# INDEX INSTRUCTION TO BIDDERS

Clause No. **Descriptions Instruction to Bidders** Α. **GENERAL** 1.0 & 1.1 Description of Works 1.2 The Principle Employer / Employer 1.3 Time of completion Information to be submitted 2.0 3.0 Cost of Bidding 4.0 Site Visit **Bid Documents** В. 5.0 Content of Bid Documents 6.0 Clarification on Bid Documents 7.0 Amendment of Bid Documents **Preparation of Bids** C. 8.0 Language of Bid 9.0 Documents Comprising the Bid 10.0 **Bid Prices** 11.0 **Bid Validity** 12.0 & 13.0 **Bid Security** Format and Signing of Bid 14. D. Submission of Bid 15.0 Sealing, Marking & Submission 16.0 Deadline for Submission of Bids 17.0 Late Bids

Clause No.	
E.	Bid Opening and Evaluation
19.0	Bid Opening
20.0	Process to be Confidential
21.0	Clarification of Bids
22.0	Determination of Eligibility & Responsiveness
23.0	Correction of Errors
24.0	Evaluation and Comparison of Bids
F.	Award of Contract
25.0	Award Criteria
26.0	Engineer's Right to Accept any Bid, to Reject any or all Bids
27.0	Notification of Award
28.0	Signing of Agreement
29.0	Performance Security
	SPECIFIC CONDITIONS OF CONTRACT Specific Conditions of Contract
1.0	General
2.0	Definitions
3.0 & 4.0	Insurance of Works
5.0	Certificates and Payments
6.0	Settlement of Disputes - Arbitration
7.0	Address
8.0	Addition to clause 34.1 of GCC

9.0	Taxation
10.0	Co-ordination Meeting
Clause No.	
11.0	
11.0	Special Applications
11.1	Site Information
11.2 a) b)	Special Instruction Statutory Requirements
11.3.1	Contractors Working Area
11.3.2	Contractors Temporary Structures
11.3.3	Procurement of Various Materials
11.3.4	Water Supply & Power Supply
11.3.5	Telecommunications
11.3.6	Temporary Fencing
11.3.7	Testing of Materials
11.3.8	Approval of Samples prior to use
11.4	Design and shop Drawings/ Working Drawings
11.5	As Made Drawings and Operation & Maintenance Manual
11.6	Progress Photographs
11.7	Programme of Work and Progress Report
11.8	Metric Units
11.9	Field Materials Testing
12.0	Rates/Prices
13.0	Compliance for Statutory Obligations
14.0	Unpriced Bids
15.0	Extra / Substituted item

16.0	Details required along with submission of running/final bills
17.0	Guarantee and Defects Liability Period
18.0	Comprehensive Annual Operation and Maintenance Services

## ADDITIONAL SPECIFIC CONDITIONS OF CONTRACT

Clause No.	Descriptions
(A)	RELATING TO CIVIL & PLUMBING WORKS
1.0	General General
2.0	Scope of Contract
3.0	Contract Drawings
4.0	Shop Drawings
5.0	Samples and Catalogues
5.2	Approval of Materials
6.0	Material and Equipment
7.0	Conformity with Statutory Acts, Rules and Standards
8.0	Deleted
9.0	Manufacturer's Instructions
10.0	Training and Operating Instructions
11.0	Inspection and Testing
12.0	Test Certificates
13.0	Performance Guarantee
14.0	Quiet Operation and Vibration
15.0	Accessibility

Clause No.	Descriptions
16.0	Completion Certificate
17.0	Completion Drawings
18.0	Rates
19.0	Check List
20.0	Repairs
21.0	Control System
22.0	Reference Points
23.0	Licence & Permits
24.0	Cutting and making good
<b>(B)</b>	RELATING TO ELECTRICAL INSTALLATIONS
1.0	General
2.0	Regulations and Standards
3.0	Rates
4.0	Completeness of Bid
5.0	Works to be done by the Contractor
6.0	Tools for Handling & Erection
7.0	Terminology & Scope
8.0	Measurement
9.0	Drawings
10.0	Conduit/ Trunking Layout
11.0	Shop Drawings

Clause No.	Descriptions
12.0	Manufacturer's Instruction
13.0	Materials & Equipment
14.0	Scale
15.0	Brochures & Data
16.0	Approval of Shop Drawings
17.0	Approval of Materials
18.0	Inspection, Testing and Inspection Certificate
19.0	Schedule & Manner of Operation
20.0	Performance Guarantee
21.0	Completion Drawings ( As Built Drawings )
22.0	Confirmation of Quantities
23.0	Terms of Payment
24.0	Training of Personnel
(C)	RELATING TO HVAC WORKS
1.0	General
2.0	Scope of contract
3.0	Stores and materials
4.0	Supply of Equipment
5.0	Shop Drawings
6.0	Completion Drawings
7.0	Operation and Service Manuals
8.0	Inspection at Contractor's Premises

Clause No.	Descriptions
9.0	Sub - Contracting
10.0	Materials Submittals
11.0	Samples and Prototypes
12.0	Testing and Commissioning
13.0	Taking Over
14.0	Operation of Plant
15.0	Guarantee and Defects Liability Period
16.0	Measurement of Works
17.0	Variation in Quantities
18.0	Maintenance
19.0	Performance Guarantee
20.0	Painting
21.0	Safe Custody and Storage
22.0	Terms of Payment
23.0	Training of Personnel
ANNEXURE A	Form of Agreement
ANNEXURE B	Proforma for Performance Bank Guarantee
ANNEXURE C	Proforma for Advance Bank Guarantee
ANNEXURE D	Proforma for Bid Security Bank Guarantee

## **INSTRUCTIONS TO BIDDERS**

#### A. General

#### 1.0 Description of Works

The site is for "HVAC works of Test Research Laboratory Building, Construction of plant room & associated works and rectification of defects if any during the defect liability period" at NATIONAL INSTITUTE OF MALARIA RESEARCH, Dwarka, New Delhi.. The Scope of work comprises of Supply, installation, testing & commissioning of HVAC works of Test Research Laboratory Building, Construction of plant room buildings and associated works and rectification of defects if any during defect liability period, obtaining approval from all statutory bodies if any from the concerned authorities.

#### 1.2 The Employer

NATIONAL INSTITUTE OF MALARIA RESEARCH, New Delhi shall be the principal Employer / employer / owner for the Development and "HVAC works of Test Research Laboratory Building, Construction of plant room & associated works and rectification of defects if any during the defect liability period. All documents relating to Labour License, submission of drawings to statutory authority for obtaining necessary clearance etc is to be signed/endorsed by principal employer/owner.

1.3 In these documents wherever the word Tender/ Tenderer/ Tendering has been used. The same may be considered synonymous with Bid/ Bidder/ Bidding.

#### 1.4 Time for Completion

The successful Bidder shall complete the Works within **5 Months including commissioning and Handing over** from Engineer's order to commence the Work.

#### 2.0 Information to be submitted

- **2.1** Bids submitted shall include the following information:
  - (a) Copies of original documents defining the constitution, legal status, place of registration and principal place of business of the company or firm
  - (b) A work plan clearly bringing out how the Bidder proposes to carry out the work to achieve the quality and the time schedule

The work plan shall clearly spell out with specific details the following:

- Detailed programme in the form of a PERT/CPM network clearly bringing out details of start & completion of all important activities and also programme showing material & labour resources related to the above PERT/CPM network.
- ii. List of equipment along with details proposed to be used on the Works.
- iii. List and bio data of Engineers and other important staff members proposed to be employed on the Works.

iv. Details of new and used shuttering proposed to be employed on the Works.

#### 3.0 Cost of Bidding

The Bidder shall bear all costs associated with the preparation and submission of his Bids and "The Employer" will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

#### 4.0 Site Visit

The Bidder is advised to acquaint himself with the job involved, visit the Site & examine soil conditions, climatic conditions, labour, power, water, material availability, transport and communication facilities, environmental regulations, laws and bye-laws of Statutory bodies of Govt. of Jammu & Kashmir and the Govt. of India and collect all information that will be necessary for preparing the Bid and entering into a Contract.

The cost of visiting the Site and collecting information for the purpose of submission of the Bid shall be to the Bidder's account.

The Bidder and any of his personnel or agents will be granted permission by the Employer to enter upon the Site for the purpose of such inspection, but only upon the express condition that the Bidder, his personnel or agents will release and indemnify the Employer and Employer's Personnel and agents from and against all liability in respect thereof and will be responsible for personnel injury (Whether fatal or otherwise), loss of or damage to property and any other loss, damage, costs and expense however caused, which, but for the exercise of such permission would not have arisen.

#### B. Bid Documents

#### 5.0 Content of Bid Documents

5.1 The Bid Documents comprise the following:

Volume I - Prequalification

Volume II - General Conditions of Contract

Volume III = Comprising :

- Instructions to Bidders

- Specific Conditions of Contract

- Additional Specific Conditions of Contract relating to

(a) Civil, Public Health works

(b) Electrical works.

(c) HVAC works.

Sample Forms of Securities

Sample Form of Agreement

Volume IV = Technical Specifications

Volume V = Bill of Quantities

Volume VI = Tender Drawings

5.2 The Bidder is expected to examine carefully all instructions, conditions, forms, terms, specifications and drawings in the Bid documents. Failure to comply with the requirements of the Bid Documents will be at the Bidder's own risk.

Bids, which are not substantially responsive to the requirements of the Bid documents, will be rejected. Bidders are requested to clear their queries before submission of bids and submit bids without conditions.

#### 6.0 Clarification on Bid Documents

A prospective Bidder requiring any clarifications on the Bid documents may notify the Engineer in writing or by telex or cable at the Engineer's mailing address indicated in the Bid documents. A meeting of the prospective Bidders shall be held at which the Engineer will respond to any request for clarification which he receives within two weeks of the first date of the issue of the Tenders. Written copies of the Engineer's response (including an explanation of the query but without identifying the source of the inquiry) will be sent to all prospective Bidders who have received the Bid documents.

#### 7.0 Amendment of Bid Documents

- 7.1 At any time prior to the dead line for submission of Bids, the Engineer may for any reason, whether at his own initiative or in response to a clarification requested by the prospective Bidder, modify the Bid documents by amendment.
- 7.2 The amendment will be sent to all prospective Bidders who have received the Bid documents, to arrive not later than 3 days prior to the original or extended deadline for submission of Bids, in writing or by telex or cable and will be binding upon them. Prospective Bidders should promptly acknowledge receipt thereof by telex or cable to the Engineer.
- 7.3 In order to afford prospective Bidders reasonable time in which to take an amendment into account in preparing their Bids, the Engineer may, at his discretion, extend the deadline for the submission of Bids.

## C. Preparation of Bids

#### 8.0 Language of Bid

8.1 The Bid prepared by the Bidders and all correspondence and documents relating to the Bid exchanged by the Bidder and the Engineer shall be written in the English Language.

#### 9.0 Documents comprising the Bid

- 9.1 The Bid to be prepared by the Bidder shall comprise of the following: the Bid and Appendix thereto, the Bid Security, the Bill of Quantities; the Schedules of Supplementary information, and any other materials required to be completed and submitted in accordance with the instructions to Bidders embodied in these Bid documents. The Forms, Bill of Quantities and Schedules provided in these Bid documents shall be used without exception.
- 9.2 All documents issued for the purpose of Bidding as described in Clause 5.1 and amendments issued in accordance with Clause 7, shall be deemed incorporated in the Bid. Bid Documents prepared and submitted in accordance with Clause 14 and 15 shall be returned by Bidders to the Employer along with the submission of the Bid.

### 10.0 Bid Prices

- The Bidder shall fill the rates against each item of Bill Of Quantities both in words and figures in the blank spaces provided in the respective columns. Item for which no rate or price is entered by the bidder will not be paid for by the employer when executed and shall be deemed covered by the others rates and prices in the bill of quantities. Correction, if any, shall be made by crossing out, initialling, dating, stamping and rewriting.
- All duties, taxes including works contract tax and other taxes, duties and levies payable by the Contractor under the Contract including Contractors profit and over heads etc. or for any other cost shall be included in the rates and prices and the total amount of Bid submitted by the Bidder. The evaluation and comparison of Bids by the Engineer shall be made accordingly.
- The rates and prices quoted by the Bidder shall be fixed for items complete in all respect for the duration of the Contract and not subject to adjustment on any account except as otherwise provided in the conditions of Contract.
- The Bidder shall fill his most competitive rates in the first instance as no negotiations shall be made after opening of the Tenders except if required with the lowest Bidder.

#### 11.0 Bid Validity

- 11.1 The Bid shall remain valid and open for acceptance for a period of *120 days* from the last date fixed for receiving the same.
- In exceptional circumstances prior to expiry of the original Bid validity period, the Engineer may request the Bidder for a specified extension in the period of validity. The request and the responses thereto shall be made in writing or by cable or telex. A Bidder may refuse the request without forfeiting his Bid Security. A Bidder agreeing to the request will neither be required nor permitted to modify his Bid, but will be required to extend the validity of his Bid Security correspondingly.

#### 12.0 Bid Security

- The Bidder shall furnish, as part of his Bid, a Bid Security of the amount of **Rs8.00 lacs** ( **Rs. eight lacs only**) No deviation shall be permitted from this.
- The Bid Security shall be in the form of a Demand Draft/Pay Order/Bank Guarantee (validity 120 days from last date fixed for receiving the tender) in favour of M/s HSCC(India) Ltd., Plot-6(A), Block-E, Sector-I, NOIDA, UP-201 301 from any Nationalised bank/Scheduled bank.
- 12.3 Any Bid not accompanied by an acceptable Bid Security will be straightaway Rejected.
- The Bid Securities of unsuccessful Bidders will be returned as promptly as possible but not later than 30 days after the expiration of the period of Bid validity prescribed by the Employer.
- The Bid Security of the successful Bidder will be returned upon the Bidder executing the Contract and furnishing the required Performance Security.
- 12.6 The Bid Security may be forfeited
  - a) If a Bidder withdraws his Bid during the period of Bid validity.
  - b) In the case of successful Bidder, if he does not:

- i) enter into the Contract, or
- ii) furnish the necessary Performance Security
- iii) agree to arithmetic corrections made as per terms of Bid documents.
- 13.0 No interest will be payable by the Engineer on the Bid Security amount cited above.

#### 14.0 Format and Signing of Bid

- The Tender shall be filled & signed only by the firm/ corporation/joint venture in whose name the Tenders have been issued. The Bid shall be typed or written in indelible ink and duly signed by a person or persons duly authorised to being the Bidder to the Contract. Proof of authorization shall be furnished in the form of written Power of Attorney, which shall accompany the Bid.
- All pages of Bid shall be initialled and stamped by the person signing the Bid where entries or amendments have been made.
- The complete Bid shall be without alterations interlining and erasures except those to accord with instruction issued by the Engineer or as necessary to correct errors made by the Bidder in which case such correction shall be initialled by person signing the Bid.

#### D. Submission of Bid

#### 15.0 Sealing, Marking & Submission

- The Bid shall be submitted in accordance with the procedure detailed herein. Specified documents shall be enclosed in envelope of appropriate size each of which shall be sealed.
  - (i) Envelope No. 1 : Bid Securities as indicated in Clause 12 of these Instructions to Bidders.
  - (ii) Envelope No. 2 : Shall contain covering letter and the other Bid documents duly signed including the following :
    - (a) Power of attorney of person authorised to sign the Bid.
    - (b) Prequalification document ( Volume I ) and PQ related all supporting documents
    - (c) Original Bid documents (all pages) & tender drawings (Volume II, III, IV & VI) duly signed and stamped.
    - (d) Documents regarding constitution of Bidder as indicated in Clause 2.1 of these Instructions to Bidders.
    - (e) Certificate of Registration.
    - (f) Construction Schedule and Schedule for man power to be deployed at Site.
  - (ii) Envelope No. 3: Shall contain only the Bill of Quantities and rates/prices (Volume V) duly filled in and signed and stamped without any conditions whatsoever. Bids containing any conditions in Envelope No. 3 are liable to be summarily rejected.

The Contractor must fill up price against each item of Bill of Quantities (Volume V) both in words and figures in the blank spaces provided in the respective columns. The rates written in words shall prevail in case of any variation between the rates mentioned in figure and words.

Please note that the price should not be indicated in any of the documents enclosed in Envelope no. 1&2. Non-compliance shall entail rejection of the Bid.

- 15.2 The Bidder shall seal the Bid.
- 15.3 All the above three envelopes shall be sealed in a fourth envelope and addressed to

The Chief. General Manager (P & BD), HSCC (India) Ltd., Plot - 6 (A), Block - E, Sector - I, Noida, Uttar Pradesh - 201 301.

15.4 All the above envelope shall bear the following identification:

Name of work: "HVAC works of Test Research Laboratory Building, Construction of plant room & associated works and rectification of defects if any during the defect liability period" at National Institute of Malaria Research, New Delhi Tender number, Due date and Time.

- All the envelopes shall indicate the name and address of the Bidder to enable the Bid to be returned unopened, if required.
- 15.6 All recipients for the purpose of submitting a Bid shall treat the contents of the documents as private and confidential.

#### 16.0 Deadline for Submission of Bids

- 16.1 Bids must be received by the Engineer, HSCC (India) Ltd., not later than 15.00 hours of the designated date.
- The Engineer/Employer may, at his discretion, extend the deadline for submission of Bids through the issuance of an amendment in accordance with Clause 7 in which case all rights and obligations of the Employer and the Bidders previously subject to the deadlines shall thereafter be subject to the new deadline as extended.

#### 17.0 Late Bids

Any Bid received by the Employer/Engineer after the prescribed deadline for submission will liable to be rejected and will be returned unopened to the Bidder.

#### 18.0 Modification and Withdrawal of Bid

- The Bidder may modify or withdraw his Bid after Bid submission, provided that modification or notice of withdrawal is received in writing by the Engineer prior to the prescribed deadline for submission of Bids.
- The Bidder's modification or notice of withdrawal shall be prepared, sealed, marked and despatched in accordance with the provisions for the submission of Bids. Notice of withdrawal may also be sent by telex or cable but shall be followed by a signed confirmation copy, postmarked not later than the deadline for submission of Bids.
- 18.3 No Bid may be modified subsequent to the dead line for submission of Bids.

- No Bid may be withdrawn in the interval between the deadline for submission of Bids and the expiration of the period of validity of the Bid specified. Withdrawal of a Bid during this interval may result in the forfeiture of the Bid Security.
- Subsequent to the expiration of the period of validity of Bids prescribed in the Bid documents, a successful Bidder who has not been notified by the Engineer of the Award of the Contract may withdraw his Bid without penalty.

## E. Bid Opening and Evaluation

#### 19.0 Bid Opening

19.1 Bids shall then be opened in the office of Engineer, HSCC (I) Ltd., at Plot - 6 (A), Block - E, Sector - I, Noida, Uttar Pradesh - 201 301, half an hour after the prescribed time for Bid submission in presence of the Bidders' representatives who may wish to be present.

Envelope No. 1 : Shall be opened first If the Bid Security is not found as prescribed, the Bid shall be summarily rejected.

The bidders who are not prequalified, their bids shall not be opened further.

Envelope No. 2 : Shall be opened on the same day. Bids of parties who do not accept the conditions laid above in the Bid documents are also liable to be rejected.

- 19.2. The Engineer will examine the prequalification document and technical bids to determine whether they are complete, whether the Bids have been properly signed and stamped and whether the Bids are generally in order.
- 19.3 Telegraphic/ Fax offer will be treated as defective, invalid and rejected. Only detailed complete Bids received prior to the closing time and date of the Bids will be taken as valid.
- The Bidder's names, general technical details, the presence of the requisite Bid Security and such other details as the Engineer, at his discretion may consider appropriate will be announced at the Bid opening.

Envelope No. 3 : Shall contain the sealed price Bid. Whose bid is found to be generally in order and substantially responsive shall be opened either at the Bid opening or at a subsequent date to be intimated in advance to such eligible Bidders.

- 19.5 Only summary of prices quoted by the Bidders will be read out.
- The Bid of any Bidder who has not complied with any of the instructions contained herein may not be considered.

#### 20.0 Process to be Confidential

- After the public opening of Bids, information relating to the examination, clarification, evaluation and comparisons of Bids and recommendations concerning the Award of Contract shall not be disclosed to Bidders or other persons not officially concerned with such process.
- 20.2 Any effort by the Bidder to influence the Employer/ Engineer in the process of examination, clarification, evaluation and comparison of Bids and decision concerning Award of Contract may result in the rejection of the Bidder's Bid.

## 21.0 Clarification of Bids

To assist in the examination, evaluation and comparison of Bids, the Engineer may ask Bidders individually for clarification of their Bids, including breakdowns of unit prices. The request for clarification and the response shall be in writing or cable or telex, but no change in the price or substance of the Bid shall be sought, offered or permitted except as required to confirm the correction or arithmetical errors discovered by the Engineer during the evaluation of the Bids in accordance with Clause 24 hereof.

#### 22.0 Determination of Eligibility & Responsiveness

The Engineer will determine whether the Bid is substantially responsive to the requirements of the Bid documents.

For the purpose of this Clause, a substantially responsive Bid is one which conforms to all the terms, conditions and specifications of the Bid documents without any deviation or reservation.

A Bid, which in relation to the cost estimates of the Engineer is unrealistically priced and which cannot be substantiated satisfactorily by the Bidder may be rejected as non responsive.

#### 23.0 Correction of Errors

- Bids, determined to be substantially responsive will be checked by the Engineer for any arithmetical errors in computation and summation. Errors will be dealt by the Engineer as follows:
  - a) Where there is discrepancy between rates indicated in figures and in words, rates in words will govern.
  - b) Incorrectly added totals will be corrected.
  - c) In case of any clerical error between rates indicated in figures and words, the rate in words would prevail. In case there is any inconsistency between the rate and the value extended (after multiplication with the tender quantity), The rate quoted shall multiplication with the tender quantity), the rate quoted shall prevail.
  - 23.2 If a Bidder does not accept the correction of errors as outlined above, his Bid will be rejected.

## 24.0 Evaluation and Comparison of Bids

- Only such of the Bids as have been determined to be substantially responsive to the requirements of the Bid documents, in accordance with Clause 22 will be evaluated. Other non-responsive Bids will be rejected.
- Bidders shall note that no preference of any nature will be given to any Bidder notwithstanding any custom, usage or instructions to the contrary.
- Evaluation of the Bids will take into account, in addition to the Bid amounts, the following factors:
  - a) Arithmetical errors corrected in accordance with Clause 23.
  - b) Such other factors as the Engineer considers may have a potentially significant impact on Contract execution price and payments.

- Offers, deviations and other factors, which are in excess of the requirements of the Bid documents or otherwise result in the accrual of unsolicited benefits to the Employer shall not be taken into account in Bid evaluation.
- 24.5 Price adjustment provisions applying to the period of execution of the Contract shall not be taken into account in Bid evaluation except to the extent specifically stated in the Contract.

### F. Award of Contract

#### 25.0 Award Criteria

Subject to Clause 26, Engineer will Award the Contract after prior approval by the Employer to the Bidder whose Bid has been determined to be eligible and to be substantially responsive to the Bid documents and who has offered the lowest evaluated Bid of the Bill of Quantities, provided further that the Bidder has the capability and resources effectively to carry out the Contract Works.

## 26.0 Engineer's Right to Accept any Bid, to Reject any or all Bids

Notwithstanding Clause 25, the Employer/Engineer reserves the right to accept or reject any Bid including the lowest and to annul the Bidding process and reject all Bids, at any time prior to Award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligations to inform the affected Bidder or Bidders of the grounds for the Employer's/Engineer's action.

#### 27.0 Notification of Award

- 27.1 Prior to the expiration of the prescribed period of Bid validity, the Engineer will notify the successful Bidder by cable or telex or letter confirmed in writing by registered letter that his Bid has been accepted.
- 27.2 The notification of Award will constitute the formation of the Contract.
  - 27.3 Upon the furnishing by the successful Bidder of a Performance Security in accordance with the provisions of Clause 29, the Engineer will promptly notify the unsuccessful Bidders that their Bids have been unsuccessful.

#### 28.0 Signing of Agreement

Upon the receipt of the notification of Award by the successful Bidder, the successful Bidder shall fill the Agreement in accordance with form of Agreement included in the Bid documents and submit the same to the Engineer within two weeks of the date of receipt of notification of Award. The Engineer shall return the draft duly approved within one day from the date of receipt of the draft and the successful Bidder shall get the same engrossed, have the correct amount to stamp duly adjudicated by Superintendent of Stamps and thereafter return the same duly signed and executed on behalf of the successful Bidder, all at his own cost within 3 days from the receipt of the approved draft.

#### 29.0 Performance Security

Within 15 days of receipt of the notification of Award from the Engineer, the successful Bidder shall furnish to the Engineer a Security in the form of a Bank Guarantee from Nationalised/Scheduled bank for an amount of 5 percent of the Contract sum. The validity of the Performance Security shall be upto the end of the Defect Liability Period.

In cases, where the aggregate of expected Contract payment would at any time exceed the Engineer's estimate of actual work performed by more than the amount of Performance Security specified in Clause 29.1 such Security shall be increased accordingly at the expense of the successful Bidder.

Failure of the successful Bidder to lodge the required Bank Guarantee shall constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security, in which event the Engineer may make the Award to the next lowest evaluated Bidder or, if there are no other Bidders, call for new Bids.

#### SPECIFIC CONDITIONS OF CONTRACT

The Conditions of Contract shall be GENERAL CONDITIONS OF CONTRACT in Volume II (hereinafter called the General Conditions) as modified or added to by the following Specific Conditions of Contract which shall be read and construed with the General Conditions as if they were incorporated therewith.

Insofar as any of the Conditions of Specific Conditions of Contract conflict or be inconsistent with any of the General Condition, the Conditions of Specific Conditions of contract shall prevail.

#### 1.0 GENERAL

#### **Description of Works**

- 1.1 HVAC works of Test Research Laboratory Building, Construction of plant room & associated works and rectification of defects if any during the defect liability period
- In these documents wherever the word tender/ tenderer/ tendering has been used, the same may be considered synonymous with bid/ bidder/ bidding.

## 1.3 **Time for Completion**

The contractor shall complete the works within 5 (Five) Calendar months including commissioning and Handing over from Engineer's order to commence the work.

## 2.0 <u>Definitions</u>

- a) "PRINCIPAL EMPLOYER/EMPLOYER" means **Director**, **National** of Malaria Research (NIMR), New Delhi, under *ICMR*.
- b) "ENGINEER" Means *CGM* ( *P* & *BD* ) of *HSCC*(*I*) *Ltd*. or any officer nominated by the Chairman-cum-Managing Director, HSCC(I)Ltd. to act as Engineer from time to time.
- c) "MONTH" and "YEAR" and all dates shall be calculated according to the Gregorian Calendar.

#### 3.0 <u>Insurance of Works, etc.</u>

All Insurances referred to in General Conditions shall be affected with an Indian Insurance Company incorporated and registered in India. All insurances and labour licence to be submitted before commencement of work.

4.0 Performance guarantees, advance payment guarantee and any insurance policies entered into by the Contractor under the terms of the Contract, shall stipulate that the proceeds of any claim shall be payable to *Director*, **National of Malaria Research (NIMR)**, **New Delhi.** 

#### 5.0 Certificates and Payments

- 5.1 Payment of Interim Certificates will be made by the Engineer after
  - 1) Execution of the form of Agreement by the parties hereto.
  - 1) Provision by the contractor of the performance security in accordance with as specified in General Conditions of Contract (GCC)
  - 1) Provision by the contractor of the insurance referred to in the General Conditions of Contract (GCC)
- 5.2 a) In accordance with clause 60.7 (a) of GCC (GCC), 10% (Ten percent)

of the contract price shall be paid as mobilisation advance at an interest @ 10% (Ten Percent) per annum on reducing balance to the successful bidder upon furnishing a bank guarantee from Nationalised/Scheduled bank of equivalent amount in the form annexed (Annexure-C).

- b) The contractor shall submit to the Engineer after the end of each month a detailed statement including measurements showing the estimated contract value of the permanent works executed upto the end of the month together with particulars of other amounts to which he is entitled under the Contract.
- c) The statement shall be submitted on a printed proforma (prepared at the cost of the contractor) approved by the engineer.
- d) The contractor shall be paid monthly on the certificate of the Engineer, the amount due to him which shall be the sum of the following amounts.
  - i) The estimated contract value of the permanent works executed upto the end of the previous month less retention money named in the bid, and
  - ii) 75% of the value of materials delivered to the site for permanent works on the site provided the engineer is satisfied that the amounts for such materials are reasonable bearing in mind the requirements of works, less deductions, as per the contract conditions.
- e) The Mobilisation advance can be drawn upto three months from the date of order to commence the work. The recovery of this mobilisation advance shall be affected as outlined in clause 60.7 (b) of General Conditions of Contract (GCC).
- f) Retention money at the rate of 10% (ten per cent) shall be deducted from each interim certificate subject to the maximum of 5% (five per cent) of the contract price.
- g) The retention money shall subject to clause 60.6 of General Conditions of Contract (GCC) become due and shall be paid to the contractor.
- h) Payment upon each of the Engineer's certificates shall be made by the HSCC(I) Ltd. acting for and on behalf of Employer or by the Employer directly within 30 days after such certificate has been issued by the Engineer.

However 75% of the estimated amount as determined by the Engineer of the payment due against the monthly running bill shall be paid within 15 (Fifteen) working days after submission of the bill by the contractor in the approved format and complete in all respects.

- i) The Engineer may at any time make any corrections or modifications to any certificate which shall have been issued by him and shall have power to withhold any certificate if the works or any part thereof are not being carried out to his satisfaction.
- j) The responsibility for making the payments or meeting other obligations to the contractor in respect of all works as certified by the Engineer shall be that of the Employer and not of the Engineer.
- k) After completion of work and prior to final payment, the contractor shall furnish to the Engineer, a release of claims against the Employer arising out of the contract, other than claims specifically identified, evaluated and excepted from the operation of the release by the contractor.

## 6.0 <u>Settlement of Disputes - Arbitration</u>

Sub Clause 67.1, 67.2, 67.3 and 67.4 of GCC shall be followed. For settlement of all disputes & Arbitration the place of jurisdiction shall be Delhi.

#### 7.0 <u>Address</u>

a. The address of the Employer is as follows:

Director, National of Malaria Research (NIMR), Sector -8, Dwarka, New Delhi

b. The address of the Engineer is as follows

HSCC (India) Ltd., Plot - 6 (A), Block - E, Sector - 1, Noida, Uttar Pradesh - 201 301.

c. The address of the Contractor is

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8.0

## THE FOLLOWING SHALL BE READ IN ADDITION TO CLAUSE 34.1 TO THE GENERAL CONDITIONS

- 8.1 Labour
- 8.1.1 Engagement of Labour

The contractor shall make his own arrangement for engagement of all labour, local or otherwise, and, save insofar as the contract otherwise provides, for the transport, housing, feeding and payment thereof.

#### 8.1.2 Supply of water

The contractor shall provide at his own cost adequate quantity of drinking water on the site to the satisfaction of the Engineer's Representative for the use of contractor's and the Engineer's staff and work people, sub contractor and site visitors.

## 8.1.3 Alcoholic Liquor or Drugs

The Contractor shall not import, sell, give, barter or otherwise dispose of any alcoholic liquor, or drugs, or permit or suffer any such importation, sale, gift, barter or disposal by his sub-contractor, agents or employees.

### 8.1.4 Arms and Ammunition

The Contractor shall not give, barter or otherwise dispose off to any person or persons, any arms or ammunition of any kind or permit or suffer the same as aforesaid.

#### 8.1.5 Festivals and religious Customs

The Contractor shall in all dealing with labour in his employment have due regard to all recognised festivals, days of rest and religious or other customs.

## 8.1.6 Epidemics

In the event of any outbreak of illness of an epidemic nature, the contractor shall comply with and carry out such regulation, orders and requirements as may be made by the government, or the local medical or sanitary authorities for the purpose of dealing with and overcoming the same.

#### 8.1.7 Disorderly Conduct, etc

The Contractor shall at all times take all reasonable precautions to prevent any unlawful, riotous or disorderly conduct by or amongst his employees and for the preservation of peace and protection of persons and property in the neighbourhood of the works against the same.

## 8.1.8 Observation of legislation etc.

The Contractor shall at all times during the continuance of the contract comply fully with all existing Acts, regulation and bylaws including all statutory amendments and re-enactments and acts that may be passed in future either by state or the central Government or local authority, including, Indian Workmen's compensation act, Contract labour (Regulation and Abolition) Act 1970 and equal remuneration Act1976. Factories Act, Minimum wages Act, provident fund regulations, Employees Provident Fund Act and Schemes made under same act, Health and sanitary arrangements for workmen, Insurance and other benefits and shall keep the employer indemnified in case any action is commenced for contravention by the contractor. If the Employer is caused to pay or reimburse any amount for non-observance of the provision

of this clause on the part of the contractor the engineer shall have the right to deduct from any moneys due to the contractor or recover from the contractor personally any sum required or estimated to be required for making good the loss or damage suffered by the Employer. All registration and station inspection fees if any in respect of his work pursuant to the contract shall be to the account of the contractor.

#### 8.1.9 Fair Wages

The contractor shall pay the labours engaged by him on the work not less than a fair wages, which expression shall mean, whether or time or piecework, the respective rates of wages as fixed by the public works department as fair wages for the area payable to the different categories of Labourers or those notified under the minimum wages act for corresponding employees of the employer whichever may be higher.

8.1.10 The contractor shall notwithstanding the provisions of any contract to the contrary, cause to be

paid a fair wage to the labourers indirectly engaged on the works including any labour engaged by subcontractor in connection with the said works as if the labourers have been immediately employed by him.

#### 8.1.11 Notices

The Contractor shall before he commences the work display and correctly maintain in clean and legible condition at a conspicuous place on the site notices in English and in a local language spoken by the majority of the workers, stating therein the rate of wages which have been fixed as fair wages and the hours of work for which such wages are earned and send a copy of such notices to the Engineer.

#### 8.1.12 Wage Records

The Contractor shall maintain records of wages and other remuneration paid to his employees in such form as may be convenient and to the requirement of the Employer/Engineer and the conciliation officer (Central) Ministry of Labour, Government of India, or such other authorised person appointed by the central or state government and the same shall include the following particulars of each worker:

- I) Name works number and grade
- II) Rate of daily or monthly wage.
- III) Nature of work on which employed.
- IV) Total number of days worked during each wage period.
- V) Total amount payable for the work during each wage period.
- VI) All deduction made from the wage with details in each case of the ground for which the deduction is made.
- VII) Wage actually paid for each wage period.
- 8.1.13 The contractor shall provide a wage slip for each worker employed on the works.

The wage record and wage slips shall be preserved for least 12 months after the last entry.

## 8.1.15 Inspection of wage Records

The contractor shall allow inspection of the aforesaid wage records and wage slip to the engineer and to any of his workers or to his agent at a convenient time and place after due notice is received, or to the Employer or any other person authorised by him on his behalf.

- 8.1.16 The Employer and the Engineer or any other person authorised by them on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observation of the fair wages clause. He shall also have the power to investigate into any complaint regarding any default made by the contractor or sub-contractor in regard to such provision.
- 8.1.17 The Employer shall have the right to deduct from money due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non payment of the aforesaid fair wage, except on account of any deduction that may be permissible under any law for the time being in force.

## 8.1.18 Representation of parties

- (i) A workman shall be entitled to be represented in any investigation or enquiry under this clause by:-
  - (a) An officer of a registered trade union of which he is a member.
  - (b) An officer of a federation of trade union to which the trade union referred to in previous sub-clause is affiliated.
  - (c) Where the worker is not a member of any registered trade union, by an officer of a registered Trade union connected with or by any other workmen employed in the industry in which the workers is employed.
- (ii) The contractor or sub-contractor shall be entitled to be represented in any investigation or enquiry under this clause by an officer of an Association of Employers of which he is a member.
- (iii) No party shall be represented by a legal practitioner in any Investigation or enquiry under this clause, unless all parties agree.

## 8.1.19 Safety Provision

The contractor shall comply with all the precautions as required for the safety of the workman by I.L.O convention (NO.62) as far as they are applicable to the contract. The contractor shall provide all necessary safety applications,

gears like goggles, helmets, masks, etc. to the workmen and the staff.

The contractor shall be responsible for observance by his sub contractor of the forgoing provisions

#### 8.1.20 Footwear

The contractor shall at his own expense provide footwear for all labour engaged on concrete mixing work and all other type of work involving the use of tar, cement, etc. to the satisfaction of the Engineer or his Representative, and on his failure to do so the Employer shall be entitled to provide the same and recover the cost from the Contractor

The contractor shall deliver to the Engineer's representative at his office on the site a return in detail in such form and a such interval as the Employer/Engineer may prescribe showing the supervisory staff and the number of the several classes of labour from time to time employed on the site.

#### 8.2 Escalation

No Escalation shall be payable in price on account of labour, material (General), POL and / or any other account. Also no variation/escalation shall be payable on account of time over run if any in completion.

#### 8.2.1 Subsequent Legislation

If, after the date seven days prior to the latest date for submission of Bids for the Works, there occurs changes to any National or State Statute, Ordinance, Decree or other law or any regulation or bye-law of any local or other duly constituted authority or the introduction of any such statute ordinance, etc. which causes additional or reduced cost, the same shall be certified by the Engineer and shall be paid by or credited to the Employer and the Contract Price adjusted accordingly. Notwithstanding the foregoing such additional or reduced cost shall not be separately paid or credited if the same shall already have been taken into account in the indexing of any inputs to the price adjustments formula in accordance with the provisions of Sub-Clauses (1), (2), (3), (4) and (5) of this Clause.

The following items are not to be included in the price adjustment calculations:

- a. Liquidated Damages.
- b. Retention money withheld and released.
- c. Advance payments in the form of loan and their repayments.
- d. Value of any additional or varied work valued at current price.

e. Payment to nominated subcontractors included as "Provisional sums" or "Prime cost" items in the Contract Price.

## 9.0 Taxation

The contractor shall pay all taxes, duties, levies, work contract tax, service tax etc. of the Government Provisions as applicable as per the advice of the Income Tax, Sales Tax Authority. Deduction of Income Tax/ other taxes shall be made from each certificate of payment as per the relevant provisions of the Income Tax Act or as per the advice of the Income Tax authority/ other competent authority.

## 10.0 <u>Co-ordination Meeting</u>

The Contractor shall be required to attend co-ordination meetings with the Engineer, the Consultant and the other contractors during the period of contract as instructed by the Engineer. All costs incidental to such interaction shall be to the contractor's account and no claim will be entertained by the Employer/Engineer on this account.

## 11.0 **Special Applications**

#### 11.1 Site Information

The proposed site is located in the campus of NIMR, Dwarka, New Delhi.

#### 11.2 a) Special Instruction

The Contractor shall procure and maintain at site suitable computer/s with peripherals and required software for planning, monitoring and billing as approved by the Engineer.

The entire works will be liable to be inspected by Chief Technical Examiner i.e. CTE/CVC and ISO auditors. The contractor will provide all necessary help required for in this connection. The contractor will have to comply with the observations/ suggestions of the CTE / ISO auditors in respect of quality, specifications, workmanship etc. in his scope of work, if any. No extra payment will be made on this account however, any recovery arising out of the CTE's observation will be borne by the contractor.

#### b) Statutory Requirements

Contractor is responsible for obtaining the required approvals/clearances and Completion Certificate from statutory and local civic authorities prior to commencement of works and upon completion of the works, as applicable, at his cost. All such approvals/clearances and Completion Certificates shall be submitted to the Engineer by the contractor in original.

The contractor will be promptly extended all assistance in this connection and

all the drawings, statutory forms/documents required for submission by client as Principal Employer shall be signed by the client. Any expenses incurred towards the fee of such authorities in connection with the statutory approvals shall be reimbursed to the contractor on production and submission of original challans and receipts/bills.

## 11.3.1 <u>Contractor's Working Area</u>

Suitable working area will be provided by the Engineer to the Contractor. The Contractor may have to carry out some cutting / filling work for making his working area. The cost of all such works shall be deemed to have been included in the rates and prices quoted for the works and no extra payment shall be made on this account.

### 11.3.2 <u>Contractor's Temporary Structures</u>

The Contractor may, at his own expense and subject to the approval of the Engineer and statutory authorities, construct offices, stores, workshop in the area allocated to him and remove the same as per the orders of the Engineer on completion of works. The Contractor shall furnish such details of his temporary works as may be called for by the Engineer and the Contractor shall satisfy the Engineer as to their safety and efficiency. Engineer may direct those temporary work which he considers unsafe or inefficient be removed and replaced in a satisfactory manner. The contractor shall immediately follow Engineer's directions/instructions.

The contractor shall make his own arrangement at his own expense for labour camp/ accommodation of his labour and staff and their conveyance to site as no workers/ staff shall unless with the specific approval of the Engineer be allowed to stay within the site. Gate passes shall be issued by the engineer to authorise the contractor's staff and workers to enter the site.

#### 11.3.3 <u>Procurement of Various Materials</u>

The Employer will not supply any construction materials or equipment required for the works under this Contract. The Contractor must, therefore, make his own arrangements for timely procurement of various materials and equipments including steel and cement.

## 11.3.4 <u>Water Supply & Power Supply</u>

The contractor shall make his own arrangement for water supply at site for drinking as well as construction purpose at his own cost. The contractor shall also make his own arrangements for power supply at site for construction, testing and commissioning of all services and general use at his own cost.

Water and power supply at site for drinking purpose as well as for

construction purpose may be made available to the contractor if spare capacity is available at site with the Employer. The contractor shall provide at his cost meters for recording consumption of power and water. The actual cost of water and power consumed by the contractor shall be recovered from the Running Bills of the Contractor.

Non availability of power supply and/or water from whatever source shall not entail any additional claims or extension of contract period in this account.

#### 11.3.5 Site office

A reasonable furnished site office accommodation having sample room, Air Conditioned meeting room, staff room along with toilets & pantry with file storage facility, computers & printers and its consumables, a telephone with STD facility including transportation facility, Electricity and filtered drinking water will have to provided by the contractor at his own cost for the site office.

#### 11.3.6 <u>Temporary Fencing</u>

The contractor shall at his own expense, erect and maintain in good condition temporary fences and gates along the boundary of the areas assigned to him for the purpose of execution of the works.

The Contractor shall, except when authorised by the Engineer, confine his men, materials and plant within the Site of which he is given possession. The Contractor shall not use any part of the Site for purposes not connected with the works unless prior written consent of the Engineer has been obtained. Access shall be made to such areas only by way of approved gateways.

#### 11.3.7 <u>Testing of Materials</u>

All materials used in the works shall be subject to inspection and tests. The Contractor shall carry out sampling of all such materials as per the appropriate Indian Standards and as directed by the Engineer. The contractor shall deliver the samples of materials to the site office of the Engineer in a manner as directed by the Engineer who will inspect the same and then order for testing of the materials.

The Contractor shall arrange for testing of materials normally in Delhi but samples may be sent to outside testing laboratories if necessary. The delivery of the samples shall be undertaken by the contractor. The cost and charges for sampling of materials and delivering the same to the office of the Engineer and/or other places including all incidentals in connection with the same as directed by the Engineer and the testing charges thereof shall be borne by the contractor and shall be deemed to be included in the rates and prices given in the Bill of quantities. The results of the tests carried out shall be binding on the contractor who shall comply with any rectification measures that the Engineer may deem fit and order to be executed by the contractor as a result of testing.

## 11.3.8 Approval of Samples prior to use

The contractor shall submit the samples of materials, he proposes to use in the works for prior approval of the Engineer. A sample room shall be maintained at site in which all approved samples shall be kept for comparison with materials being used at site. Any materials not confirming to the approved samples shall be rejected.

## 11.4 <u>Shop Drawings / Working Drawings</u>

The drawings supplied by the Engineer have been listed in the tender documents. These drawings are indicative for the purpose of detailing the intent and requirement of the contract. The contractor shall take into consideration by space allocated for equipments before ordering them to ensure that the equipment would fit into the spaces provided with necessary clearances required as per relevant standard / manufacturers recommendations.

Structural and Architectural drawings will be provided by Engineer. However to ensure un-interrupted progress of work and timely completion, the contractor will do further detailing as per the site requirement at his own.

Detailing and shop drawings of all services and systems will have to be done by the contractor based on the schematic and other details provided by the Engineer or as per the requirement of statutory authorities / standards. The work will be executed by the contractor based on the approved drawing from the concerned authority and accordingly contractor will be responsible for obtaining final NOC / clearance from the concerned authority, as required.

The contractor shall submit to the Engineer for approval details of all proposed equipments, accessories, equipment characteristics and capacity details of all equipment, accessories and devices etc. as per the specifications and as required by the Engineer. These drawings and details shall also contain details of construction, size, arrangement, operating clearances, performance characteristics and capacity of all items of equipments and also details of all related items of work by other discipline.

## 11.5 "AS MADE" Drawings and Operation & Maintenance Manual

The Contractor shall supply two complete sets of "As Made" Drawings on polyester tracing film 75 micron thick and also on CD and three prints showing details of all the works as executed. The drawings and prints shall be delivered to the Engineer within one month of completion of the various sections of the work or at such other times as directed by the Engineer.

The drawings shall be fully dimensioned with the Engineer's standard title block or as approved by the Engineer. The contractor shall also submit the Operation and Maintenance manual in 2 sets of all the equipments and Systems. No extra payment shall be made to the contractor or claimed entertained by the Engineer on this account and the cost of making the "As

Made" drawings and Operation and Maintenance manuals shall be deemed to be included in the rates quoted in the Bill of Quantities.

## 11.6 <u>Monthly Progress Photograph</u>

The contractor shall supply to the Engineer Three prints of colour progress photographs of such portions of the work in progress or completed as directed by the Engineer. The photographs shall become the property of the Employer. The photographs shall be of approximate size 169mm x 115mm each. The photographs shall be mounted in albums and shall be suitably inscribed and captioned. The albums in a chronological order shall be handed over to the Engineer. No prints or the negatives/soft copies may be supplied to any persons without the authority of the Engineer. The photographs may be upto 100 nos. per month as required by the Engineer.

### 11.7 <u>Programme of Work and Progress Reports</u>

The Contractor shall submit to the Engineer within four weeks of the award of the contract six copies of a detailed schedule showing in an approved form the estimated dates of commencement and completion of different parts of the works including the expected dates for completion of the various sections of the works. The detailed schedule shall be such as it can be updated quarterly or as directed by the Engineer. Six copies of the revised schedule shall be supplied to the Engineer as and when it is revised.

The progress shall be reviewed every fortnight. The Contractor shall submit to the Engineer a progress report for the period showing the upto date progress and progress on all items of each section of the works in relation to and in consideration of the detailed schedule.

## 11.8 <u>Metric Units</u>

Metric units have been used in the specifications and drawings in general.

If any materials described in the contract or ordered by the Engineer are described by dimensions in the metric units and the contractor can not in accordance with the contract, procure such materials in the measure specified in sufficient time to avoid delay in the performance of his other obligations under the contract, but can obtain such materials in other measure to dimensions approximating to those described in the Contract or ordered by the Engineer, then the contractor shall henceforth give notice to the Engineer of these facts stating the dimensions to which such materials are procurable in the other measure. As soon as practicable after the receipts of any such notice the Engineer shall give an order to the contractor which shall either:

- (a) Direct the contractor to supply such materials to the dimensions stated in his said notice to be procurable instead of the dimensions described in the contract or originally ordered by the Engineer, or
- (b) Direct the contractor to make some other variation whereby the need to supply such materials to the dimensions described in the contract or originally ordered by the Engineer will be avoided.

#### 11.9 <u>Field Materials Testing</u>

- 11.9.1 The contractor shall provide facilities for laboratory testing of materials etc., at his own cost, at site or in a suitable testing laboratory in Delhi or outside laboratories, certified by the Engineer.
- Whenever directed by the by Engineer, the contractor shall permit other contractor working for the employer on the project to use field testing laboratory on payment basis as fixed by the Engineer. Such payment will be made directly by the other contractor using the laboratory.
- The field laboratory shall be equipped with all necessary apparatus to carry out the following field tests in accordance with relevant Indian Standards or equivalent approved Standards:

#### i) Cement Testing:

Tests for fineness, strength, setting time and soundness.

## ii) Concrete Testing:

Tests for workability, proportions, density and strength.

#### iii) Aggregate Testing:

- a) Sieve analysis
- b) Determination of bulk density and voids on fine aggregates only:
- c) Determination of moisture content, specific gravity and absorption on coarse aggregates only:
- d) Determination of specific gravity and absorption
- iv) Any other equipment/s required and instructed by the Engineer

  The Contractor shall carryout inspection, testing, checks and shall also maintain records of inspection, testing & checks of materials, works and activities related to construction works. If required, the formats, checklists etc. shall be given by the Engineer during execution period. After getting approval from the Engineer, the contractor shall print all such forms, tables, formats etc. at his own cost.
- On completion of the works and handing over, the field test laboratory shall be dismantled and removed from Site by the Contractor. The dismantled materials and equipment shall be the property of the contractor.

#### 12.0 Rates/Prices

The quoted rates/prices for the items shall be complete in all respect including all labour, material, plant and machinery, tools and tackles, water & electricity, all taxes, duties, levies, VAT, Service Tax, statutory levies as applicable from time to time and considering the exemptions available with the Employer. The contractor should quote his rates/prices accordingly for the complete works in all respect.

The items and quantities given in the drawings / scope of works / specifications or elsewhere are only indicative and not restrictive. The work shall be carried out as per the design and detailing finalized and issued by the Engineer or approved by the Engineer.

## 13.0 Compliance for Statutory Obligations

The contractor shall comply with all the statutory obligations and obtain all required clearances and licences to implement the project without any financial repurcussions to HSCC/Employer and ensure all follow up actions with the local authorities in this respect for smooth functioning of the project. All statutory charges to get any NOC, clearances from local authorities to be obtained by the contractor and the charges towards the NOC shall be reimbursed after submitting the bills/documentary evidences. The contractor is required to obtain all NOC, completion & occupancy certificates form respective local body as required.

## 14.0 Unpriced Bids

The unpriced copies of the purchase orders of major items/equipments and of subcontracts placed by the Contractor shall be furnished to Engineer.

## **Extra/Substituted items:** The items shall be analysed based on following norms:

- a) Any extra item/non schedule item will first be analysed based on the similar items existing in the BOQ under any sub heads. Components of any similar item nearest to the non schedule item will be decomposed to get the various sub components of material and manpower. The item will again be composed on the basis of requirements taking other components from DAR/market rates.
- b) Components of material, manpower, wastage, profit, sundries, etc will be taken from CPWD latest DAR
- c) In absence of similar item and In case the components are not available in DAR, the same will be taken from actual observations made and recorded at site. A register to be made for such actual observations to be jointly signed each day of observations and put up to the engineer alongwith analysis for approval.
- d) Actual market rates of the material and bought out items at the time of execution of activity will be verified by the site incharge of HSCC based on the rates submitted by the contractor alongwith his claim for extra items after due consideration for all the project discount on the market rates of any item.
- e) Contractor's profit on extra items will be as per CPWD norms
- f) The analysis of items enclosing actual observation sheets, photocopy of pages of DAR, original paid bills and vouchers to be submitted at site

g) Labour rates will be taken from local body /collector rates of that area for minimum wages

The claim and analysis will be accepted unless proper analysis with supporting documents are submitted.

No extra item will be paid unless prior administrative approval of engineer is taken in writing for its execution with tentative rates and total cost involved.

## 16.0 Details required along with submission of running/final bills

Contractor is required to submit following details/documents along with every running/final bill without which bills may not be processed.

- 1. Bills of every section of work as provided in the BOQ to be prepared separately and submitted all together. In case there is no billable amount of any section of work, the same should be clearly indicated zero value during the period of bill.
- 2. Authorised representative of contractor with name & seal to sign on each page of bill submitted.
- 3. Carryover and brought forward for each & every quantity to be indicated in the bill.
- 4. All the copy of challan of materials, bills and test certificates of the items on which secured advance has been claimed. Rate of secured advance material to be verified by Engineer independently.
- 5. Correction as made by Engineer Representative should be incorporated by the contractor and corrected copy in three copy should be submitted for payment. Date of submission of bill will be reckoned from the date of submission of corrected bill.
- 6. Bill should be indexed properly and each page and correction if any should be signed and stamped by the authorised representative of he contractor and acceptance should be given .
- 7. Copy of challan of submission of PF & ESI and any other relevant as required from time to time should be submitted.
- 8. Power of attorney of authorized person on behalf of contractor to be submitted. Contractor must ensure that all papers /Measurement book to be signed by authorized person with measurement date, date of start & date of completion etc.
- 9. Copy of duly certified bank guarantee from bank, performance BG, insurance policies as required in terms of contract to be enclosed with first RA bill.
- 10. All overwriting, alterations shall be countersigned by the authorized person with date.

- 11. Approval of extra item if any conveyed, to be enclosed.
- 12. Contractor must ensure, in case of time extension, confirmation of extended validity of insurance, performance BG upto Defect liability period as per contract and a copy of approved time extension to be submitted.
- 13. Contractor must authorise their representatives competent for verification of measurement at site and these person should be available at site.
- 14. All the pages and enclosures of bills to be stamped with name and designation of the person with full signature of contractor's and HSCC's site incharge before submission to the engineer.

In addition to above any other document and details as required for checking, verification and timely processing of bill.

## 17.0 Guarantee and Defects Liability Period

17.1 The entire works including all the equipments, systems, services and components as a whole shall be guaranteed for its performance and against any manufacturing defects. The defects liability period shall be valid for a period of 1 (One) Year from the date of Completion of works /taking over of the works whichever is earlier by the employer. The contractor shall guarantee that all the works, equipments, systems, services and components shall be free from any defect due to defective materials and bad workmanship or any other cause and that the equipments and systems shall work satisfactorily and the performance and efficiencies of the equipments and systems shall not be less than the approved values. Any part found defective during the defects liability period shall be repaired/replaced by the contractor at his own expense. The services of the contractors personnel during this period shall be made available free of any cost to the Employer. However any consumables like gas, oil, vbelts, filters etc. is not covered under the defects liability. If the defects are not remedied within a reasonable time mentioned in the written notice, the Consultant/Employer may proceed to do so at the contractors risk and expenses without prejudice to any other rights. Joint inspection reports shall also be deemed as written notice for this purpose.

## **SPECIFICATIONS**

#### (A) RELATING TO CIVIL, PLUMBING & FIRE FIGHTING WORKS

## 1.0 General

- The following specific conditions and specification shall be read in conjunction with General Conditions of Contract and Specific Conditions of Contract. If there are any provisions in these additional specific conditions and specifications which are at variance with the provisions in the above mentioned documents, the provisions in these additional specific conditions & specifications shall take precedence.
- 1.2 These additional specific conditions and specification shall be considered as an extension and not as a limitation of the obligations of the preference.
  - The CPWD General Specifications for Civil Works.
  - The CPWD General Specification for Electrical Works : Part V for fire fighting-1985.
  - For items not covered in CPWD Specification, the work shall be done as per the latest relevant IS Code of Practice.
  - For items not covered by any of the above, the installation shall be done as directed by the Engineer and as per sound engineering practices.

#### 2.0 <u>Scope of Contract</u>

- 2.1 The scope of work under this section covers the construction, testing and commissioning of the all HVAC, Civil and associated works which also includes all detailed shop drawings, testing and commissioning of components and accessories.
- 2.2 The work shall be carried out in conformity with the drawings and within the requirement of architectural, electrical, structural and other specialised services specifications and drawings.
- 2.3 The Contractor shall make provision of hangers, sleeves, structural openings and other requirements well in advance to avoid any hold ups in progress of the construction schedule.
- 2.4 The said contract comprise of furnishing of all materials, equipment, labour & transportation etc. necessary to render the installation fully operational as per the intent of specification and drawings, including any necessary adjustment or corrections. The installation shall be all in conformity with local laws covering such installation.

#### 3.0 <u>Contract Drawings</u>

- 3.1 The drawings issued with the Bid are diagrammatic only and indicate the extent and general arrangement of the installation. Drawings shall not be scaled.
- 3.2 The Contractor shall follow the Bid drawings for preparation of his detailed sanitary, plumbing & fire fighting & Shop drawings and for subsequent installation work. He shall check the drawings of other services to verify spaces in which his work will be installed. The Contractor shall examine all Architectural, Structural, Plumbing and other services drawings before starting the work and report to the Engineer any discrepancies and obtain clarification. Any changes found essential to coordinate installation of this work with other services, shall be made with prior approval of the Engineer

## 4.0 Shop Drawings

- 4.1 Within six weeks after award of the contract, the Contractor shall furnish for approval of the Engineer, three sets of detailed Shop Drawings for Plumbing, Sanitary, Fire Fighting, Pump Rooms & Shop drawings for all equipments and materials required to complete the work as per specification under civil, plumbing and fire fighting works. These drawings shall contain details of construction, size, arrangement, operating clearances, performance characteristics, and capacity of all items of equipments, as also the details of all related items of work of other trades. All shop drawings to be made in accordance with latest fire safety norms & to be got approved by the statutory authorities (if required) before it is finally approved by Engineer, before start of work.
- 4.2 All drawings necessary for assembly, erection, maintenance, repair and operation of the equipments shall be furnished and Different parts shall be suitably numbered for identification and ordering of spare parts.
- 4.3 When the Engineer makes any amendments in the above Drawings, the Contractor shall supply fresh sets of Drawings with the amendments duly incorporated, along with the drawings on which corrections were indicated.
- 4.4 No material or equipment may be delivered or installed at the job site until the Contractor has in his possession, the approved Shop Drawings for that particular material or equipment.
- 4.5 After approval of the drawings by the Engineer, the Contractor shall further furnish six sets of Shop Drawings for the exclusive use of and retention by the Engineer.
- 4.6 Approval of Drawings by the Engineer shall not relieve the Contractor of any part of his obligation to meet all the requirements of the Contract or of the correctness of his Drawings. The Engineer's approval of specific item shall not mean the approval of the assembly of which it is a component. The Contractor shall be responsible for and is to bear the cost for all alterations of the works due to discrepancies or omission in the Drawings or other particulars supplied by him, whether such drawings have been approved by the Engineer or not.

Where the work of the Contractor has to be installed in close proximity to, or will interfere with the work of other Trades, the Contractor shall assist in working out the space conditions to make a satisfactory adjustment. If so directed by the Engineer, the contractor shall prepare composite working drawings and sections at a suitable scale not less than 1:50, clearly showing how his work is to be installed in relation to the work of other Trades. If the Contractor installs his work before coordinating with other Trades, or so as to cause any interference with the work of other trades, he shall make all the necessary changes without extra cost.

# 5.0 <u>Samples and Catalogues</u>

Prior to ordering any equipment/ material/ system, the Contractor shall submit to the Engineer, the catalogues, along with samples. No material shall be procured prior to the approval by the Engineer.

#### 5.2 **Approval of Materials**

All materials used on the works shall be new and of the best quality available, conforming to the relevant specifications and as per good engineering practice. Prior approval shall be obtained in writing from the Engineer for all materials proposed and when necessary, approved sample duly identified and labelled shall be deposited with the Engineer and shall be kept at site.

### 6.0 <u>Material and Equipment</u>

- 6.1 All Material and Equipment shall conform to the relevant Indian Standards.
- Where interfacing occurs, equipment shall be mutually compatible in all respects.
- Where an item of equipment, other than as specified or detailed on the Drawings, is approved by Engineer if it requires any re-design of the structure, partitions, foundation, piping, or any other part of the mechanical, electrical or architectural layout, all such re-design, and all new drawings and detailing required therefore, shall be prepared by the Contractor at his own expense and approval obtained by the Engineer.
- All similar equipment, materials, removable parts of similar equipment etc. shall be inter-changeable with one another.

#### 7.0 Conformity with Statutory Acts, Rules and Standards

7.1 The installation shall be in conformity with the Bye-laws Regulations and Standards of the local authorities applicable to the installations. But if the specifications and drawings call for a higher standard of materials and/or workmanship than those required by any of the above regulations and those required by any of the above regulations and standards, then the specifications and drawings shall take precedence over the said regulations and standards.

- However, if the drawings or specifications required something which violates the Bye-laws and Regulations, then the Bye-laws and Regulations shall govern the requirement of this installation.
- 7.2.1 Indian Standards: The System/ components shall conform to relevant Indian Standards wherever they are required and to the National Building Code, amended upto date.
- 7.2.2 Nothing in these specifications shall be construed to relieve the Contractor of his responsibility for the design, construction, manufacture and installation of the equipment with all its accessories in accordance with applicable Guidelines, Specifications, Statutory Regulations and safety codes in force.

#### 8.0 Deleted

#### 9.0 Manufacturer's Instructions

9.1 Where Manufacturer's have furnished specific instructions, relating to the Materials and Equipment used, covering points not specifically mentioned in these documents, manufacture's instructions shall be followed.

#### 10.0 Training and Operating Instructions

- 10.1 If required by the Engineer, the Contractor shall at no extra cost train members of the maintenance staff either at site or at his works or the sub-contractor's workshop or at such other place or places as may be considered suitable by the Engineer.
- During this period the contractor shall instruct and train the Engineer's/ Employers representatives in the operation, adjustments and maintenance of all equipment installed.
- The Contractor shall submit to the Engineer a draft copy of comprehensive operating instructions and maintenance schedule for all systems and equipment included in this Contract. This shall be supplemented not substituted by manufacturer's operating and maintenance manuals. Upon approval of the draft, the Contractor shall submit to the Engineer four (4) complete bound sets of operating and maintenance schedules along with manufacturers printed literature.

#### 11.0 <u>Inspection and Testing</u>

- 11.1 The Engineer reserves the right to request inspection and testing at manufacturer's works at all reasonable times during manufacture of items for this contract.
- The Engineer or his authorised representative shall have full power to inspect the materials and workmanship at the Contractor's works or at any place from

which the materials or equipment is obtained. Acceptance by the Engineer of any material or equipment shall in no way relieve the contractor of his responsibility for meeting the requirements of the specifications.

- Routine and typical tests for the various items of equipment shall be performed at the Contractor's works and test certificates furnished. If required by the Engineer, the Contractor shall permit the authorised representative of the Engineer to be present during any of the tests.
- After installation has been completed, the Contractor shall carry out under the direction and in the presence of the representative of the Engineer such tests and inspection as have been specified, or as the representative shall consider necessary to determine whether or not the full intent of the requirements of the drawings and specifications have been fulfilled. In case the work does not meet the full intent of the drawings and specifications and further tests are considered necessary, the Contractor shall carry them out and bear the expenses thereof.
- The Contractor shall provide all necessary instruments such as Theodolite, Dumpy level, steel tapes, weighing machine, plumb bobs, spirit levels, hammers, micrometers, thermometers, smoke test machine etc. and labour for testing. The Contractor shall make adequate records of the test procedures and readings, shall repeat any tests requested by the Engineer and shall provide test certificates signed by an properly authorised person. Such test certificates shall cover all works. All such equipments shall be tested for calibration at any approved laboratory.
- 11.6 If test fail to demonstrate the satisfactory nature of the installation or any part thereof then no claims for the extra cost of modifications, replacement or retesting will be considered. The decision of the Engineer shall be regarded as final as to what constitutes a satisfactory test.
- The above general requirements as to testing shall be read in conjunction with any particular requirements specified elsewhere.

#### 12.0 Test Certificates

The Contractor shall submit Manufacturers Test Certificates for all the Materials and Equipments. These shall be issued by the manufacturer or by a government recognized inspection office certifying that all equipment, material, construction and function are in agreement with the requirements of these specification and accepted standards.

#### 13.0 <u>Performance Guarantee</u>

The Contractor shall guarantee that performance of various equipments supplied for the fire fighting system, plumbing system etc. individually, shall not be less than, the approved ratings.

#### 14.0 Quiet Operation and Vibration

All equipment shall operate under all conditions of load without any sound or vibration which is objectionable in the opinion of the Engineer. In case of rotating machinery, sound or vibration noticeable outside the room in which it is installed or annoyingly noticeable inside its own room, shall be considered objectionable. Such conditions shall be corrected by the Contractor at his own expense.

# 15.0 <u>Accessibility</u>

The Contractor shall locate all equipment which must be serviced, operated or maintained in fully accessible positions. The exact location and size of access panels, required for each valve or other devices requiring attendance, shall be finalised and communicated well in time, to be provided in the normal course of work, failing this, the Contractor shall make all the necessary repairs and changes at his own expense.

# 16.0 <u>Completion Certificate</u>

- On completion of the installation a certificate shall be furnished to the Engineer, by the contractor, countersigned by the licensed supervisor under whose direct supervision the installation was carried out. This Certificate shall be in the prescribed form as required by the local authority. On the basis of this certificate the Contractor shall arrange for inspection of installation by the concerned local authorities.
- The Contractor shall be responsible at his own cost for getting the construction and installation duly approved by the Statutory Authorities/Bodies concerned.

#### 17.0 <u>Completion Drawings</u>

At the completion of the work in all respects, the Contractor shall at his own cost submit to the Engineer four (4) sets of layout Drawings drawn at the approved scale indicating the installation. These drawings shall clearly indicate the complete plant layouts, and piping layouts, location wiring, exact location of all the concealed piping, valves, controls, wiring and other services. The Contractor shall also submit four (4) sets of operation and maintenance manual, consolidated control diagrams, technical literature on all automatic controls and complete technical literature on all equipment and materials. The Contractor shall frame under glass, in the plant room all consolidated control diagrams and all piping diagrams.

#### 18.0 <u>Rates</u>

- 18.1 Quoted Rates shall include all materials, equipment, appliances and incidental work which are necessary and customary to make a complete installation of the item.
- 18.2 The Contractor shall check at all stages and supervise at the point of connection the associated civil, electrical and plumbing works like

underground and overhead tanks, power supply and installation of makeup water connection, drain connection in the fire fighting tanks and vicinity of plant room etc. In case of any discrepancy, all rectifications etc, required as a failure to do so, shall be carried out by the Contractor at his own expenses.

# 19.0 <u>Check List</u>

The Contractor shall provide to the Engineer four copies of a comprehensive maintenance check list and shall post a copy of it in the Plant Room. The check list shall be a list of each piece of equipment in this contract, and shall provide a space for each of the next fifty two weeks to record the maintenance provided to and status of various equipment. Every 60 days at the time of inspection, the Contractor shall certify on this check list that he has examined each piece of equipment and that, in his opinion, it is operating as intended by the manufacturer, and that all necessary intention has been performed.

#### 20.0 Repairs

All construction and equipment that required repairing shall be immediately serviced and repaired. All the required parts and labours shall be furnished at no extra cost to the Engineer.

#### 21.0 <u>Control System</u>

During the defects liability period, atleast once every three month, the Contractor shall check all controls in various areas to ensure that these are functioning as designed. This shall apply to all pressure switches and pressure gauges, contactor relays, controllers switches, high and low pressure cutouts etc.

#### 22.0 Reference Points

- 22.1 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of works.
- All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.

#### 23.0 <u>License and Permits</u>

- 23.1 Contractor shall hold a valid contracting and plumbing license issued by the Municipal Authority or other competent authority under whose jurisdiction the work falls.
- Contractor shall keep constant liaison with the competent Municipal or other authority and obtain approvals for all drainage and water supply works carried out by him.
- 23.3 Contractor shall obtain from the competent Municipal or other Authority completion certificates and approval for all drainage and water supply works

carried out by him.

Any fees deposited in connection with the work on behalf of the client in statutory bodies, Corporations, Government departments, etc. shall be paid by the contractor and the same shall be deemed to be included in the quoted rates. Necessary endorsement/application if required shall be arranged from the Employer by the Engineer.

# 24.0 <u>Cutting and Making Good</u>

No structural member shall be chased or cut without the written permission of the Engineer.

#### (B) RELATING TO ELECTRICAL INSTALLATIONS

#### 1.0 General

1.1 The following specific conditions and specification shall be read in conjunction with General Conditions of Contract and Specific Conditions of Contract. If there are any provisions in these additional specific conditions and specifications which are at variance with the provisions in the above mentioned documents, the provisions in these additional specific conditions & specifications shall take precedence.

#### 2.0 Regulations and Standards

2.1 The electrical installations shall conform to the standards and specifications as per Indian Standard Code of Practice for Electrical Wiring Installation IS: 732-1989 and as per CPWD General Specification for Electrical Works (Part I, II & IV). It shall also be in conformity with the current Indian Electricity Rules and regulations in so far as these are applicable to the installation. Wherever these additional specific conditions and specifications calls for a higher standard of material and/or workmanship than those required by any of the above regulations then this additional specific conditions and specification shall take precedence over the said regulation and standards.

# 3.0 Rates

The rates shall be for complete items of work inclusive of all charges for items contingent to the work, such as, packing, forwarding, insurance, freight and delivery and installation at site for the materials to be supplied by the contractor, watch and ward of all materials for the Internal Electrical Installation work at site for completing the required item of work.

#### 4.0 Completeness of Bid

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

#### 5.0 Works to be done by the Contractor

5.1 Unless and otherwise mentioned in the Bid Documents, the following works shall also be done by the contractor, and the quoted rates shall be deemed to

include the cost of following.

- i. Foundations for equipments and components where required, including foundation bolts.
- ii. Cutting and making good all damages caused during installations and restoring the same to their original finish.
- iii. Sealing of all floor openings provided by him for pipes and cables, from fire safety point of view, after laying of the same.
- iv. Painting at site of all exposed metal surfaces of the installation other than pre-painted items like fittings, fans, switchgear/ distribution gear items, cubicle switch board etc. and erection, shall however be rectified to the satisfaction of the Engineer.
- v. Testing and commissioning of complete installation.

#### 6.0 Tools for Handling and Erection

6.1 All tools and tackles required for handling of equipments and materials at site of work as well as for their assembly and erection and also necessary test instruments shall be the responsibility of the contractor.

### 7.0 <u>Terminology & Scope</u>

7.1 Terminology & scope of works shall be complete electrical installations works required to be executed as required and as given in the scope of works.

#### 8.0 Measurement

8.1 The works shall be measured in the units given for the particular item in the BOQ.

#### 9.0 Drawings

9.1 The work shall be executed as per the approved drawings, however any minor changes found essential to co-ordinate the installation of this work with the other trades shall be made without any additional cost to the Employer. The drawings shall be for guidance of the contractor and exact locations, distance and levels shall be governed by the building. The Contractor shall examine all architectural, structural, plumbing and sanitary & electrical drawings before starting the work and report to the Engineer any discrepancies which in his opinion appear on them and get it clarified. Contractor shall not be entitled to any extras for omissions or defects in electrical drawings or when they conflict with other services work.

#### 10.0 Conduit/ Trunking Layout

10.1 Prior to the laying of the conduits and trunking the contractor shall examine/

study the drawings and report to Engineer in case desires to make any changes from the approved conduit layout plan and shall get the same approved from Engineer.

### 11.0 Shop Drawings

The Contractor shall prepare and submit to the Engineer for his approval detailed shop drawings for Main & sub distribution boards, distribution boards, special pull boxes, light switch boards, telephone distribution boards, FDA System, Computer/ LAN System and other electrical equipments/ systems required for the project.

### 12.0 Manufacturer's Instruction

Where manufacturers' have furnished specific instructions, relating to the materials used in this job, covering points not specifically mentioned in these documents, these instructions shall be followed in all cases.

#### 13.0 Materials & Equipment

All materials and equipment shall be of the approved make and design. Unless otherwise called for, only the best quality of materials and equipment shall be used. The contractor shall be responsible for the safe custody of all materials and shall insure as against theft, damage by fire, earth quake etc. A list of items of materials and equipment, together with a sample of each shall be submitted to the Engineer within 30 days of the approval of designs and drawings.

#### **14.0** Scale

Drawings shall be prepared to the scale as required for proper explanation and shall indicate the size and location of all equipments and accessories herein. The contractor shall obtain all dimensions preferably at the building (site of work) and check those plans for interference with the building structure and other equipment.

#### 15.0 Brochures and Data

15.1 The contractor shall submit four copies of all brochures manufacturer's description data and similar literature.

#### 16.0 Approval of Shop Drawings

The Engineer's approval of shop drawings, schedule, brochures etc. shall be an approval of general details and arrangements only and shall not relieve the contractor from responsibility for deviation from drawings or specifications unless he has in writing called Engineer's attention to such deviations at the time of submission nor shall it relieve the Contractor from responsibility for errors or omissions of any kind in the shop drawings when approved.

#### 17.0 Approval of Materials

All materials used on the works shall be new and of the best quality available, conforming to the relevant specifications and as per good engineering practice. Prior approval shall be obtained in writing from the Engineer for all materials proposed and when necessary, approved sample duly identified and labelled shall be deposited with the Engineer and shall be kept at site.

### 18.0 <u>Inspection, Testing and Inspection Certificate</u>

- 18.1 Engineer and its authorised representative shall have at all reasonable times access to the Contractor's premises or works and shall have the power at all reasonable time to inspect and examine the materials and workmanship during its manufacture or erection or if the part of works is being manufactured or assembled at other premises or works.
- The Contractor shall arrange all the materials and labour required for inspection of equipment or for any testing to be carried out at his/manufacturer's works or at site. Notice for such inspection/ presence for testing shall be given to the Engineer by the Contractor at least fifteen (15) days in advance together with the routine test certificates of the equipments/materials given by the manufacturer.
- Notwithstanding approval of tests or equipment by the Engineer the contractor shall be required to perform site tests and prove the correctness of ratings and performance of equipment/ machinery and materials supplied and installed by the contractor as per the contract specifications and conditions. Engineer shall have full power to order the material or work to be tested by an independent agency at the electrical contractor's expense in order to prove soundness & adequacy.

#### 19.0 Schedule & Manner of Operation

Time being the essence of this contract, contractor shall be expected to furnish all labour & material in sufficient quantities at appropriate time, expedite and schedule the work to meet the Engineer's requirement and so manage the operations that the work shall be completed in time as stated elsewhere. In case of shut down of power supply required, Contractor shall coordinate with Engineer and shall carry out essential works during the shut down period allowed by the Engineer. In case Engineer allows for such period during night or early morning hours, Contractor shall make all provisions to avail such account. Contractor shall not be entitled for any extra claims on such account.

Contractor shall programme his work in such a way that items of work requiring presence of Engineer are carried out between 10 A.M. & 5 P.M. on working days.

### **20.0** Performance Guarantee

All equipment shall be guaranteed to give the required performance. The equipment or component or any other part of installation so found defective within the defect liability period shall be replaced/ repaired by the contractor free of cost to the satisfaction of the Engineer.

#### 21.0 Completion Drawings (As Built Drawings)

- On completion of the work, the Contractor shall submit to the Engineer completion drawings for the complete electrical installations drawn to a scale on "Polyester tracing film" indicating the following, along with four blue print copies of the same.
  - a. Run and size of conduits, inspection boxes, junction boxes and pull boxes.
  - b. Number of size of conductors in each conduit.
  - c. Location and rating of sockets and switches controlling the light and power outlets.
  - d. Location and details of main & sub distribution boards, distribution boards indicating the circuit number controlled by them.
  - e. Type of fitting viz. fluorescent, pendants, brackets, bulkhead etc. and exhaust fans.
  - f. A complete wiring diagram as installed and schematic drawings showing all connections for the complete electrical system.
  - g. Location of telephone outlets, junction boxes and sizes of various conduits and number & sizes of wire drawn.
  - h. Location of all earthing stations, route and size of all earthing conductors, manholes etc.
  - i. Layout and particulars of cables & sub mains.
  - j. Schematic drawing for telephone system.
  - k. Layout of conduits for computer outlet points.
  - l. Layout and details of fire detection & alarm system. Consisting of manual call points, fire alarm hooter, smoke & heat detector, FDA control panel including details of conduits and number of wires drawn.

- m. Layout and details of lightning protection system.
- n. Insulation tests and earth test results.

The contractor shall also submit 4 sets of comprehensive operation and maintenance manuals of various electrical items, equipments and systems.

#### 22.0 Confirmation of Quantities

All quantities indicated in the drawings / scope of work / specifications are tentative which may vary as per the approved design and drawings.

### **23.0 Terms of Payment** (For major Electrical Equipments/Items)

For the purposes of works executed for certificate of payment under clause 5.0 Specific Conditions of Contract (SCC) the following norms shall be followed.

- a. 80% of BOQ contract rates on receipt of equipment/Item at site and after inspection and passing.
- b. 10% of BOQ contract rates on erection and installation of equipment.
- c. 05% after successful completion of running tests
- d) 05% on issue of Completion / Taking over Certificate by client.

#### 24.0 <u>Training of Personnel</u>

The Contractor shall arrange to train the employer's personnel for carrying out operations, servicing, preventive maintenance and maintenance of electrical installations and systems.

# (C) RELATING TO HVAC WORKS AND SPECIALIZED EQUIPMENTS & SYSTEMS/SERVICES

#### 1.0 General

The following additional specific conditions and specifications shall be read in conjunction with General conditions of Contract, Specific Conditions of Contract and Technical Specifications. If there are any provisions in these additional specific conditions and specifications which are at variance with the provisions in the above mentioned documents, the provisions in these additional specific conditions and specification shall take precedence.

### 2.0 Scope of Contract

The scope of works covers supply, installation testing and commissioning of HVAC Works and Specialized Equipments & Systems/Services like Building Management System, Surveillance System (CCTV), Door Interlock System, Sterilizers, Steam Generation system etc. complete in all respect as per approved drawings and specifications

#### 3.0 Stores and Materials

3.1 The contractor shall provide everything necessary for the proper execution of the work according to the approved designs and drawings and technical Specifications.

#### 4.0 Supply of Equipment

- 4.1 The contractor shall submit the designs, drawings, technical details, catalogues, fabrication drawings, installation drawings etc. for every equipment and system to the Engineer for approval. No equipment or material shall be delivered without prior approval of the Engineer.
- 4.2 At the time of delivery, the contractor shall submit manufacturers test certificates for equipments and materials.
- 4.3 The contractor shall submit the Factory Gate passes/ Challans from manufacturer's factory/works clearly bearing the batch numbers/serial

number/lot number for identification and date of despatch.

### 5.0 <u>Shop Drawings</u>

- The Contractor shall within 60 (Sixty) Days of signing of the contract prepare and submit to the Engineer for approval, 3 sets of detailed shop drawings of HVAC system and other specialized systems and services, equipment details, fabrication drawings, installation drawings etc. as per specifications and as required by the Engineer.
- These drawings shall contain details of construction, size, arrangement, operating clearances, performance characteristics, and capacity of all items of equipment, as also details of all related items of work by other disciplines.
- 5.3 If the Engineer makes any amendment in the above drawings, the Contractor shall supply two fresh sets of drawings with the amendments duly incorporated, along with the drawings on which corrections were made. After final approval has been obtained from the Engineer, the Contractor shall submit a further six sets of shop drawings for the exclusive use of and retention by the Engineer.
- 5.4 The shop Drawings shall be submitted for approval sufficiently in advance of planned delivery and installation of any material, to allow Engineer ample time for scrutiny. No claims for extension of time shall be entertained because of any delay in the work due to failure to produce shop drawings in time.
- Approval rendered on shop drawings shall not be considered as a guarantee of measurements or of building conditions. Where drawings are approved, said approval does not mean that drawings have been checked in detail nor does it in any way relieve the Contractor from his responsibility of furnishing materials or performing work as required by the Contract.

# 6.0 <u>Completion Drawings</u>

- 6.1 Following "AS BUILT" drawings shall be submitted by the contractor on completion of the work in 4 sets.
  - a. Plant installation drawings giving complete details of the entire equipments including foundations.
  - b. Ducting drawings showing all sizes, damper locations and sizes of all air outlets and intakes, for all floors.
  - c. Electrical drawings showing cable sizes, equipment capacities, control components and control wiring.
  - d. Schematic control drawings giving detailed sequence of operation and notes to explain the operation of the control circuit.
  - e. Piping drawings showing all pipe sizes, valves and fittings.

- f. Schematic drawings of all specialized systems and services
- g. Any other drawings to be supplied as per instructions of the Engineer.

The Drawings shall be cross checked and approved by the Engineer before acceptance.

### 7.0 Operation and Service Manuals

7.1 The contractor shall submit 4 sets of operation and service manuals in respect of the HVAC System and Specialized Equipments and Systems.

Following minimum details shall be furnished:

- i) Detailed equipment data as approved by the Engineer.
- ii) Trouble shooting
- iii) Operation Instructions
- ii) Servicing and Maintenance instruction.
- iii) Approved test readings.

The contractor shall also submit four (4) sets of technical literature on all automatic controls and complete technical literature on all equipment and materials.

#### 8.0 Inspection at Contractor's Premises

- 8.1 The Engineer and his representatives shall at all reasonable time have free access to the contractor's premises/works. The contractor shall give every facility to the Engineer and his Representative and necessary help for inspection and examinations and test of the materials and workmanship.
- 8.2 The Engineers's Representative shall have full powers to inspect drawings of any portion of the work or examine the materials and workmanship of the plant at the contractor's works or at any other place from where the material or equipment is obtained. Acceptance of any material or equipment shall in no way, relieve the contractor of his responsibility for meeting the requirement of the specifications.
- 8.2 All the expenditures incurred for inspection and testing of equipments and materials at the contractors/manufacturers premises shall be borne by the contractor and shall be deemed to have been included in the quoted rates.

#### 9.0 <u>Sub - Contracting</u>

The contractor shall subcontract part of the works only with the written approval of the Engineer but subcontracting of any works shall not relieve the contractor from the responsibility of supplying the equipments/materials and giving the performance of the HVAC system and Specialized Equipments and Systems/Services as per the approved design conditions and the overall responsibility of the contractor for compliance with the contract terms does not alter by subcontracting.

#### 10.0 <u>Material Submittals</u>

The contractor shall submit submittals for all equipment and machinery for the written approval of the Engineer before placing orders. The material submittals shall comprise of at least the following:

- a. Manufacturer's technical catalogues and brochures giving technical data about performance and other parameters.
- b. Manufacturers drawings/ sketches showing construction, dimensional and installation details.
- c. Rating charts and performance curves clarifying rating of equipment selected and proposed.

#### 11.0 Samples and Prototypes

The contractor shall submit samples of items such as grilles/ diffusers, pipes, valves, insulation, controls, sensors and/ or any other parts or equipment as required by the Engineer for prior approval in writing before placing the order. The contractor shall also construct prototype or samples of work as laid down in the contract or as instructed by the Engineer. Such samples and prototypes after approval shall be retained by the Engineer and shall serve as the standards to be achieved in final construction.

#### 12.0 <u>Testing and Commissioning</u>

12.1 Upon completion of installations, all the equipments and systems shall be tested for their operation, capacities, performance etc. Relevant Standards and Specifications shall be followed.

The complete HVAC system shall be put for a run test for two days (48 Hours) and all the operating parameters shall be checked and tested for satisfactory operation.

- The initial tests for the HVAC works and other equipments and system shall include but not be limited to the following:
  - a. To operate and check the proper functioning of all electrically operated

- components viz., compressor motor, pumps, blowers, air handling units, rotating machine, fans, boilers, etc.
- b. To operate and check the proper functioning of all electrical panels, switch gears, safety and other controls.
- c. To adjust and balance air, water, steam and gas quantities to provide the designed flow rates by adjusting valves, dampers, diverters etc.
- d. To check the systems against leaks in different circuits, alignment of motor, 'V' Belt adjustments etc.
- e. To check the vibration and noise levels of the equipment.
- f. Setting of all control and all such other tests which are essential for smooth functioning of the plant.

All adjustments should be made prior to these tests so that proper conditions/working are achieved during this testing.

The Contractor shall pay for and arrange without any extra cost, all necessary balancing, testing and measuring equipment, instruments, materials, accessories, power, water, fuel and the requisite labour for testing and commissioning. Any defects in materials and/or in workmanship detected in the course of testing shall be rectified by the Contractor entirely at his own cost, to the satisfaction of the Engineer. The installation shall be tested again after removal of defects and shall be commissioned only after approval by the Engineer. All tests shall be carried out in the presence of the Engineer or the Engineer's Representative.

#### 13.0 Taking Over

After completion of the installation of the HVAC System and other specialized equipments and systems and upon satisfactory passing all the tests and validation, the contractor shall notify the Engineer and same shall be taken over by the employer.

#### 13.2 Final Performance and capacity Test

- The installation as a whole shall be balanced and tested upon completion, and all relevant information, including the following shall be submitted to the Engineer.
- 13.2.1 Air volume passing through each unit, duct, grilles, apertures.
- Pressure in each room/zone as per the design and Differential pressure readings across each filter, fan and coil, and through each pump.
- 13.2.3 Static pressure in each air duct.
- 13.2.4 Electrical current readings, in amperes of full and average load running, and

starting, together with name plate current of each electrical motor.

- 13.2.5 Continuous recording over a specified period, of ambient wet and dry bulb temperatures under varying degrees of internal heat loads and use and occupation, in each zone of each part of the building.
- Daily records should be maintained of hourly readings, taken under varying degrees of internal heat load and use and occupation, of wet and dry bulb temperatures, upstream "on-coil" of each cooling coil. Also suction temperatures and pressures for each refrigerating unit. The current and voltage drawn by each machine.
- Any other readings shall be taken which may subsequently be specified by the Engineer.
- Performance testing of the equipments/systems and complete A/C plant and HVAC system to check the following parameters with respect to design as minimum.
  - Performance and Capacities of Chillers
  - Performance and Capacities of Air Handling Units
  - Performance and Capacities of Pumps
  - Performance and capacities of Exhaust Blowers
  - Room inside temperatures and RH
  - Air quantity at each outlet
  - Air Changes in each room/zone with respect to the designed condition
  - Pressure in each room/zone with respect to designed conditions
  - Operation of electrical panels and its switchgears
  - Testing of power cabling, earthing etc.
  - Operation of Volume Control Dampers, Fire Dampers, Isolation Dampers etc.
  - Filter Integrity / DOP test for all HEPA and Fine Filters
  - Operation of all valves and controls
  - Operation of Control Desk/Panel
  - Any other test deemed required by the Engineer to check the performance of the HVAC equipments and system

In addition to the above testing, final performance and capacity tests of the HVAC System shall also be carried out during the defects liability period as follows:

- a. Peak summer/ monsoon test during the period from 15th may to 31st July. The installations should be able to maintain the specified inside conditions within the tolerance limits permitted in the contract.
- b. Peak winter test during the period from 1st December to 15th February. The installations should be able to maintain the specified inside conditions within the tolerance limits permitted in the contract.

c. During the performance testing, the critical parameters such as temperature, relative humidity, relative pressure etc. shall be tested and the capacities of various equipments shall be tested.

If the contractor is unable to give peak summer/monsoon and winter test of the HVAC system during this period, the defect liability period for the HVAC system shall be extended till the satisfactory completion of the above tests

### 14.0 Operation of Plant

The user shall have the right to operate the equipments and systems, if in operating condition, whether or not such equipments, have been accepted as complete and satisfactory. Repairs and alterations shall be made at such time as directed by the Engineer. In special circumstances user may have to use the plant to Air condition some areas even before the completion of whole work. The contractor shall Co-operate fully under such circumstances.

# 15.0 Guarantee and Defects Liability Period

- All the equipments including HVAC System and Specialized Equipments & Systems shall be guaranteed for its performance and against any manufacturing defect. This guarantee shall be valid for the complete defect liability period.
- The contractor shall guarantee that all equipments and materials shall be free from any defect due to the defective materials and bad workmanship or any other cause and that the equipment shall work satisfactorily and that the performance and efficiencies of the equipment shall be not less than the guaranteed values. Any parts found defective during the guarantee/defect liability period shall be replaced by the contractor at his own expense. The services of the contractor's personnel, if requisitioned during this period for such work, shall be made available free of any cost to the Employer.
- 15.3 If the defects are not remedied within a reasonable time mentioned in the written notice, the Employer may proceed to do so at the contractors risk and expenses without prejudice to any other rights. Joint inspection report shall also be deemed as written notice for this purpose.

#### 16.0 Measurement of Works

- The works shall be measured from time to time for the purpose of making interim payments in the monthly Running Bills of the contractor. The works shall be measured in accordance with the units specified/approved and the Price Breakups approved by the Engineer.
- The Engineer may from time to time intimate to the contractor that he requires the works to be measured and the contractor shall forthwith attend or send a qualified agent to assist the Engineer or the Engineer's Representative in taking such measurements and calculations and to furnish all particulars or

give all assistance required by either of them. Should the contractor not attend or neglect or omit to send such agent, then the measurements of the works, carried out by the Engineer or his Representative shall be taken to be the correct measurements of the works, in accordance with the standard method of measurements, as in prevalent use.

The contractor or his representative may at the time of measurement take such notes and measurements as he may require. The contractor shall submit Running bills supported by detailed measurement sheets.

#### 17.0 Variation in Quantities

17.1 All quantities indicated in the drawings / scope of work / specifications are tentative which may vary as per the site conditions. The work shall be executed as per the approved design and drawings on 'Turnkey Basis' complete in all respect.

# 18.0 <u>Maintenance</u>

18.1 The contractor shall carry out routine servicing and maintenance of the HVAC System and Specialized Equipments & Systems during the operation and maintenance period. The contractor shall carry out all routine and special maintenance of the equipments and systems and attend to any defects that may arise during operation.

#### 19.0 Performance Guarantee

19.1.1.1 The contractor shall submit a performance guarantee certificate that the equipments and the complete systems shall maintain the operating parameters within +/- 5 % of the specified parameters. The Contractor shall also guarantee that the capacity of various components as well as the whole system covered under scope of work, approved designs and technical data etc. shall not be less than the specified capacities. The guarantee of the specific equipment supplier alone with regard to the performance of the system shall not be acceptable. However, this does not alter the overall responsibility of the contractor for compliance with the contract terms and conditions.

#### 20.0 Painting

All equipment and ancillary items such as pipes, supports etc., will be painted in approved manner, using standard colour scheme as approved by the Engineer.

#### 21.0 <u>Safe Custody and Storage</u>

21.1 Safe custody of all machinery and equipments supplied by the contractor shall be his own responsibility till the final taking over by the Employer. He should, therefore, employ sufficient staff for watch and ward at his own

expenses. The Employer may, however, allow the contractor to use the plant room/other rooms, etc., for temporary storage of his equipment if such spaces are ready and available.

# 22.0 <u>Terms of Payment</u>

For purposes of certificate of payment under clause 5.0 Specific Conditions of Contract (SCC) the following norms shall be followed for items/works covered under this section.

- a. 80% of BOQ contract rates on receipt of equipments/items at site and after inspection and passing.
- b. 10% of BOQ contract rates on erection and installation of equipment.
- c. 05% after successful completion of running tests
- d) 05% on issue of Completion / Taking over Certificate by client.

#### 23.0 Training of Personnel

The contractor shall arrange to train the Employer's personnel on the following aspects of the HVAC System and other specialized equipments and systems :

- a) Operation of HVAC Plant and all other equipments and systems.
- b) Gas charging and pumping down of the system.
- c) Adjustments of settings for controls and protective devices.
- d) Servicing and Preventive maintenance.
- e) Disassembling and assembling of equipment/ system parts including identification and replacement of worn out parts.

# ANNEXURE - A

FORM OF AGREEMENT (On a stamp paper of appropriate value )

# **AGREEMENT**

Malar	ia Rese	arch (NIMR),	New Delhi	under Indi	an Council	of Medical R	veen <b>National of</b> Research (ICMR) who enters into
this	Aş	greement	of	the	one	part	and M/s
							or") of the other
viz the exe	ecution a		("the wo	orks") and l ks and the r	has accepted emedying or	d a Bid by th	y the Contractor, ne Contractor for therein at a total
Now th	nis Agre	eement witnesse	th as follow	vs:			
1.		Agreement watively assigned to					meanings as are referred to.
2.		llowing docume Agreement, viz		e deemed to	o form and l	oe read and o	construed as part
	(a) (b) (c)	The Letter of A The said Bid; Instructions to					

<ul> <li>(d) The General Conditions of Contract and Specific Conditions of Contract;</li> <li>(e) The Specification;</li> <li>(f) The Drawings;</li> <li>(g) The Priced Bill of Quantities;</li> <li>(h) Any other relevant documents referred to in this Agreement or in the aforementioned documents;</li> </ul>						
In consideration of the payments to be made by the HSCC(I) Ltd. for and on behalf of the Employer to the contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all respects with the provisions of the Contract.						
The Employer hereby covenants to pay the Contractor through HSCC(I) Ltd. in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.						
In Witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written.						
•						
•						
day and year first before written.						
day and year first before written.  Signed, Sealed, and Delivered by the Said  Binding Signature of [HSCC] for and on behalf of National of Malaria Research						
day and year first before written.  Signed, Sealed, and Delivered by the Said  Binding Signature of [HSCC] for and on behalf of National of Malaria Research (NIMR), New Delhi under Indian Council of Medical Research (ICMR)						
day and year first before written.  Signed, Sealed, and Delivered by the Said						

Witness (2):

3.

4.

# PROFORMA FOR PERFORMANCE BANK GUARANTEE

(On a stamp paper of appropriate value from any Nationalised Bank or Scheduled Bank)

To,	
Plot 1	HSCC (India) Ltd., No. 6(A), Block E, Sector 1, DA - 201 301.
Dear	Sir,
Countinclude (A), I award Contributer Condington and in (Ruperform)	onsideration of National of Malaria Research (NIMR), New Delhi under Indian cil of Medical Research (ICMR) (hereinafter called Employer) which expression shall de his successor and assigns represented by his Consultant M/s. HSCC (I) Ltd., Plot - 6 Block - E, Sector - I, Noida, Uttar Pradesh - 201 301 (hereinafter called HSCC) having ded to M/s. (hereinafter referred to as the said ractor or 'Contractor' which expression shall wherever the subject or context so permits de its successors and assigns) a contract No
1.	We,

- 2. We\_\_\_\_\_\_Bank Ltd. further agree that The Employer shall be sole judge of and as to whether the said contractor has committed any breach or breaches of any of the terms and conditions of the said contract and the extent of loss, damage, cost, charges and expenses caused to or suffered by or that may be caused to or suffered by The Employer on account thereof and the decision of The Employer that the said Contractor has committed such breach or breaches and as to the amount or amounts of loss, damage, costs, charges and expenses caused to or suffered by The Employer from time to time shall be final and binding on us.
- 3. The Employer shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other security in respect of the Contractor's obligations and liabilities hereunder or to vary the contract or the work to be done there under vis-a-vis the Contractor or to grant time or indulgence to the Contractor or to reduce or to increase or otherwise vary the prices of the total contract value or to release or to forbear from enforcement of all or any of the security and/or any other security(ies) now or hereafter held by The Employer and no such dealing(s) reduction(s) increase(s) or other indulgence(s) or arrangements with the Contractor or release or forbearance whatsoever shall absolve the bank of the full liability to The Employer hereunder or prejudice the rights of The Employer against the bank.
- 4. This guarantee shall not be determined or affected by the liquidation or winding up, dissolution, or change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all monies payable to The Employer in terms thereof.
- 5. The bank hereby waives all rights at any time inconsistent with the terms of this guarantee and the obligations of the Bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to The Employer in terms hereof.
- 6. The amount stated in any notice of demand addressed by The Employer to the Bank as liable to be paid to The Employer by the Contractor or as suffered or incurred by The Employer on account of any losses or damages or costs, charges and/or expenses shall be conclusive evidence of the amount so liable to be paid to The Employer or suffered or incurred by The Employer as the case may be and shall be payable by the Bank to The Employer in terms hereof.
- 8. This guarantee shall be in addition to any other guarantee or security whatsoever that The Employer may now or at any time anywise may have in relation to the Contractor's obligations/or liabilities under and/or in connection with the said contract, and The Employer shall have full authority to have recourse to or enforce this security in preference to any other guarantee or security which The Employer may have or obtain and no forbearance on the part of The Employer in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.

9.	It shall not be necessary for The Employer to proceed against the said Contractor before proceeding against the Bank and the Guarantee herein contained shall be enforceable against the Bank notwithstanding that any security which The Employer may have obtained or obtain from the contractor shall at the time when proceedings are taken against the said bank hereunder be outstanding or unrealised.
10.	We, the said Bank undertake not to revoke this guarantee during its currency except with the consent of The Employer in writing and agree that any change in the constitution of the said contractor or the said bank shall not discharge our liability hereunder.
11.	Wethe said Bank further that we shall pay forthwith the amount stated in the notice of demand notwithstanding any dispute/difference pending between the parties before the arbitrator and/or that any dispute is being referred to arbitration.
12.	Notwithstanding anything contained herein above, our liability under this guarantee shall be restricted to Rs
Dated_	day of
For an	d on behalf of Bank.
	Issued under seal :

#### PROFORMA FOR ADVANCE BANK GUARANTEE

(On a stamp paper of appropriate value from any Nationalised Bank or Scheduled Bank)

To

M/s HSCC (India) Ltd., Plot No. 6(A), Block E, Sector 1, NOIDA - 201 301.

Dear Sir,

1.	In consideration of the Indian Council of Media which expression shall Consultant M/s. HSCC Pradesh - 201 301, (he conditions of contract No Contract or the said Cont Contractor") the contract utilising it for the purpacceptable to HSCC.	cal Research (ICMR include his success (I) Ltd., Plot - 6 (A reinafter called HSC)tract) to make at the	c) (hereinafter cassors and assignated), Block - E, SCC) having agreed dated request of ("the	alled as The Employs represented by sector - I, Noida, sed under the terror (hereinafter called Contractor) or "the	loyer) y his Uttai ns & ed the e said
2.	We, the	the Companies Actdo hereby guara ith interest thereon a ontract. If the contra id contract and/or t is not fully n Bank hereby un on demand and with with interes n/misutilisation of the to recover in full	antee the repayment as provided according to utilities and advance recovered by conditionally and out demur or prost any claim made said advance as any claim made said advance as any claim made as a claim made a cla	ng our registered of the ent and recovery of ording to the term ise the said advance together with in The Employer, d irrevocably under otest to the extent of the by The Employand/or by reason o	office of the s and ce for terest we ertake of the der or f The
3.	We,sole judge of and as to advance or any part there the advance or any part the of the Employer in this r	eof for the purposes of hereof with interest h	of the said contra as been recovere	act and/or as to whed or not and the fire	nether

4. We, the said Bank further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said contract and till the said advance has been fully recovered and its claims satisfied or discharged and till The Employer certifies that the said advance with interest has been fully recovered from the contractor.

- 5. The Employer shall have the fullest liberty without affecting in any way the liability of the said Bank under this guarantee or Indemnity from time to time to vary any of the terms and conditions of the said Contract or the advance or to extend time of performance by the Contractor or to postpone for any time and from time to time any of the powers exercisable by it against the said Contractor and either to enforce or forbear from enforcing any of the terms and conditions governing the said contract or the advance or securities available to The Employer and the said Bank shall not be released from its liability under these presents by any exercise by The Employer of the liberty with reference to the matter aforesaid or by reason of time being given to the said Contractor/or any other forbearance, act or omission on the part of The Employer or any indulgence by The Employer to the said Contractor or of any other matter or thing whatsoever which under the law relating to sureties would but for this provision have the effect of so releasing the said Bank from its said liability.
- 6. The Bank hereby waives all rights at any time inconsistent with the terms of this Guarantee and the obligations of the Bank in terms hereof shall not be in any way affected or suspended by reason of any dispute or disputes having been raised by the Contractor (whether or not pending before any arbitrator, Tribunal or court) or any denial or liability by the Contractor stopping or preventing or purporting to stop or prevent any payment by the Bank to The Employer in terms thereof.
- 7. The amount stated in any notice of demand addressed by The Employer to the Bank as liable to be paid to The Employer by the Contractor, shall be conclusive evidence of the amount so liable to be paid to The Employer by the Bank.
- 8. This guarantee/undertaking shall be in addition to any other guarantee or security whatsoever that The Employer may now or any time may have in relation to the Contractor's obligations or liabilities under and/or in connection with the said Contract, and The Employer shall have full authority to have recourse to or enforce this security in preference to any other guarantee or security which The Employer may have or obtain and no forbearance on the part of The Employer in enforcing or requiring enforcement of any other security shall have the effect of releasing the Bank from its full liability hereunder.
- 9. It shall not be necessary for The Employer to proceed against the said Contractor before proceeding against the Bank and the guarantee herein contained shall be enforceable against the Bank notwithstanding that any security which the Employer may have obtained or obtain from the Contractor shall at the time when proceedings are taken against the said Bank hereunder be outstanding or unrealised.
- 10. We, \_\_\_\_\_the said Bank undertake that we shall pay forthwith the amount stated in the notice of demand notwithstanding any dispute/difference pending between the parties before the arbitrator and/or that any dispute is being referred to arbitration.
- 11. We, the said Bank undertake not to revoke this guarantee during its currency except with the consent of The Employer in writing and agree that any change in the Constitution of the said Contractor or the said Bank shall not discharge our liability hereunder.

I <i>2</i> .	remain valid and irrevocable for all claims of The Employer and liabilities of the Contractor arising upto and until midnight of
13.	Not withstanding anything contained herein above, our liability under this guarantee shall be restricted to Rsalongwith interest due thereon (Rs) with interest and this guarantee shall remain in full force till and unless a claim is made on us within 3 months from the date i.e. before all the claims under this guarantee shall be forfeited and we shall be relieved of and discharged from our liabilities hereunder.
Dated_	day of
or and	on behalf of Bank.
	Issued under seal:

#### PROFORMA FOR BID SECURITY BANK GUARANTEE

(On a stamp paper of appropriate value from any Nationalised Bank or Scheduled Bank)

To

M/s HSCC( India ) Ltd, Plot No. 6(A), Block E, Sector 1, NOIDA - 201 301.

Dear Sir,

	consideration		your	agreeing	to	accept	Bank	Guarante	e fo	r F	₹s.
(Ru <sub>l</sub>	pees payment from /t	 M/s									
 (her	einafter called	the I	Bidder	) towards	Bid	security	in respe	ect of you	r tend	ler r	10.
at . con you	ditions of the s indemnified	aid te	nder, v	we hereby extent	and	d for due ertake and	fulfilm d agree	ent of the to indemn	e term	ns a d ke	nd ep
suffo of a or a you liabi	ne event of and ered by you by my terms and or rgument, and win full satisfact lity under	reaso conditi withou ion of this	on of a ons of it refer your o guara	the said to the said to ence to the demand the antee sh	or no ende e bid e am all (	on observ r, we sha der, irrevo ounts cla not at Rupees	vance or Il on der ocably a imed by	n the part of mand and and uncond you, prov	of the withou ditiona ided th	Bido ut ca Illy p hat c	der avil ay our

This guarantee herein contained shall remain in full force and till you finalise the tender and select the tender as per your choice and it shall in the event of the said bidder being selected and entrusted with the said work, continue to be enforceable till the said bidder executes the Agreement with you and commences the work as stipulated under the terms and conditions of the said tender have been fully and properly carried out by the said bidder and accordingly discharges the guarantee.

We also agree that your decision as to whether the bidder has committed any breach or non observance of the terms and conditions of the said tender shall be final and binding on us. We under take to pay the Consultant any money so demanded by the Consultant notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceedings pending before any Court or Tribunal relating thereto, our liability under this present being absolute and equivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the contractor(s) shall have no claim against us for making such a payment.

This guarantee shall continue to be in full force and effect for a period of 120 days from last date fixed for receiving the tender. Notwithstanding the above limitations, we shall honour and discharge the claims preferred by you within thirty days of expiry of this guarantee.

We shall not revoke this guarantee during its currency except with your previous consent in writing. This guarantee shall not be affected by any change in Constitution of our bank or of the bidder firm. Your neglect or forbearance in the enforcement of the payment of any money, the payment whereof is intended to be hereby secured or the giving of time for the payment hereto shall in no way relieve us our liability under this guarantee.

Dated this day of	
	Yours faithfully,
	Signature & seal of the Bank (Authorised Signatory)