

HLL LIFECARE LIMITED
(A Government of India Enterprise)
P.B.NO.2, PEROORKADA.P.O,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

TENDER DOCUMENT
(PRICE BID)

FOR THE

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING
OF CHILLED WATER SYSTEM

FOR
NEW CONDOM MANUFACTURING FACILITY
AT RUBBER PARK, IRAPURAM, KOCHI

HLL LIFECARE LIMITED
(A Government of India Enterprise)
Project Division, Peroorkada. PO,
Thiruvananthapuram – 695005,
Kerala, India
Phn: 0471 – 2437270, 2437884
Fax: 0471 – 2432898, 2432647

INVITATION FOR BIDS (IFB)

IFB Ref: No.HLL/IP/IFC/CWS/2013
Date: 03-10-2013

HLL Lifecare Limited (HLL), a Government of India Enterprise, is in the process of setting up a new condom production facility at Rubber Park, Irapuram, Cochin. For the said project, Sealed and Super scribed bids are invited from competent and experienced Suppliers/Contractors who are capable to do the following work meeting the requirements as per our tender.

SI No	Name of Item/Work	Estimated cost (PAC)	EMD Amount
1	Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi	Rs 85 Lacs	Rs 1,50,000/-

2. Eligibility criteria for issue of Bid documents.

- a) Minimum 5 years experience in the relevant field.
 - b) Bidder should have satisfactorily completed at least two similar works of value Rs 50 Lakhs or above in the past three years.
 - c) Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least INR 50 Lakhs.
3. A complete set of tender documents can be had from the Office of Projects Department at HLL Lifecare Limited, Peroorkada Factory, Thiruvananthapuram – 695 005 during office hours on any working day on submission of written application and a non-refundable fee of Rs.550/- (including taxes) in the form of DD drawn in favour of HLL Lifecare Limited, Trivandrum to the undersigned.

The Tender Documents can also be downloaded from our Website **www.lifecarehll.com** from the date of issue of tender document.

Note:- In case the bidder downloads the tender form from our website, the bidder shall enclose DD for Rs 550/- (inclusive of taxes) as cost of tender along with the bid document.

4. Tender forms shall be filled in ink or typed. No tender filled in pencil shall be considered. The tenderer shall sign and seal the form at each page and at the end, in token of acceptance of all the terms and conditions of the tender.
5. The bid documents will be available up to 15.00 Hrs. on the previous working day of the opening of the bids. The scheduled date for issue, receipt and opening of bids is as follows.
 - a) Date of issue of tender document - 03-10-2013
 - b) Last date and time for receipt of bids - 18-10-2013, 15:00 Hrs
 - c) Date and time of opening of bids - 18-10-2013, 15:30 Hrs
6. Address for communication, receipt and Place of opening of bids.

EXECUTIVE DIRECTOR (INTERNAL PROJECTS),
HLL LIFECARE LIMITED
Projects Division, Peroorkada. PO,
Thiruvananthapuram – 695005,
Kerala, India
Phn: 0471 – 2437270, 2437884
Fax: 0471 – 2432898, 2432647
E-mail: nrvikumar@lifecarehll.com, harikrishnankp@lifecarehll.com

7. The completed bid documents and all schedules should be submitted to **Executive Director (Internal Projects)** in the above address along with sealed bids and the EMD. Bids received after due date and time will be rejected. Any bid not accompanied by EMD will be rejected.
8. Bids will be opened in the presence of Bidders representative(s) who choose to attend on the specified date and time, at the office of HLL at the address given in Clause 6 above.
9. In the event of the date specified for bid receipt and opening being declared as a closed holiday for HLL's office, the due date for submission of bids and opening of bids will be the following working day at the appointed times.
10. HLL may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons, in which case all rights and obligations of the HLL and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
11. HLL will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids sent by Telex/Fax/Telegraph will not be accepted.
12. The company reserves the right to club or split the items of works, change the qualifying criteria at their discretion and to reject or cancel the tender without assigning any reason there of.

EXECUTIVE DIRECTOR (INTERNAL PROJECTS)

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SCHEDULE I

CONDITIONS OF BID

1. Definitions

In this Contract, the following words and expressions shall have the meanings as stated below:

- a. **“INVITATION FOR BID”** shall mean and include the present document, and such other complements and agenda, which may subsequently be issued in this connection.
- b. **“BIDDER”** shall mean the person, firm or Corporation submitting a bid against this invitation for bid and shall also include his agents and representatives.
- c. **“OWNER”** shall mean **HLL LIFECARE LIMITED (HLL)** (Thiruvananthapuram) or its units thereof.
- d. **‘ENGINEER-IN-CHARGE’**, shall mean the Engineer appointed by the Owner to supervise all activities of the project.
- e. **‘TENDERER’**, shall mean the company/agency who quotes against the tender enquiry for undertaking the work.
- f. **‘CONTRACTOR’**, shall mean the successful bidder whose tender has been accepted by the Owner and to whom the order is placed by the Owner and shall include his heirs, legal representatives, successors etc.
- g. **‘PERMANENT WORKS’**, means and include all the work specified or set forth and required if any by the specification, drawings and other documents which form part of this contract or to be implied thereof or incidental thereof to be hereafter or required in such further explanatory instructions, drawings etc., as shall from time to time during the progress of the work be given by the HLL.
- h. **‘SITE’**, shall mean the actual place i.e. **HLL LIFECARE LIMITED, PLOT NO.1, RUBBER PARK, IRAPURAM, KOCHI**, where the project is to be executed.
- i. **‘PROJECT’**, shall mean entire work specified in the contract documents inclusive of extra items/ extra quantities (if any) executed during the contract period.
- j. **‘ACCEPTANCE LETTER’**, shall mean written consent by a letter of Owner to the bidder intimating him that his tender has been accepted.
- k. **‘CONTRACT’**, shall mean the articles of Contract Agreement, the conditions of contract, schedule of quantities, specifications, drawings attached and duly signed by the Owner and the Contractor.
- l. **‘DATE OF CONTRACT’**, shall mean the date on which the successful bidder has accepted the notification of award.
- m. **‘CONTRACT PERIOD’**, shall mean the period (including rainy season) specified in the tender documents during which the contract shall be executed.
- n. **‘COMPLETION CERTIFICATE’**, shall mean the certificate issued by the Owner to the Contractor after successful completion of the project.

- o. 'EXTRA ITEMS', are those items, which are not appearing in the Schedule of Items but required to be executed during the project period and for which rates are to be derived as per the formula given in the conditions of contract.

2. Bid Information and Period of Validity

2.1 Bidders shall submit their bids in two parts (**TECHNICAL BID** and **PRICE BID**)

2.2 The Technical Bid must include the following information;

- a. Enquiry No.
- b. Earnest Money Deposit as prescribed in the tender
- c. All the details and documents mentioned in the Technical Bid.
- d. Promised completion Schedule for each item/work.
- e. Certificate that bid is in total conformity with the specifications and terms and conditions mentioned in the bid document and if not, list of exclusions, and/or exceptions.
- f. All other documents/certificate/information as specified in the bid document.

2.3 The Price Bid must be as per the following

- a) The bid is invited for “**Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi**” as per the Specification, Terms and Conditions specified in the Bid Documents. The Bidder shall give the rates inclusive of labour and material cost, the relevant taxes, duties, other levies, on the appropriate price schedule (**Schedule of Work**) attached to these documents for completing the above work as per the Specification, Terms and Conditions as specified in the Bid Documents.
- b) Bidder must quote for unit price and total price based on the requirement shown in the bid document.
- c) Price should be firm without any escalation on any account till the completion of work.

2.4 Bids shall remain valid for **90 days** after the date of bid opening prescribed by the Purchaser.

3. Format and Signing of Bid

3.1 Bidders shall submit their bids in two parts (TECHNICAL BID and PRICE BID) as under.

- a) Technical bids, in duplicate clearly marking each “Original Bid” and “Copy Bid”, as appropriate, consisting of technical details bringing out clearly in a separate sheet, the deviations in specifications if any, from that of ‘Technical Specifications’ and also clause-by-clause compliance of specifications and commercial terms and conditions and EMD, excluding price, in separate sealed covers super scribing “Technical Bid” inside a main cover.
- b) Price bids, in duplicate clearly marking each “Original Bid” and “Copy Bid”, as appropriate, showing only item wise and total prices in separate sealed covers super scribing “Price Bid” inside a main cover.

3.2 When the main cover is opened on the date and time scheduled for bid opening, only the technical bids will be opened.

3.3 Bidders whose technical bids are found substantially responsive will be informed of the date and time of opening of their price bids. Price bids of others will be returned to them unopened.

- 3.4 All pages of the bid, except for un-amended printed literature shall be signed by the person or persons signing the bid. The seal of the company shall be stamped in all pages.
- 3.5 Bids shall be made in English.
- 3.6 The bid shall contain no interlineations, erasures or overwriting except as necessary to correct errors made by the Bidder, in which case such corrections shall be signed by the person or persons signing the bid.

4. Submission of Bids

Sealing and Marking of Bids

4.1 The envelopes shall be:

(a) Addressed to the Owner in the following address and

EXECUTIVE DIRECTOR (INTERNAL PROJECTS),
HLL LIFECARE LIMITED
Projects Division, Peroorkada. PO,
Thiruvananthapuram – 695005,
Kerala, India
Phn: 0471 – 2437270, 2437884
Fax: 0471 – 2432898, 2432647
E-mail: nrvikumar@lifecarehll.com, harikrishnankp@lifecarehll.com

(b) Bear the Enquiry No, closing date and General description of item tendered, and the words “DO NOT OPEN BEFORE” 15.30 Hrs (IST) on ___ (Opening Date) _____

- 4.2 The inner envelopes shall indicate the name and address of the Bidder. If the outer envelope is not sealed and marked as indicated above, the Owner will assume no responsibility for the bid’s misplacement or premature opening.
- 4.3 Bids should be hand delivered or sent by courier/mail to ensure timely arrival. Telex, cable, e-mail or facsimile bids will be rejected.

Deadline for submission of Bids

4.4 The bids will be received by the Owner in the following address not later than the date and time specified in the Invitation for Bids.

EXECUTIVE DIRECTOR (INTERNAL PROJECTS),
HLL LIFECARE LIMITED
Projects Division, Peroorkada. PO,
Thiruvananthapuram – 695005,
Kerala, India
Phn: 0471 – 2437270, 2437884
Fax: 0471 – 2432898, 2432647
E-mail: nrvikumar@lifecarehll.com, harikrishnankp@lifecarehll.com

4.5 In the event of the specified date for submission of Bids being declared a holiday for the Owner, the bids will be received up to the appointed time on the next working day.

- 4.6 The Owner may, at its discretion, extend this deadline for submission of bids by amending the Bid Documents or any other reasons in which case all rights and obligations of the Owner and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.
- 4.7 It is the responsibility of the bidders to see that the completed bidding documents whether sent by post or by courier or by person are received in the office of Executive Director (Internal Projects), in the above address by the date and time stipulated for receipt as above failing which the bid would be considered late and rejected. The Owner will not be held responsible for the postal delay, if any, in the delivery of the bidding document or the non-receipt of the same. Bids received after due date and time will be rejected. Mere handing over of the bid documents at reception counter or at any other counter or room or person cannot be considered as submission of bid.

5. Clarification of Bidding Documents

A prospective Bidder requiring any clarification of the Bidding Documents may notify the Owner in writing, or by fax at the Owners mailing address indicated in the Invitation for Bids. The Owner will respond in writing to any request for clarification of Bidding Documents, which it receives not later than 7 days prior to the deadline for submission of Bids prescribed by the Owner.

6. Amendment of Bidding Documents

- 6.1 At any time prior to the deadline for submission of bids, the Owner may, for any reason, modify the Bidding Documents by amendment.
- 6.2 The amendment will be notified in writing or fax or telegram or e-mail to all prospective Bidders, which have received the Bidding Documents and will be binding on them. Amendments will also be uploaded in our website.
- 6.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bid, the Owner may, at its discretion, extend the deadline for the submission of bids.

7. Bid Opening by Owner

- 7.1 The Owner will open bids, in the presence of the bidders' representatives who choose to attend, at the date and time specified and in the location given in this document. The Bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of bid opening being declared a holiday for the Owner, the bids shall be opened at the appointed time and location on the next working day.
- 7.2 The Bidders' names, the presence or absence of the requisite EMD and such other details as the Owner, at its discretion, may consider appropriate will be announced at the opening.
- 7.3 The Owner will prepare appropriate bid opening register and bidders present during the opening of the bids and Owner shall sign the same.

8. Clarification of bids

To assist in the examination, evaluation and comparison of bids, the Owner may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the rate or substance of the bid shall be sought, offered or permitted.

9. Inspection of site

Every tenderer is expected to inspect the site of the proposed work and acquaint himself with the site conditions, approaches etc. before quoting his rates. No claim whatsoever should be entertained later on the plea of any difficulties involved in the execution of work, which was or was not foreseen by the tenderer.

10. Preliminary examination

- 10.1 The Owner will examine the bids to determine whether they are complete, whether any computational errors, have been made, whether required EMD has been furnished, whether the documents have been properly signed, whether the bid validity is as required and whether the bids are generally in order.
- 10.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be calculated. If there is a discrepancy between the words and figures of unit price, the amount in words of unit price shall prevail.
- 10.3 Prior to the detailed evaluation, the Owner will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these clauses, a substantially responsive bid is one, which conforms to specifications and all the terms and conditions of the bidding documents without material deviation. The Owner's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 10.4 A bid determined as not substantially responsive will be rejected by the Owner and may not subsequently be made responsive by the bidder by correction of the non-conformity.
- 10.5 The Owner may waive any minor informality or non-conformity or irregularity in a bid, which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any bidder.
- 10.6 The Owner's determination as to the substantial responsiveness or otherwise of each bid or consideration of a minor informality or non-conformity or irregularity is final and conclusive.

11. Evaluation and comparison of bids.

- 11.1 The purchaser reserves the right to examine the details given in the technical bid by visiting the office and work place of the bidder and take decision based on the visit.
- 11.2 The purchaser will technically evaluate all bids previously determined to be responsive and open the price bids previously determined to be substantially responsive and technically acceptable with intimation.

12. Post – qualification

- 12.1 Notwithstanding the qualification requirements given in this document, the Owner will determine to its satisfaction whether the Bidder selected as having submitted the lowest evaluated responsive bid is qualified to satisfactorily perform the Contract.
- 12.2 The determination will take into account the Bidder's financial, technical and execution capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, as well as such other information as the Owner deems necessary and appropriate.
- 12.3 The Owner reserves the right to negotiate with the lowest evaluated responsive bidder.
- 12.4 An affirmative determination will be a prerequisite for award of the Contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Owner will proceed to the next lowest evaluated bid to make a similar determination of that bidder's capabilities to perform satisfactorily.

13. Award Criteria

The Owner will award the Contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily for the items offered.

14. Notification of Award

- 14.1 Prior to the expiration of the period of bid validity, the Owner will notify the successful Bidder in writing by or cable or telex or fax, to be confirmed in writing by post, that its bid has been accepted. The notification of award may be sent in the form of Letter of Intent and/or Work order.
- 14.2 The signed acceptance of the notification of award by the Contractor will constitute a concluded contract.

15. Security Deposit & Execution of Agreement

- 15.1 On receipt of notification of award from the Owner, within thirty days the successful Bidder shall furnish the security deposit in the form of a Demand Draft from a nationalized bank drawn in favour of HLL Lifecare Limited, Peroorkada Thiruvananthapuram payable at Thiruvananthapuram for an amount equal to **5% of the contract price** on the value of the contract for his faithful execution of contract and shall execute an agreement with the Owner in the form attached on proper stamp paper.
- 15.2 The Security deposit should be valid until successful completion of the contract and acceptance and handing over of the works and will be released after acceptance of the work by the Owner.
- 15.3 Failure of the successful Bidder to accept the notification of award or submission of security deposit within the timeframe shall constitute sufficient grounds for the annulment of the award and forfeiture of the EMD, in which event the Owner may make the award to the next lowest evaluated bidder or call for new bids.

16. Earnest Money

16.1 Each bid must be accompanied by E.M.D.

16.2 The EMD is required to protect the Owner against risk of Bidder's conduct, which would warrant the security's forfeiture

- a. The EMD shall be in the form of Demand Draft from a nationalized bank drawn in favour of HLL Lifecare Limited, Peroorkada, Thiruvananthapuram payable at Thiruvananthapuram.
- b. E.M.D. of the unsuccessful bidders will be released after tabulating tenders, keeping only the earnest money of the first three lowest bidders. The earnest money deposit of the remaining two unsuccessful bidders will be released after the acceptance of the notification of award by the successful bidder.
- c. In the case of successful bidder, the Earnest Money will be returned after signing the agreement and submission of Demand Draft towards Security Deposit, which they will have to offer for the faithful execution of the contract.

16.3 The EMD may be forfeited:

- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Document; or
- (b) In case of the successful Bidder, if the Bidder fails:
 - (i) To sign the agreement.
 - (ii) To furnish security deposit.

SCHEDULE - II

GENERAL CONDITIONS OF CONTRACT

1.0 PROJECT INFORMATION

1.1 General:

The detailed information of the project given below is as per our present requirement. However, it is not binding on the Owner in any way and shall not govern the scope of works.

1.2 Location of Site:

The project site is located at **HLL LIFECARE LIMITED, PLOT NO.1, RUBBER PARK, IRAPURAM, KOCHI.**

1.3 Price

Price quoted should be firm without any escalation till the Contract is completely executed and should be for the item/work shown under **SCHEDULE OF QUANTITIES** under **SCHEDULE V.**

The rates quoted must be firm and include the cost of transportation of material to the site, all taxes such as Sales Tax, Excise duty and Octroi etc. and the fixing or placing in position for which the item of work is intended to be operated. The rates quoted by the Contractor shall be firm throughout the contract period and there shall be no upward revision of the rates quoted by the contractor for any reason whatsoever.

It should be clearly understood that any claims for extra Sales Tax, Excise duty, Construction tax or any additional tax etc. shall not be entertained in any case whatsoever once tenders are opened

1.4 Site Facilities:

The contractor has to remove all left over, excess, scrap material from the site and restore the site to fully clean condition as and when required. In case he fails to do so, the Owner reserve the right to remove such materials from the site and expenses incurred in this case shall be deducted from the payments due to the contractor. However, no claim for any loss of material in this case shall be acceptable.

2 COMMITMENT OF CONTRACTOR

2.1 Interpretation of Contract documents:

2.1.1. All the documents forming part of the contract are to be taken as mutually explanatory, supplementary and complementary to each other. If there is any error, omission or discrepancy in any of them, it shall be brought to the notice of the Owner. The decision of the Owner shall be final and binding. The contractor shall execute the work accordingly.

2.1.2 The contractor shall examine all the contract documents thoroughly including the scope, nature and magnitude of works he has to execute in accordance with the contract documents.

2.1.3. The contractor shall visit the project site so as to study the site conditions, means of access to the site and other factors governing the works.

2.1.4. There may be change in layout of site as per technical requirements and the tenderer shall not be entitled for any claim due to such changes & should carry out such changes.

2.2 Delay in work execution due to reasons beyond contractor control

2.2. A Force majeure:

If the execution of work is delayed due to force majeure, then owner as per the affected period may extend the time period.

2.2.B Owners supplied material in case work is delayed due to non-availability of stores supplied by Owner or any decision by Owner holding the progress of work, the contractor then upon any such happening causing delay shall immediately but not later than 10 days, give notice thereof in writing to the Owner, but nevertheless use constantly his best effort to prevent or make good delay. The Owner may in his discretion grant such extension of time as may appear reasonable to him and the same shall be communicated to the contractor in writing and shall be final and binding on him and the contractor shall be bound to complete the work within such extended time.

2.3 Period of Completion

Time is the essence of the contract. Time of completion allowed is **THREE MONTHS** from the date of acceptance of **Letter Of Intent/Work Order**.

Time Schedule:

The successful tenderer shall submit the time schedule in the form of charts before commencing the work and shall execute the work strictly as per the schedule submitted by him and approved by the Owner on turnkey basis.

2.4 Compensation for delay:

Time is the essence of the contract. If the contractor fails to complete the work and clear the site on or before the dates fixed for completion, he shall without prejudice be liable to pay liquidation damage (LD) i.e. **0.5 % of the contract value for every week that the whole or the part of work remains incomplete**. For the purpose of this condition, the contract value shall be total value of quantities of items in the contract at contract rates plus algebraic sum of the subsequent work ordered. However, **the total amount of LD to be paid under this condition shall not exceed 7.5% percent of the contract value**.

2.5 Default of Contractor:

If the contractor fails to maintain progress and quality of work proportionate to time period allotted for the work in spite of notices or complete the work within the stipulated time period or extended time period, then the Owner shall have the right:

- i) To determine the contract: In this event, the contract shall be terminated by giving written notice to the contractor and the unfinished works shall be got completed by labours engaged by the Owner or through other agency at the cost of the Contractor.

- ii) Without determining the contract: In this event, the remaining works shall be got executed through a fresh contractor in which case the Contractor shall not have any objection or claim on this account.
- iii) Before determining the contract: In this event, if the Owner finds that the defaults of the Contractor can be rectified, then an opportunity shall be given to the same contractor to rectify the defects /defaults in the specified time.
- iv) Termination of contract for death: If the contractor is an individual of a proprietary firm and proprietor of the firm dies and if the Contractor is a Attorney of partnership firm and dies, then the Owner has the right to terminate the contract unless and until the Owner is satisfied that the surviving partners are capable of executing and completing the remaining contract. In case of termination of contract, the legal representatives of the deceased Contractor are not entitled for any compensation or claim. Also, the Owner shall not levy any penalty against the damage caused by incomplete work.
- v) Termination of Contractor in part or in full for Contractors default: If the Contractor fails to execute the work in the manner described in the contract documents or if he at any time, in the opinion of the Owner:
 - a) Fails to carry out the works in accordance with the contract conditions or as per the specifications mentioned in the documents.
 - b) Stops the execution of works without giving prior information to the Owner.
 - c) Fails to carry out the works to the satisfaction of the Owner both with respect to qualities and time schedule.
 - d) Fails to supply sufficient or suitable construction plant, materials and labours etc.
 - e) Commits breach of any of the provisions of the contract.
 - f) Abandons the work.
 - g) becomes bankrupt during the continuance of the work.

Whenever the Owner shall exercise his authority to cancel the contract under the above condition, the Owner shall be at liberty to hold and retain in their hands materials, tackles, machinery and stores of all kinds on site as they may think proper and may at any time sell any of the materials, tackles, machinery and stores and apply the proceeds of sale in or towards the satisfaction of any loss which may arise from the cancellation of contract as aforesaid. The Owner shall also be at liberty to use materials, tackles, machinery and other stores on the site of contractor as they think proper in completing the work and the Contractor will be allowed the necessary credit. The value of materials and stores and amount of credit to be allowed for tackles and machinery belonging to Contractor and used by Owner in completing the work shall be assessed by the Owner and amount assessed shall be final and binding on the Contractor. In case Owner completes or decides to complete the work under the provisions of this condition, the cost of completion to be taken into account in determining the excess cost to be charged to the Contractor under the condition shall consist of the cost of materials purchased or required to be purchased, labour provided or required to be provided.

2.6 Variation in scope of works:

- a) Variation in quantity:

The Owner has the right to increase or decrease the quantity of work or delete/add certain items of work. However such changes shall not entitle the contractor for any compensation, claim regarding the change in scope of work.

b) Variation in drawings and specifications:

- i) The variation in scope may be by way of changes in drawings regarding dimensions but specification remaining the same. In such a case the contractor shall not be entitled for any claim due to change.
- ii) In case of change of specification it shall be worked out as given in Clause 3.8

2.7 Staff and Workers:

The contractor shall depute qualified engineers for execution of the project. The technical staff employed by the contractor shall be responsible for the quality and workmanship of the work as per the satisfaction of the Owner. The Contractor's supervisory staff should follow the instructions given by the Owner or his authorised representative. If any of the Contractor's staff members is incapable or in-experienced, in the opinion of the Owner, then he should be removed immediately and the contractor should do suitable substitution. Technical staff employed should be degree holder from a government-recognized institution or equivalent with at least 3 years practical experience of work in addition to Diploma holder and other experienced supervisory staff.

If the workers or the supervising staff of the contractor are involved in riotous or illegal activities to such an extent that it becomes necessary to hand over the matter to the police then the contractor would be solely responsible for the case and all the expenses incurred in the legal proceedings shall be borne by the contractor.

2.8 Subletting of contract:

No subletting of contract is permitted. Specialized work agency contracts may be permitted with prior permission.

2.9 Co-operation with other agencies at site:

The Contractor or his authorised representatives must work in close co-operation with the agencies executing other works forming the part of the project and also with the representatives of the Owner for the execution of works which are not included in the contract. Contractor shall permit free access and generally afford reasonable facilities to other agencies or departmental workmen etc.

The Contractor's quoted amount/rate shall be deemed to cater for all the above contingencies and nothing extra shall be admissible on this account.

2.10 Contractor should keep his working site clean and the materials brought for work shall be kept in a properly stacked / stored way.

The work site should be swept at the end of each working day after removal of debris/ left over materials. The Contractor has to take full care so as not to spoil or damage other Contractor's/ Owner's job / material.

2.11 Safety of adjoining properties:

The Contractor or his authorized representatives should conduct all the operations necessary for the execution of works in such a manner that no inconvenience / damages are caused to the properties of other persons & Owner.

2.12 Settlement of dispute:

Any disputes or difference arising between the parties with respect to the performance of any part of this agreement or any thing connected therewith, etc shall as far as possible be mutually settled by the process of dialog and negotiation.

The Courts at Trivandrum alone shall have jurisdiction in respect of settlement of any matter arising out or in connection with the contract.

2.13 Escalation:

The rates quoted by the Contractor in the contract documents shall be final and shall not be subjected to any change due to the increase in labour wages or inflation in the cost of materials or any other price variations due to any reason during the stipulated time period of the contract or during the extended time period of completion.

2.14 Insurance:

The Contractor shall at his own expense carry and maintain insurance with reputed insurance companies to the satisfaction of the Owner as under:

i) Insurance of works:

The Contractor shall take full responsibility for loss, damage and care of plant and works until it is delivered to site, constructed, erected, commissioned and taken over by Owner. Without limiting such responsibility, the contractor shall in the interest of the work insure the plant and work for their full value plus ten percent until they have been taken over. Such insurance shall cover the equipments and works against loss, damage or destruction by fire, earthquake, theft or any other cause, throughout the duration of the contract period or extended contract period.

ii) Insurance of employees:

The Contractor shall accept full and exclusive liability for the compliance of all obligations and responsibilities imposed by the Employees State Insurance Act, 1948 and any liability or penalty which may be imposed by the Central, State or Local Authorities due to the reason of violation by the contractor or sub-contractor of the Employees State Insurance Act, 1948. The Contractor shall agree to fulfill the requirement of the Employees State Insurance Corporation and maintain the declaration forms and all such forms, which may be, required in respect of the contractor's, sub-contractor's employees who are employed in the work provided for or those covered by E.S.I.C. from time to time under the agreement. The Owner shall retain such sum as may be necessary from the total contract value until the contractor shall furnish satisfactory proof that all contributions as required by the Employees State Insurance Act, 1948 have been paid by him.

iii) Workmen's Compensation:

Insurance shall be affected for all the Contractor's employees engaged for this contract. The Contractor shall also carry and maintain all other insurance, which may be required under any law or regulations from time to time. He should also carry and maintain any other insurance, which may be required by the Owner.

iv) Transit Insurance:

The cost of transit insurance relating to the items to be transported by the contractor to the site of work shall be borne by the contractor and the quoted price shall be inclusive of this cost.

v) Loss or damage and Indemnity Agreement:

The contractor shall be responsible during the progress of work as well as maintenance period for any liability imposed by law for any damage to work or any part thereof or to any of the material or other things including those of Owner used in performing the work or for injury to any person or persons or for any property damaged in or outside the site. The contractor shall indemnify and hold the Owner and the Engineer harmless against all liabilities, claims, loss or injury, including costs, expenses and attorney's fees incurred in the defense of same, arising from any allegation whether groundless or not, of damage or injury to any person or property resulting from the performance of the work or from any material used in the work or from any condition of the work or work site or from any cause whatsoever during the progress and maintenance of the work.

vi) Third party insurance:

Before commencing the execution of the works the Contractor, but without limiting his obligations and responsibilities, shall insure against his liability for any material or physical damage, loss or injury which may occur to any property, including that of the Owner, or to any person, including any representative of the Owner, by or arising out of the execution of works or in the work being carried out by the owner, by or arising out of the provision of clause 2.14.v here of. Such insurance shall be effected with an insurer and in terms approved by the Owner and for at least the amount stated in the Appendix of the Tender.

vii) The Contractor shall take **Contractor's All Risks Insurance (CAR)** policy, jointly in the name of HLL LIFECARE LIMITED and the Contractor and the insurance should be valid till the satisfactory completion of the work. The copy of the policy shall be deposited with HLL before commencing the work.

Note: The Contractor's payment shall be clear only after his compliance of all insurance formalities as given above. He shall have to deposit the photocopies of the various policies and payment receipts with the Owner's site engineer for this purpose.

3.0 EXECUTION OF WORK

3.1 General:

All the works shall be executed in accordance with the detailed drawings, specifications and instructions given by the Owner or mentioned in the contract document.

3.2 Drawings:

The drawings given in the tender document are as per our present requirement and are meant for the purpose of giving idea of the type and quantum of work to be executed.

All working drawings shall be marked "Released for Execution" and duly signed and approved by the Owner. All the old drawings shall be discarded and marked with "Superseded by Drg. No....."

If during the execution of the work, any discrepancy occurs in the drawings or between the drawings and specification then the same should be clarified from the Owner prior to the execution of work. The decision given by the Owner would be final.

3.3 Inspection of works:

i) The Owner shall have the full authority to inspect the works at any time, at any stage. The contractor shall provide adequate facilities to carry the inspection work. The Contractor should present himself or his authorised representative during the inspection so that the Owner can convey the instruction regarding the works.

- ii) The Contractor shall give information to the Engineer in charge before covering up the works so that the same can be inspected and measured jointly & correctly to true dimensions.
- iii) If the contractor fails to get the work inspected before covering it up, then the Owner has full authority to get the work uncovered at the expense of the Contractor and if any fault is found then the same should be rectified by the Contractor without claiming any extra payment.

3.4 Inadequate/substandard works and materials:

- i) If any material brought by the Contractor is found unsuitable or of sub-standard quality after testing, then the Contractor shall remove those faulty materials immediately from the site as per the instructions of the Owner.
- ii) If any work executed by the Contractor is found to be of bad workmanship or not as per the drawings, then the same is to be dismantled and re-executed by the Contractor without claiming any extra payment or extension in time period.

3.5 Default of Contractor in compliance:

If the contractor or his authorised representative fails to follow the instructions given by the Owner regarding any of the works, then the same shall be got executed by other persons employed by the Owner and the expenses incurred shall be borne by the Contractor.

3.6 Discrepancies between instructions:

If any discrepancy occurs between the various instructions conveyed to Contractor or his authorised representative or if any misunderstanding arises between the Contractor's staff and Owner's staff, the contractor shall report the matter immediately to the Owner. The decisions of Owner shall be final and binding. Moreover, no claims for losses due to discrepancies between instructions, doubts or misunderstandings shall be admissible.

3.7 Power to make alterations

The Owner shall have the power to make in writing any alterations, omissions, additions or substitutions for original specifications, drawings, designs, patterns and instructions that may appear to him necessary or advisable during the progress of the work and the contractor shall be bound to carry out the work in accordance with the instructions which may be given to him by the Owner or his representative. On submission of electrical scheme to the Electrical Inspectorate it is bound to have some changes in the panels, cables rating etc.

Such alterations, omissions, additions, substitutions shall not invalidate the contract. Any altered additional or substituted work which the contractor may be required to do in the manner specified above as part of the work shall be carried out by the contractor on the same conditions in all respect on which the main works was agreed to be done and at the rates derived according to clause 3.8.

3.8 Change in specifications and valuation of extra items:

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

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

- a. In the case of all extra items whether additional, altered or substituted, if accepted rates for identical items provided for in the contract, such rates shall be applicable.
- b. In the case of all extra items whether altered or substituted, for which similar items exist in the contract, the rates shall be derived from the original item by appropriate adjustment of cost of affected components. The percentage excess or deduction of the contract rate for the original item with reference to the estimated rate shall be applied in deriving the rates for such items.
- c. In the case of extra items, whether altered or substituted, for which similar items do not exist in the contract, the rates shall be arrived at on the basis of provision of standard data Book and schedule of rates 2007 of CPWD by adding profit of 10% and applying the contractor's quoted percentage above or below.
- d. In the case of extra items, whether additional altered or substituted, for which the rates cannot be derived from similar items in the contract, and only partly from similar items in the contract, and only partly from the CPWD rates, the rates for such part of parts of items as are not covered in the schedule of rates shall be determined by the Owner on the basis of the prevailing market rates giving due consideration to the analysis of the rate furnished by the Contractor with supporting documents, including contractor's profit. This shall be added on to the C.P.W.D rate revised as on 2007 (including contractor's profit). For the other part of the items the rates can be derived from the recent schedule of rates of C.P.W.D.
- e. In the case of extra item whether additional, altered, substituted, for which the rates cannot be derived either from similar item of work in the contract or from the departmental schedule of rates, the contractor shall within 14 days of the receipt of order to carry out the said extra item of work, communicate to the Owner the rate which he proposes to claim for the item, supported by analysis of the rate claimed and the Owner shall within one month thereafter, determine the rate on the basis or the market rate giving due consideration to the rate claimed by the contractor.
- f. The quantities indicated are approximate. On award of work and approval of the scheme, the contractor has to work out the actual quantities of each item of work and intimate to the Owner. No increase in cost shall be given for any additional quantities of any item given in the tender.

3.9 Work not specified in the specification:

If, for any work, no specification has been given in the tender document, then the work will be executed as per the IS specifications, and if the work is not covered by IS specifications also, then it should be executed as per standard engineering practice, subject to the recommendation and approval of the Owner.

3.10 Testing:

The Contractor shall agree for testing works as mentioned in the specifications of various items of works involved in the project.

- i) If the various tests prescribed in the specifications at specified intervals for ascertaining the quality of the work done prove unsatisfactory, the Owner shall have the authority to instruct the Contractor to re-execute the work done or make alterations as per the orders of the Owner.

- ii) The Contractor shall furnish to the Owner, for approval adequate samples of all materials to be used in the works free of cost. Such samples shall be submitted before the work is commenced, giving ample time to ascertain ISI approval/markings.

All materials furnished in actual works shall be of the same quality of that of approved samples.

- iii) The testing of various equipments to be used in works shall be tested in standard laboratories as directed by the Owner and the expenses incurred shall be borne by the Contractor.

3.11 Progress Report:

During execution of the contract, the contractor shall furnish weekly progress reports to the Owner and in the format as specified by the Owner indicating the progress achieved during the week and the total progress up to the week as against scheduled and anticipated completion dates in respect of key phases of the work. The Contractor shall also furnish any other information in order to ascertain progress, if called for by the Owner.

3.12 Liabilities for defects and rectifications:

If it shall appear to the Owner that any work has been executed with imperfect or unskilled workman or with materials of any inferior description, or of quality inferior to that contracted for, or otherwise not in accordance with the contract, the Contractor shall on demand in writing from the Owner or his representative specifying the work, materials or articles complained of, notwithstanding that the same may have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct that work so specified and provide other proper and suitable materials or articles at his own charges and cost, and in the event of failure to do so within a period to be specified by the Owner or his demand aforesaid, the Owner may on expiry of notice period rectify or remove, re-execute the work at the risk of Contractor and the cost shall be recovered from the Contractor. The decision of the Owner as to any question arising under this clause shall be final and conclusive.

3.13 Defect liability Period:

The liability period of the work shall be 12 months from the date of completion of the work as certified by the Owner and this date will be as indicated in the provisional completion certificate. If any damage or defect occurs in the work during this period then the contractor shall rectify the damage or defect at his own expense to the satisfaction of the Owner. If the contractor fails to do so, then the Owner shall have the authority to get the work done by other means and the expenditure incurred shall be recovered from the contractor.

3.14 Suspension of work:

The Contractor shall suspend the progress of work, on receipt of the written order from the Owner for any of the following reasons:

- i) On account of any default on the part of the Contractor. In this case the contractor shall be entitled for the extension of time, but the contractor shall have no claim for payment of compensation for re-execution of faulty works.
- ii) For execution of the works for reasons other than the default of the contractor.
- iii) For safety of the works.

In case of suspension of work:

- a) The contractor shall during such suspension, properly protect and secure the works and carry out the instructions of the owner.
- b) If the suspension is ordered for the reasons 3.13 as stated above, the Contractor shall be entitled for extension of time equal to the period of every such suspension but no compensation for damages etc. shall be admissible on account of suspension of work.

3.15 Possession prior to completion:

The Owner shall have authority to take possession of any completed or partially completed works. Such possession shall not be deemed to be acceptance of any work completed in accordance with the contract. If such prior possession delays the progress of works then the adjustment in the time of completion shall be done accordingly. The decision of the Owner regarding the extent of delay shall be final and binding.

3.16 Care of Works:

From the commencement to the completion of works, the Contractor shall take full responsibility for the care of all works including all temporary works and in case any damage or loss occurs then the contractor shall at his own cost repair and make good the same so that on completion of the work, the same shall be in good order in every respect in accordance with the contract and to the satisfaction of the Owner.

4.0 CERTIFICATE AND PAYMENT**4.1 Schedule of Rates:**

- i) The payments to be made to the contractor for various items of works shall be as per the finalised rates in tender document and the rates of extra items finalised from time to time.
- ii) The rates finalised in the tender document shall remain firm till the completion of the work including extension of time, if any.
- iii) After the completion of work, the Contractor will have to submit the clearance certificate for all statutory payments like royalties, Octroi etc.

4.2 Measurement:

Joint measurements of the various items of the work shall be taken by the Contractor's authorised representative in presence of the Owner's and authorized representative from time to time for maintaining the records and preparing the bills. If the contractor fails to send his representative then the measurements taken by the Owner's and shall be final and no claim shall be entertained in this regard.

4.3 Mode of Measurement:

All measurements shall be in the metric system and in accordance with Indian Standard Specifications and in accordance with standard engineering practice. If the contractor has any objection regarding the measurements then he shall inform the Owner immediately. The decision given by the owner shall be final and binding on the contractor. In case of mode of measurement of any item is not specified; then I.S.I. mode of measurement (as applicable during contract period) shall be followed.

4.4 Mobilization Advance:

No mobilization advance shall be paid.

4.5 Lump sums in Tender:

Lump sum items considered only where specified.

4.6 Running Account Payments to be regarded as advances:

All running account payments shall be regarded as payments by way of advances against the final payment only and not as payment for work actually done and completed, and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or re-erected or be considered as an admission of the performance of the contract or nor shall it conclude, determine or affect in any way the powers of the Owner under these conditions or any of them as to the final settlement of the accounts or otherwise, or in any other way vitiate or affect the contract. The final bill shall be submitted by the contractor within one month from the date of actual completion of the work, to the Owner's certificate of the measurement and of the total amount payable for the work accordingly shall be final and binding on the Contractor. The payment of final bill shall be done within three months after the submission of the final bill by the contractor, to the including period of one month of clause no.4.8 (c) billing and terms of payment.

4.7 Payment of Contractor's Bills:

- a. The payment due to the contractor shall be made only in Indian Currency by Crossed Account Payee Cheques. In no case, will the Owner be responsible if the cheque is misled or mis-appropriated by the contractor or his representatives. The cheque shall be released only against submission of duly signed and revenue stamped receipt.
- b. The Owner reserves the right to carry out post payment audit and technical examination of the bills and work executed including all supporting vouchers etc. The Owner further reserves the right to enforce recovery of over-payment when detected. Similarly, if any under payment is discovered, the amount shall be paid to the contractor.
- c. Wherever any claim for the payment against the contractor arises as per the contract, the same may be deducted from the bill of the contractor or from his security deposit.

4.8 Billing and terms of payment:

(a) The payment shall be made as under:-

- i) 70% of the value of goods supplied at site shall be made immediately after supply & acceptance of materials/work executed at site.
- ii) 20% of the value of goods supplied/ work executed at site shall be made immediately after completing and commissioning the equipments/work executed.
- iii) Balance 10% after rectification of defects, energizing the complete system to the full satisfaction of Owner, against a Performance Bank Guarantee for the guarantee period of 1 Year from the date of successful validation & Commissioning & handing over.

(b) The amount deposited as Security Deposit shall be released only after issuance of provisional completion certificate by the Owner.

- (c) Tax Deduction: All statutory deductions like Income Tax, Works Contract Tax, E.S.I., P.F. or any other government imposed liabilities shall be borne by the contractor (as applicable at the time of execution of job) and shall be deducted from each bill submitted by the Contractor.

5. Provisional Completion Certificate:

When the Contractor successfully completes the works as per the contract, he shall be eligible to apply for provisional completion certificate in respect of the works. The Owner shall issue to the Contractor the provisional completion certificate after verifying from the completion documents submitted by the Contractor and satisfying himself that the work has been completed in accordance with the construction drawings and the contract document. The Contractor, after obtaining the provisional completion certificate, is eligible to present the final bill for the work executed by him under the terms of the contract. The work will not be considered as complete and taken over by the Owner until all the temporary works, labour hutments etc. are removed and the work site cleared to the satisfaction of the Owner.

If the contractor fails to comply with the requirements of the above on or before the date for the completion of the works, the Owner may, at the expense of the contractor, remove the tools and plants and surplus materials and dispose off the same and the contractor shall pay the amount of all expenses incurred.

6.0 LABOUR LAWS AND SAFETY REGULATIONS

6.1 Labour Laws:

- i) Laborers below the age of 18 years shall not be employed on the work.
- ii) The contractor shall not pay less than what is specified by the law to laborers engaged by him on the work.
- iii) The contractor shall, at his own expenses, comply with all labour laws and the Owner shall not be responsible for any recovery/penalty imposed by the respective authorities for violating the labour laws.
- iv) If the contractor is covered under the Contract Labour (Regulation & Abolition) Act, he shall obtain a license from the licensing authority (i.e. the Office of Labour Commissioner), by payment of the necessary prescribed fee and deposit, if any, before starting the work.
- v) The contractor shall furnish to the Owner, the details of the workers employed on the works.
- vi) The contractor shall comply with the provisions of the existing rules and regulations relating to labour laws.
- vii) The Owner /authorized engineer shall on a report having been made by an inspecting officer as defined in Contract Labour (Regulation and Abolition) Act, 1980, have the power to deduct from the amount due to the contractor any sum required or estimated to be required for making good the losses suffered by a worker or workers by reason of non-fulfillment of the conditions of the contract for the benefit of the workers, or if deductions made from his or their wages which are not justified by the terms of contract or non-observance of the said regulations.

6.2 Minor Accident on Duty:

For cases of minor accident on duty not covered under compensation by insurance, the contractor shall have to compensate the affected person by reimbursing these medical expenses against submission of actual expenditure document. The absence from duty, if takes place due to such accident, shall be considered as special leave and full payment shall have to be made for duration of such absence.

6.3 Provident Fund:

It shall be solely the Contractor's responsibility to complete all provident fund formalities as per statutory regulations.

7.0 SAFETY CODE

7.1 Safety and Protection:

The contractor shall adhere to safe construction practice and guard against hazardous and unsafe working conditions. While carrying out the work, the contractor should provide for;

- i) Safety of personnel engaged in the construction.
- ii) Protection and safety of works and materials during their progress.
- iii) Sanitary and hygienic conditions of working and living for his workers, as required by the Owner.

7.2 Use of Safety Gadgets:

The Contractor shall have to ensure availability and use of all desire safety gadgets like safety belts, helmets, goggles, hand gloves etc.

7.3 Unsafe working condition:

If any activity is found to be progressing without proper and complete safety measures (including use of safety gadgets) being implemented, the contractor may be asked to stop the work unless he fulfills the desired safety norms. Such delays shall not be allowed to be considered for extension in duration of the allotted time period.

7.4 First Aid:

The contractor shall provide first aid facilities for his employees and those of his sub-contractors. The requisite first aid box and medicines should always be available at work site.

7.5 Contractor's Barricades:

The contractor shall erect and maintain barricades required in connection with his operations to guard or protect:-

- i) Excavations
- ii) Hoisting Areas
- iii) Areas adjudged hazardous by the Contractor's or Owners representatives.

- iv) Charged electrical panels.
- v) Owner's existing property liable to get damaged by contractor's operation.

7.6 Preservation of peace:

The contractor shall take precautions to prevent any riotous or unlawful behavior by his workers, for the preservation of peace and protection of inhabitants and the security of property in the neighborhood of the work.

8.0 DETAILS OF WORK EXECUTION

- i) The work shall be done in such a manner so as to clear work front availability for other agencies working at site.
- ii) Finish of work shall be as per drawings & details given by Owner.
- iii) In general the complete work is to be done as per Indian Standard and esthetical norms as specified and detailed in Tender.

9.0 CONTRACTOR'S SCOPE OF SUPPLY

All materials required for executing the jobs specified in the Schedule of Items, inclusive of all tools, tackles, scaffolding, consumables & testing equipments shall be procured and supplied by the contractor at his own cost except for any items specified as owner supplied.

10.0 RECOVERY FROM THE CONTRACTOR

- i) If the contractor or his employees damage or destroy the property of the Owner, then the same shall be replaced/ refunded by the contractor; otherwise the expenses may be recovered from his bill or security deposit.
- ii) All compensation & recoveries to be made as per terms of the contract shall be deducted from the contractor's bill or security deposit.
- iii) Forfeiture of Security Deposit: Whenever any claim against the contractor is to be recovered then the same may be made from the security deposit. If the contractor abandons the work or leaves the work in complete, then the Owner/has the right to forfeit the security deposit.

11.0 SPECIAL INSTRUCTIONS

- a) All materials to be used in execution of project shall be of **first class quality, recommended make; I.S.I. marked and shall be approved by Owner** before its application.
- b) The contractor shall be paying all testing charges required for testing of materials and samples as and when taken by Owner/ The Contractor shall arrange necessary labour and transportation to facilitate testing of samples/materials. Frequency of testing materials/samples shall be as per related I.S. codes.
- c) The work should be carried out in truly professional manner, neatly finished with proper line, level and plumb. Cleanliness and finishing of the job is of utmost importance. Hence the job should be done most carefully with best workmanship. For all finishing jobs samples should be approved from the owner before completely executing the work.

- d) The Owner/ should be immediately informed for any discrepancy in drawings, specifications and instructions in the execution of job at site before actual execution of particular item having discrepancy.
- e) Any item found to be having been executed with poor workmanship or materials of inferior quality then the contractor shall have to rectify /reconstruct the work as specified by Owner/ No extra charge will be admissible in such case. If Contractors fails to do so, the Owner reserved the right to rectify/reconstruct the work through some other agency at the expenses of contractor.
- f) The schedule of activities as submitted by the contractor shall have to be strictly adhered to. Regular progress reports shall have to be submitted by the contractor giving all details for monitoring of the schedule.
- g) The Contractor shall take charge of site and if site clearance is involved, he shall attend to it. (If such type of unforeseen and unavoidable situation occurs, in that case actual labour employed for such job shall be paid including overheads and profit).
- h) Special care is to be taken for cleanliness of the site. After the end of day's work, the site should be cleaned immediately.
- i) The contractor shall have to co-operate with the agencies executing other works in the same area.
- j) While executing the work, the contractor shall ensure safety and security of the property of the Owner so as to avoid theft etc.

12. STAMP PAPER AGREEMENT

AN AGREEMENT made this the _____ day of _____ 2013 between M/S _____ here in after called the CONTRACTOR/S which expression shall include its executors, administrators, legal representative and assigns of the first part and **M/S. HLL LIFECARE LIMITED..** (Hereinafter called the Owner) of the second part. WHEREAS **M/S. HLL LIFECARE LIMITED,** the Owner is desirous of doing **“Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi”** as per Drawings & specification and the contractor/s has/have by his/their tender dated _____ as amended by the contractor’s - contractor’s letter no. _____ dated _____ offered to execute and fully complete the above work in the Owner’s Premises for the Owner as set forth in the tender or as amended and the schedule Bill quantities particular specifications, ISI specification, drawings, special conditions of the contract, scope & performance schedule and general conditions of the contract, according to the terms and conditions contained there in for an approximate total sum of

Rs. _____ (Rupees _____
_____) and the Owner has accepted such item rate/percentage rate/Lump sum tender in terms of its letter no. /dtd. _____.

Owner/Employer

SIG.OF THE CONTRACTOR

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS

1. The contractor/s covenant/s and agree/s with the Owner that the contractor/s with in the time of **THREE MONTHS** from the date stipulated in the acceptance letter shall execute and fully complete all the works specified described or referred to in and by the said tender or as amended according to the true intent and meaning of the said tender or as amended and as per the Schedule Bill of quantities Particular Specifications ISI Specification Drawings & Instructions issued from time to time Special Conditions of the Contract Scope & Performance Schedule General Conditions of the Contract.

The Contractor/s covenant/s and agree/s with the Owner to truly observe perform fulfill & submit to the said terms obligations and conditions referred above. In case the contractor fails to execute the work in the manner described in the condition of Contract or stops the execution of work or fails to carry out the works to the satisfaction of the Owner with respect to quantity quality and time schedule or abandons the work or becomes bankrupt then the Owner will have right to terminate the contract and get the remaining work executed at the risk and cost of the contractor. It is agreed that time is of the essence of this contract. In case the work is not completed in the manner mentioned above to the complete satisfaction of the Owner in every respect within the aforesaid time limit of four months from the date stipulated in the Work Order the Contractor/s agree/s to pay compensation of ½% of the value of the contract sum for each week of delay beyond the date stipulated for completion subject however to a maximum of 7.5% of the value of the Contract sum.

2. In consideration of the satisfactory work executed by the contractor/s with the provisions as stated above the Owner covenant/s with the contractor/s that it will pay to the contractor/s from time to time in accordance with the Schedule Bill of quantities and various terms and conditions as contained in General Conditions of the contract and Special Conditions of the contract, provided always that whether or not a work is satisfactory shall be decided by the Owner and its decision in this behalf shall be final and binding.
3. The rates for items whether termed as extra items or deviations or by whatever name called and which are not covered by the tendered rates will be worked out in accordance with Clause 3.8 of Schedule II the General Conditions of the contract only.
4. Sales Tax by whatever name and in whatever form it may be in all cases shall be the contractor's /Contractors' responsibility. Income Tax Work Contract Tax & Taxes in pursuance of U.T. Sales Tax amendment and validation ordinances and or the Act thereof and or other amendments as may be made from time to time or taxes as result of subsequent orders/ordinances/acts as issued by the State or Central Govt. from time to time shall be borne by the Contractor/s.
5. The contractor shall abide by and shall be responsible for all statutory provisions of the Law such as labour laws & safety regulations etc.
6. This agreement further witnesseth that the contractor/s hereby covenant/s with the Owner that in the event of the nonfulfilment in any respect by the contractor/s of the said covenant/s terms, agreements, obligations and conditions on the part of the contractor/s, the contractor shall pay on demand to the Owner all losses, damages, costs, charges and expenses as the Owner may be directly or indirectly put to in consequence of such non fulfilment of contract by the contractor/s.

7. In the event of any dispute arising out of or in connection with the arbitration proceedings, or any proceedings being taken subsequent to the arbitration proceedings, it is further agreed that only the courts in Thiruvananthapuram, Kerala shall have the sole jurisdiction in the matter.

8. The following documents are deemed to form part of the agreement, namely the tender, the priced bill of quantities, the drawings issued for the work, Schedule 'II' Particular Specifications, Special Conditions of the Contract and General Scope performance Schedule Conditions of the contract, all of which for the purpose of identification have been signed on behalf of the Owner and by the contractor/s. The relevant ISI will also form part of this agreement. The letter of Acceptance and their amendment etc. shall also form part of the agreement.

9. The agreement further witnesseth that the contractors is are responsible for any accident or other compensations payable to the workmen employed by and working under the control of contractors, that the Owner has no liability in the matter and that if any payment would have to be made by the Owner, the same shall be reimbursed by the contractors on demand and/ or recovered from the dues of the contractors. In witnesses whereof the said parties here to have here unto set their hands.

FOR & ON BEHALF OF **HLL LIFECARE LIMITED**,

OWNER/EMPLOYER

SIGN.OF THE CONTRACTOR

Date:

Witnesses:

1. _____

2. _____

Witnesses:

1. _____

2. _____

SCHEDULE III

DETAILED SPECIFICATION OF SCREW CHILLER SYSTEM

The scope of work includes the following.

- i. Supply, installation, testing, validation and commissioning of 2 Nos of 70TR (minimum) Water cooled screw chiller system including required pumps, Cooling towers, Electrical panels and all accessories as mentioned in the schedule.
- ii. Supply, installation, testing, validation and commissioning of insulated chilled water pipe lines to the dipping lines and tanks as per the machine requirements

The Screw Chiller system consists of the following: -

1. CHILLING UNIT

1.1 Compressor

The compressor shall be screw type with refrigerant circuits. The unit shall be hermetic or semi hermetic type. The complete compressor unit shall be made for continuous operation and long life. The inlet and outlet valves shall be suitable for the operational pressures specified and tested to the standards. Automatic capacity control valves and systems to be incorporated. The complete assembly shall be statically and dynamically balanced for required operation and low noise level. Compressor shall be tested in accordance with ARI or national/international standards. The capacity specified shall be at chiller water in at 12.7°C (55° F) and out at 7.2°C (45° F) and condenser water in at 32° C (90° F) and out at 36.11°C (97°F).

- 1.2 **Lubricating system** should form an integral part of the assembly which ensures complete lubrication to all bearing surfaces under any speed conditions, at start up, shut down and during operation under various loads. The complete system shall have inbuilt oil separator, oil level switch, oil differential pressure switch etc.

1.3 Compressor control panel

Microprocessor based control panel has to be used. The following indications/controls are required.

- a) Suction pressure
- b) Discharge pressure
- c) Anti freeze cutout
- d) High refrigerant pressure cut out
- e) Low refrigerant pressure cut out
- f) Water – in pressure on chiller
- g) Water- out pressure on chiller
- h) Temperature of water in and out on pipeline
- i) Chilled water temperature shall be controlled accurately.

- j) In built time delay for compressor, single phase, phase reversal protection and antifreeze protection.
- k) RS 485 ports for remote connectivity, fault indicator and status facility, PC connectivity and remote monitoring.

All safety controls including the above and as required and applicable have to be incorporated in the system.

1.4 Capacity control

The capacity shall be continuously controlled from 25% to 100% depends on the load.

1.5 Capacity

The capacity indicated is minimum 70TR. The contractor shall quote near by capacity with maximum efficiency and cost effective.

- 1.6 The compressor shall be driven by a 415V, 3 phase 50c/s, and induction motor. The motor shall be of refrigerant cooled in hermetic /semi hermetic type. The motor shall be capable of with accuracy $\pm 6\%$ variation in voltage. The temperature raise of motor during operation should not exceed the limits as laid in the latest IS specifications for induction motors. The motor should be of adequate HP so that current at any time during operation does not exceed the full load current. Terminal box of the motor should be phase-separated type, fabricated out of steel.

1.7 Evaporator and condenser

1.7.1 Evaporator

The evaporator shall be horizontal shell and tube type or brazed plate type. In shell and tube evaporator shell will be of electric welded or hot rolled steel. Water and gas spacer shall be designed for maximum working pressure but tested for twice the working pressure or 300 psi (21.4kg/sq.mm) whichever is higher. Water boxes and end cover shall be of welded steel, and covers shall be removable without disturbing the piping. All the tubes should be of integral finned, deoxidized copper, rolled into multigrooved steel tube plates. End of tubes at tube sheets must be expanded to outside dia of fin in order to permit its removal from shell. The evaporator shall be constructed in accordance with ASME Unfired Pressure Vessel code.

Brazed plate type evaporator shall consist of pattern embossed plates of stainless, acid resistant steel which are brazed together to form a pressure resistant heat exchanger package. The impressions in the plates shall form two separate systems in which the two media flow in counter current fashion completely separated from each other.

1.7.2 Condenser

Same as the chiller in construction. Water-cooled.

1.7.3 Installation

Compressor, chiller and condenser shall be mounted on a common structure made out of formed steel sections that shall be pre assembled at the factory with all controls.

All the equipment shall be thoroughly tested.

All safety controls, low and high refrigerant pressure controls, starter overload trips shall be suitably set and a record of all the settings shall be furnished.

1.8 Testing

Unit capacity in tons refrigeration shall be computed from the temperature readings and water low measurements. Computed results shall tally with specified capacities.

All instruments, services and personnel required for the testing and computation of capacities and power consumption shall be provided by the contractor at his own cost.

- 1.8.1 **All the equipment including mounting structure etc. shall be treated properly and painted with two coats of suitable paint** of approved colour after applying two coats of zinc chromate primer of approved quality.

2. COOLING TOWER

2.1 Basin & Casing

The basin and casing shall be supported by heavy gauge cold rolled section hot –dip galvanized steel for long life. Standard accessories shall include overflow, drain stainless steel strainers and brass make-up valve with plastic float. The casing and Basin shall be made out of FRP with both sides Gel coated for smoothness from inside and pigmented from outside.

2.2 Axial Fans

Fans shall be heavy-duty axial type statically and dynamically balanced. The fans constructed of hollow extruded aluminium alloy blades, installed in a closely fitted cowl with venturi air inlet. Fan screens shall be galvanized steel mesh and frame, bolted to the fan cowl.

2.3 Fan Motor

Suitable capacity totally enclosed fan cooled fan motor suitable for outdoor service on 415 volts, 50c/s and 3 phase AC supply.

The Fan Motor shall be high efficiency 4 pole, and shall be mounted out of moist Air stream.

2.4 Fill

The Cooling Tower Fill shall be of virgin PVC of cross-fluted design for optimum heat transfer and efficiency. The cross fluted sheets shall be bonded together and the edges double folded for strength and durability. The PVC fill shall be resistant to rot decay, or biological attack.

2.5 Water Distribution System

The spray header and branches shall be constructed of Heavy duty, corrosion resistance and shall have a steel connection to attach the external piping. The piping shall be removable for cleaning purposes. The water shall be distributed over the fill by precision molded ABS spray nozzles with large orifice openings to eliminate clopping.

2.6 Eliminators

The eliminators shall be constructed entirely of inert polyvinyl chloride in easily handled sections. The eliminator design shall incorporate two changes in air direction to assure complete removal of all entrained moisture from the discharge air stream. Maximum drift rate shall be less than 0.005% of the circulating water rate.

2.7 Louvers

The louvers shall be constructed from polyvinyl chloride. The louvers shall be mounted in easily removable frames for access to the Basin for maintenance. The louvers shall be suitable angled and spaced to prevent splash out and block direct sunlight.

2.8 Finish

All Basin and casing materials will be 2 side finished in standard colour with NPG, u.v stabilizer gel coat.

2.9 Access Ladder

For sizes greater than 2.4M wide a GI ladder of formed/Rolled channels shall be provided with platform for easy access to Motor.

3. PUMPS

3.1 Construction

Pumps shall be as per IS 5120-1960 and shall be of the following construction.

<u>Pump</u>	<u>Centrifugal monoblock</u>
1. Casing	Cast iron/cast steel
2. Impeller	Bronze
3. Shaft	High tensile steel
4. Bearings	Heavy-duty ball/roller type
5. Base plate	Cast iron/fabricated M.S
6. Flanges	to ISS 1536/1960
7. Packing	graphited asbestos
8. Motor	T E F C S C induction motor
9. Max speed	1500rpm
10 Starter	As per specifications

Pump and motor shall be mounted on a single bedplate and directly driven through flexible coupling.

3.2 Accessories and Fittings

The following accessories shall be provided with each pump among other standard accessories required: -

- a. Lubrication fittings and sealed piping
- b. Test air vent cocks
- c. The following fittings shall be provided with each pump among other standard fittings required.
 - i) suction and discharge shut off valves (gate type) and discharge check valves.
 - ii) suction and discharge pressure gauges not less than 150mm dia and with appropriate gauge cocks etc.
 - iii) 25mm GI clad drain

3.3 Installation

Pumps shall be installed as per manufacturers recommendations. Pump set shall be mounted on concrete block which in turn is mounted on 75mm isolating fitting.

Pumps set shall be factory aligned. Whenever necessary, site alignment shall be done by competent persons. Before the foundation bolts are grouted and the couplings bolted the bedplate levels and alignment results shall be submitted to the Engineer-in-charge.

3.4 Insulation

Pumps used for chilled water service shall be insulated to the specification laid down for the pipes connected to these pumps.

3.5 Testing

The discharge head and BHP (As measured on the input side) shall be field-tested. Test results shall correspond to the performance curves.

3.6 Painting

After complete installation and testing, pumps accessories and fittings shall be given two coats of approved finishing paint.

The pump shall be acid cleaned, washed and phosphated before painting.

4. PIPING

4.1 Scope

The scope of this section comprises of the supply and laying of chilled water pipes required for this work. On award of the contract, contractor shall prepare detailed working drawings. The drawings provided and scheduled quantities with the tender document are indicative only and are not final.

4.1 Chilled water piping

All piping shall be as follows:-

Pipe size	Materials	Joints & Fittings	Sealing materials
Upto 65mm	GI Tube C-class IS 1239/1958	i) Screwed fittings ii) Unions iii) Screwed flanges	i) Nonhardening ii) Lubricant iii) 3mm 3ply rubber insertion
75mm 200mm	GI tube C class	i) Welded ii) Slip on flanges	i) --- ii) 3mm 3 ply rubber Insertion

Pipe threads shall be to I.S 554/1995 and flanges to I.S. 1536/1960.

All piping shall be black steel/ unless otherwise stated. Pipes shall be new/ and from standard manufacturers. Pipes shall be given one primary coat of red oxide paint before being installed. Pipes shall be slopping towards drain points.

Fittings shall be new and from standard manufacturers.

Fittings shall be malleable casting of pressure ratings suitable for the piping system. Fittings used on welded piping shall be of the weldable type. Flanges shall include bolts, washers etc. as required.

Tee-off connections shall be through reducing tees wherever possible. Otherwise ferrules welded to the main pipe shall be used. Drilling and tapping of the walls of the main pipe shall not be resorted to.

All equipment and valves connection or connections to any other metering pipes, shall be through unions/screwed for G.S for larger diameters or as required for the metering connection. Sufficient number of flanges shall be provided as required.

Gate valves/ Globe valves shall be provided wherever necessary conforming to the following specifications.

Size	Construction	Ends
12mm to 65mm	Gun metal	i) Screwed female
Above 65mm	i) Body- cast iron ii) Spindle: Valve : Bronze Seat : or Wedge : gun Nut etc : metal	ii) Flanged

Valves shall conform to IS : 780/963 and flanges to IS: 1536/1960 or as required. Valves shall have non-rising spindles unless otherwise specified and shall be suitable for 21kg/sq.m test pressure. Tail pieces shall be used where required.

Check valves shall be provided wherever necessary conforming to the following specifications:-

Size	Construction	Ends
12mm to 65mm	Gun metal	i) Screwed female
Above 65mm	Gun metal /C.I	ii) Flanged

Swing check valves shall normally be used in all over services. Lift type valves may be used in horizontal runs. Air release and clean out plugs shall be provided and valve shall be suitable for 21kg/sq.mm test pressure.

Strainers shall be preferably of the approved 'Y' type with C.I or fabricated steel bodies designed to the test pressure specified for the gate valves. Strainers shall be provided with flanges or threaded sockets as required. They shall be designed so as to enable blowing out accumulated dirt and facilities removal and replacement of all screens without disconnection of the main pipe. All strainers shall be provided with equal size isolating gate valves with rising spindles so that the strainers shall be provided on the suction side of each pump and inlet side of heat exchange equipment.

4.2 Piping installation

The contractor on the award of the work shall prepare detailed working drawings, showing the cross-section longitudinal sections, details of fittings, locations of isolating valves drain and air valves etc. They must keep in view the specific openings in buildings and other structures through which the pipes are designed to pass. Piping shall be properly supported or suspended from stands, clamps, hangers etc. as required. The contractor shall adequately design all the bracket, saddles, clamps hangers etc., and to be responsible for their structural integrity.

Pipe supports shall be of steel, adjustable for height and prime-coated with preventive paint and finish-coated black. Where pipe and clamp are dissimilar material, a gasket shall be provided in between.

Spacing of pipe supports shall not exceed the following:-

<u>Pipe (mm)</u>	<u>Spacing (mtr)</u>
3 to 12	1.22
19 to 25	1.83
32 to 150	2.44
150 and above	3.05

Pipe hangers shall be fixed on wall and ceilings by means of metallic rawl plugs or approved shear fastener.

Vertical risers shall be parallel to walls and column lines and shall be straight and plumb.

Risers passing from floor to floor shall be supported at each floor by clamps or collars attached to pipe and with a 12mm thick rubber pad or any resilient material. Where pipes pass through the terrace floor suitable flashing shall be provided to prevent water leakage. Risers shall also have a suitable elbow or concrete pipe support at the lowest point.

Pipe sleeves of 50mm larger diameter shall be provided wherever pipes pass through walls and the annular space filled with felt and finished with retaining rings.

Insulated piping shall be supported in such a manner as not to put under pressure on the insulation. 1.80mm metal sheet shall be provided between insulation and the clamp, saddle or roller extending at least 150mm on both sides of the clamp saddle or roller. Cutouts required sides of the clamp saddle or roller. Cutouts required in the floor slab for taking the various pipes are to be indicated.

Adequate number of clamps, anchors etc for the pipes to be supported shall be provided.

Proper Flanges are to be provided in the chilled water pipe lines at an interval of 18 metres or as instructed by HLL.

All pipes using screwed fittings shall be accurately cut to the required sizes and threaded in accordance with I.S. 554/1955 and burrs removed before laying. Open ends of the piping shall be blocked as the pipe is installed to avoid entrance of foreign matter. Wherever reducers are to be made in horizontal runs eccentric readers shall be used if the piping is to drain freely, in other locations, concentric reducers may be used.

Air valves shall be provided at all high points in the piping system for venting. Valves shall be of the double float type, with G.M/C.I body, balls, rubber seating etc. Air valves shall be of the sizes specified and shall be associated with an equal size gate valve with rising spindles.

<u>Mains</u>	<u>Air valves</u>
Upto 100mm	25mm

Discharge from the air valves shall be piped through an equal sized G.S pipe to the nearest drain or floor was to or as shown.

Drain shall be provided at all low points in the piping system and shall be of the following sizes:

<u>Mains</u>	<u>Drain</u>
Up to 300mm	25mm

Drain shall be provided with gate valves of equal size with rising spindle. Drains shall be piped through equal size PVC pipe to the nearest drain or floor waste. Piping shall be pitched towards drain points.

4.3 **Pressure Gauges**

Pressure gauges shall be not less than 150 mm dia. Dial type and of appropriate range and be complete with shut off gauge cocks etc., duly calibrated before installation. Pressure gauges shall be provided at the following locations.

- i) Supply and return of chillers and condensers
- ii) Inlets and outlets of all other heat exchangers
- iii) Suction and discharge of pumps
- iv) Supply and return of all water lines.

Care shall be taken to protect pressure gauges during pressure testing. Pressure gauges are to be provided wherever necessary for the maintenance and better functioning of the system.

4.4 Thermometers

Thermometers shall be either 150mm dia. Dial or direct reading industrial type of appropriate range duly calibrated before installation.

Thermometers shall be provided at the following locations.

1. Dial type thermometers on supply and return of chillers and condensers.
2. Direct reading industrial type on supply and return of all water lines.

Thermometers are to be provided wherever necessary for the maintenance and better functioning of the system.

4.5 Insulation

Pipes carrying chilled water shall be insulated with 50mm thick thermocole or equivalent preferably rigid sections in two halves and fits snugly on to pipes.

All valves, fittings, strainers etc. shall be insulated to the same thickness as the pipes to which they are connected and applied generally in the manner specified above. Care should be taken to insulate the fittings/valves in manner as to allow the operation of valves / dismantling of pumps without damaging the insulations.

4.6 Vibration Elimination

Piping installation shall be carried out with vibration elimination fittings wherever required.

4.7 Testing

i) Water pipes

All water pipes shall be tested to hydrostatic test pressure of at least one and a half times the maximum operating pressure, but not less than 7kg/sq cm for a period of not less than 12 hours. All leaks and defects in joints revealed during test shall be rectified. No insulation shall be applied to piping until after the completion of the pressure testing.

4.8 Painting

After all the piping has been installed, tested and run for at least 10 days of 8 hours each the piping shall be given a finished coats 3 mils each as follows:-

<u>Service</u>	<u>Flow</u>	<u>Colour</u>
i. Chilled water	Supply/Return	As approved
ii. Refrigerant	Liquid suction discharge	by HLL

The direction of flow of fluid in the pipe shall be visibly marked in white arrows.

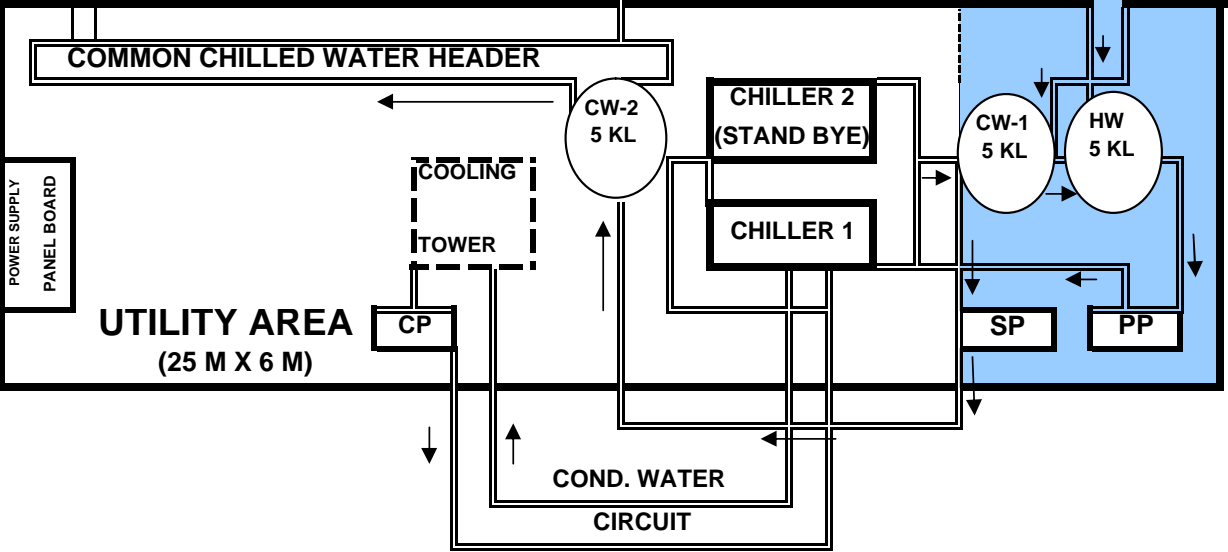
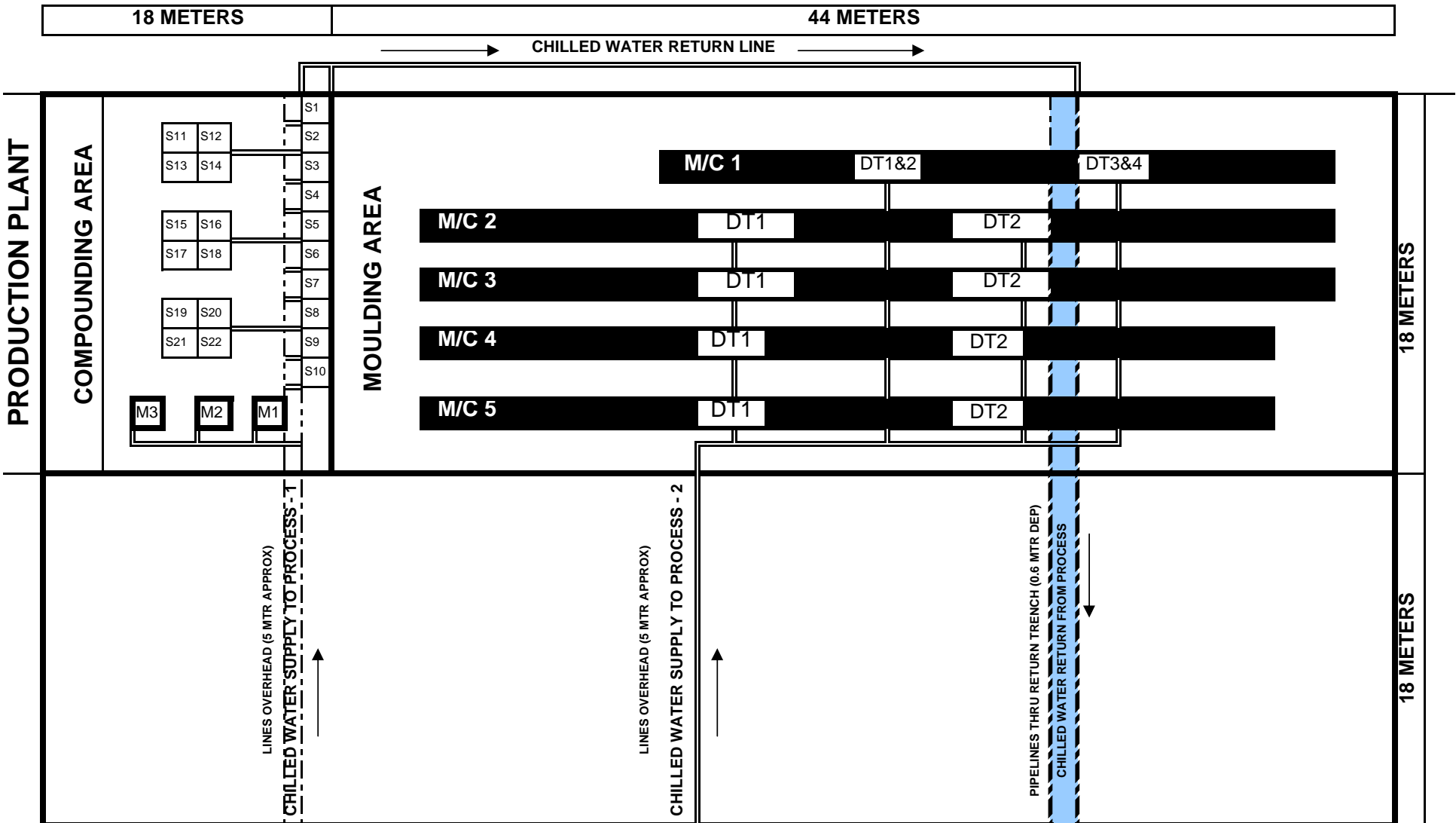
SCHEDULE IV

<u>RECOMMENDED MAKES OF EQUIPMENT/MATERIAL</u>		
SL.NO	DESCRIPTION	MAKE
1	Chiller Unit	Carrier/ Dunham Bush/York/Voltas/Blue Star
2	Pumps	Beacon/ KSB / Stork/Grundfos/Mather Platt
3	Cooling Towers	Himgiri/Paharpur/Nutech
4	Valves	
a	Butterfly Valves	Intervolve/ Univas/ Audco /Castle/L&T
b	Gate/Globe/NRV	Leader/Divine/Castle/Intervolve/Audco/L&T
c	Balancing valves	Castle / Advance/ Audco/L&T
5	Pipes	TATA/JINDAL
6	Insulation	
a	Expanded Polystyrene	Beardsell/Lloyds
b	Fibreglass	Owens Corning/ Up twiga
c	PUF sections /slabs	Beardsell/Sunpreeth/Lloyds
7	Pressure switches/ Flow switches	Danfoss/Indfoss/ Honeywell/ Johnson
8	Thermometers/pressure gauge	Fiebig/ H.Guru/ Warree
9	Motors	ABB/Siemens /Crompton/Bharat bijlee
10	Starters and Switchgear	L&T/Siemens/Legrand
11	Electrical panels	Local make as per standard design with L&T/ ABB/Siemens/ Schneider components
12	Indicating Meters (Digital)	Enercon, Mecco-G, Conzerve, Secure
13	Wires/cables	Finolex/Nicco/Gloster/Legrand

Signature of the Bidder

SCHEDULE V CHILLED WATER SYSTEM LAYOUT FOR IRAPURAM PLANT

DRAWING NO: HLL-IP-IFC-CWS-002



LOCATION DETAILS		
ITEM	DESCRIPTION	LOCATION
CW-1	COLD WELL-1	GROUND FLOOR
CW-2	COLD WELL-2	ON ROOF SLAB (5 MTRS HT.)
HW	HOT WELL (1 NO)	GROUND FLOOR
PP	PRIMARY PUMPS (2 NOS)	GROUND FLOOR
SP	SECONDARY PUMPS (2 NOS)	GROUND FLOOR
CP	CONDENSOR PUMPS (2 NOS)	ROOF SLAB
CT	COOLING TOWER (1 NO)	ON ROOF SLAB (5 MTRS HT.)
DT	DIPPING TANKS - M/C	GROUND FLOOR
M	MIXER TANKS	GROUND FLOOR (4 MTR HT.)
S	SUPPLY TANKS	GROUND FLOOR (4 MTR HT.)

SCHEDULE V**SCHEDULE OF QUANTITIES**

Sub: Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi as per the tender specifications - reg.									
SL NO	DESCRIPTION	QTY	UNIT	SUPPLY PORTIOIN		INSTALLATION PORTION		TOTAL IN RS	
				UNIT RATE	AMOUNT	UNIT RATE	AMOUNT	UNIT RATE	AMOUNT
1	Water cooled Screw chiller unit - 70TR Capacity (Minimum)	2	sets						
	Water cooled Screw chiller - 70TR (Minimum) Capacity with compressor, suction discharge, stop valves, HP-LP cutouts, oil pressure failure switch, water cooled condenser, cooler, chiller with gas coil, necessary valves and accessories with necessary instrumentation, gauges all as specified and suitable for operation with 415/440, 50 c/s, 3 phase AC supply with built in starter, controls, lubrication system, Safety controls etc, all as specified including the following.								
	i Automatic capacity control.								
	ii Providing all interconnections, refrigerant piping, fittings and valves to interconnect the compressor, condenser, chiller and necessary gauges thermometer etc.								
	iii Frame for mounting the compressor, condenser and chiller to form a compact package chiller unit.								
	iv Providing complete initial charge of lubricants and R134a refrigerant								
	v Providing microprocessor based automatic capacity controller and other parameters as required.								
vi With soft starter in the compressor motors									
vii Suitable Chiller Electrical Control Panel with PLC to control all the operations of the chiller system including electrical and instrumentation controls for power, sequence and protection, VFD for motor drives, interlocks complete with indicating lamps etc. Only incoming power supply will be provided by HLL.									
2	CHILLED WATER PUMP SET (PRIMARY PUMPS)	2	no						
	Supply, installation, testing and commissioning of TEFC motors, base plates, cushy foot vibration isolators, local push button start/stop stations and all other accessories complete in all respects and of the following capacities with aluminium cladding.								
	Chilled Water pump								
	1. Working								
	Flow rate : 170 US GPM or as per the machine quoted Head : 20 FT Motor : 3 HP or as required with modification in pump panel								
3	CHILLED WATER PUMP SET (SECONDARY PUMPS)	2	no						
	Supply, installation, testing and commissioning of TEFC motors, base plates, cushy foot vibration isolators, local push button start/stop stations and all other accessories complete in all respects and of the following capacities with aluminium cladding.								
	Chilled Water pump								
	1. Working								
	Flow rate: 200 US GPM or as per the machine quoted Head : 80 FT Motor : 7.5 hp or as required with modification in pump panel								
4	CONDENSER WATER PUMP SET	2	no						
	Supply of uninsulated horizontal split casing centrifugal pumps for condenser water circulation with TEFC motors, base-plates, cushy foot vibration isolators, local push button start/stop stations and all other accessories, complete in all respects and of the following capacities.								
	Condenser Water pump								
	Flow rate : 240 US GPM or as per the machine quoted Head : 40FT Motor : 5 hp or as required with modification in pump panel								

SCHEDULE V**SCHEDULE OF QUANTITIES**

Sub: Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi as per the tender specifications - reg.									
SL NO	DESCRIPTION	QTY	UNIT	SUPPLY PORTIOIN		INSTALLATION PORTION		TOTAL IN RS	
				UNIT RATE	AMOUNT	UNIT RATE	AMOUNT	UNIT RATE	AMOUNT
5	CHILLED WATER BUFFER TANKS	3	no						
	Buffer tanks, preferably cylindrical shaped, suitably insulated for storage of chilled water supply (2 tanks- 1 overhead) and chilled water return (1 tank) complete with suitable interconnections, float valve, gauge glass, drain, overflow and make up connection with gate valves and vent piping, wherever required.								
	Capacity: 5 KL MOC: Mild Steel, 5 mm thick, capable to withstand working pressure upto 8 Kg/cm ² , 100 mm thick EPS insulation with 24G Aluminium Cladding complete								
6	COOLING TOWER	1	no						
	Supply, installing, testing and commissioning of induced draft FRP cooling tower suitable for the total capacity of the chillers offered, complete with Fan having TEFC induction motor, starter, Makeup, quick fill and drain connections with valves, float switch, PVC fills, Ladder, drift eliminator, Bird protector, local starter panels etc.								
	Capacity : 100 TR (or above as per design); Water Flow: 315 US GPM Motor : 2.5 KW (or as per design) Spare cooling tower motor 2.5KW (Capacity of the motor shall be to suit Cooling tower Model)								
7	CHILLED WATER PIPING GI "C" CLASS)								
	Piping to machines as per Piping diagram HLL-IP-IFC-CWS-002								
A)	Insulated chilled water Class 'C' Galvanised iron pipes of make TATA/JINDAL as per IS 1239 Part I&II for pipes upto 200mm dia outside the building and in trenches, complete with bends, tees, elbows, flanges, bolts, nuts, seals, flow indicators, supports, hangers, vibration eliminators, painting with insulation etc.								
	a) 8.0" - (200mm dia)	18	mtr						
	b) 6.0" - (150mm dia)	210	mtr						
	c) 5.0" - (125mm dia)	90	mtr						
	d) 4.0" - (100mm dia)	240	mtr						
	e) 2 1/2" - (65 mm dia)	120	mtr						
	f) 2.0" - (50mm dia)	240	mtr						
	g) 1 1/2" - (40mm dia)	60	mtr						
	h) 1" - (25mm dia)	180	mtr						
	i) 3/4" - (20mm dia)	30	mtr						
	B)	Butterfly valves complete with flanges, bolts, nuts, seals, flow indicators, supports, gaskets, insulation, painting etc. (Valves in the plant room shall be cladded with aluminium sheets similar to piping)							
a) 8.0" - (200mm dia)		6	no						
b) 6.0" - (150mm dia)		10	no						
c) 5.0" - (125mm dia)		10	no						
d) 4.0" - (100mm dia)		24	no						
e) 2 1/2" - (65 mm dia)		10	no						
f) 2.0" - (50mm dia)		10	no						
g) 1 1/2" - (40mm dia)		10	no						
h) 1" - (25mm dia)		10	no						
i) 3/4" - (20mm dia)		10	no						
C)		SS Ball Valve, Screwed ends, ISI marked, Make: Audco/L&T of following sizes:							
	a) 4.0" - (100mm dia)	12	no						
	b) 2 1/2" - (65 mm dia)	20	no						
	c) 2.0" - (50mm dia)	6	No						
	d) 1 1/2" - (40mm dia)	24	No						
	e) 1" - (25mm dia)	80	No						
	f) 3/4" - (20mm dia)	24	No						

SCHEDULE V**SCHEDULE OF QUANTITIES**

Sub: Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi as per the tender specifications - reg.									
SL NO	DESCRIPTION	QTY	UNIT	SUPPLY PORTIOIN		INSTALLATION PORTION		TOTAL IN RS	
				UNIT RATE	AMOUNT	UNIT RATE	AMOUNT	UNIT RATE	AMOUNT
D)	Non-return valves within the building complete with flanges, bolts, nuts, seals, flow indicators, supports, gaskets, insulation, painting etc. (Valves in the plant room shall be cladded with aluminium sheets similar to piping)								
a	8.0" - (200mm dia)	2	no						
b	6.0" - (150mm dia)	4	no						
c	5.0" - (125mm dia)	2	no						
d	4.0" - (100mm dia)	6	no						
E)	Y-strainers within the building complete with flanges, bolts, nuts, seals, flow indicators, supports, gaskets, insulation, painting etc. (Valves in the plant room shall be cladded with aluminium sheets similar to piping)								
a	150mm (6") dia	2	no						
b	125mm (5") dia	2	no						
c	100mm (4") dia	2	no						
d	65 mm (2 1/2") dia	4	no						
e	50 mm (2") dia	6	no						
F)	SITC of the 6" dial type pressure Gauge with stainless steel siphon with cock	10	no						
G)	SITC of the 6" dial type thermo meters	10	no						
8	Supply and installation of MS strucutural supports, cable trays, chequered plates using MS angles, channels, beams, flats of adequate size finished and painted with one coat of zinc chromate primer and two coats of black enamel paint.	4000	Kg						
TOTAL AMOUNT IN RS									
APPLICABLE TAXES									
GRAND TOTAL IN RS									
(IN WORDS)									
I agree to provide the item as per the above schedule at the rate quoted by me as above									
DATE				SIGNATURE OF THE TENDERER					

HLL LIFECARE LIMITED
(A Government of India Enterprise)
P.B.NO.2, PEROORKADA.P.O,
THIRUVANANTHAPURAM - 695 005
KERALA, INDIA

TECHNICAL BID

SUPPLY, INSTALLATION, TESTING AND
COMMISSIONING OF CHILLED WATER SYSTEM

FOR
NEW CONDOM MANUFACTURING FACILITY
AT RUBBER PARK, IRAPURAM, KOCHI

IFB Ref: No.HLL/IP/IFC/CWS/2013

Date: 03-10-2013

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PREQUALIFICATION REQUIREMENTS

1. The Bidder should have minimum 5 years experience in the relevant field.
2. Tenderer should have satisfactorily completed at least two similar works of value Rs 50 Lakhs or above in the past three years.
3. Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least Indian Rupees (INR) 50 Lakhs.
4. Power of Attorney, in case an authorized representative has signed the tender.
5. The duly signed acceptance form confirming that all terms & conditions, technical specifications, drawings & volume of job are understood by the bidder. Certificate that bid is in total conformity with the specifications and terms and conditions mentioned in the bid document and certificate on period of validity (sheet enclosed)
6. Deviation if any, giving reasons for the deviation.
7. Even if the bidder meets the above qualifying criteria, they are subject to being disqualified if they have:

Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.

Note: - HLL does not bind itself to accept the lowest or any tender, and reserves to itself the right to accept or reject any or all the tenders, either in whole or in part without assigning any reason for doing so.

APPLICATION FOR PREQUALIFICATION

Name of Work: Supply, Installation, Testing and Commissioning of Chilled water system for new condom manufacturing facility at Rubber Park, Irapuram, Kochi – reg.

A. Name of Contractor/Firm/Company:

1. Postal address:

2. Telephone No.: FAX : E-Mail :

3. Year of commencement of Contract/Year of establishment of firm/Company :

B. In the case of Firm

1. Whether proprietary or partnership firm:

2. Name of Managing Partner:

3. Name of other partners:

Note: Attested copy of partnership deed to be enclosed

C. In the case of Company

1. Whether Private Limited or Public Limited Company:

2. Name of Managing Director:

3. Names of other Directors:

Note: Attested copy of Company Registration deed to be enclosed.

D. Minimum 5 years experience in the relevant field.

Please submit a brief profile giving the details of similar works (including client name, order value etc.) successfully completed in the last 5 years.

E. Bidder should have satisfactorily completed at least two similar works of value Rs 50 Lakhs or above in the past three years.

Enclose completion certificates from the clients for 2 similar works successfully completed in last 3 years. Note: Details to be furnished in **Annexure I**

F. Total number of ongoing installations or orders in hand for similar works.

Note: Details to be furnished in **Annexure II**

G. Has the Contractor/ Firm/Company ever been black listed by the Govt. /or the registering authority. (Yes/ No)

a. If so, give the period and details.

H. Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least INR 50 Lakhs.

a. Annualized turn over of the Contractor/Firm/Company in the last 3 years ending 31.03.2013

1.	2010-2011:	INR.
2.	2011-2012:	INR.
3.	2012-2013:	INR.

Note: Details to be furnished in **Annexure III**

I. Details of organization:

1. Technical personnel: i) No. of Graduate Engineers: ii) No. of Diploma Holders:

2. Non Technical Management

(Details to be enclosed in **Annexure IV**)

J. Technical Specification: in **Annexure V** (filled and enclosed)

K. Completion Period: in **Annexure VI** (filled and enclosed)

L. Acceptance Form in **Annexure VII**

M. CERTIFICATE as per **Annexure VIII**

I/We hereby confirm that the details given in the application form and Annexure I to Annexure VIII are correct to the best of my/our knowledge. I /We have no objection, in Owner (HLL Lifecare Limited) contacting any of our clients for reference.

Place:
Date:

Signature
Name and address of the Party

ANNEXURE - I

DETAILS OF ORDERS FOR SIMILAR WORKS SUCCESSFULLY COMPLETED DURING THE LAST 3 YEARS (RS 50 LAKHS & ABOVE)				
S. No.	Name of Client with full address, telephone numbers and nature of work	Order details such as quantity etc.	Value of works completed	Period of Completion with dates (in months)

NOTE:

TENDERER SHOULD HAVE SATISFACTORILY COMPLETED AT LEAST TWO SIMILAR WORKS OF VALUE RS 50 LAKHS OR ABOVE IN THE PAST THREE YEARS.

SIGNATURE OF BIDDER

ANNEXURE - II

TOTAL NUMBER OF ONGOING INSTALLATIONS OR ORDERS IN HAND FOR SIMILAR WORKS			
S. No.	Name of Client with full address, telephone numbers and nature of work	Order details such as quantity, completion time etc.	Value of works

SIGNATURE OF BIDDER

ANNEXURE III

(ENCLOSE DETAILS OF ANNUALISED TURN OVER OF THE CONTRACTOR/FIRM/COMPANY IN THE LAST 3 YEARS ENDING 31-03-2013)

2010-2011: INR.

2011-2012: INR.

2012-2013: INR.

(Enclose audited Balance sheets in proof for the above period)

SIGNATURE OF BIDDER

Note: Average annual financial turn over of the bidder during the last 3 years, ending 31st March of the previous financial year, should be at least INR 50 Lakhs.

ANNEXURE- IV

DETAILS OF ORGANIZATION

Sl. No	Name & Postal Address	Date of Birth	Qualification	Total experience in years	Name of organization served showing position held and period of service in each position
1.	A.ENGINEERING PERSONNELS				
2					
3.					
4					
5.					
6					
1.	B. DIPLOMA HOLDERS/ ITI PERSONNEL				
2					

Attach an organization chart. Also mention the no. of engineering/technical personnel you will engage for the satisfactory completion of the tendered work.

SIGNATURE OF THE BIDDER WITH SEAL

ANNEXURE V

(ENCLOSE DETAILED TECHNICAL SPECIFICATION OF CHILLED WATER SYSTEM AGAINST THIS TENDER, INCLUDING THE DIMENSION OF THE MACHINES, THEIR UTILITY REQUIREMENTS, DETAILED MACHINE CATALOGUES, WARRANTY PERIOD ETC. COMPLETE)

NOTE: THE BIDDER SHOULD ALSO INDICATE DEVIATIONS, IF ANY FROM THE TENDER SPECIFICATIONS

SIGNATURE OF THE BIDDER WITH SEAL

ANNEXURE VI

COMPLETION PERIOD

SIGNATURE OF THE BIDDER WITH SEAL

ANNEXURE VII

ACCEPTANCE FORM

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

From

To

EXECUTIVE DIRECTOR (INTERNAL PROJECTS)
HLL LIFECARE LIMITED PEROORKADA,
THIRUVANANTHAPURAM – 695 005
KERALA, INDIA

Dear Sir,

I / We, hereby offer to supply/install/testing/validate/commission as detailed in schedule hereto or such portion thereof as you may specify in the acceptance of Bid at the price given in the price bid and agree to hold this offer open for **90 Days** from the date of bid opening prescribed by the Purchaser. I/We have understood the terms and conditions mentioned in the invitation for bid and Conditions of Contract furnished by you and have thoroughly examined the specifications quoted in the bid document hereto and are fully aware of the nature of the scope of work required and my/our offer is to comply strictly in accordance with the requirement and the terms and conditions mentioned above.

The following pages have been added to and form part of this bid.

Yours faithfully,

SIGNATURE OF THE BIDDER WITH SEAL

ANNEXURE VIII

CERTIFICATE

I / we hereby confirm that the information given with this bidding document is correct. If, at any stage, it is found to be incorrect, I / we understand that the contract will be liable to be terminated and action could be taken against me/us by the Company for damages.

SIGNATURE (S) OF BIDDER WITH SEAL

(To be submitted in the letter pad of the firm indicating full name and address, telephone & fax numbers etc.)

CHECK LIST FOR TECHNICAL BID

S. No.	Item	Yes/No	Remarks
1	Enclosed EMD as prescribed in the tender		
2	Application of Pre-qualification duly filled, signed and sealed by the tenderer		
3	Enclosed completion certificates from the clients for the satisfactory completion of similar works of value Rs 50 Lakhs or above in the past three years – Annexure I		
4	Enclosed details of ongoing installations or orders in hand for similar works – Annexure II		
5	Enclosed Turnover Details – Annexure III		
6	Enclosed Details of Organization – Annexure IV		
7	Enclosed Technical Specification including Catalogue of machines – Annexure V		
8	Attached Completion Period – Annexure VI		
9	Enclosed signed and sealed Acceptance Form – Annexure VII		
10	Enclosed Certificate signed and sealed – Annexure VIII		

SIGNATURE OF THE BIDDER WITH SEAL