

BID/TENDER DOCUMENT

The State Trading Corporation of India Ltd
(A Govt. of India Enterprise)

JAWAHAR VYAPAR BHAWAN, TOLSTOY MARG,
NEW DELHI-110001

INVITES

Open e-bids under two packet bidding procedure

For the work of Comprehensive Routine, breakdown Operation and Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of CentralHVAC (Heat, Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place, Delhi.

Website: www.stclimited.co.in

It is to be noted that bidder shall not disclose any Confidential Information to any third party without STC's prior written consent. All Confidential Information is and shall remain the property of the STC which has supplied it to the Bidder and Bidder shall not use, or permit to be used, any Confidential Information of STC other than in connection with the purpose contemplated by this Tender/EOI/Bid Document. Confidential information shall not be limited to the Tender Documents or any Invitation to offer but covers communications between STC and Bidder/s pertaining to the period starting from bidding process and up to selection of the successful bidder or the period as decided by STC at its sole discretion.

Contact person for any clarification Rajesh (Manager-Elect.) / R K Avasthi (DGM Electrical)

The State Trading Corporation of India Ltd.

1-Tolstoy Marg, Jawahar Vyapar Bhawan, Connaught Place, New Delhi-01 Ph -011-2346-2111/2400

E mail <u>rsingh@stclimited.co.in</u>, rkavasthi@stclimited.co.in

Bid Ref : - STC/CO/BLD-E/F01136/2022/1

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The State Trading Corporation of India Ltd. (A Public Sector Undertaking)

NOTICE INVITING E-BIDS

Bid Ref:- STC/CO/BLD-E/F01136/2022/1

Bids are invited in two part bidding process **online (e-bidding process)** via open bid process from competent firms, for the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi.

1. The bids have to be submitted on-line only.

Sr.	Particular	Details	
No.			
1	Bid issue and filling site	www.eprocure.gov.in	
2.	Bid document fee	Rs.1180.00 (including GST)	
3.	Bid floating date	17/02/2022	
4.	Last Date of issue of bid	11/03/2022	
5.	Date and time of submission of scanned bid documents with all necessary documents on the e-bid portal.	11/03/2022 11:00 HRS (IST)	
6.	Date and time of opening of bid (Technical Bid-Part-1)	11/03/2022 11:30 HRS (IST)	
7	Venue of opening	eprocure.gov.in.	
8	Date and time of opening of Price	Shall be intimated later to the	
	Bid of bid (Part-II)	successful bidders in technical bid.	
9.	Amount of earnest money to be	Rs. 1,10,000/-	
	deposited (EMD)		
10.	Submission of bidding fees	To be deposited online prior to closing	
	(non-refundable) and EMD	time of bid, as per below. The details	
		of the same have to uploade	
		d with	
		tender document.	

		1. Name	of Bank :-	State	Bank of
		India, Ov	erseas Branc	h, New	Delhi.
		2. Name	of beneficiar	y:- The	STC of
		India Ltd			
		3.	Account	no	:-
		4030212	7653		
		4.	ISFC	code	:-
		SBIN000	4803		
11	Contract person details	R.K.	Avasthi		
		D.G.M-EI	ectrical,		
		The state	Trading Cor	poration	n of India
		Limited,	1-Tolstoy	Marg,	Jawahar
		Vyapar B	hawan, C.P.	New De	elhi
		Email :- <u>r</u>	kavasthi@stc	limited.	co.in,
		Ph:- 011-	23462400,23	701102	

Note:-

- 1. Any Deviation from bid conditions shall result into technical disqualification.
- All the pages of the bid documents should be signed by the bidder as a token
 of acceptance and shall be uploaded in PDF format on-line in two packet
 system.
- 3. If the dates mentioned above happen to be a Holiday in STC, the next working day shall be considered as mentioned date.

Instruction for filling the e-bid

- 1. Bids are invited via open bid process for the Works of Comprehensive routine operation, Breakdown Maintenance of Electrical & Mechanical equipment installed in Jawahar Vyapar Bhawan, Connaught Place, Delhi.
- Bids have to be uploaded on line only via https://eprocure.gov.in/eprocure/app (the e-procurement portal of NIC (https://eprocure.gov.in/eprocure/app). No bids shall be accepted in hard copy or any other form.
- 3. For submission of e bids, bidders are required to get them registered with NIC's Central Public Procurement (CPP) portal (http://eprocure.gov.in/eprocure/app) using class-II/Class –III digital signature certificate. All the details mentioned during registration / enrolment process must be correct and true. Bidders have to abide by all the terms and conditions mentioned during registration process.
- 4. The details of financial instrument regarding Tender fee must be uploaded during the e-bid submission and it should tally with the amount received as required, otherwise, the bid may be rejected.
- 5. The bidders are required to upload soft copies of all relevant documents.
- 6. Bidders are advised in their own interest to upload the on line bids well before the bid document submission end date and time (as per server system clock of CPP). STC shall not be responsible for any delay or the difficulties encountered during submission of bids at the eleventh hour due to any technical or other problems.
- 7. For any queries relating to the process of online bid submission or queries relating to Procurement Portal (eprocure.gov.in), the bidders may contact CPP Portal Helpdesk on Tel No's.: 1800-3070-2232, 91-7878007972, 91-7878007973, 91-7574889871 and 91-7574889874.
- 8. Bidders may regularly visit STC website for any information / clarification / addendum / corrigendum etc. related to this bid, processing of bids received, award of job, pre bid meet decisions etc. STC shall not be liable to send any individual information or publish a public notice for any further information regarding this bid in newspapers.
- 9. Portal for Online Submission https://eprocure.gov.in/eprocure/app
- Scanned copy of all the documents as required for bid submission have to be uploaded online only.

- 11. A bidder may modify, substitute or withdraw its e-bid after submission before the last date and time of bid submission. No bids shall be modified, substituted or withdrawn by the bidder on or after the last date and time of bid submission. For modification of e-bids, bidder has to detach its old proposal from e-biding portal and upload/resubmit digitally signed modified bid.
- 12. STC may ask the bidders to submit/Show any or all the documents in original as part of their online bid anytime during the bid process.
- 13. If there is a discrepancy between words and figures, the amount in words shall prevail. However, where the amount expressed in words does not represent arithmetically correct total, the amount in figures shall prevail.
- 14. It shall be the bidder's responsibility to ensure that adequate documentary proof is provided in the bid for each of the technical evaluation criteria. Bidder has to satisfy STC for ensuring sufficiency of documents necessary for tender evaluation at his cost if so desired by STC.
- 15. The bid document available on e- procurement portal shall be taken as final. STC reserve the right to take the decision only on the basis of the available documents on online portal however STC also reserves the right to ask for more document as "Clarification/supporting" for verification of the uploaded documents for a rational and comprehensive decision of bid evaluation, if deemed fit. Decision of STC will be final and binding in this regard.

Definitions

- 1. "Application" shall mean the request submitted by interested bidders for obtaining the bid document against the tender notice inviting bid.
- 'Bid document or the tender document shall mean the documents (including notice inviting tender-NIT) issued by STC in respect to the bidding to the prospective bidder and the corresponding document submitted by the bidder under his application /"Bid".
- 3. Security/Earnest Money/EMD" shall mean the amount to be deposited by the Bidder with the Bid.
- 4. "Bid Validity" shall mean the period for which the Bids shall remain valid.
- 5. "Bidder" shall mean the party/firm/agency participating in the Bidding process pursuant to and in accordance with the terms of this document.
- 6. "Contract" shall mean the agreement to be signed between the successful bidder and the nominee of the competent authority on behalf of STC.
- 7. "Contract Price" shall mean the financial bid of the successful bidder as accepted by the STC.
- 8. "Date of commencement of work" shall mean the date of start as communicated by the Letter of work order.
- 9. "Defects Liability Period/Maintenance Period" means the period after completion of the contract during which the STC or its authorized representative/Engineer-incharge will notify to the Contractor any defect noticed in the work and the contractor is liable for, replacing or repair the same as provided under the Terms of the Contract/ Document. Proof of dispatch of letter notifying the defect/intimating the representative of Contractor at site on the last date of Defect Liability period will make the contractor liable for rectifying all such defects.
- 10. "Tender Evaluation Committee (TEC)" shall mean the committee constituted by STC for the technical evaluation of the bids and opening of Price Bids of those bidders found technically qualified, thereafter.
- 11. "Letter of Award/Notification of Award" shall mean the letter issued by the STC to the successful bidder inviting him to sign the agreement.
- 12. 'STC' shall mean The State Trading Corporation of India Limited having its registered office at Jawahar Vyapar Bhawan,1-Tolstoy Marg Connaught Place, Delhi.

- 14 "The Contractor" shall mean the sole proprietor, or firm or company, undertaking the works and shall include the legal representative or such successors, heirs, administrators or official pen assignees of such sole proprietor, partnership or company, as the case may be.
- 15. Engineer-in-charge shall mean the officer designated by STC who shall supervise and who shall be in charge of the work, and issue necessary instructions at the site, on behalf of STC.
- 16. "Performance Security/Performance Bank Guarantee" shall mean the security amount to be paid by the successful bidder as per relevant clause mentioned in the bid document. provided by the contractor for proper performance of the contract.
- 17. "Work" means Works of Comprehensive routine, breakdown Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi as per bid document.
- 18. "Site: shall mean the place where the works under the Contract are to be carried out and the details of which are provided in this document.
- 19. "Successful Bidder" shall mean the bidder who has been declared technically qualified and whose bid has been accepted by competent authority of STC. The successful bidder has to sign the agreement.
- 20. "Scheduled Banks" mean Scheduled Commercial Banks of Govt. of India.
- 21 Order placing authority means: The officer who is issuing or Placing detailed work order to the contractor
- 22. GST:-Any tax imposed under the Goods and service Tax.
- 23. Bill of quantities (B.O.Q.): Shall mean the Part of the bid document, wherein Price of the work has to be quoted by the bidder online, same as Price bid or Financial Bid
- 24. SITC- Supply, installation, Testing and Commissioning

Tender Evaluation Criteria (TEC)

NAME OF WORK:- Comprehensive routine, breakdown Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat, Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place, Delhi.

Only those firms will qualify in Technical evaluation (Part-1) who possesses the following minimum pre-qualifying requirements. The prospective bidders have to upload self-attested documents in PDF format in support of their qualification.

- 1. The bidder should have following experience of Operation and Comprehensive Maintenance in following area in any PSU/ Government./ Semi Government./ State Public sector undertaking/ Government Autonomous bodies during last 7 years preceding from the last date of the previous month when the bid are invited.
 - (a) Operation and Comprehensive maintenance for Central water cooled/air cooled HVAC plant of totaling minimum 750 TR capacity in a single location/installation/office. The bidder may be asked for detailed contract document/work order(s) for the verification of the above during tender evaluation process.
 - (b) Letter of authority/ copy of MOU from OEM of Chillers (M/s Carrier) in favour of the bidder expressing their consent for providing comprehensive AMC of high pressure side of HVAC system specific to STC's site.
- 2. A certificate of satisfactory completion by the order placing authority or higher authority shall only be considered against the works submitted for experience purpose at Sr. No. 1.

For the contractors worked in STC, satisfactory performance certificate during their final one year must be enclosed for this purpose.

3. The bidder should be financially capable for execution of the work as per NIT specifications.

For this purpose Average annual turnover during last three financial years (2020- 21, 2019-20, 2018-19), should be at least Rs 20 Lakhs. For the verification purpose, financial statement i:e Profit & Loss account (P & L) sheet and Balance sheets for above Years should be uploaded. These financial statements should be properly authenticated by Chartered accountant.

- 4. Experience of having successfully completed the similar works (works mentioned at Sr. No 1) during last 07 years counted preceding from the last date when the bid are invited.
 - (a) Three (03) nos. of similar completed works each costing not less than the amount equal to Rs. 21 lakhs per year

"Or"

(b) Two (02) Nos. of similar completed works each costing not less than the amount equal to Rs. 26 lakhs per year

- (c) One(01) No .of similar completed work costing not less than the amount equal to Rs. 41lakhs per year
- 5. Bidder should upload with the technical bid the following with the bid.
- (a) Copy of GST Registration
- (b) Copy of PF Registration
- (c) Copy of PAN card
- (d) Certificate of Non-Blacklisting /debarring from PSU/Govt. / MNC as per bid document
- (e) ESI Registration
- (f) Electrical License from statutory authority
- (g) Proof of depositing Earnest Money Deposit (EMD) and Tender fee online or Registration with MSME/NSIC etc. for availing preferential purchase policy 2012. (For availing exemption bid fee and EMD).
- (h) In case the signatory is other than the contractor certified true copy of the Power of attorney should be uploaded as a token of authorized signatory. In case of a company, board resolution must be uploaded for the same.
- (i) Successful bidder must submit tender document, signed and stamped with agreement.

Note:-

- The technical evaluation of the bids shall be done on the basis of above criteria however, the Tender Evaluation Committee reserves the right to evaluate the bid after taking an all-inclusive/exhaustive view/interpretation of the complete bid document. Hence, the bidder should also follow other terms of the tender documents.
- 2. STC reserves the right to verify the certificate(s) submitted by the contractor directly from the issuing authority/authorities/clients or any other Bidder/contractor/party as deemed fit. Bidder should be in a position to produce the original certificate, if required. The bidder will be liable for verification of the documents, if fails, STC reserve the right the reject the bid at any stage.
- The contractor will have to submit complete details as per KYC format (Know Your Customer) after award of work, without fail. The same is not required at the time of bidding. KYC format will be submitted to the bidder after award of the work.
- 4. The contractor will submit Labour Licence at the start of the work for the site as per the law.

PROFORMA – I

Letter for submission of bid

(To be uploaded online after filling, signed, stamped and scanned)

From:
То
The Deputy General Manager (Elect.)
General Administration Division-Building Cell
The STC of India Ltd., Jawahar Vyapar Bhawar
1, Tolstoy Marg, New delhi-110001.
Sir,

- 1. I/We have examined the conditions as incorporated in the Bid documents for the Execution of work and having visited and examined the site of said work, I/we the undersigned, offer to execute the said works in conformity with the conditions of bid.
- 2. Should this bid be accepted I/We undertake to take over the site within 03 days and commence the work as stipulated in the Letter of award for the said work and further undertake to perform whole of the work comprised in the contract for a period of 12 months specified or till the extended period under bid documents/contract. If I do not commence the work at site within 03 days from the date of award of work, STC may take punitive action against me as deemed fit including debarring/ Holidaying / Blacklisting, for 2 years .
- 3. I/We agree to abide by this bid for a period of 60 days from the date of opening of Bid or such extended period as may be mutually agreed as prescribed in Instruction to Bidders and shall remain binding upon us.
- 4. I/We agree to inform you that whenever there is a change in my permanent, correspondence address for communication including electronic mail, I/we will inform STC immediately else STC can take any action as deemed fit. I/We also

agree that communication through electonic mail as mentioned in my bidding KYC form will be as good as by registered/ speed post

- 5. I/We agree that unless and until an agreement is prepared and executed, this bid and conditions of the tender document together with STC's written acceptance thereof shall constitute a binding contract between us.
- 6. I/We understand that STC is not bound to accept the lowest bid and that STC reserve the right to accept or reject any bid, and/or to annul the bidding process and reject all bids, at any time prior to award of work, without thereby incurring any liability from the affected bidder or bidders nor shall STC have any obligations to inform the affected bidders of the grounds for STC's action.
- 7. I/We understand that STC may reject my bid if the same does not meet the cost of all statuary compliances even if my bid is First Lowest.
- 8. Name of the One representative of the Bidder/contractor at site

(a)Sign	
(b) Sign	
Yours Faithfully,	
Signature of the Bidder (who will sign the agreement with STC)	
Permanent address	
Local address :	
	•
Email address	

Note: The contractor is to fill up the blanks in above form before signing & submitting the bid.

This application is made with full understanding that bids submitted by bidders will be subject to verification of all information furnished for bid evaluation during the bidding process.

Signature of Authorized representative of the bidder.

PROFORMA - 2

Letter for Un-Conditional acceptance of Bid Document

(To be uploaded online after filling, signed, stamped and scanned)

The Deputy General Manager (Elect.)

General Administration Division,

The State Trading Corporation of India Ltd.

Jawahar VyaparBhawan, Tolstoy Marg,

New Delhi-110001.

Subject: - Unconditional acceptance of Bid Conditions

Dear Sir,

- 1. I/We have read and examined and understood all the conditions in the bid documents and site conditions as well for the subject work and we hereby unconditionally accept the bid conditions entirely for the said work. I understand that during the taking over the system from the previous contractor on "as is where is basis", I will abide by the decision of the Engineering in charge without any claim, in case of any dispute from the outgoing contractor of the site.
- 2 I/we undertake to execute the above items strictly in accordance with the requirements and particulars /Specifications stipulated in the bid documents.
- 3. I/we hereby further undertake that during the said period:-
 - (a) I/we shall not vary/alter or revoke my /our bid during the validity period of Bid after bid submission.
 - (b) I/we have quoted for the complete scope of the said work
- 4. I/we undertake to abide by the terms and conditions as stipulated in STC bid documents and as amended thereafter before award of work.
- 5. I/We have not enclosed any condition/deviation to conditions of Bid documents in the envelope containing Price Bid.
- 6. I/we agree that in an event of conditional bid, the bid is liable to be rejected without assigning any reason whatsoever.
- 7. This undertaking is in consideration of STC to open my bid and considering and evaluating the same for the purpose of award of work in terms of provision of bid documents.

Name	
Designation_	

PROFORMA - 3

(To be uploaded online after filling, signed, stamped and scanned)

Past Contractual performance/declaration by the bidder

Following is certified that ---

- 1. We have not made any misleading or false representation in the forms, statements and attachments in proof of the bid evaluation criteria.
- We do not have records of poor performance such as abandoning the work, not properly completing the contract, work in-completion, failure to comply statutory compliances related to any contract, inordinate delays in completion, litigation history with STC or financial failures etc.
- 3. Our business has not been banned/ Blacklisted/Holidaying by any Central/State Govt. department/Public Sector Undertakings or Enterprises of Central /State Govt during last 3 years proceeding from the last date of bid submission.
- 4. We have submitted all the supporting documents and furnished the relevant details as per the prescribed format.
- 5. The information and documents submitted with the bid by us are correct and we are fully responsible for the correctness of the information and documents submitted by us.
- 6. We have not submitted any fraudulent document/information either in present or past bids due to which, STC can invokes its right to disqualify us/me or take any action as deemed fit such as debarring of business for 2 years.
- 7. There has been no judgement/award by tribunals/orders if any against us/me pertaining to cheque bounce/dishonour/damage or commercial disputes.
- 8. There has not been any pendency for the statutory compliances regarding the man power deployed by us during last 3 years, at any site including STC (if worked in STC) preceding from the closing date of the Bid.
- 9. I assure that I will not use the manpower of this site to any other site of my firm. if found/ noticed so, STC will be free to take any action including (up to) debarring of my business for 2 years ,as deemed fit as I understand that the same may amount to exploitation of manpower on the same PF /ESI account(s) of the work force.

AGREEMENT

(To be executed on the stamp paper as per Delhi Stamp act) This agreement is made on theday of, Two thousand
Between The State Trading Corporation of India Ltd., the Company
incorporated under Companies Act, 1956, having its registered office at Jawahar
Vyapar Bhawan, Tolstoy Marg, New Delhi – 110001 (hereinafter referred to as the
"STC", which expression shall unless it be repugnant to the context be deemed to
mean and include its successors and assigns) on the one part and M/s
a company registered under the companies act
1956/2013 or a partnership registered under the Indian Partnership Act 1932 or Sole
proprietorship registered under the licence no./certificate no(hereinafter
referred to as the "Contractor", which expression shall unless be repugnant to the
context be deemed to mean and include its successors and assigns) wherever
mentioned as per terms of the bid document and annexure(s) including general
conditions and where STC desires certain works to be executed by the contractor
viz."" in
considerations of the amount of Rs (Rupees
in words) and
subject to such terms and conditions as set out in the bid documents (Bid No.
dated) which shall form part of the contract.
And where in consideration of the payments to be made by the STC as per terms of
the bid document and annexure(s) including general conditions, the contractor
hereby agrees with the STC in furtherance of the bid document and annexure(s)
hereby agrees with the STC in furtherance of the bid document and annexure(s) including general conditions, to perform the work of Comprehensive Routine,
including general conditions, to perform the work of Comprehensive Routine,
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat, Ventilation & air
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg,
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi,and all other allied works., in conformity with the provisions
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi,and all other allied works., in conformity with the provisions of this agreement.
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi,and all other allied works., in conformity with the provisions of this agreement. And where the STC per terms of the bid document and annexure(s) including
including general conditions, to perform the work of Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi,and all other allied works., in conformity with the provisions of this agreement. And where the STC per terms of the bid document and annexure(s) including General conditions, agrees to pay the contractor in consideration of the performance

Bhawan,1-Tolstoy Marg, Connaught Place, Delhi. Such amounts as may become payable under the provisions of the agreement at the times and in manner prescribed by the agreement. NOW IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS **FOLLOWS** That the terms and conditions in the bid documents (Annexure-A) and award letter (Annexure-B) No.______dated_____shall form integral part of the agreement and all the terms and conditions of Bid Documents/ Award letter shall be deemed to be the terms and conditions of this agreement. For the sake of brevity the same are not reproduced herein and are placed as annexure- A and Annexure - B of this agreement and shall be binding on both the parties. This agreement shall be binding upon and inure to the benefits of the parties and their respective successors and permitted assigns. ACCEPTED AND AGREED as of the first date above written by the following authorized party / representatives. Signature of the representative of STC Signature of the Contractor Name: Name: Designation: Designation:

Name: Name: Designation : Designation:

In the presence of

Signature

Signature

General Conditions of Contract

Section "A"

INSTRUCTION TO BIDDERS:-

DEFINITION: - The term 'Corporation or STC or STC of India Ltd. wherever appearing in this specification would mean The State Trading Corporation of India Limited and shall include the nominated person authorized to place an order under prescribed specification.

1.0 PREPARTION OF BID:-

- 1.01 Before submission of the bid, the Bidders are requested to have themselves fully conversant with the Tender Evaluation Criteria "specification, nature of work, the site conditions and general conditions of contract etc., so that, no ambiguity arises at a later date in this respect. Opinion of STC will be final and binding in this regard. They should visit the site for seeing the actual working conditions and the nature of work.
- 1.02. Only such persons/firms/company need to submit bids which meets the Tender evaluation criteria and other terms of the bid documents and which can submit satisfactory evidence in that regard.

The Corporation reserves the right to revise, amend or cancel the bid documents prior to the date notified for closing to the bids & also the right to postpone the date for presentation and opening of bid without assigning any reason.

The terminated/debarred/Blacklisted/Holidaying bidders from any Govt./Semi Govt./ PSUs are not allowed to participate in the bid (as per Performa 3).

If the Bidder deliberately furnishes wrong information in his bid, the bid would be liable to be rejected out rightly at any stage and the security deposit shall be forfeited and/or may be debarred for business for 2 years.

Bid document are not transferable. JV (Joint Ventures) firms/companies are not allowed to participate in the bid. Not more than one bid for the work shall be submitted by one contractor.

The Corporation shall not be liable for expenses incurred by the Bidder in the preparation of the bid whether the bid is accepted or not.

Bids containing any alterations/cuttings/marks of eraser etc even if accompanied by signature shall be liable to be rejected on such grounds.

Successful L-1 (First Lowest) bidder shall be decided on the basis of price quoted in the price bids section.

Bids submitted by courier/post / manual submission shall be rejected. Only electronic submission –online is accepted.

Part Bid submissions shall be rejected. .

The bid is to be furnished in two parts i.e. PART-I (Techno-commercial bid or technical Bid) & PART-II (Price Bid); All the bid document digitally signed accompanied by documents in support of tender evaluation criteria / bid enquiry, scanned copy of financial instrument (for bid fee, EMD) should be uploaded to the https://eprocure.gov.in/eprocure/app. Price bid section (Part II) has also to be uploaded in PDF format on e-mode only in separate folder (online). No other document has to be attached with Price bid.

The Part-I i.e. Techno-commercial Bid (also called Technical Bid) will be opened on the scheduled date and time online.

The bidder who's Part-I (Techno-Commercial bid) bids have been found acceptable, shall be intimated via e-procurement portal for opening of price bid opening.

Intimation regarding date, time of opening of price bid shall be intimated online to the technically qualified bidders.

STC reserves the right to accept or reject any bid, and/or to annul the bidding process and reject all bids, at any time prior to award the work without thereby incurring any liability from the affected bidder or bidders nor shall STC have any obligations to inform the affected bidder or bidders of the grounds for STC's action.

STC reserves the right to nominate or replace the Engineer in charge during the currency of contract period or during the bid process.

The Contractor shall fill in the rates tendered in figures as well as words. The amount of each item should be worked out and the requisite total given. The bidders who do not fulfil these requirements, their tender is liable to be summarily rejected.

No alteration is to be made by the bidder in Notice inviting tender, instructions to the Contractors, in the contract form, in the conditions of contract, in the drawings, in specifications or in quantities, and if any such alterations are made or any special conditions are attached, the tender/contract is liable to be rejected/terminated and the contractor will be debarred from STC for 2 years for any business.

2.0 Earnest Money Deposit (EMD), Cost of bid document:-

EMD of Rs. 1,10,000/- and Bid document fee of Rs. 1,180/- will have to be deposited online prior to closing time of bid, as per below details. The details of the same have to uploaded with tender document.

1. Name of Bank :- State Bank of India, Overseas Branch, New Delhi.

2. Name of beneficiary:- The STC of India Ltd

3. Account no :- 40302127653 4. ISFC code :- SBIN0004803

Any bid not accompanied with EMD and cost of bid document is liable to be rejected unless they are exempted under any notification / rule issued by the Govt or suitable Body. Those bidders exempted for depositing EMD and tender fee have to upload scanned copy of relevant certification of the same for exemption (Like MSME NSIC etc. registration of the firm).

Bid document fee is non-refundable.

Request for adjustment/appropriation of deposits if any already lying with the Corporation in connection with some other bid/orders/works shall not be entertained.

No interest shall be payable on EMD and Bid document fee deposits.

EMD shall be refunded to the unsuccessful bidders upon opening of price bids and receipt of request for return of EMD from bidders while EMD shall be returned to the successful bidder upon receipt of Security deposit equivalent to 3% of the order value and receipt of request for return of EMD from bidder.

Participation in the bid process without EMD/ cost of bid document shall be permitted only for those Bidder/contractors who are exempted/notified under any statutory/ Govt. Body notification. Those bidders should upload the concerned notification/Circular/document/Certificate showing exemption, along with the bid submission. Purchase and Price Preferential policy 2012, as declared by the Central Govt. regarding MSEs (Micro and small Enterprises) /MSMEs / NSIC etc. shall be followed for exempting bidders for Tender fee.

The bidder shall treat the details of specification and other bid documents as private and confidential, and they shall not be reproduced anywhere without the written authorization of the Corporation.

If any Proprietor/ Owner/Director of a firm bids through more than one firm, all bids will be rejected summarily.

3.0 **VALIDITY OF BID:**-

The bid shall remain valid for 60 days which will be reckoned from the date of opening of technical bid. Bids once opened cannot be withdrawn by the bidder

at any stage. Bidders mentioning a shorter validity period than specified are liable to be rejected. In case validity period is not stated it will be presumed that the bid is valid for 60 days without obtaining any confirmation from the bidder.

4.0 **CANVASSING**: - No Bidder shall canvas any official/Officer with respect to his or other bid. Contravention of the condition will result in rejection of the bid.

5.0 INSPECTION OF SITE

Any site information given in this document is for guidance only. The Bidder is advised to visit and examine the Site of works and its surroundings at his/their cost at his/their own responsibility. Bidder is advised to obtain relevant information that may be considered necessary for preparing / participating in the Bid enquiry and entering into a Contract with STC, including availability of electricity, water and drainage or any other parameter which may be an integral part for the successful completion of the work. The contractor is free to raise any clarification /doubts regarding scope of work/ scope of supply etc prior to last date of seeking clarification "as per tender terms". STC shall not be liable for any costs for such activities performed by bidder

6.0 **ENTRIES**

All the entries in the tender documents must be in English. Any tender in whom there is over writing or marks of erasure is liable to be rejected. Tender containing any alterations/cuttings/marks of erasers etc. even if accompanied by signatures shall be liable to be rejected on such grounds. Price Bid to be filled up in figure and words for rate and amount of each item.

7.0 **ETHICS**

STC requires that the Bidders observe the highest standard of ethics during the bidding process. In pursuit of this policy, the following are defined:

- (a) **Corrupt Practice:** The offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution.
- (b) **Fraudulent Practice:** A misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract.
- (c) **Collusive Practice:** A scheme of arrangement between two or more bidders, with or without the knowledge of STC, designed to establish bid prices at artificial, non-competitive levels.
- (d) **Coercive Practice:** means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.

STC will reject a proposal for award if it determines that the Bidder Page 20 of 73

recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question.

8.0 Price Bid /Bill of quantities(B.O.Q.) /Financial Bid

Before quoting in the Price bid section, it will be assumed that that the contractor has understood all the terms and condition of the contract and site conditions without any ambiguity. The work has to be carried out on as is where is basis. The contractor will be solely responsible for the quoted rates. The decision of L-1(First Lowest Bidder) will be the criteria for the award of the work after price bid opening. However, following should be taken into consideration before quoting the Price bid.

- 1. GST Goods and service tax will be paid extra as per terms.
- 2. No other format of price submission shall be accepted.
- 3. The bidder is required to quote for the complete work, though STC reserve the right to award the work in full of in part.
- 4. Leaving an unfilled entry in the price bid against any term shall mean as Zero cost and the bid shall be evaluated accordingly. It is assumed that the contractor has already taken the cost of this item in any other item, without any changes in the scope of work.
- 5. Contractor should ensure that all the obligations in the contract have been well covered in the cost quoted by the bidder.

GENERAL CONDITIONS OF CONTRACTS SECTION – B

1.0 The bidder shall be deemed to have carefully examined & made himself/herself fully conversant with the general conditions, specifications, schedules, scope of work and site conditions etc. before submitting the bid. If he/she has any doubt as to the meaning of any portion of the general and special conditions of bid specifications or about any point regarding site conditions, he/she may seek necessary clarification in writing, before submitting his offer/bid latest before 3 days from the date of closing of the bid. Interpretation of STC will be final and binding to the bidder at later stage.

2.0 CONTRACT DOCUMENT AND AGREEMENT:-

The order placed under these specifications shall be governed by terms and conditions as incorporated in this tender document specifications and as given in the 'Work order' and it's Annexure (s). The terms and conditions specified in this section if differ from the terms as indicated in the work order and its Annexure(s), the latter shall prevail. The contract shall for all purpose be construed according to the laws of India and subject to jurisdiction of courts of New Delhi only. For the due fulfilment of the contract, the contractor shall execute an agreement in duplicate in the prescribed format (attached in the bid document) on non-judicial stamp paper worth Rs. 100/-(as per existing Delhi Stamp act, Purchased on the name of "The State Trading Corporation of India Limited" by the contractor). Such agreement shall be executed & signed by the authorized representative of competent authority of the contractor on each page thereof. The original copy is to be executed on the non-judicial stamp paper. The remaining copy may be executed on simple paper. Such complete agreement along with the contract documents shall be required to be submitted to the order placing authority within a period of 15 days from the dispatch date of the order from this office. No payment to the contractor shall be released by STC without execution of the agreement. One copy of the accepted agreement duly signed by order placing authority shall be given to the contractor for his reference.

The contract documents shall include the followings:-

- (i) Contract agreement.
- (ii) Work Order and its annexure.
- (iii) NIT and bid document

All the charges in respect of execution of the contract agreement shall be borne by the contractor.

3.0 CORRESPONDENCE:-

All correspondence pertaining to the work order in respect of any clarification required on the terms and conditions, contract documents, scope of work etc, should be addressed to the Deputy General Manager-Elect., STC of India Ltd. New Delhi.

4.0 CHANGE OF NAME OF BIDDER / CONTRACTOR:-

At any stage after biding, the order placing authority shall deal with bidder / contractor only in the name and at the address under which he has submitted the bid. All the liabilities / responsibilities for due execution of the contract shall be that of the contractor. Under no circumstances he shall be relieved of any obligations under the contract. The order placing authority may however, at its discretion deal with the agent / representatives / sister concern and such dealing shall not relieve the contractor from his responsibilities / obligations / liabilities to the STC of India Ltd. under the contract. Any change/ alteration of name / constitution / organization of the contractor shall be duly notified to the order placing authority. Order placing authority reserves the right to terminate the contract in case of such notification. In the event of such termination, the STC of India Ltd. may get the portion of work or whole piece of work, not executed by the contractor or done in violation of the contract; get it executed from elsewhere at the risk and cost of the contractor. In such condition, security deposit of the contractor will be forfeited.

5.0 DELEGATE:-

The contractor will not delegate the contract without the consent of, The STC of India Ltd. in writing.

6.0 INTERPRETATION OF CONTRACT: -

The contract shall in all respect be deemed to be and shall be construed and interpreted in accordance with the laws on India.

7.0 ACCEPTANCE OF THE ORDER:-

The acceptance of the work order should be conveyed to the order placing authority by the bidder, within 03 days of receipt of the order failing which it will be presumed that the work order awarded has been accepted by the contractor.

8.0 SECURITY DEPOSIT:-

The successful bidder shall have to deposit a security amount @ 3% of the contract value for one year contract period which should be deposited online as per details given in tender document within 07(seven days) after award of work. In case of non-deposition of security deposit, STC reserves the right the cancel the bid and such contractor will be debarred for business for 2 yrs.

Unless otherwise specifically required to be retained / forfeited by STC of India Ltd. in part or full, the security deposit shall be refundable on the request of the contractor after six month of completion of the entire contract to the satisfaction of the STC of India Ltd. and on submission of annual return of EPF, ESI, Other statutory dues, and annual contribution slips of individual workers engaged during the term of contract. STC reserves the right to cross check the validity of deposition of statutory dues in respective statutory body(s) at contractor's cost.

If the contractor fails and neglects to observe or perform any of the obligation/conditions under the contract it will be lawful for the STC of India Ltd. to forfeit either in whole or in part, at its absolute discretion, the security deposit and/or other dues to STC of India Ltd., furnished by the contractor.

No interest shall be payable on such security deposit.

9.0 FORCE MAJEURE CONDITIONS:-

For the purpose of this Contract, "Force Majeure" means an event which is beyond the reasonable control of STC or the Contractor, is not reasonably foreseeable, is unavoidable and is not brought about by or at the instance of the party claiming to be affected by such events and which caused the non-performance or delay in performance, and which makes a party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood or other extreme adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.

The party which is unable to fulfil its obligations under the present contract must within 24 hours from the day of occurrence of any of the causes mentioned in this clause shall inform the other party of the existence of the circumstances referred to above, which are responsible for causing delays in performance of the contract.

The party affected by an event of Force Majeure shall continue to perform its obligations under the Contract as far as is reasonably practical and shall take all reasonable measures to minimise the consequences of any event of Force Majeure.

The failure of either party to fulfil any of its obligations under this contract shall not be considered to be a breach of, or default under the Contract insofar as such inability arises from an event of Force Majeure, provided that the party affected by such an event has taken all reasonable precautions, due care and reasonable alternative measures, all with the objectives of carrying out the terms and conditions of the Contract.

Notwithstanding the above, in case of Strike /Labour dispute that prolongs beyond a period of 48 hours, the Contractor is required to inform STC about the same, on account of which STC reserves the right to get the work done from any other agency at the risk and cost of the Contractor.

10.0 CONTRACT PERIOD:-

The contract period will be **one year** from commencement of the work. STC of India Ltd. reserves the right to extend it for an extra period of one year or till

the new contract gets finalized whichever is earlier on mutual consent, on the same terms & conditions.

11.0 MODE OF PAYMENT:-

The contractor will submit the monthly bill in duplicate to Engineer In charge of work. The same will be verified by Engineering section and will be forwarded to Finance wing of STC of India Ltd for releasing the payment through RTGS mode. The Bank fee for this RTGS facility shall be borne by the contractor. The Contractor shall have to submit the following self-attested documents along with the bill:

- 1. Self-attested copy of Electronic Challan Cum Return (ECR) as a proof of deposition of PF of engaged manpower at site mentioning therein the details of individual person, of one month before of the month of Bill
- 2. Self attested copy of contribution towards ESI, in ESIC, mentioning there in the names of the engaged manpower at site, of one month before of the month of Bill.
- 3. Self attested copy of the wages disbursed with sign of engaged manpower at site, as a proof of online transfer of wages to engaged manpower. The wages to the engaged manpower must be disbursed only in their aadhar Link accounts of each person of one month before of the month of Bill.
- 4. Self attested copy of attendance sheet at site of the month of the Bill.
- 5. Self attested copy of labour license.
- 6. Undertaking in respect of depositing GST (Goods and service Tax) regularly by Contractor as per norms.

The Contractor will have to provide Pay Slip to every labour/ worker every month at the time of payment indicating PF A/c No. with PF Deduction amount and amount of Overtime as per Labour laws. The contractor has to make regular payment of workers through online (Aadhar linked) except during emergency conditions such as due to inadvertent delay in account opening either from worker or from contractor.STC reserve the right to get the records cross checked from the originals.

100% payment after making necessary deduction (towards S.D., I. Tax, GST& other if any) shall be made by STC against satisfactory performance of work done on monthly basis on the recommendation of the Engineer incharge.

Any <u>New statutory duties /levies/ taxes</u> imposed or the variation in rates of the existing statutory duties/levies/ taxes by Gazette Notification during the contract period, the same shall be borne by STC of India Ltd on documentary evidence.

Rules/Norms/Circular as adopted by the Central Govt. will be applicable.

In the event of <u>revision</u> of minimum wages or <u>any</u> statutory dues (PF, ESI, Bonus etc) by <u>Central Govt.</u>, or introduction of new statutory payment, the contractor shall have to comply with the statutory requirement and which will be reimbursed or deducted by STC corresponding to hike or reduction respectively in rates of the statutory item. The maximum reimbursed amount will be corresponding to the minimum number of man power in aadhar linked account, as described in tender document (08 Nos.) during the

currency of the contract. STC will reimburse only the difference of the statutory items, since the contractor should well cover these items in the price quoted by the bidder during the bidding process.

The contractor will be bounded to comply the various labour Acts in this contract. The deployed man power will have no rights to absorb in STC in any manner directly/indirectly.

12.0 LIABILITY OF THE CONTRACTOR:-

The contractor is required to carry out the works as per direction of Engineer in charge and the bid terms and conditions. The Engineer-in-charge or his representative will check the work before any recommendation to STC for releasing payment to the Contractor.

(a) WAGES :-

Contractor shall ensure and will be solely responsible for payment of wages and other dues latest by 7th of the following months to the personnel deployed by him as per statutory provisions and shall fully comply with the rules laid under payment of wages act and enforced from time to time, irrespective of the payment released from STC, in their aadhar linked accounts. The contractor shall keep an up-to-date account of deployment of labour and payment of their wages etc, which will be produced for inspection to the Engineer-in- charge/representative as and when desired by him.

The Contractor shall have to give statutory to their workers/labour as per provisions of Act. The Contractor will pay Overtime to the workers as per prevailing rules and no extra paymentshall be made to the contractor on this account.

The STC of India Ltd. shall not be responsible in any manner for any Act or Omission of the workers engaged by the contractor and the contractor shall indemnify STC in this regard. No claim in this regard shall be entertained by STC of India Ltd. If by virtue of any law in force if STC of India Ltd. is made to pay any amount by way of penalty / damage / fine etc. the same shall be recovered from the Contract's dues. Bidder is to include cost of wages in the Price bid of the works.

(b) PROVIDENT FUND (PF):-

The contractor shall have to get himself registered with the concerned PF commissioner before start of work.

The contractor shall have to submit a certificate every month to the Engineer In charge that he has an establishment covered under the Employees Provident Funds and Miscellaneous Provisions Act 1952 or under the latest act, and has a separate code number with the provident fund commissioner and also that the provident fund contribution in respect of all the employees employed by him, under the contract, along with employer's share of contribution etc, has been deposited with the Provident Fund Authorities and shall also submit certified photo copies of the Bank Challan of deposits with all relevant details.

In absence of above, the contractor shall deposit employee's as well as employer's contribution / other charges in the respect of all employees engaged by him for the said work with STC of India Ltd. along with the details of the employees, their wages and the amount of contribution as per PF rules every month. In case of failure, STC of India Ltd. shall be entitled to withhold 25% from the amount of his bills till the regularization of such discrepancies.

The Contractor shall give annual contribution slips of individual workers engaged during the term of contract as issued by PF department.

Contractor shall be responsible to make deduction towards the contribution of provident fund (PF) from such contract labour engaged by him who may be covered under provident fund Act.

Contractor shall arrange to open PF accounts in the name of the labour engaged by him immediately from first month after deployment of persons at his own cost.

Bidder is to include cost of PF contribution in the Price bid of the works.

(c)EMPLOYEES STATE INSURANCE (ESI)& Statutory Bonus :-

It is sole responsibility of the contractor to get his workmen insured under Employees State Insurance Act (ESIC) 1948 & 1950 workmen compensation Act & Rules or under the latest Act, while at work, as required by relevant rules and regulations of workmen compensation and shall pay compensation, as per latest Act and provision / rules made there under and as amended from time to time.

The contractor will also disburse statutory bonus as per the law to his engaged workforce.

Bidder is to include cost of ESI and Statutory Bonus in the Price bid of the works.

(d) ISSUE OF GATE PASSES, UNIFORM, SHOES TO WORKERS ENGAGED BY CONTRACTOR:-

After award of the contract, the successful bidder will furnish the list of Supervisor and labourers to be engaged by him indicating their particulars with passport size photograph to the Engineer-in-charge for arranging gate passes which should be required to be produced for security check every time before entry into the Jawahar Vyapar Bhawan. The said gate passes should always be displayed by the labour

during working hours in the JawaharVyapar Bhawan.

Contractor shall submit ID proof of each employee duly issued by him and attested by STC. Contractor shall also get ID verification through local police authorities and submit the same within one month period from the date of commencement of work order if required for security purpose by STC of India Ltd. time to time.

Contractor should ensure that the engaged manpower should wear the uniform (Trouser- Navy Blue, Full Sleeves Shirt-Navy Blue, Sweater during the winter) while on duty, issued by him on per year basis (at no cost to STC) during the currency of the contract with the badge of his firm for which the contractor will have to provide. No manpower would be allowed on duty without uniform.

The firm would also disburse safety shoes once for every 2 years year basis (at no cost to STC, (Make Bata/ Liberty/ Tiger) at the start of the contract within 07 days for the engaged labour at no cost to STC. No manpower would be allowed on duty without safety shoes during the contract period.

Non-disbursing the above will be non compliance of the contract and STC will be at liberty to make available the above on the risk and cost of the contractor with an extra penalty of Rs 2000 for uniform and Rs 1500/- for safety shoes.

Bidder is to include cost of the above in the Price bid of the works.

13.0 OBLIGATION OF THE CONTRACTOR:-

One person will be nominated as supervisor at site by the contractor and the supervisor will keep contact with Engineer-in-charge at all time and comply with the instructions as given by the Engineer-in-charge or his authorized representative in relation to execution of work.

The contractor shall coordinate daily with the Engineer In-charge so as to provide maintenance works assistance as may be required. The routine maintenance work shall be planned one day in advance. However the breakdown works shall have to be attended at short notice and at any time as per direction of Engineer-in-charge.

The works will be carried out in shifts and in General Shift. Breakdown Maintenance/Overhauling works will be carried out in such a manner so that normal functioning of the Building remains unaffected. Contractor will have to coordinated with Engineering in charge for the same. STC reserve the right to allot time slot (night hours also) as per convenience of STC to which nothing extra will be paid. Bidder is to this cost in the Price bid of the works.

TOOLS & TACKLES, EQUIPMENT: -

The contractor's labourers shall be provided with the material / T&P required for the work during the entire period as prescribed in bid document by the contractor. All the tools and materials shall be provided by the contractor for manual loading / unloading and transportation of material. Bidder is to include cost of the same in the Price bid of the works. Bidder is to this cost in the Price bid of the works. Any damage to the STC of India Ltd shall be recovered from the contractor.

CONSUMABLES: -

All the consumable such as rope, spanners, pliers, hacksaw blades, soap cakes,

waste cloth, gunny bags, cotton waste, screwdriver, torch, tester hand gloves, battery cells insulation tape, cotton tap, multi-meter, testing lamp and cell, Sanitary & Plumbing & Plumbing, carpentry tools etc. shall be arranged by the contractor at his own cost for necessary maintenance purpose and the same shall be kept in ready stock by contractor. Bidder is to include this cost the Price bid of the works.

14.0 CONTRACTOR'S RESPONSIBILITY:-

Supervision and control of the work / job will be contractor's responsibility.

Contractor shall be solely responsible to obtain and abide by all necessary licenses / permissions from the concerned authorities as required under the various Labour laws, legislations including Labour license from the competent authority under the Contract Labour(Regulation and Abolition) Act, 1971.

Supervision, control and regulation of condition of the workmen engaged by the contractor shall be his responsibility and STC Of India Ltd. will have no direct connection with the workers of the contractor.

The work / job shall be executed exclusively in accordance with details, instructions as specified by the Engineer-in-charge. Contractor shall be bound to discharge its obligation in compliance with various statutory enactments including Employees State Insurance Act, 1948, Employees Provident Fund And Misc. Provisions Act, 1952, Factories Act, 1948, Industrial Disputes Act, 1947, Payment of Act, 1965, Payment of Gratuity Act, 1972, The Trade Unions Act, 1926, Laws related to wages, Laws related to child labour, Law related to contract labour, Maternity Benefit Act, 1961, Payment of Wages Act. 1936, Minimum Wages Act. 1948, Employees liability Act. 1938, any modification/amendment thereof and any other law relating thereto and rules made there under from time to time.

The Contractor shall ensure checking of all relevant records by Labour Inspector, PF Inspector once in a year/ as desired by concerned Officer and submit the report of the same to Engineer In charge.

Maintaining Records as per the Factories Act. 1948/ Labour Laws:

The contractor shall maintain the following records and shall make it available for verification, inspection as per The Factories Act. 1948/ Labour Laws as and when asked by the Engineer In charge. The Contractor shall adhere to labour laws of state/central Govt. and other statutory laws/rules such as:

- Payment Register/wages slip.
- Overtime Register in Form No.11 /OT slip/OT card.
- Actual worker register in form No. 13.

- Attendance Register.
- Leave with wages register in form No. 16.
- Register of compensatory holidays in Form No.10 (Prescribed under rule-81)
- Notice of periods of work for adult worker in Form No.12(Prescribed under rule-84)
- Health check-up register of worker employed in Form No.19 (Prescribed under rule-14)
- Register of leave book in Form No.17 (Prescribed under rule-93).
- The Contractor shall have to provide mobile phone with incoming & outgoing facility to their Supervisor during execution of work. The complete details having name of Supervisors with Mobile number is to be given to Engineer In charge before start of work. If there is any change, the same shall be communicated in advance to the Engineer In charge. The workers should be asked to give their mobile number to the Engineer In charge. As per statuary norms, Fire officer (having minimumqualification as retired officer from armed forces / Diploma in fire safety) is mandatory.
- The Contractor shall remove all T&P and material from Site after completion of work and same shall be deposited in Contractor store etc. The scrap material shall be the property of the contractor if the material was being provided by the contractor for replacement otherwise it will be property of STC. The same shall be deposited by the Contractor in the respective Contractor's / STC's Stores/ Site Stores within 3 days after completion of the work as per direction of Engineer In charge.
- The waste material shall be disposed off by the Contractor within 3 days after completion of the work as per direction of Engineer In charge.
- The work area under the contract of the Contractor shall remain always clean at any time during the contract period. The contractor will arrange necessary T&P and labour for cleaning of work area and equipment etc. as per direction of Engineer In charge.
- The Contractor shall have to carry out works instructed during Sunday [weekly offs and Gazetted holidays too] if the need arises at site at no cost to STC.
 - On failure of the contractor in complying with any of the directions in the tender document, the STC of India Ltd. may at its discretion either cancel the contract or impose such penalty as deemed fit, which may be recovered from the security deposit or other claims payable to the contractor against this contract or any other payment due to him and/ or may take legal recourse for such recovery. The decision of the Engineering in charge shall be final and binding on the contractor.

- The Contractor will also take proper care for other equipment nearby to the working place and will also ensure no damage is caused to them.
- The Contractor will also ensure proper fencing/ to cover the openings/dugout and to put Sign Board [For Dangerous/ Work in Progress] at the place, to avoid any incident before leaving the work under pending.

15.0 CONTRACTOR'S RESPONSIBILITY TOWARDS THEFT: -

The contractor will be responsible in case he/they or their workmen are found committing theft. The FIR will be lodged with police against the delinquent(s) & concerned contractor & penalty of **Rs. 5000**/- (Rs. Five Thousand Only) will be imposed/ recovered in each case as token penalty beside the recovery. However, in case of more than three such incidents takes place then in such situation the contractor will be black listed and no contract shall be awarded to him for a further period of three years & all the existing contracts will be liable to be cancelled.

16.0 MEDICAL CHECKS UP & CARE:-

The contractor shall be fully responsible for providing safety equipment, First Aid and emergency medical treatment to his employees. The contractor shall make necessary arrangement for this purpose.

The contractor shall submit health check-up report in form No.19 of workers employed by him at least once in twelve months period.

Free and Comprehensive medical treatment to be provided by the Contractor to all workmen found to be suffering from an occupational disease, ailment until cured or until death. Services of the workmen not to be terminated during illness and to be treated as if on duty.

Compensation to be paid by the contractor to workmen suffering from any occupational disease, ailment or accident in accordance with the provisions of workmen's Compensation Act 1923 or ESI scheme as effective during the contract.

17.0 SAFETY DEVICES: -

The contractor shall provide all the required safety appliances to the workers / staff as may be warranted for safety of the workers during the course of the

work. Safety devices like Safety belt, Safety Helmet, Safety Shoes, Ear protector, welding glass, welding gloves, Asbestos gloves etc. shall be provided for use by workers during work.

The contractor shall provide personal protective equipment conforming to the IS mentioned below -

- (a) Safety helmets conforming to IS-2925: 1984
- (b) Safety Belts conforming to IS-3521: 1983
- (c) Eye and face protection devices conforming to IS-8520:1977and IS-8940:1978
- (d) Hand and body protection devices conforming to

(1) IS-2573: 1975

(2) IS-6994: 1973

(3) IS-8807: 1978 (4) IS-8519: 1977

18.0 LIABILITY FOR DAMAGES: -

If due to contractor's negligence and / or non-observance of safety and other precautions, any accident / injury occurs to any other person / public, the contractor shall have to pay necessary compensation & other expenses.

If due to contractor's negligence and/ or non-observance of safety precautions, damage is caused to the property of STC of India Ltd., the same shall be recovered from the running bill of the contractor or from his security deposit.

19.0 WITHHOLDING PAYMENT:-

The STC of India Ltd may withheld the whole or part of any payment for work claimed by the contractor, which in the opinion of the order placing authority is necessary to protect STC from loss on account of: -

- A. Defective work not remedied or guarantees not met.
- B. Claims filed against the contractor.
- C. Failure of the contractor to make due payment for material or labour employed by him.
- D. Damage to another contractor's/ STC of India Ltd's property.
- E. Insufficient / Unsatisfactory progress.

When grounds for withholding of payment are removed, to the satisfaction of Engineer in charge /order placing authority the payment of the amount due to the contractor shall be arranged by the STC of India Ltd.

20.0 REGARDING PERSONNEL OF CONTRACTOR: -

The Engineer in charge shall be at liberty to express objections about the working of the Supervisor or any person employed by the Contractor for execution of work on account of misconduct / incompetence /negligence by way of Notice in writing addressed to the Contractor. On receipt of such Notice from Engineer in charge, the Contractor shall remove such person and shall provide a suitable replacement within 24 hours of such Notice at its own Cost and expense

Contractor/ his representative / supervisor shall abide by all general rules and regulations in force on the site and to any special conditions imposed by the local administration. The general discipline of the Jawahar Vyapar Bhawan shall be maintained.

21.0 PENALTY FOR DELAY IN EXECUTION OF WORK.

Contractor has to discharge his duties timely as per terms & conditions laid down in the contract. In case of any default or delay on the part of the contractor for not completing the work in time as per requirement of work, recovery shall be made from his running bills as described below.

In case the contractor does not supply the required T&P and / or consumables, a deduction at the rate of Rs. 2000 per day shall be made for the period in which contractor becomes defaulter to the maximum limit of 10% of the contract value. The advisory list of T&P is attached for refence.

In case the contractor does not provide **supervisor** to meet the requirement of contract at work site a deduction at the rate of **Rs. 500**/- per day shall be made for the period in which contractor becomes defaulter to the maximum limit of 10% of the contract value. In case contractor deploys lesser number of other manpower as compared to minimum needed in tender document, a penalty of Rs 500/per person per day will be imposed along with the deduction of wages of that manpower during the absence period.

In case of breakdown / shut down /emergency maintenance work of which the contractor fails to do any work or part thereof due to his negligence within the prescribed time period given by the Engineer In charge, STC will be at liberty to recover penalty from the contractor @ ½ % per hour after stipulated time subject to a maximum of 10% value of the particular work/contract as per the decision on EngineerIn charge. The decision of Engineer in charge will be final and binding. Long pendency of the emergency work may also invite debarring from future tenders of STC including forfeiture of S.D. .Decision of Engineer in charge will be final and binding

In case of Maintenance work to be done daily and found incomplete during checking due to one or other reasons, the suitable penalty as decided by the Engineer In charge, maximum up to 10% of the contract value, shall be imposed till the work completed to the full satisfaction of Engineer-incharge. The decision of Engineer in charge will be final and binding.

22.0 ACTION FOR NEGLIGENCE AND DEFAULT OF CONTRACTOR

If the Engineer-in-charge feels that the work is important and of emergent nature and no extra time is admissible even on penalty basis, the work of breakdown/exigencies shall be done through another agency at the risk and cost of the contractor and the extra amount involved in attending to such breakdown/exigency will be borne by the contractor.

If it is found that the lapse on the part of the contractor are repeated every day and there is no improvement in the work in-spite-of informing the contractor by Engineer-in-charge verbally and /or in writing form time to time and/or also making deductions under aforesaid clause, the order placing authority in addition to exercising his option to terminate the contract by serving 7-days' notice to the contractor can get the work done from other agency at the risk and cost of contractor and shall also reserve the right to recover losses from running bill of the contractor and / or security deposit or otherwise.

23.0 ENGINEER IN CHARGE: -

The work shall be carried out under the guidance of the DGM –Elect. STC of India Ltd., New Delhi (who is the Engineer in charge of this contract) and his authorized Representative Chief Manager/Manager (Electrical).

24.0 TAX DEDUCTIONS: -

The tax deduction at applicable rate from time to time shall be made from the running bills of the contractor by the Finance wing of the STC of India Ltd., New Delhi.

25. 0 DISPUTES: -

(a) ARBITRATION:

All disputes or differences whatsoever arising between STC and the contractor out of or relating to construction, meaning and operation or effect of this agreement or the breach thereof if not settled through conciliation, shall

be referred to arbitration as per rules of Indian Council Of Arbitration, New Delhi and the award made in pursuance thereof shall be final and binding and final on both the parties. The venue of arbitration will be New Delhi (India) Only.

26.0 OTHERS: -

- (a) Domestic LPG Gas cylinder shall not be allowed in the Jawahar Vyapar Bhawan for any cutting and welding works.
- (b) Electricity and water will be provided by the STC of India ltd. free of cost at anyone point available at site to execute the contract.
- (c) The contractor shall not keep/leave waste material/ debris/ garbage at the site of work after completion of the job. The waste material should be removed and disposed to a place to be indicated by the Engineer In charge. The contractor's bill shall not be verified unless the work site has been completely cleaned of all the waste materials/debris. Disposal shall be done as per hazardous waste management rule. In case the site is not cleared immediately and final disposal of waste is not done within one week period then a penalty of Rs. 2000/- per day may be imposed.

27.0 CONTRACT VALUE: -

The amount mentioned is subject to completion of entire work as per Schedule and is payable to the contractor on normal course but the quantities are tentative/indicative only. The work may increase or decrease as per actual requirement during the contract period. The payment shall be made for actual work done satisfactorily. STC of India Ltd. does not guarantee for payment of entire Work Order amount.

28.0 TERMINATION: -

(a) Penal termination of contract: -

Notwithstanding anything elsewhere provided herein and in addition to any other right or remedy of STC under the contract or otherwise, including right of STC for compensation for delay, the Engineer-in-charge may, without prejudice to his right against contractor in respect of any delay, bad workmanship or otherwise or to any claims for damage in respect of any breach of the contract and without prejudice to any rights or remedies under any of the provisions of this contract or otherwise and whether the date for completion has or has not elapsed may by intimation in writing, absolutely determine the contract.

Default or failure by the contractor in any of the under mentioned cases, including but not limited to the following shall be the basis of action under this clause of the contract:

- 1) Failure to provide at the job site, sufficient labour, material, equipment, machinery, and/or facilities required for the proper and/or due execution of the work or any part thereof;
- 2) Failure to execute the works or any of them in accordance with the contract

- 3) Disobedience of any order or instruction of the Site Engineer and/or Engineer-in-charge.
- 4) Negligence in carrying out the work or carrying out of work found to be unsatisfactory by the Engineer-in-charge.
- 5) Abandonment of the works or any part thereof.
- 6) Failure to execute the contract according to the terms of the Contract.
- 7) If the contractor is incapable of carrying out the work.
- 8) If the contractor misconducts in any manner.
- If there is any change in the constitution of the contractor or in the circumstances or organization of the contractor, which is detrimental to the interests of STC.
- 10) Dissolution of the contractor or winding up (whether voluntary or compulsory) of the contractor (if a company) or appointment of a receiver or Manager or any other professional under the applicable lawsany of the contractor's assetsand/or insolvency of the contractor.
- 11) Delay in execution of work, which in opinion of Engineer-in-charge shall delaythe completion of work beyond the stipulated date of completion.
- 12) Distress, execution, or other legal process being levied on or upon any of thecontractor's goods and/or assets.
- 13) Death of Contactor/s
- 14) If the contractor or any person employed by him shall make or offer for any purpose connected with the contract any gift, gratuitous act royalty, commission, gratification, or other inducement (whether money or in any other form) to any employee or agent to STC.
- 15) If the contractor removes, assigns, or attempt to assign his interest or any part thereof in the contract.
- 16) In case of violation of terms and conditions of the tender, violation of any statutory regulations, local laws etc. STC shall reserve the right to terminate thecontract.
- 17) If the Bidder deliberately gives wrong information in his tender, In such cases in addition to termination of contract the deposited dues with STC shall be forfeited by the Corporation.

The decision of the Deputy General Manager (Admn.), STC as to whether any of the events/contingencies mentioned in aforesaid clauses entitling STC to terminate the contract has occurred shall be final and binding upon the contractor. However, before termination of the contract, a notice with a time period of reply of 7 days or as deemed fit by STC, will be served to the contractor informing the termination action. The reason for the termination stated in the notice of termination shall be final and binding upon the contractor and shall be non-arbitral. The jobs left however by the contractor shall be got done at his risk and cost through the other agencies and the contract shall be determined accordingly.

(b) Voluntary termination of contract by STC: -

In unforeseen circumstances or in the event of Force Majeure including but not restricted to Any Natural Calamity, Closure, or Structural Changes of the STC, STC reserves the right to terminate the contract with a notice period of 30 days without any claim against the executed work or for the undelivered material at site, Recovery or damages of any nature or any other dues including any interest thereupon, and without any risk and liability on each other.

Such Decision of STC will be final and binding upon the Contractor and without any recourse in any manner to STC.

The date of termination of contract will be deemed as the final day of the period of contract.

29.0 RECOVERY AGAINST THE CONTRACTOR:-

If due to any default by the contractor, recovery arises against the contractor, the contractor shall be required to deposit the amount of recoveries finalized within a period of 30 days of receipt of intimation failing which the dues shall be recovered from the securities and financial hold of the contractor including any amount owed to contractor available with the STC of India Ltd. In case, where the amount of recoveries against the contractor exceeds its financial hold, securities and payable /due of the contract including its financial hold with STC, the STC of India Ltd. will be at liberty to effect such recoveries out of the such securities and payables due of the contractor including its other financial hold and future receivables towards pending payments of the contractor available with other PSUs or through legal course of action.

30.0 THE INDEMNITY CLAUSE:-

- 1. The contractor will indemnify STC of all legal/other obligations of the professional / employees deployed for STC work.
- 2. STC also shall stand absolved of any liability on account of fraud or breach of trust
- 3. STC shall also be indemnified from any act or from any factual concealment causing thereby damage or any legal proceedings against STC by any third party or contractor's deployed employees.
- 4. The contractor shall also undertake to keep STC harmless and indemnified from any loss or costs resultant from any decree/award/orders /directions /penalties obtained/enforced against the STC or implicating STC as a liable for enforcement body/ entity / person such or making such decree/award/direction/orders/penalties effective. Also, the STC shall be indemnified from any consequential act taken by STC in order to protect its interest or in order to defend any suit or legal action for itself or for on behalf of contractor, to the extent of cost/legal expenses/interest imposed upon.

5. The contractor shall indemnify and compensate STC, if the STC as principal employer under the contract Labour (Regulation & Abolition) Act, 1970 becomes liable to assume any liability towards the work force engaged by the contractor. In that event, the provisions relating to recovery as provided in the relevant clauses of the said Act shall be applicable into.

The Contractor shall at all times indemnify and keep STC indemnified against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees/workmen or agents or by any other third Party resulting from or by any action, omission or operation conducted by or on behalf of the contractor.

The Contractor shall at all times indemnify and keep indemnified STC against any and all claims by Employees, Workman, agent(s), employed engaged or otherwise working for the Contractor, in respect of wages, salaries, remuneration, compensation or the like.

All claims regarding indemnity shall survive the termination or expiry of the Contract and shall be recoverable from Security Deposit in addition to any other means. The quantum of indemnification shall be finalised by STC and be binding upon the contractor

31.0 JURISDICTION OF COURTS:-

The agreement will be governed by the laws of India and within the framework of applicable legislation and enactment made from time to time. All the legal disputes between STC and the contractor shall be governed by the courts/tribunals/forums situated in Delhi and shall have the exclusive jurisdiction, to entertain such disputes

32.0 SUCCESSOR AND ASSIGNS:-

This agreement shall be binding upon and inure to the benefits of the parties and their respective successors and permitted assigns.

33.0 NON-COMPLIANCE OF CONTRACTUAL TERMS:-

On failure of the contractor in complying with any of the directions in the bid document/ Award of work/Contract, the STC of India Ltd. may at its discretion either cancel the contract or impose such penalty as per tender terms or as deemed fit if not described in tender document specifically, which may be recovered from the security deposit or other amount payable to the contractor against this contract or any other payment due to him and/ or may take legal recourse for such recovery. The decision of the Engineer in charge shall be final and binding on the contractor.

The Contractor will also take proper care for other equipment /offices nearby to the working place and will also ensure no damage is caused to them. The Contractor will also ensure proper fencing/ to cover the openings/dug-out and to put Sign Board [For Dangerous/ Work in Progress] at the place, to avoid

any incident before leaving the work under pending.

The contractual will be bounded to follow latest law /amendments of the land whether mentioned in the bid document or not specifically.

34.0LIEN IN RESPECT OF CLAIM IN OTHER CONTRACTS

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

35.0Works carried out by other contractor:-

STC reserve the right to reduce the scope of the work due to any reason like taking up the system for capital works by any other agency or separating the system from this contract due to any other reason at its own, in such circumstances, the value of the monthly payment will be reduced proportionately accordingly. STC will adopt rational approach in this regard however such reduction in scope of work will be sole right of STC and calculation for the reduced amount bill be final and binding tothe contractor.

36.0Extra work

In exceptional circumstances, the contractor may be asked to take up extra work or deployment of extra manpower for taking up any other work, beyond the scope of work of this contract on mutual agreed terms.

System Description and Scope of work

1. Introduction to Site: -

The site of the work will be the Corporate office of The State Trading Corporation of India Limited (STC -A Public Sector Undertaking under the administrative control of Ministry of Commerce and Industry, Govt. of India) which is also known as 'Jawahar Vyapar Bhawan (JVB)' situated at Janpath-1-Tolstoy Marg Crossing, Connaught Place, New Delhi – 110 001. JVB is a 23 storied building with two basements and is fully occupied by STC and Co-owners viz a viz CCIC (Central Cottage Industries Corporation) & HHEC (Handicraft and Handloom export Corporation) along with very prestigious Govt. /PSU banks as tenants like, Security printing and Minting Corporation (I) Ltd.(SPMCIL), Corporate Branches of The state Bank of India, Department of Factories and Alkaloids, etc. The building witnesses frequent VVIP visits/Dignitaries including Ministers of the Govt. of India.

- 2. It is advised that the contractor should verify all figures, facts, site conditions, taxes, tender terms and conditions / interpretation thereof or any other factor (e.g. statuary requirement, Civic body compliances etc.) that may impact the performance during /after the work execution period, at their end at own cost ,before bidding for the work. STC shall not be responsible for any manner whatsoever, later on this account.
- **3.** Various Electromechanical installations viz-a- viz 1675 TR HVAC Plants, 2 x 1010 and 2 x 500 KVA DG Sets, Sump pumps, Transformers, Water supply System, 11kV/400 V NDMC substation, Fire protection system comprising Fire Hydrant system, Fire Sprinkler system, Fire Alarm and annunciation system, Fire Deluge system, Mulsifier system, First Aid Fire extinguishers, Public address system etc serve the building for its day today functions.
- **4.** This contract will serve the organization for healthy turnkey (all in alli; e including all material, man power and spare parts) maintenance of the below mentioned system on "as is where is Basis", ensuring the system in healthy state round the clock. Thus the contract is a works contract.
- 5. This documents describes only the salient feature of the system as the system is vast enough to describe in the tender document in details. The ancillary items which are the integral part of the system, necessary for the proper functioning of the system are deemed to have been described here even without any specific mention here. Hence site visit is recommended before bidding.
- **6.** In case of any ambiguity/dispute regarding scope of work/scope of supply, decision of Engineer incharge will be final and binding.
- 7. The contractor will take over the system from the preceding contractor in presence of STC'S representative within 03 working days from the date of award and the contractor will be liable for the contractual responsibilities from the date of handing over of the system, which will be mentioned in the award letter. In case of any dispute in this process, decision of STC will be final and binding. The system will be handed over on "As is where is basis" and the contractor will

- maintain the system in the same state throughout the contractual period. The contractor will be bounded to take over the system from the preceding contractor.
- **8.** The work will be carried out through experienced person duly approved, who are conversant with the nature of work along with the helpers. All T&P & safety equipment & consumables as may be required shall be provided by the contractor, at no cost to STC, under the awarded value.
- 9. The system under maintenance is quite old and it is informed that STC is not having any schematic Drawings of the various arrangements/Drawings of the system, hence Contractor will have no claim anything in this regard during the execution of the work. Contractor should visit the site and get familiar for the works to be executed in advance to avoid any adversaries during the contract as spare parts of some components may not be easily available in the market.
- **10.** Works of capital nature will be taken up by STC however in case of any dispute regarding capital or revenue nature, decision of Engineer in charge will be final and binding.
- 11. The works will have to be carried out to the satisfaction of Engineer in charge.
- 12. The contractor has to assure to deploy following minimum number of man power with their respective qualification, including rest relievers. This is minimum requirement and the contractor must enhance the deployment of man power as per site requirement as to maintain the system healthy. STC will reimburse any statuary benefit only to the minimum no of manpower as described below though the contractor will have to comply any statuary compliance for all the engaged man power at site. The deployed man power must have their respective minimum qualifications/experience or higher. This minimum number includes rest relievers per day deployment. STC will be not be liable for other extra man power at site required necessary to complete the work.
- 13. No person will be allowed to work at site to handle the sensitive system of JVB who lacks necessary technical skill necessary for carrying out the works at site. The decision of Engineer in charge will be final and binding in this regard as the building houses sensitive Govt offices and the system cannot be offered to technically unsuitable persons in the opinion of STC. However it does not absolve the responsibility of the contractor for the satisfactory completion of the work. In case any worker/personnel is found unsuitable against work by the same shall be replaced immediately by another suitable person without any cost to STC. Engineer in charge reserve the right to relax the below as per his discretion depending upon the quality of the experience and other factors. Contractor is expected to deploy persons with multiple skills for smooth working.
- **14.** The deployed manpower will work in General timings (9 a.m. to 5:30 p.m) and shift timings. The deployment in General/Shift will be done as per site requirement and decision of Engineer in charge.
- **15.** Following system is installed in Jawahar Vyapar Bhawan. The list is prepared with care however the bidder is advised to get it cross checked from the site and bidder will be fully responsible for any discrepancies if notices at later stage without any responsibility on STC.

- **16.** This contract is comprehensive in nature without any exception in services and supply of material. The contractor has to execute the works as perdirection of the Engineer in charge and/or bid document however, in case of any interpretation of discrepancy, the decision of STC shall be final.
- 17. The contractor has to assure to deploy following minimum number of man power with their respective qualification including all /relievers for operation and routine cleaning of the equipment. This is minimum requirement and contractor must enhance the deployment of man power as per site requirement as to maintain the system smoothly without any cost to STC. STC will reimburse any statutory benefit only to the minimum number of man power as described below though contractor will have to comply all statutory compliances for all the engaged man power at site. The above man power must have following respective minimum qualifications or higher. STC will not object if this man power assist is maintenance works also without sacrificingthe operation of the system.

Sr.	Category	Name of	No. of	Minimum qualification
No.		post	persons	
1.	Highly	Plant	1	Diploma in Electrical/
	skilled	Supervisor		Mechanical/Refrigeration/HVAC
				Engineering
2.	Skilled	Plant	3	ITI in Electrical/
		Operator		Mechanical/Refrigeration/ HVAC
				Engineering
3.	Semi-	Assistant	3	Minimum 5 years' Experience of
	skilled	Operator		Refrigeration/ HVAC Plant
				operation
4	Unskilled	Helper	1	Minimum 8 th pass

- 18. It shall be the responsibility of the Bidder/contractor to get the works executed through the man power who are qualified to perform the job. If the quality of the works carried out is not as per standard methods to the satisfaction of Engineer in charge, STC reserves the right to get the work repeated by the said manpower or through any other agency at no cost to STC or at the risk and cost of the Bidder/contractor. No extra payment shall be made to the contractor.
- **19.** The Bidder/contractor shall keep machines in well maintained conditions.
- **20.** Any person misbehaving or involved in ill- legal activities or detrimental to STC property or unsuitable to the job assigned shall have to be replaced by the contractor immediately upon information from STC.
- **21.** All statutory rules and regulations should invariably be followed by the bidder/contractor otherwise it shall be deemed as non-compliance of the contract condition and action as per contract hall be invoked against the

Bidder/contractor.

- 22. The Works shall be carried out as per OEM manual guide of the equipment or as per relevant IS standards or as per direction of the Engineer in-charge. The works / material rejected by the engineer in charge shall have to be carried out by the contractor again at no cost to STC and it shall be binding to the Contractor. If no directions are issued by STC, then maintenance will be carried as per following
 - (a) Civil Works:- CPWD Specification 2009 Vol-I & II
 - (b) Electrical works :- Latest CPWD General Specification Part I to Part VII
- **23.**The Bidder/contractor shall do routine and breakdown maintenance of the systems installed under STC premises. Generally the works of welder is needed inside the shaft to which safety and security is prime importance.
- 24. High side of the system will have to be maintained by the OEM M/s carrier only for which the contractor will have to engage M/s carrier as service provider from the first day of the contract period, at no extra cost to STC, failing which STC reserve the right to terminate the contract instantly and Security deposit will be forfeited along with banning/Blacklisting the contractor for 2 years. Punitive action against those Bidder/contractors who have not deposited Security deposit i.e. Concerned MSME, statuary body will be informed to take punitive action against such default.
 - **Scope of supply: -** The Bidder/contractor shall supply all the spares and consumables needed to carry out the Operation and maintenance work at site. The routine spares and probable breakdown spares shall be kept ready in the store of the Bidder/contractor round the clock and the Bidder/contractor shall arrange the spares as directed by the Engineer in The supplied material must be proprietary and genuine or the approved list in NIT or as approved by the site in charge. Inferior quality material shall not be accepted and the Bidder/contractor shall have to produce the test certificate of the material if required by the Engineer in charge. The decision of Engineer in charge shall be final and binding. The material supplied must be warranted for a period of one year for proper performance at site. The poor performer material shall have to replace by the Bidder/contractor free of cost with in warranty / guarantee period and if the Bidder/contractor do not replace the poor quality material by the approved material well with in time, STC will be free to take up the work at the risk and cost of the Bidder/contractor.
- 26. Exclusion in the scope of supply and services: The contract is comprehensive in nature i:e "all in all ", hence there is No exclusion of the material or services will be there. The Bidder/contractor shall have to supply all the material that is needed for proper maintenance including all Civil, mechanical, HVAC material, electrical, electronic, software etc. Bidder/contractor will supply all material including Sheet metal ducting,

grills/diffusers, masonry work, carpenter work and welding work connected with above replacement of any major equipment such Copper pipe Compressor Oil and Refrigerant, Filters free of cost to STC.

27. Maintenance schedule: - The routine maintenance plan shall be intimated to the Engineer in charge well in advance; however the schedule of maintenance shall be needed to be approved by the Engineer in charge. The Bidder/contractor will have to follow the instruction of the Engineer in charge regarding the maintenance schedule. Minor / Major maintenance of the major equipment's shall be carried out during off hours of the building for the sake of convenience of the occupants of the building. The workmanship shall be guaranteed for one year .The maintenance or the testing of the equipment should be informed prior to the engineer in charge and the tests shall be carried out as per the instructions of the site in charge or as per relevant IS, However the decision of the site in charge will be final and binding.

The breakdown maintenance shall be carried as and when required as per the need of the site.

- **28.** Guidance of maintenance: Following is the guidance of the maintenance that are required minimum for up keeping the system in healthy condition. However the Engineer in charge shall reserve the right to alter the plan/ scheme /frequency/ equipment under consideration for maintenance for proper maintenance.
- (A) The following inspection items ensure that HVAC plant is operating reliably and efficiently through the cooling season.
- a) Checking operation of controls.
- b) Checking oil and refrigerant levels.
- c) Recording operating conditions.
- d) Logging and reporting repairs and parts those are required.
- e) Carry out leak test of system.
- f) Complete service inspection report forms
- g) Check three-phase voltage and current balance.

B. MAJOR MAINTENANCE:

The contractor will carry out at least 1 (one) Major Service overhauling of HVAC System per year during winter season as decided by STC. Following are the worksfor the major overhauling (indicative only)

- a) Complete cleaning of evaporator by acidic solutions, pressure testing.
- b) Complete cleaning of cooling by acidic solutions, pressure testing.
- c) Cleaning contacts or recommending replacement.
- d) Meggering the motor.
- e) Checking all terminals and tightening connections.
- f) Checking overloads.

Review the control panel for the following Items:

- a) Running diagnostic check of motor control panel.
- b) Checking safety shutdowns operation.
- c) Checking all terminals and tightening connections.
- d) Checking display data accuracy and set points.

Checking the system for the following Items:

- a) Conducting a leak check and identifying leak sources.
- b) Recording the condition of sight glasses.
- c) Checking the refrigerant cycle to verify the proper operating balance.
- d) Checking condenser water and chilled water heat transfer.

General items included:

- a) Repairing insulation removed for inspection and maintenance procedures.
- b) Cleaning equipment and surrounding area upon completion of work.
- c) Consulting with the operator.
- d) Reporting deficiencies and repairs required.
- e) Complete service inspection Report Form.

Facilities by STC "Following facilities shall be provided by STC to the Bidder/contractor during the contract period. STC will allow use of building services like telephones, parking, etc. STC will provide lockable space in plant room for site use.

- 29. The contractor is required to submit fortnightly/ monthly report in respect of routine/preventive services and regular services/repairs carried out for installation(s) to Engineer-in –charge without extra cost to STC.
- 30. The contractor shall maintain complaint register for receiving complaints from STC representatives/staff, log books for these DG installations and other records.
- 31. Liaising with any statutory/ Govt. agency for obtaining the various licenses pertaining to works described in Contract shall be under Contractor's responsibility. However the fee shall be reimbursed by STC on actual basis to the concerned authority.
- 32. During the currency of contract if some part of the system gets out of the scope of work, STC reserve the right to curtail the scope of work as per its need and accordingly the monthly bill may be reduced on rational / proportional basis on which no claim of the contractor will be entertained.
- 33. **Delivery**:- Any Rewound items shall be delivered within 7 days and in emergency within 3 days.

34. **Guarantee**:-

Contractor shall provide guarantee for satisfactory performance in respect of workmanship and material for a period of twelve months or installation whichever is later. If any motors / Pump /equipment fails within guarantee period due to any reason then the contractor will get it repaired again at his own cost.

THE STATE TRADING CORPORATION OF INDIA LIMITED JAWAHAR VYAPAR BHAWAN, TOLSTOY MARG, NEW DELHI

(A Public sector Undertaking)

System Description

Following system is installed in Jawahar Vyapar Bhawan. The list is prepared with care however the bidder is solely responsible for any discrepancy if notices at later stage e without any responsibility on STC.

S. No.	Item Description	Unit	Qty.
	Main Equipment		
1	Chilling Machine	set	2.00
1	Centrifugal Water Chilling Units each complete with 750 TR actual capacity centrifugal compressor with motor, starter panel free standing/ machine mounted, water cooled condenser, duly insulated chiller, flow switch at chiller and condenser, vibration isolators, integral refrigerant piping and wiring, BMS interface, accessories as required and called for, automatic and safety controls mounted in central micro-processor based console panel and all mounted on a steel frame complete, Motor set suitable for 415±10% 50 cycles. 3 phase AC supply and motor cable terminal box shall be suitable to connect Aluminium Cabling. Refrigerant used HFC-134A		
	Condenser Water OUT 97.5°F Fouling factor 0.001 FPS Water flow rate: 3000 USGPM Unit Shall run Through VFD Maximum Power Consumed: Not greater than 0.68 KW/TR at aboveconditions		
2)	Screw type water chilling unit highly energy efficient of minimum 175 TR Capacity(nominal) complete with Semihermetic screw compressors, motor, Factory insulated chiller, AIR cooled condenser, vibration isolators, integral refrigerant piping and wiring, flow switch at chiller, first charge of refrigerant and lubricant, microprocessor control panel, accessories as required and called for, automatic and safety controls and all	Nos.	1.00

	mounted on a steel frame as	1	
	mounted on a steel frame as per specifications. Motor shall be suitable for 415 ± 10% V, 50Hz, 3ph AC supply. The chiller is BMS compatible for software integration.		
3)	FRP Induced draft cooling tower of following capacity complete with sump & steel ladder and other accessories required to make it fully functional. The starter, isolating switch & panel near cooling tower along with power cabling, control wiring and earthing is included in main electrical panel .The fan/ fan motor is isolated from the cooling tower structure using spring isolators of suitable deflection properties. Cooling tower is complete with axial fan & TEFC, IP-55 motor weather proof and 720 RPM fan. The fan motor is compatible to operate with VFD.		
	Entering water Temperature: 97.5 deg F Leaving water temperature: 90 deg F CAPACITY:900 TR Water Flow Rate: 3000 USGPM	Set	2.00
4)	Split casing centrifugal pump sets with bronze impeller for condenser water recirculation complete with TEFC Sq. Cage induction motor with Class 'F' insulation, base plate, vibration isolators, mechanical seal etc All the pumps mentioned below shall be complete with vibration isolators (spring mounted type), mechanical seals, gland drain connections and shall be suitable for 415+/- 5% volts, 50 Hz, 3 phase AC power supply). Nos. CDWP-1-3) Water flow rate: 3000 USGPM Head: 82 ftwg Motor HP: 90 HP(min)	Set	3.00
5)	Split casing centrifugal pump sets with bronze impeller for chilled water recirculation complete with TEFC Sq. Cage induction motor with Class 'F' insulation, base plate, vibration isolators, mechanical seal as per following parameters. All the pumps mentioned below are		
	complete with vibration isolators (spring mounted type), mechanical seals, gland	Nos.	3.00

	drain connections and shall be suitable for 415+/- 5% volts, 50 Hz , 3 phase AC power supply). The chilled water pumps include thermal insulation & cladding. (Tag Nos. PCHWP;1-3) Water flow rate :1500 USGPM Head: 40 ftwg Motor HP: 25 HP(min)		
6)	Split casing secondary chilled water centrifugal pump sets with bronze impeller for chilled water recirculation complete with TEFC Sq. Cage induction motor with Class 'F' insulation, base plate, vibration isolators, mechanical seal etc& All the pumps mentioned below are complete with vibration isolators (spring mounted type), mechanical seals, gland drain connections and are suitable for 415+/- 5% volts, 50 Hz, 3 phase AC power supply). Minimum efficiency of pump shall not be less than 75 %.The chilled water pumps shall include thermal insulation & cladding.	Nos.	3.00
	Secondary Circuit chilled water pumps complete with variable frequency drive including one standby, dedicated logic controller downloaded with parallel pumping software, differential pressure sensor/transmitters. System is complete with all accessories to make it functional and compatible with the building management system The pump logic controller is capable of accepting analog inputs from flow sensor/ transmitter to provide lowest KW draw based on efficiency optimisation program & multiple differential pressure sensor/ transmitters. Controller shall be capable of accepting input from flow sensor transmitter to ensure end of the curve protection. (Tag Nos. SCHWP;1-3) Water flow rate:1500 USGPM Head 85 ftwg Motor HP: 50 HP(min)	Nos.	

7	Split casing centrifugal pump sets with bronze impeller for chilled water recirculation complete with TEFC Sq. Cage induction motor with Class 'F' insulation, base plate, vibration isolators, mechanical seal etc .All the pumps mentioned below are complete with vibration isolators (spring mounted type), mechanical seals, gland drain connections and shall be suitable for 415+/- 5% volts, 50 Hz , 3 phase AC power supply).The chilled water pumps include thermal insulation & cladding.		
	(Tag Nos. CHWP;1-2) Water flow rate :420 USGPM Head : 90 ftwg Motor HP :15 HP(min)	Nos.	2.00
8)	Hot Water Generator Hot Water Generator as per specifications. Capacity: 300 KW	Nos.	2.00
	Status : 2(W) + 0(S) Flow rate : 1050 USGPM EWT/LWT : 118 Deg F/ 120 Deg F		
	B :- AIR CIRCULATION SYSTEM		
	Double skinned floor Mounted Air Handling Units Double skinned chilled water Air handling unit horizontal type fabricated out of extruded aluminium section with 0.6mm pre - plasticized / pre - coated Galvanised steel sheet outside & 0.6 mm plain Galvanised steel sheet inside with backward curved centrifugal blower, blower section and blower motor TEFC type suitable for operation on 415 volts + 10%, 50 Hz + 5% AC supply, 6 Row cooling coil made of aluminium finned copper tube with coil section, pre - filter section with non woven synthetic media for 10 micron particle size with an efficiency of 90%, MERV 13 filter section with filters stainless steel drain pan made out of 22 G sheet duly insulated Complete with motor and belt drive package etc. without face and bypass dampers. The AHU panels are insulated with 23mm thick & 36 Kg/m3 density PU foam. The motor & blower assembly		

		I	1
	are mounted on aluminium extruded		
1.1	section only. Tag No. AH- 1 to 3		
1.1			
	Air Quantity: 40000 CMH Static Pressure: 65 mm wg Coil Rows Deep: 6	Nos.	3.00
	Motor HP :15	INUS.	3.00
1.2	Tag No. AH- 4		
1.2	149 1101741 4		
	Air Quantity: 22500 CMH Static Pressure		
	: 65 mm wg Coil Rows Deep :6	Nos.	1.00
	Motor HP :10		
1.3	Tag No. AH- 5 To 36		
	Air Quantity : 21000 CMH Static Pressure		
	: 65 mm wg		
	Coil Rows Deep :6	Nos.	32.00
	Motor HP :10		
1.4	Tag No. AH-37 TO 52		
	Air Quantity: 19000 CMH		
	Static Pressure :65 mm wgCoil Rows	Nos.	16.00
	Deep: 6		
2	Motor HP : 7.5		
2	Inline Fans (of approx. 0.18		
	HP) .Each fan is complete with centrifugal		
	blowers, totally enclosed fan cooled		
	motor. Fan motor is suitable for single		
	phase, 220 +/- 6% V, 50 Hz AC supply.		
	Item is complete with starter & cabling.		
2.1	Duty :Exhaust		
	Air Quantity :200-400 CFM Static	Nos.	51.00
	Pressure : 30 mm wg		
2.2	Duty:Exhaust		
	Air Quantity :500CFM	Nos.	68.00
2	Static Pressure : 30 mm wg		
3	Tube Axial Flow fans		
3.1	Tube axial flow fans:- Each fan is direct		
	driven Fan motor issuitable for 3 phase,		
	415+/- 10% V, 50Hz AC supply . Fan is complete with gravity louvers. Duty: Lift	Sets	4.00
	Well pressurization Air Quantity: 25000	3612	4.00
	CFM Static Pressure : 30 mm wg Motor		
	Rating: 15.0 HP		
4	CLOSED TYPE EXPANSION TANK		
	Closed type expansion tank for chilled		
	water application duly pressurized		
	complete with piping connections, safety		
	relief valve, drain valve , pressure gauge	Nos.	1.00
	complete .		
	Water Volume : 1.4 Cum		

	Safety Working Pressure: 10 Bar		
5	AIR SEPARATOR		
6	Air separator capability automatic air purging arrangement etc duly insulatedcomplete, working pressure 10 bar. Line Size: 300 mm Design Flow:3960 USGPM FAN COIL UNITS	Nos.	1.00
	Fan Coil Units blow through type, each complete with Three Row deep cooling coil, one or more centrifugal fan(s), cleanable type aluminium filters. FCUs are double drain tray sandwiched type. The item includes control wiring between thermostat, and valve actuator as well as power wiring with 5/15 A switch and socket outlet complete as required.(Motor HP: 0.12 (Approx.) Capacity: 2.5 TR(ductable) Air Quantity: 1000 CFM	Nos.	100.00
1	PIPING WORK		
	CONDENSER WATER MS heavy class pipes(C Class- as per IS 1239-79, PartI and IS 3589 upto date ammendments), and installed with welded all joints, provided and fixed with all necessary fittings such as bends, elbows, tees, reducers, flanges, sockets, required supports etcof following sizes		
1.1	600 mm dia MS Pipes	М	As per site
1.2	500 mm dia MS Pipes	M	-Do-
1.3	350 mm dia MS Pipes	М	-Do-
1.4	300 mm dia MS Pipes	М	-Do-
1.5	250 mm dia MS Pipes	М	-Do-
1.6	200 mm dia MS Pipes	М	-Do-
2	Butterfly valves		
2.1	500 mm dia Valves	Nos.	3.00
2.2	350 mm dia Valves	Nos.	14.00
2.3	350 mm dia Valves (motorised valve with actuators, control wiring as reqd)	Nos.	4.00
2.4	250 mm dia Valves	Nos.	2.00

3	Dynamic/ automatic balancing valves		
3.1	350 mm dia Valves	Nos.	4.00
4	Check valves		
4.1	350 mm dia Valves	Nos.	3.00
5	Pot strainer		
5.1	500 mm dia MS Strainer	Nos.	1.00
6	Providing and fixing of Y strainer	1403.	1.00
6.1	350 mm dia MS Strainer	NI.	4.00
7	CHILLED WATER PIPING	Nos.	1.00
	MS, C Class pipes (as per IS 1239-79, Partl and IS 3589 upto date amendments) with joints, providing and fixing in position necessary fittings like bends, elbows, tees, reducers, sockets, supports, vibrating isolator etc fabricated to site. The insulation is with unfaced PUF pipe section of density 36 kg/ Cu.m , wrapped in polythene sheet retained by GI wire netting and finished with 24 guagealuminum cladding etc.		
7.1	450 mm dia MS Pipes (50 mm thick pipe section insulation)	M	As per site
7.2	400 mm dia MS Pipes (50 mm thick pipe section insulation)	M	-Do-
7.3	350 mm dia MS Pipes (50 mm thick	M	-Do-
7.4	pipe section insulation) 300 mm dia MS Pipes (50 mm thick pipe section insulation)	M	-Do-
7.5	250 mm dia MS Pipes (50 mm thick pipe section insulation)	M	-Do-
7.6	200 mm dia MS Pipes (50 mm thick pipe section insulation)	М	-Do-
7.7	150 mm dia MS Pipes (50 mm thick pipe section insulation)	М	-Do-
7.8	125 mm dia MS Pipes (40 mm thick pipe section insulation)	М	-Do-
7.9	100 mm dia MS Pipes (40 mm thick pipe section insulation)	М	-Do-
7.10	80 mm dia MS Pipes (40 mm thick pipe section insulation)	M	-Do-
7.11	65 mm dia MS Pipes (40 mm thick pipe section insulation)	M	-Do-
7.12	50 mm dia MS Pipes (40 mm thick pipe section insulation)	M	-Do-
7.13	40 mm dia MS Pipes (40 mm thick pipe section insulation)	M	-Do-

7.14	32 mm dia MS Pipes (40 mm thick	N 4	-Do-
	pipe section insulation)	М	
7.15	25 mm dia MS Pipes (40 mm thick	M	-Do-
8	pipe section insulation) Aluminium Cladding		
0			
	Aluminium cladding with 24 Gauge aluminium sheet with overlap on		
	joints and fixed with selftapping screws	SQM	As per
	etc on chilled water/ hot water piping on		site
	the terrace, inside AHU rooms, plant		
	room as per specifications.		
9	Butterfly valves duly insulated as per		
9.1	specifications 450 mm dia Valves		
	400 mm dia Valves	Nos.	1.00
9.2		Nos.	4.00
9.3	300 mm dia Valves	Nos.	1.00
9.4	250 mm dia Valves	Nos.	25.00
9.5	250 mm dia Valves (motorised valve with actuators, control wiring as reqd)	Nos.	2.00
9.6	200 mm dia Valves	Nos.	4.00
9.7	150 mm dia Valves	Nos.	1.00
9.8	125 mm dia Valves	Nos.	10.00
9.9	100 mm dia Valves	Nos.	1.00
9.10	80 mm dia Valves	Nos.	6.00
9.11	65 mm dia Valves	Nos.	98.00
9.12	50 mm dia Valves	Nos.	1.00
9.13	40 mm dia Valves	Nos.	1.00
9.14	32 mm dia Valves	Nos.	1.00
10	Dynamic/ automatic balancing valves as		
40.4	per specifications(duly insulated)		
10.1	250mm dia Valves	Nos.	4.00
10.2	200mm dia Valves	Nos.	1.00
10.2	20011111 dia Valves	1105.	1.00
10.3	125 mm dia Valves	Nos.	1.00
11	Pressure independent type		
	2 way Balancing and modulating Control		
	valves duly insulated in a single Unit of		
	Valve with PN16 Rating. DN 15 to DN 32 Brass Body. DN 40 & above shall be		
	Grey Iron or cast iron Body with flanged		
	Ends Connection		
	Duly mounted with Modulating actuator		
	IP40 or above suitable for 24V AC. The		
	actuator shall be equipped to transmit a		

	transduced flow feedback signal in 4.20		
	transduced flow feedback signal in 4-20 mA format to the BMS. Valve shall be		
	selected for maximum water flow rate of		
	AHU/FCU.		
11.1	250mm dia Valves	Nos.	5.00
11.2	200mm dia Valves	Nos.	1.00
11.3	150 mm dia Valves	Nos.	1.00
11.4	125 mm dia Valves	Nos.	1.00
11.5	100 mm dia Valves	Nos.	1.00
11.6	80 mm dia Valves	Nos.	3.00
11.7	65 mm dia Valves	Nos.	49.00
11.8	50 mm dia Valves	Nos.	1.00
11.9	20 mm dia Valves	Nos.	100.00
12	Check valves duly insulated as per specifications:-	1100.	100.00
12.1	250 mm dia Valves	Nos.	6.00
12.2	125 mm dia Valves	Nos.	2.00
13	Y strainer duly insulated as per site		
13.1	250 mm dia Strainer	Nos.	6.00
13.2	150 mm dia Strainer	Nos.	1.00
13.3	125 mm dia Strainer	Nos.	2.00
13.4	100 mm dia Strainer	Nos.	2.00
13.4	100 mm dia Strainer	Nos.	1.00
13.5	80 mm dia Strainer	Nos.	3.00
13.6	65 mm dia Strainer	Nos.	49.00
13.7	50 mm dia Strainer	Nos.	1.00
13.8	32 mm dia Strainer	Nos.	1.00
14	Gate Valves duly insulated as per site	1105.	1.00
14.1	50 mm dia Valves	Nos.	2.00
14.2	40 mm dia Valves	Nos.	2.00
14.3	32 mm dia Valves	Nos.	2.00
14.4	25 mm dia Valves	Nos.	1.00
14.5	25 mm dia Valves	Nos.	1.00
15	DRAIN PIPING GI medium class, installed with screw joints including the necessary fittings duly insulated with 25 mm thick PUF pipe section of 32 kg/cum denisty and as per site		
15.1	100 mm dia	М	As per site

15.2	50 mm dia		Б.
15.3	40 mm dia	M	-Do-
15.4	32 mm dia	M	-Do-
		M	-Do-
15.5	25 mm dia	RM	-Do-
16	Industrial type pressure gauges with Gun metal valves for isolation and necessary fittings, for the ease of maintenanceand operation	Nos.	As per site
17	Stem mercury in glass filled industrial thermometers	Nos.	-Do
18	Auto air vents of suitable approved sizes	Nos.	-Do-
19	Ball Valves duly insulated as per site		
20		Nos.	6.00
	32 mm dia Valves Ball Valves with Strainer and duly insulated as per site 32 mm dia Valves	Nos.	6.00
21	Snap acting thermostat for FCUs	Nos.	100.00
22	UVGI SYSTEM Duct mounted factory assembled ultra violet germicidal eradication system of 99.99% kill rate of air borne mold, spores, bacteria, viruses & odour etc. Specification of UVGI sysem as per the site		
22.1	40000 CMH	Nos.	3.00
22.2	22500 CMH	Nos.	1.00
22.3	19000 CMH	Nos.	16.00
22.4	21000 CMH	Nos.	32.00
23	Chilled water expansion tank of 3 mm thick MS sheet duly insulated of size 1mx1mx1m with all necessary pipe connection as per site. D:- Air DISTRIBUTION	Nos.	1.00
10		1	
1a	Sheet metal ducts in accordance as per site, GI sheet material confirm to IS 277		
1.1	0.63 MM (24 gauge) Galvanized Sheet Steel	SQM	As per site
1.2	0.8 MM (22 gauge) Galvanized Sheet Steel	SQM	-Do-
1.3	1.0 MM (20 gauge) Galvanized Sheet Steel	SQM	-Do-
1.4	1.25 MM (18 gauge) Galvanized Sheet Steel	SQM	-Do-

		1	
2	Supply, fabrication, installation fabricated Duct as per SMACNA standards.		-Do-
2.1	0.63 MM (24 gauge) Galvanized Sheet Steel	SQM	-Do-
2.2	0.8 MM (22 gauge) Galvanized Sheet Steel	SQM	-Do-
2.3	1.0 MM (20 gauge) Galvanized Sheet Steel	SQM	-Do-
2.4	1.25 MM (18 gauge) Galvanized Sheet Steel	SQM	-Do-
3	Square shape ceiling diffusers with removable core.		
3.1	Extruded aluminium construction, powder coated with volume control damper	SQM	As per site
3.2	Extruded aluminium construction, powder coated without volume control damper	SQM	As per site
4	Extruded aluminium powder coated supply / return air grills as per site		
4.1	Extruded aluminium construction, double louvered, powder coated with volume control damper.	SQM	As per site
4.2	Extruded aluminium construction, doublelouvered, powder coated without volume	SQM	-Do-
5	Extruded aluminium powder coated linear grills as per site		
5.1	200 mm wide	М	As per site
5.2	150 mm wide	М	-Do-
5.3	100 mm wide	М	-Do-
5.4	80 mm wide	М	-Do-
6	Volume control damper for linear grills.	SQM	-Do-
7	Extruded aluminium powder coated linear diffusers	SQM	-Do-
8	GSS volume control dampers for ducts	SQM	-Do-
9	Aluminium powder coated fresh / exhaust air louvers complete with damper and aluminium wire mesh bird screen	SQM	-Do-
10	Fire Dampers		
10.1	Galvanised sheet fire dampers of 90 minutes fire rating and as per the site. The fire damper is complete with limit switch. The fire damper is located in the supply / return air ducts spaces and as per site.	SQM	As per site

	Acceptains		
10.2	Accessories Motorised actuators, control panels & associated control wiring	Set	As per site
11	Air curtains for toilet doors .The air curtains shall be suitable for door size of 1000 mm W x 2100 mm H.	Set	119.00
1	INSULATION Thermal insulation with rigid fibre glass prelaminated with aluminium foil and density as per site		
1.1	50 mm thick	SQM	As per site
1.2	25 mm thick	SQM	As per Site
2	19 mm thick closed cell polyethylene foam insulation with UV barrier treatment for ducts exposed to weather as per site	SQM	As per site
3	EXternal thermal insulation with closed cell polyethylene foam as per the site		
3.1	10 mm thick insulation for return air ducts	SQM	AS per site
3.2	13 mm thick insulation for supply air ducts	SQM	As per site
4	Accoustic lining within the ducts as per site		
4.1	50 mm thick	SQM	As Per site
4.2	25 mm thick	SQM	-Do-
5	Acoustic treatment on walls and ceiling of AHU rooms&plant room with resin bonded glass wool having density of 32 kg/cum wrapped with tissue paper, fixed on wall/ceiling in frame work made out of 22 guage GI channel covered with 0.80 perforated aluminium sheet and finally braced with aluminium beading of 25mm x 2mm flat fixed with cromium plated secrew etc. complete as per site	COM	
5.1	50 mm thick accoustic lining	SQM	As per site
6	Underdeck insulation with TF quality expended polystrene insulation of density 18 kg/cum and thickness 50 mm by cleaning the surface,thick layer bitumen on the one side on insulation borad and fixing and bracing them on ceiling.		
6.1	50 mm thick	SQM	As per site

		T	T
	ELECTRICALS		
1 1.1	MAIN MOTOR CONTROL CENTRE (FOR HVAC SYSTEM EQUIPMENT) Free standing, dust and vermin proof, compartmentalised Motor Control Centre fabricated out of 2/1.60 mm thick steel sheet and finished in powder coat of approved shade. A solid bus bar shall be provided at the bottom of the panel. The panels shall be suitable for415 Volts, 50 Hz, 3 Phase, 4 wire supply system. The Panel drawing shall be approved before proceeding with the fabrication. The panel shall be compatible for integration with BMS system with required NO+NC contacts. All voltmeters and ammeters shall be digital type. The main panel shall be suitable for 31 MVA fault level. All outgoing shall be provided with stop/manual/auto/selector switch to facilitate operation through BMS INCOMING 2 Nos. 2000 Amps TPN EDO ACB(50 KA), with o/c & s/c release. 1 SeT (R,Y,B) Phase indication Lamps with protection fuse1 Set Ammeter of suitable range with 3CT and selector switch 1 No. voltmeter 0-500 V with selector switch and controlMCBs BUSCOUPLER 1 No 2000 Amps TPN EDO ACB with u/v release OUTGOING 1 Nos. outgoing to air cooled chiller panel comprising 1 Nos.800 Amps TPN MCCB(50 KA), with o/c & s/c release. 1 SeT (R,Y,B) Phase indication Lamps with protection fuse1 Set Ammeter of suitable range with 3CT and selector switch 1 No. voltmeter 0-500 V with selector switch 2 Set Ammeter of suitable range with 3CT and selector switch 1 No. voltmeter 0-500 V with selector switch and control fuse2 Nos. Chiller feeders each comprising		
	comprising		
	1 Nos.1250 Amps TPN EDO ACB(50		
	KA),with o/c & s/c release. 1 SeT (R,Y,B) Phase indication Lamps		
	with protection fuse 1 Set Ammeter of suitable range with		
	3CT and selector switch		

Suitable for 3 Nos. 3.5 c x 40	00 sqmm
armoured aluminium conducto	or cable
connection	
3Nos. Primary Chilled Water	Pumps
feeders	
each comprising	
25 HP Chilled water pump feeder	
1 No. 63 Amps TPN MCCB - 25 K	Λ
· ·	
1 Set ON/OFF/Trip indication Lam	nps with
protection fuse	
1 Set Ammeter of suitable range v	with 1CT
1 Set Start/stop Push Button	
1 No. 25HP star delta Starter	
Star/delta starter should be with o	verload
protection with built in single p	phasing
protection with all starter	
3 Nos. Secondary Chilled Wa	ater
Pumps feeders	
each comprising	
50 HP Chilled water pump feeder	
· ·	
1 No.200 Amps TPN MCCB - 25 k	
1 Set ON/OFF/Trip indication Lam	nps with
protection fuse	
1 Set Ammeter of suitable range v	with 1CT
1 Set Start/stop Push Button	
3 Nos. Condenser Water	Pumps
feeders	
each comprising	
1 No.90 HP Condenser water pun	np
feeder	•
1 No. 250 Amps TPN MCCB - 25	KA
1 Set ON/OFF/Trip indication Lam	
protection fuse	ips with
1 .	with 1CT
1 Set Ammeter of suitable range v	with ICI
1 Set Start/stop Push Button	
1 No. 90 HP Star Delta Starter	
2 Nos. Cooling Towers feeders	
(multi blower cooling tower)	
1 No. 10.0 HP Cooling Tower Mot	tor
feeder	
1 No. 32 Amps TPN MCCB - 25 K	(A
1 Set ON/OFF/Trip indication Lar	
withprotection fuse	'
1 Set Ammeter of suitable range v	with 1CT
. Ser Allinerer of Simanie (2008)	
I	
1 No.VFD 10.0 HP	
1 No.VFD 10.0 HP 1 Set Start/stop Push Button	adara
1 No.VFD 10.0 HP 1 Set Start/stop Push Button 2 Nos. Hot Water Generator fee	
1 No.VFD 10.0 HP 1 Set Start/stop Push Button 2 Nos. Hot Water Generator fee 2 Nos. 300 KW Hot Water Gene	
1 No.VFD 10.0 HP 1 Set Start/stop Push Button 2 Nos. Hot Water Generator fee 2 Nos. 300 KW Hot Water Generator feeders each comprising	erator
1 No.VFD 10.0 HP 1 Set Start/stop Push Button 2 Nos. Hot Water Generator fee 2 Nos. 300 KW Hot Water Gene	erator KA

	T		T
	switch		
	Panel shall have 10 % spare space		
1.1.1	1 No. 2500 Amps bus bar of aluminium		
1.1.2	conductor1 No. earth bus of AL conductor	Set	1
1.2	Free standing, dust and vermin proof,		
	compartmentalised Motor Control Centre		
	(Suitable for outdoor application)		
	fabricated out of 2/1.60 mm thick steel		
	sheet and finished in powder coat of		
	approved shade. A solid bus bar shall be		
	provided at the bottom of the panel. The panels shall be suitable for 415 Volts, 50		
	Hz, 3 Phase, 4 wire supply system. The		
	Panel drawing is approved before		
	proceeding with the fabrication. The panel		
	is compatible for integration with BMS		
	system with required NO+NC contacts.All		
	voltmeters and ammeters are digital type.		
	The main panel is suitable for 31 MVA		
	fault level. All outgoing are provided with		
	stop/manual/auto/selector switch to		
	facilitate operation through BMS		
	Suitable for 2 Nos. 3.5 c x 300 sqmm		
	armoured aluminium conductor cable connection		
	INCOMING		
	1 Nos.800 Amps TPN MCCB(50		
	KA),with o/c & s/c release.		
	1 SeT (R,Y,B) Phase indication Lamps		
	with protection fuse		
	1 Set Ammeter of suitable range with		
	3CT and selector switch		
	1 No. voltmeter 0-500 V with selector		
	switch and controlMCBs		
	OUTGOING		
	1 Nos. Chiller feeders(1W+0S) feeders each comprising		
	1 Nos.630 Amps TPN MCCB(50		
	KA),with o/c & s/c release.		
	1 SeT (R,Y,B) Phase indication Lamps		
	with protection fuse		
	1 Set Ammeter of suitable range with		
	3CT and selector switch		
	(suitable for 2 Nos. 3.5 c x 300 sqmm		
	cables)		
	2Nos. Chilled Water Pumps feeders		
	each comprising		
	15 HP Chilled water pump feeder		
	1 No. 63 Amps TPN MCCB - 25 KA		
	1 Set ON/OFF/Trip indication Lamps with		

	_	,	
	protection fuse		
	1 Set Ammeter of suitable range with 1CT		
	1 Set Start/stop Push Button		
	1 No. 15HP star delta Starter Star/delta		
	starter is with overload protection with		
	built in single phasing protection with all		
	starter		
	Panel shall have 10 % spare space		
	1 No. 1000 Amps bus bar of aluminium	Set	1
	conductor1 No. earth bus of AL conductor	OCI	•
2	LOCAL DISCONNECT PANELS		
_	Supply, installation,testing and		
	1		
	commissioning of local disconnect		
	panels wall mounted type made out of		
	2.0 mm thick steel sheet duly painted and		
	comprising of following. The panel is		
	compatible for integration with BMS		
	system with required NO+NC contacts.		
	Meters are digital type.		
	All outgoing are provided with		
	stop/manual/auto selector switch to		
	facilitate operation through BMS.		
	Incomer: 1 No. 32 Amp 4P MCB		
	Outgoing:1 No. TPN MCB 32 A		
	3 Nos. 16 A 2 pole MCB		
	1 Set Phase indication lamps with		
	protection fuse.1 No. ON indication lamp		
	with protection fuse.1 Set 'Start/ Stop'		
	push button.		
	1 No. 24 Volt Transformer.(for AHU		
	panels only)		
	1 No. Ammeter of suitable range with		
	1CT Power Connectors Voltmeter		
	and ammeter with selector		
	switchTime delay relay for delayed		
	automatic restart of air handling unit		
	motor(0-180 Sec)		
	Wiring for micro switch for		
	starting/stopping the fan when fire		
	damper closes Necessary internal wiring		
2.1	as per siteequipment /motor to panel	Sets	16
	shall be included.	33.0	
	FOR AHUS UP TO 7.5 HP , 3 PHASE		
	MOTOR		
	7.5 HP VFD		
2.2	FOR AHUS OF 15 HP , 3 PHASE		
۷.۷	•		
	MOTOR		
	Incomer: 1 No. 63 Amp 4P MCCB		
	Outgoing: 1 No. TPN MCCB 63 A		
	3 Nos. 16 A 2 pole MCB,1 Set Phase	Sets	3
	indication lamp with protection fuse.		

	_		T
	1 No. ON indication lamp with protection		
	fuse.1 No. Ammeter of suitable range		
	with 1CT,1 Set 'Start/ Stop' push button.		
	1 No. 24 Volt Transformer. 15 HP VFD		
2.3	FOR AHUS OF 10 HP , 3 PHASE		
	MOTOR		
	Incomer: 1 No. 32 Amp 4P MCB		
	Outgoing: 1 No. TPN MCB 32 A		
	3 Nos. 16 A 2 pole MCB,1 Set Phase		
	indication lamp with protection fuse.	Sets	33
	1 No. ON indication lamp with protection		
	• •		
	fuse.1 No. Ammeter of suitable range		
	with 1CT.,1 Set 'Start/ Stop' push button.		
	1 No. 24 Volt Transformer.		
	10 HP VFD		
	Outgoings		
	For 4 Nos. 15 HP Liftwell		
	pressurisation fans each feeder		
	comprising		
	1 No. TPN MCCB- 63 A		
	1 No. Phase indication lamp with		
	protection fuse		
	1 No. ON/OFF indication lamp with		
	protection fuse.		
	1 No. Ammeter of suitable range with		
	1CT		
	1 Set 'Start/ Stop' push button.		
	1 No. 15 HP Star delta Starter		
	For 4 Nos. 10.0 HP Liftlobby		
	· · · · · · · · · · · · · · · · · · ·		
	pressurisation fans each feeder		
	comprising		
	1 No. TPN MCCB- 32 A ,1 No. Phase		
	indication lamp with protection fuse		
	1 No. ON/OFF indication lamp with		
	protection fuse.1 No. Ammeter of suitable		
	range with 1CT ,1 Set 'Start/ Stop' push		
	button.1 No. 7.5 HP DOLStarter, For 2		
	Nos.7.5 HP staircase pressurisation		
	fans each feeder comprising		
	1 No. TP MCCB- 32 A,1 No. Phase		
	indication lamp with protection fuse		
	1 No. ON/OFF indication lamp with		
	protection fuse.1 No. Ammeter of suitable	Set	1
	range with 1CT,1 Set 'Start/ Stop' push		
	button.1 No. 7.5 HP DOL Starter		
	10% spare feeders is provided.		
	1 No. 350 amps aluminium bus		
	bar		
4.0	AHU Panel		
4.0			
	'' '		
	mounted free standing type with		

separation system as per IS 8623 part 1415 V ,50 Hz 3phase 4 wire supply , moisture ,dust 7 vermin proof AHU panel board made from 2 mm , thick CRCA sheet steel duly power coated in approved colour ,complete with protection release /relay computer compatible Energy Analyser , LED indication lamps , CTs interconnection/control wiring & fuses bus bars removable gland plate on top & bottom MV danger notice plate and following incomer& out going feeder completes per specification . Incomer 630A 4P 35 KA MCCB -1 set Bus bar 800A, 415 V three Phase 4wire color coded non adhesive PVC insulated electrolyticAl conductor bus bar Out going 63 A FP MCCB -2Nos 32 A FP MCB-30 Nos 5.0 Power Cabling Supply, laying, testing and commissioning of 1.1 KV PVC insulated , PVC sheathed ,armoured cable of aluminium conductor complete with end termination with brass compression glands, aluminium lugs, identification Tags, clamps etc.as per site 5.1.1 400 sqmm x 3.5 core aluminium conductor armoured cable M -Do-5.1.3 185sqmm x 3.5 core aluminium conductor armoured cable M -Do-5.1.4 50 sqmm x 3.5 core aluminium conductor armoured cable M -Do-5.1.5 35 sqmm x 3.5 core aluminium conductor armoured cable M -Do-5.1.6 25 sqmm x 3.5 core aluminium conductor armoured cable M -Do-6.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do-6.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do-6.1.1 10 company x 3 core aluminium conductor armoured cable M -Do-6.1.1 10 company x 3 core aluminium conductor armoured cable M -Do-6.1.1 10 company x 3/3.5 core aluminium conductor armoured cable M -Do-6.1.1 10 company x 3/3.5 core aluminium conductor armoured cable M -Do-6.1.1 10 company x 3/3.5 core aluminium conductor armoured cable M -Do-6.1.1 10 company x 3/3.5 core aluminium conductor armoured cable M -Do-6.1.1 11 company x 3/3.5 core aluminium conductor armoured cable M -Do-6.1 11 company x 3/3.5 core aluminium conductor armoured cable M -Do-6.1 11 company x 3/3 core aluminium conductor armoured cable M -Do-6.1 11 company x 3/3				
800A, 415 V three Phase 4wire color coded non adhesive PVC insulated electrolyticAl conductor bus bar Out going 63 A FP MCCB -2Nos 32 A FP MCB-30 Nos 5.0 Power Cabling 5.1 Supply, laying, testing and commissioning of 1.1 KV PVC insulated , PVC sheathed , armoured cable of aluminium conductor complete with end termination with brass compression glands, aluminium lugs, identification Tags, clamps etc.as per site 5.1.1 400 sqmm x 3.5 core aluminium conductor armoured cable 5.1.2 240 sqmm x 3.5 core aluminium conductor armoured cable 5.1.3 185sqmm x 3.5 core aluminium conductor armoured cable 5.1.4 50 sqmm x 3.5 core aluminium conductor armoured cable 5.1.5 35 sqmm x 3.5 core aluminium conductor armoured cable 5.1.6 25 sqmm x 3.5 core aluminium conductor armoured cable 5.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable 5.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do-		1415 V ,50 Hz 3phase 4 wire supply , moisture ,dust 7 vermin proof AHU panel board made from 2 mm , thick CRCA sheet steel duly power coated in approved colour ,complete with protection release /relay computer compatible Energy Analyser , LED indication lamps , CTs interconnection/control wiring & fuses bus bars removable gland plate on top & bottom MV danger notice plate and following incomer& out going feeder completes per specification . Incomer 630A 4P 35 KA MCCB -1 set		
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armoured cable 5.1.4 50 sqmm x 3.5 core aluminium conductor armoured cable 5.1.5 35 sqmm x 3.5 core aluminium conductor armoured cable 5.1.6 25 sqmm x 3.5 core aluminium conductor armoured cable 5.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do- M -Do-		conductor armoured cable	М	-Do-
armoured cable 5.1.5 35 sqmm x 3.5 core aluminium conductor armoured cable M -Do- 5.1.6 25 sqmm x 3.5 core aluminium conductor armoured cable M -Do- 5.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do-			М	-Do-
armoured cable 5.1.6 25 sqmm x 3.5 core aluminium conductor armoured cable M -Do- M -Do- 5.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do-		armoured cable	M	-Do-
armoured cable M -Do- 5.1.7 16 sqmm x 3/3.5 core aluminium conductor armoured cable M -Do-		armoured cable	М	-Do-
conductor armoured cable M -Do-	5.1.6		М	-Do-
F 1 9 10 gamm y 2 gars aluminium conductor	5.1.7	•	М	-Do-
armoured cable	5.1.8	10sqmm x 3 core aluminium conductor armoured cable	М	-Do-
5.1.9 6 sqmm x 3 core aluminium conductor armoured cable -Do-	5.1.9	6 sqmm x 3 core aluminium conductor	M	-Do-
5.1.10 6 sqmm x4 core aluminium conductor armoured cable — M -Do-	5.1.10	6 sqmm x4 core aluminium conductor	M	-Do-

5.1.11	4 samm v4 sors aluminium conductor			Do
	4 sqmm x4 core aluminium conductor armoured cable		М	-Do-
5.1.12	4 sqmm x 3 core aluminium conductor armoured cable		М	-Do-
6.0	Control cabling			As per site
6.1	1.1 KV grade PVC Insulated, PVC Sheathed copper conductor armoured control cables complete with brass compression glands, copper lugs, identification tags, clamps etc. as per site			
6.1.1	2 core x 2.5 sqmm		М	As per site
6.1.2	3 core x 2.5 sqmm		М	As per Site
6.1.3	6 core x 1.5 sqmm	М		As per site
6.1.4	12 core x 1.5 sqmm	М		As per site
7.0	Earthing			
	GI Stripe from earth electrode as per site for EarthContinuity:			
7.1	1x32x6 mm GI Strip	М		As per strip
7.2	1x25x5mm GI Strip	М		As per site
7.3	1x6 SWG GI Wire	М		As per site
7.4	1x 8 SWG GI wire	М		As per site
	Cable Trays			
8	Ladder type cable trays made of GI slats, 75 mm high and 2.0 mm thick, complete with clamps and suspension arrangement comprising of 10 mm dia GI rods complete as per site			
8.1	600 mm wide	М		As per site
8.2	450 mm wide	М		-Do-
8.3	300 mm wide	М		-Do-
8.4	150 mm wide	М		-Do-
1.0	Building Management System (BMS) and allied systems as per an all-time fully integrated system, (which is used for monitoring building AHUs, cooling plant, light, power system, fire system and security system) i.e compatible with the fire, security, light etc. BMS Computer System: PC (Pentium		lo.	1

			1
	Core 2 Duo processor 3 GHz or better), 2GB RAM, 52X DVD Writer, 22" TFT Colour monitor, 180GB HDD SATA, Microsoft Bus mouse with pad, 2serial, 1 parallel port, Windows XP / Windows 7 operating system, 104 Keybord, Expansion Bus with spare Slot, with original license, protection & restore key, includes LAN Card, USB ports		
2.0	BMS System Software: Web Based Graphical Software meeting the requirements in the Given I/O Summary and technical specifications including configuration and facility to create / provide the graphic mapping for all I/O Summary points, animate the Graphics, Navigation between pages, display of logs, changing the time zones, popup alarms, configurable password protection for Building Mgmt System as per Specifications. Software shall be able to communicate with Lonworks, Bacnet, Modbus devices simultaneously, with unlimited user & Point license capacity. Same software can be utilized as programming / commissioning software of DDC, NAC etc	No.	1
3.0	Web Based Router / Network Area Controller interfacing the DDC controllers and Integrators for the system with PC. It has capacity to store trends & program backup. It should be BTL & UL Listed.	Lot	1
4.0	Web Based Integrator for interfacing for	Lot	1
4.0	Chiller machine Web Based Integrator for interfacing for VFD	Lot	1
5.0	Automation stations / DDC Controller with I/O module etc., The controllers shall be 16 bit microprocessor based standalone and net workable type with real time clock. The DDC's shall be capable of peer to peer communication without help of system interface controller or PC. with locable MS mounting cabinets duly powder coated connector strip, internal wiring and space to house controller & relays, connector strip current transformer, MCB, internal wiring.		

			T
	(Contractor shall confirm his I/O		
	provision w.r.t requirement on basis of data point) on Lonworks		
5.1	DDC Panel for Chiller Plant Room	Lot	1
5.2	DDC Panel for AHUs	Nos	1
5.3	DDC panel for ventillation system	Nos	1
1.0	Immersion temp sensor for CHW line	Nos	9
2.0	Outside Temp & Humidity Sensor	Nos.	1
3.0	Water Level Switches for Water Tanks	Nos.	3
4.0	DP Switch Air for Monitoring Blower, Fan ETC	Nos.	110
5.0	Duct Type Temp Sensor	Nos.	52
6.0	Water Flow Switch	Nos.	4
7.0	Water Flow Meter	Nos.	1
C) 1.0	Conducting, Wiring and cabling of following cables:		
1.1	multistranded,F-10Cable	М	As per site
1.2	3 Core 1.5 Sqmm, PVC Insulated, PVC Sheathed ATC conductor multistranded, cable for Powering DDC, Actuators, F-10 Cables	M	As per site
1.3	2 Core 1.0 Sqmm, PVC Insulated, PVC Sheathed ATC conductor multistranded, twisted & Shielded (Aluminium foil) cable, for communication (F-10 Cables)	М	As per site
1.4	ISI Mark 1.6 mm thick MS conduit on surface/recess including cutting/filling chases along with conduit accessories etc. complete as per site		
a)	25 mm dia	М	As per site
c)	Steel reinforced PVC quoated flexible pipe with all coupler & Clamps	М	As per site
	CIVIL WORKS		
1.0	Associated civil works like foundation of equipment in AC plant room, air handling units, air cooled chiller including structural supports etc, making and dressing of AC openings and as required to make the system functional.	LOT	1

Mandatory Spares and Tools at all times during the contract Period

The contractor will have to ensure the availability of necessary spares and Tools for the maintenance purpose at all times during the contract period. Non availability of spare parts a/tools will attract suitable penalty as deemed fir by STC.

Quantity will be decided by the site conditions and as per the Direction of Engineer in charge. The list is indicative only.

Material of one head will may also be required under other head hence repetition has been avoided hereunder

Sr. No.	
1	Pipe wrench –all sizes (24",18",14",10" mostly)
2	Tota Plass-Plier
3	Screw Driver
4	Hammer
5	Chisel
6	Sandasi
7	Round Plug
8	Hacksaw Frame with Blades
9	Grinder Cutter Machine
10	Drill machine –Hammering
11	Drill machine
12	Torch
13	Inch tape
14	Pipe Vice
15	Pressure exerting
16	Pipe Bending machine
17	Trowel
18	File
19	Spirit Level
20	Safety Belt
21	Helmet
22	Caulking Tools
23	Inch square Driver set
24	Any other items as per direction of Engineer in charge

Material

matorial	
Sr. No.	Bibcock –All tyoe
1	Pillarcock-all types
2	Bottle Trap
3	Connection Pipe (18", 24" mostly)
4	Soap Container
5	PVC waste Pipe
6	Bibcock Face –Half turn. Full turn
7	Pillarcock Face -Half Turn, Full turn
8	WC Cistern Siphon-Single /Dual
9	Ballcock

10	Waste Jali
11	WC bend –Long/short
12	Urinal spreader
13	Angle valve
14	Wash Basin
15	WC
16	Urinal
17	WC Cistern –PVC/China ware
18	GI fitting material like Socket, elbow, T, Union, Pipes clamps,
	screw, Gitti etc
19	Dhaga, safeda, washers, Teflon tape, M seals, etc
20	CPVC fittings- Plain Socket, elbow, T, Union, Pipes , FTA, MTA,
	Solvent , Brass elbow , clamps, Screw , Gitti etc
21	Any other items as per direction of Engineer in charge
22	Gate Valves
23.	Black and white cement
24	Breaching powder, Wipers, Wire Brush etc
25.	Any other material

(A) Electrical Main Tools

1	Neon Tester
2	Insulation Resistance meter (Megger)
3	Clamp Meter
4	Multi meters
5	Ring spanner sets
6	Ended spanner set
7	T spanner set
8	Test lamp
9	Soldering iron set
10	Hammer –All type
11	Screw Driver (Plus, Minus and Star) set
12	Line tester
13	Pliers – all types
14	L and Key set
15	Insulation removal knife
16	Insulation Gloves
17	Clamping tools
18	Any other items as per direction of Engineer in charge

Data to be supplied by the bidder

(Performa-4)

NAME OF WORK:- Comprehensive Routine, breakdown Operation & Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of Central HVAC (Heat , Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place , Delhi.

Sr.	Particular		Yes/No
No.			
1.	Name and complete Address		
	of the Firm		
2.	Name of proprietor(s)/		
	Directors with the PAN Nos.		
3.	Bank account details of the		
	Firm -Name of Bank,		
	Account No. IFSC code		
4.	Annual turnover ,Balance	FY 2020-21	
	sheet & Profit and Loss	Turnover	
	account in Rs. lakhs	Profit/Loss	
		FY 2019-20	
		Turn over	
		Profit/Loss	
		FY 2018-19	
		Turnover	
		Profit/Loss	
5.	Average Annual Turnover		
	(Rs.) of 3 years as above		

6.	GST No.	
7.	P.F No	
8.	PAN No.	
9.	Electrical Licence No	
10	ESI Registration No.	
11	Work experience details	Fill separate sheet
12.	Satisfactory service certificate	
13.	EMD details	
14	Bid Fee details	
15	Self-attested certificate of	
	Non-blacklisting from	
	PSUS/Govt./MNC.	
16.	Performa1,2,3 4	
17.	Registration No. (Certificate)	
	under MSME/NSIC/KKB body	
	if the bidder avails the benefit	
	of exemption of tender fee,	
	being a MSME/ NSIC unit.	
18.	Authorization letter for	
	authorized signatory if the	
	bidder is different from the	
	Proprietor of the Firm	

Note: The above signed scanned documents have to be uploaded for technical bid purpose. Price bid has to be scanned, filled, and signed by the bidders and to be uploaded in the separate folder on e-procurement portal.

Name and Signature of Contractor with seal

Summary of Past Work Experience (Performa -5)

Sr.	Name of	PSU/	Value	Duration	Details,	Satisfactory
No.	Work Order	GOVT./	of the	(from	nature of	completion
	awarding	Semi	work	to)	work(as per	certificate
	organisation	Govt./	(annual		requirement	attached
		State	basis)		of	(Y/N)
		PSU/MNC	Rs.		satisfaction	
		& Private	Lacs		for PQR	
		institutions				
1.						
2.						
3.						
4.						
7.						

Name and Signature of Contractor with seal

Note: - Separate sheets may be attached for furnishing the past work details

Price Bid /Financial Bid/Bill of quantities(B.O.Q.) (Performa -6)

(To be quoted in the format as per e-procurement site as per available format there)

Prices for Comprehensive routine operation, breakdown Maintenance of water cooled (2x 750 TR), Air cooled (1x 175 TR) and associated system of CentralHVAC (Heat, Ventilation & air conditioning) system installed at Jawahar Vyapar Bhawan,1-Tolstoy Marg, Connaught Place, Delhi.

PROCEDURE FOR FILLING OF PRICE BID ONLINE

- 1. BOQ(price bid) uploaded by STC to be used only for submission of price.
- The BOQ template must not be modified/ replaced by the bidder after down loading and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. bidders are allowed to enter the bidder name and item/unit rate only.
- 3. At the time of up loading of BOQ by bidder, the file name for uploading the BOQ (Price Bid) should remain the same as it was downloaded from the CPP portal.
- 4. Goods and service tax shall be paid extra by STC of India Ltd. as per rules, on providing documentary proof of deposition. The contractor will have to provide tax input credit of GST and pass the same to the STCunder anti profiteering clause of GST act.
- 5. No other format of price submission shall be accepted.
- 6. The bidder is required to quote for the complete work, though STC reserve the right to award the work in full or in part.
- 7. Bidder/contractor has to quote the final rates only, all including discount/ rebate etc. Any separate discount/ rebate quoted shall not be considered.
- 8. The offer shall be valid for 60 days from the date of bidopening.
- 9. Leaving an unfilled entry in the price bid against any term shall mean as Zero cost andthe bid shall be evaluated accordingly.
- 10. KYC information has to be provided by the contractor before the execution of the agreement.
- 11. Putting price bid along with technical bid will leadto rejection of the bid summarily.

BOQ TEMPLATE- Sample-

S.No.	Item description	Quoted Price (Rs.) per
		annum
01	Comprehensive Routine, breakdown	
01	•	
	Operation & Maintenance of water cooled (
	2x 750 TR), Air cooled (1x 175 TR) and	
	associated system of Central HVAC (Heat ,	(In words Rs
	Ventilation & air conditioning) system	
	installed at Jawahar Vyapar Bhawan,1-)
	Tolstoy Marg, Connaught Place , Delhi.	
	including all taxes and duties except GST.	

In words

Signature of authorized representative of the bidder with seal