deposit can be released, provided that when the security deposit reaches a limit of Rs.5 Lakhs, the contractor, if he so desires, may convert the amount into one of the Government securities or Bank guarantees from State Bank of India or associates or any other nationalised bank; for the amount coming above Rs.5 lakhs on its accumulation to a minimum amount of Rs.5 lakhs subject to the condition that amount of any such bank guarantee except last one shall not be less than Rs.5 lakhs, the bank guarantee being valid till the completion of defect liability period.
2. Provided that, if at the time of payment of the final bill, the deductions so made together with the earnest money already deposited, fall short of the security deposit above the recovery of the balance amount of security deposit shall be deemed to have been waived.

c) All compensation or other sums of money payable by the Contractor under the terms of this Contract or any other Contract or any other account whatsoever may be deducted from his security deposit or from the interest arising therefrom or from any sums which may be due or may become due to the Contractor by ACCEPTING AUTHORITY on any account whatsoever and in the event of his security deposit being reduced by reason of such deduction as aforesaid, the Contractor shall within fourteen days of receipt of notice of demand from the Engineer-in-Charge, make good the deficit.

d) Government papers tendered as security shall be taken at 10% (ten percent) below the market price or their face value, whichever is less.

e) Refund of Performance Guarantee:

Performance guarantee shall be refunded soon after the satisfactory completion of the work and recording of the completion certificate.

f) Refund of Security Deposit:

On expiry of the Defects Liability Period (referred to in Condition 33 hereof) or on payment of the amount of the Final Bill payable in accordance with Condition 50 hereof whichever is later, the Engineer-in-Charge, shall on demand from the Contractor, refund to him the security deposit provided the Engineer-in-Charge is satisfied that there is no demand outstanding against the Contractor.

10.0 Deviations/Variations Extent & Pricing:

The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, quantities, drawings, designs and instructions that may appear to him to be necessary or advisable during the progress

of the work, and (ii) to omit a part of the Works in case of non-availability of a portion of the Site or for any other reasons, and the Contractor shall be bound to carry out the Works in accordance with any instructions given to him in writing signed by the Engineer-in-Charge and such alterations, omissions, additions or substitution shall form part of the Contract as if originally provided therein and any altered, additional or substituted work which the Contractor may be directed to do in the manner above specified as part of the Works, shall be carried out by the Contractor on the same conditions in all respects including price on which he agreed to do the main work.

10.1 The time for completion of the Work shall, in the event of any deviations resulting in additional cost over the Contract Sum being ordered, be extended as follows, if requested by the Contractor.

- a) in the proportion which the additional cost of the altered, additional or substituted work bears to the original Contract sum plus.
- b) Any further additional time as may be considered reasonable by the Engineer-in-charge. (Subject to maximum of 25% of the time calculated as above).

10.2 Rates for such additional, altered or substituted work shall be determined by the Engineer-in-Charge as follows:

- (i) If the rate for additional, altered or substituted item of work is specified in the Schedule of Quantities, the Contractor shall carry out the additional, altered or substituted item at the same rate. In the case of composite tenders where two or more schedules of quantities may form part of the contract, the applicable rate shall be taken from the schedule of quantities of that particular part in which the deviation is involved, failing that at the lowest applicable rate for the same item of work in the other Schedule of Quantities.
- (ii) If the rate for any altered, additional or substituted item of work is not specified in the Schedule of Quantities, the rate for that item shall be derived from the rate for the nearest similar item specified therein. In case of composite tenders where two or more schedules of quantities form part of the contract, the rate shall be derived from the nearest similar item in the Bills of Quantities of the particular part of works in which the deviation is involved failing that from the lowest of the nearest similar items in other schedule of quantities.
- (iii) If the rate for any additional, altered or substituted item of Work cannot be determined in the manner specified in sub-para (i) and (ii) above, then note for such item of work shall be arrived from respective CPWD Schedule of Rates as mentioned in the NIT, as the cost index prevailing at the time of tendering plus/minus the percentage by which the tendered amount of the works actually awarded is higher or lower than the estimated amount of the works actually Awarded.

(Applicable to Measurement Contracts based on item rates or lump sum Contracts based on Bills of Quantities or Percentage Rate Contracts).

- (iv) If the rate for any altered, additional or substituted item of Work cannot be determined in the manner specified in sub-para (i) to (iii) above, then the rate for such item of work shall be derived from the Schedule of Rates specified in sub-para (iii) above plus/minus the percentage mentioned in that sub-para. Provided always that if rate(s) for part(s) of an item(s) is/are not specified in the Schedule of Rates

the rate(s) for such part(s) shall be determined by the Engineer-in-Charge on the basis of the purchase price as supported by the vouchers unless the Engineer-in-Charge finds the purchase price unreasonable. In the latter event, the price shall be determined on the basis of market rate(s) prevailing during the fortnight following the date of the order.

- (v) If the rate for any altered, additional or substituted item of Work cannot be determined in the manner specified in sub-paras (i) to (iv) above, the Contractor shall, within 14 days of the date of receipt of the order to carry out the said work, inform the Engineer-in-Charge of the rate which he proposes to claim for such item of work supported by analysis of the rate claimed and the Engineer-in-Charge shall, within three months thereafter after giving due consideration to the rate claimed by the Contractor, determine the rate on the basis of market rate (s). In the event of the Contractor failing to inform the Engineer-in-Charge within the stipulated period of time, the rate which he proposes to claim, the rate for such item shall be determined by the Engineer-in-Charge on the basis of market rate(s).
- (vi)(A) Except in case of items of work below ground surface as it exists at the time of commencement of work (See (B) below), quantities of which may change due to site conditions, provisions contained in sub-conditions (i) to (v) above shall not apply to:
 - (a) that value of any contract item, substituted item or contract-cum-substituted item as is in excess of the original value of the item by 25%.
(Applicable to lump-sum Contracts, Measurement contracts based on item rates and percentage Rate Contracts).
 - (b) that value of deviations ordered on any individual trade item included in the contract as is in excess of 25 percentage. (Applicable to Lump-Sum Contracts only).
 - (c) the value of all items not already included in the Contract as is in excess of 25 percentage.
- (B) In case of items of Work below ground surface as it exists at the time of commencement of work, quantities of which may change due to site conditions, provisions contained in sub-conditions (i) to (v) above shall not apply to:
 - (a) items of any individual trade which exceed by more than 50 percentage of the value of that trade included in the Contract as a whole, unless the Contractor and the Engineer-in-Charge agree to a higher percentage for any particular item.
 - (b) the value of any item not included in the Contract in excess of 5% of the contract sum.

NOTE: Individual trade means the sub-heads into which the Schedule of quantities as provided in the Contract has been divided and in the absence of any such provision in the Contract, the sub-heads as given in the Schedule of Rates.

For the purpose of operation of clause 10 (vi) B the following works shall be treated as works below ground surface.

- (a) For buildings, compound walls, plinth level or 1.2 metres (4 ft) above ground level whichever is lower, excluding items above flooring and D.P.C. but including base concrete below the floors.
- (b) For abutments, piers, retaining walls of culverts and bridges, walls of water reservoir, the bed of floor level.
- (c) For retaining walls where floor level is not determinate, 1.2 metres above the average ground level or bed level.
- (d) For roads, all items of excavation and filling including treatment of sub base and lower sub base works.
- (e) For water supply lines, sewer lines, underground storm water drains and similar work. All items of work below ground level except items of pipe work and proper masonry work.
- (f) For open storm water drains, all items of work except lining of drains.

11.0 In the case of contract items, substituted items, contract-cum-substituted items or additional items which exceed the limits laid down in sub-para (vi) of Condition 10 above, the Contractor may, within fourteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis, for the work in excess of the above-mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the Schedule of quantities or of those derived in accordance with the provisions of sub-para (i) to (iv) of Condition 10 by more than five percent, the Engineer-in-Charge shall, within three months of receipt of the claim supported by analysis, after giving consideration to the analysis of the rates submitted by the Contractor, determine the rates on the basis of market rates and, if the rates so determined exceed the rates specified in the Schedule of Quantities or those derived in accordance with the provisions of subpara (i) to (iv) of Condition 10 by more than five per cent, the Contractor shall be paid in accordance with the rates so determined. In the event of the Contractor failing to claim revision of rates within the stipulated period, if the rates determined by the Engineer-in-Charge within a period of three months of receipt of the claim supported by analysis are within five per cent of the rates specified in the Schedule of Quantities or of those determined in accordance with the provisions of sub-para (i) to (iv) of Condition 10, the Engineer-in-Charge shall make payment at the rates as specified in the Schedule of Quantities or those already determined under sub-para (i) to (iv) of Condition 10 for the quantities in excess of the limits laid down in sub-para (vi) of Condition 10.

11.1 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items, for the item in excess of the limits laid down in sub-para (vi) of Condition 10 provided that such decrease is more than five per cent of rates specified in the Schedule of Quantities or of those derived in accordance with the provisions of sub-para (i) to (iv) of Condition 10, and the Engineer-in-Charge may, after giving notice to the Contractor within two months of receipt of order by the Contractor or occurrence of the excess and after taking into consideration any reply received from the Contractor within fourteen days of receipt of the notice, revise the rates for the work in question, within two months of expiry of said period of 14 days, having regard to the market rates.

12.0 **Suspension of Work:**

- (a) The Contractor shall, on receipt of the order in writing of the Engineer-in-Charge, suspend the progress of the work or any part thereof for such time and in such

manner as the Engineer-in-Charge may consider necessary for any of the following reasons.

- (i) on account of any default on part of the Contractor; or
- (ii) for proper execution of the Works or part thereof for reasons other than the default of the Contractor; or
- (iii) for safety of the Works or part thereof.

The Contractor shall, during such suspension, properly protect and secure the Works to the extent necessary and carry out the instructions given in that behalf by the Engineer-in-Charge.

- b) If the suspension is ordered for reasons (ii) and (iii) in sub-para (a) above:

The Contractor shall be entitled to an extension of the time equal to the period of every such suspension plus 25%.

- c) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (i) in sub-para (a) above, the Contractor may, after receipt of such order, serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-Charge of the said notice, to proceed with the Works or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the Contractor, if he intends to treat the suspension, where it affects only a part of the Works as an omission of such part by ACCEPTING AUTHORITY under Conditions 10 and 11 or where it affects the whole of the Works, as an abandonment of the Works by ACCEPTING AUTHORITY shall, within ten days of expiry of such period of 15 days, give notice in writing of his intention to the Engineer-in-Charge. In the event of the Contractor treating the suspension as an abandonment of the Contract by ACCEPTING AUTHORITY, he shall have no claim to payment of any compensation on account of any profit or advantage which he may have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at Site, remaining idle in consequence and of materials collected which could not be utilized on the Works, adding to the total thereof 10 percentage to cover indirect expenses of the Contractor, provided the Contractor submits his claim supported by the details to the Engineer-in-Charge within 28 days of the expiry of the period of 3 months.

13.0 Time, Submission of programme and Extension for Delay:

The time allowed for execution of the Works as specified in Notice Inviting Tender or the extended time in accordance with these Conditions shall be of the essence of the Contract. The execution of the Works shall commence within 15 days from the date on which the Engineer-in-Charge issues written orders to commence the work or from the date of handing over of the Site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, ACCEPTING AUTHORITY shall, without prejudice to any other right or remedy, be at liberty to forfeit the earnest money absolutely.

- 13.1 After the acceptance of his Tender, the Contractor shall, within fifteen days, submit to the Engineer-in-Charge, for his approval, a detailed programme taking into account the total time period stipulated in the contract showing the order, the procedure and method in which he proposes to carry out the works.
- He shall furnish the particulars in writing of his arrangements of manpower, plant and machinery, shuttering and all other resources owned and dedicated to this work. Cash flow during the execution of project for procurement of materials and for carrying out of the works including temporary works which the Contractor intends to construct shall also be furnished.
- In support of this programme, the Contractor shall submit a work schedule in the form of a CPM/PERT Chart. The Engineer-in-Charge shall if necessary modify the programme submitted by the Contractor and approval shall be given by the Engineer-in-Charge indicating the major milestones. The programme approved by the Engineer-in-Charge shall be final and binding on the Contractor. The approval by the Engineer-in-Charge of such programme or furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the contract.
- During the progress of work, the Contractor shall be required to furnish the resource mobilisation plan as required by Engineer-in-Charge to keep up the target date of completion.
- This CPM/PERT programme will be required to be updated every three months or more frequently as directed by the Engineer-in-Charge, based on the actual progress, resource mobilisation and other field conditions actually prevailing.
- 13.2 If the Works be delayed by force majeure, or excepted risks, or any other cause which, in the absolute discretion of the Accepting Authority 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 but shall nevertheless use constantly his best endeavours 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.
- 13.3 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. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired.
- 13.4 In any such case the Accepting Authority may give a fair and reasonable extension of time for completion of the work. Such extension shall be communicated to the Contractor by the Engineer-in-Charge, in writing, within 3 months of the date of receipt of such request by the Engineer-in-Charge.
- 14.0 **Tools and Equipment's**
- The Contractor shall arrange at his own expense all tools and equipment's required for execution of the work.
- 15.0 **Materials**
- 15.1 The Engineer-in-Charge shall have full powers to require removal of any or all of the materials brought to Site by the Contractor which are not in accordance with the Contract specifications or do not conform in character or quality to samples approved by him. In

case of default on the part of the Contractor in removing rejected materials the Engineer-in-Charge shall be at liberty to have them removed by other means. The Engineer-in-Charge shall have full powers to procure other proper materials to be substituted for rejected materials and, in the event of the Contractor refusing to comply, he may cause the same to be supplied by other means. All costs, which may attend upon such removal and/or substitution, shall be borne by the Contractor.

- 15.2 The Contractor shall indemnify ACCEPTING AUTHORITY employees against any action, claim or proceedings relating to infringement or use of any patent or design or any alleged patent or design right and shall pay any royalties or other charges which may be payable in respect of any article or material or part thereof included in the Contract. In the event of any claim being made or action being brought against ACCEPTING AUTHORITY or any agent, servant or employee of ACCEPTING AUTHORITY in respect of any such matters as aforesaid, the Contractor shall immediately be notified thereof. Provided that such indemnity shall not apply when such infringement has taken place in complying with the specific directions issued by ACCEPTING AUTHORITY but the Contractor shall pay any royalties or other charges payable in respect of any such use, the amount so paid being reimbursed to the Contractor only if the use was the result of any drawings and/or specifications issued after submission of the tender.
- 154 The Engineer-in-Charge shall be entitled to have tests carried out, as specified in the Contract, for any materials supplied by the Contractor other than those, for which, as stated above, satisfactory proof has already been furnished, at the cost of the Contractor and the Contractor shall provide at his expense all facilities, which Engineer-in-Charge may require for the purpose. If no tests are specified in the Contract, and such tests are required by the Engineer-in-Charge, the Contractor shall provide all facilities required for the purpose and the charges for these tests shall be borne by the Contractor only if the tests disclose that the said materials are not in accordance with the provision of the Contract. The cost of materials consumed in tests shall be borne by the Contractor in all cases except when otherwise provided.
- 155 The Contractor shall bear the cost of loading, transporting to Site, unloading, storing under cover as required, assembling and joining the several parts together as necessary and incorporating or fixing materials in the Works including all preparatory work of whatever description as may be required.
- 156 Materials required for the Works, whether brought by the Contractor or supplied by ACCEPTING AUTHORITY, shall be stored by the Contractor only at places approved by the Engineer-in-Charge. Storage and safe custody of materials shall be the responsibility of the Contractor.
- 157 ACCEPTING AUTHORITY officials concerned with the Contract shall be entitled at any time to inspect and examine any materials intended to be used in or on the Works, either on the Site or at factory or workshop or other place(s) where such materials are assembled/fabricated, manufactured or at any place(s) where these are lying or from which these are being obtained and the contractor shall give such facilities as may be required for such inspection and examination.
- 158 All materials brought to the Site shall become and remain the property of ACCEPTING AUTHORITY and shall not be removed from the Site, without the prior written approval of the Engineer-in-Charge. But whenever the Works are finally completed and advance, if any, in respect of any such materials is fully recovered, the Contractor shall at his own expense forthwith remove from the Site all surplus materials originally supplied by him

and upon such removal, the same shall revert to and become the property of the Contractor.

16.0 SITE ORDER BOOK

An order book of work shall be maintained at site and the Contractor shall acknowledge the orders given by the Engineer-in-charge and shall carry them out accordingly.

17.0 Labour

The Contractor shall employ labour in sufficient numbers either directly or through subcontractors to maintain the required rate of progress and of quality to ensure workmanship of the degree specified in the Contract and to the satisfaction of the Engineer-in-Charge. The Contractor shall not employ in connection with the Works any person who has not completed eighteen years of age.

17.1 The Contractor shall furnish to the Engineer-in-Charge weekly return of the number and description by trades of the work people employed on the Works. The Contractor shall also submit on the 4th and 19th of every month to the Engineer-in-Charge a true statement showing in respect of the second half of the preceding month and the first half of the current month (i) the accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them and (ii) the number of female workers who have been allowed Maternity Benefit as provided in the Maternity Benefit Act, 1961 or Rules made thereunder and the amount paid to them.

17.2 The Contractor shall pay to labour employed by him either directly or through subcontractors wages not less than fair wages as defined in the Contractor's Labour Regulations.

17.3 The Contractor shall in respect of labour employed by him either directly or through subcontractors comply with or cause to be complied with the Contractor's Labour Regulations in regard to all matters provided therein.

164 The Contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employer's Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Provident Fund Act, Maternity Benefit Act, 1961, and Mines Act, 1952, Miscellaneous Provisions Act 1952 or any modifications thereof or any other law relating thereto and rules made thereunder from time to time.

164.1 The Contractor shall be liable to pay his contribution and the employees' contribution to the State Insurance Scheme in respect of all labour employed by him for the execution of the contract, in accordance with the provision of "The Employees' State Insurance Act, 1948" as amended from time to time. In case the contractor fails to submit full details of his account of labour employed and the contribution payable, the Engineer-in-Charge shall recover from the running bills of contractor an amount of contribution as assessed by him. The amount so recovered shall be adjusted against the actual contribution payable for Employees' State Insurance.

165 The Engineer-in-Charge shall, on a report having been made by an Inspecting Officer as defined in the Contractor's Labour Regulations, have the power 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 workers, non-payment of wages or of

deductions made from his or their wages which are not justified by the terms of the Contract or non observance of the said Contractor's Labour Regulations.

- 166 The Contractor shall indemnify ACCEPTING AUTHORITY against any payments to be made under and for non-observance of the Regulations aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- 167 In the event of the Contractor committing a default or breach of any of the provisions of the aforesaid Contractor's Labour Regulations, as amended from time to time or furnishing any information or submitting or filing any Form/Register/Slip under the provisions of those Regulations which is materially incorrect then on the report of the Inspecting Officers as defined in the Contractor's Labour Regulation, the Contractor shall, without prejudice to any other liability pay, to ACCEPTING AUTHORITY Rs.250/- as liquidated damages for every default, breach or furnishing, making, submitting, filing materially incorrect statement as may be fixed by the Engineer-in-Charge and, in the event of the Contractor's default continuing in this respect, the liquidated damages may be enhanced to Rs.250/- per day for each day of default subject to a maximum of 5% of the estimated cost of the Works put to tender. The Engineer-in-Charge shall deduct such amount from bills or security deposit of the Contractor and credit the same to the Welfare Fund constituted under regulations. The decision of the Engineer-in-Charge in this respect shall be final and binding.
- 168 **Model Rules for Labour Welfare:** The Contractor shall at his own expense comply with or cause to be complied with Model Rules for Labour Welfare as appended to these Conditions or rules framed by Government from time to time for the protection of health and for making sanitary arrangement for workers employed directly or indirectly on the works. In case the Contractor fails to make arrangements as aforesaid, the Engineer-in-Charge shall be entitled to do so and recover the cost thereof from the Contractor.
- 169 **Safety Code:** The Contractor shall at his own expense arrange for the safety provisions as appended to these conditions or as required by the Engineer-in-Charge, in respect of all labour directly or indirectly employed for performance of the Works and shall provide all facilities in connection therewith. In case the Contractor fails to make arrangements and provide necessary facilities as aforesaid, the Engineer-in-Charge shall be entitled to do so and recover the cost thereof from the Contractor.
- 16.9.1 The contractor shall take necessary precautions to ensure safety of his crew, materials, equipment and the works during the period of the contract. No claim from the contractor for loss of or damage to equipment, materials, crew of the works during the course of the work due to natural causes like cyclones, gales, floods, rains or other cause or combination of causes will be entertained by ACCEPTING AUTHORITY. The contractor shall be fully liable to compensate ACCEPTING AUTHORITY for any loss or damage to works till the time of taking over of the work by ACCEPTING AUTHORITY.
- 16.9.2 Failure to comply with Model Rules for Labour Welfare, Safety Code or the provisions relating to report on accidents and to grant of maternity benefits to female workers shall make the Contractor liable to pay to ACCEPTING AUTHORITY, as liquidated damages, an amount not exceeding Rs.250/- for each default or materially incorrect statement. The decision of the Engineer-in-Charge in such matters, based on reports from the Inspecting Officers as defined in the Contractor's Labour Regulation as appended to these conditions, shall be final and binding and deductions for recovery of such liquidated damages may be made from any amount payable to the Contractor.

180 The Contractor shall not be permitted to enter on (other than for inspection purposes) or take possession of site until instructed to do so by the Engineer-in-Charge in writing. The portion of the site to be occupied by the Contractor shall be defined and/or marked on the site plan, failing which these shall be indicated by the Engineer-in-Charge at site and the Contractor shall on no account be allowed to extend his operations beyond these areas. In respect of any land allotted to the Contractor for purposes of or in connection with the Contract, the Contractor shall be a licensee subject to the following and such other terms and conditions as may be imposed by the licencer:-

- (i) that he shall pay a nominal licence fee of Re.1 per year or part of a year for use and occupation, in respect of each and every separate area or land allotted to him.
- (ii) that such use or occupation shall not confer any right of tenancy of the land to the Contractor.
- (iii) that the Contractor shall be liable to vacate the land on demand by the Engineer-in-Charge.
- (iv) that the Contractor shall have no right to any construction over this land without the written permission of the Engineer-in-Charge. In case, he is allowed to construct any structure he shall have to demolish and clear the same before handing over the completed work unless agreed to the contrary.

181 The Contractor shall provide, if necessary or if required on the Site, all temporary access thereto and shall alter, adapt and maintain the same as required from time to time and shall take up and clear them away as and when no longer required and as and when ordered by the Engineer-in-Charge and make good all damage done to the Site.

182 Land for Labour Camps: No Labour camps will be permitted within the work site and, the Contractor shall make the necessary arrangements, at his own cost.

19.0 **Contractor's Supervision:**

The Contractor shall either himself supervise the execution of the Works if he is qualified enough or shall appoint a competent agent approved by the Engineer-in-Charge. If the Contractor has himself not sufficient knowledge and experience to be capable of receiving instructions or cannot give his full attention to the Works, the Contractor shall, at his own expense, employ as his accredited agent an engineer having required qualification and sufficient experience in the construction field approved by the Engineer-in-Charge. Orders given to the Contractor's agent shall be considered to have the same force if these had been given to the Contractor himself. He shall take such orders as may be given to him by the Engineer-in-charge from time to time and shall be responsible to carry them out properly and should be available at site, even if permission is given to subcontract a portion of the work and all instructions will be issued to the authorised agent only. If the Contractor fails to appoint a suitable agent as directed by the Engineer-in-Charge, the Engineer-in-Charge shall have full powers to suspend the execution of the Works until such date a suitable agent is appointed and the Contractor shall be held responsible for the delay so caused to the works and ACCEPTING AUTHORITY reserves right to deduct a reasonable amount from the contractors bill, subject to a minimum of Rs.25, 000/- per month for every month of absence.

20.0 **Inspection and Approval:**

All works embracing more than one process shall be subject to examination and approval at each Stage thereof and the Contractor shall give due notice to the Engineer-in-Charge or his authorised representative when each stage is ready. In default of such notice, the Engineer-in-Charge shall be entitled to appraise the quality and extent thereof.

- 20.1 No work shall be covered up or put out of view without the approval of the Engineer-in-Charge or his authorised representative and the contractor shall afford full opportunity for examination and measurement of any work which is about to be covered up or put out of view and for examination of foundations before permanent work is placed thereon. The Contractor shall give due notice to the Engineer-in-Charge or his authorised representative whenever any such work or foundation is ready for examination and the Engineer-in-Charge or his representative shall, without unreasonable delay, unless he considers it unnecessary and advises the Contractor accordingly, attend for the purpose of examining and measuring such work or of examining such foundations. In the event of the failure of the Contractor to give such notice he shall, if required by the Engineer-in-Charge, uncover such work at the Contractor's expense.
- 20.2 Company officers concerned with the Contract shall have powers at any time to inspect and examine any part of the Works and the Contractor shall give such facilities as may be required for such inspection and examination.

21.0 Duties and Powers of Engineer-in-Charge's Representative:

The duties of the representative of the Engineer-in-Charge, are to watch and supervise the Works and to test and examine any materials to be used for workmanship employed in connection with the Works. He shall have no authority to order any work involving any extra payment by ACCEPTING AUTHORITY, nor to make any variation in the Works.

- 21.1 The Engineer-in-Charge may, from time to time, in writing delegate to his Representative any of the powers and authorities vested in the Engineer-in-Charge and shall furnish to the Contractor a copy of all such written delegation of powers and authorities. Any written instruction or written approval given by the Representative of the Engineer-in-Charge to the Contractor within the terms of such delegation shall bind the Contractor and ACCEPTING AUTHORITY as though it had been given by the Engineer-in-Charge.
- 21.2 Failure of the Representative of the Engineer-in-Charge to disapprove any work or materials shall not prejudice the power of the Engineer-in-Charge thereafter to disapprove such work or materials and to order the pulling down, removal or breaking up thereof.
- 21.3 If the Contractor shall be dissatisfied with any decision of the Representative of the Engineer-in-Charge he shall be entitled to refer the matter to the Engineer-in-Charge who shall, thereupon, confirm, reverse or vary such decision.

22.0 Removal of Workmen:

The Contractor shall employ in and about the execution of the Works only such persons as are skilled and experienced in their several trades and the Engineer-in-Charge shall be at liberty to object to and require the Contractor to remove from the Works any person employed by the Contractor in or about the execution of the Works who, in the opinion of the Engineer-in-Charge, misconducts himself or is incompetent or negligent in the proper performance of his duties and such person shall not be again employed upon the Works without permission of the Engineer-in-Charge.

23.0 **Uncovering and Making Good:**

The Contractor shall uncover any part of the Works and/or make openings in or through the same as the Engineer-in-Charge may from time to time direct for his verification and shall reinstate and make good such part to the satisfaction of the Engineer-in-Charge. If any such part has been covered up or put out of view after being approved by the Engineer-in-Charge and is subsequently found on uncovering to be executed in accordance with the Contract, the expenses of discovering and/or making openings in or through, reinstating and making good the same shall be borne by ACCEPTING AUTHORITY; in any other case, all such expenses shall be borne by the Contractor.

24.0 **Work during Night or on Sundays and Holidays:**

Subject to any provisions to the contrary contained in the Contract, none of the permanent works shall be carried out during night or on Sundays or on authorised holidays without the permission in writing of the Engineer-in-Charge except when the work is unavoidable or absolutely necessary for the safety of life, property and Works in which case the Contractor shall immediately advise the Engineer-in-Charge accordingly. Contractor, if need be, shall work in shifts with prior written permission from Engineer-in-Charge.

25.0 **Completion Certificate:**

As soon as the work is completed, the Contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of receipt of such notice the Engineer-in-Charge shall inspect the work and shall furnish the Contractor with a certificate of completion indicating (a) the date of completion, (b) defects to be rectified by the Contractor and/or (c) items for which payment shall be made at reduced rates. When separate periods of completion have been specified for items or groups of items, the Engineer-in-Charge shall issue separate completion certificates for such item or groups of items. No certificate of completion shall be issued, nor shall the work be considered to be complete till the contractor shall have removed from the premises, on which the work has been executed, all scaffolding, sheds and surplus materials, except such as are required for rectification of defects, rubbish and all huts and sanitary arrangements required for his workmen on the Site in connection with the execution of the work as shall have been erected by the Contractor or the workmen and cleaned all dirt from the parts of building(s) in, upon or about which the work has been executed or of which he may have had possession for the purpose of the execution thereof and cleaned floors, gutters and drains, eased doors and sashes, oiled locks and fastenings labelled keys clearly and handed them over to the Engineer-in-Charge or his Representative and made the whole premises fit for immediate occupation or use to the satisfaction of the Engineer-in-Charge. If the Contractor shall fail to comply with any of the requirements of this Conditions as aforesaid, on or before the date of completion of the Works, the Engineer-in-Charge may at the expense of the Contractor fulfil such requirements and dispose of the scaffoldings, surplus materials and rubbish, etc. as he thinks fit and the Contractor shall have no claim in respect of any such scaffolding or surplus materials except for any sum actually realised by the sale thereof less the cost of fulfilling the requirements and any other amount that may be due from the Contractor. If the expense of fulfilling such requirements is more than the amount realised on such disposal as aforesaid, the Contractor shall forthwith on demand pay such excess.

25.1 If at any time before completion of the entire work, items or groups of items for which separate periods of completion have been specified, have been completed, the Engineer-

in-Charge, with the consent of the Contractor, may take possession of any part or parts of the same (any such part(s) being hereinafter in this Condition referred to as “the relevant part”), then notwithstanding anything expressed or implied elsewhere in this Contract:-

- a) Within thirty days of the date of completion of such items or groups of items or of possession of the relevant part, the Engineer-in-Charge shall issue completion certificate for the relevant part as in Condition 31(1) above provided the Contractor fulfils his obligations under that condition for the relevant part.
- b) The Defects Liability period in respect of such items and the relevant part shall be deemed to have commenced from the certified date of completion of such items or the relevant part as the case may be.
- c) The Contractor may reduce the value insured under Condition 34 by the full value of the completed items or relevant part as estimated by the Engineer-in-Charge for this purpose. This estimate shall be applicable for this purpose only and for no other.
- d) For the purposes of ascertaining compensation for delay under Condition 32 in respect of any period during which the Works are not complete the relevant part will be deemed to form a separate item or group, with date of completion as given in the Contract or as extended under Condition 13 and actual date of completion as certified by the Engineer-in-Charge under this condition.

26.0 Compensation for delay:

If the Contractor fails to maintain the required progress in terms of condition 13 or to complete the work and clear the site on or before the contract, or extended date of period of completion, he shall, without prejudice to any other right or remedy of ACCEPTING AUTHORITY on account of such breach, pay an agreed compensation amount calculated as stipulated below on the total PAC of the work for every completed day/month that the progress remains below that specified in condition 13 or that the work remains incomplete.

- a) Compensation for delay - @ 1.5% per month of delay to be computed on per day basis.

This will also apply to items or groups of items for which separate period of completion has been specified.

26.1 Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10 percentages of the PAC or of the PAC of the item or group of items of work for which a separate period of completion has been specified.

26.2 The amount of compensation may be adjusted or set-off against any sum payable to the contractor under this or any other contract with ACCEPTING AUTHORITY.

27.0 Defects Liability Period:

The defects liability period shall be 12 months which shall be reckoned from the certified date of completion, and the Contractor shall be responsible to make good and remedy at his own expense within such period any defect which may develop or may be noticed before the expiry of the period and intimation of which has been sent to the Contractor within seven days of the expiry of the said period by a letter sent by hand delivery or by registered post.

28.0 Contractor's Liability and Insurance:

From commencement to completion of the Works, the Contractor shall take full responsibility for the case thereof and for taking precautions to prevent loss or damage and to minimise loss or damage to the greatest extent possible and shall be liable for any damage or loss that may happen to the Works or any part thereof and all ACCEPTING AUTHORITY's T&P from any cause whatsoever (save and except the Excepted Risks) and shall at his own cost repair and make good the same so that at completion, the Works and ACCEPTING AUTHORITY's T & P shall be in good order and condition and in conformity in every respect with the requirements of the Contract and instructions of the Engineer-in-Charge.

28.1 In the event of any loss or damage to the Works or any part thereof or to any T & P or to any material or articles at the Site from any of the Excepted Risks the following provisions shall have effect:

- a) the Contractor shall, as may be directed in writing by the Engineer-in-Charge, remove from the Site any debris and so much of the works as shall have been damaged taking to ACCEPTING AUTHORITY's T & P store such ACCEPTING AUTHORITY's T & P articles and/or materials may be directed;
- b) the Contractor shall, as may be directed in writing by the Engineer-in-Charge, proceed with the erection and completion of the Works under and in accordance with the provisions and Conditions of the Contract; and
- c) there will be added to the Contract Sum, the net amount due, ascertained in the same manner as for deviations, or as prescribed for payment, in respect of the re- execution of the Works lost or damaged, the replacement of any T & P and any materials and articles lost or damaged, but not incorporated in the Works, on the day when the loss or damage accrued and the removal by the Contractor as provided above of ACCEPTING AUTHORITY's T & P articles and/or materials to the ACCEPTING AUTHORITY's store and of debris and damaged Works referred to therein and the compensation paid by him, under any law for the time being in force, to any workman employed by him for any injury caused to him, or to the workman's legal successors for loss of the workman's life.

28.2 PROVIDED always that the Contractor shall not be entitled to payment under the above provisions in respect of so much loss or damage as has been occasioned by any failure on his part to perform his obligations under the Contract or not taking precautions to prevent loss or damage or minimise the amount of such loss or damage.

28.3 When ACCEPTING AUTHORITY/CLIENT/CONSULTANT's building or a part thereof is rented by the Contractor he shall insure the entire building if the building or any part thereof is used by him for the purpose of storing or using materials of combustible nature, as to which the decision of the Engineer-in-Charge shall be final and binding.

28.4 The Contractor shall indemnify and keep indemnified ACCEPTING AUTHORITY/CLIENT/CONSULTANT's against all losses and claims for injuries or damage to any persons or any property whatsoever which may arise out of or in consequence of the construction and maintenance of Works and against all claims, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of or in relation thereto. PROVIDED always that nothing herein contained shall be deemed to render the Contractor liable for or in respect of or to indemnify ACCEPTING

AUTHORITY/CLIENT/ CONSULTANT's against any compensation or damage caused by the Excepted Risks.

- 28.5 Before commencing execution of the work, the Contractor shall, without in any way limiting his obligations and responsibilities under this condition, insure against any damage, loss or injury which may occur to any property, building rented by the Contractor wholly or in part and any part of which is used by him for storing combustible materials), or to any person (including any employee of ACCEPTING AUTHORITY/CLIENT/CONSULTANT's) by or arising out of carrying out of the Contract.
- 28.6 The Contractor shall at all times indemnify ACCEPTING AUTHORITY/CLIENT/CONSULTANT's against all claims, damages or compensation under the provisions of Payment of Wages Act, 1936, Minimum Wages Act, 1948 Employer's Liability Act, 1938, the Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947 and the Maternity Benefit Act, 1961, Provident Fund Act or any modifications thereof or any other law relating thereto and rules made thereunder from time to time or as a consequence of any accident or injury to any workman or other persons in or about the Works, whether in the employment of the Contractor or not, save and except where such accident or injury has resulted from any act of ACCEPTING AUTHORITY, its agents or servants, and also against all costs, charges and expenses of any suit, action or proceedings arising out of such accident or injury and against all sum or sums which may with the consent of the Contractor be paid to compromise or compound any claim. Without limiting his obligations and liabilities as above provided, the Contractor shall insure against all claims, damages or compensation payable under the Workmen's Compensation Act, 1923 or any modification thereof or any other law relating thereto.
- 28.7 The aforesaid insurance policy/policies shall provide that they shall not be cancelled till the Engineer-in-Charge has agreed to their cancellation.
- 28.8 The Contractor shall prove to the Engineer-in-Charge from time to time that he has taken out all the insurance policies referred to above and has paid the necessary premiums for keeping the policies alive till expiry of the Defects Liability Period.
- 28.9 The Contractor shall ensure that similar insurance policies are taken out by his sub-contractors (if any) and shall be responsible for any claims or losses to ACCEPTING AUTHORITY resulting from their failure to obtain adequate insurance protection in connection thereof. The Contractor shall produce or cause to be produced by his sub-contractors (if any) as the case may be, the relevant policy or policies and premiums receipts as and when required by the Engineer-in-Charge.
- 28.10 If the Contractor and/or his sub-contractors (if any) shall fail to effect and keep in force the insurance referred to above or any other insurance which he/they may be required to effect under the terms of the Contract then and in any such case ACCEPTING AUTHORITY may, without being bound to, effect and keep in force any such insurance and pay such premium or premiums as may be necessary for that purpose and from time to time deduct the amount so paid by ACCEPTING AUTHORITY from any moneys due or which may become due to the Contractor or recover the same as a debt due from the Contractor.

29.0 Sub Contracts:

The Contractor shall not sublet any portion of the contract without the prior written approval of the ACCEPTING AUTHORITY. However if the contractor wants to sublet

certain works he shall as soon as practicable, after signing the contract, notify to the Engineer-in-Charge, in writing, the names of the Sub-contractors proposed for the work.

The Contractor shall be fully responsible to ACCEPTING AUTHORITY for the acts and omissions of his Sub-contractors and of persons directly or indirectly employed by them, as he is for the acts and omissions of persons employed by him.

Nothing contained in the contractual documents shall create any contractual relation between any Sub-contractor and ACCEPTING AUTHORITY.

Sub-contracting shall be limited to NOT exceeding 40% of the total amount of contract. In case of specialised nature of work requiring very high quality stipulations, such works shall not be Sub-contracted unless:-

- a) The Sub-contractor firm has sufficient expertise, equipment/plant, back up and experience in the similar nature of work.
- b) The Sub-contractor firm has sufficient financial background. The firm should have atleast 20% of the value of work to be sublet, as net assets.
- c) The Sub-contractor firm has a track record of completing the works on time and to the quality stipulations.
- d) The Sub-contractor firm has not run into litigation/ arbitration in the past three years with the clients.

In no event can any delay or unsatisfactory work conducted by the Sub-contractor can either be accepted or can be contractor adduce such delay or unsatisfactory work attributable to subletting of work. The main contractor shall be fully responsible for the contract and Management of Sub-contractors.

30.0 Instructions and Notices:

Subject as otherwise provided in this Contract, all notices to be given on behalf of ACCEPTING AUTHORITY and all other actions to be taken on its behalf, may be given or taken by the Engineer-in-Charge or any officer for the time being entrusted with the functions, duties and powers of the Engineer-in-Charge.

- 30.1 All instructions, notices and communications, etc. under the Contract shall be given in writing and, if sent by registered post to the last known place of abode or business of the Contractor, shall be deemed to have been served on the date when in the ordinary course of post these would have been delivered to him.
- 30.2 The Contractor or his Agent shall be in attendance at the Site(s) during all working hours and shall superintend the execution of the Works with such additional assistance in each trade as the Engineer-in-Charge may consider necessary. 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.
- 30.3 The Engineer-in-Charge shall communicate or confirm his instructions to the Contractor in respect of the execution of work in a "Works Site Order Book" maintained in the office of the Engineer-in-Charge and the Contractor or his authorised representative shall confirm receipt of such instructions by signing the relevant entries in this book. If required by the Contractor, he shall be furnished a certified true copy of such instruction(s).

31.0 Foreclosure of Contract in Full or in Part due to Abandonment or Reduction in Scope of Work:

If at any time after acceptance of the tender, ACCEPTING AUTHORITY shall decide to abandon or reduce the scope of the Works for any reason whatsoever and hence not require the whole or any part of the Works to be carried out, the Engineer-in-Charge shall give notice in writing to that effect to the Contractor, and the Contractor shall have no claim to any payment of compensation otherwise whatsoever, on account of any profit or advantage which he might have derived from the execution of the Works in full but which he did not derive in consequence of the foreclosure of the whole or part of the Works.

31.1 The Contractor shall be paid at Contract rates full amount for works executed at Site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent because of the foreclosure:

- a) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office, storage accommodation and water storage tanks.
- b)
 - (i) ACCEPTING AUTHORITY shall have the option to take over Contractor's materials or any part thereof either brought to Site or of which the Contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work), provided, however, ACCEPTING AUTHORITY shall not be bound to take over the materials or such portions thereof as the Contractor does not desire to retain. For materials taken over or to be taken over by ACCEPTING AUTHORITY, cost of such materials, shall, however, take into account to purchase price, cost of transportation and deterioration or damage which may have been caused to materials while in the custody of the Contractor.
 - (ii) For Contractor's materials not retained by ACCEPTING AUTHORITY, reasonable cost of transporting such materials from Site to Contractor's permanent stores or to his other Works, whichever is less. If materials are not transported to either of the said place, no cost of transportation shall be payable.
- c) If any of the materials supplied by ACCEPTING AUTHORITY is rendered surplus, the same except normal wastage shall be returned by the Contractor to ACCEPTING AUTHORITY at rates not exceeding those at which these were originally issued less allowance for any deterioration or damage which may have been caused whilst the materials were in the custody of the Contractor. In addition, cost of transporting such materials from Site to ACCEPTING AUTHORITY stores, if so required by ACCEPTING AUTHORITY.
- d) Reasonable compensation for transfer of T&P from Site to Contractor's permanent stores or to his other Works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.

31.2 The Contractor shall, if required by the Engineer-in-Charge, furnish to him books of account, wage books, time sheets and other relevant documents as may be necessary to enable him to certify the reasonable amount payable under this Condition.

32.0 **Termination of Contract for Death:**

If the Contractor is an individual or a proprietary concern and the individual or the proprietor dies and if the Contractor is a partnership concern and one of the partners dies, then unless the Accepting Authority is satisfied that the legal representatives of the individual Contractor or of the proprietor of the proprietary concern and in the case of partnership, the surviving partners, are capable of carrying and completing the Contract, the Accepting Authority shall be entitled to cancel the contract as to its incomplete part without ACCEPTING AUTHORITY being in any way liable to payment of any compensation to the estate of the deceased Contractor and/or to the surviving partners of the Contractor's firm on account of the cancellation of the Contract. The decision of the Accepting Authority that the legal representatives of the deceased Contractor or the surviving partners of the Contractor's firm cannot carry out and complete the Contract shall be final and binding on the parties. In the event of such cancellation ACCEPTING AUTHORITY shall not hold the estate of the deceased Contractor and/or the surviving partners of the Contractor's firm liable in damages for not completing the Contract.

33.0 **Cancellation of Contract in Full or in Part:**

If the Contractor

- (a) at any time makes default in proceeding with the Works with due diligence and continues to do so after a notice in writing of 7 days from the Engineer-in-Charge; or
- (b) Commits default in complying with any of the terms and conditions of the Contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge; or
- (c) fails to complete the Works or items of work with individual dates of completion, on or before the date(s) of completion and does not complete them within the period specified in a notice given in writing in that behalf by the Engineer-in-Charge; or
- (d) shall offer or give or agree to give to any person in ACCEPTING AUTHORITY/CLIENT/CONSULTANT service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other Contract for ACCEPTING AUTHORITY/CLIENT/CONSULTANT; or
- (e) shall enter into a Contract with ACCEPTING AUTHORITY/CLIENT/CONSULTANT in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have previously been disclosed in writing to the Accepting Authority/Engineer-in-Charge; or
- (f) Shall obtain a Contract with ACCEPTING AUTHORITY as a result of ring tendering or other non-bonafide methods of competitive tendering; or
- (g) being an individual, or if a firm, any partner thereof, shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or

assignment of his effective or composition or arrangement for the benefit of his creditors or purport to do so, or if any application be made under any insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors; or

- (h) being a company, shall pass a resolution or the Court shall make an order for the liquidation of its affairs, or a receiver or manager on behalf of the debenture holders shall be appointed or circumstances shall arise which entitle the Court or debenture holders to appoint a receiver or manager' or.
- (i) Shall suffer an execution being levied on his good and allow it to be continued for a period of 21 days; or
- (j) assigns, transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or attempts to assign, transfer or sublet the entire Works or any portion thereof without the prior written approval of the Accepting Authority; the Accepting Authority may, without prejudice to any other right which shall have accrued or shall accrue thereafter to ACCEPTING AUTHORITY by written notice cancel the contract as a whole or only such items of work in default from the Contract.

33.1 The Accepting Authority shall on such cancellation have powers to:

- (a) take possession of the Site and materials, constructional plant, implements, stores, etc. thereon; and/or
- (b) carry out the incomplete work by any means at the risk and cost of the Contractor.

33.2 On cancellation of the Contract in full or in part, the Engineer-in-Charge shall determine what amount, if any, is recoverable from the Contractor for completion of the Works or part of the Works or in case the Works or part of the Works is not to be completed, the loss or damage suffered by ACCEPTING AUTHORITY. In determining the amount, credit shall be given to the Contractor for the value of the work executed by him up to the time of cancellation, the value of Contractors materials taken over and incorporated in the Work, and use of tackle and machinery belonging to the Contractor.

33.3 Any excess expenditure incurred or to be incurred by ACCEPTING AUTHORITY in completing the Works or part of the Works or the excess loss or damages suffered or may be suffered by ACCEPTING AUTHORITY as aforesaid after allowing such credit shall be recovered from any money due to the Contractor on any account, and if such moneys are not sufficient the Contractor shall be called upon in writing to pay the same within 30 days.

33.4 If the Contractor shall fail 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 Contractor's unused materials, constructional plant, implements, temporary building, etc. and apply the proceeds of sale thereof towards the satisfaction of any sums due from the Contractor under the Contract and if thereafter there be any balance outstanding from the Contractor, it shall be recovered in accordance with the provisions of the Contract.

33.5 Any sums in excess of the amounts due to ACCEPTING AUTHORITY and unsold materials, constructional plant, etc. shall be returned to the Contractor, provided always that if cost or anticipated cost of completion by ACCEPTING AUTHORITY of the Works or part of the Works is less than the amount which the contractor would have been

paid had he completed the Works or part of the Works, such benefit shall not accrue to the Contractor.

34.0 **Liability for Damage, Defects or Imperfections and Rectification thereof:**

If the Contractor or his workman or employees shall injure or destroy any part of the building in which they may be working or any building, road, fence, etc. contiguous to the premises on which the work or any part of it is being executed, or if any damage shall happen to the work while in progress the Contractor shall, upon receipt of a notice in writing, make the same good at his own expense. If it shall appear to the Engineer-in-Charge or his Representative at any time during construction or re-construction or prior to the expiration of the Defects Liability Period, that any work has been executed with unsound, imperfect or unskilled workmanship or that any materials or articles provided by the Contractor for execution of the work are unsound or of a quality inferior to that contract for, or otherwise not in accordance with the Contract, or workmanship, the Contractor shall, upon receipt of a notice in writing in that behalf from the Engineer-in-Charge, 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 and/or remove the materials or articles so specified and provide other proper and suitable materials or articles at his own expense, notwithstanding that the same may have been inadvertently passed, certified and paid for, and in the event of his failing to do so within the period to be specified by the Engineer-in-Charge in his notice aforesaid, the Engineer-in-Charge may rectify or remove and re-execute the work and/or remove and replace with others the materials or articles complained of, as the case may be or by other means at the risk and expense of the Contractor.

34.1 In case of repairs and maintenance works, splashes and droppings from white-washing, painting, etc. shall be removed and surfaces cleaned simultaneously with completion of these items of work in individual rooms, quarters or premises, etc. where the work is done, without waiting for completion of all other items of work in the Contract. In case the Contractor fails to comply with the requirements of this condition, the Engineer-in-Charge shall have the right to get the work done by other means at the cost of the contractor. Before taking such action, however, the Engineer-in-Charge shall give three days' notice in writing to the Contractor.

35.0 **Urgent Works:**

If any Urgent Work (in respect whereof the decision of the Engineer-in-Charge shall be final and binding) becomes necessary and the Contractor is unable or unwilling at once to carry it out, the Engineer-in-Charge may, by his own or other work people, carry it out as he may consider necessary. If the Urgent Work shall be such as the Contractor is liable under the Contract to carry out at his expense, all expenses incurred on it by ACCEPTING AUTHORITY shall be recoverable from the Contractor and be adjusted or set off against any sum payable to him.

36.0 **Changes in Constitution**

Where the Contractor is a partnership firm, prior approval in writing of the Accepting Authority shall be obtained before any change is made in the constitution of the firm. Where the Contractor is an individual or a Hindu Undivided Family business concern such approval as aforesaid shall likewise be obtained before the Contractor enters into any partnership agreement whereunder the partnership firm would have the right to carry out the work hereby being undertaken by the Contractor. If prior approval as aforesaid is

not obtained, the Contract shall be deemed to have been assigned in contravention of Condition 41 (h) hereof and the same action may be taken and the same consequence shall ensue as provided for in the said Condition 41.

C. VALUATION AND PAYMENT

37.0 Records and measurement

The Engineer-in-Charge shall, except as otherwise stated, ascertain and determine by measurement the value in accordance with the Contract of work done in accordance therewith.

- 37.1 All items having a financial value shall be entered in Measurement Book, level book, etc. prescribed by ACCEPTING AUTHORITY so that a complete record is obtained of all work performed under the Contract.
- 37.2 Measurements shall be taken jointly by the Engineer-in-Charge or his authorised representative and by the Contractor or his authorised representative.
- 37.3 Before taking measurements of any work, the Engineer-in-Charge or the person deputed by him for the purpose shall give a reasonable notice to the Contractor. If the Contractor fails to attend or send an authorised representative for measurement after such a notice or fails to countersign or to record the objection within a week from the date of measurements, then in any such event measurement taken by the Engineer-in-Charge or by the person deputed by him shall be taken to be correct measurements of the work.
- 37.4 The Contractor shall, without extra charge, provide assistance with every appliance, labour and other things necessary for measurement.
- 37.5 Measurements shall be signed and dated by both parties each day on the Site on completion of measurement. If the Contractor objects to any of the measurements recorded on behalf of ACCEPTING AUTHORITY a note to that effect shall be made in the Measurement Book against the item objected to and such note shall be signed and dated by both parties engaged in taking the measurement.

38.0 Methods of Measurement:

Except where any general or detailed description of the work in Quantities expressly shows to the contrary, Schedule of Quantities shall be deemed to have been prepared and measurements shall be taken in accordance with the procedure set forth in the Schedule of Rates/Specification, notwithstanding any provision in the relevant Standard Method of Measurement or any general or local custom. In the case of items which are not covered by the Schedule of Rates/Specification, measurements shall be taken in accordance with the relevant Standard Method of Measurement issued by the Bureau of Indian Standards.

39.0 Time Limit for payment of Final Bill:

The final bill shall be submitted by the Contractor within three months of physical completion of the Works. No further claims shall be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished. The Payment shall be made within the period specified hereunder, the period being reckoned from the date of receipt of the bill by the Engineer-in-Charge.

- (a) Contract amount not exceeding Rs.15 lakhs Four months

(b) Contract amount exceeding Rs.15 lakhs Six months

40.0 Mobilisation Advance

Mobilisation Advance in respect of certain specialised and capital intensive works with PAC of Rs.2 crore and above and subject to availability of funds will be given as under within six weeks of submission of application by the contractor and subject to other conditions being fulfilled and the Engineer-in-Charge certifying the sum to which the Contractor is entitled by way of advance.

In the case of contracts valued at over Rs.2.00 crore, a lump-sum advance not exceeding 10% of the contract Sum against a bank guarantee from a Nationalised Bank acceptable to ACCEPTING AUTHORITY. The lump sum advance so paid will carry interest @ 12% per annum. The advance shall be utilised for the purposes of this Contract only and for no other purpose.

40.1 Recovery of the sums advanced above and interest thereon shall be made by deduction from the on account payments referred to in Condition 51 in suitable percentages in relation to the progress, as fixed by the Engineer-in-Charge, so that all the sums advanced with interest thereon shall be fully recovered by the time work amounting to nearly 80% of the Contract Sum is completed. If the amount payable under any interim bill is not sufficient to cover all deductions to be made for sums advanced and other sums deductible therefrom, the balance outstanding shall be deducted from subsequent interim bill/bills, as may be necessary, failing that, as otherwise provided for in the Contract.

41.0 **Income Tax Recovery**

Before releasing payment to the Contractor, income tax recovery shall be made from the Contractor's bill at the rate as applicable during that time. For payment towards advances under condition 54, no income tax recovery shall be made and advances shall be recovered as per terms and conditions provided in condition 54.0

42.0 **Overpayments and Underpayments:**

Wherever any claim for the payment of a sum of money to ACCEPTING AUTHORITY arises out of or under this contract against the Contractor the same may be deducted by ACCEPTING AUTHORITY from any sum then due or which at any time thereafter may become due to the Contractor under this contract and failing that under any other contract with ACCEPTING AUTHORITY or from any other sum due to the contractor from ACCEPTING AUTHORITY which may be available with ACCEPTING AUTHORITY or from his security deposit; or he shall pay the claim on demand.

42.1 ACCEPTING AUTHORITY reserves the right to carry out post-payment audit and technical examination of the final bill including all supporting vouchers, abstracts, etc., ACCEPTING AUTHORITY further reserves the right to enforce recovery of any over- payment when detected notwithstanding the fact that the amount of the final bill may be included by one of the parties as an item of dispute before an arbitrator appointed under condition 57 of this Contract and notwithstanding the fact that the amount of the final bill figures in the arbitration award.

42.2 If as a result of such audit and technical examination of any overpayment is discovered in respect of any work done by the Contractor or alleged to have been done by him under the contract, it shall be recovered by ACCEPTING AUTHORITY from the Contractor by

any or all of the methods prescribed above or if any underpayment is discovered the amount shall be duly paid to the Contractor by ACCEPTING AUTHORITY.

42.3 Provided that the aforesaid right of ACCEPTING AUTHORITY to adjust overpayments against amount due to the Contractor under any other Contract with ACCEPTING AUTHORITY shall not extend beyond the period of two years from the date of payment of the final bill or in case the final bill is a MINUS bill, from the date the amount payable by the Contractor under the MINUS final bill is communicated to the Contractor.

42.4 Any amount due to the Contractor under this Contract for underpayment may be adjusted against any amount then due to which may at any time thereafter become due before payment is made to the Contractor, from him to ACCEPTING AUTHORITY on any other Contract or account whatsoever.

43.0 Laws governing the Contract

43.1 All disputes which may arise under this contract will have to be filed before the Principal sub court, Ernakulam, where the headquarters of the ACCEPTING AUTHORITY is located.

This Contract shall be governed by the Indian Laws for the time being in force.

D. CONTRACTORS' LABOUR REGULATIONS

(See condition 16)

44.0 Definition:

In the regulations, unless otherwise expressed or indicated, the following words and expression shall have the meaning hereby assigned to them:

- (a) "Labour" means workers employed by a contractor directly, or indirectly through a sub-contractor, or by an agent on his behalf on a payment not exceeding Rs.5000/- per month.
- (b) "Fair Wage" means wages, which shall include wages for weekly day of rest and other allowances, whether for time or piece work taking into consideration prevailing market rates for similar employment in the neighbourhood but shall not be less than the minimum rates of wages fixed under the Minimum Wages Act.
- (c) "Contractor" for the purpose of these Regulations shall include an agent or sub-contractor employing labour on the work taken on Contract.
- (d) "Inspecting Officer", means any Labour Enforcement Officer, or Assistant Labour Commissioner of the Chief Labour commissioner's Organisation.
- (e) "Form" means a form appended to these regulations.

45.0 Notice of Commencement:

The Contractor shall, within SEVEN days of commencement of the work, furnish in writing to the Inspecting Officer of the area concerned the following information:

- (a) Name and situation of the work;
- (b) Contractors' name and address;

- (c) Particulars of the Department for which the work is undertaken;
- (d) name and address of sub-contractors as and when they are appointed;..
- (e) Commencement and probable duration of the work;
- (f) number of workers employed and likely to be employed;
- (g) 'fair wages' for different categories or workers.

46.0 Number of hours of work, which shall constitute a normal working day:

- (i) The number of hours which shall constitute a normal working day for an adult shall be NINE hours. The working day of an adult worker shall be so arranged that inclusive of intervals, if any, for rest, it shall not spread over more than twelve hours on any day. When an adult worker is made to work for more than NINE hours on any day or for more than FORTY EIGHT hours in any week he shall, in respect of overtime work, be paid wages at double the ordinary rate of wages.
- (ii) Weekly day of rest: Every worker shall be given a weekly day of rest which shall be fixed and notified at least TEN days in advance. A worker shall not be required or allowed to work on the weekly rest day unless he has or will have a substituted rest day, on one of the five days immediately before or after the rest day. Provided that no substitution shall be made which will result in the worker working for more than ten days consecutively without a rest day for whole day. Where in accordance with the foregoing provisions a worker works on the rest day and has been given a substituted rest day he shall be paid wages for the work done on the weekly rest day at the overtime rate of wages.

NOTE: the expression 'ordinary rate of wages' means the fair wage the worker is entitled to.

47.0 Display of notice regarding Wages, Weekly Day of Rest, etc.:

The Contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in clean and legible condition in conspicuous places on the works, notice in English and in the local Indian language, spoken by the majority of workers giving the rate of fair wages, the hours of work for which such wages are payable, the weekly rest days workers are entitled to and name and address of the Inspecting Officer. The Contractor shall send a copy of each of such notices to the Inspecting Officers.

48.0 Fixation of Wage Periods:

The Contractor shall fix wage period in respect of which wages shall be payable. No wage period shall normally exceed one week.

49.0 Payment of Wages:

- (i) Wages due to every worker shall be paid to him direct. All wages shall be paid in current coins or currency or in both.
- (ii) Wages of every worker employed on the contract shall be paid where the wages period is one week, within THREE days from the end of the wage period; and in any other case before the expiry of the 7th day or 10th from the end of the wage period according as the number of workers does not exceed 1,000 or exceeds 1,000.

- iii) When employment of any worker is terminated by or on behalf of the Contractor, the wages earned by him shall be paid before expiry of the day succeeding the one on which his employment is terminated.
- iv) Payment of wages shall be made at the work site on a working day except when the work is completed before expiry of the wage period, in which case final payment shall be made at the work site within 48 hours of the last working day and during normal working time.

NOTE: The term 'working day' means a day on which the work on which labour is employed, is in progress.

50.0 Register of Workmen:

A register of workmen shall be maintained in the form appended to these regulations and kept at the work site or as near to it as possible, and the relevant particulars of every workman shall be entered there in within THREE days of his employment.

51.0 Employment Card:

The Contractor shall issue an employment card in the Form appended to these regulations to each worker on the day of work or entry into his employment. If a worker has already any such card with him issued by the previous employer, the Contractor shall merely endorse that Employment Card with relevant entries. On termination of Employment the Employment Card shall again be endorsed by the Contractor and returned to the worker.

52.0 Register of Wages, etc.:

- (i) A Register of Wages-cum-Muster Roll in the Form appended to these regulations shall be maintained and kept at the work site or as near to it as possible.
- (ii) A wage slip in the Form appended to these regulations shall be issued to every worker employed by the contractor at least a day prior to disbursement of wages.

53.0 Preservation of Registers: The Register of workmen and the Register of Wages-cum- Muster roll required to be maintained under these Regulations shall be preserved for 3 years after the date on which the last entry is made therein.

SPECIAL CONDITIONS OF CONTRACT (SCC)

1.0 General

1.1 The following special conditions shall be read in conjunction with General Conditions of Contract (GCC) and amendments/ corrections thereto. Where any portion of the GCC are repugnant to or at variance with any provisions of the SCC, **then, unless a different intention appears, the provision of the SCC shall be deemed** to override the provisions of the GCC only to the extent that such repugnancy, or variations cannot be reconciled with the SCC and shall be to the extent of such repugnancy, or variations, prevail.

Wherever it is stated anywhere in this contract that such and such work is to be carried out, it shall be understood that same shall be effected/carried out by the Contractor at his own cost, unless a different intention is specifically and expressly stated herein or otherwise explicit from the context. The work in general shall be carried out as per the nomenclature of the individual items and in the particular specifications. For item of works, not covered above, the same shall be carried out as per instructions and specifications given by the Consultant.

For any other item of work, not covered in the above paragraph, the same shall be done as per TAC or latest relevant BIS codes of practice.

2.0 Works to be done by Contractor

Unless and otherwise mentioned in the tender document, the following works shall be done by the contractor, and therefore their cost shall be deemed to be included in their tendered cost: -

- a) Supply of all gas piping and gas purification systems
- b) Installation of all gas piping and gas purification systems

3.0 General Requirements and Arrangement of Materials

3.1 Quality of materials

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

3.2 Inspection of material and Equipment

The materials should be inspected/tested prior to the supply at manufacturer's premises to ensure proper use of materials, workmanship and quality control by Purchaser/Consultant and expenses for conveyance and stay for such inspections shall be borne by the contractor. The inspection call should be given at least ten days in advance so as to depute the officials of Purchaser/Consultant for the inspection.

Such inspection will be of the following categories:

1. Inspection of materials/equipment to be witnessed at the manufacturers' premises in accordance with relevant BIS standards

2. To receive materials at site with manufacturers' Test Certificate(s).
3. To receive materials after physical inspection at site.

The contractor will first submit dimensional detailed drawings for approval before fabrication is taken up in the factory.

3.3 Storage of materials

The storage of materials brought to site is the full responsibility of the contractor. The contractor should construct necessary storerooms. The land required for stores will be provided by the Purchaser free of cost. The storeroom should be with double lock arrangement and key of one lock will be with Engineer-in-charge or his authorised representative and other one will be with the contractor.

3.4 Procurement of Materials

Contractor shall make his own arrangements for the procurement of all materials required for the work.

4.0 Samples

4.1 The Contractor shall be required to produce samples of all the materials sufficiently in advance to obtain approval of the Engineer-in-charge.

4.2 Approved samples shall be retained by the Engineer-in-charge until the completion of the work and all materials and workmanship incorporated in the work are to conform to the approved samples in all respects. Rejected materials shall be removed from the site immediately under the supervision of Engineer-in-charge.

4.3 If on handing over the site or at any time thereafter during the execution of work, the contractor considers that any drawing or information necessary for the execution of the work has not been provided, he shall inform the Engineer-in-charge in writing giving full details required. All materials or workmanship, which in the opinion of the Engineer-in-charge is defective or is unsuitable shall be removed immediately from the site within a reasonable time to be fixed by the Engineer-in-charge depending on the requirement in each case, failing which, the same shall be removed at the risk and cost of the Contractor. No claim whatever shall be entertained on this account.

4.4 Whenever B.I.S. codes are referred to in other particular specifications attached, the latest B.I.S. codes prevalent at the time of execution shall be followed.

5.0 Contract Documents

The Contract document is confidential and must strictly be confined to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers, if necessary) and to the purpose of the contract.

All tenderers shall sign a declaration under the Official Secrets Act for maintaining secrecy of the tender documents, drawings or other records connected with the work given to them. The unsuccessful tenderers shall return all drawings given to them.

6.0 Bye-laws

The Contractor shall comply with all bye-laws and regulations of local and statutory authorities having jurisdiction over the works and shall be responsible for obtaining

prior approval, if any, and payment of all fees and other charges, giving and receiving of all necessary notices and keeping the Engineer-in-charge informed of the said compliance with the bye-laws payments made, notices issued and received.

The Contractor shall indemnify Purchaser against all claims in respect of royalties, patent rights, design trade marks of name or other protected rights in respect of any plant, machine, work or materials used for or in connection with work or temporary work and from and against all claims, demands proceeding, cost, charges and expenses whatsoever in respect of or in relation thereto. The Contractor shall defend all actions arising from such claims and shall himself and any every sort that may be legally incurred in respect thereof.

The Electrical work shall be carried out as per State Electrical Inspectorate / Central Electrical Authority, whichever is concerned. standards/ specifications/ guidelines and the Contractor shall get the approval and safety certificate from the Inspectorate after the completion of work and before energisation.

7.0 Consumption of Materials

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

8.0 Co-ordination

The Contractor shall co-operate with other agencies working in the same project, compare plans, specifications and the time schedules and so arrange his work that there will be no interference. The Contractor shall forward to the Engineer-in-charge all correspondence and drawings exchanged. Failure to check plans for conditions will render the Contractor responsible for bearing the cost of any subsequent change found necessary or damages done.

However, the Contractor shall afford necessary facilities to execute the work simultaneously with other agencies executing the works for the same project. The Purchaser shall entertain no claim on this account.

9.0 Safety

Only properly tested and marked material handling equipment shall be used.

All important connections/assembly of sound design related to pulley/guide etc., including the supporting arrangement and fixing details shall be checked periodically and necessary rectifying actions are to be taken in order to ensure safe handling of loads during different operations.

All plant and machinery of the contractor shall observe the safety regulations needed for working in a project where other contractors/sub-contractors/agencies might also be working on the project, so as not to interfere with the work of the other contractors or foul with their constructions shall be taken by the contractor and nothing extra is payable on this account.

The Contractor shall take all precautions to avoid all accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused



due to negligence on his part. No hindrances shall be caused to traffic during execution of work.

The rates quoted by the Contractor for all items except those where specific provisions indicated in the schedule of Requirements shall include all leads, lifts, and nothing extra shall be paid on this account.

The Contractor shall adjust his labour, staff, plant, machinery. etc., according to the requirement of work from time to time with particular regard to approved phases of work and no claim shall be entertained on account of idle labour, plant, machinery, etc., due to any reason whatsoever.

10.0 Testing and Measuring Equipment's

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

11.0 Water and Electric Supply

The Purchaser will not be responsible for arranging supply of water and Electric power to the Contractor. The Contractor shall make his own arrangements for temporary connections required, if any, and make necessary payment for it direct to the Department concerned. Nothing shall be payable by Purchaser on this account.

12.0 Site for Plants/Equipment, Stacking of Materials and Labour

The Contractor shall stack materials at the site of work strictly as per instructions of Engineer-in-charge keeping in view the safety and smooth progress of the project.

Nothing extra shall be payable for any extra lead involved in stacking the materials at a reasonable distance away from the work place.

Site for labour camps will be made available to the Contractor, if found necessary, by the Purchaser and it should be vacated and area cleared by the Contractor on completion of work and before the release of final bill.

13.0 Site Maintenance during Construction

The Contractor and each Sub-Contractor shall from time to time clear and remove all rubbish and obstructions and driveways in the work area shall be kept clear and unobstructed at all times. Nothing extra shall be paid on this account.

14.0 Insurance

The Contractor shall arrange, secure and maintain insurance as may be necessary and for all such amounts to protect his risks as detailed herein. The form and the limit of such insurance as defined herein together with the under written thereof in such case shall be as acceptable to the Purchaser.

However, irrespective of such acceptance, the responsibility to maintain adequate insurance coverage on comprehensive all risks basis at all times during the period of contract shall be of the Contractor. The Contractor's failure in this regard shall not relieve him of any of his contractual responsibilities and obligations. Any loss or damage to the construction equipment or materials during handling, transporting, storage and erection, till such time as the work is certified by the Engineer-in-charge

as having been completed in all respects & is taken over by the Purchaser: shall be to the account of the Contractor and his responsibility preferring all claims and make good for the damage or loss by way of repairs and/or replacement of the portion of the work damaged or lost. The completion of work shall not, in any, way relieve the Contractor of the above responsibilities during the period of the contract. The Contractor shall provide the Purchaser with a copy of all insurance policies and documents taken out by him in pursuance of this contract.

Such copies of documents shall be submitted to the Purchaser immediately after such insurance coverage. The Contractor shall also inform the Purchaser in writing at least twenty (20) days in advance regarding the expiry/cancellation and/or change in any of such documents and insurance revalidation/renewal, etc., well in time as may be necessary. The risks that are to be covered under the insurance shall include but not be limited to the loss or damage in transit, theft, pilferage, riot, civil commotion, weather conditions, accidents of all kinds, fire, etc. The scope of such insurance shall cover the entire value of the work from time to time. All costs on account of insurance liabilities covered under the contract will be on the Contractor's account and will be included in contract price. However, the Purchaser, may from time to time during the pendency of the contract, ask the Contractor in writing to limit the insurance coverage risks and in such a case the parties to the contract will agree for a mutual settlement for reduction in contract price to the extent of reduced premium account.

14.1 Insurance for Staff

The Contractor shall insure all his staff working at site against injury, loss of life etc., and the Purchaser will entertain no claims of compensation in this regard. The Contractor shall indemnify the Purchaser against all such claims as above, by his staff.

15.0 Compensation for Delay

If the Contractor fails to complete the work and clear the site for any particular phase on or before the stipulated completion time of that respective stage or extended period of completion, he shall, without prejudice to any other right or remedy of the Purchaser on account of such breach, pay as agreed a compensation of the amount calculated on the basis of General Conditions of Contract.

The Contractor shall maintain in perfect condition all works executed till the completion of the entire works allotted to him. When, phased handing-over is contemplated, the provisions mentioned above will apply to each phase.

16.0 Guarantee

At the close of work and before issue of final certificate of total completion by Engineer-in-charge, the contractor shall furnish a written guarantee indemnify the Purchaser against defective materials and workmanship for a period of one year after completion. The Contractor shall hold himself fully responsible for reinstallation or replace free of cost to the Purchaser during the defect liability period as stipulated hereunder:

a) Any defective material supplied by the Contractor or defective workmanship of the Contractor.

b) Any material supplied by the Purchaser/owner, which is proved to be damaged or destroyed as a result of defective workmanship by the Contractor.

17.0 Payment Terms for the Supply and Installation

Contractor shall be eligible for payment only after completion of 100% of works at site duly certified by Consultants.

17.1 All the payments are made, after deducting there from the amounts already paid, the security deposit, income tax and other amounts as may be deductible or recoverable in terms of the contract.

17.2 The amount admissible for interim bills shall be normally paid within a month from the date of receipt of the bill by the Engineer-in-charge after such verification as is considered necessarily.

17.3 Pending consideration of extension of date of completion, interim payments shall continue to be made as here in provided.

17.4 Any interim certificate given relating to work done or materials delivered, may be modified or corrected by any subsequent interim certificate or by the final certificate. No certificate of the Engineer-in-charge supporting an interim payment shall have itself be inclusive evidence that any work or materials to which it relates is/are in accordance with the contract.

18.0 Structural Alterations to Building

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

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

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

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

19.0 Phasing of Works

The total period for completion of works under this contract is as given in the bid document. The work has to be carried out in phases as directed by the Engineer-in-charge from time to time so that the total project work can progress smoothly with least obstruction to the work of other Contractors/agencies.

20.0 Programme of Works and Progress Reports

20.1 Contractor to submit Programme

The contractor is required to inform at least seven days in advance before starting of any new item of work.

After the acceptance of his Tender, the Contractor shall, within fifteen days, submit to the Engineer-in-charge for his approval, a detailed program taking into account

the total time period stipulated in the contract showing the order, the procedure and method in which he proposes to carry out the work.

He shall furnish the particulars in writing of his arrangements of manpower, plant and machinery and all other resources owned and dedicated to this work. Cash flow during the execution of project for procurement of materials and for carrying out the work including temporary work that the contractor intends to construct shall also be furnished.

In support of this programme, the Contractor shall submit a work schedule in the form of a CPM/PERT chart prepared using 'MS Project'. The Engineer-in-charge shall modify the programme submitted by the Contractor and approval shall be given by the Engineer-in-charge indicating the major milestones. The programme approved by the Engineer-in-charge shall be final and binding on the Contractor. The approval by the Engineer-in-charge of such programme, or furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the contract.

During the progress of work, the Contractor shall be required to furnish the resource mobilisation plan as required by Engineer-in-charge to keep the target date of completion.

20.2 Progress Reports and Schedules

The Contractor shall submit to the Engineer-in-charge by the third day of every month, two (2) copies of a report duly updated along with CPM/PERT in 'MS Project' proforma showing the progress made in the works during the previous month.

The Contractor shall also submit by the end of every month his anticipated progress schedule for all items of work for the following month in two (2) copies in an approved proforma to the Engineer-in-charge.

20.3 Detailed Working Drawings

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

20.4 BOQ/Tender Drawings

BOQ and layout drawings are enclosed in the tender documents.

The tenderer shall go through the drawings and BOQ and quote the rates for the items accordingly. However, necessary working drawings will be issued from time to time for all the systems envisaged in the scope of work, during execution of work by SPICES BOARD/Consultant appointed by SPICES BOARD.

21.0 Progress of Supply



Contractor shall regularly intimate progress of supply, in writing, to the purchaser/Engineer-in-Charge as under:

1. Quantity offered for inspection and date;
2. Quantity accepted/rejected by inspecting agency and date;
3. Quantity dispatched/delivered to consignees and date;
4. Quantity where incidental services have been satisfactorily completed with date
5. Quantity where rectification/ repair/ replacement effected/ completed on receipt of any communication from consignee/ purchaser with date;
6. Date of completion of entire contract including incidental services, if any; and
7. Date of receipt of entire payments under the contract (in case of stage-wise inspection, details required may also be specified).

22.0 Time of Completion

22.1 Completion time of the job is the essence of the contract and the Contractor obligates himself to complete the whole of work covered by this contract in accordance with the contract documents in the time set forth in the contract subject to any adjustment granted by the Purchaser/Consultant in writing under the conditions of contract. He shall submit to the Consultant periodic progress reports as required.

22.2 As soon as feasible, (after the contract has been signed) the Engineer-in-charge will issue a notice to the contractor designating a starting date. The time for performance of the contract shall be computed from this date, and the contractor shall commence work on the date designated.

22.3 If the Contractor should be delayed at any time in the progress of the work by any act or neglect of the Purchaser, or by any separate Contractor employed by the Purchaser, or by changes ordered in the work, or by strikes, lockouts, fire, unavoidable casualties or any cause beyond the Contractor's control, or by any cause which the Engineer-in-charge shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the Purchaser may decide.

22.4 Supplementary drawings and/or detail will be issued by the Engineer-in-charge from time to time as required. The Contractor shall notify the Engineer-in-charge not less than 10 days or more than 30 days, before the supplementary drawings and/or the information is required.

23.0 Schedule & Completion

The proposed delivery and completion schedule shall be based on the projected completion and handing over of the entire work.

The bidders shall furnish detailed bar chart and schedule along with the bids and shall update the same duly co-ordinate with other contractors/agencies during the progress of construction.

24.0 Virtual Completion



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

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

25.0 Completion Drawings and Certificate

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

On completion of work, the Contractor shall submit "As fitted drawings" drawn to a suitable scale in tracing sheet with three copies and one set of CD ROMS of the same to the Engineer-in-charge before the submission of the final bill.

26.0 Handing over the site

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

27.0 Deviations from Purchaser's Specification

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

TECHNICAL SPECIFICATIONS

1. Any demolition/dismantling/crossing of civil structure required for installation of services and making it good as per original shall be deemed to have been included in the cost quoted by the bidder and no extra payment for these works will be made. Bidders are advised to visit the site to assess the extent & requirement for such works to be conducted.
2. In general joints shall be butt welded as specified in the applicable valve & piping specifications, with flanges and butt weld fittings used on where required.
3. All welding shall have full thickness penetration and shall be done by the TIG process. Tack welds lacking penetration shall be chipped out completely and re-welded properly.
4. In multiple pass welding, each layer shall be cleaned of all slag, scale and other foreign matter and any serious defects chipped out before subsequent welding is done. Next run of weld shall be carried out only after thorough inspection, rectification and preparation of the previous run. Use stainless steel chipping tools and wire brushes for cleaning. The completed weld shall be cleaned of slag and spatter if any.
5. No under cutting of pipe adjacent to the completed weld will be permitted.
6. Pipes shall be brushed with stainless steel wire brushes and then cleaned for a distance of at least 50mm from the weld area. Filler material shall also be cleaned in similar manner.
7. Root pass shall be made with electrodes/filler wires recommended in the welding specification chart. The preferable size of the electrode is 2.5 mm diameter (12 SWG) but in any case not greater than 3.25 mm (10 SWG)
8. The root run of butt joints should be executed properly so as to achieve full penetration with complete fusion of the root edges. Weld projection inside the pipes shall not exceed 3mm, wherever not specified by the applicable code. All root run will be done by TIG welding for Butt Joints.
9. While welding is in progress, care should be taken to avoid any kind of movement of the components, shocks, vibrations and stresses to prevent occurrence of weld cracks.
10. Welding electrodes with a suitable coating/filler wires shall be in accordance with IS:814/ASME Sec. II, latest edition and of a recognised quality. These shall be approved by Engineer-in-Charge before being used in the work. Approved makes are to be used.
11. The following specifications of electrodes are recommended for welding:
General structural welding : AWS-E-6012
12. Fabricated piping system shall be erected as detailed on piping layout drawing and as advised by the Engineer-in-Charge. The contractor shall

provide adequate field joints bearing in mind the fact that there may be variations in locations of equipments, equipment nozzles, inserts, structures, etc. but not limited to the aforesaid contingencies only. In certain cases site measurement may have to be taken before commencement of fabrication.

13. After successful commissioning of the pipelines, the contractor shall conduct performance tests including hydraulic or pneumatic pressure testing on the equipment to satisfy the Engineer-in-charge that all the equipments perform to the rated outputs. Equipment like valves, fittings etc. shall be replaced (not repaired) if the same is not working at rated output.
14. All related finishing works shall be carried out by the contractor at no extra cost.

APPROVED MAKES OF ITEMS

1.	M.S. Manifold	Heavy duty seamless pipes C-class of TATA or equivalent
2.	Adjustable Regulator	United or equivalent.
3.	Main Valve	S.S.ball valve of ACRON /Fobes Marshall/HPC or equivalent
4.	Control Valve	HPC/ Fobes Marshall / or equivalent
5.	Non-Return Valve	HPC/TVL/ Fobes Marshall or equivalent
6.	Cylinder Pigtail	Suraksha/Basant/ united or equivalent(ISI marked)
7.	Cylinder Adapter	HPC/TVL or equivalent
8.	Low pressure regulator	UNITED/VANAZ or equivalent
9.	Pressure gauge meter	HPC/Fobes Marshall/ WIKA or equivalent
10.	Taps Cock	SWASTIK or equivalent

KITCO LTD
SPICES BOARD
GAS PURIFICATION AT QUALITY EVALUATION LABORATORY KOLKATA
SPECIFICATION AND SCHEDULE OF QUANTITIES

Sl.No	Description of Items	Unit	Qty	Rate(Rs)		Amount(Rs)
				In Figures	In Words	
1	Gas Purification System consists of Wall Mountable Panel with	set	2			
	Gas Purification System consists of Wall Mountable Panel with					
	b) Precision Control regulator for each gas.					
	c) Pressure gauge for each gas.					
	d) Shut-off valve each for Nitrogen, Helium, Hydrogen and Air.					
	e. Purifiers :					
	1. Nitrogen :Moisture Trap - 1No					
	OxyTrap, (Regenerating type) - 1No					
	Hydrocarbon Trap - 1No					
	2. Helium : Moisture Trap - 1No					
	Oxytrap(Regenerating type) - 1No					
	Hydrocarbon Trap - 1No					
	3. Hydrogen: Moisture Trap - 1No					
	Hydrocarbon trap - 1No					
	4. Air : Moisture Trap - 1No					
	Hydrocarbon trap - 1No					
	Fitted with 1/8" Swagelok SS 304 and whole unit can be connected to one GC/GC-MS System. Gases can be individually stopped without disturbing the other gas.					

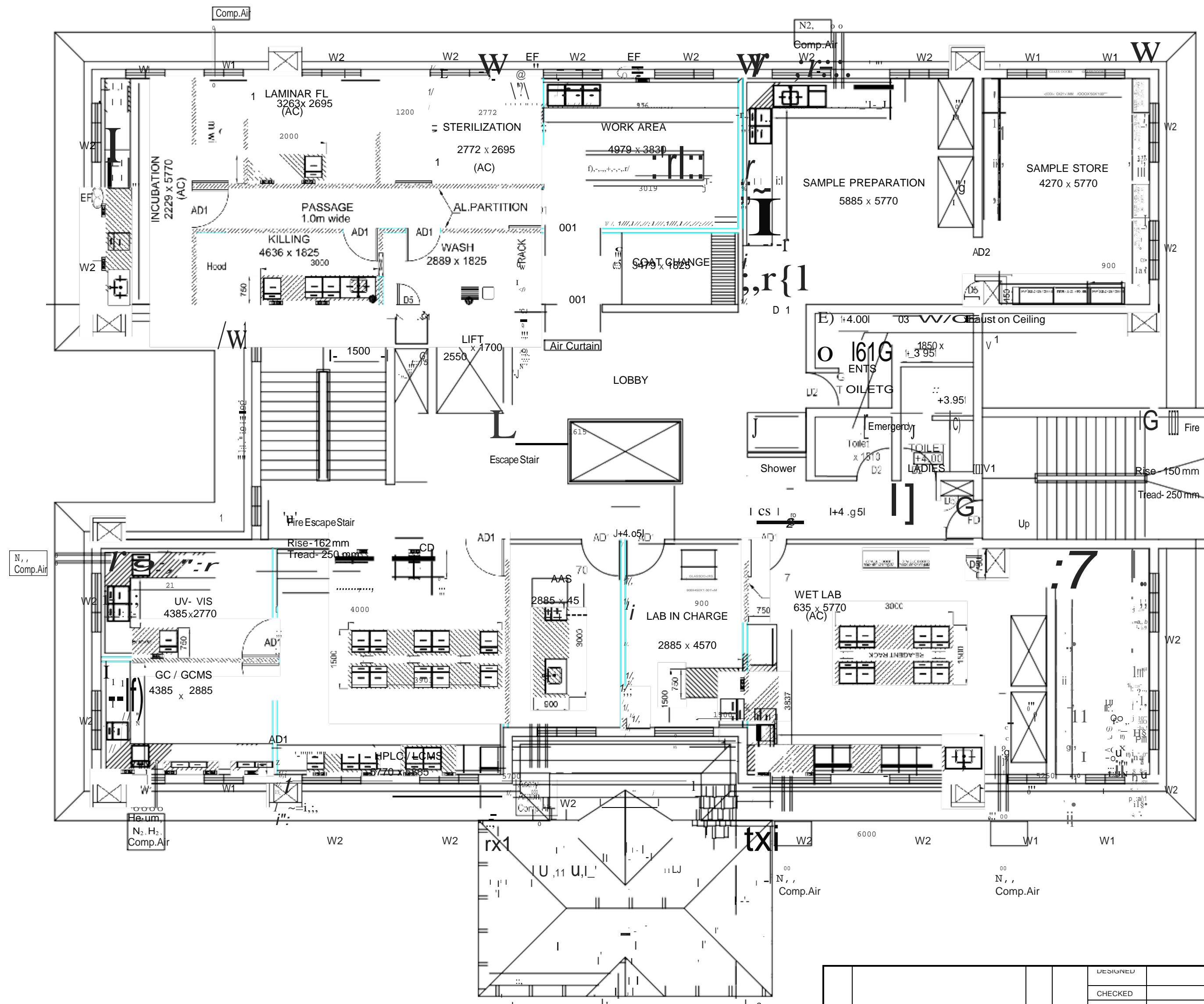
Sl.No	Description of Items	Unit	Qty	Rate(Rs)		Amount(Rs)
				In Figures	In Words	
2	Gas Purification System for LCMS consists	set	3			
	of Wall Mountable Panel with					
	a) One Inlet and One outlets					
	b) Precision Control regulator					
	c) Pressure gauge					
	d) Shut-off valve					
	e. Purifiers :					
	1. Argon :Moisture Trap - 1No					
	Hydrocarbon Trap - 1No					
	OxyTrap, (Regenerating type) - 1No					
	Fitted with 1/8" Swagelok SS 304 and whole unit can be connected to one LCMS System. Gases can be individually stopped without disturbing the other gas.					
3	Gas Purification System for AAS consists of	set	1			
	Panel with					
	a) One Inlet and One outlet for each of Acetylene, Argon, Nitrous Oxide & Air.					
	b) Precision Control regulator for each gas - 1No					
	c) Pressure gauge for each gas - 1No					
	d) Shut-off valve one each for Acetylene, Argon, Nitrous Oxide & Air - 1No					
	e. Purifiers :					
	1. Acetylene :Moisture Trap - 1No					
	Moisture Trap - 1No					
	2. Argon : Moisture Trap - 1No					
	Hydrocarbon Trap - 1No					
	3. Nitrous Oxide: Moisture Trap - 1No					

Sl.No	Description of Items	Unit	Qty	Rate(Rs)		Amount(Rs)
				In Figures	In Words	
	Moisture trap - 1No					
	4. Air : Moisture Trap - 1No					
	Hydrocarbon trap - 1No					
	Fitted with 1/4" Swagelok SS 304 and whole unit can be connected to one AAS System. Gases can be individually stopped without disturbing the other gas.					
4	Two Cylinder SS Manifold System (For Nitrogen (4nos), Hydrogen (1no), Helium (1no) & Zero Air (2nos)).	set	6			
	2 x 1 Cylinder Manifold system to connect Two cylinders with single outlet consists of					
	a. High Pressure Shut-off valve with Built-in the holder, provision for direct pigtail and regulator					
	b. Teflon braided SS pigtail 1 meter length – 2					
	c. Non-Return Valve – 2 Nos					
	d. MS Frame to hold the Manifold – 1 No.					
	(Cylinder Regulator not included)					
5	Single Cylinder SS Manifold System (For Argon, Air, Acetylene, Nitrous oxide).	set	4			
	Single Cylinder Manifold system to connect single cylinder with single outlet consists of					
	a. SS Block to Hold Pigtail & Regulator					
	b. Teflon braided SS pigtail 1 meter length – 1					
	c. MS Frame to hold the Manifold – 1 No.					
	(Cylinder Regulator not included)					

Sl.No	Description of Items	Unit	Qty	Rate(Rs)		Amount(Rs)
				In Figures	In Words	
6	Double Stage Double Gauge SS Regulator with SS Diaphragm. Supplied with suitable end fittings (for Nitrogen 4nos, Hydrogen, Helium, Zero Air-3nos, Argon, Acetylene & Nitrous Oxide)	No	10			
7	Heater for Nitrous Oxide	No	1			
8	1/8" SS 316 Flexible high grade Tubing with color coded sleeves	m	780			
9	1/4" SS 316 Tubing	m	720			
10	Metal Casing & Capping	m	252			
11	Flash Back Arrestor for Hydrogen & Acetylene	No	2			
12	Cylinder Holding Bracket with Chain	set	25			
13	Assorted Fittings	set	1			
14	Control Unit (for Nitrogen & Air) for LCMS (2nos) Supplied with 1/4" Inlet & 1/4" Outlet, Consists of Pressure Gauge (0-10Kg/cm ²), Pressure Regulator & Shut-off valve.	No	4			
15	Control Unit (for Nitrogen & Air) for HPLC (2nos): Supplied with 1/8" Inlet & 1/8" Outlet, Consists of Pressure Gauge (0-10Kg/cm ²), Pressure Regulator & Shut-off valve.	No	4			


Sl.No	Description of Items	Unit	Qty	Rate(Rs)		Amount(Rs)
				In Figures	In Words	
16	Control Unit for Nitrogen for N2 Concentrator (1no): Supplied with 1/4" Inlet & 1/4" Outlet, Consists of Pressure Gauge (0-10Kg/cm2), Pressure Regulator & Shut-off valve.	No	1			
17	Control Unit for Single Gas: Nitrogen for UV-Vis (1no) Fume Hood (2nos) Acid (1no) Sample Preparation (3nos) Wet lab (1no), killing sec (1no) : Supplied with 1/8" Inlet & 1/8" Outlet, Consists of Pressure Gauge (0-10Kg/cm2), Pressure Regulator & Shut-off valve.	No	9			
18	Control Unit for Single Gas: Air for UV-Vis (1no) Fume Hood (2nos) Acid (1no) Sample Preparation (3nos) Wet Lab (1no), Killing sec (1no) : Supplied with 1/8" Inlet & 1/8" Outlet, Consists of Pressure Gauge (0-10Kg/cm2), Pressure Regulator & Shut-off valve.	No	9			
19	Control Unit for (Nitrogen / Air) Supplied with 1/4" One Inlet & Two 1/4" Outlets, Two 1/8" Outlets and shut-off valve for LCMS & HPLC.	No	3			
20	Control Unit for Argon Supplied with 1/8" One Inlet & Two 1/8" Outlet and shut-off valve for (LCMS)	No	3			
21	Control Unit for (Nitrogen / Air gases Supplied with 1/4" One Inlet & Four 1/8" Outlet and Shut-off valve for GCMS & UV-Vis	No	2			

Sl.No	Description of Items	Unit	Qty	Rate(Rs)		Amount(Rs)
				In Figures	In Words	
22	Control Unit for (Hydrogen and Helium gases Supplied with 1/4" One Inlet & three 1/8" Outlet and Shut-off valve for GC.	No	2			
23	Control Unit for (Nitrogen/Air gases Supplied with 1/4" One Inlet & Two 1/4" Outlet and Shut-off valve for Purging Line	No	2			
24	Control Unit for (Nitrogen/Air gases Supplied with 1/4" One Inlet & Five 1/8" Outlet and Shut-off valve for (Sample Preparation, Acid & Wet Lab)	No	4			
25	Control Unit for (Nitrogen / Air) Supplied with 1/4" One Inlet & three 1/8" Outlet, shut-off valve for (Fume Hood & Killing)	No	2			
26	Control Unit for (Nitrogen/Air) supplied with 1/4" one Inlet & 1/4" two outlets, shut off valve	No	2			
27	LCMS Compressor line Composed Pipe (end to end without joint) 3 lines	m	300			
	Total					



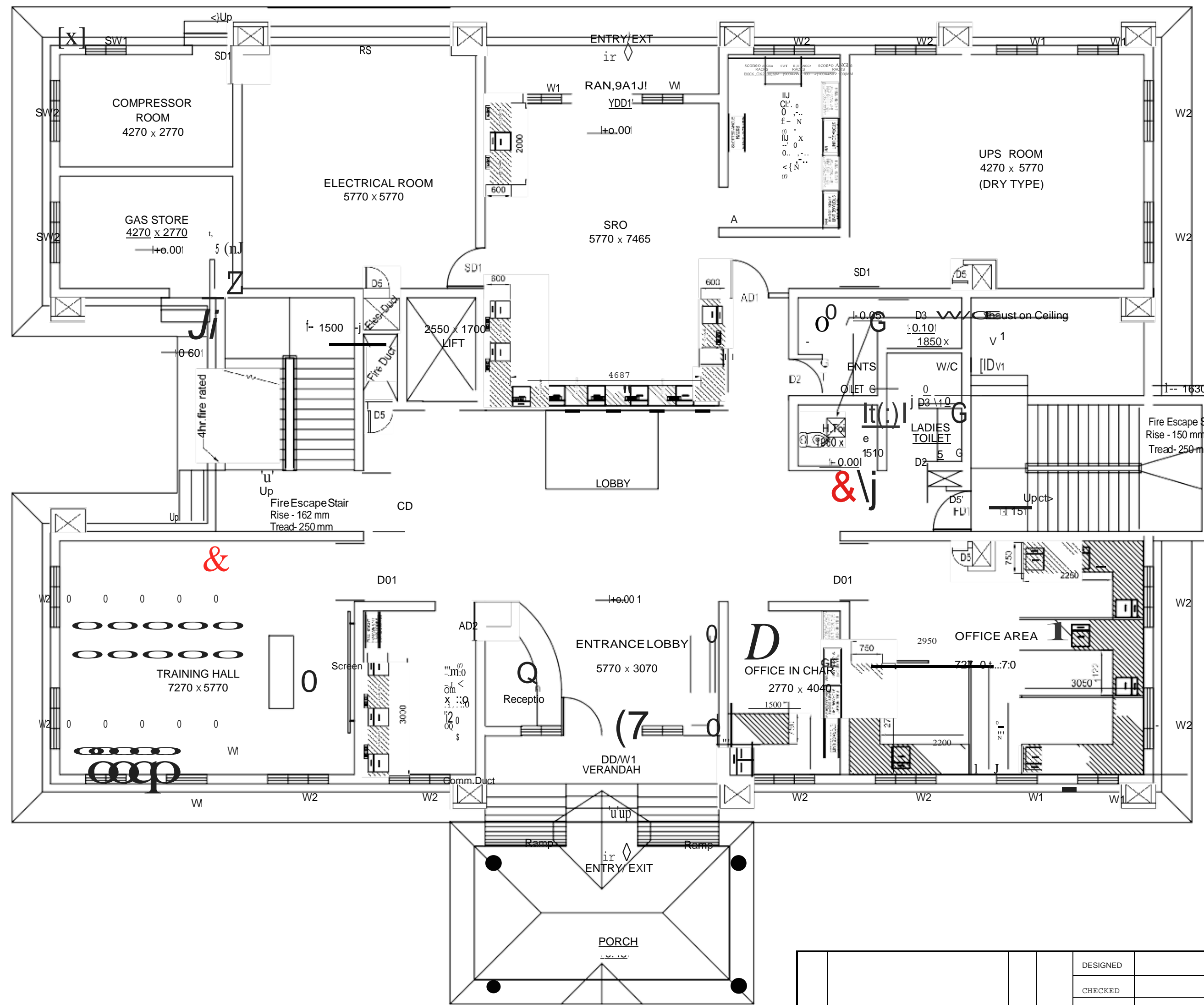
FIRST FLOOR PLAN
AREA= 441.31M²

DESIGNED	
CHECKED	
DRAWN	
CHECKED	
APPROVED	
SCALE	NTS
UNIT	mm.
DATE	15.02.2017

 KITCO Ltd. <small>(Estd. in 1972 by IDBI & Govt. of Kerala) PUTHIYA ROAD - NH BYPASS, KOCHI - 28</small>	
CLIENT:	SPICES BOARD
PROJECT	PROPOSED BUILDING FOR QUALITY EVALUATION LABORATORY IN KOLKATTA
TITLE:	LAB LAOUT

This drawing is the property of KITCO Ltd. and is to be used only for the purpose for which it was lent and must not be in any way detrimental to the interest of the company and is subject to return on demand

DRG NO:	DP 520 DRG CL 01 00	REV.		SHEET NO:	1 OF 2
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1-0.601
GROUND FLOOR PLAN
 AREA= 474.40M²

DESIGNED	
CHECKED	
DRAWN	
CHECKED	
APPROVED	
SCALE	NTS
UNIT	mm.
DATE	15.02.2017

TCO
the consultants

KITCO Ltd.
(Est. in 1972 by IDB I & Govt. of Kerala)
PUTHIYA ROAD - NH BYPASS, KOCHI - 28

CLIENT: SPICES BOARD

PROJECT: PROPOSED BUILDING FOR QUALITY EVALUATION LABORATORY IN KULKAIA

TITLE: LAB LAOUT

SL.No.	PARTICULARS	INITIAL	DATE
REVISION			

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