



Supply, installation, testing and commissioning of 6000 CFM floor mounted outdoor type AHU for Office building at RBI, Jaipur

Reserve Bank of India, Jaipur invites e-Tender for **Supply, installation, testing and commissioning of 6000 CFM floor mounted outdoor type AHU** for Bank's Office Building, Reserve Bank of India, Jaipur. The tendering would be done through the e-Tendering portal of MSTC Ltd (<http://mstcecommerce.com/eprochome/rbi>). All the eligible firms / contractors must register themselves with MSTC Ltd through the above-mentioned website to participate in the tendering process. The Schedule of e-Tender is as follows:

a. e-Tender Name	Supply, installation, testing and commissioning of 6000 CFM floor mounted outdoor type AHU for Office building at RBI, Jaipur
b. e-Tender no	RBI/Jaipur/Estate/230/19-20/ET/438
c. Mode of Tender	e-Procurement System (Online Part I - Techno-Commercial Bid and Part II - Price Bid through www.mstcecommerce.com/eprochome/rbi)
d. Date of NIT available to parties to download	March 18, 2020, 09:00AM
e. Earnest Money Deposit	Rs 15360/- (Rs. Fifteen thousand three hundred sixty only) through NEFT - details as below along with the Part I / Technical – Commercial Bid. IFSC Code – RBIS0JPPA01 A/c number – 8692299 MSME firms are exempted for submitting the EMD subject to submission of relevant certificate.
f. Last date of submission of EMD	Till 12:00 PM on 08.04.2020
g. Date of Starting of e-Tender for submission of on line Techno-Commercial Bid and price Bid at www.mstcecommerce.com/eprochome/rbi	March 18, 2020, 09:00AM
h. Date of closing of online e-tender for submission of Techno-Commercial Bid & Price Bid	Till 2:00 PM on 08.04.2020
i. Date & time of opening of Part-I (i.e. Techno-Commercial Bid) Date & Time of opening of Part- II (i.e. Price Bid)	03:00 PM on April 08, 2020. Date and time of opening of price bid will be informed separately to all the eligible bidders later.
j. Transaction Fee	To be paid through MSTC website

Please note that there is no tender fees to download the tender document from Portal.

Applicants intending to apply will have to satisfy the Bank by furnishing documentary evidence in support of their possessing required eligibility and in the event of their failure to do so, the Bank reserves the right to reject their candidature.

Any amendments / corrigendum to the tender, if any, issued in future will only be notified on the RBI Website and MSTC Website as given above and will not be published in the newspaper.



Reserve Bank of India
Estate Department
Jaipur

E-Tender: Supply, installation, testing and commissioning of 6000 CFM floor mounted outdoor type AHU for Office building at RBI, Jaipur

Part I

Name of the tenderer _____

Address _____

Due Date of Submission at 14:00 Hrs on 08.04.2020

Note: It is e tender. Hence, signed & scanned Part I must be uploaded to MSTC website. Part II/rates will be directly filled at the site.

Bidder/Contractor/Tenderer means those are participating the tendering process. Successful bidder/contractor/Tenders mean who quote Lowest after evaluating the Part I and Part II of tender.

Important instructions regarding e-tender

This is an e-procurement event of Reserve Bank of India, JAIPUR. The e-procurement service provider is MSTC Limited.

You are requested to read and understand the Notice Inviting E-Tender and subsequent Corrigendum, if any, before submitting your online tender. Tenderers who do not comply with the conditions with documentary proof (wherever required) will not qualify in the Tender for opening of price bid.

1.	<p>Process of E-tender :</p> <p>A) Registration: The process involves vendor's registration with MSTC e-procurement portal which is free of cost. Only after registration, the vendor(s) can submit his/their bids electronically. Electronic Bidding for submission of Techno-Commercial Bid as well as Price Bid over the internet will be done. The Vendor should possess Class III signing type digital certificate. Vendors are to make their own arrangement for bidding from a P.C. connected with Internet. MSTC/RBI, JAIPUR is not responsible for making such arrangement. (Bids will not be recorded without Digital Signature).</p> <p>SPECIAL NOTE: THE PRICE BID AND THE COMMERCIAL BID HAS TO BE SUBMITTED ON-LINE ONLY AT www.mstcecommerce.com/eprochome/rbind</p> <p>1).Vendors are required to register themselves online with www.mstcecommerce.com→ e-Procurement→PSU /govt depts→ RBI JAIPUR→Register as Vendor Filling up details and creating own user id and password→ Submit.</p> <p>2). Vendors will receive a system generated mail confirming their registration in their email which has been provided while filling the registration form.</p> <p>In case of any clarification, please contact MSTC/RBI, JAIPUR, (before the scheduled time of the e- Tender).</p> <p>Contact person (MSTC):</p> <table style="width: 100%; border: none;"><tr><td style="width: 50%;">1) Mr Sumit Chakraborty</td><td style="width: 50%;">2) Shri Vikas Agrawal</td></tr><tr><td>Deputy Manager (NRO)</td><td>Assistant Manager</td></tr><tr><td>Mobile no: 7043414496</td><td>Mobile no- 9004311440</td></tr><tr><td></td><td>Email- vagrawal@mstcindia.co.in</td></tr><tr><td>Landline-01132068276</td><td>Email- smohanta@mstcindia.co.in</td></tr></table> <p>Contact person (RBI JAIPUR):</p> <p>Shri Harshad Kelkar, Assistant Manager, Estate Department</p>	1) Mr Sumit Chakraborty	2) Shri Vikas Agrawal	Deputy Manager (NRO)	Assistant Manager	Mobile no: 7043414496	Mobile no- 9004311440		Email- vagrawal@mstcindia.co.in	Landline-01132068276	Email- smohanta@mstcindia.co.in
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	<p>MOB: 8828202902</p> <p>B) System Requirement:</p> <p>i) Windows XP-SP3 & above/Windows 7 Operating System</p> <p>ii) IE-7 and above Internet browser.</p> <p>iii) Signing type digital signature</p> <p>iv) JRE 7 update 9 and above software to be downloaded and installed in the system.</p> <p>To enable ALL active X controls and disable 'use pop up blocker' under Tools→Internet Options→custom level</p> <p>For more details, vendor may refer to the Vendor Guide and FAQ available at www.mstcecommerce.com/eprochome.</p>
2.	<p>(A) Part I Techno-Commercial bid will be opened electronically on specified date and time as given in the NIT.</p> <p>(B) Part II Price bid will be opened electronically of only those bidder(s) whose Part I Techno-Commercial Bid is found to be Techno-Commercially acceptable by RBI, JAIPUR. Such bidder(s) will be intimated date of opening of Part II Price bid, through valid email confirmed by them.</p> <p>Note:</p> <p>The tenderers are advised to offer their best possible rates. There would generally be no negotiations hence please submit your most competitive prices while submitting the price bid. However in case the lowest rate appears to be reasonable taking into account the prevailing market conditions, the order may be awarded to the lowest bidder and if the rate is still considered high, action as per prevailing instruction/guideline shall be taken.</p>
3.	<p>All entries in the e-Tender should be entered in online Technical & Commercial Formats without any ambiguity.</p>
4.	<p>Special Note towards Transaction fee: PAYMENT OF Transaction fee is online on MSTC site</p> <p>After making the payment for transaction fee, the vendor should enter the transaction fee details by using the "Transaction Fee entry" Link under "My Menu" in the vendor login. Here the vendor may select the particular e-Tender in which they want to participate by clicking on the tick box at the right and then Clicking on the "Submit" Button at the bottom Of the page. Then the page appears where the vendors are required to fill up the transaction details, namely the UTR No, Date Of Transaction, And the Remitting Bank in the given fields and then clicking on the "Confirm" Button.</p> <p>NOTE : The bidders should submit the transaction fee well in advance before the last date of submission of e-Tender as they will be activated for bid submission only after receipt of transaction fee by MSTC.</p> <p>Vendors are advised not to deposit cash in bank as it becomes difficult to ascertain the details of the remitter from such cash transactions.</p>

	<p>Contact Details :</p> <p>Shri Vikas Agrawal</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Deputy Manager (NRO)</td> <td style="width: 50%;">Assistant Manager</td> </tr> <tr> <td>Mobile no: 09971668889</td> <td>Mobile no- 9004311440</td> </tr> <tr> <td>Email: umesh@mstcindia.co.in</td> <td>Email- vagrwal@mstcindia.co.in</td> </tr> <tr> <td>Landline-01132068276</td> <td>Email: umesh@mstcindia.co.in</td> </tr> </table> <p>Bidders may please note that the transaction fee should be deposited by debiting the account of the bidder only; transaction fee deposited from or by debiting any other party’s account will not be accepted. Transaction fee is non-refundable.</p> <p>In case of failure to make payment towards Transaction fee for any reason, the vendor, in term, will not have the access to online e-tender.</p>	Deputy Manager (NRO)	Assistant Manager	Mobile no: 09971668889	Mobile no- 9004311440	Email: umesh@mstcindia.co.in	Email- vagrwal@mstcindia.co.in	Landline-01132068276	Email: umesh@mstcindia.co.in
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Landline-01132068276	Email: umesh@mstcindia.co.in								
5.	<p>Vendors are instructed to use Upload Documents link in My menu to upload documents in document library. Multiple documents can be uploaded. Maximum size of single document for upload is 5 MB.</p> <p>Once documents are uploaded in the library, vendors can attach documents through Attach Document link against the particular e-Tender. Please note that if the documents are not attached to any e-Tender, the same cannot be downloaded by RBI JAIPUR and it will be deemed that the vendor has not submitted the documents. For further assistance please follow instructions of vendor guide.</p>								
6.	<p>All notices and correspondence to the bidder(s) shall be sent by email only during the process till finalization of e-Tender by RBI, JAIPUR as well as by MSTC (e-procurement service provider). Hence the bidders are required to ensure that their email address provided is valid and updated at the stage of registration of vendor with MSTC (i.e. Service Provider). Bidders are also requested to ensure validity of their DSC (Digital Signature Certificate).</p>								
7.	<p>(i) Please note that there is no provision to take out the list of parties downloading the e-Tender document from the web site mentioned in NIT. As such, bidders are requested to see the web site once again before the due date of e-Tender opening to ensure that they have not missed any corrigendum uploaded against the said e-Tender after downloading the e-Tender document. The responsibility of downloading the related corrigenda, if any, will be of the bidders only.</p> <p>(ii) No separate intimation in respect of corrigendum to this NIT (if any) will be sent to tenderer (s) who have downloaded the documents from web site. Please see website www.mstcecommerce.com/eprochome/rbind of MSTC Ltd.</p>								
8	E-tender cannot be accessed after the due date and time mentioned in NIT.								
9.	<p><u>Bidding in e-tender</u></p> <p>a) Bidder(s) need to submit necessary EMD, E-Tender fees (If ANY) and Transaction separately for the e-tender. Transaction fees if any are non-refundable. No interest will be paid on</p>								

EMD. EMD of the unsuccessful bidder(s) will be refunded by RBI, JAIPUR.

- b) The process involves Electronic Bidding for submission of Techno Commercial Bid as well as Price Bid.
- c) The bidder(s) who have submitted the above fees can only submit their Techno Commercial Bids and Price Bid through internet in MSTC website www.mstcecommerce.com → e-procurement → PSU /Government Departments →RBI JAIPUR Login →My menu→ Auction Floor Manager→ live event →Selection of the live event→ Techno Commercial Bid.
- d) The bidder should allow to run an application namely en Apple by accepting the risk and clicking on run. This exercise has to be done twice immediately after reaching the bid floor. If this application is not run then the bidder will not be able to save/submit his bid.(for details refer vendor guide & FAQ).
- e) First the vendor needs to fill up the Commercial specification if any and save it. Then the vendor should fill up the Techno-commercial bid. After filling the Techno-Commercial Bid, bidder should click 'save' for recording their Techno-Commercial bid. Once the same is done, the Price Bid link becomes active and the same has to filled up and then bidder should click on "save" to record their price bid. Then once both the Techno-Commercial bid & price bid has been saved, the bidder can click on the "Final Submission" button to register their bid

NOTE: - After clicking the final submission two more options will show up, "Withdraw bid" and "Delete bid". If the vendor wants to withdraw its bid permanently then they should click withdraw bid link. He/she will not be able to bid again. If the vendor wants to delete the bid after final submission and re submit the bid then he/she should click delete bid and resubmit the same and again click final submission.

- f) In all cases, bidder should use their own ID and Password along with Digital Signature at the time of submission of their bid.
- g) During the entire e-tender process, the bidders will remain completely anonymous to one another and also to everybody else.
- h) The e-tender floor shall remain open from the pre-announced date & time and for as much duration as mentioned above.
- i) All electronic bids submitted during the e-tender process shall be legally binding on the bidder. Any bid will be considered as the valid bid offered by that bidder and acceptance of the same by the Buyer will form a binding contract between Buyer and the Bidder for execution of supply/work. Such successful tenderer shall be called hereafter **SUPPLIER/CONTRACTOR.**
- j) It is mandatory that all the bids are submitted with digital signature certificate otherwise the same will not be accepted by the system.
- k) Buyer reserves the right to cancel or reject or accept or withdraw or extend the tender in full or part as the case may be without assigning any reason thereof.

	<p>l) No deviation of the terms and conditions of the e-Tender document is acceptable. Submission of bid in the e-tender floor by any bidder confirms his acceptance of terms & conditions for the e-Tender.</p> <p>m) Unit of Measure (UOM) is indicated in the e-tender Floor. Rate to be quoted should be in Indian Rupee as per UOM indicated in the e-tender floor/tender document.</p>
10.	Any order resulting from this open e-tender shall be governed by the terms and conditions mentioned therein.
11.	No deviation to the technical and commercial terms & conditions are allowed.
12.	RBI, JAIPUR has the right to cancel this e-tender or extend the due date of receipt of bid(s) without assigning any reason thereof.
13	The online e-Tender should be submitted strictly as per the terms and conditions and procedures laid down in the website www.mstcecommerce.com/eprchome/rbind of MSTC Ltd.
14.	The bidders must upload all the documents required as per terms of NIT. Any other document uploaded which is not required as per the terms of the NIT shall not be considered.
15	The bid will be evaluated based on the filled-in technical & commercial formats.
16.	The documents uploaded by bidder(s) will be scrutinized. In case any of the information furnished by the bidder is found to be false during scrutiny, EMD of defaulting bidder(s) will be forfeited. Punitive action including suspension and banning of business can also be taken against defaulting bidders.

**Reserve Bank of India
Estate Department
Jaipur
Section I
E-Tender Inviting Notice and important information**

1. **Name of the work:**
E-tender for: **Supply, installation, testing and commissioning of 6000 CFM floor mounted outdoor type Air Handling Unit (AHU) for Office building at RBI, Jaipur.**
E-Tender will be carried out by the MSTC. The estimated cost of the work is Rs 7.68 lakh.
2. **Eligibility Criteria: All (2.1 to 2.3) need to be fulfill**
 - 2.1 Minimum 5 years of experience in the field of undertaking similar works e.g. Air Conditioner(AC) plant related work (AC pumps, Chiller, AC pipe line work). SITC of AHU of similar ratings and specifications for office buildings / commercial Estate / industrial houses/Government organization/PSU's (from the date of issue of e-Tender)
And
 - 2.2 Have executed successfully similar works from the date of issue of e-Tender individually costing as under: (work order of executed work need to attached)
 - a) Three works each costing not less than 40 % of the estimated cost OR
 - b) Two works each costing not less than 50 % of the estimated cost OR
 - c) One work costing not less than 80 % of the estimated cost
 And
 - 2.3 Have a minimum yearly turnover of 100 % of the estimated cost during the last 3 years. Bidder should submit a copy of total turnover during last three years i.e.2016-17, 2017-18 and 2018-19.

3.	Important Information for this E-TENDER	
a.	Estimate cost of the work	Rs 7.68 lakh
b.	Bid security amount / EMD	Rs 15360/- (Rs. Fifteen Lakh Three Hundred and Sixty only) along with the Part I / Technical – Commercial Bid. MSME are exempted subject to submission of relevant certificate.
c.	Cost of the e-Tender	This will be charged by the MSTC online
d.	The Bid Security/Earnest Money Deposit(EMD)/ cost of the e-Tender shall be paid through NEFT/ Net banking only.	RBI Jaipur RBI JAIPUR A/c No.8692299, IFSC Code:RBIS0JPPA01 {Intimate/ forward the transaction details on estatedeptjaipur@rbi.org.in }
e.	The last date of submission of EMD online	April 08 , 2020, 12:00 PM
f.	E-Tender documents can be downloaded From RBI website www.rbi.org.in and MSTC website	March 18, 2020 , 09:00AM (www.mstcecommerce.com/eprochome/rbind)
g.	Date and time of Pre-bid meeting at RBI Jaipur	Not Required

h.	Clarification regarding the e-Tender can be sought through email up to seven days before opening of Part I	harshadkelkar@rbi.org.in
i.	Last date and time for uploading Signed scanned copy of Part I , eligible criteria documents and filling up Part II of tender	14:00 PM on April 08, 2020
j.	Date and time opening of Part I of e-Tender	15:00 PM on April 08, 2020
k.	Date and time opening of Part II of e-Tender	Will be intimate separately through email
l.	Commencement Date	14 th day from the date of issue of work order
m.	Completion period	2 months from the 14 th day from the date of issue of work order
n.	Payment condition	Clause 3.30
o.	Security deposit	Clause 3.30
p.	Liquidated Damages (penalty for not completion of work on time)	Rs 232/- per day subject to maximum @ 10% of contract amount/work order amount (Clause 3.31)
q.	Validity of e-Tender	90 days from the date of opening of Part I
r.	All disputes arising shall be subject to the jurisdiction	Jaipur
s.	Address of office	The Regional Director, Reserve Bank of India, Rambagh circle, Estate Department, Jaipur – 302004
t.	Contact officer of RBI in connection with this TENDER	Shri Harshad Kelkar(AM-Electrical), 8828202902, Email: harshadkelkar@rbi.org.in

Tender Notice is part and parcel of Part I

Section (II)
Form of Tender

Place _____
Date _____

The Regional Director
Estate Department,
Reserve Bank of India
Rambagh Circle
Jaipur-302004

Dear Sir,

Having examined the specifications, and schedule of quantities relating to the works specified in the memorandum hereinafter set out and having visited and examined the installation site of the works specified in the said memorandum and having acquired the requisite information relating thereto as affecting the tender, I/We hereby offer to execute the works specified in the said memorandum within the time specified in the said memorandum at the rates mentioned in the attached Schedule of Quantities and in accordance in all respects with specifications, designs, drawings and instructions in writing referred to in articles of agreement, special instructions to the tenderers, general instructions to the tenderers and special conditions, conditions hereinbefore referred to, specifications, data sheet and schedule of quantities and with such materials as are provided for, by and in all other respects, in accordance with such conditions so far as they may be applicable.

MEMORANDUM

(a)	Description of works	Supply, installation, testing and commissioning of 6000 CFM floor mounted outdoor type AHU for Office building at RBI, Jaipur.
(b)	Estimated cost	As indicated in section I of the tender
(c)	Mode of payment	As indicated in section I of the tender
(d)	Earnest Money	As indicated in section I of the tender
(e)	Time allowed for completion of work	As indicated in section I of the tender
(f)	Security Deposit	As indicated in section I of the tender

2. I/We also agree that our tender will remain valid for acceptance by the Bank for 90 days from the date of opening of Part I of the tender and this period of validity can be extended for such period as may be mutually agreed between the Bank and us in writing. We also agree to keep the Bank Guarantee towards earnest money valid during the entire period of validity of tender.

3. Should this Tender be accepted, I/we hereby agree to abide by and fulfill all the Terms and Conditions of the Tender and in default thereof, to forfeit and pay to you or your successors, or assignees or nominees such sums of money as are stipulated in the conditions contained in the tender together with the written acceptance of the Contract.
4. I/We understand that you reserve the right to accept or reject any or all the tender either in full or in part without assigning any reason therefor.
5. I/We upload all the necessary documents to MSTC site. Part I contains all commercial terms and conditions and technical particulars and Part II contains only the price bid.

Dated: this _____ day of _____ 20.....

For and on behalf of M/s _____

(Signature with seal)

Name _____
 Designation _____
 Place _____
 Date _____

(Certified true copy of the Power of Attorney of the above signatory should be enclosed).

Witnesses

(1) Signature with
 name, address and date _____

(2) Signature with
 name, address and date _____

Details of Tenderers**A. Particulars of Firm**

Sr. No.	Particulars	To be filled by Tenderer
1.	Whether Original Equipment Manufacturer	
	Or Authorized Dealer (Please submit the certificate of authority)	Indicate Yes/No (submit certificate of authority)
2.	Composition of the firm (Whether partnership / proprietorship /Public Ltd.)	
3.	Names of the proprietor/ partners / Directors of the firm	
4.	GST Number	
5.	Address of the Firm	
	Telephone	
	Email	
	Fax	

B. The details of bankers are as below:

Sr. No.	Particulars (submit the crossed cancelled cheque)	To be filled by tenderer
1	Name of the Bank	
2	Branch Address	
3	Telephone and fax number	
4	Name of the contact person	
5	Credit facility / overdraft facility enjoyed by firm from the Bank	
6	The period from which the firm has been banking with Bank	

C. Prequalification Criteria :

Following are our Clients for whom we have executed "eligible" works during last 5 years as per the eligibility criteria (Please submit the documentary evidence for following works)

Sr. No.	Details	Client (1)	Client (2)	Client (3)
1	Name of the Client Organization / Firm:			
	Address :			
	Name of the Contact Person:			
	His/her Mobile No. :			
	His/her Fax No.:			
	His/her Telephone No/s.:			
	His/her e-mail ID:			
2	Name of the "eligible" work with brief particulars			
3	Work order No. and date			
4	Cost of the "eligible" work as per work order / letter of award:			
5	Date of commencement			
6	Stipulated date of completion			
7	Actual date of completion			
8	Amount of compensation levied by the client for delayed completion, if any:			

Sr. No.	Details	Client (1)	Client (2)	Client (3)
9	Gross value of the work completed and paid for :			
10	Whether the tenderer has been engaged by the Client for maintenance under Annual Maintenance Contract (AMC) of the commissioned system (please state Yes or No)			

D. Please also provide following details with supporting documents as per prequalification criteria:

1	Work experience in years (please submit old work order of any amount at least 5 years from the date of publish of this tender) or Incorporation Certificate of the firm	
2	Turnover of the firm for the last 3 years (year wise) and submit the documentary evidence in support of the same duly certified by Chartered Accountant	
	(a) 2018-19	
	(b) 2017-18	
	(c) 2016-17	

Note : All the details must be filled in the tender documents only no separate annexure will be accepted. Only Submit documents in support of details filled above.

Signature of Tenderer with stamp/Date

Reserve Bank of India
Estate Department
Jaipur

**Supply, installation, testing and commissioning of 6000 CFM
floor mounted outdoor type AHU for Office building at RBI,
Jaipur**

Section (III):

GENERAL INSTRUCTIONS TO CONTRACTORS & SPECIAL CONDITIONS

3.1 E- tenders in two parts are invited for said work from eligible contractors (Refer **Section I**).

Only those tenderers who fulfil the eligibility criteria as given in section I , will be eligible to tender for the work. A Tender submitted by a firm which is found, not satisfying any of the eligibility criteria will be liable for rejection.

3.2 The tenders for the above work in two parts i.e. Part-I containing technical specifications of equipment, and the terms and conditions (Rates and amounts of items shall not appear anywhere in this part) and Part-II containing only rates of items.

Following Scan signed document is need to be uploaded on MSTC site on relevant tender.

- 1. Signed copy of Part I of the tender.**
- 2. Eligible criteria documents (Work order copy, balance sheet for last three years)**

If the intending tenderer feels that any of the terms and conditions of the tender documents are not acceptable to them or they feel that additional terms and conditions are required to be incorporated, they may indicate these conditions or additional or amended conditions only in separate letter and this letter need to be upload along with Part I. All other terms and conditions on which there are no observations by the intending tenderers shall be constructed as acceptable to the tenderer.

- (a) Each of the tender documents should be signed by the person or persons submitting the tender in token of his/their having acquainted himself/themselves with the General Conditions of Contract, Specifications, Special Conditions etc. as laid down. Any tender with any of the documents not signed will be rejected.

- (b) The Tender submitted on behalf of a firm/company and shall be signed by all the partners of the firm or by a partner who has the necessary authority on behalf of the firm to enter into the proposed contract, otherwise the tender may be rejected by the bank.
- (c) The Reserve Bank of India does not bind itself to accept the lowest or any tender and reserve to itself to accept or reject any or all the tenders either in whole or in part, without assigning any reasons for doing so.

3.3 Clarifications:

- (a) If firms are required to clarify any point / clause of the tender they may email to the officers as mentioned at important information at Section I.

Earnest Money Deposit (EMD) To Be Submitted By The Tenderers

- 3.4 **Intending tenderers shall pay as earnest money NEFT (refer Section I) to Reserve Bank of India, Jaipur. Tender without EMD will not be accepted. MSME are exempted from submission of EMD subject to submission of relevant certificate.** The earnest money will be returned to the tenderer if his tender is not accepted but without any interest. The earnest money of successful tenderer will be returned after completion of the work. **MSME are exempted subject to submission of relevant certificate.**

EMD shall be forfeited if the Bidder:

- (i) makes misleading or false representations in the forms, statements and attachments submitted, has suppressed any material information, details of any legal proceedings pending in the court which might otherwise have created any impact on the eligibility criteria; or
 - (ii) Withdraws his Bid during the period of Bid validity; or does not sign the contract after award of Contract.
 - (iii) Has been blacklisted by any Government agency and the blacklisting is still in force.
 - (iv) If bidder fails to complete the work.
- 3.5 On receipt of intimation from the Bank of the acceptance of his/their tender, the successful tenderer shall be bound to implement the contract and within fourteen days thereof the successful tenderer shall sign an agreement (Draft article of agreement at Annexure IV) in accordance with the draft agreement and the Schedule of Conditions but the written acceptance by the Reserve Bank of India of a tender will constitute a binding contract between the Reserve Bank of India and the person so tendering whether such formal agreement is or is not subsequently executed.
- 3.6 **Cleanliness:** All debris shall be disposed of by the bidder as per the rules and regulation of local authorities concerned beyond the property limits and the site shall be kept free of safety/ fire hazards.
- 3.7 All compensation or other sums of money payable by the Contractor to the Employer under the terms of this Contract may be deducted from his earnest money and the security deposit if the amount so permits and the contractor

shall, unless such deposit becomes otherwise payable, within ten days after such deduction make good in cash the amount so deducted.

- 3.8 The tenderers shall furnish full details of eligible similar works carried out by them during the last 05 years, as per the Performa included in this tender. The Bank will inspect one or all the works and satisfy itself about the performance of the installed equipment including the quality and reliability of the service rendered before opening Part II of the tenders. Thereafter, the Bank at its discretion will consider or reject any or all the tenders without assigning any reason thereof.
- 3.9 The Contractor shall carry out all the work strictly in accordance technical specification and scope of the work, details and instructions of the Bank's Engineer.
- 3.10 The rates quoted shall be firm and shall not be subjected to variations in exchange variation in labour, transport cost. The rates shall be quoted for complete work, i.e. supply, installation, testing and commissioning of the equipment and shall include charges for all taxes, duties, levies, consumable, labour, transport, insurance for transit, storage as also workmen compensation & 3rd party liability policies, erection etc except service tax/GST at the specified site. No concessional form for any levies will be issued by the Bank. Similarly no import license will be issued by the Bank. Equipment, if required to be imported shall be arranged to be imported against the contractors own import license. All payments will be made at Jaipur and will be in Indian rupees only.
- 3.11 Tenderers are advised to quote strictly as per **Schedule of Quantity**. The schedule of quantities is based on probable quantities. The Contractor should note that unless otherwise stated the tender is strictly on item rate basis and his attention is drawn to the fact that rates for each and every item should be correct, workable and self-supporting. The quantities in the Schedule of Quantities approximately indicate the total extent of work but may vary to any extent and may even be omitted depending upon the site conditions and requirements solely at the discretion of the Bank thus altering the aggregate value of the Contract. No claim shall be entertained on this account.
- 3.12 As regards make of equipment acceptable to the Bank the tenderers are advised to refer to "Section V – Technical Specification Approvals" and to the list of approved make of materials/equipment. The tenderer are advised to quote for the make out of the approved list, conforming to the specification and which is most economical. The tenderers are advised not to quote with alternative equipment. The tender shall be accompanied by leaflets/literatures giving complete technical & constructional details along with list of make of components of the equipment offered.
- 3.13. The tenderer must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a tender and for entering into a contract and must examine the Drawings and must inspect the site of the work and acquaint himself with all local conditions,

means of access to the work, nature of the work and all matters pertaining thereto.

3.14. **Evaluation of tenders:**

Eligible Tenders (Those qualify in Part I of tender) will be evaluated on the basis of capital cost of the system after opening of Part-II of the tender. **Lowest quoted amount in Part II will be declared as L1 bidder/successful bidder and tender will be awarded to them.**

3.15 **Defect Liability Period (DLP)**

- a) The equipment/system supplied shall be guaranteed against all types of defects for at least a period of one year (defect liability period/ DLP) from the date of handing over of the equipment/system to the Bank.
- b) Any defects in the system/sub-assemblies found within the guarantee period/DLP shall be rectified / replaced by the tenderer free of cost. This includes all consumable like grease etc. and non consumable items.
- c) During the said period of 12 months, the contractor (successful tenderer) shall make periodical inspection of the working of the AHU free of charge at least twice a year or as per OEM recommendation (whichever is higher), if required, including (cleaning of all components, greasing, checking alignment, inlet-outlet temperatures, electrical panel with starters or any other checks as recommended by OEM etc.) and attending to ANY NUMBER of breakdown calls shall be carried out free-of-cost.
- d) Tenderer shall also indicate the service facility they can offer at the place of installation and the telephone number & address of their service center.

3.16 The tenderer should impart training to the Bank's staff for a period not less than one week on the system before handing over of the system without any charge to the Bank.

3.17 **Insurance**

The contractor shall take all insurances before dispatching the system from the factory to our site at his cost to cover all kinds of risks from the date of scheduled commencement of works till handing over the system to the Bank, in the joint names of the Bank, the Bank's name being the first and the contractor before commencement of work and it shall cover the following risks:

- a) work man compensation for working men
- b) Third party liability (Rs 1 lakh per accident maximum for 3 period)
- c) Contractor's all risk policies for contract value

3.18 The tender shall be accompanied by leaflets/literatures giving complete technical & constructional details, makes of components of the equipment offered. Tenderers are advised to visit the site of installations and acquaint themselves of the site conditions before tendering. Tenderers should be specific and offer comments only if their system differs from the Bank's detailed specifications/ features in any manner. A write up of working of the system as a whole and the individual components shall also be enclosed. The successful tenderer, on completion of the work, shall furnish three sets of schematic and layout drawings and maintenance manuals.

- 3.19** Time allowed for carrying out the work as mentioned in the Memorandum and Section I shall be strictly observed by the Contractor and it shall be reckoned from the 14th day after written order to commence the work is issued. The work shall throughout the stipulated period of the Contract be proceeded with all due diligence and if the Contractor fails to complete the work within the specified period he shall be liable to pay compensation as defined in Section I of the Part I. The work is allowed to be carried out during office hours (9:30 AM to 5:30 PM). The successful bidder is required to make entry passes before start of work for their workers. Special permission is required for working on holidays/late ours apart from regular entry pass. **The tenderer shall before commencing work prepare a detailed work programme which shall be approved by the Bank's Engineer.**
- 3.20** The Contractor shall not be entitled to any compensation for any loss suffered by him on account of delays in commencing or executing of the work, whatever the cause of delays may be, including delays arising out of modifications to the work entrusted to him or in any sub-contract connected therewith or delays in awarding contracts for other trades of the project or in commencement or completion of such works or in procuring Government controlled or other building materials or in obtaining water and power connections for construction purposes or for any other reason whatsoever and the Employer shall not be liable for any claim in respect thereof. The Employer does not accept liability for any sum besides the tender amount, subject to such variations as are provided for herein.
- 3.21. The successful tenderer is bound to carry out any items of work necessary for the completion of the job even though such items are not included in the quantities and rates. Schedule of instructions in respect of such additional items and their quantities will be issued in writing with the prior consent in writing of the Employer.
- 3.22. The successful tenderer must co-operate with the other contractors appointed by the Employer so that the work shall proceed smoothly with the least possible delay and to the satisfaction of the Employer.
- 3.23. The Contractor must bear in mind that all the work shall be carried out strictly in accordance with Specifications and also in compliance of the requirements of the local public authorities and to the requirements of the Indian Electricity Rules and no deviation on any account will be permitted.
- 3.24 Before dispatching the equipment to site, the equipment may be inspected by the {Bank's Engineer} Bank's Technical officers in any grade at the manufacturer's site and then cleared for shipment. The contractor shall at his own expense, offer to the Inspector all reasonable facilities as may be necessary for satisfying himself, that the equipment/execution of work is being and/or have been manufactured/executed in accordance with specifications laid down in the particular specifications attached to this tender documents. The Bank's Engineer shall have full and free access at any time during the execution of the contract to the Contractor's works or site in case of execution

of work for the purpose aforesaid, and he may require the contractor to make arrangements for inspection or work or any part thereof or any material at his premises or at any other place specified by the Bank's Engineer and if the contractor has been permitted to employ the service of a sub-contractor, reserve to the Bank's Engineer a similar right.

This will however, not in any way absolve the contractor of his responsibility about proper performance of the system/components after erection & commissioning at the designated site.

- 3.25 Cost of Inspection:- The contractor shall provide, without any extra charge, all materials, tools, labour and assistance of every kind which the Bank's Engineer may demand of him for any test/inspection and examination which he shall require to be so made on the contractor's premises and shall bear and pay all costs attendant thereon. However, cost of traveling, boarding and lodging, of Bank's Engineer (s) to the site of inspection shall be borne by the Bank.
- 3.26 Method of Testing: - The Bank's Engineer shall have the right to put all the equipment and materials forming part of the same or any part thereof to such tests as he may think fit and proper. The contractor shall not be entitled to object on any ground whatsoever to the method of testing adopted by the Inspector.
- 3.27 Inspector Authority to certify performance: - The Bank's Engineer shall have the power:
- a) Before any equipment or part thereof are submitted for inspection to certify that they or any portion thereof are not in accordance with the contract owing to adoption of any unsatisfactory method of manufacture;
 - b) To reject any equipment or parts submitted as not being in accordance with the specification;
 - c) To reject the whole of the equipment tendered for inspection, if after inspection of such portion thereof as he may in his discretion think fit, he is satisfied that the same is unsatisfactory; and
 - d) To mark the rejected equipment or parts with a rejection mark so that it may easily be identified if re-submitted.
- 3.28 Consequence of rejection: If on the equipment or the equipment or its part thereof, being rejected by the Bank's Engineer the contractor fails to make satisfactory supplies or rectify the faulty work thus executed within the stipulated period of delivery/completion period, the Bank shall be at liberty to:
- i) Allow the contractor to re-submit the equipment or parts in replacement of those rejected, within a time to be specified, the contractor bearing the cost of freight if any, on such replacement without being entitled to any extra payments on that account; or
 - ii) Purchase/execute or authorise the purchase/execution of quantity/work of the equipment or parts rejected or others of a similar description (when equipment or parts exactly complying with specifications are not in the opinion of the Bank which shall be final, readily available) to the

- contractor at his risk and cost and without affecting the contractor's liability as regards supply under the contract; or
- iii) Cancel the contract and purchase/execute or authorise the purchase/execution of the equipment or others of a similar description (when equipment or parts exactly complying with specifications are not in the opinion of the Bank, which shall be final, readily available) at the risk and cost of the contractor. In the event of action being taken under such clause (b) above or this clause the provision of delivery clause apply as far as applicable.
- 3.29 Bank's Engineer decision as to rejection final: - The Bank's Engineer's decision as regards the rejection shall be final and binding on the contractor subject to contractor's appeal.
- 3.30 The following terms of payment shall be applicable to this contract:
- (a) 70% of the contract value released after delivery of all material and completion and submission of the bill for the value more than 60% of contract value as per bill of quantity.
 - (b) Rest 30% of the contract value after completion of work.
 - (c) **Security deposit** of 5% of contract amount (including GST, interest free) will be deducted from each bill and same will be returned after completion of one year of defect liability period (DLP). All defect will be rectified free of cost during one year of DLP. All Penalties, if any mentioned in the tender, will be recovered from security deposit.
 - (d) All bill is liable to deduct TDS@1% or 2% of contract amount (1% in case of individual firm and 2% for company) and 1% of contract value each of CGST and SGST on TDS.
 - (e) Bill will be paid within 30 days from submission to the bank.
- 3.31 The entire work shall be completed as indicate section I of Part I which liquidated damages per day as indicated above in tender notice with an upper ceiling of 10% of the contract amount, will be levied.
- 3.32 The successful tenderer shall execute an agreement with the Bank on stamped paper within fourteen days of receipt of letter of acceptance. However, the issue of letter of acceptance by the Bank shall be construed as a binding contract, as though such an agreement has been executed and all the terms and conditions shall apply on this contract.
- 3.33 The payment for the system will be made by Jaipur office to which the system is supplied and installed. Any dispute arising out of this contract will also be sorted out within the jurisdiction of Jaipur.
- 3.34 The tenderer shall furnish the name and address of the Bankers with whom they normally Bank. They shall also furnish the name and addresses of their recent clients for whom they have carried out similar works/supplies in the recent past, along with full details like the cost and capacity of the equipment supplied, the date of the supply etc.

- 3.35 The Bank reserves the right to accept or reject any or all the tenders either in full or in part without assigning any reasons thereof.
- 3.36 The Contractor shall strictly comply with the provision of safety code annexed hereto.
- 3.37 **Non-Disclosure clause:** The Bidder shall not disclose directly or indirectly any information, materials and details of the Bank's infrastructure/systems/equipment etc., which may come to the possession or knowledge of the Bidder during the course of discharging its contractual obligations in connection with this agreement, to any third party and shall at all times hold the same in strictest confidence. The Bidder shall treat the details of the contract as private and confidential, except to the extent necessary to carry out the obligations under it or to comply with applicable laws. The Bidder shall not publish, permit to be published, or disclose any particulars of the works in any trade or technical paper or elsewhere without the previous written consent of the Employer. The Bidder shall indemnify the Employer for any loss suffered by the Employer as a result of disclosure of any confidential information. Failure to observe the above shall be treated as breach of contract on the part of the Bidder and the Employer shall be entitled to claim damages and pursue legal remedies. The Bidder shall take all appropriate actions with respect to its employees to ensure that the obligations of non-disclosure of confidential information under this agreement are fully satisfied. The Bidder's obligations with respect to non-disclosure and confidentiality will survive the expiry or termination of this agreement for whatever reason.
- 3.38 The Bidder / Agency shall comply with the provisions of "the Sexual Harassment of women at work place (Prevention, Prohibition and Redressal) Act, 2013". In case of any complaint of sexual harassment against its employee within the premises of the bank, the complaint will be filed before the Internal Complaints Committee constituted by the Bidder / Agency and the Bidder/Agency shall ensure appropriate action under the said Act in respect to the complaint. The bidder shall be responsible for educating its employees about prevention of sexual Harassment at work place and related issues.
- (i) Any complaint of sexual harassment from any aggrieved employee of the bidder against any employee of the Bank shall be taken cognizance of by the Regional Complaints Committee constituted by the Bank.

I/We have understood all the above-mentioned conditions and they are acceptable to me/us.

Place: _____ Signature of Tenderer

Date: _____ Name & Designation

_____ Name of firm

SEAL

SAFETY CODE

- 1 There shall be maintained in a readily accessible place first aid appliances including adequate supply of sterilized dressings and cotton wool.
- 2 An injured person shall be taken to a public hospital without loss of time, in cases where the injury necessitates hospitalization.
- 3 Suitable and strong scaffolds should be provided for workmen for all works that cannot safely be done from ground.
- 4 No portable single ladder shall be over 8 meters in length. The width between the side rails shall not be less than 30cm. (clear) and the distance between two adjacent rungs shall not be more than 30 cm. When a ladder is used an extra mazdoor shall be engaged for holding the ladder.
- 5 The excavated material shall not be placed within 1.5 meters of the edge of the trench or half of the depth of trench whichever is more. All trenches and excavations shall be provided with necessary fencing and lighting.
- 6 Every opening in the floor of building or in a working platform shall be provided with suitable means to prevent the fall of persons or materials by providing suitable fencing or railing whose minimum height shall be one meter.
- 7 No floor, roof or other part of the structure shall be so overloaded with debris or materials as to render it unsafe.
- 8 Workers employed on mixing and handling materials such as asphalt, cement mortar, concrete and lime mortar shall be provided with protective footwear and rubber hand-gloves.
- 9 Those engaged in welding works shall be provided with welder's protective eye shields and gloves.
- 10 (i) No paint containing lead or lead products shall be used except in the form of paste or readymade paints.

(ii) Suitable facemasks should be supplied for use by the workers when the paint is applied in the form of spray or surface having lead paint is dry rubbed and scrapped.
- 11 Overalls shall be supplied by the Contractor to the painters and adequate facilities shall be provided to enable the working painters to wash during the periods of cessation of work.
- 12 Hoisting machines and tackle used in the works, including their attachments, anchorage and supports shall be in perfect condition.
- 13 The ropes used in hoisting or lowering material or as a means of suspension shall be of durable quality and adequate strength and free from defects.

SECTION (IV)
Conditions of contract - commercial

THE CONDITIONS HEREINBEFORE REFERRED TO

4.1 Interpretation Clause

4.1.1 In construing these conditions, the Specifications, Schedule of Quantities and Contract agreement, the following words shall have the meaning herein assigned to them except where the subject of context otherwise required.

- (a) "Employer" shall mean the Reserve Bank of India and shall include its assigns and successors.
- (b) "Contractor/Bidder/tenderer" (i) in the case of partnership shall mean _____ and _____ trading as partners in the names and style of _____ and having a place of business at _____ and shall include the partners for the time being of the said firm and legal representatives of a deceased partner (ii) in the case of individual shall mean Shri _____ trading in the name and style of _____ and shall include his heirs, successors and legal representatives (iii) in the case of company shall mean _____ a company incorporated under _____ 19____ and having its registered office at _____ and shall include its successors and assigns.
- (c) "Site" shall mean the site of the Contract works including any building and erections thereon and any other land (inclusively) as aforesaid allotted by the Employer for the Contractor's use.
- (d) "This Contract" shall mean the Articles of Agreement, the Special Conditions, the Conditions, the Appendix, the Schedule of Quantities, Specifications, and Drawings, etc, attached hereto and duly signed.
- (e) "Bank's Engineer : The term "Bank's Engineer" shall mean the person appointed and paid by the Employer to inspect the works. The Contractor shall afford the Bank's Engineer every facility and assistance for inspecting the works and materials, and for checking and measuring time and materials. Neither the Bank's Engineer nor any representative of the Bank shall have power to set out works or to revoke, alter, enlarge or relax any requirements of the Contract, or to sanction any day work, additions, alterations, deviations, or omissions, or any extra work whatever, except in so far as such authority may be specially conferred by a written order of the Bank's Engineer with the prior concurrence in writing of the Employer.

The Bank's Engineer or any representative of the Bank shall have power to give notice to the Contractor or his representative of non-approval of any work or materials and such work shall be suspended or the use of such

materials shall be discontinued. The work will, from time to time, be examined by the Bank's Engineer/Bank's representative but such examination shall not in any way exonerate the Contractor from the obligation to remedy any defects which may be found to exist at any stage of the works or after the same is completed. Subject to the limitation of this clause the Contractor shall take instructions only from the Bank's Engineer.

- (f) "Notice in Writing" or Written Notice shall mean a notice written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by registered post to the last known private or business address or registered office and shall be deemed to have been received when in the ordinary course of post it would have been delivered.
- (g) "Act of Insolvency" shall mean any act of insolvency as defined by the Presidency Towns Insolvency Act or the Provincial Insolvency Act or any Act amending such original.
- (h) "Net Prices" if in arriving at the Contract amount the Contractor shall have added to or deducted from the total of the items in the tender any sum either as percentage or otherwise, than the net prices of any item in the tender shall be the sum arrived at by adding to or deducting from the actual figure appearing in the tender as the price of that item a similar percentage or proportionate sum provided always that in determining the percentage of proportion of the sum so added or deducted by the Contractor the total amount of any Prime Cost items and provisional sums of money shall be deducted from the total amount of the tender. The expression "Net rates" or "Net Prices" when used with reference to the Contract or accounts shall be held to mean rates or prices so arrived at.
- (i) "The Works" shall mean " the name of the tender/work as mentioned Section I" at Jaipur
- (k) Words imparting persons include firms and corporations. Words imparting the singular only also include the plural and vice versa, where the context requires.

4.2 Scope of Contract

4.2.1 The Contractor shall carry out and complete the said work in every respect in accordance with this Contract and with the directions of and to the satisfaction of the Bank's Engineer. The Bank's Engineer may in his absolute discretion and from time to time issue further drawings and / or written instructions, details, directions, and explanations which are hereafter collectively referred to as "Bank's Engineer's Instructions" in regard to,

- (a) The variation or modification of the design, quality or quantity of works or the addition or omission or substitution of any work.

- (b) Any discrepancy in the drawings or between the Schedule of Quantities and/or Drawings and/or Specifications.
- (c) The removal from the site of any materials brought thereon by the Contractor and the substitution of any other material therefor.
- (d) The removal and/or re-execution of any works executed by the Contractors.
- (e) The dismissal from the works of any persons employed thereupon.
- (f) The opening up for inspection of any work covered up.
- (g) The amending and making good of any defects under clause 4.19 hereof.

4.2.2 The Contractor shall forthwith comply with and duly execute any work comprised in such Bank's Engineer's Instructions provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the work by the Bank's Engineer shall, if involving a variation, be confirmed in writing by the Contractor within SEVEN days, and if not dissented from in writing within a further SEVEN days by the Bank's Engineer, such shall be deemed to be the Bank's Engineer's Instructions within the scope of Contract.

4.3 Variations to be approved by Employer

4.3.1 Notwithstanding anything herein contained, the Bank's Engineer or his representative shall not, without the prior concurrence in writing of the employer issue any instructions, verbal or in writing, which will result in the Employer having to pay the Contractor an additional sum and all instructions issued to the Contractor should forthwith be brought to the notice of the Employer. The Contractor shall submit a statement of variations giving quantity and rates duly supported by analysis of rates, vouchers, etc. The rates on scrutiny and final acceptance by the Employer shall form a supplementary agreement. The Employer shall not be liable for payment of such variations until these statements are sanctioned by it.

4.4 Drawings, Schedule of Quantities and Agreement

4.4.1 The Contract shall be executed in duplicate and the Employer and the Contractor shall be entitled to one executed copy each for his use. The Contractor on the signing hereof, shall be furnished by the Bank's Engineer, free of cost, one copy each of the said Drawings and of the Specifications. Any further copies of such Drawings required by the Contractor shall be paid for by him. The Contractor shall keep one copy of all Drawings on the works and the Bank's Engineer or his representative shall at all reasonable times have access to the same. Before the issue of the final certificate to the Contractor he shall forthwith return to the Bank all Drawings and Specifications.

4.5 Contractor to provide everything necessary at his cost.

4.5.1 The Contractor shall provide at his cost everything necessary for the proper execution of the works according to the intent and meaning of the Drawings, Schedule of Quantities and Specifications taken together whether the same may or may not be particularly shown or described therein provided that the same can reasonably be inferred therefrom, and if the Contractor finds any discrepancy in the Drawings or between the Drawings, Schedule of Quantities and Specifications he shall immediately and in writing refer the same to the Bank's Engineer who shall decide which is to be followed.

4.6 Authorities, Notices and Patents

4.6.1 The Contractor shall conform to the provisions of any Act of the Legislature relating to the works, and to the regulations and bye-laws of any authority, and of any water, electric supply and other companies and/or authorities with whose systems the structure is proposed to be connected, and shall, before making any variations from the Drawings or Specifications that may be necessitated by so conforming, give to the Bank's Engineer written notice, specifying the variations proposed to be made and the reason for making it and apply for instructions thereon. In case the Contractor shall not within ten days receive such instructions he shall proceed with the work conforming to the provisions, regulations, or bye-laws in question, and any variation so necessitated shall be dealt with under Clause 4.13 hereof.

4.6.2 The Contractor shall bring to the attention of the Bank's Engineer all notices required by the said Acts, regulations or bye-laws to be given to any authority and pay to such authority, or to any public office all fees that may be properly chargeable in respect of the works and lodge the receipts with the Bank's Engineer.

4.6.3 The Contractor shall indemnify the Employer against all claims in respect of patent rights and shall defend all actions arising from such claims and shall himself pay all royalties, license fees, damages cost and charges of all and every sort that may be legally incurred in respect thereof.

4.7 Setting out of Works

4.7.1 The Contractor shall set out the works and shall be responsible for the true and perfect setting out of the same and for the correctness of the positions, levels, dimensions and alignment of all parts thereof. If at any time, any error in this respect shall appear during the progress of the works or within a period of one year from the completion of the works, the Contractor shall, if so required, at his own expense rectify such error to the satisfaction of the Bank's Engineer.

4.8 Materials & Workmanship to conform to Descriptions

4.8.1 All materials and workmanship shall, so far as procurable, be of the respective kinds described in the Schedule of Quantities and/or Specifications and in accordance with the Bank's Engineers' instructions and the Contractor shall upon the request of the Bank's Engineer furnish him with all invoices, accounts, receipt and other vouchers to prove that the materials comply therewith. The Contractor

shall at his own cost arrange for and/or carry out any test of any materials which the Bank's Engineer may require.

4.9 Contractor's Superintendence & Representative on the works

4.9.1 The Contractor shall give all necessary personal superintendent during the execution of the works and as long thereafter as the Bank's Engineer may consider necessary until the expiration of the "Defects Liability Period". The Contractor shall also during the whole time the works are in progress employ a competent representative who shall be constantly in attendance at the works while the men are at work. Any directions explanations, instructions or notices given by the Bank's Engineer to such representative shall be held to be given to the Contractor.

4.10 Dismissal of Workmen

4.10.1 The Contractor shall on the request of the Bank's Engineer immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Bank's Engineer be incompetent or misconduct himself and such persons shall not be again employed on the works without the permission of the Bank's Engineer.

4.11 Access to Works

The Employer and their representatives shall at all reasonable times have free access to the works and/or to the workshops, factories or other places where the material is lying or from which they are being obtained and the Contractor shall give every facility to the Employer and their representatives necessary for the inspection and examination and test of the materials and workmanship. No person not authorised by the Employer except the representatives of public authorities shall be allowed on the works at any time.

4.12 Assignment and Sub-letting

4.12.1 The whole of the works included in the Contract shall be executed by the Contractor and the Contractor shall not directly or indirectly transfer, assign or under-let the Contract or any part/share thereof or any interest therein without the prior written consent of the Employer, and no undertaking shall relieve the Contractor from the full and entire responsibility of the Contract or from active superintendence of the works during their progress.

4.12.2 No alteration, omission or variation shall vitiate this Contract but in case the Bank's Engineer thinks proper at any time during the progress of the works to make any alterations in, or additions to, or omissions from the works or any alterations in the kind or quality of the materials to be used therein and shall give notice thereof in writing under his hand to the Contractor, the Contractor shall alter, add to, or omit from, as the case may be, in accordance with such notice, but the Contractor shall not do any work extra to or make alterations or additions to or omissions from the works or any deviations from any of the provisions of the Contract, Stipulation, Specification or Contract Drawings without the previous

consent in writing of the Bank's Engineer and the value of such extras, alterations, additions, or omissions shall in all cases be determined by the Bank's Engineers with the prior approval in writing of the Employer in accordance with the provisions of Clause 4.16 hereof and the same shall be added to, or deducted from the Contract Amount, as the case may be, accordingly.

4.13 Schedule of Quantities

4.13.1 The schedule of quantities, unless otherwise stated shall be deemed to have been prepared in accordance with the standard method of measurement. The mode of measurement for measurable items of work shall be as indicated in the sub-section "mode of measurement" under section.

4.13.2 Any error in description or in quantity or in omission of items from the Schedule of Quantities shall not vitiate this Contract but shall be rectified and the value thereof as ascertained under Clause 4.16 thereof shall be added to, or deducted from, the Contract Amount (as the case may be) provided that no rectification of errors, if any, shall be allowed in the Contractor's Schedule of Rates.

4.14 Sufficiency of Schedule of Quantities

4.14.1 The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the prices stated in the schedule of quantities and / or the Schedule of Rates and prices which rates and prices shall cover all his obligations under the Contract and all matters and things necessary for the proper completion of the works.

4.15 Measurement of Works

4.15.1 The Bank's 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 Bank's Engineer or his representative in taking such measurements and calculations and to furnish all particulars or to give all assistance required by any of them.

4.15.2 Should the Contractor not attend or neglect or omit to send such Agent then the measurement taken by the Bank's Engineer or a person approved by him shall be taken to be correct measurements of the works. Such measurements shall be taken in accordance with the Mode of Measurements detailed in the Specifications.

4.15.3 The Contractor or his Agent may at the time of measurement take such notes and measurements as he may require.

4.15.4 All authorised extra works, omissions, and all variations made without the Bank's Engineers' knowledge, if subsequently sanctioned by him in writing (with the prior approval in writing of the Employer) shall be included in such measurements.

4.16 Prices for extras etc. - Ascertainment of

4.16.1 The Contractor may, when authorised, and shall, when directed, in writing by the Bank's Engineer with the approval of the Employer add to, omit from, or vary the works shown upon the drawings, or described in the Specification, or included in the Schedule of Quantities, but the Contractor shall make no additions, omissions or variation without such authorization or direction. A verbal authority or direction by the Bank's Engineer shall, if confirmed by him in writing within seven days, be deemed to have been given in writing.

4.16.2 Extra Item: If the quantity of any of the tender items increases 25% beyond the tender item quantity, such items shall be treated as Extra items and the rates of these shall be prepared on the basis of market rate analysis. No claim for an extra item shall be allowed unless it shall have been executed under provisions of Clause 4.2.2 hereof or by the authority of the Bank's Engineer with the concurrence of the Employer as herein mentioned. Any such extra is herein referred to as authorized extra and shall be made in accordance with the following provisions.

- (a) The net rates or prices in the original tender shall determine the valuation of the extra work where such extra work is of similar character and executed under similar conditions as the work priced therein.
- (b) Rates for all items, wherever possible, should be derived out of the rates given in the priced Schedule of Quantities.
- (c) The net prices of the original tender shall determine the value of the items omitted provided if omissions vary the conditions under which any remaining items of works are carried out the prices for the same shall be valued under sub-clause (c) and (d) hereof.
- (d) Where the extra works are not of similar character and/or executed under similar conditions as aforesaid or where the omissions vary the conditions under which any remaining items of works are carried out or if the amount of any omission or additions relative to the amount of the whole of the Contract Works or to any part thereof shall be such that in the opinion of the Bank's Engineer the net rate or price contained in the Priced Schedule of Quantities or tender or for any item of the works involves loss or expense beyond that reasonably contemplated by the Contractor or it by reason of such omission or addition rendered unreasonable or inapplicable, the Bank's Engineer shall fix such other rate or price as in the circumstances he shall think reasonable and proper, with the prior approval in writing of the Employer.

Where extra work cannot be properly measured or valued the Contractor shall be allowed day work prices as the net rates stated in the tender or the Price Schedule of Quantities or, if not so stated, then in accordance with the local day work rates and wages for the district; provided that in either case vouchers specifying the daily time (and if required by the Bank's Engineer the workmen's names) and materials employed be delivered for verification on to the Bank's Engineer or his representative at or before the end of the week following that in which the work has been executed.

4.16.3 The measurement and valuation in respect of the Contract shall be completed within the "Period of final measurements" or if not stated, then, within six months of the completion of the Contract works as defined in Clause 4.20 hereof.

4.17 Unfixed materials when taken into account to be Property of the Employer

4.17.1 Where in any certificate (of which the Contractor has received payment) the Bank's Engineer has included the value of any unfixed materials intended for and/or placed on or adjacent to the works such materials shall become the property of the Employer and they shall not be removed except for use upon the works, without the written authority of the Bank's Engineer. The Contractor shall be liable for any loss of or damage to such materials.

4.18 Removal of Improper Works

4.18.1 The Bank's Engineer, shall during the progress of the works, have power to order in writing from time to time the removal from the works within such reasonable time or times as may be specified in the order, of any materials which in the opinion of the Bank's Engineer are not in accordance with the Specifications or the instructions of the Bank's Engineer, the substitution of proper materials and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the Drawings and Specifications or instructions; and the Contractor shall forth-with carry out such order at his own cost. In case of default on the part of the Contractor to carry out such order, the Employer shall have the power to employ and pay other persons to carry out the same; and all expense consequent thereon, or incidental thereto, as certified by the Bank's Engineer shall be borne by the Contractor, or may be deducted by the Employer from any moneys due, or that may become due, to the Contractor.

4.19 Defects after Virtual Completion

4.19.1 Any defect, shrinkage, settlement or other faults which may appear within the "Guarantee period" or, if none stated, then within twelve months from the date of handing over of the plant after successful completion of acceptance testing, arising in the opinion of the Bank's Engineer from materials or workmanship not in accordance with the Contract, shall upon the directions in writing of the Bank's Engineer and within such reasonable time as shall be specified therein, be amended and made good by the Contractor, at his own cost and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage, settlements or other faults, and all damages, loss and expenses consequent thereon or incidental thereto shall be made good and borne by the Contractor and such damages, loss and expenses shall be recoverable from him by the Employer or may be deducted by the Employer from any money due or that may become due to the Contractor, or the Employer may in lieu of such amending and making good by the Contractor, deduct from any moneys due to the Contractor a sum, to be determined by the Bank's Engineer, equivalent to the cost of amending such work and in the event of the amount retained under Clause 4.30 hereof being insufficient, recover the balance from the Contractor, together with any expenses the Employer may have incurred in

connection therewith. Should any defective work have been done or material supplied by any sub-Contractor employed on the works, who has been nominated or approved by the Bank's Engineer as provided in Clauses 4.11 and 4.12 hereof the Contractor shall be liable to make good in the same manners as if such work or material had been done or supplied by this Contractor and been subject to the provisions of the Clause 4.2 hereof. The Contractor shall remain liable under the provisions of this clause notwithstanding the signing of any Certificate or the passing of any accounts, by the Bank's Engineer.

4.20 Certificate of Virtual Completion & Guarantee Period

4.20.1 The works shall not be considered as completed until handing over of the system as specified. The Guarantee period shall commence from the date of taking over.

4.21 Nominated Sub-Contractors

4.21.1 All specialists, Merchants, Tradesmen and others executing any work or supplying and fixing any goods for which prime cost prices or provisional sums are included in the Schedule of Quantities and/or Specifications who may be nominated or selected by the Bank's Engineer are hereby declared to be Sub-Contractors employed by the Contractor and are herein referred to as nominated Sub-Contractors.

4.21.2 No nominated Sub-Contractors shall be employed on or in connection with the works against whom the Contractor shall make reasonable objection of (save where the Bank's Engineer and Contractor shall otherwise agree) who will not enter into a Contract provided:

- (a) That the nominated Sub-Contractor shall indemnify the Contractor against the same obligations in respect of the Sub-Contract as the Contractor is under in respect of this Contract.
- (b) That the nominated Sub-Contractor shall indemnify the Contractor against claims in respect of any negligence by the Sub-Contractor, his servants or agents or any misuse by him or them of any scaffolding or other plant, the property of the Contractor or under any Workmen's Compensation Act in force.
- (c) Payment shall be made to the nominated Sub- Contractor within fourteen days of his receipt of the Bank's Engineer's certificate provided that before any Certificate is issued the Contractor shall upon request furnish to the Bank's Engineer proof that all nominated Sub Contractor's accounts included in previous Certificates have been duly discharged; in default whereof the Employer may pay the same upon a certificate of the Bank's Engineer and deduct the amount thereof from any sums due to the Contractor. The exercise of this power shall not create privity of Contract as between Employer and Sub-Contractor.

4.22 Other Persons Employed by Employer

4.22.1 The Employer reserves the right to use the premises and any portions of the site for the execution of any work not included in this Contract which it may desire to have carried out by other persons and the Contractor shall allow all reasonable facilities for the execution of such work not included in this Contract which it may desire to have carried out by other persons and the Contractor shall allow all reasonable facilities for the execution of such work but shall not be required to provide any plant or materials for the execution of such work except by special arrangements with the employer. Such work shall be carried out in such manner as not to impede the progress of the works included in the Contract and the Contractor shall not be responsible for any damage or delay which may happen to, or occasioned by, such work.

4.23 Insurance in respect of Damage to Person & Property

4.23.1 The Contractor shall be responsible for all injury to persons, animals or things, and for all structural and decorative damage to property which may arise from the operation or neglect of himself or of any nominated Sub- Contractor or any employee of either, whether such injury or damage arises from carelessness, accident or any other cause whatever in any way connected with the carrying out of this Contract. This Clause shall be held to include inter-alia, any damage to buildings, whether immediately adjacent or otherwise and any damage to roads, streets, footpaths, bridges or way as well as all damages caused to the buildings and works forming the subject of this Contract by frost, rain, wind or other inclemency of weather. The Contractor shall indemnify the Employer and hold him harmless in respect of all and any expenses arising from any such injury or damage to persons or property as aforesaid and also in respect of any claim made in respect of injury or damage under any Acts of any award of compensation or damages consequent upon such claim.

4.23.2 The Contractor shall reinstate all damage of every sort mentioned in this Clause, so as to deliver up the whole of the Contract works complete and perfect in every respect and so as to make good or otherwise satisfy all claims for damage to the property of third parties.

4.23.3 The Contractor shall indemnify the Employer against all claims which may be made against the Employer by any member of the public or other third party in respect of anything which may arise in respect of the work or in consequence thereof and shall at his own expense arrange to effect and maintain, until the virtual completion of the Contract with an approved office a Policy of Insurance in the joint names of the Employer and the Contractor against such risks and deposit such policy or policies with the Bank's Engineer from time to time during the currency of this Contract. The Contractor shall also similarly indemnify the Employer against all claims which may be made upon the Employer whether under the Workmen's Compensation Act or any other statute in force during the currency of this Contract or at Common Law in respect of any employee of the Contractor or any Sub-Contractor and shall at his own expense effect and maintain, until the virtual completion of the Contract, with an approved Office a Policy of Insurance in the Joint names of the Employer and the Contractor against such risks and deposit

such Policy or Policies with the Bank from time to time during the currency of the Contract.

4.23.4 The Contractor shall be responsible for any liability which may be excluded from the insurance policies above referred to and also for all other damages to any person, animal, or property arising out of and incidental to the negligent or defective carrying out of this Contract. He shall also indemnify the Employer in respect of any costs, charges, or expenses arising out of any claim or proceedings and also in respect of any award of or compensation or damages arising therefrom.

4.23.5 The Employer shall be entitled to deduct the amount of any damage, compensation, costs, charges and expenses arising or accruing from, or in respect of any such claims or damage from any or all sums due or to become due to the Contractor, without prejudice to the Employer's other rights in respect thereof. The Contractor shall, at his own expense, arrange to effect and maintain (until the virtual completion of the Contract) with an approved office, the following insurance policies and deposit such policy or policies with the Bank's Engineer from time to time during the currency of this Contract.

4.24 Date of Commencement & Completion

4.24.1 The Contractor shall be allowed admittance to the site on the "Date of Commencement", or such later date as may be specified by the Bank's Engineer and he shall thereupon and forthwith begin the works and shall regularly proceed with and complete the same (except such paint or other decorative work as the Bank's Engineer may desire to delay) on or before the "Date of Completion" subject nevertheless to the provisions for extension of time hereinafter contained.

4.25 Damage for Non-completion

4.25.1 If the Contractor fails to maintain the agreed rate of progress of work and or fails to complete the works by the date stated in section I of part I or within any extended time under Clause (4.26) hereof and the Bank's Engineer certifies in writing that his opinion the same ought reasonably to have been completed, the Contractor shall pay the Employer the sum mentioned in section I of part I as "Liquidated Damages" for the period during which the said works shall so remain incomplete and the Employer may deduct such damages from any moneys due to the Contractor.

4.26 Delay & Extension of Time

4.26.1 If in the opinion of the employer, the works be delayed (a) by force majeure or (b) by reason of any exceptionally inclement weather or (c) by reason of proceedings taken or threatened by or dispute with adjoining or neighboring owners or public authorities arising otherwise than through the Contractor's own default or (d) by the works or delays of other Contractors or Tradesmen engaged or nominated by the Employer and not referred to in the Schedule of Quantities and/or Specifications or (e) by reason of Bank's Engineer's instructions as per Clause 4.2 hereof or (f) by reason of civil commotion, local commotion of workmen or strike or lock-out affecting any of the

building trades or (g) in consequence of the Contractor not having received in due time necessary instructions from the Bank's Engineer for which he shall have specifically applied in writing or (h) from other causes which the Bank's Engineer may certify as beyond the control of Contractor or (i) in the event, the value of the work exceeds the value of the Priced Schedule of Quantities owing to variation, the Bank's Engineer may with the previous approval in writing of the Employer make a fair and reasonable extension of time for completion of the Contract works; in case of such strike or lock-out the Contractor shall, as soon as may be given written notice thereof to the Bank's Engineer, but the Contractor shall nevertheless constantly use his endeavor to prevent delay and shall do all that may reasonably be required to the satisfaction of the Bank's Engineer to proceed with work.

4.27 Failure by Contractor to comply with Bank's Engineer 's Instructions

4.27.1 If the Contractor after receipt of written notice from the employer requiring compliance within ten days fails to comply with such further drawings and/or Bank's Engineer's instructions, the Employer may employ and pay other persons to execute any such work whatsoever that may be necessary to give effect thereto, and all costs incurred in connection therewith shall be recoverable from the Contractor by the Employer on the Certificate of the Bank's Engineer as a debt or may be deducted by him from any moneys due to the Contractor.

4.28 Termination of Contract by the Employer

4.28.1 If the Contractor being an individual or a firm commits any "Act of Insolvency", or shall be adjudged an Insolvent or being an Incorporated Company shall have an order for compulsory winding up made against it or pass an effective resolution for winding up, voluntarily or subject to the supervision of the Court and the Official Assignee or the Liquidator in such acts of insolvency or winding up, as the case may be, shall within seven days after notice to him requiring him to do so, to show to the reasonable satisfaction of the Bank's Engineer that he is able to carry out and fulfill the Contract and to give security therefor, if so required by the Bank's Engineer.

Or if the Contractor (whether an individual, firm or Incorporated Company) shall suffer execution or other process of court attaching property to be issued, against the Contractor,

Or shall suffer any payment under this Contract to be attached by or on behalf of any of the creditors of the Contractor, Or shall assign or sublet this Contract without the consent in writing of the Employer first hand obtained. Or shall charge or encumber this Contract or any payments to you, or which may become due, to the Contractor then and there,

Or if the Bank's Engineer shall certify in writing to the Employer that the Contractor:

- i) has abandoned the Contract, or

- ii) has failed to commence the works, or has without any lawful excuse under these Conditions suspended the progress of the works for fourteen days after receiving from the Bank's Engineer notice to proceed, or
- iii) has failed to proceed with the works with such due diligence and failed to make such due progress as would enable the works to be completed within the time agreed upon, or
- iv) has failed to remove material from the site or to pull down and replace work for seven days after receiving from the Bank written notice that the said materials or works were condemned and rejected by the Bank's Engineer under these conditions, or has neglected or failed persistently to observe and perform all or any of the acts, matters or things by this Contract to be observed and performed by the Contractor for seven days after written notice shall have been given to the Contractor requiring the Contractor to observe or perform the same.

Then and in any of the said cases the Employer may, notwithstanding any previous waiver, after giving seven days' notice in writing to the Contractor, determine the Contract, but without thereby affecting the powers of the Bank's Engineer or the obligations and liabilities of the Contractor, the whole of which shall continue in force as fully as if the Contract had not been so determined, and as if the works subsequently executed had been executed by or on behalf of the Contractor. And further, the Employer by his agents or servants may enter upon and take possession of the works and all plant, tools, scaffoldings, shade, machinery, steam and other power utensils and materials lying upon the premises of the adjoining lands or roads, and use the same as his own property or may employ the same by means of his own servants and workmen in carrying on and completing the works or by employing any other Contractor or other person or persons to complete the works, and the Contractor shall not in any way interrupt or do any act, matter or thing to prevent or hinder such other Contractor or other person or persons employed for completing and finishing or using the materials and plant for the works. When the works shall be completed or as soon thereafter as convenient the Bank's Engineer shall give a notice in writing to the Contractor to remove his surplus materials and plant, and should the Contractor fail to do so within a period of fourteen days after receipt thereof by him, the Employer may sell the same by public auction, and give credit to the Contractor for the net amount realised. The Bank's Engineer shall thereafter ascertain and certify in writing under his hand what (if anything) shall be due or payable to, or by the Employer, for the value of the said plant and materials so taken possession of by the Employer and the expenses or loss which the Employer shall have been put to in procuring the works to be completed, and the amount, if any, owing to the Contractor and the amount, which shall be so certified, shall thereupon be paid by the Employer to the Contractor or by the Contractor to the Employer, as the case may be, and the Certificate of the Bank's Engineer shall be final and conclusive between the parties.

4.29 Termination of Contract by Contractor

4.29.1 If payment of the amount payable by the Employer under certificate of the Bank's Engineer shall be in arrears and unpaid for thirty days after notice in writing requiring payment of the amount as aforesaid shall have been given by

the Contractor to the Employer, or if the Employer interferes with or obstructs the issue of any such certificate, or if the Employer shall repudiate the Contract, or if the works be stopped for three months under the order of the Bank's Engineer or the Employer or by any injunction or other order of any Court of Law, then and in any of the said cases, the Contractor shall be at liberty to determine the Contract by notice in writing to the Employer, through the Bank's Engineer, and he shall be entitled to recover from the Employer, payment for all works executed and for any loss he may sustain upon any plant or materials supplied or purchased or prepared for the purpose of the Contract.

4.29.2 In arriving at the amount of such payment, the net rates contained in the Contractor's original tender shall be followed, or where the same may not apply, valuation shall be made in accordance with Clause 4.16 hereof.

4.29.3 Termination for Default:

(a) The Bank may without prejudice to any other remedy for breach of Contract, by Seven Days (07) days written notice of default sent to the Bidder and upon the Bidder's failure and neglect to propose and/or execute any corrective action to cure the default, terminate this Contract in whole or in part:

(i) If the Bidder fails to deliver any or all of the items/works within the time period(s) specified in the Contract; or

(ii) If the Bidder fails to perform any other obligation(s) under the Contract.

(b) On termination of the Contract for default, the EMD of the Bidder will be forfeited.

(c) On termination of the Contract for default, action will be taken to blacklist the Bidder.

(d) Bank has right to go in court of law if such case is arrived

4.30 Certificate & Payments

4.30.1 The Contractor shall be paid by the Employer from time to time by installments under Interim Certificates to be issued by the Bank's Engineer to the Contractor on account of the works executed when in the opinion of the Bank's Engineer work to the approximate value named in the section I of part I as Value of work for Interim Certificates (or less at the reasonable discretion of the Bank's Engineer) has been executed in accordance with the Contract. The Bank's Engineer may in his discretion include in the Interim Certificate such amount as he may consider proper on account of materials delivered upon the site by the Contractor for use in the works. No certificate of the Bank's Engineer shall of itself be conclusive evidence that any works or materials to which it relates are in accordance with the Contract neither will the Contractor have a claim for any amounts which the Bank's Engineer might have certified in any interim bill and paid by the Employer and which might subsequently be discovered as not payable and in this respect the Employer's decision shall be final and binding.

4.30.2 The Bank's Engineer shall have power to withhold any certificate if the works or any parts thereof are not being carried out to his satisfaction.

4.30.3 The Bank's Engineer may by any certificate make any correction in any previous certificate which shall have been issued by him.

4.30.4 No Certificate of Payment shall be issued by the Bank's Engineer if the Contractor fail to insure the works and keep them insured till the completion of the work.

4.31 Delayed Payment- clause deleted

4.32 Matters to be finally determined by Bank's Engineer

4.32.1 The decision, opinion, direction, Certificate of the Bank's Engineer (Except for payment) with respect to all or any of the matters under Clauses 4.2.1 (a, b), 4.5, 4.6, 4.13 and 4.26 (a,b,c,d and f) hereof (which matters are herein referred to as the excepted matters) shall be final and conclusive and binding on the parties hereto and shall be without appeal. Any other decision, opinion, direction, certificate or valuation of the Bank's Engineer or any refusal of the Bank's Engineer to give any of the same, shall be subject to the right of Arbitration and review under Clause 4.33 hereof in the same way in all respects (including the provisions as to opening the reference) as if it were a decision of the Bank's Engineer.

4.33 Settlement of Dispute by Arbitration

4.33.1 All disputes and differences of any kind whatever arising out of or in connection with Contract or the carrying out of the works (whether during the progress of the works or after their completion and whether before or after the determination, abandonment or breach of the Contract) shall be referred to and settled by the Bank's Engineer, who shall state his decision in writing. Such decision may be in the form of a final certificate or otherwise. The decision of the Bank's Engineer with respect to any of the excepted matters shall be final and without appeal as stated in Clause 4.33 hereof, But if either the Employer or the Contractor be dissatisfied with the decision of the Bank's Engineer on a matter, question or dispute of any kind (except any of the excepted matters) or as to the withholding by the Bank's Engineer of any Certificate to which the Contractor may claim to be entitled, then and in any such case, either party (the Employer or the Contractor) may within 28 days after receiving notice of such decision given a written notice to the other party through the Bank's Engineer requiring that matters in dispute be arbitrated upon. Such written notice shall specify the matters which are in dispute or difference of which such written notice has been given and no other shall be and is hereby referred to the arbitration and final decision of an arbitrator to be agreed upon as appointed by both the parties or, in case of disagreement as to the appointment of a single arbitrator, to the appointment of two arbitrators, one to be appointed by each party, which arbitrators shall, before taking upon themselves the burden or reference, appoint an Umpire.

4.33.2 The Arbitrator or Arbitrators, as the case may be, shall have power to open up, review and revise any certificate, opinion, decision, requisition of notice, save in regard to the excepted matters referred to in the preceding Clause, and to determine all matters in dispute, which shall be submitted to arbitration and of which notice shall have been given as aforesaid.

4.33.3 The Arbitrator or Arbitrators, as the case be, shall make his or their award

within one year (or such further extended time as may be decided by him or they, as the case may be, with the consent of the parties from the date of the Arbitrator entering on the reference. In case during the arbitration proceedings the parties mutually settle, compromise or compound their dispute or difference, the Arbitrator or Arbitrators, as the case may be shall be deemed to have been revoked and the arbitration proceedings shall stand withdrawn or terminated, with effect from the date on which the parties file a joint memorandum of settlement thereof, with the Arbitrator or Arbitrators as the case may be.

4.33.4 Upon every or any such reference, the cost of and incidental to the reference and award respectively shall be in the discretion of the Arbitrator or Arbitrators, as the case may be, who may determine, the amount thereof, or direct the same to be taxed as between attorney and client or as between party and party, and shall direct by whom and to whom and in what manner the same shall be borne and paid. This submission shall be deemed to be a submission to Arbitration within the meaning of the Indian Arbitration And Conciliation Act, 1996 or any statutory modification thereof. The Award of the Arbitrator or Arbitrators, as the case may be shall be final and binding on the parties. It is agreed that the Contractor shall not delay the carrying out of the works by reason of any such matter, question or dispute being referred to arbitration but shall proceed with the work with all due diligence and shall, until the decision of the Arbitrator or Arbitrators, as the case may be, given abide by the decision of the Bank's Engineer and no Award of the Arbitrator or Arbitrators, as the case may be, shall relieve the Contractor of his obligations to adhere strictly to the Bank's Engineer's instructions with regard to the actual carrying out of the works. The Employers and the Contractor hereby also agree that arbitration under this Clause shall be a condition precedent to any right to action under the Contract.

4.34 Right of Technical Scrutiny of Final Bill

4.34.1 The Employer shall have a right to cause a technical examination of the works by any agency and the full and the final bill of the Contractor including all supporting vouchers, abstracts, etc, to be made at the time of payment of the final bill. If as a result of this examination or otherwise any sum is found to have been overpaid or over-certified it shall be lawful for the Employer to recover the sum.

4.35 Employer Entitled to Recover Compensation Paid to Workmen

4.35.1 If, for any reason, the Employer is obliged, by virtue of the provisions of the workman's Compensation Act , 1923, or any Statutory Modification or re-enactment thereof to pay compensation to a workman employed by the Contractor, in execution of the works, the Employer , shall be entitled to recover from the Contractor the amount of compensation so paid, and without prejudice to the rights of the Employer under the said Act. The Employer shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by the Employer to the Contractor under this Contract or otherwise. The Employer shall not be bound to contest any claim made against it under the said Act, except on the written request of the Contractor and upon his giving to the Employer full security to the satisfaction of the Employer for all costs

for which the Employer might become liable in consequence of contesting such claim.

4.36 Abandonment of Works

4.36.1 If at any time after the acceptance of the tender, the Employer shall for any reasons whatsoever not require the whole or any part of the works to be carried out, the Bank's Engineer shall give notice in writing to the Contractor who shall have no claim to any payment of compensation or otherwise whatsoever on account of any profit or advantage which he might have derived from execution of the whole works.

4.37 Return of Surplus Materials

4.37.1 Notwithstanding anything to the contrary contained in any of all the clauses of this Contract, where any materials for the execution of the Contract are procured with the assistance of the Employer by purchase made under orders or permits or licenses issued by Government the Contractor shall hold the said materials economically and solely for the purpose of the Contract and not dispose off them without the prior written permission of the Employer and return them to the Employer, if required by the Employer at the price to be determined by the Bank's Engineer having due regard to the condition of the materials, the price to be determined not to exceed the purchase price thereof inclusive of sales tax, octroi and other such levies paid by the Contractor in respect thereof. In the event of breach of the aforesaid condition, the Contractor shall, in addition to being liable to action for contravention of the terms of licenses or permits and/or criminal breach of trust, be liable to the Employer all moneys, advantages or profits resulting or which in the usual course would have resulted to him by reason of such breach.

4.38 Right of the Employer to Terminate Contract in the Event of Death of Contractor, if Individual

4.38.1 Without prejudice to any of the rights or remedies under this Contract, if the Contractor being an individual, dies, the Employer shall have the option of terminating the Contract without incurring any liability for such termination.

4.39 Testing

4.39.1 All the equipment shall be tested jointly with the contractor and the Bank's engineer as required by the various sections of the specifications.

4.40 Work at Site

4.40.1 The contractor shall inspect the site and ascertain for himself the nature, character and extent of work to be executed and shall include all items and services necessary, whether specifically mentioned or not in the Specifications, Drawings, or Schedule of Equipment to make with the intent and purpose of these Specification.

Place:
Date:

Signature of Tenderer
Name
Designation
Name of firm
SEAL

Section-V
Technical Specifications/ Scope of the work

Name of work	SITC of 6000 CFM floor mounted outdoor type Air Handling Unit for Entrance lobby area at RBI Jaipur office.
	<p>The scope of work shall includes:</p> <ol style="list-style-type: none"> 1. Design and Delivery of all equipment's materials to Bank's site at Jaipur including packing, handling, transporting, loading/unloading at site 2. Erection, testing, commission of AHU, modulating valves and other accessories provided for in the bill of materials/schedule of quantities and handing over the units to Bank along with necessary modification in the pipe line, ducting, providing canvas connection etc. • 3. The rate should include the work of integration of pipeline with existing pipeline, related accessories for installation of new AHUs & all other expenses for the said work. 4. Dismantling and Re-assembling the blower(s) to bring them inside the AHU/Fan room, if required, due to inadequate passage area. 5. The installation of AHUs shall be inspected and certified by the AHU manufacturer before handing over of the same. 6. Any damages/holes made in walls/floor shall be repaired made good. No extra payment will be made for the said work. 7. All air handling units shall be selected to meet the performance criteria set out in the appropriate data sheets. Wherever the ceiling heights are low, unit selection shall be such that the unit could be accommodated in the space assigned. Floor Suspended AHU should installed on rigid 'C' channel frame 100mmx 50mm & isolated with anti-vibration pads. <p><u>Air Handling units:</u></p> <p>The unit shall be double skinned, Backward Curve Fan type and placed at outdoor site.</p> <p>The motor must be of IE-2</p> <p>The cooling coils must be AHRI certified and Blower must be AMCA (Air Movement and Control Association) certified for air and sound.</p> <p>Casing</p> <p>The panels shall <u>consist of 0.6 mm galvanized outer skin powder coated. and 0.6 mm galvanized inner skin with pressure injected polyurethane foam insulation. The insulation material shall be PUF material of 50 mm thick sand-witched between the two panels having density of 38-40 kg/m³.</u> The thermal conductance of the panel shall be not more than 1.2 W/sqmC and the noise reduction of 20 dB @ 250 Hz mid frequency.</p> <p>Air Handling Units shall be of sectionalized constructions with an under frame of extruded heavy aluminum profiles anodized for extra protection against corrosion and having built in thermal barrier to prevent condensation on AHU panels. The aluminum profiles shall be connected through die-cast connectors which shall render the unit capable of being easily dismantled. The under frame shall be mechanically strong and shall take double skinned insulated panels of thickness 43mm-50mm. Double skin wall panels shall be</p>

fixed to aluminum twin box section structure framework. Entire unit shall be mounted on a 1.2 mm galvanized steel sub-base. Four lifting lugs shall be bolted to each section for lifting or placing AHU in place as required.

Air tight hinged quick opening insulated access doors shall be provided in the fan section and coil sections. Access doors shall be double skinned and shall be of same construction as the wall panels. Marine light shall be provided for maintenance with control switch on outside. Limit switch shall be provided inside the door which will be suitably linked to stop motor automatically in case the door is opened to ensure safety.

Sloping drain pan shall be fabricated from 18SWG SS304 Tray duly insulated with 13 mm closed Cell Nitrile insulation. Water trap shall be provided to condensate drain water pipe. Drain pan shall be extended beyond the coil. Drain connections shall be provided on both ends and shall be suitably piped to the nearest drain.

Units meant for **outdoor exposed** locations shall be specially designed to meet the arduous and corrosive atmosphere. All hardware shall be hot dip galvanized.

Provision for mounting thermometers and pressure gauges shall be provided at inlet and outlet of chilled water line.

AHU will be capable of handling air quantity at 65 mm static complete with Fan outlet GI damper and canvass connection.

The AHU shall have inspection covers for attending to various parts requiring maintenance.

The drive motor shall be preferably direct coupled. If this feature is not possible, suitably designed flat belts shall be provided.

Fan Section

The fans shall be **backward curve** type with optimized selection, low noise and high efficiency.

Fans shall be statically and dynamically balanced for vibration free operation.

Cooling Coil Section

Cooling coils shall have 12.5mm diameter tubes of 24G thickness with Aluminum fins firmly bonded to copper tubes assembled in GI casing. The coil shall be with **4/6** rows with 12 fins per inch spacing. The coil shall be tested for a pressure of 10 Kg per sq.cm (g) and test reports shall be furnished for this. The coil face air velocity across the coil shall not exceed 500 FPM velocity.

Inlet and outlet coil nipples shall be sealed against unit casing by means of neoprene gaskets.

Filter Section

The filters (EU-4) shall be 50mm thick HDPE mesh of efficiency 90% down to 10 microns complete with AL anodized frame. Filters shall be 100% pleated fire retardant and selected for air velocity through pre-filter shall be not exceeding 500 FPM velocity.

Motors:

The drive motor shall be of TEFC squirrel cage induction motor with IP 55 protection and with Class F insulation. The design, construction features and testing of the motors shall be as per the latest version of IS 325. Routine test certificates shall be furnished for the motor.

Motors up to and including 5 HP shall have DOL starter and above this rating shall have

Star/ Delta starter.

Ducting:

The following points should be taken into account while fabrication of ducts.

- (a) All ducts shall be supported from the ceiling/slab by means of MS rods of dia. 9 mm with MS angle at the bottom. The ducts may be suspended from the ceiling with the help of dash fasteners. Provision of necessary supports with materials shall be arranged by the Contractor.
- (b) The rubber gasket shall be installed between duct flanges in all connections and joints.
- (c) The duct work can be modified in consultation with the Consultant to suit actual site conditions in the building.
- (d) All flanges and supports should be primer coated on all surface before erection and painted with aluminum paint thereafter.

Note The diffuser shall be dropped from OTS (Open to sky) terrace through available opening. Firm needs to ensure after ducting the opening are sealed properly so that there will not be any water seepage through the same. No additional charges on these accounts shall be payable to the Contractor.

Acoustic Insulation of the duct:

The plenum shall be acoustically insulated in the following manner:

The initial supply air duct piece near AHU may be provided with acoustic lining with open cell Nitrile Rubber insulation. Material shall be Class '1' certified & with anti-microbial properties. The recommended insulation thickness is 10mm thick.

Water Piping

This section deals with supply, installation of pipes, pipe fittings and valves, testing and balancing of all condensers, chilled water, drain water etc. as detailed in specifications. All piping, fittings and valves etc. shall conform to relevant Indian standards. The pipes, fittings and valves shall be of approved make.

Chilled/Condenser water pipes shall be "C" Class M.S.E.R.W. Black pipes & shall conform to IS: 1239 (Part I) - 1991 with latest amendments. The wall thickness of "C" Class M.S.E.R.W. Black pipes as per IS: 1239 (Part I).

Pipe Fittings

General

The pipe fittings for screwed piping shall be malleable iron fabricated from MS Class C ERW and for piping with welded joints shall be of weldable quality. Also the fittings shall be suitable for same pressure ratings as for the piping system. All bends up to sizes 150 mm dia. shall be of heavy duty ready made.

All bends in sizes 200 mm and above shall be fabricated from the same dia. and thickness of pipe in at least four sections and having a center in radius of at least 1.5

times diameter of pipes. Fittings such as tees, reducers etc. shall be from the same pipe and at least of length twice the diameter of the pipe.

The dead ends are to be formed with flanged joints and 6 mm thick blank between flange pair for 150 mm and over in case here a future extension is to be made. Otherwise blank end disc 6 mm thicknesses are to be welded with additional stiffness from 50mm x 50 mm M.S. heavy angles. For sizes above 350 mm all ends larger than 400 mm dia. shall have dished ends and tested.

Flanges

All flanges shall be of mild steel as per IS : 6392/71 (with latest amendments) & shall be slip on type welded to the pipes. Flanged thickness shall be to suit Class II pressure. 3 mm thick gasket shall be used in between the flanges. Flanged pair shall be used on all such equipment which are required to be isolated or removed for service for example condenser/chilled water pumps, chilling m/c. AHU etc.

Butterfly Valves

Butterfly valves shall be ISI marked and of PN 16 rating as per IS 13095 preferably with fixed linear design to suit duty and flanges as per IS 6392 Table "E" Valves of sizes 32 mm and above diameter shall be made of cast iron close end body, cast iron epoxy coated disc. Nitrile Seal and SS 410 Stem with Teflon bush and lever to operate. All valves shall be supplied with factory test reports.

Balancing/Controller Valves

The balancing control and shut off valves with built in facility for flow measurement shall be provided as specified in the Bill of materials.

The valves of sizes 32 mm to 65 mm dia. shall be of gun metal / cast iron gun metal (IS 318 Gr. LTB2) equivalent to (ASTM A62) construction with PTEE (Teflon Ring) construction with screwed ends angular design digital hand wheel with locking facility. Whereas valves of sizes 75 mm and above shall be of cast iron construction with internal parts of SS 410 and EPDM / nitrile seat with flanged ends. The test cocks should be long enough to protrude out of valve insulation.

The valves shall be designed for PN 16 and tested for the seat at 1.1 times the design pressure and 1.5 times the design pressure for the shell. All valves shall be supplied with test certificates and flow charts.

3 WAY automatic chilled water flow modulating valves

3way chilled water flow valve shall be designed for **PN 16** rating or as per manufacturer's design standard. The valve should be Brass body mixing valve with motorized modulation non-spring return type actuator (24V) provided with actuator, thermostat and sensor; necessary pipe/pipe fittings of 80 mm diameter or as specified in Part II of the tender including control wiring from AHU starter panel in AHU room, with PVC insulated 1.5 sq.mm copper cable. Voltage converting devices if required should also be provided along with the valve assembly. All other fittings/hardware/insulation etc., as required for satisfactory operation of the valve is also included in the scope of work.

Y-Stainer

Y-stainer & non-return valve shall be of CI body construction with SS wire mesh.

Drain Piping

Drain piping shall be properly clamped & done using hard PVC pipes of minimum 1.5" dia. U trap shall be provided at the end of each drain connection. The drain piping shall be insulated properly. All joints in pipe shall be sealed using adhesives. Drain shall be terminated at nearest drain line as directed by Bank's Engineer.

Layout and Sizing of Pipe Lines

The sizes and layout given in the drawings / bill of quantities Section are for guidance purpose only. The A/C Contractor shall prepare submit detailed drawings after the award of contract approval. No work at site shall be started before final approval of drawings if given. The drawings shall indicate sizes of pipes quantity of water flow in each length of pipe. All details of fittings, location of all valves, air vents, pipe supports etc. shall be clearly indicated in the drawings.

Installation Of Chilled / Condenser / Drain / Make Up Water Piping

All pipes shall be securely supported or suspended on stands, hangers, clamps etc. as required. The Air-conditioning contractor shall design all brackets, saddles, anchors, clamps etc. & shall be responsible for structural adequacy.

All pipe supports shall be of steel, coated with two coats of anti-corrosive paint and finally finished with paint.

The pipe spacing shall be as follows:

Dia. of Pipe	Spacing between supports
Upto 25mm	1.5 mtr.
30mm to 50mm	2.0 mtr.
65mm to 75mm	2.5 mtr.
100mm to 125mm	3.0 mtr.
150mm	3.5 mtr.
200mm and above	4.0 mtr.

- The vertical risers shall run parallel to walls and should be straight to wall duly checked with plumb line.
- In case pipes with/without insulation while passing the wall / slab, shall be provided with sleeve 50mm higher in size than the pipe with / without insulation.
- Wherever insulated pipes are running, it should be supported in such a way that no undue pressure is exerted on the insulated pipe.

Insulation

This section deals with supply and fixing of thermal insulation of chiller, pipes etc. as per the specification given in this section.

Material of insulation

The insulation material of the following kind shall be used for cold insulation.

The Insulation material shall be performed pipe section or slabs of Chemically cross linked closed cell polyethylene FR-XPE Fire retardant grade with K value not exceeding 0.029 at 23°C mean temp & thermal conductivity not exceeding 0.031w/mK at mean temperature of 0°C.

For water pipe insulation.	Perforated pipe sections or slab/roll of chemically cross linked closed cell Polyethylene FR-XPE Fire retardant grade
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The Thickness of Insulating material of Cross linked Closed Cell Polyethylene Fire Retardant grade to be used for various sizes of pipes is as under or as specified in Part-II of the tender.

Application of insulation shall be done as given below.

(a) The pipe to be insulated should be cleaned thoroughly with steel brush for removing dirt, rust and grease and painted with two coats of zinc chromate primer.

(b) Pre moulded pipe section or slab/roll of insulating material shall be placed over the pipes after removing the adhesive protection-layer from the inner surface of insulation coming in contact with the pipe to be insulated. It will then be uniformly pressed, preferably with a smooth roller, by clean hands or other means in such a way that the insulation sticks to the surface of the pipe with uniform pressure without leaving any gap or traces of air in between.

The Thickness of Insulating material of Cross linked Closed Cell Polyethylene Fire retardant grade to be used for various sizes of pipes is as under or as specified in Part-II of the tender.

Pipe Dia (mm)	thickness (mm)
10-25	19
30-65	25
80 to 150	32
200 to 300	38
350 to 500	45

(c) All longitudinal and transverse joints shall be sealed by Pideilite SSR 998 adhesive liquid or any other adhesive recommended by the manufacturer and the joints shall be sealed again with a 50 mm wide sealing tape of approved quality as recommended by the manufacturer ensuring it provided full vapour barrier sealing. PVC tape as recommended by the manufacturer shall be strapped at 1500 mm center shall be used to securely hold the insulation and the tape in position. Tapes covering the circular joints shall be provided with PVC tape as indicated above shall be strapped of same width to properly hold the joint in position. Insulation for all pipes, running above ground in weather protected areas, shall be covered with **26G** aluminum sheet cladding in neat & clean manner to achieve true surface.

Notes - No insulation to be applied before leak tests.

Valves, fittings, pumps and accessories

All valves, fittings, flanges, strainers etc. in the piping operating below normal temperature shall be insulated in the same manner as described above. Care should be taken to ensure that no damage would be caused to the insulation when valves or strainers is used serviced. All water pumps and accessories shall be provided with insulation of the same thickness as that of pipes to which they are connected. The method of application of insulation shall be as described for insulation of piping.

Painting Work

This section deals with painting of various equipment/material supplied under this contract. It gives basic guidance for painting as specified below.

Type of paints - The paint shall be readily mixed enamel paint of ICI, Asian or approved make only. The paint shall be supplied in accordance with the quality of surface covered as per manufacturers' recommendations for specific application.

Application - All equipment/piping/supports etc. shall be given two coats paint as approved by the Consultant/ bank's Engineer.

Noise and Vibration Controls:

The air conditioning contractor must take all necessary precautions to have minimum noise generation and its transmission. Minimum vibration as permitted by IS relevant code shall be ensured. A few points for guidance are given below.

- a) Double fire retardant flexible connection shall be connected from air discharge to the duct.
- b) Vibration isolation pads of suitable thickness commensurate to loading for elimination of vibration shall be provided under all pumps, air handlers etc. in consultation with manufacturers for proper selection of vibration isolation pads.
- c) The floor supported piping shall be supported on base of 9 mm ribbed neoprene pads between the base plate and the support on the floor.
- d) All other mechanical equipment such as air handling units etc. shall have double deflection 9mm neoprene pads.
- e) In case ducts, conduits, pipes, tubes the annular space between walls etc. and penetrating element shall be filled with fibrous material and both sides sealed with suitable sealant.
- f) All the duct starting from air handling unit shall be provided with acoustic lining for minimum of 3mt. length from outlet of air handler.
- g) No air-conditioning ducts or chilled water drain piping shall rest on false ceiling frames to avoid transmission of vibrations to the false ceiling

Motor Starters

- (a) All starters shall conform to IS 1882. The starter shall be enclosed in sheet metal enclosure or mounted inside the cubicle MCC which would be dust vermin proof etc.
- (b) All starters should be of voltage and frequency as specified.
- (c) All starters shall have integral stop/start push button of international colour code.

- (d) Contactors shall have number of poles as required for appropriate duty. Contacts could be made of solid silver faced should be suitable for at least 40 contacts per hours.
- (e) All starters shall be provided with thermal overload relay.
- (f) All starters (star/delta) shall have adjustable timers.
- (g) Terminal blocks with integral insulating barrier shall be provided for each starter.
- (h) Starter shall be air break type compatible to the drive and driven equipment.

Electrical Power panel

The electrical starter panel shall be fully wired and factory tested.

The panel shall have a single point power supply to the unit. All internal power distribution shall be carried out within the unit mounted panel. The power supply required for the control circuit/microprocessor circuit shall be tapped internally within the panel

The panel shall have MCCB for isolation of power supply to the unit. Control wiring for auto control of the fan speed to attained set temperature parameters. Speed control regulator shall be provided for speed control in manual mode. Auto/Manual control shall be selected using selector switch. Any external DC/AC supply needed for operation of AHU shall be tapped from the panel itself. AHU can be started through starter installed in AC plant as well as from the panel installed in AHU room. The necessary control wiring required inside panel or from AC plant shall be in scope of contractor. The control wiring diagram need to be pasted inside the panel.

Panel shall include starters of type as specified in BOQ.

Make of Materials

List of approved makes of materials

Air Handling Unit	Nutech/Zeco/SystemAir/ Advantek /Daikin or equivalent	Make offered
Water piping class C	TATA/Jindal/Zenith	
Water duty butterfly valve	Audco / Advance / C & R	
3 way By-pass Valve with actuator and sensor	Johnson/ Honeywell/siemens/Audco	
Gate valves	Leader/ Advance / Audco	
Pressure Gauges	Fiebig /Emerald / H Guru	
Dial type temperature gauges	Emerald / H Guru / Jaspin/Fiebig	
Paints	ICI / Asian / Jenson & Nicholson	
Star Delta Starter	L & T /Siemens	
MCCB/MCB	Legrand/ Siemens/L&T	
Power cable	Polycab/finolex	
Control cable	Gloster / Finolex/polycab	
Voltmeter / Ammeter (Digital)	A.E./IMP/Rishab/amco	
CT	AE/Kappa	
Switches	L & T /Siemens	
HRC Fuse and Fittings	L & T /Siemens / GE	
Contactors	L & T / Siemens	
Overload Relays	L & T / Siemens	

Selector / Toggle switch	Kaycee / L &T	
Time Delay Device	Siemens / L &T / BCH	
Single Phase Device	L & T/Minilec	
Vibration Isolation Spring	Dunlop / Resistoflex	
GSS Sheet	Sail / Tata/ Jindal	
Motor	Crompton/Kirloskar/ABB/Siemens	
Balancing valve	Advance/Castle	
Y-stainer	Trishul/Sant S.I	
Butterfly valve	Audco/C&R	
Actuator	Belimo/Honeywell/Joventa	
Insulation	Armacell/kflex	
Drain piping	Finolex/Prince/Kissan	

The Tenderer shall indicate the specific make of material (any one of the make listed above) proposed to be used by them for the said work against each item failing which the Bank reserve the right to choose any one make out of the above

Performance Test readings

Season -

Date -

The following test readings shall be recorded hourly during the seasonal tests.

1	<u>Outside conditions</u>						
(a)	Season						
(b)	Dry bulb temperature °C						
(c)	Wet bulb temperature °C						
2	<u>Inside conditions</u> (For each area served by each AHU)	1	2	3	4	5	6
(a)	Dry bulb temperature °C						
(b)	Wet bulb temperature °C						
(c)	Relative humidity (%)						

The capacity of the AHUs, cooling coils, blower CFM, Motor current and Kw will be measured and recorded

FACTORY INSPECTION/TESTING

The tenderer shall inform the Bank before dispatch of Air handling units from the Manufacturer's factory. The bank's engineer at the discretion of the Bank will inspect the materials at the factory prior to dispatch and carry out the following:

1. Checking of make/model/ wall thickness of the AHUs
2. Checking of overall dimensions
3. Checking of Blower/Motor capacity/make/model
4. Checking of filters
5. All other materials as per BOQ being dispatched from the factory

Date	Signature of the firm
Place	(By a person holding the Authority/Power of Attorney)

Section-VI (Un-priced financial- bid/ Part-II)

Sr No	Description	Unit	Quantity
1	Floor Mounted Air handling unit (6000 CFM each) with Thermal Break profile for Outdoor Installation (including canopy) in double skin construction with 50 mm PUF with pre coated 0.6 mm thick sheet outside and plain 0.6 mm thick sheet inside with & having the following sections : <ul style="list-style-type: none"> • Pre filter section with 10 micron filter • Mixing Box for connection to the return duct • Fan section with backward fan with inspection door view window, lamp & limit switch Copper Coil section with 4/6 row deep chilled water coil with SS 304 Drain pan. Motor shall be TEFC motor of suitable rating. All the motors shall be IE2. 6000 CFM, 65 mm static, 15 TR	Nos	1
2	Supply, Installation, Testing & Commissioning of M. S. Class 'C' CHILLED WATER 50 mm dia PIPING with 2 layer of 19 mm thick Cross linked Closed Cell Polyethylene insulation. The pipe insulation shall be covered with 1 mm thick polythene sheets double wrapped and held with PVC tape and then covered with 26 Gauge Aluminium cladding	Rmt	50
3	Supply, Installation, testing and commissioning of insulated cast iron Butterfly Isolation Valves with Cross linked Closed Cell Polyethylene Insulation complete with gaskets, flanges etc. PN 16 class rating IS 210- 50 mm dia	Nos	2
4	3-Way Valves complete with modulate motor activating thermostat etc.- 50 mm dia with Cross linked Closed Cell Polyethylene insulation.	Unit	1
5	Supply, Installation, testing and commissioning of insulated flanged type Balancing Valves BS:5154	Nos	1

6	SITC of Y-Strainers in Chilled Water line with Insulation - 50 mm dia with Cross linked Closed Cell Polyethylene insulation. PVC tape and then covered with 26 Gauge Aluminium cladding	Nos	1
7	SITC of GI Ducting made out of 120 GSM 24 Gauge GI Sheet including 10 mm Open Cell Nitrile Rubber pasted from Inside and 32 mm Cross linked Closed Cell Polyethylene insulation & 50kg/Cu.mtr from outside	Sq.Mtr	10
8	SITC of GI Ducting made out of 120 GSM 24 Gauge GI Sheet including Cross linked Closed Cell Polyethylene insulation of 32 mm thickness & 50kg/Cu.mtr on outside.	Sq.Mtr.	50
9	SITC of aluminium powder coated Circular type diffuser each capable of delivering air flow not less than 3000 CFM including damper, fixtures, gasket, screws etc.for supply.	Nos	2
10	SITC of aluminium powder coated Circular type diffuser for return air including fixtures, gasket, screws etc	Nos	2
11	Electrical Panel wall mounted : Supply, erection, testing and commissioning of cubicle type weather poof (IP 55) wall mounted AHU control panel complete as per specifications, and equipped with the following : a) 1 Nos. 32 A TPN MCCB as incomer b) 1 set of phase indicating LEDs with fuses. c) 1 No 0-500V digital voltmeter with selector switch d) star delta/DOL starter as required e) 1 nos. 0-50 A digital ammeter with CTs and selector switch f) Digital kWh meter g) Push button for stop and start (Red/ Green) Suitable capacity/contactors with thermal bimetallic overload relay with required capacity copper bus bar interconnection with the incomer. Copper earth terminal of 26x6mm and necessary hardware for connection.	Nos	4
12	SITC of Electrical cable		
12.1	4cX 6sq.mm Copper armoured cable with 2 run of 14G GI earthing, support hardware, termination, with proper dressing, etc.	RMT	100
12.2	SITC of perforated GI cable 150x25mmx1.6mm tray with necessary support, hardware accessories	RMT	100

Date _____

Signature of tenderer & seal

Place _____

Annexure I

FORMAT FOR ARTICLES OF AGREEMENT (for successful bidder)

(On the Rs.500/- stamp paper)

ARTICLES OF AGREEMENT made the _____ day of _____ between the Reserve Bank of India, Jaipur (hereafter called "The Bank") of the one part and _____ (thereinafter called "the Contractor") of the other part.

WHEREAS The Bank is desirous of (**Name of work**) at _(location)_ and has caused specifications describing the works to be done.

AND WHEREAS the said specifications, the Schedule of Quantities and drawings have been signed by or on behalf of the parties hereto.

AND WHEREAS the Contractor has agreed to execute upon the subject to the Conditions set forth herein and to the Conditions set forth in the Special Conditions and in the Schedule of Quantities and Conditions of Contract (all of which are collectively hereinafter referred to as "the said Conditions") the works shown upon the said drawings and/or described in the said specification and included in the Schedule of Quantities at the respective rates therein set forth amounting to the sum as therein arrived at or such other sum as shall become payable thereunder (hereinafter referred to as 'the said Contract Amount')

NOW IT IS HEREBY AGREED AS FOLLOWS:

1. In consideration of said Contract Amount to be paid at the times and in the manner set forth in the said conditions, the Contractor shall upon and subject to the said Conditions execute and complete the work shown upon the said Drawings and described in the said Drawings and described in the said Specifications and the Schedule of Quantities.
2. The Bank shall pay the Contractor the said Contract Amount, or such other sum as shall become payable, at the times and in the manner specified in the said conditions.
3. The said Conditions thereto shall be read and construed as forming part of this agreement and the parties hereto shall respectively abide by, submit themselves to the said Conditions and perform the agreements on their part respectively in the said Conditions contained.
4. The plans, agreement and documents mentioned herein shall form the basis of this Contract.
5. This Contract is neither a fixed/ Lump sum Contract nor a Piece work Contract but is a Contract to carry out the "**Name of work**" to be paid for according to actual measured quantities at the rates contained in the Schedule of Rates and Probable quantities or as provided in the said Conditions.
6. The Contractor shall afford every reasonable facility for the carrying out of all works relating to civil works and other ancillary works in the manner laid down in the said Conditions, and shall make good any damages done to walls, floors etc. after the completion of such works.

- 7. The Bank reserves to itself the right of altering the Drawings and nature of the work by adding to or omitting any items of work or having portions of the same carried out without prejudice to this contract.
- 8. **Time** shall be considered as one of the important factor of this Contract, and the Contractor hereby agrees to commence the work soon after the site is handed over to him or from 14 day after the day of issue of formal works order as provided for in the said Conditions, whichever is later, and to complete the entire work as provided in said condition , subject nevertheless to the provisions for extension of time.
- 9. All payments by The Bank under this Contract will be made only at Jaipur.
- 10. All disputes arising out of or in any way connected with this agreement shall be deemed to have arisen at Jaipur and only Courts in Jaipur shall have jurisdiction to determine the same.
- 11. That the several parts of this Contact have been read by the Contractor and fully understood by the Contractor.

If the contractor is a Partnership or an Individual

IN WITNESS WHEREOF The Bank and the Contractor have set their respective hands to these presents and two duplicate hereof the day and year first hereinabove written.

If the contractor is a Company

IN WITNESS WHEREOF The Bank has set its hand to these presents through its duly authorised official and the Contractor has caused its common seal to be affixed hereunto and the said two duplicate/has caused these presents and the said two duplicates hereof to be executed on its behalf, the day and year first hereinabove written.

Signature Clause

SIGNED AND DELIVERED by the Reserve Bank of India by the hand of Shri

(name and designation)

..... in the presence of

(1)
Address

(2)
Address

.....
.....
.....

Witnesses

SIGNED AND DELIVERED BY If the part is a partnership firm or any individual should be signed by all or on behalf of all the

.....1)..... partners.

..... Address

.....

.....

.....

2)

.....

..
Address

.....

.....

.....

If the Contractor signs under its common Seal the signature clause should tally with their sealing clause in the Articles of Associations.

Witnesses

THE COMMON SEAL OF
Was hereunto affixed pursuant to
the resolutions passed
By its Board of Directors at the
meeting held on

.....

.....

.....

In the presence of

(1
)

.....

....

(2
)

.....

....

Directors who have signed these
presents in taken thereof in the
presence of

(1)

.....

(2)

.....

SIGNED AND DELIVERED BY the
Contractor by the hand Of
Shri

.....

and duly constituted attorney.

The Contractor is signing by the hand of power of attorney whether a company or individual.

The Contractor is signing by the hand of power of attorney whether a company or individual.