



(भारत सरकार का उपक्रम-जल शक्ति मंत्रालय)
(A Government of India Undertaking-Ministry of Jal Shakti)

TENDER DOCUMENT FOR

**Renovation works for proposed CBSE Regional Office & COE
at NBCC Square, New Town, Kolkata**

WAP/CMU-I/2025/ CBSE/KOLKATA/05

Date: 03-11-2025

Executing Agency:

**WAPCOS LIMITED
1st floor, Plot no. 148, Sector- 44, Gurugram,
Haryana-122015**

November, 2025

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NOTICE INVITING TENDER (NIT)

NOTICE INVITING TENDER (NIT)**NIT No. WAP/CMU-I/2025/CBSE/KOLKATA/05****Dated 03-11-2025**

WAPCOS Limited (A Govt. of India Undertaking) on behalf of Central Board of Secondary Education (CBSE), invites open online Item Rate tender from experienced, competent and eligible bidders in a two-envelope system as per below:

1.	Work/ Project	Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata
2.	Site / Location	NBCC Square, New Town, Kolkata
3.	Website for viewing tender, Corrigendum/ Addendum, if any.	www.wapcos.co.in & www.etenders.gov.in/eprocure
4.	Website for Registration/ uploading of Tender	www.etenders.gov.in/eprocure
5.	Estimated / NIT Cost	Rs. 8.64 Crore excluding GST
6.	Cost of Tender Document	Rs. 5,000/- (Rupees Five thousand Only) as Tender Processing Fee in the form of Demand Draft
7.	Earnest Money Deposit (EMD) / Bid Security	Rs. 17.27 Lakhs (Refundable) in the form of Insurance Surety Bonds/ Account Payee Demand Draft/ Fixed Deposit Receipt/ Banker's Cheque or Payment through RTGS/ NEFT in favor of 'WAPCOS Limited' payable at Gurugram, Haryana. The bank account as per details: Name of Bank: Indian Overseas Bank Bank Account Number: 193502000000405 IFSC Code: IOBA0001935 Branch Name: National Horticulture Board (NHB) Building, G-85, Industrial Area, Sector-18, Gurugram-122015, Haryana Note: Bid Security shall remain valid for a period of 45 days beyond final bid validity period.
8.	Solvency Certificate - specific to this Bid submission only and mentioning the name of the work/project	Rs. 3.46 crore in original from a Nationalized/ Scheduled Commercial Bank approved by Reserve Bank of India (RBI). The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana quoting the name of the work. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate. Note: This Certificates will be verified from the issuing authority by WAPCOS.
9.	Project Completion Period	03 Months from the Date of Commencement of work or the first date of handing over of the site, whichever is later

10.	Performance Guarantee Bank	The Bidder quoting below Minus (-) 5% of the estimated cost put to tender shall submit the additional performance guarantee of amount equal to the percentage of quoted amount and as detailed in Special Conditions of Contract
11.	Bid Validity Period	90 days from the date of opening of technical bid
12.	Site Visit	Bidders are advised/encouraged to visit the site for actual assessment of the project site location and its consequences during execution of work
13.	Pre Bid Meeting	06/11/2025 at 11:30 AM to be held in the office of Sr. General Manager, Construction Management Unit-I
14.	Last date & time for online submission of Technical & Financial Bid	17/11/2025 up to 15:00 hours
15.	Offline Submission of Technical document, Tender Fees, EMD etc. as detail in Tender for bidders.	17/11/2025 up to 15:00 hours in the office of Sr. General Manager, Construction Management Unit-I at 1 st Floor, NPCC Building, Plot No. 148, Sector- 44 Gurugram-122003, Haryana
16.	Online opening of Technical Bid	18/11/2025 up to 15:00 hours
17.	Online opening of Financial Bid	Intimated to Technical Qualified Bidders.
18.	Item Rate Tender	If the Bidder quotes any DSR Item above then 10% of the corresponding DSR rate. Then it shall be treated as abnormal rate. In these cases, during the financial evaluation of L-1 Bidder, such rates shall be restricted to only 10% above of the DSR rate and accordingly work shall be awarded.
19.	Tender Inviting Authority & Communication address during Tendering and Execution of Works	Sr. General Manager Construction Management Unit-I 1st floor, Plot no. 148, Sector- 44, Gurugram, Haryana-122003 Email: wss@wapcos.co.in Contact No. +91-124-4488018
20.	The Bid Security/ EMD / Solvency Certificate / BG against Performance Security/ BG against Mobilization Advance/ shall be addressed to WAPCOS Corporate Office	WAPCOS Limited 76-C, Institution Area Sector-18, Gurugram, Haryana-122015

- The tender document has to be viewed/ downloaded from above specified websites. Bidders are advised to visit above specified websites regularly for updates /Amendments/ Corrigendum, if any and not be published elsewhere. The Updates/Corrigendum/Addendum shall be followed up to submission of tender and it will be the part of tender.
- The purpose of this NIT is to provide interested parties with information to assist the preparation of their bid. While WAPCOS Limited has taken due care in the preparation of the information contained herein, and believe it to be complete and accurate, neither it nor any of its authorities or agencies nor any of its respective officers, employees, agents or advisors give any warranty or make any representations, expressed or implied as to the completeness or accuracy of the information

contained in this document or any information which may be provided in association with it. The Bidders must read all the terms and conditions of bidding document carefully and only submit the bid, if eligible and in possession of all the documents required. Corrigendum while all efforts have been made to avoid errors in the drafting of the tender documents, the Bidder is advised to check the same carefully. No claim on account of any errors detected in the tender documents shall be entertained.

- Further, WAPCOS Limited does not claim that the information is exhaustive. Respondents to this NIT are required to make their own inquiries/ surveys and will be required to confirm, in writing, that they have done so and they did not rely solely on the information in NIT. WAPCOS Limited is not responsible if no due diligence is performed by the bidders.
- If the office of WAPCOS Limited happens to be closed on the last date and time mentioned for any of the event, the said event will take place on the next working day at the same time and venue.
- WAPCOS Ltd. reserves the right to accept or reject any or all bids without assigning any reasons. No Bidder shall have any cause of action or claim against the WAPCOS Ltd. For rejection of his Bid and will not be bound to accept the lowest or any other tender.
- No reimbursement of cost of any type or on any account will be paid to persons or entities submitting their Bid.
- All information submitted in response to this NIT shall be the property of WAPCOS Limited and it shall be free to use the concept of the same at its will.
- It is hereby declared that WAPCOS is committed to follow the principle of transparency, equity and competitiveness in public procurement. The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer/bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected. This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the WAPCOS.

For and on behalf of WAPCOS LIMITED
Sr. General Manager

SECTION– I

INSTRUCTIONS TO BIDDER

SECTION- I INSTRUCTIONS TO BIDDER

1.0 SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING

1.1 GENERAL

Submission of Online Bids is mandatory for this Tender. E-Tendering is a methodology for conducting Public Procurement in a transparent and secured manner. For conducting electronic tendering, bidders shall use the portal www.etenders.gov.in/eprocure. Tender is invited in Single Stage -Two Envelope system, one Technical Bid and second as financial bid. Accordingly, bidder is directed to make all formalities and registration on www.etenders.gov.in/eprocure website and submit the Technical Bid and Financial bid.

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained from website: <https://etenders.gov.in/eprocure/app> .

1.2 REGISTRATION

- a) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://etenders.gov.in/eprocure/app>) by clicking on the link “Online bidder Enrollment” on the CPP Portal which is free of charge.
- b) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- c) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- d) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.
- e) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- f) Bidder then logs in to the site through the secured log-in by entering their user ID /password and the password of the DSC / e-Token.

1.3 SEARCHING FOR TENDER DOCUMENTS

- a) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- b) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS / e- mail in case there is any corrigendum issued to the tender document.
- c) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

1.4 PREPARATION OF BIDS

- a) Bidder should take into account any corrigendum, Addendum published on the web portal along with tender document before submitting their bids.
- b) Bidder should read the tender document, corrigendum, Addendum and any other related correspondence, carefully to understand the documents required to be submitted as part of the bid.
- c) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

1.5 SUBMISSION OF BIDS

- a) Please uninstall any Java version if installed already. Then go to this link <https://eprocure.gov.in/cppp/jre-windows-i586.exe> and download this prescribed version of java for this portal.
- b) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- c) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- d) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- e) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- f) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- g) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- h) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- i) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener’s public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- j) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- k) Upon the successful and timely submission of bids (i.e. after Clicking “Freeze Bid Submission” in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- l) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

2.0 INSTRUCTIONS TO BIDDER

The purpose of these instructions to serve as a guide to Bidders for preparing offer for carrying out the project in all respect.

- a) Submission of a tender by a tenderer implies that the bidder has read Each Section of Tender Document, Corrigendum, Addendum and other related correspondence and has made himself aware about the complete scope of work under the tender document. Accordingly, Contract shall be governed by each Section of Tender Document and all other Conditions mentioned in the tender documents.
- b) WAPCOS Limited desires that the bidders, suppliers, and sub-contractors under the Project, observe the highest standard of ethics during the performance, procurement and execution of such contracts. In pursuance of this requirement, WAPCOS Limited, defines, for the purposes of this provision, the terms set forth below:
 - i. “Corrupt Practice” means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - ii. “Fraudulent Practice” means any act of submission of forged documentation, or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation, or to succeed in a competitive bidding process;
 - iii. “Coercive Practice” means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - iv. “Collusive Practice” means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

Will reject the award of Contract, even at a later stage, if it determines that the bidder recommended/ selected for award/awarded has, directly or through an agent, engaged in Corrupt, Fraudulent, Collusive, Or Coercive Practices in competing for the Contract;

Will sanction a party or its successors, including declaring ineligible, either indefinitely or for a stated period of time, to participate in any further bidding/procurement proceedings under the Project, if it at any time determines that the party has, directly or through an agent, engaged in Corrupt, Fraudulent, Collusive, Or Coercive Practices in competing for, or in executing, the contract; and the party may be required to sign an Integrity Pact, if required; and WAPCOS Limited will have the right to require the bidders, or its suppliers, contractors and consultants to permit WAPCOS Limited to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by WAPCOS Limited at the cost of the bidders.

The Bidder must obtain for himself on his own responsibility and at his own expenses all the information which may be necessary for the purpose of making a bid and for entering into a contract, must examine the Drawings, must inspect the sites of the work, acquaint himself with all local conditions, means of access to the work, nature of the work and all matters pertaining

thereto. WAPCOS Limited will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

- a) All Bidders are hereby explicitly informed that conditional offers or offers with deviations from the Conditions of Contract, the bids not meeting the minimum eligibility criteria, Technical Bids not accompanied with EMD and Tender Document Fees of requisite amount in acceptable format, Bids in altered/modified formats, or in deviation with any other requirements stipulated in the tender documents are liable to be rejected.
- b) The company reserves the right to waive minor deviations if they do not materially affect the capability of the Tenderer to perform the contract
- c) The bidders shall not tamper or modify any part of the tender documents in any manner. In case in part of the bid is found to be tampered or modified at any stage, the bids are liable to be rejected, the contract is liable to be terminated and the full earnest deposit/retention money/performance guarantee will be forfeited and the bidder will be liable to be banned from doing any business with WAPCOS Limited.
- d) Incomplete Price bid shall be liable to be rejected, at the discretion of WAPCOS Limited. The total bid price shall cover the entire scope of works covered in the tender.

3.0 EARNEST MONEY DEPOSIT (EMD) / BID SECURITY

The Earnest Money Deposit shall be as per the details mentioned in NIT. EMD shall not carry any interest. The Bid Security/ EMD of the unsuccessful bidder shall be returned at the earliest after expiry of final bid validity period and latest by 30th days after the award of the contract. Bid Security shall be refunded to the successful bidder on receipt of Performance Security.

The successful bidder shall accept the Letter of Award (LOA) within 15 (Fifteen) days from receipt of the same, failing which the EMD shall be forfeited and the award of work may be liable to be cancelled.

If any bidder withdraws or make any changes in his offer already submitted before the expiry of the validity period or any extension thereof without the written consent of the company, the EMD amount will be forfeited for such act of the bidder.

WAPCOS Limited reserves the right of forfeiture of Earnest Money deposit (EMD) in case of the successful bidder.

- i. After opening of Tender, revokes his tender within the validity period or increases his earlier quoted rates.
- ii. Does not commence the work within the period as per LOA/Contract. In case the LOA/Contract is silent in this regard then within 15 days after award of contract.

The Bid Security will be forfeited in the bidder

- i) withdraws or amends its/ his tender;
- ii) impairs or derogates from the tender in any respect within the period of validity of the tender;
- iii) If the bidder does not accept the correction of his bid price during evaluation; and
- iv) If the successful bidder fails to sign the contract or furnish the required performance security within the specified period.

4.0 LANGUAGE OF BID

The Bid and all related correspondence and documents relating to the Project shall be in English language. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate English translation which shall be certified by a qualified translator. Any material that is submitted in a language other than English and which is not accompanied by an accurate English translation will not be considered.

5.0 BIDDERS RESPONSIBILITY

The Bidder is solely responsible for the details of their Bid and the preparation of bids. In no case shall the WAPCOS be responsible for any part of the tender documents submitted by him. Any Site information given in this tender document is for guidance only. The Bidder is advised to visit and examine the Site of works and its surroundings at their cost and obtain for themselves on their own responsibility, all information that may be necessary for preparing the tender and entering into a Contract. Irrespective of whether or not the Bidders have attended the pre-bid meeting, they shall be deemed to have inspected the Site and its surroundings beforehand and taken into account all relevant factors pertaining to the Site and clarifications/ modifications/ additions given in Pre-Bid meeting or addendum issued in the preparation and submission of the Bid.

The Bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs. WAPCOS Limited shall in no case be responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

6.0 PERIOD OF COMPLETION

The completion period shall be as per NIT. The completion period is for the entire work of planning, execution, approvals, arrangement of materials, equipment, delivery at site including transportation, construction/ installation, testing, commissioning, NoCs & statutory approvals from local bodies and successfully handing over of the entire project to the satisfaction of the Principal Employer/ Employer.

7.0 AMENDMENT OF BID DOCUMENTS

At any time prior to the deadline for submission of bids, the Employer may, for any reason (s), whether at their own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by the issuance of a corrigendum/ addendum. No modification of Bid shall be permissible after last date of submission, whatever may be the reason. The Employer may at their discretion extend the deadline for submission of Tender/ Bid, if considered necessary.

Any corrigendum/ addendum thus issued shall be part of the bidding documents. Prospective Bidders shall download the same from the e-portal and submit along with the submission of Bid as token of acceptance.

8.0 BID VALIDITY PERIOD

Bids validity will be as per NIT. In exceptional circumstances, on expiry / prior to expiry of original bid validity period, the WAPCOS may request the successful bidder for a specified extension in the period of validity. A Bidder may accept OR refuse the request of extension of validity period. A Bidder agreeing Extension of validity period will not be required/nor permitted to modify his bid. In case of refusal of request of extension of validity period tender will be cancelled.

9.0 CURRENCY OF BID

Bid prices shall be quoted in Indian Rupees.

SECTION– II

SELECTION AND QUALIFYING CRITERIA

SECTION-II

SELECTION AND QUALIFYING CRITERIA

1.0 SITE VISIT

Intending Bidder(s) are advised to inspect and examine the site at his own cost and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid in order to avoid impractical and non-serious bids. A bidder(s) shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed.

The bidder(s) shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder(s) implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work

The bidder and any of its personnel or agents will be granted permission by the Employer/Owner to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the bidder, its personnel, and agents will release and Indemnify the Employer/Owner and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.

2.0 PRE-BID MEETING

Prospective Bidder requiring any clarification of the bidding documents may notify the Employer via email mentioned in NIT, at least one working day prior to pre-bid meeting. The queries shall be discussed during the pre-bid meeting. Thereafter no further queries/clarifications shall be entertained. The Employer will reply to only those queries which are received before the scheduled time as mentioned above, which are essentially required for submission of bids. The Employer will not reply to the queries which are not considered fit like replies of which can be implied /found in the NIT/Tender Documents or which are not relevant or in contravention to NIT/Tender Documents.

The pre-bid meeting shall be held at the communication address mentioned in NIT. The Addendum/ Corrigendum/Replies to pre bid queries as per Pre bid meeting, shall be uploaded on e-portal & WAPCOS website.

3.0 QUALIFYING CRITERIA: ONLINE TECHNICAL BID SUBMISSION

The intending bidders should only submit bid if he considers himself eligible and will be Technically Qualified, if have all the Documents as mentioned below in Table-1: “ Documents for Technical Qualification”.

Table-1 shall also be considered as “CHECK LIST” for submission of documents. The bidder will upload all the required documents as per Table-1 on Online Portal and same shall be submitted Offline.

The “**MANDATORY GUIDELINES**” for “Uploading of Technical Bids” and “Submission of Offline Bids” are as below:

a) UPLOADING OF TECHNICAL BIDS

- 1) Bidder will arrange & prepare the all required documents as per Table no.-1.
- 2) After that Bidder will arrange all these documents serial wise as per order given in Table-1 i.e. S.N: a) to u) below
- 3) After that bidder will put continuous page number (without any break) on each page.
- 4) These page numbers shall be mentioned by bidder in “Check List” against each required documents
- 5) This numbered check list prepared by bidder shall be put on top of arranged numbered documents as per above Sno.2.
- 6) After that Authorized representative of bidder shall Sign & Stamp on each page of these arranged numbered documents.
- 7) The numbered Check List along with required Qualifying Documents arranged as per above Sno-1 to 6 shall be scanned in coloured by bidder and will be uploaded Online for “Technical Evaluation”. If file size is increasing, these documents may be split in parts, however serial / order will be kept as per above Sno. 2 & 3 for ease of “Technical Evaluation”
- 8) **Note: There is no need to add any other additional documents apart from the documents asked in Table-1, as additional documents will not be considered during Technical Evaluation**

b) SUBMISSION OF OFFLINE BID

- 9) The proper binded, above Qualifying Documents arranged & page numbered by bidder along with Check List on top (as per above S.no. 1 to 6) with Signed & Stamped on Each Page shall be submitted in one (1) separate sealed envelope clearly labeled as “TECHNICAL BID” for the Work (Write Name of Work as mentioned in NIT) along with Details of Bidders Address, Phone, E-mail on Envelope.
- 10) **NOTE:-** The above offline documents shall be submitted by bidder on WAPCOS address as per date & time mentioned in NIT, otherwise bids shall be rejected.

Note: The Work is to be executed on priority basis as desired by CBSE. Bidders are advised to follow strictly above-mentioned submission guidelines. WAPCOS is not bound to request for missing/left documents by the Bidders. The Bid shall be rejected in case of bid is not submitted as per NIT guidelines.

Table -1: Documents for Technical Qualification				
CHECK LIST				
Name of Bidder		M/s.....		
Name of Work:		Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata		
SN	Particular of Document	Page Nos. (from – to)	Remarks	
			Yes	No
a)	Authority to Sign the Tender c) In case of proprietary firm, the Proprietor shall sign with full name, current address OR by the authorized person holding Notarized Power of Attorney issued by the Proprietor for signing of business proposal. The Power of Attorney shall <u>be submitted in original and shall be specific to this Bid submission only and mentioning the name of the work/project</u> d) In case of a Limited Company or Corporation, the Application shall be signed by an authorized person holding the Power of Attorney for signing of business proposal. A certified copy of the Power of Attorney shall accompany the Application. Note: Power of Attorney duly notarized and on a stamp paper of appropriate value, issued for signing the tender documents, make corrections/ modifications, to interact with the Employer and act as the contact person, shall be submitted along with Technical Bid.			
b)	Scanned copy of EMD Documents.			
c)	Scanned copy of Demand Draft for Tender Fees			
d)	Letter of Transmittal For Technical Bid along with Declaration by the Bidder on bidder's original letter Head as per given format.			
e)	Letter of Transmittal For Financial bid along with Declaration by the Bidder on bidder's original letter Head as per given format. – Undertaking regarding restriction on quoting of DSR Items to 10% of corresponding DSR Rates.			
f)	Bidder shall submit “Financial Information” regarding Turnover, Profit/Loss and Net Worth certificate for Last 5 (five) years ending on the financial year 2024-25 in Form-A duly certified by Statutory Auditor of the firm/company which must carry UDIN (Unique Document Identification Number) in original. Profit / loss (after Tax): The Bidder should not have incurred any loss (profit after tax should be positive) in more than two years during last five years ending 2024-25. Turnover: Average annual financial turnover of			

	Bidder should be at least 50% (4.32 Crores) of the estimated cost of work during the immediate last 3 consecutive financial years ending 2024-25 • Net Worth: Net worth of the Bidder should be positive during the last financial year 2024-25. The requisite certificates must be certified by statutory auditor of the firm/company. • Bidder shall attach Balance Sheet and Profit & loss Statement, duly audited by Statutory Auditor of the firm for last 5 (five) years ending on the financial year 2024-25 in support of Form-A Note: This Certificate will be verified through ICAI Portal using UDIN number mentioned in Form-A Note: There is no need to upload entire voluminous balance sheet. However, summarized balance sheet (Audited) and summarized Profit & Loss Account (Audited) for last 05 years shall be uploaded.			
g)	Solvency Certificate The bidder contractor should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Bank Solvency Certificate issued from a Nationalized / Scheduled Commercial Bank approved by Reserve Bank of India (RBI) should be at least 40% (0.89 Crores) of the estimated cost of the work. The Certificate should be issued between the publishing of NIT & last date of submission of Bids, including extensions if any and shall be addressed to WAPCOS Limited, 76-C, Institutional Area, Sector-18, Gurugram, Haryana <u>specific to this Bid submission only and mentioning the name of the work/project.</u> The certificate shall be submitted in original and the colour / b&w copy / scanned copy shall not be accepted. The certificate should carry name, designation of the bank official, who has the authority to issue Solvency Certificate Note: This Certificate will be verified from the issuing authority by WAPCOS			
h)	Completed Similar Work Criteria: The bidder should have satisfactorily completed the similar types of works as mentioned below during the last seven years ending previous day of last date of submission of tender. i) One similar completed work costing not less than 80% (Rs. 6.91 Crores) of the estimated cost of work. Or ii) Two similar completed works of order value each not less than 50% (Rs. 4.32 Crores) of the estimated cost of work. Or iii) Three similar completed works of order value not less			

	than 40% (Rs. 3.46 Crores) of the estimated cost of work. Note: Similar work shall mean completed Non-residential Building e.g. Office/Administrative/Institutional/Buildings including Mechanical/ Electrical/ Plumbing works during last seven years executed for State or Central Governments/ Departments/ Ministries/ Authorities/ Public Sector Undertakings. The bidder shall submit Completion Certificate(s) for the same along-with LOI(s)/W.O(s) from respective Owner(s)/Client(s). The value of the work done declared is to be without GST / Taxes. For the works, where the Taxes or GST is not clearly defined, the value of works shall be considered as including GST and GST @12% shall be deducted for the works completed up to 31.12.2021 and GST @18% shall be deducted for the works completed after 01.01.2022 to establish the value of work done. The value of executed works shall be brought to the current level by enhancing the actual value of work done at a simple rate of 7% per annum, calculated from the actual date of completion mentioned in the completion certificate to the date of floating of this tender. The bidders submitting experience certificate for the works done in joint venture (JV)/consortium with other firms/companies, their proportionate experience to the extent of its share in the JV/consortium or work done by them shall only be allowed on submitting the valid proof of their share/ work done Note: The completion / experience certificates, along with the supporting documents, shall be got verified from the issuing authority / organizations prior to opening of Financial Bid. In case, the works / certificates are not verified by the issuing authority, WAPCOS reserves the right to reject the bid of the bidder.			
i)	The contractor should also have at least one satisfactorily completed similar work of any value in West Bengal for State or Central Governments/ Departments/ Ministries/ Authorities/ Public Sector Undertakings during the last seven years ending previous day of last date of submission of tender: The bidder shall submit Completion Certificate(s) for the same along-with LOI(s)/W.O(s) from respective Owner(s)/Client(s).			

	The copy of completion certificates shall be got verified from the issuing authority/organizations prior to award of works.			
j)	The contractor should also have at least one satisfactorily completed Furniture supply/installation work of any value for State or Central Governments/ Departments/ Ministries/ Authorities/ Public Sector Undertakings during the last seven years ending previous day of last date of submission of tender: The bidder shall submit the LOI(s)/W.O(s) from respective Owner(s)/Client(s). The copy of completion certificates shall be got verified from the issuing authority/organizations prior to award of works.			
k)	Verification of Solvency Certificate and Completion & Performance Certificates. Verification should be done from the official email id of issuing Authorities. The bidder will provide official e-mail, Landline number of the Issuing Authorities in prescribed Form-C with undertaking. Bidder will ensure the email ids and landline are in working condition. If Solvency Certificate, completion, performance certificates are not verified by the issuing authority, then it will not be considered for technical evaluation.			
l)	Bid Capacity as prescribed in Form-D. The bidder should possess the bidding capacity as calculated by the specified formula. The formula generally used is: Available bid capacity = A x 1.5 x N – B, where A = Maximum value of engineering (Civil/ Electrical/ Mechanical as relevant to work being procured) works executed in any one year during the last five years (updated at the current price level), taking into account the completed as well as works in progress. N = Number of years prescribed for completion of the work in question. B = Value (updated at the current price level) of the existing commitments and ongoing works to be completed in the next 'N' years. NOTE: The bidder shall furnish statements showing the value of existing commitments and on-going works as well as stipulated period of completion remaining for each of the works separately. The value of executed works shall be brought to the			

	current level by enhancing the actual value of work done at a simple rate of 7% per annum, calculated from the actual date of completion mentioned in the completion certificate to the date of floating of this tender.			
m)	EPF Registration: The agency may have EPF registration as per norms.			
n)	GST Registration & PAN: Bidder shall submit valid GST registration certificate for the state where work is to be executed and PAN Card. If not registered till date of submission of bid, bidder will give undertaking on bidder letter head stating that they will get registered in GST as per Govt. norms before submitting of 1 st bill of executed works.			
o)	Indian Registered Company: The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship Firm/ Partnership Firm. Joint ventures are not accepted. Copy of Certificate of Incorporation/ Registration/ Partnership Deed Registration or any other relevant document, as applicable, should be submitted along with a copy of address proof. NOTE: Proprietor firms shall submit registration details or shall submit the copy of relevant page of Pass book for the Current Account in the name of Proprietor Firm.			
p)	Structure & Organization: The bidder will submit Name, address, details of the organization, Name(s) of the Owner/partners/promoters and Directors of the firm/ company as prescribed in Form-E.			
q)	Undertaking for Manpower Deployment: The bidder will submit “ Undertaking for Manpower Deployment ” as prescribed in Form -F			
r)	Non - Conviction Certificate: The bidder will submit the undertaking regarding “ Non – Conviction Certificate ” as prescribed in Form-G.			
s)	No Deviation Certificate: The bidder will submit ‘ No Deviation Certificate ’ as prescribed in Form-H.			
t)	Undertaking regarding Blacklisting / Non Debarment The bidder will submit the “Undertaking regarding Blacklisting / Non Debarment” as prescribed in			

	Form-I.			
u)	Undertaking regarding Restriction under Rule 144(XI) of the General Finance Rules (GFRs) 2017 The bidder will submit the “Undertaking regarding Restriction under Rule 144(XI) of the General Finance Rules (GFRs) 2017” as prescribed in Form –J.			
v)	Preference to Make in India: The bidder shall submit undertaking indicating percentage of local content used during the execution of work as per the order of Public Procurement (Preference to Make in India) as prescribed in Form-K duly signed by Statutory Auditor and must carry UDIN (Unique Document Identification Number) Note: This Certificate will be verified through ICAI Portal using UDIN number mentioned in Form-K			
w)	Understanding The Project Site The bidder will submit the “Understanding The Project Site” as prescribed in Form –L.			
x)	Undertaking for Performance of works awarded by WAPCOS (Completed & Ongoing) as prescribed in Form-M			

Date:

Place:

(Signature, Name, Designation
of the Authorized signatory with Seal)

4.0 CONTENTS OF FINANCIAL BID

The Financial Bid should be uploaded online before last date & time of submission of Tender Document.

Quoted amount by the Bidder shall be firm during the performance of the Contract. Quoted amount by the Bidder with any condition shall not be accepted and same is liable to be rejected. Quoted amount by the Bidder shall include all Materials, Tools & Plant, labour, supervision, profit; other levies together with all general risks, liabilities and obligations set out or implied in the contract, applicable Labour Cess, cost of insurance to this contract, all applicable tax liabilities like Income Tax & Surcharges, etc. Any other taxes /cess as per Government directives shall be deducted from each bill paid to the Contractor, from time to time. GST shall be payable extra as per prevailing rates.

The Contractor shall submit e-invoice / Tax Invoice (as applicable for the bidder's Firms) to WAPCOS showing (i) Basic amount (ii) GST amount separately in each bill. It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable. The Goods and Services Tax (GST), shall be reimbursed to the Agency only after uploading of bills by Contractor on GST Portal "to avail Input benefit of GST".

The WAPCOS shall be performing all its duties of deduction of TDS and other deduction on payment made to the contractor as per applicable legislation in force on the date of submission of bid or to be newly/amended introduced during the execution of the Contract.

5.0 OPENING OF FINANCIAL BID

The financial bids of the technically qualified bidders shall be opened at the notified date & time. Final selection of the bidder will be made based on the least cost method.

6.0 SIGNING OF THE CONTRACT

The letter of Award will be issued to the successful bidder by WAPCOS which will be duly signed & stamped by the successful bidder as token of unequivocal acceptance and confirmation within 5 working days. Subsequently, successful bidder shall submit the Performance Security of required value within the specified time period. Thereafter, on a date and time mutually agreed upon, the successful Bidder or his authorized representative shall attend the office for signing of the Contract Agreement.

Failure on the part of the successful Bidder to comply with the above requirements will constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security.

SECTION – III

FORMS

	LETTER OF TRANSMITTAL FOR TECHNICAL BID AND FINANCIAL BID ALONG WITH DECLARATION
FORM-A	FINANCIAL INFORMATION
FORM-B	SOLVENCY CERTIFICATE
FORM-C	CORRESPONDENCE DETAILS OF ISSUING AUTHORITY
FORM-D	BID CAPACITY
FORM-E	STRUCTURE & ORGANISATION
FORM-F	UNDERTAKING FOR MANPOWER DEPLOYMENT
FORM-G	NO CONVICTION CERTIFICATE
FORM-H	NO DEVIATION CERTIFICATE
FORM-I	UNDERTAKING REGARDING BLACKLISTING / NON DEBARMENT
FORM-J	UNDERTAKING FOR RESTRICTION UNDER RULE 144(XI) OF GFRs
FORM-K	PREFERENCE TO MAKE IN INDIA
FORM-L	UNDERSTANDING THE PROJECT SITE
FORM-M	UNDERTAKING FOR PERFORMANCE OF WORKS AWARDED BY WAPCOS (COMPLETED & ONGOING)

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**LETTER OF TRANSMITTAL FOR TECHNICAL BID**

To,
 Sr. General Manager
 Construction Management Unit-I
 1st floor, Plot no. 148,
 Sector- 44, Gurugram, Haryana-122003
Email: wss@wapcos.co.in
Contact No. +91124-4488018

Subject: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

Sir,

Having examined the details given in tender document for the above work, I/we hereby submit the relevant information.

- i. I / We acknowledge that the WAPCOS will be relying on the information provided in the Bid and the documents accompanying the Bid & detailed provided in the enclosed "Forms" for selection of the Contractor for the aforesaid Project, and we certify that all information provided in the Bid are true and correct; nothing has been omitted which renders such information misleading; and all documents accompanying the Bid are true copies of their respective originals.
- ii. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- iii. I/we submit the requisite Solvency Certificate, Completion Certificates and Financial Information's and authorize WAPCOS Ltd. to approach the Issuing Authority to confirm the correctness thereof. I/we also authorize WAPCOS Ltd. to approach individuals, employers, firms and corporation to verify our competence and general reputation.
- iv. I/ We acknowledge the right of the Authority to reject our Bid without assigning any reason or otherwise and hereby waive, to the fullest extent permitted by applicable law, our right to challenge the same on any account whatsoever.
- v. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Name of work	Certificate from

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

LETTER OF TRANSMITTAL FOR FINANCIAL BID

Date:

To
Sr. General Manager
Construction Management Unit-I
1st floor, Plot no. 148,
Sector- 44, Gurugram, Haryana-122003
Email: wss@wapcos.co.in
Contact No. +91124-4488018

Sub: Financial Bid for the Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

Dear Sir,

With reference to this Tender Document, I/we, having examined the Bidding Documents and understood their contents, hereby submit my/our Bid for the aforesaid Project. The Bid is unconditional and unqualified.

1. The Cost has been quoted by me/us for bid after taking into consideration all the terms and conditions stated in the Tender Document, our own estimates of costs and after a careful assessment of the site and all own the conditions that may affect the project cost and implementation of the project.
2. I / We have not quoted any DSR Item of BOQ above than 10% of the corresponding DSR rate. If being an L-1 Bidder during financial evaluation, any DSR Rate is found to be more than 10% than I / We understand that WAPCOS in such case restrict the rate to only 10% above of the DSR rate and accordingly work shall be awarded.
3. I / We shall keep this offer valid as period specified in the NIT.
4. I / We hereby submit our FINANCIAL BID and Offer Cost as filled in format given on online portal for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**DECLARATION BY THE BIDDER**

This is to certify that We, M/s, in submission of this offer confirm that:-

We have inspected the site of work and have made myself/ourselves fully acquainted with local conditions in and around the site of work. We have carefully gone through each & every section of the tender document for the work **Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata.**

1. Our tender is offered taking due consideration of all factors mentioned in tender documents.
2. We promise to abide by all the stipulations of the Contract documents and carry out and complete the work to the satisfaction of the Employer/ Principal Employer.
3. We also agree to procure Plants and Machineries at our cost required for the work. We also submit that we have Organizational Structure comprising adequate Technical Personnel in the line of requirement. We also agree to accomplish the job entrusted to us in the stipulated time laid out in document except situations not under our control.
4. We have not made any misleading or false representation in the forms, statement and attachments in proof of the qualification requirements;
5. We do not have records of poor performance such as abandoning the work, not properly completing the Contract, inordinate delays in completion or financial failures etc.
6. We have submitted all the supporting documents and furnished the relevant details as per prescribed format.
7. We are financially sound and have not applied or be under corporate debt restructuring.
8. List of Similar Works satisfying Qualification Criterion as indicated hereinafter, does not include any work which has been carried out by us through a Subcontractor on a back-to-back basis.
9. The Cost has been quoted by me/us for bid after taking into consideration all the terms and conditions stated in the Tender Document, our own estimates of costs and after a careful assessment of the site and all own the conditions that may affect the project cost and implementation of the project.
10. I / We shall keep this offer valid as period specified in the NIT.
11. I / We hereby submit our FINANCIAL BID and Offer Cost for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.
12. In the event of my/ our being declared as the Selected Bidder, I/we agree to enter into a Agreement in accordance with the format of Contract Agreement. We agree not to seek any changes in the aforesaid format of Contract Agreement and agree to abide by the same.

Certificate:

It is certified that the information given in the enclosed bid are correct. It is also certified that I/we shall be liable to be debarred, disqualified / cancellation of enlistment in case any information furnished by me/us found to be incorrect.

Date:**(Signature, Name, Designation
of the Authorized signatory with Seal)****Place:**

**[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF STATUTORY AUDITOR
OF BIDDER]**

FORM-A: FINANCIAL INFORMATION

Years	Gross Annual turnover	Profit/Loss (After Tax)	Net worth
2020-2021			
2021-2022			
2022-2023			
2023-2024			
2024-2025			

Above Details are being furnished as per the figures in balance sheet for the last five years in respect of M/s(Name & address of firm of bidder), as submitted by the firm to the Income Tax Department.

Date:

**(Signature of Statutory Auditor with Seal)
UDIN No. :**

Place:

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF ISSUING BANK]

FORM- B: SOLVENCY CERTIFICATE

To
WAPCOS Limited,
76-C, Institutional Area,
Sector-18, Gurugram, Haryana

Name of Work: **Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata**

This is certify that to the best of our knowledge and information that M/s(name of bidder &address).....
.....
.....
.....
.....

(Signature for The Bank)

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**FORM-C: CORRESPONDENCE DETAILS OF ISSUING AUTHORITY****Solvency Certificate/ Completion Certificate / Performance Certificate**

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

A. Solvency Certificate

Present address of the Issuing Branch	Official Email Id	Landline no	Other Contact no.

B. Completion Certificate for Similar works under Table -1 (g) (h) and (i)

Present address of the Issuing Authority	Official Email Id	Landline no	Other Contact no.

This is to certify that above information is correct and is gathered from the Issuing Authorities by us for the verification of concerned documents. We understand that if the documents is not verified by the issuing authority, then our bid is liable to be rejected.

Date:**(Signature, Name, Designation
of the Authorized signatory with Seal)****Place:**

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**FORM- D: BID CAPACITY**

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

Available bid capacity = $A \times 1.5 \times N - B$

Where,

A = Maximum value of engineering (Civil/ Electrical/ Mechanical as relevant to work being procured) works executed in any one year during the last five years (updated at the current price level), taking into account the completed as well as works in progress.

N = Number of years prescribed for completion of the work in question.

B = Value (updated at the current price level) of the existing commitments and ongoing works to be completed in the next 'N' years.

Existing Commitments & on-going works details:

Description of work	Location	Contract no.	Name of address of Client	Value of Contract (Rs. Cr.)	Stipulated period of completion	Value of remaining work (Rs. cr.)	Anticipated date of completion

NOTE:

The bidder shall furnish statements showing the value of existing commitments and on-going works as well as stipulated period of completion remaining for each of the works separately.

The value of executed works shall be brought to the current level by enhancing the actual value of work done at a simple rate of 7% per annum, calculated from the date of completion of last day of the month previous to the one in which applications are invited.

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)**FORM- E: STRUCTURE & ORGANISATION**

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

S.No.	Particulars	Details
1.	Name & Registered Address of the Bidder	
2.	Address and Email on which correspondence will be made during Tendering & after Award of Work	Name of Person: ...<u>who will sign tender</u> Mobile No. : Email: Address:
3.	Telephone no./Mobile no./Fax no.	
4.	Legal status of the Bidder (attach copies of original document defining the legal status) (a) A Proprietary Firm (b) A Partnership Firm (c) A Limited Company or Corporation (d) A Company registered under company's Act 1956/2013	
5.	Particulars of Registration with various Government Bodies (Attach attested photocopy) Organization/Place of Registration 1. 2. 3.	Registration No. 1. 2. 3.
6.	Names and Titles of Directors with designation as per Legal Status of Company	
7.	Designation of Senior Level Officers authorized to act for this work	
8.	Any other information considered necessary but not included above.	

Date:

Place:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM- F: - UNDERTAKING FOR MANPOWER DEPLOYMENT

Name of Work : Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

This is to certify that We, M/s
....., in submission of this offer
confirm that:-

- I. Our tender is offered taking due consideration of all factors including site requirements information and conditions stated in the detailed Instructions to Bidders to execute the work up to the standards as laid out in Employer's Requirements and other sections of Tender Document.
- II. We agree to employ the number of technical staff during the execution of this work as defined in the tender document. We shall deploy additional manpower as deemed fit and required to complete the project within stipulated completion period, without any additional cost to the Employer.
- III. WAPCOS shall have full power and without giving any reason to us, immediately to get removed any representative, staff and workmen or employees on account of misconduct negligence or incompetence or whose continued employment may in his opinion be undesirable. We shall not claim any compensation on this account.
- IV. In case we fail to deploy the technical staff as mentioned in the tender document, we shall be liable to pay recovery for each month of default as mentioned in Tender Documents. The details of Deployment of Technical Staff will be submitted with each Bill duly certified by The Project Manager, WAPCOS. We shall not raise any objection if deduction is made for the same from Running Bills.

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-G: NO-CONVICTION CERTIFICATE

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

This is to certify that _____ (Name of the organization), having registered office at _____ (Address of the registered office) has never been convicted by any Central / State Government Department or Court of law anywhere in the country.

This is also to certify that we are not involved in any form of Corrupt and Fraudulent Practices in past and will never be involved in future.

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-H: NO DEVIATION CERTIFICATE

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

This is to confirm that as per Tender conditions we have visited site before submission of our Offer and noted the job content and site condition etc. We also confirm that we have not changed/modified the above tender document and in case of observance of the same at any stage it shall be treated as null and void.

We hereby also confirm that we have not taken any deviation from Tender Clause together with other reference as enumerated in the above referred Notice Inviting Tender and we hereby convey our unconditional acceptance to all terms & conditions as stipulated in the Tender Document.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null and void.

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-I: UNDERTAKING REGARDING BLACKLISTING / NON DEBARMENT

Name of Work Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

This is to certify that we have taken the cognizance of Blacklisting Policy of WAPCOS Ltd. Further, we hereby Confirm and declare that we, M/s_____ , is not blacklisted/De-registered/debarred by any Government Department/Public Sector Undertaking /Private Sector/ or any other agency for which we have Executed / Undertaken the works/ Services during the last 5 Years.

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

**FORM-J: UNDERTAKING FOR RULE 144 (XI) IN THE GENERAL FINANCIAL
RULES-2017**

**Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC
Square, New Town, Kolkata**

I / we(Name of the Firm)
well aware about the Restrictions under RULE 144 (XI) In General Financial Rules (GFR), 2017 on
procurement from country which shares a land border with India.. I/ we hereby certify that we are
eligible to participate in the tender as per Rule 144 (xi) In The General Financial Rules (GFR), 2017

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

[TO BE SUBMITTED ON ORIGINAL LETTER HEAD OF STATUTORY AUDITOR
OF BIDDER]

FORM-K: UNDERTAKING REGARDING PERCENTAGE OF LOCAL CONTENT

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

We, , a Chartered Accountant firm having our registered office address..... hereby state that, we are Statutory Auditor of the Company M/s..... (CIN :).

The Bidder is bidding for the “..... (Name of work)

We have understood the provisions of Public Procurement (Preference to make in India) Local content Policy against WAPCOS Tender NIT No. Date -.....

We on the basis of the bidder's representation received, hereby confirm that, offer is achieving the minimum local content target as per of above Policy shall be **50%**.

Date:

**(Signature of Statutory Auditor with Seal)
UDIN No. :**

Place:

[TO BE SUBMITTED BY BIDDER ON THEIR ORIGINAL LETTER HEAD]

FORM-L: UNDERSTANDING THE PROJECT SITE

Name of Work: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

I/we hereby certify that I/we have examined & inspected the site & its surrounding satisfactorily, where the project is to be executed. I/ We are well aware about the following

- Location of the land demarcated for the execution of work and approach/ accessibility to the site.
- Availability of all construction material required for the execution of work.
- Location of the proposed buildings and its allied works on demarcated land.
- Sources from where electric connection is to be taken by contractor at the time of mobilization or other arrangements for electricity is to be made.
- Sources from where suitable water for construction is to be arranged.
- Site clearance and location of matured trees.
- Awareness about the surrounding local conditions, villagers etc.
- Topography, contouring and any other relevant feature like Pond, nallah etc. of the land where the project is to be executed.
- Nature of the ground & sub-soil of the site and accessibility to the site.
- Location of local electrical supply line and other relevant services
- Hindrances / dispute, if any, which may arise during the execution of work

I / We hereby submit our BID considering above all facts gathered during site visit and each & every aspect have been considered in the Quoted Item Rates / price.

Date:

**(Signature, Name, Designation
of the Authorized signatory with Seal)**

Place:

[To be submitted by Bidder on their Original Letter Head]

**FORM-M: UNDERTAKING FOR PERFORMANCE OF WORKS AWARDED BY
WAPCOS (COMPLETED & ONGOING)**

Name of Tender: Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

This is to declare that our firm is/was engaged in the following completed and ongoing projects of WAPCOS as detailed below:

SN	Name of Project	Location & state	Date of Award	Date of Completion (Actual/Stipulated)	Award Value

It is mandatory to enclose all award letters/completion certificates for above mentioned project for verification.

Declaration:

We hereby declare that, to the best of our knowledge, the following statements hold true for all of the above-mentioned projects:

1. The firm has never been blacklisted by WAPCOS Limited.
2. The firm has never failed to fulfill a contract and has never been terminated for any of the above projects.
3. No Liquidated damages (LD) has been imposed on any of the above mentioned projects.
4. No Performance Bank Guarantee (PBG) has been forfeited for any of the above mentioned projects.

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

NOTE:

1. If bidder is not engaged by WAPCOS ever, then bidder will submit above information as NIL and their bid will be considered during evaluation.
2. As per the declaration, if bidder is not in comply of 04 points then he is not eligible to participate in the tender. Despite, If the bid is submitted than it shall be rejected.
3. It is mandatory for the bidder to disclose all the completed and ongoing projects in WAPCOS and to submit the Form L. If the Bidder hides any project which is under progress or completed in WAPCOS, then his bid will not be considered for evaluation.

SECTION – IV

GENERAL CONDITIONS OF CONTRACT

SECTION – IV**GENERAL CONDITIONS TO CONTRACT****1.0 GENERAL RULES AND DIRECTIONS**

General Rules & Directions	1.	The work proposed for execution by contract will be notified in a form of invitation to tender by publication in website. This form will state the work to be carried out, as well as the date for submitting and opening tenders and the time allowed for carrying out the work, also the amount of earnest money to be deposited with the tender, and the amount of the security deposit and Performance Security to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills.
	2.	In the event of the tender being submitted by a Partnership firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a Power of Attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act, 1952.
	3.	Receipts for payment made on account of work, when executed by a firm, must also be signed by all the partners, except where contractors are described in their tender as a firm, in which case the receipts must be signed in the name of the firm by one of the partners, or by some other person having due authority to give effectual receipts for the firm
Applicable for Items Rate tender only	4.	The rate(s) must be quoted in decimal coinage. Total Amount must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one. In case the lowest tendered amount (worked out on the basis of quoted rate of Individual items) of two or more contractors is same, then such lowest contractors may be asked to submit sealed revised online offer (through limited tender process) quoting rate/ cost of work of each item of the schedule of quantity for all sub sections/sub heads as the case may be, but the revised quoted rate of each item of schedule of quantity for all sub sections/sub heads should not be higher than their respective original rate quoted already at the time of submission of tender. The lowest tender shall be decided on the basis of revised offer. If the revised tendered amount (worked out on the basis of quoted rate of individual items) of two or more contractors received in revised offer is again found to be equal, then the lowest tender, among such contractors, shall be decided by draw of lots in presence of WAPCOS and the lowest contractors those have quoted equal amount of their tenders. In case of any such lowest contractor in his revised offer quotes rate of any item more than their respective original rate quoted already at the time of submission of tender, then such revised offer shall be treated invalid. Such case of revised offer of the lowest contractor or case of refusal to submit revised offer by the lowest contractor shall be treated as withdrawal of his tender before acceptance and 50% of his earnest money shall be forfeited. In case all the lowest contractors those have same tendered amount (as a result of their quoted rate of individual items), refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each

		lowest contractors. Contractor, whose earnest money is forfeited because of non-submission of revised offer, or quoting higher revised rate(s) of any item(s) than their respective original rate quoted already at the time of submission of his bid shall not be allowed to participate in the retendering process of the work
Applicable for Percentage Rate/ EPC tender only	4A	In case of Percentage Rate /EPC Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities , he will be willing to execute the work. The tender submitted shall be treated as invalid if :- 1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender. 2. The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender. 3. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected.
	4B	In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/ below on estimated cost of tender including all sub sections/sub heads as the case may be, but the revised percentage quoted above/below on tendered amount or on each sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers. In case any of such contractor refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited. If the revised tendered amount of two more contractors received in revised offer is again found to be equal , the lowest tender, among such contractors, shall be decided by draw of lots in the presence WAPCOS & the lowest contractors those have quoted equal amount of their tenders. In case all the lowest contractors those have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of each contractor, whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.
	5.	The designated committee will open tenders in the presence of any intending contractors who may be present at the time, and will enter the amounts of the several tenders in a comparative statement in a suitable form. In the event of a tender being accepted, a receipt for the earnest money shall thereupon be given to the contractor who shall thereupon for the purpose of identification sign copies of the specifications and other

		documents. In the event of a tender being rejected, the earnest money shall thereupon be returned to the contractor remitting the same, without any interest.
	6.	The officer Inviting Tenders shall have the right of rejecting all or any of the tenders and will not be bound to accept the lowest or any other tender
	7.	The receipt of an accountant or clerk for any money paid by the contractor will not be considered as any acknowledgment or payment to the officer inviting tender and the contractor shall be responsible for seeing that he procures a receipt signed by the officer inviting tender or a duly authorized Cashier.
Applicable for Items Rate tender only	8.	In the case of Item Rate Tenders, only rates quoted shall be considered. Any tender containing percentage below/above the rates quoted is liable to be rejected. Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words, then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the contractor in figures and in words tally, but the amount is not worked out correctly, the rates quoted by the contractor will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s), and amount blank, it will be presumed that the contractor has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as zero and work will be required to be executed accordingly. However, if a tenderer quotes nil rates against each item in item rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer and earnest money deposited shall be forfeited. If the Any Bidder quotes any DSR Item above then 10% of the corresponding DSR rate. Then it shall be treated as abnormal rate. In these cases, during the financial evaluation of L-1 Bidder, such rates shall be restricted to only 10% above of the DSR rate and accordingly work shall be awarded.
Applicable for Percentage Rate /EPC tender only	9.	In case of Percentage Rate / EPC Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy
Applicable for Percentage Rate EPC tender only	10.	In Percentage Rate /EPC Tender, the tenderer shall quote percentage below/above (in figures as well as in words) at which he will be willing to execute the work. He shall also work out the total amount of his offer and the same should be written in figures as well as in words in such a way that no interpolation is possible. In case of figures, the word 'Rs.' should be written before the figure of rupees and word 'P' after the decimal figures, e.g. 'Rs. 2.15P and in case of words, the word 'Rupees' should precede and the word 'Paisa' should be written at the end.
	11.	i. The Contractor, whose tender is accepted, will be required to furnish Performance Security of 5% of the Tendered Value . This Security shall be in the form of cash (in case Security amount is less than Rs.

		10,000/-) or Deposit at call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case Security amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in the with the prescribed form. ii. The contractor whose tender is accepted will also be required to furnish by way of Security Deposit for the fulfillment of his contract, an amount equal to 5% of the value of each Running & Final bill. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rates mentioned above. The Security amount will also be accepted in cash or in the shape of Government Securities. Fixed Deposit Receipt of a Scheduled Bank or State Bank of India will also be accepted for this purpose provided confirmatory advice is enclosed
	12.	On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the Engineer-in-Charge shall be communicated in writing to the Engineer-in-Charge.
	13.	GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same.
	14.	The contractor shall give a list of WAPCOS employees related to him.
	15.	The tender for composite work includes, in addition to building work, all other works such as sanitary and water supply installations drainage installation, electrical work, horticulture work, roads and paths etc.

2.0 CONDITIONS OF CONTRACT

Definitions	1.	The “ Contract ” means the documents forming the tender and acceptance thereof and the formal Agreement executed between the WAPCOS and the Contractor, together with the documents referred to therein including these conditions, the specifications, designs, drawings and instructions issued from time to time by the Engineer-In-Charge and all these documents taken together, shall be deemed to form one contract and shall be complementary to one another.
	2.	In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:- i. “Employer” shall mean WAPCOS Limited/ WAPCOS, A Government of India undertaking- Ministry of Jal Shakti, for execution of the Work / Project as mentioned in NIT, having their Registered office at 5th floor, Kailash building, 26-Kasturba Gandhi Marg, New Delhi-110001, India & include Engineer-in-charge, Project Manager, their successors & permitted assigns as well as their authorized officer / representatives. WAPCOS Limited is a company registered under the Indian Company Act 1956, with its registered office at New Delhi or its Administrative officers or its Engineer or other employees authorized to deal with any matter with which these persons are concerned and authorized on its behalf. ii. Principal Employer/Owner” Central Board of Secondary Education (CBSE), Ministry of Education, Govt. of India, who has appointed WAPCOS Ltd. as Project Management Consultant for the work mentioned in NIT. iii. “Bidder/Tenderer/Contractor/Supplier” shall mean the individual, firm or company, whether incorporated or not, undertaking the works and shall include the legal personal representative of such individual or the persons composing such firm or company, or the successors of such firm or company and the permitted assignees of such individual, firm or company who are participating in Bidding process and will Execute the project after award of the Works as Contractor/Supplier. They should be an Indian Registered Company under Companies Act 1956/ 2013, Proprietorship Firm/ Partnership Firm iv. “Work or Project” means as mentioned in NIT. v. “Site and location” means the land/or other places on, into or through which work is to be executed under the contract or any adjacent land, path or street through which work is to be executed under the contract or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract as mentioned in NIT. vi. “Engineer-in-Charge” means the Officer appointed by WAPCOS who shall direct, supervise and sign the Contract Agreement on behalf of WAPCOS, for the purpose of Contract or his duly authorized representative. vii. “Project Manager, WAPCOS” shall mean the officer appointed by WAPCOS to supervise the works at site on behalf of WAPCOS

		and Authorized by the Engineer-in charge. viii. Excepted Risk are risks due to riots (other than those on account of contractor's employees), war (whether declared or not) invasion, act of foreign enemies, hostilities, civil war, rebellion revolution, insurrection, military or usurped power, any acts of Government, damages from aircraft, acts of God, such as earthquake, lightening and unprecedented floods, and other causes over which the contractor has no control and accepted as such by the Engineer-in-charge or causes solely due to use or occupation by Government of the part of the works in respect of which a certificate of completion has been issued or a cause solely due to Government's faulty design of works. ix. "Market Rate" shall be the rate as checked & verified by the Project Manager, WAPCOS and agreed by the Engineer-in-Charge on the basis of the cost of materials and labour at the site where the work is to be executed plus the percentage mentioned in Special Conditions of Contract to cover, all overheads and profits. x. "Schedule(s)" referred to in these conditions shall mean the relevant schedule(s), standard Schedule of Rates of the government mentioned in Special Conditions of Contract. xi. "Consultant" means any consultant nominated by the WAPCOS xii. "Tendered Amount" means the value as quoted by the Bidder during bidding process excluding GST. xiii. "Tendered Value" means the value of work as stipulated in the letter of award excluding GST. xiv. "Contract Price" means the value of work executed under the Contract including tendered value, cost of extra items, cost of substituted items, cost of deviated items, works executed under the Contract including GST. xv. "Date of Commencement of Work" The date of commencement of work shall be the date of start as specified in Letter of Award or the first date of handing over of the site, whichever is later, in accordance with the phasing if any, as indicated in the tender document. xvi. GST means Goods & Service tax- Central, State and Inter State
Scope and Performance	3.	Where the context so requires, words imparting the singular only also include the plural and vice versa. Any reference to masculine gender shall whenever required include feminine gender and vice versa.
	4.	Headings and Marginal notes to these General Conditions of Contract shall not be deemed to form part thereof or be taken into consideration in the interpretation or construction thereof or of the contract.
	5.	The contractor shall be furnished, free of cost one certified copy of the contract documents except standard specifications, and such other printed and published documents, together with all drawings as may be forming part of the tender papers. None of these documents shall be used for any purpose other than that of this contract.
Works to be carried out	6.	The work to be carried out under the Contract shall, except as otherwise provided in these conditions, include all labour, materials, tools, plants, equipment and transport which may be required in preparation of and for and in the full and entire execution and completion of the works. The descriptions given in the Schedule of Quantities/ Building Components shall, unless otherwise stated, be held to include wastage on materials, carriage and cartage, carrying and return of empties, hoisting, setting,

		fitting and fixing in position and all other labours necessary in and for the full and entire execution and completion of the work as aforesaid in accordance with good practice and recognized principles.
Sufficiency of Tender	7.	The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the works and of the cost quoted in the Schedule of Quantities/ Building Components, which rates and prices shall, except as otherwise provided, cover all his obligations under the Contract and all matters and things necessary for the proper completion and maintenance of the works.
Discrepancies and Adjustment of Errors	8.	The several documents forming the Contract are to be taken as mutually explanatory of one another, detailed drawings being followed in preference to small scale drawing and figured dimensions in preference to scale and special conditions in preference to General Conditions.
	8.1	In the case of discrepancy between the schedule of Quantities/Building Components, the Specifications and/ or the Drawings, the following order of preference shall be observed:- i. Description of Schedule of Quantities/ Building Components. ii. Particular Specification and Special Condition, if any. iii. Drawings. iv. Standard Specifications. v. Indian Standard Specifications of B.I.S.
	8.2	If there are varying or conflicting provisions made in any one document forming part of the contract, the Engineer-in-charge shall be the deciding authority with regard to the intention of the document and his decision shall be final and binding on the contractor.
	8.3	Any error in description, quantity or rate in Schedule of Quantities or any omission therefrom shall not vitiate the Contract or release the Contractor from the execution of the whole or any part of the works comprised therein according to drawings and specifications or from any of his obligations under the contract.
Signing of Contract	9.	The letter of Award will be issued to the successful bidder by WAPCOS which will be duly signed & stamped by the successful bidder as token of unequivocal acceptance and confirmation. Subsequently, successful bidder will submit the Performance Security of required value within time specified in Tender document. Thereafter, on a date and time mutually agreed upon, the successful Bidder or his authorized representative shall attend the office for signing of the Contract Agreement. The contract Agreement consisting of complete Tender Document along with all the documents Corrigendum/Amendments if any, Clarifications / Correspondences and any other documents as forming part of the contract. No payment for the work done will be made unless contract is signed by the contractor. Failure on the part of the successful Bidder to comply with the above requirements will constitute sufficient grounds for the annulment of the Award and forfeiture of the Bid Security.

2.0 CLAUSES OF CONTRACT

CLAUSE 1: PERFORMANCE SECURITY (OR PERFORMANCE BANK GUARANTEE)

- i. The contractor shall submit an irrevocable **Performance Security of 5% (Five percent) of the "Tendered Value"** in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Special Conditions of Contract from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in Special Conditions of Contract on written request of the contractor stating the reason for delays in procuring the Performance Security, to the satisfaction of the Engineer-in-Charge. This Security shall be in the form of Cash (in case Security amount is less than Rs. 10,000/-) or Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case Security amount is less than Rs. 1,00,000/-) or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the WAPCOS as part of the performance Security and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the WAPCOS to make good the deficit.
- ii. **The Performance Security shall be initially valid up to period of 60 (sixty) days beyond the date of completion of all contractual obligations of the contractor, including Defect Liability Period (DLP) plus 1 year claim period beyond that.** In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Security extended to cover such enlarged time. The performance Security shall be refunded to the contractor without interest, after he duly performs and completes all obligations under the contract including completion of the Defect Liability Period.
- iii. The Engineer-in-Charge shall make a claim under the performance Security except for amounts to which the WAPCOS is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
- iv. Failure by the contractor to extend the validity of the Performance Security as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Security.
 - a) Failure by the contractor to pay WAPCOS any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- v. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance Security shall stand forfeited in full and shall be absolutely at the disposal of the WAPCOS.

CLAUSE 1A: SECURITY DEPOSIT / RETENTION MONEY

The Bidder whose tender(s) may be accepted shall permit WAPCOS at the time of making any payment to Contractor for work done under the contract to deduct a sum at the rate of 5% from each running and final bill excluding GST.

The Security Deposit as deducted above shall be released within 60 days of successful completion of Warranty/Defect Liability as Certified by the Engineer-in-Charge or till the final bill has been prepared and passed whichever is later.

CLAUSE 2: COMPENSATION FOR DELAY i.e. LIQUIDITY DAMAGE

If the contractor fails to maintain the required progress or to complete the work and clear the site on or before the contract or extended date of completion, he shall, without prejudice to any other right or remedy available under purview of the Contract on account of such breach, pay compensation for delay i.e. Liquidity Damage, a sum not less than 0.5% (Zero point five percent) of the Tendered Value as

aforesaid for each week and limited to 10% of the Contract Price. If, still work is not completed by the Contractor after deduction of full Liquidity Damage i.e. 10% of the Contract Price, then Performance Security shall be invoked and deducted security money shall be forfeited and project will be terminated. After that the balance work will be executed by Employer on risk and cost (amount recovered from invocation of Performance Security and Security deposit) of contractor.

In case Liquidity Damage imposed by Principal Employer to the project at any point of time, then full amount of Liquidity Damage (10% of the Contract Price) will be recovered from the up-coming interim bills/ final bill. If the amount of up-coming interim bills/ final bill is less than the amount of Liquidity Damage, then balance amount of Liquidity Damage will be recovered from the Performance Security, Security Deposit and any other financial deposit of Contractor with Employer.

CLAUSE 3: WHEN CONTRACT CAN BE DETERMINED

Subject to other provisions contained in this clause, the Engineer-in-Charge may, without prejudice to his any other rights or remedy against the contractor in respect of any delay, inferior workmanship, any claims for damages and/or any other provisions of this contract or otherwise, and whether the date of completion has or has not elapsed, by notice in writing absolutely determine the contract in any of the following cases:

- i. If the contractor having been given by the Engineer-in-Charge a notice in writing to rectify, reconstruct or replace any defective work or that the work is being performed in an inefficient or otherwise improper or unworkman like manner shall omit to comply with the requirement of such notice for a period of seven days thereafter.
- ii. If the contractor has, without reasonable cause, suspended the progress of the work or has failed to proceed with the work with due diligence so that in the opinion of the Engineer-in-Charge (which shall be final and binding) he will be unable to secure completion of the work by the date for completion and continues to do so after a notice in writing of seven days from the Engineer-in-Charge.
- iii. If the contractor fails to complete the work or section of work with individual date of completion on or before the stipulated or justified extended date, on or before such date of completion; and the Engineer-in-charge without any prejudice to any other right or remedy under any other provision in the contract has given further reasonable time in a notice given in writing in that behalf as either mutually agreed or in absence of such mutual agreement by his own assessment making such time essence of contract and in the opinion of Engineer-in-Charge the contractor will be unable to complete the same or does not complete the same within the period specified.
- iv. If the contractor persistently neglects to carry out his obligations under the contract and/ or commits default in complying with any of the terms and conditions of the contract and does not remedy it or take effective steps to remedy it within 7 days after a notice in writing is given to him in that behalf by the Engineer-in-Charge.
- v. If the contractor shall offer or give or agree to give to any person in WAPCOS service or to any other person on his behalf any gift or consideration of any kind as an inducement or reward for doing or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of this or any other contract for WAPCOS.
- vi. If the contractor shall enter into a contract with WAPCOS in connection with which commission has been paid or agreed to be paid by him or to his knowledge, unless the particulars of any such commission and the terms of payment thereof have been previously disclosed in writing to the Engineer-in-Charge.
- vii. If the contractor had secured the contract with WAPCOS as a result of wrong tendering or other non-bonafide methods of competitive tendering or commits breach of Integrity Agreement.
- viii. If the contractor being an individual, or if a firm, any partner thereof shall at any time be adjudged insolvent or have a receiving order or order for administration of his estate made against him or shall take any proceedings for liquidation or composition (other than a voluntary

- liquidation for the purpose of amalgamation or reconstruction) under any Insolvency Act for the time being in force or make any conveyance or assignment of his effects or composition or arrangement for the benefit of his creditors or purport so to do, or if any application be made under any Insolvency Act for the time being in force for the sequestration of his estate or if a trust deed be executed by him for benefit of his creditors.
- ix. If the contractor being a company shall pass a resolution or the court shall make an order that the company shall be wound up or if a receiver or a manager on behalf of a creditor shall be appointed or if circumstances shall arise which entitle the court or the creditor to appoint a receiver or a manager or which entitle the court to make a winding up order.
 - x. If the contractor shall suffer an execution being levied on his goods and allow it to be continued for a period of 21 days.
 - xi. If the contractor assigns (excluding part(s) of work assigned to other agency(s) by the contractor as per terms of contract), transfers, sublets (engagement of labour on a piece-work basis or of labour with materials not to be incorporated in the work, shall not be deemed to be subletting) or otherwise parts with or attempts to assign, transfer, sublet or otherwise parts with the entire works or any portion thereof without the prior written approval of the Engineer -in-Charge. When the contractor has made himself liable for action under any of the cases aforesaid, the Engineer-in-Charge on behalf of the WAPCOS shall have powers:
 - (a) To determine the contract as aforesaid so far as performance of work by the Contractor is concerned (of which determination notice in writing to the contractor under the hand of the Engineer-in-Charge shall be conclusive evidence). Upon such determination, Security Deposit already recovered, Security deposit payable and Performance Security under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the Government.
 - (b) After giving notice to the contractor to measure up the work of the contractor and to take such whole, or the balance or part thereof, as shall be un-executed out of his hands and to give it to another contractor to complete the work. The contractor, whose contract is determined as above, shall not be allowed to participate in the tendering process for the balance work including any new items needed to complete the work. In the event of above courses being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reasons of his having purchased or procured any materials or entered into any engagements or made any advances on account or with a view to the execution of the work or the performance of the contract. And in case action is taken under any of the provision aforesaid, the contractor shall not be entitled to recover or be paid any sum for any work thereof or actually performed under this contract unless and until the Engineer-in-Charge has certified in writing the performance of such work and the value payable in respect thereof and he shall only be entitled to be paid the value so certified.

Note:

Actions under Clause 2 and 3 are independent.

The compensation under Clause 2 is for loss caused due to delay in performance, whereas, the compensation under Clause 3 is for consequential losses due to non-performance of the Contract. Hence, the Employer is entitled to compensation under Clause 3 and Clause 2 independently. Hence, the Employer is empowered to take action under Clause 2 for levy of compensation depending on liability of Contractor under Clause 2 based on the delay at the stage of Clause 3 action, before determination.

CLAUSE 3A

In case, the work cannot be started due to reasons not within the control of the contractor within 1/6th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract. In case contractor wants to close the contract, he shall give notice to the WAPCOS stating the failure on the part of WAPCOS. In such eventuality, the Performance Security of the contractor shall be refunded within following time limits :

- | | | |
|----|--|---------|
| a) | Tendered value of work is up to Rs. 1.0 Crore | 15 days |
| b) | If the Tendered value of work is more than Rs.1.0 crore and up to Rs. 10 Crore | 21 days |
| c) | If the Tendered value of work exceeds Rs. 10 Crore : | 30 days |

Neither party shall claim any compensation for such eventuality. This clause is not applicable for any breach of the contract by either party

CLAUSE 4: CONTRACTOR LIABLE TO PAY COMPENSATION EVEN IF ACTION NOT TAKEN UNDER CLAUSE 3

In any case in which any of the powers conferred upon the Engineer-in-Charge by Clause-3 thereof, shall have become exercisable and the same are not exercised, the non-exercise thereof shall not constitute a waiver of any of the conditions hereof and such powers shall notwithstanding be exercisable in the event of any future case of default by the contractor and the liability of the contractor for compensation shall remain unaffected. In the event of the Engineer-in-Charge putting in force all or any of the powers vested in him under the preceding clause he may, if he so desires after giving a notice in writing to the contractor, take possession of (or at the sole discretion of the Engineer-in-Charge which shall be final and binding on the contractor) use as on hire (the amount of the hire money being also in the final determination of the Engineer-in-Charge) all or any tools, plant, materials and stores, in or upon the works, or the site thereof belonging to the contractor, or procured by the contractor and intended to be used for the execution of the work/or any part thereof, paying or allowing for the same in account at the contract rates, or, in the case of these not being applicable, at current market rates to be certified by the Engineer-in-Charge, whose certificate thereof shall be final, and binding on the contractor, clerk of the works, foreman or other authorized agent to remove such tools, plant, materials, or stores from the premises (within a time to be specified in such notice) in the event of the contractor failing to comply with any such requisition, the Engineer-in-Charge may remove them at the contractor's expense or sell them by auction or private sale on account of the contractor and his risk in all respects and the certificate of the Engineer-in-Charge as to the expenses of any such removal and the amount of the proceeds and expenses of any such sale shall be final and conclusive against the contractor.

CLAUSE 5: TIME AND EXTENSION FOR DELAY

The time allowed for execution of the Works as specified in Contract or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the works shall commence from such time period as mentioned in Contract or from the date of handing over of the site whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, WAPCOS shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the performance Security absolutely.

- 5.1** As soon as possible but within 7 (seven) days from the date of commencement of work, the Contractor shall submit a Time and Progress Chart for each milestone and get it approved by the Engineer-in-Charge. The Chart shall be prepared in direct relation to the time stated in the Contract documents for completion of items of the works. It shall indicate the forecast of the dates of commencement and completion of various trades of sections of the work and may be amended as necessary by agreement between the Employer and the Contractor within the limitations of time imposed in the Contract documents, and further to ensure good progress during the execution of the work, the Contractor shall in all cases in which the time allowed for any work, exceeds 15 days (save for special jobs for which a separate programme has been agreed upon) complete the work as per scheduled date of completion.

In case of non-submission of construction programme by the contractor, the program approved by the Engineer-in-Charge shall be deemed to be final.

The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.

The contractor shall submit the Time and Progress Chart and Progress Report using the mutually agreed software or in other format decided by Engineer-in-Charge for the work done during previous month to the Engineer-in-charge on or before 5th day of each month failing which a recovery of Rs. 2500/- per day basis in case of delay in submission of Time and Progress Chart and Rs. 1000/- per day in case of delay in submission of the monthly progress report.

5.2 If the work(s) be delayed by:-

- (i) force majeure, or
- (ii) abnormally bad weather, or
- (iii) serious loss or damage by fire, or
- (iv) civil commotion, local commotion of workmen, strike or lockout, affecting any of the trades employed on the work, or
- (v) delay on the part of other contractors or tradesmen engaged by Engineer-in- Charge in executing work not forming part of the Contract, or
- (vi) any other cause which, in the absolute discretion of the Engineer-in-Charge is beyond the Contractor's control.

then upon the happening of any such event causing delay, the Contractor shall immediately give notice thereof in writing to the authority, but shall nevertheless use constantly his best endeavours to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Employer/ Principal Employer to proceed with the works. The Employer will give the "Extension of Time" only after the approval of the same from Principal Employer.

If, Employer/Principal Employer are not satisfied with the reasons stated by the contractor for delay then, Provision Extension of Time shall be granted to complete the balance works and keep the contract alive. In the period of Provisional Extension of time, Employer shall have the right to impose Liquidity damage as per above Clause 2, if Principal Employer impose the Liquidity Damage to the project at any point of time.

During the granted provisional extension of time, 10% amount of bill amount excluding GST, shall be withheld from each running bill as per the discretion of the Engineer-in-charge. The withheld amount will be accountable to Liquidity damage as per clause-2 and shall only be released to the contractor, if work is completed within the given Provisional Extension of time and Principal Employer didn't impose the Liquidity Damage to the project.

The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for above events listed.

5.3 In case the work is hindered by the Employer/ Principal Employer for any reason / event, the Engineer-in-Charge, if justified, give a fair and reasonable extension of time and reschedule the mile stones for completion of work. Such extension of time or rescheduling of milestone/s shall be without prejudice to any other right or remedy of the parties in contract or in law; provided further that for concurrent delays under this sub-clause and sub-clause 5.2 to the extent the delay is covered under sub-clause 5.2 the Contractor shall be entitled to only extension of time and no compensation/damages.

5.4 Request for rescheduling of Milestones and extension of time, to be eligible for consideration, shall be made by the Contractor in writing within fourteen days of the happening of the event causing delay on the prescribed form to the Engineer-in-Charge. The Contractor may also, if practicable, indicate in such a request the period for which extension is desired. The Contractor

shall indicate in such a request the period by which rescheduling of milestone/s or extension of time is desired. With every request for rescheduling of milestones, or if at any time the actual progress of work falls behind the approved programme by more than 10% of the stipulated period of completion of contract, the Contractor shall produce a revised programme which shall include all details of pending drawings and decisions required to complete the contract and also the target dates by which these details should be available without causing any delay in execution of the work. An amount as deemed appropriate by the Engineer-in-Charge shall be deducted on per day basis in case of delay in submission of the revised programme.

5.4.1 In any such case the Engineer-in-Charge may give a fair and reasonable extension of time for completion of work or reschedule the mile stones. Engineer-in-Charge shall finalize/ reschedule a particular mile stone before taking an action against subsequent mile stone. Such extension or rescheduling of the milestones shall be communicated to the Contractor by the Engineer-in-Charge in writing, within 21 days of the date of receipt of such request from the Contractor in prescribed form. In event of non-application by the Contractor for extension of time Engineer-in-Charge after affording opportunity to the Contractor, may give, supported with a programme, a fair and reasonable extension within a reasonable period of occurrence of the event.

5.5 In case the work is delayed by any reasons, in the opinion of the Engineer-in-Charge, by the Contractor for reasons beyond the events mentioned in sub clause 5.2 and beyond the justified extended date; without prejudice to right to take action under Clause 3, the Engineer-in-Charge may grant extension of time required for completion of work without rescheduling of milestones. The Contractor shall be liable for levy of compensation for delay for such extension of time.

CLAUSE 6 : COMPUTERIZED MEASUREMENT BOOK

Project Manager, WAPCOS shall, except as otherwise provided, ascertain and determine by measurement the value of work done in accordance with the contract.

All measurements of all items having financial value shall be entered by the contractor and compiled in the shape of the Computerized Measurement Book having pages of A-4 size as per the format of the WAPCOS so that a complete record is obtained of all the items of works performed under the contract.

All such measurements and levels recorded by the contractor or his authorized representative from time to time, during the progress of the work, shall be got checked by the contractor from the Project Manager, WAPCOS as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Project Manager, WAPCOS, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Project Manager, WAPCOS, for the dated signatures by the Project Manager, WAPCOS, and the contractor or their representatives in token of their acceptance.

Whenever bill is due for payment, the contractor would initially submit draft computerized measurement sheets and these measurements would be got checked/test checked from the Project Manager, WAPCOS. The contractor will, thereafter, incorporate such changes as may be done during these checks/test checks in his draft computerized measurements, and submit to the WAPCOS a computerized measurement book, duly bound, and with its pages machine numbered. The Project Manager, WAPCOS, would thereafter check this MB, and record the necessary certificates for their checks/test checks.

The final, fair, computerized measurement book given by the contractor, duly bound, with its pages machine numbered, should be 100% correct, and no cutting or over-writing in the measurements

would thereafter be allowed. If at all any error is noticed, the contractor shall have to submit a fresh computerized MB with its pages duly machine numbered and bound.

The contractor shall also submit to the WAPCOS separately his computerized Abstract of Cost and the bill based on these measurements, duly bound, and its pages machine numbered. Thereafter, this bill will be processed by the Project Manager, WAPCOS.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Project Manager, WAPCOS.

Except where any general or detailed description of the work expressly shows to the contrary, measurements shall be taken in accordance with the procedure set forth in the specifications notwithstanding any provision in the relevant Standard Method of measurement or any general or local custom. In the case of items which are not covered by specifications, measurements shall be taken in accordance with the relevant standard method of measurement issued by the Bureau of Indian Standards and if for any item no such standard is available then a mutually agreed method shall be followed.

The contractor shall give not less than seven days' notice to the Project Manager, WAPCOS in charge of the work before covering up or otherwise placing beyond the reach of checking and/or test checking the measurement of any work in order that the same may be checked and/or test checked and correct dimensions thereof be taken before the same is covered up or placed beyond the reach of checking and/or test checking measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Project Manager, WAPCOS in charge of the work who shall within the aforesaid period of seven days inspect the work, and if any work shall be covered up or placed beyond the reach of checking and/or test checking measurements without such notice having been given or Project Manager, WAPCOS consent being obtained in writing the same shall be uncovered at the Contractor's expense, or in default thereof no payment or allowance shall be made for such work or the materials with which the same was executed.

Engineer-in-Charge may cause either themselves or through another officer of the WAPCOS to check the measurements recorded by contractor and all provisions stipulated herein above shall be applicable to such checking of measurements or levels.

It is also a term of this contract that checking and/or test checking the measurements of any item of work in the measurement book and/or its payment in the interim, on account of final bill shall not be considered as conclusive evidence as to the sufficiency of any work or material to which it relates nor shall it relieve the contractor from liabilities from any over measurement or defects noticed till completion of the defects liability period.

CLAUSE 7: PAYMENT ON INTERMEDIATE CERTIFICATE TO BE REGARD AS ADVANCE

The interim or running account bill shall be submitted by the Contractor for work executed on the basis of recorded measurements on the format of the Employer on or before the date of every month fixed by Project Manager of WAPCOS. Contractor shall submit the bill with all requisite certificates/documents. Project Manager of WAPCOS shall arrange to have the bill verified by taking or causing to be taken where necessary, the requisite measurement of the work within 15 working days. Observations if any shall be conveyed by the Project Manager, WAPCOS to the Contractor within 25 working days. Contractor shall resubmit the bill to Project Manager, WAPCOS after compliance of observations and duly signed by the Project Manager of WAPCOS for further processing.

Payment on account of amount admissible shall be made by the Engineer-in-Charge certifying the sum to which the Contractor is considered entitled by way of interim payment at such rates as decided by Engineer-in-Charge. The amount shall be paid by 45 working days after the day of presentation of the corrected bill by the Contractor to the Engineer-in-Charge or his representative, or 45 days after receive of the payments from Principal Employer whichever is later. As Bidder/Contractor acknowledges that under the present Contract agreement, the Employer is only working as intermediary between Principal Employer and Contractor. Thus, the Contractor unconditionally acknowledge that the payments under the present Contract shall be made proportionately by the Employer only on back-to-back basis i.e., after 45 days subject to receipt of payment from Principal Employer. The Contractor also unconditionally agree that in the event the payment or part thereof, under the present Contract is not received from Principal Employer, then WAPCOS and/or any of its Employee/Officer shall not be responsible to pay any amount to Contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.

All such interim payments shall be regarded as payment by way of advances against final payment only and shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be rejected, removed, taken away and reconstructed or re-erected. Any certificate given by the Engineer-in-Charge relating to the work done or materials delivered forming part of such payment, may be modified or corrected by any subsequent such certificate(s) or by the final certificate and shall not by itself be conclusive evidence that any work or materials to which it relates is/are in accordance with the contract and specifications. Any such interim payment, or any part thereof shall not in any respect conclude, determine or affect in any way powers of the Engineer-in-Charge under the contract or any of such payments be treated as final settlement and adjustment of accounts or in any way vary or affect the contract.

Pending consideration of extension of date of completion, interim payments shall continue to be made as herein provided without prejudice to the right of the WAPCOS to take action under the terms of this contract for delay in the completion of work, if the extension of date of completion is not granted by the competent authority.

It is clearly agreed and understood by the Contractor that notwithstanding anything to the contrary that may be stated in the agreement between Employer and the Contractor; the Contractor shall become entitled to payment only after Employer has received the corresponding payment(s) from the Principal Employer for the work done by the Contractor. Any delay in the release of payment by the Principal Employer to Employer leading to a delay in the release the corresponding payment by Employer to the Contractor shall not entitle the Contractor to any compensation/interest from Employer.

All payments shall be released by way of e-transfer through RTGS in India directly at their Bank account by Employer.

Clause 7A

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC / BOCW Welfare Board, whatever applicable are submitted by the Contractor to the Project Manager, WAPCOS.

CLAUSE 8: COMPLETION CERTIFICATE AND COMPLETION PLANS

Within ten days of the completion of the work, the contractor shall give notice of such completion to the Engineer-in-Charge and within thirty days of the receipt of such notice, the Engineer-in-Charge or his representative shall inspect the work with Project Manager, WAPCOS and if there is no defect in the work, shall furnish the contractor with a final certificate of completion, otherwise a provisional certificate of physical completion indicating defects (a) to be rectified by the contractor and/or (b) for which payment will be made at reduced rates, shall be issued. But no final certificate of completion

shall be issued, nor shall the work be considered to be complete until the contractor shall have removed from the premises on which the work shall be executed all scaffolding, surplus materials, rubbish and all huts and sanitary arrangements required for his/their work people on the site in connection with the execution of the works as shall have been erected or constructed by the contractor(s) and cleaned off the dirt from all wood work, doors, windows, walls, floor or other parts of the building, in, upon, or about which the work is to be executed or of which he may have had possession for the purpose of the execution; thereof, and not until the work shall have been measured by the Engineer-in-Charge. If the contractor shall fail to comply with the requirements of this Clause as to removal of scaffolding, surplus materials and rubbish and all huts and sanitary arrangements as aforesaid and cleaning off dirt on or before the date fixed for the completion of work, the Engineer-in-Charge may at the expense of the contractor remove such scaffolding, surplus materials and rubbish etc., and dispose of the same as he thinks fit and clean off such dirt as aforesaid, and the contractor shall have no claim in respect of scaffolding or surplus materials as aforesaid except for any sum actually realized by the sale thereof.

The completion certificate shall be issued by Employer to the Contractor after successful handing/taking over by Principal Employer; submitting of **Occupational Certificates** issued by the local urban bodies/Municipal Corporation by contractor along with submission of all necessary NOC's/statutory approvals from all concerned departments such as local urban bodies, Fire Department, Electricity Board/Chief Electrical Inspector, Forest, Lift etc. of that area in accordance with Government norms to enable Principal Employer/Owner to occupy the project with all required service. The Completion Certificate shall only be issued after the submission of "**No Claim Certificate**" by contractor as per the format given in the **Section of Annexures**.

CLAUSE 8A : COMPLETION PLANS TO BE SUBMITTED BY THE CONTRACTOR

The contractor shall submit completion plans for Internal and External Civil, Electrical and Mechanical Services within thirty days of the completion of the work, provided that the service plans having been issued for execution, unless the contractor, by virtue of any other provision in the contract, is required to prepare such plans. The "As Built" Drawings and completion report shall be submitted by the Contractor within 30 days from the date of completion works in 3 sets.

In case, the contractor fails to submit the completion plan/drawings as aforesaid, he shall be liable to pay a sum of 0.25% (zero point two five percent) of Tendered value.

CLAUSE 9 : PAYMENT OF FINAL BILL

The final bill shall be submitted by the Contractor in the same manner as specified in interim bills within three months of physical completion of the work or within one month of the date of the final certificate of completion furnished by the Engineer-in-Charge whichever is earlier. No further claims shall be made by the Contractor after submission of the final bill and these shall be deemed to have been waived and extinguished.

CLAUSE 10A: MATERIALS TO BE PROVIDED BY CONTRACTOR

The contractor shall, at his own expense, provide all materials, required for the works.

The contractor shall, at his own expense and without delay, supply to the Project Manager, WAPCOS samples of materials to be used on the work and shall get these approved in advance. All such materials to be provided by the Contractor shall be in conformity with the specifications laid down or referred to in the contract. The contractor shall, if requested by the Engineer-in-Charge furnish proof, to the satisfaction of the Engineer-in-Charge that the materials so comply. The Project Manager, WAPCOS shall within thirty days of supply of samples or within such further period as he may require intimate to

the Contractor in writing whether samples are approved by him or not. If samples are not approved, the Contractor shall forthwith arrange to supply to the Project Manager, WAPCOS for his approval, fresh samples complying with the specifications laid down in the contract. When materials are required to be tested in accordance with specifications, approval of the Engineer-in-Charge/ Principal Employer shall be issued after the test results are received.

The Contractor shall at his risk and cost submit the samples of materials to be tested or analyzed and shall not make use of or incorporate in the work any materials represented by the samples until the required tests or analysis have been made and materials finally accepted by the Engineer-in-Charge/ Principal Employer. The Contractor shall not be eligible for any claim or compensation either arising out of any delay in the work or due to any corrective measures required to be taken on account of and as a result of testing of materials.

The contractor shall, at his risk and cost, make all arrangements and shall provide all facilities as the Project Manager, WAPCOS may require for collecting, and preparing the required number of samples for such tests at such time and to such place or places as may be directed by the Project Manager, WAPCOS and bear all charges and cost of testing unless specifically provided for otherwise elsewhere in the contract or specifications. The Engineer-in-Charge or his authorized representative shall at all times have access to the works and to all workshops and places where work is being prepared or from where materials, manufactured articles or machinery are being obtained for the works and the contractor shall afford every facility and every assistance in obtaining the right to such access.

The Engineer-in-Charge or his authorized representative shall have full powers to require the removal from the premises of all materials which in his opinion are not in accordance with the specifications and in case of default, the Engineer-in-Charge shall be at liberty to employ at the expense of the contractor, other persons to remove the same without being answerable or accountable for any loss or damage that may happen or arise to such materials. The Engineer-in-Charge or his authorized representative shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge or his authorized representative may cause the same to be supplied and all costs which may attend such removal and substitution shall be borne by the Contractor.

The Contractor shall at his own expense, provide a material testing lab at the site for conducting routine field tests. The lab shall be equipped at least with the testing equipment as specified in Contract.

If the Engineer-in-Charge or his authorized representative instructs the Contractors to carry out a test not specified in the Specification to check whether any work has a Defect. Such tests are to be carried out by the Contractor by deploying agencies and paying all the cost for such tests.

CLAUSE 10B :

(i) SECURED ADVANCE ON NON-PERISHABLE MATERIALS AND RECOVERY

The contractor, on signing an indenture in the form to be shall be entitled to be paid during the progress of the execution of the work up to 75% of the assessed value of any materials which are in the opinion of the Project Manager, WAPCOS non-perishable, non-fragile and non-combustible and are in accordance with the contract and which have been brought on the site in connection therewith and are adequately stored and/or protected against damage by weather or other causes but which have not at the time of advance been incorporated in the works. When materials on account of which an advance has been made under this sub-clause are incorporated in the work, the amount of such advance shall be recovered/ deducted from the next payment made under any of the clause or clauses of this contract.

Such secured advance shall also be payable on other items of perishable nature, fragile and combustible with the approval of the Engineer-in-Charge provided the contractor provides a

comprehensive insurance cover for the full cost of such materials. The decision of the Engineer-in-Charge shall be final and binding on the contractor in this matter. No secured advance, shall however, be paid on high-risk materials such as ordinary glass, sand, petrol, diesel etc.

The secure Advance shall be recovered as per consumption of material from the contractor which secure advance is given to the contractor. If any value of secure advance is remaining to recover, then it will be fully recovered after completion of 80% work of the Tendered Value.

(ii) MOBILISATION ADVANCE

On request of contractor, the Employer shall make interest bearing advance payment for mobilization of labour, stores and workshops including camps, labour sheds, machineries and construction plant, etc. for preliminary and enabling Works, after the signing of Contract agreement to the extent of 10 (ten) per cent of the Tendered Value of an unconditional BG. Such BG shall remain effective until the advance payment has been fully repaid.

The aforesaid advance of 10 (ten) per cent shall be paid in two instalments, each of five per cent. The first one shall be paid on commencement of the work and on submission of unconditional BG in respect of the advance.

The second instalment shall be paid on certification by the engineer in charge for achieving a financial progress of 10 (ten) per cent of the Tendered Value, as also provision of a BG by the contractor for this part of the advance. Mobilisation expenditure mentioned herein shall not include the margin money and bank commission, and so on, paid by the contractor for procurement of BGs against performance security and mobilisation advance.

The request of contractor for aforesaid mobilization advance will be considered within 3 (three) months from the commencement of work.

(iii) INTEREST & RECOVERY OF MOBILISATION ADVANCE

The mobilization advance bears simple interest at the rate 10 % and shall be calculated from the date of payment to the date of recovery (365 days in a year) both days inclusive, on the outstanding amount of advance.

Before any installment of advance is released, the contractor shall execute a one single Bank Guarantee Bond from Scheduled Bank for the amount equal to 110% of the amount of mobilization advance and valid up to stipulated period of completion as mentioned in NIT. This (Bank Guarantee from Scheduled Bank for the amount equal to 110% of the balance amount of advance) shall be kept renewed from time to time to cover the balance amount and likely period of complete recovery.

Recovery of such sums advanced shall be made by the deduction from the contractor's bills commencing after first 10% of the gross value of the work is executed and paid, on pro-rata percentage basis to the gross value of the work billed beyond 10% in such a way that the entire advance is recovered by the time 80% of the gross value of the contract is executed and paid, together with interest due on the entire outstanding amount up to the date of recovery of the installment. Along with aforesaid condition of recovery of mobilization advance, if contractor wants to recover more or full mobilization advance from the interim bills, then accordingly mobilization advance may be recovered by Employer. The said request will be given by the contractor along with the interim bill to the Engineer-In-Charge. The Bank Guarantee will be returned after recovery of the mobilization advance against particular Bank guarantee.

CLAUSE 10C : PAYMENT ON ACCOUNT OF INCREASE IN PRICE / WAGES DUE TO STATUTORY ORDER – NOT APPLICABLE

CLAUSE 10CA : PAYMENT DUE TO VARIATION IN PRICES OF MATERIALS AFTER RECEIPT OF TENDER – NOT APPLICABLE

CLAUSE 10CC: PAYMENT DUE TO INCREASE / DECREASE IN PRICES/ WAGES (EXCLUDING MATERIALS COVERED UNDER CLAUSE 10 CA) AFTER RECEIPT OF TENDER FOR WORKS – NOT APPLICABLE

CLAUSE 10D : DISMANTLED MATERIAL PROPERTY

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as WAPCOS/Government/Principal Employer property and such materials shall be disposed off to the best advantage of WAPCOS according to the instructions in writing issued by the Engineer-in-Charge or his authorized representative.

CLAUSE 11: WORKS TO BE EXECUTED IN ACCORDANCE WITH SPECIFICATIONS, DRAWINGS, ORDERS ETC.

The Contractor shall execute the work as per the sequence submitted by Contractor and approved by Engineer-in-Charge from time to time so that all other items of the work to be executed by other agencies are completed progressively along with the main work.

The contractor shall execute the whole and every part of the work in the most substantial and workmanlike manner both as regards materials and otherwise in every respect in strict accordance with the specifications. The contractor shall also conform exactly, fully and faithfully to the design, drawings and instructions in writing in respect of the work and the contractor shall be furnished free of charge one copy of the contract documents together with specifications, designs, drawings and instructions as are not included in the standard specifications or in any Bureau of Indian Standard or any other, published standard or code or, Schedule of Rates or any other printed publication referred to elsewhere in the contract.

The contractor shall comply with the provisions of the contract and with the care and diligence execute and maintain the works and provide all labour and materials, tools and plants including for measurements and supervision of all works, structural plans and other things of temporary or permanent nature required for such execution and maintenance in so far as the necessity for providing these, is specified or is reasonably inferred from the contract. The Contractor shall take full responsibility for adequacy, suitability and safety of all the works and methods of construction.

At least to 10% of prescribed Tests as per Central Public Works Department Manual/IS Codes of construction materials shall be carried out from the outside approved/NABL recognized Laboratory as may be approved by Engineer-In-Charge without any extra expenditure to Employer.

The Contractor shall establish a field test laboratory on the site with latest equipment's for carrying out field tests of construction materials and will maintain proper records of all the test results.

CLAUSE 12 : DEVIATIONS / VARIATIONS EXTENT AND PRICING

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

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

12.1 The time for completion of the works shall, in the event of any deviations resulting in additional cost over the Tendered Value sum being ordered, be extended, if requested by the contractor, as follows:

- (i) In the proportion which the additional cost of the altered, additional or substituted work, bears to the original Tendered Value plus
- (ii) 25% of the time calculated in (i) above or such further additional time as may be considered reasonable by the Engineer-in-Charge.

12.2 Deviations, Extra Items, Substituted item and Pricing

- (a) **In the case of extra item(s)** (items that are completely new, and are in addition to the items contained in the contract), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis, for the work and the Project Manager, WAPCOS shall within prescribed time limit of the receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined after approval of Engineer-in -charge.
- (b) **In the case of substituted items** (items that are taken up with partial substitution or in lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following para.
 - If the market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so increased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
 - If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted).
- (c) **In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in Special Conditions of Contract**, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Project Manager, WAPCOS shall within prescribed time limit of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined after approval of Engineer-in -charge.

The prescribed time limit for finalizing rates for Extra Item(s), Substitute Item(s) and Deviated Quantities of contract items is within 45 days after submission of proposal by the contractor without observation of the Engineer-in-Charge or his authorized representative.

- 12.3** Any operation incidental to or necessarily has to be in contemplation of tenderer while filing tender, or necessary for proper execution of the item included in the Schedule of quantities or in the schedule of rates mentioned above, whether or not, specifically indicated in the description of the item and the relevant specifications, shall be deemed to be included in the rates quoted by the tenderer or the rate given in the said schedule of rates, as the case may be. Nothing extra shall be admissible for such operations.

CLAUSE 13: FORECLOSURE OF CONTRACT DUE TO ABANDONMENT OR REDUCTION IN SCOPE OF WORK

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

The contractor shall be paid at contract rates, full amount for works executed at site and, in addition, a reasonable amount as certified by the Engineer-in-Charge for the items hereunder mentioned which could not be utilized on the work to the full extent in view of the foreclosure;

- (i) Any expenditure incurred on preliminary site work, e.g. temporary access roads, temporary labour huts, staff quarters and site office; storage accommodation and water storage tanks.
- (ii) Employer shall have the option to take over contractor's materials or any part thereof either brought to site or of which the contractor is legally bound to accept delivery from suppliers (for incorporation in or incidental to the work). For materials taken over or to be taken over by WAPCOS, cost of such materials as detailed by Engineer-in- Charge shall be paid. The cost shall, however, take into account purchase price, cost of transportation and deterioration or damage which may have been caused to materials whilst in the custody of the contractor.
- (iii) Reasonable compensation for transfer of T & P from site to contractor's permanent stores or to his other works, whichever is less. If T & P are not transported to either of the said places, no cost of transportation shall be payable.

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

The reasonable amount of items on (i), (iv) and (v) above shall not be in excess of 2% of the cost of the work remaining incomplete on the date of closure, i.e. total stipulated cost of the work as per accepted tender less the cost of work actually executed under the contract and less the cost of contractor's materials at site taken over by the WAPCOS as per item (ii) above. Provided always that against any payments due to the contractor on this account or otherwise, the Engineer-in-Charge shall be entitled to recover or be credited with any outstanding balances due from the contractor for advance paid in respect of any tool, plants and materials and any other sums which at the date of termination were recoverable by the WAPCOS from the contractor under the terms of the contract.

In the event of action being taken under Clause 13 to reduce the scope of work, the Contractor may furnish fresh Performance Security on the same conditions, in the same manner and at the same rate

for the balance tendered value and initially valid up to the extended date of completion or stipulated date of completion if no extension has been granted plus minimum 60 days beyond that. Wherever such a fresh Performance Security is furnished by the Contractor the Engineer-in-Charge may return the previous Performance Security.

CLAUSE 14 : CARRYING OUT PART WORK AT RISK & COST OF CONTRACTOR

If contractor:

- (i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-Charge; or
- (ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or
Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge.
- (iii) The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to WAPCOS, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:
 - (a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or
 - (b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

The Engineer-in-Charge shall determine the amount, if any, is recoverable from the contractor for completion of the part work/ part incomplete work of any item(s) taken out of his hands and execute at the risk and cost of the contractor, the liability of contractor on account of loss or damage suffered by WAPCOS because of action under this clause shall not exceed 10% of the Contract Price.

In determining the amount, credit shall be given to the contractor with the value of work done in all respect in the same manner and at the same rate as if it had been carried out by the original contractor under the terms of his contract, the value of contractor's materials taken over and incorporated in the work and use of plant and machinery belonging to the contractor.

The certificate of the Engineer-in-Charge as to the value of work done shall be final and conclusive against the contractor provided always that action under this clause shall only be taken after giving notice in writing to the contractor. Provided also that if the expenses incurred by the WAPCOS are less than the amount payable to the contractor at his agreement rates, the difference shall not be payable to the contractor.

Any excess expenditure incurred or to be incurred by WAPCOS in completing the part work/ part incomplete work of any item(s) / rectification works during Defect Liability Period or the excess loss of damages suffered or may be suffered by WAPCOS as aforesaid after allowing such credit shall without prejudice to any other right or remedy available to WAPCOS in law or per as agreement be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

If the contractor fails to pay the required sum within the aforesaid period of 30 days, the Engineer-in-Charge shall have the right to sell any or all of the contractors' unused materials, constructional plant, implements, temporary building at site etc. and adjust the proceeds of sale thereof towards the dues recoverable from the contractor under the contract and if thereafter there remains any balance outstanding, it shall be recovered in accordance with the provisions of the contract.

In the event of above course being adopted by the Engineer-in-Charge, the contractor shall have no claim to compensation for any loss sustained by him by reason of his having purchased or procured any materials or entered into any engagements or made any advance on any account or with a view to the execution of the work or the performance of the contract.

CLAUSE 15 : SUSPENSION OF WORK

- (i) The contractor shall, on receipt of the order in writing of the Engineer-in-Charge, (whose decision shall be final and binding on the contractor) suspend the progress of the works or any part thereof for such time and in such manner as the Engineer-in-Charge may consider necessary so as not to cause any damage or injury to the work already done or endanger the safety thereof for any of the following reasons:
 - (a) on account of any default on the part of the contractor or;
 - (b) for proper execution of the works or part thereof for reasons other than the default of the contractor; or
 - (c) for safety of the works or part thereof.

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

- (ii) If the suspension is ordered for reasons (b) and (c) in sub-para (i) above:
 - (a) the contractor shall be entitled to an extension of time equal to the period of every such suspension PLUS 25%, for completion of the item or group of items of work for which a separate period of completion is specified in the contract and of which the suspended work forms a part, and;
 - (b) If the total period of all such suspensions in respect of an item or group of items or work for which a separate period of completion is specified in the contract exceeds thirty days, the contractor shall, in addition, be entitled to such compensation as the Engineer-in-Charge may consider reasonable in respect of salaries and/or wages paid by the contractor to his employees and labour at site, remaining idle during the period of suspension, adding thereto 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within fifteen days of the expiry of the period of 30 days.
- (iii) If the works or part thereof is suspended on the orders of the Engineer-in-Charge for more than three months at a time, except when suspension is ordered for reason (a) in subpara (i) above, the contractor may after receipt of such order serve a written notice on the Engineer-in-Charge requiring permission within fifteen days from receipt by the Engineer-in-Charge of the said notice, to proceed with the work or part thereof in regard to which progress has been suspended and if such permission is not granted within that time, the contractor, if he intends to treat the suspension, where it affects only a part of the works as an omission of such part by WAPCOS or where it affects whole of the works, as an abandonment of the works by WAPCOS, shall within ten days of expiry of such period of 15 days give notice in writing of his intention to the Engineer-in-Charge. In the event of the contractor treating the suspension as an abandonment of the contract by WAPCOS, he shall have no claim to payment of any compensation on account of any profit or advantage which he might have derived from the execution of the work in full but which he could not derive in consequence of the abandonment. He shall, however, be entitled to such compensation, as the Engineer-in-Charge may consider reasonable, in respect of salaries and/or wages paid by him to his employees and labour at site, remaining idle in consequence adding to the total thereof 2% to cover indirect expenses of the contractor provided the contractor submits his claim supported by details to the Engineer-in-Charge within 30 days of the expiry of the period of 3 months.

CLAUSE 16 : ACTION IN CASE WORK NOT DONE AS PER SPECIFICATIONS

All works under or in course of execution or executed in pursuance of the contract, shall at all times be open and accessible to the inspection and supervision of the Project Manager, WAPCOS and all the superior officers, officer of the Quality Assurance Unit of the WAPCOS or any organization engaged by the WAPCOS for Quality Assurance and of the Chief Technical Examiner's Office, and the contractor shall, at all times, during the usual working hours and at all other times at which reasonable notice of the visit of such officers has been given to the contractor, either himself be present to receive orders and instructions or have a responsible agent duly accredited in writing, present for that purpose. Orders given to the Contractor's agent shall be considered to have the same force as if they had been given to the contractor himself.

If it shall appear to the Engineer-in-charge or his authorized subordinates incharge of the work or to the Engineer-in-charge of Quality Assurance or Project Manager, WAPCOS or his subordinate officers or the officers of the organization engaged by the WAPCOS for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskillful workmanship, or with materials or articles provided by him for the execution of the work which are unsound or of a quality inferior to that contracted or otherwise not in accordance with the contract, the contractor shall, on demand in writing which shall be made within twelve months (six months in the case of work costing Rs. 10 Lac and below except road work) of the completion of the work from the Engineer-in-Charge specifying the work, materials or articles complained of notwithstanding that the same may have been passed, certified and paid for forthwith rectify, or remove and reconstruct the work so specified in whole or in part, as the case may require or as the case may be, remove the materials or articles so specified and provide other proper and suitable materials or articles at his own charge and cost. In the event of the failing to do so within a period specified by the Engineer-in-Charge in his demand aforesaid, then the contractor shall be liable to pay compensation at the same rate as under clause 2 of the contract (for non-completion of the work in time) for this default.

In such case the Engineer-in-Charge may not accept the item of work at the rates applicable under the contract but may accept such items at reduced rates as the authority specified in Special Conditions of Contract may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

CLAUSE 17: CONTRACTOR LIABLE FOR DAMAGES, DEFECTS DURING DEFECT LIABILITY PERIOD

The Warranty (on site)/**Defect Liability Period shall be 12 (Twelve) Months.**

The contractor will deploy sufficient manpower (i.e. Technical Supervisor, Mason, Electrician, Plumber etc.) and materials, accessories tools and plants required for the maintenance of the buildings, services, landscaping works, external development works during defect liability period. No extra charge in this account shall be paid to the contractor. Therefore, contractor is advised to quote the cost accordingly.

The Warranty/Defect Liability Period shall commence from the date of issue of the Taking Over Certificate by Principal Employer or issue of Completion Certificate by Principal Employer or agreed date of start of Defect Liability Period by the Principal Employer whichever is later. The Warranty period of equipments/items shall be provided as per the manufacturer norms or upto end of Defect

liability period whichever is more. When the equipment is under Warranty/Defect Liability Period, it shall be the sole responsibility of the Contractor/Supplier to rectify defect of equipment, spare parts, replacement equipment as deemed necessary by the Employer/Owner and install the same without any cost implications to Employer/ Owner.

If the contractor or his working people or servants shall break, deface, injure or destroy any part of building in which they may be working, or any building, road, road kerb, fence, enclosure, water pipe, cables, drains, electric or telephone post or wires, trees, grass or grassland, or cultivated ground contiguous to the premises on which the work or any part is being executed, or if any damage shall happen to the work while in progress, from any cause whatever or if any defect, shrinkage or other faults appear in the work within twelve months (six months in the case of work costing Rs. Ten lacs and below except road work) after a certificate final or otherwise of its completion shall have been given by the Engineer-in- Charge as aforesaid arising out of defect or improper materials or workmanship the contractor shall upon receipt of a notice in writing on that behalf make the same good at his own expense or in default the Engineer-in-Charge cause the same to be made good by other workmen and deduct the expense from any sums that may be due or at any time thereafter may become due to the contractor, or from his security deposit or the proceeds of sale thereof or of a sufficient portion thereof.

Contractor shall take required works / rectification of defects immediately after receiving of complaints from Principal Employer / Employer. If Contractor fails to attend the complaints within the given time frame by Engineer-in-charge, then any expenditure incurred by WAPCOS in completing works / rectification of defects shall be recovered from any money due to the contractor on any account, and if such money is insufficient, the contractor shall be called upon in writing and shall be liable to pay the same within 30 days.

CLAUSE 18: CONTRACTOR SUPPLY TOOLS & PLANTS ETC.

The contractor shall provide at his own cost all materials, machinery, tools & plants as specified in tender. In addition to this, appliances, implements, other plants, ladders, cordage, tackle, scaffolding and temporary works required for the proper execution of the work, whether original, altered or substituted and whether included in the specifications or other documents forming part of the contract or referred to in these conditions or not, or which may be necessary for the purpose of satisfying or complying with the requirements of the Engineer-in-Charge as to any matter as to which under these conditions he is entitled to be satisfied, or which he is entitled to require together with carriage therefore to and from the work. The contractor shall also supply without charge the requisite number of persons with the means and materials, necessary for the purpose of setting out works, and counting, weighing and assisting the measurement for examination at any time and from time to time of the work or materials. Failing his so doing, the same may be provided by the Engineer-in-Charge at the expense of the contractor and the expenses may be deducted, from any money due to the contractor, under this contract or otherwise and/or from his security deposit or the proceeds of sale thereof, or of a sufficient portions thereof.

CLAUSE 18A : RECOVERY OF COMPENSATION PAID TO WORKMEN

In every case in which by virtue of the provisions sub-section (1) of Section 12, of the Workmen's Compensation Act, 1923, WAPCOS is obliged to pay compensation to a workman employed by the contractor, in execution of the works, WAPCOS will recover from the contractor, the amount of the compensation so paid; and, without prejudice to the rights of the WAPCOS under sub-section (2) of Section 12, of the said Act, WAPCOS shall be at liberty to recover such amount or any part thereof by

deducting it from the security deposit or from any sum due by WAPCOS to the contractor whether under this contract or otherwise. WAPCOS shall not be bound to contest any claim made against it under sub-section (1) of Section 12, of the said Act, except on the written request of the contractor and upon his giving to WAPCOS full security for all costs for which WAPCOS might become liable in consequence of contesting such claim.

CLAUSE 18B: ENSURING PAYMENT AND AMENITIES TO WORKERS, IF CONTRACTOR FAILS

In every case in which by virtue of the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and of the Contract Labour (Regulation and Abolition) Central Rules, 1971, WAPCOS is obliged to pay any amounts of wages to a workman employed by the contractor in execution of the works, or to incur any expenditure in providing welfare and health amenities required to be provided under the above said Act and the rules under Clause 19H or under the C.P.W.D. Contractor's Labour Regulations, or under the Rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by C.P.W.D. Contractors, WAPCOS will recover from the contractor, the amount of wages so paid or the amount of expenditure so incurred; and without prejudice to the rights of the WAPCOS under sub-section(2) of Section 20, and sub-section (4) of Section 21, of the Contract Labour (Regulation and Abolition) Act, 1970, WAPCOS shall be at liberty to recover such amount or any part thereof by deducting it from the security deposit or from any sum due by WAPCOS to the contractor whether under this contract or otherwise WAPCOS shall not be bound to contest any claim made against it under sub-section (1) of Section 20, sub-section (4) of Section 21, of the said Act, except on the written request of the contractor and upon his giving to the WAPCOS full security for all costs for which WAPCOS might become liable in contesting such claim.

CLAUSE 19 : LABOUR LAWS TO BE COMPLIED BY CONTRACTOR

The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, before the commencement of the work, and continue to have a valid license until the completion of the work.

The contractor shall also comply with provisions of the Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, 1979.

The contractor shall also abide by the provisions of the Child Labour (Prohibition and Regulation) Act, 1986.

The contractor shall also comply with the provisions of the building and other Construction Workers (Regulation of Employment & Conditions of Service) Act, 1996 and the building and other Construction Workers Welfare Cess Act, 1996.

Any failure to fulfill these requirements shall attract the penal provisions of this contract arising out of the resultant non-execution of the work

CLAUSE 19A

No labour below the age of fourteen years shall be employed on the work.

CLAUSE 19B : PAYMENT OF WAGES

- i. The contractor shall pay to labour employed by him either directly or through subcontractors, wages not less than fair wages as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970 and the contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- ii. The contractor shall, notwithstanding the provisions of any contract to the contrary, cause to be paid fair wage to labour indirectly engaged on the work, including any labour engaged by his sub-contractors in connection with the said work, as if the labour had been immediately employed by him.
- iii. In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Contractor's Labour Regulations made by WAPCOS from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorizedly made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Central Rules, 1971, wherever applicable.
- iv. (a) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.
- (b) Under the provision of Minimum Wages (Central) Rules, 1950, the contractor is bound to allow to the labours directly or indirectly employed in the works one day rest for 6 days continuous work and pay wages at the same rate as for duty. In the event of default, the Engineer-in-Charge shall have the right to deduct the sum or sums not paid on account of wages for weekly holidays to any labours and pay the same to the persons entitled thereto from any money due to the contractor by the Engineer-in-Charge concerned.

In the case of Union Territory of Delhi, however, as the all inclusive minimum daily wages fixed under Notification of the Delhi Administration No.F.12(162)MWO/DAB/ 43884-91, dated 31-12-1979 as amended from time to time are inclusive of wages for the weekly day of rest, the question of extra payment for weekly holiday would not arise.

- v. The contractor shall comply with the provisions of the Payment of Wages Act, 1936, Minimum Wages Act, 1948, Employees Liability Act, 1938, Workmen's Compensation Act, 1923, Industrial Disputes Act, 1947, Maternity Benefits Act, 1961, and the Contractor's Labour (Regulation and Abolition) Act 1970, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.
- vi. The contractor shall indemnify and keep indemnified WAPCOS against payments to be made under and for the observance of the laws aforesaid without prejudice to his right to claim indemnity from his sub-contractors.
- vii. The laws aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract.
- viii. Whatever is the minimum wage for the time being, or if the wage payable is higher than such wage, such wage shall be paid by the contractor to the workmen directly without the intervention of Jamadar and that Jamadar shall not be entitled to deduct or recover any amount from the minimum wage payable to the workmen as and by way of commission or otherwise.
- ix. The contractor shall ensure that no amount by way of commission or otherwise is deducted or recovered by the Jamadar from the wage of workmen.

CLAUSE 19C

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.500/- for each default and in addition, the Engineer-in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

CLAUSE 19 D

The contractor shall submit by the 4th and 19th of every month, to the Engineer-in-Charge, a true statement showing in respect of the second half of the preceding month and the first half of the current month respectively:-

- (1) The number of labourers employed by him on the work,
- (2) Their working hours,
- (3) The wages paid to them,
- (4) The accidents that occurred during the said fortnight showing the circumstances under which they happened and the extent of damage and injury caused by them, and
- (5) The number of female workers who have been allowed maternity benefit according to Clause 19F and the amount paid to them.

Failing which the contractor shall be liable to pay to WAPCOS, a sum not exceeding Rs.500/- for each default or materially incorrect statement. The decision of the Engineer-In-Charge shall be final in deducting from any bill due to the contractor; the amount levied as fine and be binding on the contractor.

CLAUSE 19 E

In respect of all labour directly or indirectly employed in the works for the performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with all the rules framed by Government from time to time for the protection of health and sanitary arrangements for workers employed by the WAPCOS and its contractors.

CLAUSE 19 F

Leave and pay during leave shall be regulated as follows:-

1. **Leave :**
 - (i) in the case of delivery - maternity leave not exceeding 8 weeks, 4 weeks up to and including the day of delivery and 4 weeks following that day,
 - (ii) in the case of miscarriage - upto 3 weeks from the date of miscarriage.
2. **Pay :**
 - (i) in the case of delivery - leave pay during maternity leave will be at the rate of the women's average daily earnings, calculated on total wages earned on the days when full time work was done during a period of three months immediately preceding the date on which she gives notice that she expects to be confined or at the rate of Rupee one only a day whichever is greater.
 - (ii) in the case of miscarriage - leave pay at the rate of average daily earning calculated on the total wages earned on the days when full time work was done during a period of three months immediately preceding the date of such miscarriage.
3. Conditions for the grant of Maternity Leave:

No maternity leave benefit shall be admissible to a woman unless she has been employed for a total period of not less than six months immediately preceding the date on which she proceeds on leave.

4. The contractor shall maintain a register of Maternity (Benefit) in the Prescribed Form as shown in Appendix -I and II, and the same shall be kept at the place of work.

CLAUSE 19 G

In the event of the contractor(s) committing a default or breach of any of the provisions of the WAPCOS, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and' Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum not exceeding Rs.500/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.500/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.

Should it appear to the Engineer-in-Charge that the contractor(s) is/are not properly observing and complying with the provisions of the Labour Regulations and Model Rules and the provisions of the Contract Labour (Regulation and Abolition) Act 1970, and the Contract Labour (R& A) Central Rules 1971, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

CLAUSE 19 H

The contractor(s) shall at his/their own cost provide his/their labour with a sufficient number of huts (hereinafter referred to as the camp) of the following specifications on a suitable plot of land to be approved by the Engineer-in-Charge.

- (i) (a) The minimum height of each hut at the eaves level shall be 2.10m (7 ft.) and the floor area to be provided will be at the rate of 2.7 sq.m. (30 sq.ft.) for each member of the worker's family staying with the labourer.
- (b) The contractor(s) shall in addition construct suitable cooking places having a minimum area of 1.80m x 1.50m (6'x5') adjacent to the hut for each family.
- (c) The contractor(s) shall also construct temporary latrines and urinals for the use of the labourers each on the scale of not less than four per each one hundred of the total strength, separate latrines and urinals being provided for women.

- (d) The contractor(s) shall construct sufficient number of bathing and washing places, one unit for every 25 persons residing in the camp. These bathing and washing places shall be suitably screened.
- (ii)
 - (a) All the huts shall have walls of sun-dried or burnt-bricks laid in mud mortar or other suitable local materials as may be approved by the Engineer-in-Charge. In case of sun-dried bricks, the walls should be plastered with mud gobi on both sides. The floor may be kutcha but plastered with mud gobi and shall be at least 15 cm (6") above the surrounding ground. The roofs shall be laid with thatch or any other materials as may be approved by the Engineer-in-Charge and the contractor shall ensure that throughout the period of their occupation, the roofs remain water-tight.
 - (b) The contractor(s) shall provide each hut with proper ventilation.
 - (c) All doors, windows, and ventilators shall be provided with suitable leaves for security purposes.
 - (d) There shall be kept an open space of at least 7.2m (8 yards) between the rows of huts which may be reduced to 6m (20 ft.) according to the availability of site with the approval of the Engineer-in-Charge. Back to back construction will be allowed
- (iii) **Water Supply** - The contractor(s) shall provide adequate supply of water for the use of labourers. The provisions shall not be less than two gallons of pure and wholesome water per head per day for drinking purposes and three gallons of clean water per head per day for bathing and washing purposes. Where piped water supply is available, supply shall be at stand posts and where the supply is from wells or river, tanks which may be of metal or masonry, shall be provided. The contractor(s) shall also at his/ their own cost make arrangements for laying pipe lines for water supply to his/ their labour camp from the existing mains wherever available, and shall pay all fees and charges therefore.
- (iv) The site selected for the camp shall be high ground, removed from jungle.
- (v) **Disposal of Excreta** - The contractor(s) shall make necessary arrangements for the disposal of excreta from the latrines by trenching or incineration which shall be according to the requirements laid down by the Local Health Authorities. If trenching or incineration is not allowed, the contractor(s) shall make arrangements for the removal of the excreta through the Municipal Committee/authority and inform it about the number of labourers employed so that arrangements may be made by such Committee/authority for the removal of the excreta. All charges on this account shall be borne by the contractor and paid direct by him to the Municipality/authority. The contractor shall provide one sweeper for every eight seats in case of dry system.
- (vi) **Drainage** - The contractor(s) shall provide efficient arrangements for draining away sullage water so as to keep the camp neat and tidy.
- (vii) The contractor(s) shall make necessary arrangements for keeping the camp area sufficiently lighted to avoid accidents to the workers.
- (viii) **Sanitation** - The contractor(s) shall make arrangements for conservancy and sanitation in the labour camps according to the rules of the Local Public Health and Medical Authorities.

CLAUSE 19 I

The Engineer-in-Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors' employ upon the work who may be incompetent or misconduct

himself and the contractor shall forthwith comply with such requirements. In respect of maintenance/repair or renovation works etc. where the labour have an easy access to the individual houses, the contractor shall issue identity cards to the labourers, whether temporary or permanent and he shall be responsible for any untoward action on the part of such labour.

CLAUSE 19J

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorizedly during construction, and is handed over to the Engineer-in-Charge with vacant possession of complete building. If such building though completed is occupied illegally, then the Engineer-in-Charge shall have the option to refuse to accept the said building/buildings in that position. Any delay in acceptance on this account will be treated as the delay in completion and for such delay, a levy upto 5% of Contract Price of work may be imposed by the WAPCOS whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, Employer, through a notice, may require the contractor to remove the illegal occupation any time on or before construction and delivery.

CLAUSE 19K : Employment of Skilled / Semi Skilled Workers

The contractor shall, at all stages of work, deploy skilled/semi skilled tradesmen who are qualified and possess certificate in particular trade from Industrial Training Institute/National Institute of construction Management and Research (NICMAR)/ National Academy of Construction, CIDC or any similar reputed and recognized Institute managed/ certified by State/Central Government. The number of such qualified tradesmen shall not be less than 20% of total skilled/semi skilled workers required in each trade at any stage of work. The contractor shall submit number of man days required in respect of each trade, its scheduling and the list of qualified tradesmen along with requisite certificate from recognized Institute to Engineer-in-charge for approval. Notwithstanding such approval, if the tradesmen are found to have inadequate skill to execute the work of respective trade, the contractor shall substitute such tradesmen within two days of written notice from Engineer-in-Charge. Failure on the part of contractor to obtain approval of Engineer-in-Charge or failure to deploy qualified tradesmen will attract a compensation to be paid by contractor at the rate of Rs. 100 per such tradesman per day. Decision of Engineer-in-charge as to whether particular tradesman possesses requisite skill and amount of compensation in case of default shall be final and binding.

Provided always, that the provisions of this clause, shall not be applicable for works with estimated cost put to tender being less than Rs. 5 crores.

For work costing more than Rs. 10 Crores, and upto Rs. 50 Crores, the Contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 20% of the unskilled workers engaged in the project in co-ordination with the Employer & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen.

For works costing more than Rs. 50 Crores, the Contractor shall arrange on site training as per National Skill Development Corporation (NSDC) norms for at least 30% of the unskilled worker engaged in the project in co-ordination with the Employer & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen. The cost of such training as stated above shall be borne by the Government. The necessary space and workers shall be provided by the Contractor and no claim what so ever shall be entertained.

CLAUSE 20 : MINIMUM WAGES ACT TO BE COMPLIED WITH

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract

Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.

CLAUSE 21 : WORK NOT TO BE SUBLET/ACTION IN CASE OF INSOLVENCY

The contract shall not be assigned or sublet without the written approval of the Engineer-in Charge. And if the contractor shall assign or sublet his contract, or attempt to do so, or become insolvent or commence any insolvency proceedings or make any composition with his creditors or attempt to do so, or if any bribe, gratuity, gift, loan, perquisite, reward or advantage pecuniary or otherwise, shall either directly or indirectly, be given, promised or offered by the contractor, or any of his servants or agent to any public officer or person in the employ of WAPCOS in any way relating to his office or employment, or if any such officer or person shall become in any way directly or indirectly interested in the contract, the Engineer-in-Charge on behalf of the WAPCOS shall have power to adopt the course specified in Clause 3 hereof in the interest of WAPCOS and in the event of such course being adopted, the consequences specified in the said Clause 3 shall ensue.

CLAUSE 22

All sums payable by way of compensation under any of these conditions shall be considered as reasonable compensation to be applied to the use of WAPCOS without reference to the actual loss or damage sustained and whether or not any damage shall have been sustained.

CLAUSE 23 : CHANGES IN FIRM'S CONSTITUTION TO BE INTIMATED

Where the contractor is a partnership firm, the previous approval in writing of the Engineer-in-Charge shall be obtained before any change is made in the constitution of the firm. Where the contractor is an Proprietor Firm, such approval as aforesaid shall likewise be obtained before the contractor enters into any partnership agreement where under the partnership firm would have the right to carry out the works hereby undertaken by the contractor. If previous approval as aforesaid is not obtained, the contract shall be deemed to have been assigned in contravention of Clause 21 hereof and the same action may be taken, and the same consequences shall ensue as provided in the said Clause 21.

CLAUSE 24: LIFE CYCLE COST

The contractor shall be responsible for safety, quality and soundness of the buildings including structural elements beyond maintenance period. The contractor shall have obligation to rectify such defects minimum up to 5 (five) years from the date of completion of work. The defects have to be rectified within a reasonable time not exceeding forty five days after issue of notice by Engineer- in-Charge. If contractor does not take corrective action within 45 days, then action for debarring of the agency shall be taken by the appropriate authority.

CLAUSE 25: SETTLEMENT OF DISPUTES & ARBITRATION

25.1 Settlement of Disputes

Except where otherwise provided in the contract, all questions and disputes relating to the meaning of the specifications, design, drawings and instructions here-in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever in any way arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work or after the cancellation, termination, completion or abandonment thereof shall be dealt with as mentioned hereinafter:

- I. If the Contractor considers any work demanded of him to be outside the requirements of the Contract, or disputes any drawings, record or decision given in writing by the Engineer-in-Charge on any matter in connection with or arising out of the Contract or carrying out of the work, to be unacceptable, he shall promptly within 15 days request Engineer-in-Charge in writing for written instruction or decision. Thereupon, the Engineer-in-Charge shall give his written instructions or decision within a period of one month from the receipt of the Contractor's letter.
- II. In case the Contractor is not satisfied with the decision of Engineer-in-Charge, he may proceed for arbitration as detailed in Clause 25.2 hereinafter.
- III. It is a term of Contract that each party invoking arbitration must exhaust the aforesaid mechanism of settlement of claims/disputes prior to invoking arbitration.
- IV. Performance of this Agreement/ Contract shall continue during arbitration proceedings or any other dispute resolution mechanism pursuant to Clause 25.2. No payment due or payable by the Employer shall be withheld on account of pending reference to the arbitration or other dispute resolution mechanism except to the extent that such payment of dispute.

25.2 Arbitration

Any dispute, controversy of claims arising out of or relating to this Agreement or the breach, termination or invalidity thereof, shall be settled through following mechanism:

- a. Firstly, the aggrieved party shall write a letter to the other party detailing its grievances and calling upon the other party to amicably resolve the dispute by convening a joint meeting. Accordingly, the parties as per their convenience shall jointly convene the said meeting(s), wherein minutes of the said meeting(s) shall be prepared and countersigned by all the parties. It is mandatory to prepare minutes of meeting(s) and to be countersigned by all the parties, irrespective of the outcome of the said meeting(s).
- b. In the event the parties are unable to reach on any settlement in the said meeting(s), then the aggrieved party shall mandatorily resort to pre-litigation mediation mechanism with Delhi High Court Mediation Cell, New Delhi.
- c. It is only upon failure of the pre-litigation mediation mechanism with Delhi High Court Mediation Cell, then the aggrieved party shall resort to resolution of disputes through arbitration of a Sole Arbitrator. The appointing authority of Sole Arbitrator is CMD, WAPCOS Limited, to which neither of the parties have any objection nor they shall ever object.
- d. Subject to the parties agreeing otherwise, the Arbitration proceedings shall be conducted in accordance with the provisions of the Indian Arbitration and Conciliation Act, 1996 (amended as on date).
- e. It is also acknowledged and accepted that the Employer is only working as intermediary between the Contractor/Supplier and the Principal Employer/Owner, thus in the event, any dispute arises under the present agreement and referred to Arbitration for adjudication, then subject to corresponding clause in the Contract between Principal Employer/Owner & the Employer, Principal Employer/Owner shall also be made party to the said Arbitration proceedings. Also, the award including costs if any passed against the Employer and costs incurred in the proceedings shall be the sole responsibility of Principal Employer/Owner. The said clause if found inapplicable, even then the other terms of the Arbitration Clause shall survive and shall be acted upon.
- f. The place/seat of arbitration shall be Delhi and any award whether interim or final, shall be made, and shall be deemed for all purposes between the parties to be made, in Delhi. The

arbitral procedure shall be conducted in English language and any award or awards shall be rendered in English. The procedural law of the arbitration shall be Indian Law. The award of the arbitrator shall be final and conclusive and binding upon the Parties.

- g. The Contract and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and construed in accordance with the laws of India and the Parties submit to sole & exclusive jurisdiction of courts at Delhi.”

25.3 English Language

The request for arbitration, the answer to the request, the terms of reference, any written submissions, any orders and awards shall be in English and, if oral hearings take place, English shall be the language to be used in the hearings.

25.4 Performance during Arbitration

Pending the submission of and/or decision on a Dispute and until the arbitral award is published, the Parties shall continue to perform their respective obligations under the Contract without prejudice to a final adjustment in accordance with such award.

25.5 No arbitration for decision on sub-standard work

The decision of Engineer-in-Charge regarding the quantum or reduction as well as justification thereof in respect of payment for sub-standard work which may be decided to be accepted will be final and would not be open to arbitration.

CLAUSE 26 : CONTRACTOR INDEMNIFY EMPLOYER AGAINST PATENT RIGHTS

The contractor shall fully indemnify and keep indemnified the Employer against any action, claim or proceeding relating to infringement or use of any patent or design or any alleged patent or design rights and shall pay any royalties which may be payable in respect of any article or part thereof included in the contract. In the event of any claims made under or action brought against Employer in respect of any such matters as aforesaid, the contractor shall be immediately notified thereof and the contractor shall be at liberty, at his own expense, to settle any dispute or to conduct any litigation that may arise therefrom, provided that the contractor shall not be liable to indemnify the Employer if the infringement of the patent or design or any alleged patent or design right is the direct result of an order passed by the Engineer-in-Charge in this behalf.

CLAUSE 27 : LUMP SUM PROVISIONS IN TENDER – NOT APPLICABLE

CLAUSE 28 : ACTION WHERE NO SPECIFICATIONS ARE SPECIFIED

In the case of any class of work for which there is no such specifications as referred to in Clause 11, such work shall be carried out in accordance with the Bureau of Indian Standards Specifications. In case there are no such specifications in Bureau of Indian Standards, the work shall be carried out as per manufacturers' specifications, if not available then as per District Specifications. In case there are no such specifications as required above, the work shall be carried out in all respects in accordance with the instructions and requirements of the Engineer-in-Charge.

CLAUSE 29 : WITHHOLDING AND LIEN IN RESPECT OF SUM DUE FROM CONTRACTOR

- a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending finalisation or adjudication of any such claim. In the event of the security being insufficient to cover the claimed amount or amounts or if no security has been taken from the contractor, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the WAPCOS or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.

It is an agreed term of the contract that the sum of money or moneys so withheld or retained under the lien referred to above by the Engineer-in-Charge or WAPCOS will be kept withheld or retained as such by the Engineer-in-Charge or WAPCOS till the claim arising out of or under the contract is determined by the arbitrator (if the contract is governed by the arbitration clause) by the competent court, as the case may be and that the contractor will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention under the lien referred to above and duly notified as such to the contractor. For the purpose of this clause, where the contractor is a partnership firm or a limited company, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold and also have a lien to retain towards such claimed amount or amounts in whole or in part from any sum found payable to any partner/limited company as the case may be, whether in his individual capacity or otherwise.

- b) Employer shall have the right to cause an audit and technical examination of the works and the final bills of the contractor including all supporting vouchers, abstract, etc., to be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed to have been done by him under the contract and found not to have been executed, the contractor shall be liable to refund the amount of over-payment and it shall be lawful for WAPCOS to recover the same from him in the manner prescribed in sub-clause (i) of this clause or in any other manner legally permissible; and if it is found that the contractor was paid less than what was due to him under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by WAPCOS to the contractor, without any interest thereon whatsoever.

Provided that the Government shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the WAPCOS on the one hand and the contractor on the other under any term of the contract permitting payment for work after assessment by WAPCOS.

CLAUSE 29A : LIEN IN RESPECT OF CLAIMS IN OTHER CONTRACTS

Any sum of money due and payable to the contractor (including the security deposit returnable to him) under the contract may be withheld or retained by way of lien by the Engineer-in-Charge or the Employer or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or Employer or such other person or persons in respect of payment of a sum of money arising out of or under any other contract made by the contractor with the Engineer-in-Charge or the Employer or with such other person or persons.

It is an agreed term of the contract that the sum of money so withheld or retained under this clause by the Engineer-in-Charge or the Employer will be kept withheld or retained as such by the Engineer-in-Charge or the Employer or till his claim arising out of the same contract or any other contract is either mutually settled or determined by the arbitration clause or by the competent court, as the case may be and that the contractor shall have no claim for interest or damages whatsoever on this account or on any other ground in respect of any sum of money withheld or retained under this clause and duly notified as such to the contractor.

CLAUSE 30 : WATER FOR WORKS

The contractor(s) shall make his/their own arrangements for water required for the work and nothing extra will be paid for the same. This will be subject to the following conditions.

- (i) That the water used by the contractor(s) shall be fit for construction purposes to the satisfaction of the Project Manager, WAPCOS.
- (ii) The contractor(s) shall make his/their own arrangement of water connection and laying of pipelines from existing main of source of supply.
- (iii) The water charges @ 1 % on tendered value shall be recovered if water supplied by Government/ Principal Employer is used by contractor.

CLAUSE 30A : ALTERNATE WATER ARRANGEMENTS

The contractor shall be allowed to construct temporary wells in Government land for taking water for construction purposes only after he has got permission from the concerned Government Authority and inform the same to Engineer-In-Charge in writing. No charges shall be recovered from the contractor on this account, but the contractor shall be required to provide necessary safety arrangements to avoid any accidents or damage to adjacent buildings, roads and service lines. He shall be responsible for any accidents or damage caused due to construction and subsequent maintenance of the wells and shall restore the ground to its original condition after the wells are dismantled on completion of the work.

CLAUSE 31 : HIRE OF PLANT & MACHINERY

The contractor shall arrange at his own expense all tools, plant, machinery and equipment (hereinafter referred to as T&P) required for execution of the work.

CLAUSE 32 : EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES

The contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of the work with full quality control. The contractor shall provide all necessary superintendence during execution of the work and all along thereafter as may be necessary for proper fulfilling of the obligations under the contract.

The contractor shall immediately after receiving letter of acceptance of the tender and before commencement of the work, intimate in writing to the Engineer-in-Charge, the name(s), qualifications, experience, age, address(s) and other particulars along with certificates, of the principal technical representative to be in charge of the work and other technical representative(s) who will be supervising the work. Even if the contractor (or partner(s) in case of firm/ company) is himself / herself an Engineer, it is necessary on the part of the contractor to Employ principal technical representative / technical representative (s).

The contractor shall provide and employ on the site only such technical assistants as are skilled and experienced in their respective fields and such foremen and supervisory staff as are competent to give proper supervision to the work.

The Engineer-in-Charge shall be at liberty to object to and require the contractor to remove from the works any person who in his opinion misconducts himself, or is incompetent or negligent in the performance of his duties or whose employment is otherwise considered by the Engineer-in-Charge to be undesirable. Such person shall not be employed again at works site without the written permission of the Engineer-in-Charge and the persons so removed shall be replaced as soon as possible by competent substitutes.

CLAUSE 33 : LEVY/TAXES PAYABLE BY CONTRACTOR

- (i) The Contract price is inclusive of Goods and Service Tax (GST) and any other taxes, levies, royalties together with all general risks, liabilities and obligations set out or implied in the Contract, applicable Labour Cess, cost of insurance to this Contract, all applicable tax liabilities, Income Tax & Surcharges, etc. However, only the payment of GST shall be reimbursed by the Employer to the Contractor.
- (ii) The Contractor shall issue E-Invoice (if applicable for contractor firm)/Tax Invoices to Employer showing (a) Basic Amount (b) GST amount separately for each bill. The payment of GST amount shall be reimbursed to the Contractor only after uploading of GST amount by Contractor on GST portal to avail input benefit of GST by Employer.
- (iii) Notwithstanding anything contained above, the Contractor shall ensure payment of appropriate tax on the supplies made under the Contract. The Contractor shall comply with all applicable provision of Goods and Service Tax (GST) levied by Union Government and State Governments. The Contractor shall get himself registered and discharge his obligations for payment of taxes, filing of returns etc. under the appropriate provisions of law in respect of all the taxes, duties, levies, cess, etc. The Employer would have right to seek necessary evidence that the Contractor is registered under the law and duly discharging its obligations under the tax law, enabling the Employer to avail input tax credit.
- (iv) In case any law requires the Employer to pay tax on the Contract price on reverse charge basis, the amount of tax deposited by Employer would be considered as paid to the Contractor and, accordingly, the price payable to the Contractor would stand reduced to that extent.
- (v) In case the Contractor does not deposit the tax payable on execution of the Contract, or has not provided the tax invoice to Employer showing the amount of tax, or has not uploaded the document in computerized tax network as per prevailing law, leading to non-availability of inputs credit of the tax to Employer, the amount equivalent to such tax shall be deducted from the any amount payable to Contractor.
- (vi) The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.

If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the Employer and does not any time become payable by the Contractor to the State Government, Local authorities in respect of any material used by the Contractor in the works, then in such a case, it shall be lawful to the Employer and it will have the right and be entitled to recover the amount paid in the circumstances as aforesaid from dues of the Contractor.

CLAUSE 34 : CONDITIONS FOR REIMBURSEMENT OF LEVY/TAXES IF LEVIED AFTER RECEIPT OF TENDERS

All tendered cost shall be inclusive of all taxes and levies (except GST) payable under respective statutes. However, if any further tax or levy or cess is imposed by Statute, after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the WAPCOS attributable to delay in execution of work within the control of the contractor.

Provided further that for Building and Other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess.

- (i) Provided further that such increase including GST shall not be made in the extended period of contract for which the contractor alone is responsible for delay as determined by WAPCOS for extension of time.
- (ii) The contractor shall keep necessary books of accounts and other documents for the purpose of this condition as may be necessary and shall allow inspection of the same by a duly authorized representative of the Government and/or the Engineer-in-Charge and shall also furnish such other information/document as the Engineer-in-Charge may require from time to time.
- (iii) The contractor shall, within a period of 30 days of the imposition of any such further tax or levy or cess, or variation or repeal of such tax or levy or cess give a written notice thereof to the Engineer-in-charge that the same is given pursuant to this condition, together with all necessary information relating thereto.

CLAUSE 35 : TERMINATION OF CONTRACT ON DEATH OF CONTRACTOR

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Engineer-In-Charge on behalf of the WAPCOS shall have the option of terminating the contract without compensation to the contractor.

CLAUSE 36 : IF RELATIVE WORKING IN WAPCOS THEN THE CONTRACTOR NOT ALLOWED TO TENDER

The contractor shall not be permitted to tender for works in the WAPCOS responsible for award and execution of contracts in which his near relative is posted in WAPCOS. He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the WAPCOS. Any breach of this condition by the contractor would render him liable to be debarred from tendering in WAPCOS any breach of this condition.

NOTE: By the term “near relatives” is meant wife, husband, parents and grand parents, children and grand children, brothers and sisters, uncles, aunts and cousins and their corresponding in-laws.

CLAUSE 37: NO GAZETTED ENGINEER TO WORK AS CONTRACTOR WITHIN ONE YEAR OF RETIREMENT

No engineer of gazetted rank or other gazetted officer employed in engineering or administrative duties in an engineering department of the Government of India shall work as a contractor or employee of a contractor for a period of one year after his retirement from government service without the previous permission of Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of Government of India as aforesaid, before submission of the tender or engagement in the contractor's service, as the case may be.

CLAUSE 38 : THEORETICAL CONSUMPTION OF MATERIAL- NOT APPLICABLE

CLAUSE 39 : COMPENSATION DURING WARLIKE SITUATION

The work (whether fully constructed or not) and all materials, machines, tools and plants, scaffolding, temporary buildings and other things connected therewith shall be at the risk of the Contractor until the work has been delivered to the Engineer-in-Charge and a certificate from him to that effect

obtained. In the event of the work or any materials properly brought to the site for incorporation in the work being damaged or destroyed in consequence of hostilities or warlike operation, the Contractor shall when ordered (in writing) by the Engineer-in-Charge to remove any debris from the site, collect and properly stack or remove in store all serviceable materials salvaged from the damaged work and shall be paid at the Contract rates in accordance with the provision of this agreement for the work of clearing the site of debris, stacking or removal of serviceable material and for reconstruction of all works ordered by the Engineer-in-Charge, such payments being in addition to compensation upto the value of the work originally executed before being damaged or destroyed and not paid for. In case of works damaged or destroyed but not already measured and paid for, the compensation shall be assessed the Engineer-in-Charge upto Rs. 2,00,000/- and by the next higher officer concerned for a higher amount. The Contractor shall be paid for the damages/destruction suffered and for restoring the material at the rate based on analysis of rates tendered for in accordance with the provision of the Contract. The certificate of the Engineer-in-Charge regarding the quality and quantity of materials and the purpose for which they were collected shall be final and binding on all parties to this Contract.

Provided always that no compensation shall be payable for any loss in consequence of hostilities or warlike operations (a) unless the Contractor had taken all such precautions against air raid as are deemed necessary by the A.R.P. (Air Raid precaution) Officers or the Engineer-in-Charge (b) for any material etc. not on the site of the work or for any tools, plant, machinery, scaffolding, temporary building and other things not intended for the work.

In the event of the Contractor having to carry out reconstruction as aforesaid, he shall be allowed such extension of time for its completion as is considered reasonable by the Engineer-in-Charge.

CLAUSE 40 : APPRENTICES ACT PROVISIONS TO BE COMPLIED WITH

The contractor shall comply with the provisions of the Apprentices Act, 1961 and the rules and orders issued thereunder from time to time. If he fails to do so, his failure will be a breach of the contract and the WAPCOS may, in his discretion, cancel the contract. The contractor shall also be liable for any pecuniary liability arising on account of any violation by him of the provisions of the said Act.

CLAUSE 41 : RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE

Release of Security Deposit of the work shall not be refunded if any complaint from labour / labour department against the contractor deployed at site for execution of works. As soon as the work is virtually complete the contractor shall apply for the clearance certificate to the Labour Officer under intimation to the Engineer-in-Charge.

CLAUSE 42: INSURANCE

1. Requirements

Before commencing execution of works, it shall be obligatory for the contractor to obtain at his own cost stipulated insurance cover under the following requirements:

- a) Contractor's all risk and Third Party Cover.
- b) Liability under the workmen's compensation Act, 1923, Minimum Wages Act, 1948 and Contract Labour (Regulation and Abolition) Act, 1970.
- c) Accidents to staff, Engineers, Supervisors and others who are not governed by workmen's compensation Act.
- d) Damage to material, machinery and works due to fire theft etc.
- e) Any other risk to be covered by insurance as specified by the employer.

2. Policy in Joint Names of Contractor and Employer

The policy referred above shall be obtained in the joint names of the contractor and the employer and shall inter-alia provide coverage against the following, arising out of or in connection with execution of works, their maintenance and performance of the contract.

- a) Loss of life or injury involving public, employee of the contractor, or that of employer and Engineer, labour etc.
- b) Injury, loss or damage to the works or property belonging to public, government bodies, local authorities, utility organizations, contractors, employer or others.

3. Third Party Insurance

Contractor is required to take third party insurance cover for an amount of 5% (five percent) of contract value from Nationalized insurance company for insurance against any damage, injury or loss which may occur to any person or property including that of Employer / Owner, arising out of the execution of the Works or Temporary works. Wherever required by Employer the Contractor shall produce the policy or the policies of Insurance and the receipt of payment of the current premiums.

Above policies shall remain in force throughout the period of execution of the works.

CLAUSE 43 : PREFERENCE TO MAKE IN INDIA

The provisions of revised 'Public Procurement (Preference to Make in India) Order 2017-Revision' issued by Department of Industrial Policy and Promotion under Ministry of Commerce and Industry vide letter no.-P45021/2/2017-PP (BE-II) as amended on 16.09.2020 shall be applicable to the bidding process and award of the contract shall be done accordingly.

Verification of Local Content

- i. The bidder at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement of the tender. They shall also give details of the location(s) at which the local value addition is made.
- ii. In cases of procurement for a value in excess of Rs 10 Crores, the bidder shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

CLAUSE- 44: RULE 144 (XI) IN GENERAL FINANCIAL RULES (GFRS) 2017

- i. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.
- ii. Bidder from a country which shares a land border with India" for the purpose of this Order means:-
 - a) An entity incorporated, established or registered in such a country; or
 - b) A subsidiary of an entity incorporated, established or registered in such a country; or
 - c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - d) An entity whose beneficial owner is situated in such a country; or
 - e) An Indian (or other) agent of such an entity; or
 - f) A natural person who is a citizen of such a country; or
 - g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

- iii. The beneficial owner for the purpose of clause above will be as under:
1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercise control through other means.
 2. “Controlling ownership interest” means ownership of or entitlement to more than twenty-five per cent. Of shares or capital or profits of the company;
 3. “Control” shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
 4. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
 5. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profit of such association or body of individuals;
 6. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
 7. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- iv. An Agent is a person employed to do any act for another, or to represent another in dealings with third person. The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

SECTION– V

SPECIAL CONDITIONS OF CONTRACT

SECTION-V**SPECIAL CONDITIONS OF CONTRACT****1.0 SPECIAL CONDITIONS OF CONTRACT**

The Special Condition of Contract (SCC) shall be followed by the Contractor in addition to the General Condition of Contract (GCC) of tender document. The following General Condition of Contract of this tender are modified/added as detailed below. In case of any discrepancy between GCC and SCC, the SCC will succeed over GCC.

GENERAL RULES AND DIRECTIONS under GCC		
DEFINITIONS		
2 (ix)	Market Rate Percentage on cost of materials and labour to cover all overheads and profits	15%
2(x)	Schedule(s)	Delhi Schedule Rates- 2023 (CPWD DAR-2023) for Civil; DSR-2025 for E&M

GCC Clause No.	Particular	Modified/ Added
Clause 1	Performance Security	a) Within 21 (Twenty one) days of receipt of the Letter of Award, but not later than the date of the signing of the Agreement, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 5% of the Tendered Value: • A Bank Guarantee issued by a Scheduled Commercial Bank approved by Reserve Bank of India (RBI) as per Annexure-I of Bid document; or • A deposit receipt of a Scheduled Commercial Bank approved by Reserve Bank of India (RBI) in favour of WAPCOS Limited payable at Delhi/ Gurgaon. b) The Bidder quoting below Minus (-) 5% of the estimated cost put to tender shall submit the additional performance guarantee of amount equal to the percentage of quoted amount by which the bidder has quoted below -5% of the estimated cost. For example: if the bidder quotes -5% of the estimated cost, then no additional performance guarantee is required. If the bidder quotes -6% of the estimated cost, then the bidder has to submit additional performance guarantee equal to 1% of the quoted amount. Similarly, if the bidder quotes -7% of the estimated cost, then the bidder has to submit additional performance guarantee equal to 2% of the quoted amount and so on. The validity of the Additional Performance Security shall be same as the original performance Security. The Additional Performance Security may be submitted in

GCC Clause No.	Particular	Modified/ Added
		the same format of Performance Security or this additional amount may be added to the Performance Security. The conditions for Additional Performance Security shall be same as are for 5% Performance Security mentioned at Clause 1 in Section of General Condition of Contract. c) The confirmation of the Bank Guarantee shall be sought from the issuing bank through Structured Financial Messaging System (SFMS), from our banker Indian Overseas Bank, NHB, Gurugram, Branch Code: 1935, IFSC code: IOBA0001935 and Beneficiary as WAPCOS Limited. This shall also be applicable in respect of confirmation of any extension of the Bank Guarantee as and when required.
Clause 10 B(iv)	Recovery of Mobilization advance	Applicable The mobilization advance shall be recovered @15% of the value of advance from each running bill after the 2nd running bill of the contractor till the complete mobilization advance is recovered from the contractor.
Clause 12	Deviations / Variations Extent and Pricing	
	Clause 12.1	Not applicable
	Clause 12.2(a)	Modified as “In the case of extra item(s) (items that are completely new and not in the scope of works as per tender condition), the rates for extra items shall be determined on basis of latest DSR (Delhi Schedule of rates). In case, extra items are not available in DSR, market rates shall prevail with proper justification of rates and the contractor shall be paid in accordance with rate approved by WAPCOS.
	Clause 12.2(b)	Modified as “The specification mentioned in Tender may be substituted as per the requirement of Owner/ WAPCOS. - In this case of substituted item(s) being DSR item, the rates for substituted items shall be determined on basis of latest DSR (Delhi Schedule of rates) + increased / decreased in the rate as per the % quoted above or below by Contractor. - In this case of substituted item(s) being Non DSR item, market rates shall prevail with proper justification of rates and the contractor shall be paid in accordance with rate approved by WAPCOS.
	Clause 12.2(c) Deviation Limit for all items of work	Project & Original Works 100% Modified as “In the case of deviation, the rates for

GCC Clause No.	Particular	Modified/ Added
		deviation items shall be determined on basis of latest DSR (Delhi Schedule of rates) + increased / decreased in the rate as per the % quoted above or below by Contractor.

2.0 ADDITIONAL CONDITIONS OF CONTRACT

2.1 Third Party Inspection of Works

Notwithstanding the any other conditions of Contract, the Employer shall get the work inspected by any third party (IIT/ NIT as appointed by WAPCOS/CBSE) during the progress of work or any time after the construction and development of project up to the defect liability period. The Contractor, his consultant, subcontractors of all tiers and suppliers thereof shall make available during the inspection with all records necessary to demonstrate that the Works have been executed in accordance with the Contract Agreement.

The Contractor shall also be responsible for consequential effects arising out during the inspection done by the third party from time to time and will take appropriate action for rectification of defective work. Rectification of defective works or replacement of sub-standard materials or articles, as pointed out by the third party authorized by Employer, will be carried out or replaced by the Contractor at his own risk and cost. The Employer will not pay any extra amount for such rectification or replacement

- 2.2 The Contractor shall submit the Standard Operating Procedure (SOP) / Quality Control & Quality Assurance Plan as finalized by the CBSE and submit to the WAPCOS & Third Party Quality Assurance Agency (TPQAA) for checking & verification during visit of TPQAA. The reports of TPQAA will be the part of the Running Account Bills which will be raised after completion of important milestones / critical activities as defined by CBSE.

2.3 Inspection of the work by any Government Agency

The Contractor shall be responsible for consequential effects arising out during the inspection done by the Chief Technical Examiner Cell, Central Vigilance Commission or Committee constituted by the Principal Employer or construction site visiting team of Principal Employer or by the Building Works Committee or third party authorized by WAPCOS or any Statuary Committee or by any duly authorized representative of WAPCOS, during the progress or any time after the construction and development of project up to the defect liability period, and will take appropriate action for rectification of defective work and modifications as suggested by the above teams/ group/ individual. Rectification of defective works or replacement of sub-standard materials or articles or modifications, as pointed out by the Chief Technical Cell, Central Vigilance Commission, committee constituted by Principal Employer, construction site visiting team of Principal Employer, Building Works Committee or authorized representative of WAPCOS or third party authorized by Employer/ Principal Employer or any Statuary Committee, will be carried out or replaced/ modified by the Contractor at his own risk and cost.

2.4 Prior Approval from Fire Department & Electrical Department

Contractor shall take prior approval well in advance of electrical substation, layout, drawings, electrical equipment, solar installation drawings/documents etc. from concern Electrical Department/ local Authorities before order of procurement & commencing the Electric work. Contractor shall take prior NOC from Local Fire Department & submit the project drawings to

the Fire Department before commencing the construction works for checking and verification of fire department as per the fire norms of that particular region. After the completion of work, Contractor shall apply and provide final fire department NOC.

2.5 Site Facilities

- The contractor shall provide fully equipped office for Engineer- in-charge/ site engineer/ Principal Employer along with facility of 24 hours electric and drinking water supply, sanitary facilities, one inspection vehicle, furniture and desktop computers of latest version along with printers and internet connection at construction site and any other miscellaneous requirement as directed by Engineer-in-charge for finalizing immediate technical solutions/decisions on the site, so that the work progress may not be hampered. An amount equal to 1% of the gross amount of running account bills and final bill will be deducted, if above facilities are not provided at site.
- The Contractor has to make own security arrangement. Contractor shall maintain upto date record of in & out of the material & labour / staff at the security gate of campus at its own expenses.
- The Contractor shall provide safety equipment to the Employers/officers (whenever required).
- Contractor shall deploy security/ watchmen for 24 hours on site at entire execution period and up to successful handing over of the project to the Principal Employer.
- Contractor shall properly cover up & protect all the work throughout the duration of work at his cost until successful handing over to the Principal Employer, particularly flooring, risers, mouldings, steps, terrace or special floor finishes (by a layer of 25 mm thick Plaster of Paris over Polyethylene sheet as approved by Engineer-in-Charge) staircases and balustrades, doors and glass, paint work, furniture and all finishing

2.6 Approach Roads and Transportation of Equipment & Materials

Contractor will be permitted to use the existing roads in the establishment area for the purpose of transporting equipment and materials and for use of labour etc if Principal Employer permits the same. The Engineer-in-Charge, however, will not undertake to provide any approach roads to the actual site of work. It shall be the entire responsibility of the Contractor to provide and maintain such temporary approach roads including cross drainage works if any at his own cost for the purpose of movement of men, materials and equipment.

2.7 Supply of Water for Construction Purpose

Contractor shall make his own arrangement of water required for the work, at his own cost, subject to the approval of the Engineer-in-Charge. However, the Contractor will be permitted to drill bore well/s at site and the Contractor shall pay all charges to local bodies / authorities / royalty if any and obtain statutory approvals, geological survey provide pump, pipeline, casing with all accessories required for functioning of the bore well. The water should be tested in an approved laboratory and should be permitted to use in work if found suitable for construction. However, Contractor shall make alternate arrangements in case the water is not found fit for construction. After completion of work the Contractor will handover complete bore well/s with pump/s and accessories to the Employer at no cost. The water storage tanks should be leak proof and wastage and misuse of water is strictly prohibited, Contamination and pollution of water to be strictly avoided. Construction water should not be used for drinking or for domestic purpose.

2.8 Monthly Bill of Electric & Water Department

The Contractor shall make his own arrangement for the Temporary connection for Supply of Electricity & Water for Construction Purpose as required at his own cost and pay their monthly bill. After getting permanent connection during final stage of construction for Principal Employer/ Project, contractor shall pay monthly billing charges of Permanent electric and water connection (taken by contractor on behalf of Principal Employer, to run project) up to the successful handing over of the project to Principal Employer, from the date of installation of connections. These charges will be borne by the contractor. Hence contractor shall quote the cost in tender accordingly

2.9 Handing Over of the Project

Contractor shall apply/ liaison, well before the completion of project, for permanent electricity connection, Electric load enhancement, solar net metering from concerned Electrical Departments for Permanent supply of electricity to the project within the completion period of the project. After completion of installation of electric equipments & connections, Contractor shall arrange necessary testing of equipment, panels, transformer, DG set, solar installation etc. at site as per norms and provide test reports to Employer/local Authorities. After that Contractor will arrange all necessary approval/NOC from Chief Electrical Inspector Department/ local Authorities etc. to submit further to the electricity department for getting permanent electrical supply to the project.

Contractor shall apply/ liaison, well before the completion of project, permanent water connection & Sewerage Connection, gas connection, etc. from concerned Departments/ Government Authorities which are mandatory to make the project operational and get the connection within the completion period of the project.

Contractor shall provide necessary Statutory Approvals/NOCs/ License from all local Government/ Statuary Authorities including Fire, Forest, Electrical, Pollution, Environment, Lift, DG Set, final Occupancy Certificate required before handing over the project to the Principal Employer.

Contractor will hand over the project to Employer/Principal Employer after successful completion of each component of the project along with submission of all the required documents i.e. As- built drawings, Inventory list, guarantee / warranty bonds, certificates & invoices of equipment, lock and key of each room, NoCs form various Departments and final Occupancy Certificate from Local Body with complete satisfaction and acceptance by Principal Employer within the completion period of the project.

The statutory fees, if any will be deposited by the contractor for the above will be reimbursable to the contractor by Employer after providing the original receipt of the concern department. No other amount will be paid to the contractor for above works.

The partial handing over of works components shall not be considered. The Warranty/Defect Liability Period shall commence from the date of issue of the Taking Over Certificate by Principal Employer or issue of Completion Certificate by Principal Employer or agreed date of start of Defect Liability Period by the Principal Employer whichever is later along with submission of all the required documents i.e. As- built drawings, Inventory list, guarantee / warranty bonds, certificates & invoices of equipment, lock and key of each room and NoCs form various Departments.

2.10 Ceremony/Inaugural Function

The contractor shall make all arrangements for Foundation Stone/ Ground Breaking Ceremony/Inaugural Function etc. for the project as required and the cost towards it deemed

to be included in quoted cost by the contractor. Any expenditure already incurred/to be incurred by Employer on account of ground breaking ceremony/inaugural function etc, shall be recovered from the Contractor.

2.11 Setting out Base Lines and Levels

The Contractor shall establish at site the layout of each component of the work from base lines and grids established by the Employer and shall be responsible for all measurements in connection therewith. The Contractor shall, at his own expenses, furnish all stakes, templates, platform, equipment, ranges and labour that may be required in setting out or laying out any part of the work. The Contractor shall be held responsible for the proper execution of the work to such lines, levels and grids as may be established or indicated on the drawings and specifications. The Contractor shall check the bench marks and stakes existing at the site for laying out lines and levels.

The Contractor has to construct and maintain proper bench marks at all salient locations/positions in order that the lines and levels may be accurately checked at all times.

Theodolite/ Total Station, Levels, Prismatic Compass, Chain, Steel and FRP Tapes and all other surveying instruments found necessary on the works shall be provided by the Contractor for use at site in connection with this work.

2.12 Co-operation & Co-ordination with other Agencies:

The Contractor shall have to make Coordination with other agencies engaged at the site by the Employer at no extra cost and share the Site with other Contractors/agencies, public authorities, utilities working in the area, if any. The Contractor will carry out the entire work in a planned manner by coordinating his work with other agencies, who will be simultaneously carrying out work in the same area and also co-ordinate in connection with the position of various fixtures, inserts, embedment's and other allied work connected with the completion of the building / subject work.

In case of any dispute between the agencies engaged on the same work, decision of Engineer-in-Charge shall be final and binding.

2.13 Operations and Storage Areas

All operations of the Contractor shall be confined to areas authorized by the Project Manager, WAPCOS and storage of materials shall be over the areas specially indicated by the Project Manager, WAPCOS. Materials like sand and metal of different sizes shall be stored in properly constructed bins with hard floor to avoid inter mixing as well as mixing with objectionable materials. The Contractor shall be obliged to keep the premises in hygienic conditions by proper drainages of the area provided with suitable approaches throughout the period of Contract. He shall rectify all damages caused to the Government property within the areas thus allotted. He shall be responsible to clear all rank, vegetation at site at his own cost.

2.14 Contractor's Storage and Site Office

The Contractor shall make own arrangement for storing his equipment, plant, materials etc. and for his site office and cement godown. The Contractor be solely responsible for watching or guarding his property and materials. Contractor shall cover all materials at site with requisite insurance against theft, larceny, dacoits, fire tempest and flood. The Contractor, however, shall have to dismantle the shed and vacate the land after the receipt of due notice from the Project Manager, WAPCOS if the same is obstructing any work. The Contractor should obtain necessary permission / approval from Statutory Authorities such as Municipal corporations / Local bodies etc. for construction of temporary structures at site of work such as cement godown, stores, site office etc. It will be responsibility of the Contractor to prepare proper plans, to pay any requisite fees to statutory authorities and to execute the work for the temporary structure at their own cost as per the conditions and rules laid by statutory authorities.

The Engineer-in-Charge or his authorized representative shall have a right at any time to inspect and examine any stores and materials intended to be used in or on the works either on the site or at any factory or workshops or other places where such stores or materials are being constructed or manufactured or processed or any place from where they are being obtained and the Contractor shall give such facilities as required to be given for such inspection and examination.

The Engineer-in-Charge or his authorized representative shall be entitled to have tests made without any extra cost to the Employer at the laboratory selected by the Employer for any stores and or materials supplied by the Contractors, who shall provide at his own expense all the facilities which the Engineer-in-Charge may require for this purpose.

Any stores and materials brought to site for use on the work and which has been rejected by Engineer-in-Charge shall be immediately removed off the site by Contractor at his own expenses and intimate in writing accordingly to the Engineer-in-Charge. The rejected materials shall not be used in any manner in the construction of the project.

2.15 Temporary Buildings

Any temporarily buildings and office facilities as required by the Contractor shall be arranged by the Contractor at his own expense. Area for the same will be made available by the Employer, if available. After the work is over, all these temporary facilities shall be removed by the Contractor at his own expense within 10 days from the date of completion.

Labour Camp is permitted at site after approval of Principal Employer. However, no labour shall be permitted to stay in the partly completed building at any time. Unauthorized occupation of any area/partly completed building by the Contractor's labourer will be treated as trespass and action will be taken to evict them including termination of Contract if deemed fit. Sanitary as well as water supply and drainage facilities as required by the labour laws in force, are to be provided by the Contractors at his own cost. The labour camp should be dismantled by the Contractor before handing over the buildings.

2.16 Traffic Interference & Inconvenience to the Public

The Contractor shall so conduct his operations as to interfere as little as possible with the traffic/public. When interference to traffic is inevitable, a notice of such interference shall be given to the Project Manager, WAPCOS well in advance (at least 2 days) at any stage, if it becomes necessary to divert the traffic, the Contractor shall obtain permission from the local traffic authorities at his own expense. The Employer will render reasonable assistance in the matter. The Contractor shall take all precautionary and other measure, such as providing warning signals, temporary diversion etc. all as directed by the Project Manager, WAPCOS.

The Contractor shall not deposit materials anywhere at work site which will seriously inconvenience the public. The Project Manager, WAPCOS may require the Contractor to remove any materials which are considered to be a danger or inconvenience to the public or cause them to be removed at the Contractor's cost.

The Contractor shall exercise full care to ensure that no damage is caused by him or his workmen, during the operation to the existing water supply and power lines. The cost of any such damage and risks arising out of this shall be entirely borne by the Contractor.

2.17 Drainage around the Buildings and Foundation for other Works

The Contractor shall be entirely responsible for the provision and maintenance of efficient drainage arrangements in the work site to lead all water whatsoever pumped out from the excavations on account of rains, floods, springs or any other source whatsoever. The foundation trenches shall be kept free from water while all the works below ground level are in progress.

Flooding or ponding of water in the work site shall not be permitted under any circumstances whatsoever and the Contractor shall take all necessary precautions to prevent the same by providing suitable pumps and other dewatering arrangement.

The cost of repairing damages if any, to the work under execution or to any government

property in and around the site shall be entirely borne by the Contractor where such damages are due to his non-compliance with the above conditions.

2.18 Maintenance of Entire Electrical Installation

As mentioned above, the Contractor shall maintain his entire electrical installation, appliances etc. in good and safe condition as required under relevant rules and BIS codes of practice etc. till completion of works at his own cost. However, the following precautions and directives shall be followed in addition to observing other essential rules:

- a. The minimum clearance (measured at the lowest sag point) to be maintained for all overhead lines shall be 4 Mtrs. cross country or along roads and 6.1 metres across roads.
- b. Metallic poles as a general rule should be avoided and if used should be earthed individually.
- c. All loose hanging of wires and cables should be avoided. The line wires should be properly supported and an approved method of fixing shall be adopted.
- d. Installation shall not cause any hindrance to the normal movement of men and materials at site.
- e. All cables and wires should be adequately protected against mechanical damage during construction activity of all Contractors, working at site.
- f. In case the cable is required to be laid in ground, it should be adequately protected by covering the same with bricks, R.C.C. tiles or any other approved means and cable markers provided at suitable intervals as per approval of the Engineer-in-Charge.
- g. Laying of cable and wires direct on floor shall not be allowed but if absolutely necessary for some very short lengths, the same shall be taken through suitable mechanical covering like G.I. / M.S. Pipes etc.
- h. All the cut door switch boards, equipment etc., should be adequately protected against rain or preferably they should not be exposed to weather.
- i. If overhead lines using bare conductors are installed, a guard wire system of adequate size shall run along the cables / wires and earthed effectively.
- j. The connection for portable machines shall be taken only through suitably rated 3 pin socket points. Iron clad industrial type outlets are preferred. While taking supply through socket outlet a plug top must be used, avoiding inserting of loose wires in the sockets. The third pin of the plug shall invariably be earthed and 3 core wire of appropriate specifications and capacity shall be used.
- k. All three-phase equipment shall be provided with duplicate earthing. All metallic frames, light fixtures, portable equipment's etc. should be effectively earthed to main earthing.
- l. Duly authorized persons having valid wireman's license / competence certificate must be employed under the supervision of a qualified and experienced Electrical Supervisor for carrying out electrical work and repair of electrical equipment, installation and maintenance etc. at site.
- m. Special precaution shall be taken by the Contractor not to disturb the sapling/trees recently planted by the side of the compound wall. The sapling/trees fall within the building/road etc. shall be transplanted to suitable place with written approval of the Engineer-in-Charge and maintained by the Contractor till completion of works at his own cost.

2.19 Proper drawings and instructions

The Contractor shall provide shop drawings and other drawings to the Engineer-in-Charge in line with the requirement of contract agreement from time to time for approval for the purpose of proper and adequate execution and maintenance of the work and the Contractor shall carry out the work and be bound by the same.

Copies of the drawings approved by the Engineer-in-Charge and the construction drawings issued shall be kept by the Contractor at the site and the same shall at all reasonable times be made

available for inspection and use by the Engineer-in-Charge and any other person authorized by the Engineer-in-Charge.

2.20 Employment of Staff for Plumbing & Electrical Works

- Employment of certified plumber: Certified plumbers should be employed by the Contractor on the work for main sewer, filtered and unfiltered main.
- Employment of licensed electrical foreman: The Contractor should employ a licensed electrical foreman to supervise the Electrical works.

2.21 Urgent repairs

If by reason of any accident or failure or other event occurring to or in connection with the work or any part thereof either during the period of construction or maintenance, any remedial or other work or repair shall in the opinion of the Project Manager, WAPCOS be urgently necessary for security etc. and the Contractor is unable or unwilling, at once, to do such work or repair, the Project Manager, WAPCOS may be his own or other workmen do such work or repair as he may consider necessary. If the work or repair so done which in the opinion of the Project Manager, WAPCOS, the Contractor was liable to do at his own expenses under the Contract and all cost and charges properly incurred by the Project Manager, WAPCOS in so doing shall on demand be paid by the Contractor or may be deducted from any sum due or which may become due to the Contractor provided always that the Project Manager, WAPCOS shall soon after the occurrence of any such emergency as may be reasonable, practicable, notify the Contractor thereof in writing.

2.22 Security Regulations

The Contractor has to strictly follow the security regulations at the work site regarding entry of personnel, material etc. and any other regulation that might be enforced from time to time. All materials and articles brought by the Contractor to the work site shall have to be declared at the security gate. Similarly, no materials shall be taken out from the premises without proper gate pass.

The Contractors, Suppliers, vendors, workers engaged in work/business will be issued with renewable entry permit to avoid unauthorized entry in the work site on scrutiny of applications in prescribed form.

For working on Sundays, Holidays and late hours, even though permission will be accorded by the Engineer-in-Charge, the Contractor will have to make application to the Engineer-in-Charge also and keep them informed well in advance.

The area where the proposed work is to be carried is residential / non-residential area under the control of Security authorities, entry to the site of work shall be through the main gate only. The Contractor shall follow strictly the security regulations at site of work regarding entry of personnel, materials etc. and other regulations that might be enforced from time to time at the work site and also in the campus for smooth and efficient operation. The Contractors, his agents, representatives, workmen etc. and his materials, carts, trucks or other means of transport etc. will be allowed to enter through and leave from such point of entry/exit at such times, the authorities in charge of the area, at their sole discretion, may permit.

The Contractors, his agents and representatives are required to be in possession of the individual identity / muster cards or passes. The muster cards or passes are examined by the security staff at the time entry / exit inside the premises and also at any time or number of times within such area.

The Contractor will have to apply for entry/muster permits of likely number of labour to be

engaged during the week for the workers and authorize their representatives to collect the entry permits for labour from the Employer's Security Authorities.

It will be the responsibility of the Contractor to maintain the list of laborers permitted to work inside the premises in a register and the representative of Contractor's labour will have to issue entry pass to each labour after making necessary entry in the registers.

The Contractor, his agents, representatives, workmen shall strictly observe the orders pertaining to prevailing fire precautions.

In addition to the above, other security regulations as may be imposed by the Security authorities / Project Manager, WAPCOS shall be complied with / observed by the Contractor and his workmen, in addition to the above.

Any breach of above security regulations and rules in force from time to time will be viewed seriously. No claim whatsoever will be entertained by the Employer on account of the observation of the Security regulations.

2.23 Watch and Ward and Lighting

The Contractor shall in connection with the works provide and maintain at his own cost all lights, guards, fencing and watching when and where necessary or as required by the Project Manager, WAPCOS and duly constituted authority for the protection of the workers or for safety and convenience of the public or others. The Contractor shall be responsible for all damages and accidents caused due to negligence in this regard.

It will be the entire responsibility of the Contractor to protect the work(s) carried out by them including the fittings, fixtures and other accessories provided by them till the entire work is satisfactorily handed over to the Employer.

2.24 Removal of rejected/sub-standard materials.

The following procedure shall be followed for the removal of rejected/sub-standard materials from the site of work:

- (i) Whenever any material brought by the contractor to the site of work is rejected, entry thereof should invariably be made in the Site Order Book under the signature of the Project Manager, WAPCOS, giving the approximate quantity of such materials.
- (ii) As soon as the material is removed, a certificate to that effect shall be recorded by the Project Manager, WAPCOS against the original entry, giving, the date of removal and mode of removal, i.e., whether by truck, carts, or by manual labour. If the removal is by truck, the registration number of the truck should be recorded.
- (iii) When it is not possible for the Project Manager, WAPCOS to be present at the site of work at the time of actual removal of the rejected/sub-standard materials from the site, the required certificate should be recorded by the Authorized Representative of WAPCOS, and the Project Manager, WAPCOS should countersign the certificate recorded by the Authorized Representative.

As the basement is to be excavated at site hence soil as excavated shall remain in surplus to be disposed-off from site. In the estimation the financial impact of same is taken and has been deducted from the NIT cost. Thus, the soil excavated from site in surplus may be used or sell by the contractor. Documentation for same should be made available to CBSE if desired.

2.25 Special Conditions for Steel:

The contractor shall procure TMT bars of Fe500/Fe500D/Fe550/Fe550D grade (the grade to be specified) from primary steel producers as per the list of approved makes or any other producer as approved by WAPCOS who are using iron ore as the basic raw material / input and having crude steel capacity of 2.0 Million tonnes per annum and above

2.26 Special conditions for Cement

The contractor shall procure 43 grade Ordinary Portland Cement (conforming to IS : 8112), Portland pozzolona cement (confirming to IS : 1489 : Part –I) as required in the work, from reputed manufacturers of cement as per the list of approved makes or from any other reputed cement manufacturer, having a production capacity not less than one million tones per annum as approved by WAPCOS. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves right to accept or reject name(s) of cement manufacture(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufactures, given by the tenderer, fully or partially. The cement brought to the site for execution of work shall be in bags bearing manufacturer's name & ISI marking. Weight of cement in each bag shall be 50 kg. Samples of cement arranged by the contractor shall be taken by the Engineer- in-Charge and got tested in accordance with provisions of relevant BIS codes. In case the test results indicate that the cement arranged by the contractor does not conform to the relevant BIS codes, the same shall stand rejected and it shall be removed from the site by the contractor at his own cost within 7 days of written order from the Engineer-in-Charge to do so.

2.27 Special Conditions for Waterproofing and Testing

The contractor shall associate himself with the specialized firm, to be approved by the Engineer-in-Charge in writing, for water proofing treatment as contractor shall provide Guarantee Bond in the prescribed format for 10 years. After laying and jointing of pipes for PHE works contractor shall carry out Pressure test as per CPWD Specification 2019 to check the leakage and sustainability of whole pipe network system. Similarly after water proofing works and finalization of roof top surface/exposed surfaces, the entire surface thus treated shall be flooded with water by making kiaries with weak cement mortar, for a minimum period of two weeks.

2.28 Other Conditions

- a) Contractor shall use good quality Steel Props and steel shuttering material for RCC works. Use of wooden props and shuttering is affecting the line, level and alignment of RCC members. No payment shall be released for RCC work where use of wooden centering & shuttering material is noticed or reported.
- b) All mass Reinforced Cement Concrete work shall be design mix concrete of specified grade and initial design mix shall be carried out from the NIT/IIT only immediately after award of work. The Design Mix report shall be submitted to WAPCOS before commencement of the RCC works at site.
- c) The Contractor shall be responsible to co-ordinate with service provider/concerned authorities for cutting of trees, shifting of utilities and removal of encroachments etc. and making the site un-encumbered from the project construction area required for completion of work. This shall include initial and frequent follow up meetings/ actions/ discussions with each involved service provider/ concerned authorities. The contractor shall not be entitled for any additional compensation for delay in cutting of trees, shifting of utilities and removal of encroachments by the service provider/ concerned authorities.
- d) Contractor shall provide R.O. Plant sufficient for workers employed at site, his technical staff and site staff.
- e) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been in-built in the items and nothing extra shall be payable (or) extra cement considered in consumption on this account.
- f) No payment shall be made for any damage caused by rain, snowfall, flood or any other natural calamity, whatsoever during the execution of the work. The Contractor shall be

fully responsible for any damage to the govt. property and work for which the payment has been advanced to him under the contract and he shall make good the same at his risk and cost. The Contractor shall be fully responsible for safety and security of his material, T&P, Machinery brought to the site by him.

- g) Wherever work is specified to be done or material procured through specialized agencies, their names shall be got approved well in advance from Engineer-in-Charge. Failure to do so shall not justify delay in execution of work. It is suggested that immediately after award of work, Contractor should negotiate with concerned specialist agencies and send their names for approval to Engineer-in-Charge. Any material procured without prior approval of Engineer-in-Charge in writing is liable to be rejected. Engineer-in-Charge reserves right to get the materials tested in laboratories of his choice before final acceptance. Nonstandard materials shall not be accepted.
- h) The construction joints shall be provided in predetermined locations & as per the approved drawings only.
- i) The Contractor shall invariably prepare the samples of finishing items i.e. flooring of different types, external & internal finishing i/c colour scheme of paint, tiles in dado, flooring in platforms & staircase, water supply & sanitary fittings and any other item as per direction of Project Manager, WAPCOS. The Contractor shall proceed with further finishing items only after getting the samples of these items approved in writing from Engineer-in-Charge. No extra claim whatsoever beyond the payments due at agreement rates will be entertained from the Contractor on this account.
- j) Contractor shall not divert any advance payments or part thereof for any work other than that needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e., mobilization advance, secured advance against materials brought at site, secured advance against plant & machinery and/or for work done during interim stages, etc.) are required to be re-invested in the contracted work to ensure advance availability of resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
- k) Any Circular/Guidelines/SOP issued by the Principal Employer/ Government during the progress/ execution of the construction work shall be followed by the contractor without any dispute. The contractor shall comply with proper and legal orders and directions of the local or public authority or municipality and abide by their rule and regulations and pay all fees and charges which he may be liable.
- l) All the modifications and any additional works (basic requirement after use of premises by user) suggested by Principal Employer at the time of handing over of the project and after occupancy of premises by Principal Employer during Defect Liability Period must be taken up by contractor without any disputes.
- m) If any dispute/ hindrance may arise during construction due to any reason whatsoever, the contractor is not liable for any financial claim or damages due to such circumstances.
- n) If the work is carried out in more than one shift or during night, no claim on this account shall be entertained. The contractor has to take permission from the police & local authorities etc. if required for work during night hours. No claim / hindrance on this account shall be considered if work is not allowed during night time. The requisite supervision shall be made available by the WAPCOS along with necessary issue of material under joint custody.
- o) In case of any inconsistency between clauses, the clause favorable/ beneficiary to the project will prevail which will be decided by the Principal Employer and Employer.
- p) One sample room complete in all shape for each category, shall be prepared by the contractor and got approved from Engineer-in-charge in writing. The contractor shall be allowed to proceed with further rooms only after getting the sample room approved in writing from Engineer-in-charge. No extra claim whatsoever beyond the payments due at agreement rates will be entertained from the contractor on this account.

- q) It must be ensure that all materials to be used in work bear BIS certification mark. In cases where BIS certification system is available for a particular material/product but not even a single producer has so far approached BIS for certification the material can be used subject to the condition that it should confirm to CPWD specification and relevant BIS codes. In such case written approval of the Engineer-In-Charge may be obtained before use of such material in the work.

- r) In case of works where a ready mix concrete (RMC) is stipulated to be used from an approved source/manufacturer, cement register need not be maintained. However, the computerized dispatch slips that are sent with each dispatch of RMC shall be kept as record.

SECTION – VI

ANNEXURES

ANNEXURE - I	FORMAT FOR CONTRACT AGREEMENT AND LETTER OF AWARD
ANNEXURE - II	FORMAT FOR PERFORMANCE BANK GUARANTEE
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ANNEXURE – X	SAFETY CODES
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ANNEXURE-I

(Format for “Contract” to be signed on Non-Judicial Stamp Paper of Rs. 100 by successful bidder)

CONTRACT AGREEMENT

This Contract made on the ____ day of ____ 20____ between WAPCOS Limited, a Company in corporate under Indian Company’s Act and having its registered office at 5th floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called “WAPCOS” of the one part) and (Name of Contractor Firm & Address)_____ (hereinafter called “Contractor” of the other part).

WHEREAS the WAPCOS is desirous that Work known as “_____”. (Herein after referred to as “Work/ Project”) under the Tender no. _____ dated _____ should be executed by the Contractor AND WHEREAS by a Letter of Award No. _____ dated _____ issued by WAPCOS Limited and accepted by the contractor. WAPCOS Limited has accepted a Bid submitted by the Contractor for the execution and completion of such Work AND WHEREAS the Contractor has agreed to undertake such Work and furnish a Performance Security _____ (details) pursuant to Tender conditions.

NOW THIS AGREEMENT WITNESSETH as follows;

In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

The following documents shall be deemed to form and be read and construed as part of this Contract, viz;

- a) Tender Document no. _____ dtd. _____
- b) Letter of Award to Contractor by WAPCOS
- c) Documents furnished by the Contractor during Bidding process
- d) Corrigendum/Amendments, if any
- e) Clarifications / Correspondences, if any
- f) Any other documents as forming part of the contract

1. The aforesaid documents shall be taken as complementary and mutually explanatory of one another.
2. In consideration of the payment to be made by WAPCOS to the Contractor as indicated in this Contract, the Contractor hereby covenants with WAPCOS to execute and complete the Works in conformity, in all respects, with the provisions of the Contract.
3. WAPCOS hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein the Contract Price or such other sum as may become payable under the provisions of the contract at the time and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with Laws of India on the day, month & year indicated above.

SIGNED, SEALED AND DELIVERED

For and on behalf of the WAPCOS

For and on behalf of the Contractor

NAME _____
Designation

NAME _____
Designation

in the presence of witness:

in the presence of Witness

1 _____

1 _____

2 _____

2 _____

NOTE: Contractor shall submit the Original Power of Attorney on Non-Judicial Stamp Paper for this particular Work / Project, in the name of Person who will sign the Contract with WAPCOS after award of Work.

FORMAT FOR LETTER OF AWARD

No.

Date:.....

M/s(Name of successful Bidder)
 (Address of successful bidder)

Subject: Award Letter for Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

Reference: Tender No.

Dear Sir,

We are pleased to inform that work of “.....” is awarded to your firm, in cost of Rs. ----- excluding GST, according to submission of your technical & financial bids against referred tender for the subjected work.

Project	Awarded Cost excluding GST
Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata	Rs.

- The “Date of Commencement of Work” shall be 15 days after Date of Award or Handing over of Site whichever is later and accordingly, planning should be started for deploying manpower, resources as per Terms & Conditions of Tender document.
- The tender document wholly accepted by you along with all related correspondences at the time of bidding shall form a part of this letter of award.
- You are requested to submit the following as per Terms & Conditions of tender
 - Performance Security @5% of Tendered Value as per the form enclosed in the tender document before signing of the Agreement within 21 (Twenty One) days of the date of acceptance of the letter of award and sign the Contract Agreement.
 - Detailed Schedule Plan/ Bar chart of each component of work to complete the work in stipulated time period
 - Labour License from concerned Labour Department of State
 - Contractor All Risk (CAR) and Third Party Cover Policy.
 - Liability under the workmen’s compensation Act, 1923, Minimum Wages Act, 1948
 - Details of manpower to be deployed at site along with CVs
 - List of Lab Equipment required for the work for approval of Engineer-in charge.
- The terms & conditions of the Work will be governed as mentioned in the tender document.

This letter of award is being issued to you in duplicate. You are requested to return the duplicate copy of the letter of award immediately duly signed and stamped as a token of your unequivocal acceptance and confirmation of the same.

Thanking You,

Yours faithfully,
(Name & Designation)

Annexure – II**(To be submitted on non-judicial stamp paper of Rs. 100)****FORMAT FOR PERFORMANCE BANK GUARANTEE**

To,
The WAPCOS Limited,
76-C, Sector 18, Institutional Area
Gurugram, Haryana-122015.

In consideration of _____ (Employer's name) (hereinafter referred to as "the Employer") which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to _____ (Contractor's name & address) (hereinafter referred to as "the Contractor" which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer's Notification of Award No. _____ dt. _____ and the same having been unequivocally accepted by the Contractor, resulting into a contract valued at Rs. _____ (Rupees _____ only) for **Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata** (hereinafter called "the contract") and the Contractor having agreed to provide a Contract Performance Security for the faithful performance of the entire contract equivalent to Rs. _____ (Rupees _____ only) (5% of the said value of the Contract to the Employer).

We, _____ (name & address of bank) (hereinafter referred to as "the Bank" which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer, on demand any or, all monies payable by the Contractor to the extent of Rs. _____ (Rupees _____ only) as aforesaid at any time upto _____ without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor or court. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Bank undertakes not to revoke this guarantee during its currency without previous consent of the Employer and further agrees that the guarantee herein contained shall continue to be enforceable till the Employer discharges this guarantee.

We the said Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the Employer certifies that the terms and conditions of the said Contract have been fully and properly carried out by the said Contractor and accordingly discharges the guarantee.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from, time to time to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the

Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank. The guarantee shall not be affected by a change in the constitution of the bank or of the employer.

The bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance, without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

We The Said Bank do hereby declare that we have absolute and unconditional power to issue this guarantee in your favour under the Memorandum and Articles of Association or such other constitutional documents of the Bank and the undersigned have full power to execute this guarantee under the Power of Attorney / Post Approval Authorization dated _____ of the bank granted to him / us by the Bank. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the powers of the bank or its officials and the guarantee shall be deemed to have been issued as if the bank and its officials have all the powers and authorization to give this guarantee on behalf of the bank.

We the said bank do hereby certify the genuineness and appropriateness of the Stamp paper and stamp value used for issuing the guarantee. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the stamp paper or its stamp value.

We the said bank do hereby declare that our payments hereunder shall be made to you , free and clear of and without and deduction, reduction on account of any reasons including any and all present and future taxes, levies, charges of withholding whatsoever imposed or collected with respect thereto.

Notwithstanding anything contained hereinabove our liability under this guarantee is restricted to Rs. _____ (Rupees _____ only) and it shall remain in force upto and including _____ and shall be extended from time to time for such period as may be desired by M/s WAPCOS Limited to whom this bank guarantee has been given.

Notwithstanding anything contained herein

- i) Our liability under this guarantee shall not exceed Rs. _____ (Rupees _____ only);
- ii) This bank guarantee shall be valid upto _____; and
- iii) our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee, only and only if you serve upon us a written claim or demand in terms of the guarantee on or before _____ **(indicate a date twelve month after validity of Guarantee)**

Dated this _____ day of _____ at New Delhi.

Authorized Signatory of Bank

Signature

Signature

Name..... Name.....

Signature Code/ S.S no. Signature Code/ S.S no.

.....

ANNEXURE – III**(To be submitted on non-judicial stamp paper of Rs. 100)****FORMAT FOR MOBILIZATION ADVANCE PAYMENT BANK GUARANTEE**

To,
The WAPCOS Limited,
76-C, Sector 18, Institutional Area
Gurugram, Haryana-122015

In consideration of WAPCOS LTD. (hereinafter referred to as “the Employer”) which expression shall, unless repugnant to the context or meaning thereof include its successors, administrators and assigns) having awarded to _____ (Contractor’s name) with its Registered /Head Office at _____ (hereinafter referred to as “the Contractor” which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) a contract, by issue of Employer’s Notification of Award No. _____ dt. _____ and the same having been unequivocally accepted by the Contractor, resulting into a contract valued at Rs. _____ (Rupees _____ only) for _____ (hereinafter called “the contract”) and the Employer having agreed to make an advance payment to the Contractor for performance of the above Contract amounting to Rs. _____ (Rupees _____ only) as an advance against bank guarantee to be furnished by the Contractor.

We, _____ (name & address of bank) having its Head Office at _____ (hereinafter referred to as “the Bank” which expression shall, unless repugnant to the context or meaning thereof, include its successors, administrators, executors and assigns) do hereby guarantee and undertake to pay the Employer immediately on demand any or, all monies payable by the Contractor to the extent of Rs. _____ (Rupees _____ only) as aforesaid at any time upto _____ without any demur, reservation, contest, recourse or protest and/or without any reference to the Contractor. Any such demand made by the Employer on the bank shall be conclusive and binding notwithstanding any difference between the Employer and the Contractor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. We agree that the Guarantee herein contained shall be irrevocable and shall continue to be enforceable till the Employer discharges this guarantee. We further agree that no change in the constitution of the Bank or of the Employer shall affect this guarantee.

The Employer shall have the fullest liberty without affecting in any way the liability of the Bank under this guarantee, from time to time, to vary the advance or to extend the time for performance of the Contract by the Contractor. The Employer shall have the fullest liberty without affecting this guarantee, to postpone from time to time the exercise of any powers vested in them or of any right which they might have against the Contractor and to exercise the same at any time in any manner, and either to enforce or to forbear to enforce any covenants, contained or implied, in the Contract between the Employer and the Contractor or any other course or remedy or security available to the Employer. The bank shall not be released of its obligations under these presents by any exercise by the Employer of its liberty with reference to the matters aforesaid or any of them or by reason of any other act or forbearance or other acts of omission or commission on the part of the Employer or any other indulgence shown by the Employer or by any other matter or thing whatsoever which under law would but for this provision, have the effect of relieving the Bank.

The bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and

notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

We the Said Bank do hereby declare that we have absolute and unconditional power to issue this guarantee in your favour under the Memorandum and Articles of Association or such other constitutional documents of the Bank and the undersigned have full power to execute this guarantee under the Power of Attorney/ Post Approval Authorization dated _____ of the bank granted to him / us by the Bank. We the said bank do hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the powers of the bank or its officials and the guarantee shall be deemed to have been issued as if the bank and its officials have all the powers and authorization to give this guarantee on behalf of the bank.

We the said bank does hereby certify the genuineness and appropriateness of the Stamp paper and stamp value used for issuing the guarantee. We the said bank does hereby declare and undertake that your claim under the guarantee shall not be affected by any deficiency or other defect in the stamp paper or its stamp value.

We the said bank do hereby declare that our payments hereunder shall be made to you , free and clear of and without and deduction, reduction on account of any reasons including any and all present and future taxes, levies, charges of withholding whatsoever imposed or collected with respect thereto.

Notwithstanding anything contained hereinabove our liability under this guarantee is limited to Rs. _____ (Rupees _____ only) and it shall remain in force upto and including _____ and shall be extended from time to time for such period (not exceeding one year), as may be desired by M/s _____ on whose behalf this bank guarantee has been given.

Notwithstanding anything contained herein

- i) Our liability under this guarantee shall not exceed Rs. _____ (Rupees _____ only);
- ii) This bank guarantee shall be valid upto _____ and
- iii) our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee, only and only if you serve upon us a written claim or demand in terms of the guarantee on or before _____ (**indicate a date twelve months after the validity of the guarantee**).

Dated this _____ day of _____ at.....

Authorized Signatory of Bank

Signature

Signature

Name..... Name.....

Signature Code/ S.S no. Signature Code/ S.S no.

.....

ANNEXURE-IV**(On non-judicial stamp paper of Rs. 100 duly attested by Notary / Magistrate)****FORMAT FOR INDENTURE FOR SECURED ADVANCES**

THIS INDENTURE made the..... day of20..... BETWEEN (hereinafter called the Contractor which expression shall where the context so admits or implies be deemed to include his executors administrators and assigns) of the one part and the WAPCOS (hereinafter called the WAPCOS which expression shall where the context so admits or implies be deemed to include his successors in office and assigns) of the other part.

WHEREAS by an agreement dated..... (hereinafter called the said agreement) the Contractor has agreed AND WHEREAS the Contractor has applied to the WAPCOS that he may be allowed advances on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to execute at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges) AND WHEREAS the WAPCOS has agreed to advance to the Contractor the sum of Rupees on the security of materials the quantities and other particulars of which are detailed in Accounts of Secured Advances attached to the Running Account Bill for the said works signed by the Contractor onand the WAPCOS has reserved to himself the option of making any further advance or advances on the security of other materials brought by the Contractor to the site of the said works. Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rupeeson or before the execution of these presents paid to the Contractor by the WAPCOS (the receipt whereof the Contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as aforesaid the Contractor doth hereby covenant and agree with the WAPCOS and declare as follows: -

- (1) That the said sum of Rupeesso advanced by the WAPCOS to the Contractor as aforesaid and all or any further sum or sums advanced as aforesaid shall be employed by the Contractor in or towards expediting the execution of the said works and for no other purpose whatsoever.
- (2) That the materials detailed in the said Account of Secured Advances which have been offered to and accepted by the WAPCOS as security are absolutely the Contractor's own property and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnifies the WAPCOS against all claims to any materials in respect of which an advance has been made to him as aforesaid.
- (3) That the materials detailed in the said Account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereinafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Divisional Officer Division (hereinafter called the Divisional Officer) and in the term of the said agreement.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Divisional Officer or any officer authorised by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same as required by the Divisional Officer.

- (5) That the said materials shall not on any account be removed from the site of the said works except with the written permission of the Divisional Officer or an officer authorised by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contractor receives payment from the WAPCOS of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the WAPCOS will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials then actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing to the WAPCOS shall immediately on the happening of such default be repayable by the Contractor to the WAPCOS together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs charges, damages and expenses incurred by the WAPCOS in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the WAPCOS to repay and pay the same respectively to him accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the WAPCOS of the said sum of Rupeesand any further sum or sums advanced as aforesaid and all costs charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers contained therein if and whenever the covenant for payment and repayment herein before contained shall become enforceable and the money owing shall not be paid in accordance therewith the WAPCOS may at any time thereafter adopt all or any of the following courses as he may deem best :-
 - (a) Size and utilize the said materials or any part thereof in the completion of the said works on behalf of the Contractor in accordance with the provisions in that behalf contained in the said agreement debiting the Contractor with the actual cost of effecting such completion and the amount due in respect of advances under these presents and crediting the Contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the Contractor he is to pay same to the WAPCOS on demand.
 - b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or payable to the WAPCOS under these presents and pay over the surplus (if any) to the Contractor.
 - (c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the Contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been herein before expressly provided for the same shall be finally resolved as per provisions of clause 25 of the contract.

In witness whereof the said Contractor and WAPCOS by the order and under the direction of the WAPCOS have hereunto set their respective hands the day and year first above written.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor

For and on behalf of the WAPCOS

NAME _____

NAME_____

Designation _____

Designation_____

in the presence of witness:

1 _____

2 _____

in the presence of Witness

1 _____

2 _____

ANNEXURE-V**(To be submitted on non-judicial stamp paper of Rs. 100)****FORMAT FOR BANK GUARANTEE OF EMD**

To,
The WAPCOS Limited,
76-C, Sector 18, Institutional Area
Gurugram, Haryana-122015.

WHEREAS, M/s having their Registered/Head Office at (hereinafter called “the Bidder”) has submitted his Bid dated for the [hereinafter called “the Bid”] to M/s WAPCOS Limited (hereinafter called the Employer)

KNOW ALL PEOPLE by these presents that we (name of the Bank) having our head office at (hereinafter called “the Bank”) are bound unto Employer in the sum of for which payment well and truly to be made to the Employer, the Bank binds itself, its successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this day ofmonth..... year.

THE CONDITIONS of this obligation are:

(1) If after Bid opening the Bidder withdraws his bid during the period of Bid validity specified;

OR

(2) If the Bidder having been notified of the acceptance of his bid by during the period of Bid Validity:

We undertake to pay to the up to the above amount upon receipt of his first written demand, without the Employer having to substantiate his demand, provided that in his demand the Bidder will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above mentioned two conditions and specify the occurred condition or conditions.

This Guarantee will remain in force up to and including the date after the deadline for submission of Bids as is stated in the instructions to Bidders or as it may be extended by the notice of which extension(s) to the Bank is hereby waived and notice to the bidder would constitute sufficient notice to the Bank. Any demand in respect of this guarantee should reach the Bank not later than the above date.

Notwithstanding anything contained herein

- i) Liability under this guarantee shall not exceed
- ii) This bank guarantee shall be valid upto and;
- iii) Our liability to make payment shall arise and we are liable to pay the guaranteed amount or any part thereof under this guarantee only and only if you serve upon us a written claim or demand in terms of the guarantee on or before (indicate a period twelve months after the date of issue of Bank Guarantee).

Dated this _____ day of _____ at.....

Authorized Signatory of **Bank**

Signature

Signature

Name..... **Name.....**

Signature Code/ S.S no. **Signature Code/ S.S no.**

ANNEXURE-VI

(To be submitted on Contractor's original Letter Head)

FORMAT FOR SEEKING EXTENSION OF TIME

1. Name of Contractor:
2. Name of work:
3. Agreement No. and Date:
4. Date of commencement of work as per Agreement:
5. Period and Stipulated date of completion as per Agreement:
6. Period for which extension of time already given:

Extension	Period	Reasons Stated earlier for seeking EoT
(a) 1 st extension		
(b) 2 nd extension		
(c) 3 rd extension		
(d) 4 th extension		
(e) 5 th extension		

9) Reasons for present extension

10) Period for which extension is applied for

It is understood that we will not claim any additional cost due to above extension of time and also understand that WAPCOS have rights to act in accordance with provisions in relevant clauses of Contract Agreement.

Dated.....

Contractor's Signature and Stamp

Annexure – VII

(On Rs. 100 non- Judicial Stamp Paper duly attested by Notary / Magistrate and will be signed by the person who sign the Original Agreement)

FORMAT FOR GUARANTEE BONDS

To Be Executed by Contractor for Structural Stability, Removal of Defects after completion of work

This Supplementary Agreement made this ____ day of _____ 20____ between (Name of Contractor firm & address) _____ (hereinafter called the CONTRACTOR / GUARANTOR of the one part) and the WAPCOS LIMITED, 5th floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called WAPCOS of the other part) for the Work of **Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata** in respect of Contract Agreement (hereinafter called the “Original Agreement” signed between(Name of Contractor firm) and WAPCOS on..... dated), whereby the contractor interalia, under look to render the work in the said contract recited structurally stable workmanship and use of sound materials.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said work will remain structurally stable and guarantee against faulty workmanship, manufacturing defects of materials etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable, for the minimum life of ten years, to be reckoned from the date of start of Defect Liability Period or Maintenance Period which ever is later, prescribed in the Contract.

The decision of the WAPCOS with regard to nature and cause of defects shall be final. During the period of guarantee the Guarantor shall make good all defects to the satisfaction of the WAPCOS calling upon him to rectify the defects, failing which the work shall be got done by the WAPCOS by some other agencies at the Guarantor's cost and risk. The decision of the WAPCOS as to the cost payable by the Guarantor shall be final and binding.

That if the Guarantor fails to make good all the defects, commits breach thereunder then the guarantor will indemnify the Principal and his successor against all loss, damage cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and / or damage and / or cost incurred by the WAPCOS the decision of the WAPCOS will be final and binding.

IN WITNES WHEREOF those presents have been executed by the GUARANTOR(Name and Designation who sign the Original Contract Agreement) on behalf of(Name of Contractor Firm) and WAPCOS on the day, month and year first above written.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor

For and on behalf of the WAPCOS

NAME _____

NAME _____

Designation _____

Designation _____

in the presence of witness:

in the presence of Witness

1 _____

1 _____

2 _____

2 _____

Annexure – VIII

(On Rs. 100 non- Judicial Stamp Paper duly attested by Notary / Magistrate and will be signed by the person who sign the Original Agreement))

FORMAT FOR GUARANTEE BONDS**To Be Executed by Contractor for Water Proofing after Completion of Work**

This Supplementary Agreement made this ____ day of _____ 20____ between (Name of Contractor firm & address) _____ (hereinafter called the CONTRACTOR / GUARANTOR of the one part) and the WAPCOS LIMITED, 5th floor, Kailash Building, 26, K. G. Marg, New Delhi (hereinafter called WAPCOS of the other part) for the Work of **Renovation works for proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata** in respect of Contract Agreement (hereinafter called the “Original Agreement” signed between(Name of Contractor firm) and WAPCOS on..... dated), whereby the contractor interalia, under look to render the buildings and structures in the contract recited completely water and leak-proof for Toilets, Shower , Under Ground Tank, Roof, Over Head Tank, Basement and any other allied areas of building.

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the effect that the said structures will remain water and leak-proof for **ten years** from the date after the Defect Liability Period or Maintenance Period which ever is later, prescribed in the contract. NOW THE GUARANTOR hereby guarantees that water proofing treatment given by him will render the structures completely leak proof and the minimum life of such water proofing treatment shall be **ten years** to be reckoned from the date after the Defect Liability Period / Maintenance Period which ever is later, prescribed in the contract.

Provided that the Guarantor will not be responsible for the leakage caused by earthquake or structural defects or misuse of roof or alteration and for such purpose:

- a. Misuse of roof shall mean any operation which will damage proofing treatment, like chopping of firewood and things of the same nature which might cause damage to the roof.
- b. Alteration shall mean construction of an additional storey or a part of the roof or construction adjoining to existing roof whereby proofing treatment is removed in parts.
- c. The decision of the Principal Employer with regard to cause of leakage/seepage shall be final.

During this period of guarantee the Guarantor shall make good all defects and in case of any defect being found, render the building water proof to the satisfaction of the Principal Employer at his cost and shall commence the work for the rectification within seven days from the date of issue of the notice from the Principal Employer calling upon him to rectify the defects failing which the work shall be done by the Principal Employer by some other agency at the GUARANTOR's risk and cost. The decision of the Principal Employer as to the cost payable by the Guarantor shall be final and binding. That if Guarantor fails to make good all defects or commits breach there under then the Guarantor will indemnify the principal and his successors against all loss, damage, cost expense otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and/or damage and/or cost incurred by the Principal Employer the decision of the owner will be final and binding on the parties.

IN WITNESS WHEREOF those presents have been executed by the GUARANTOR(Name and Designation who sign the Contract) on behalf of(Name of Contractor Firm) and Principal Employer on the day, month and year first above written.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor	For and on behalf of the Principal Employer/Employer
-------------------------------------	---

NAME _____
Designation

in the presence of witness:

1 _____

2 _____

NAME _____
Designation

in the presence of Witness

1 _____

2 _____

ANNEXURE VIII (a)**FORM OF BANK GUARANTEE BOND FOR WATER PROOFING WORK**

1. In considerable of the(Name of Principal Employer) (hereinafter called "The Owner") having agreed to exempt..... (Hereinafter called the said contractor(s)) from the demand, under the terms and conditions of the Agreement No..... dated.....Made between and For the work of..... (hereinafter called "The said Agreement") security deposit for the due fulfillment by the said contractor(s) of the terms & conditions contained in the said Agreements for the work of Anti water proofing work on production of an irrevocable Bank Guarantee for Rs. 10 Lakhs for ten years we (Indicate the name of the bank) (Hereinafter referred to as "the Bank) hereby undertake to pay to the Owner an amount not exceeding Rs.(Rupeesonly) on demand by the Owner
2. We..... (indicate the name of the bank) do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from Principal Employer stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under the Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.(Rupeesonly).
3. We..... (indicate the name of the bank) further undertake to pay to Principal Employer any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.
The payment so made by as under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We..... (indicate the name of the Bank) further agree that the guarantee hereinafter contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of Principal Employer under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Principal Employer certified that the terms and condition of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.
5. We..... (indicate name of the bank) further agree with Principal Employer that Principal Employer shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by Principal Employer against the said contractor(s) and to for bear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractors(s) or for any bearance, act of commission of the part of Principal Employer or any indulgence by Principal Employer to the said contractor(s) or by any such matter of thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

6. This guarantee will not be discharged due to the change in the constitution of Bank or the contractor(s).
7. We..... (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of Principal Employer in writing
8. This guarantee shall be valid upto unless extended on demand by Principal Employer. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.(Rupeesonly) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged

Dated this _____ day of _____ at.....

Authorized Signatory of

Bank

Signature

Signature

Name.....

Name.....

Signature Code/ S.S no.

Signature Code/ S.S no.

Annexure – IX

(On Rs. 100 non- Judicial Stamp Paper duly attested by Notary / Magistrate and will be signed by the person who sign the Original Agreement))

FORMAT FOR GUARANTEE BONDS FOR ANTI-TERMITE TREATMENT
To Be Executed by Contractor for Anti Termite Treatment after Completion of Work

This Agreement made on this ____ day of _____ 20__ between _____ (Name of Contractor firm & address) _____ (hereinafter called the CONTRACTOR / GUARANTOR of the one part) and the _____ (hereinafter called Principal Employer/Employer of the other part) for Anti Termite Treatment Works for Renovation works for proposed CBSE Regional Office at NBCC Square, New Town, Kolkata.

WHEREAS This Agreement is Supplementary, to a Contract (hereinafter called the Contract) Contract no. _____ dated _____ and made between the _____ (Name of Contractor) and WAPCOS LIMITED, 5th floor, Kailash Building, 26, K. G. Marg, New Delhi, whereby the contractor, inter alia, undertook to render the wooden work in the said contract recited completely Termite proof.

THE GUARANTOR hereby guarantee that the anti-termite treatment given by him will render the wooden works completely Termite proof and the minimum life of such Anti-Termite treatment shall be five years to be reckoned from the from the date after the Defect Liability Period or Maintenance Period which ever is later, prescribed in the contract.

During the period of guarantee the Guarantor shall make good all defects and in case of any defects being found render the wooden works termite proof to the satisfaction of the Principal Employer at his cost and shall commence the work for such rectification within seven days from the date of issue of notice from the Principal Employer calling upon him to rectify the defects, failing which the work shall be got done by the Principal Employer through some other Agency at the Guarantor's cost and risk. The decision of the Principal Employer as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to execute the Anti-termite works, or commits breach thereunder then the guarantor will indemnify the Principal and his successor against all loss, damage, cost of expenses or otherwise which may be incurred by him by reason of any of any default on the part of the GUARANTOR in performance and observance of this Supplementary Agreement. As to the amount of loss and / or cost incurred by the Principal Employer on the decision of the Principal Employer will be final and binding.

IN WITNES WHEREOF those presents have been executed by the GUARANTOR(Name and Designation who sign the Contract) on behalf of(Name of Contractor Firm) and Principal Employer on the day, month and year first above written.

SIGNED, SEALED AND DELIVERED

For and on behalf of the Contractor	For and on behalf of the Principal Employer/Employer
--	---

NAME _____
 Designation _____

NAME _____
 Designation _____

in the presence of witness:

in the presence of Witness

1 _____
 2 _____

1 _____
 2 _____

ANNEXURE – X

SAFETY CODES

1. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to $1\frac{1}{4}$ horizontal and 1 vertical).
2. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.
3. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6 m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.
4. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.).
5. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. (11½") for ladder upto and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ " for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person
6. (a) Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.
 - (b) Safety Measures for digging bore holes:-
 - i. If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;

- ii. During drilling, Sign boards should be erected near the site with the address of the drilling contractor and the Engineer-in-charge of the work;
 - iii. Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all round the point of drilling to avoid entry of people;
 - iv. After drilling the borewell, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;
 - v. After the completion of the borewell, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
 - vi. After the borewell is drilled the entire site should be brought to the ground level.
7. Demolition - Before any demolition work is commenced and also during the progress of the work,
 - (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
 - (ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
 - (iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.
8. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided.
 - (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles.
 - (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
 - (iii) Those engaged in welding works shall be provided with welder's protective eyeshields.
 - (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
 - (v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated atleast for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measure are adhered to :-
 - (a) Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.
 - (b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.
 - (c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.
 - (d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.
 - (e) Safety belt with rope should be provided to the workers. While working inside the

manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

- (f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.
- (g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.
- (h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.
- (i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.
- (j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.
- (k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 metres away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.
- (l) The workers engaged for cleaning the manholes/sewers should be properly trained before allowing to work in the manhole.
- (m) The workers shall be provided with Gumboots or non sparking shoes bump helmets and gloves non sparking tools safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.
- (n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.
- (o) If a man has received a physical injury, he should be brought out of the sewer immediately and adequate medical aid should be provided to him.
- (p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

The Contractor shall not employ men and women below the age of 18 years on the work of painting with products containing lead in any form. Wherever men above the age of 18 are employed on the work of lead painting, the following precaution should be taken:-

- (a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
- (b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
- (c) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

9. The Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use :

- (i) White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
- (ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.

- (iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - (iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (v) Overall shall be worn by working painters during the whole of working period.
 - (vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - (vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man.
 - (viii) WAPCOS may require, when necessary medical examination of workers.
 - (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
10. When the work is done near any place where there is risk of drowning, all necessary equipments should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.
11. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions :-
- (i) (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.
 - (b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.
 - (ii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.
 - (iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.
 - (iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.
12. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

13. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.
14. These safety provisions should be brought to the notice of all concerned by display on a notice board at a prominent place at work spot. The person responsible for compliance of the safety code shall be named therein by the contractor.
15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Labour Officer or Engineer-in-Charge of the department or their representatives.
16. Notwithstanding the above clauses from (1) to (15), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

ANNEXURE – XI**MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY
ARRANGEMENTS****FOR WORKERS EMPLOYED BY CONTRACTORS****1. APPLICATION**

These rules shall apply to all buildings and construction works in which twenty or more workers are ordinarily employed or are proposed to be employed in any day during the period during which the contract work is in progress.

2. DEFINITION

Work place means a place where twenty or more workers are ordinarily employed in connection with construction work on any day during the period during which the contract work is in progress.

3. FIRST-AID FACILITIES

- (i) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment:-
 - (a) For work places in which the number of contract labour employed does not exceed 50- Each first-aid box shall contain the following equipments :-
 - 1) 6 small sterilised dressings.
 - 2) 3 medium size sterilised dressings.
 - 3) 3 large size sterilised dressings.
 - 4) 3 large sterilised burn dressings.
 - 5) 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
 - 6) 1 (30 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label.
 - 7) 1 snakebite lancet.
 - 8) 1 (30 gms.) bottle of potassium permanganate crystals.
 - 9) 1 pair scissors.
 - 10) 1 copy of the first-aid leaflet issued by the Director General, Factory Advice Service and Labour Institutes, Government of India.
 - 11) 1 bottle containing 100 tablets (each of 5 gms.) of aspirin.
 - 12) Ointment for burns.
 - 13) A bottle of suitable surgical antiseptic solution
 - (b) For work places in which the number of contract labour exceed 50. Each first-aid box shall contain the following equipments.
 - 1) 12 small sterilised dressings.
 - 2) 6 medium size sterilised dressings.
 - 3) 6 large size sterilised dressings.
 - 4) 6 large size sterilised burn dressings.
 - 5) 6 (15 gms.) packets sterilised cotton wool.
 - 6) 6.1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
 - 7) 1 (60 ml.) bottle containing salvolatile having the dose and mode of administration indicated on the label
 - 8) 1 roll of adhesive plaster.
 - 9) 1 snake bite lancet.

- 10) 1 (30 gms.) bottle of potassium permanganate crystals.
- 11) 1 pair scissors.
- 12) 1 copy of the first-aid leaflet issued by the Director General Factory Advice Service and Labour Institutes / Government of India.
- 13) A bottle containing 100 tablets (each of 5 gms.) of aspirin.
- 14) Ointment for burns.
- 15) A bottle of suitable surgical antiseptic solution.

- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

- (i) In every work place, there shall be provided and maintained at suitable places, easily accessible to labour, a sufficient supply of cold water fit for drinking.
- (ii) Where drinking water is obtained from an Intermittent public water supply, each work place shall be provided with storage where such drinking water shall be stored.
- (iii) Every water supply or storage shall be at a distance of not less than 50 feet from any latrine drain or other source of pollution. Where water has to be drawn from an existing well which is within such proximity of latrine, drain or any other source of pollution, the well shall be properly chlorinated before water is drawn from it for drinking. All such wells shall be entirely closed in and be provided with a trap door which shall be dust and waterproof.
- (iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. WASHING FACILITIES

- (i) In every work place adequate and suitable facilities for washing shall be provided and maintained for the use of contract labour employed therein.
- (ii) Separate and adequate cleaning facilities shall be provided for the use of male and female workers.
- (iii) Such facilities shall be conveniently accessible and shall be kept in clean and hygienic condition.

6. LATRINES AND URINALS

- (ii) Latrines shall be provided in every work place on the following scale namely :-
 - (a) Where female are employed, there shall be at least one latrine for every 25 females.
 - (b) Where males are employed, there shall be at least one latrine for every 25 males.
 Provided that, where the number of males or females exceeds 100, it shall be sufficient if there is one latrine for 25 males or females as the case may be upto the first 100, and one for every 50 thereafter.

- (iii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- (iv) Construction of latrines: The inside walls shall be constructed of masonry or some suitable heat-resisting nonabsorbent materials and shall be cement washed inside and outside at least once a year, Latrines shall not be of a standard lower than borehole system.
- (v) (a) Where workers of both sexes are employed, there shall be displayed outside each block of latrine and urinal, a notice in the language understood by the majority of the workers "For Men only" or "For Women Only" as the case may be.
(b) The notice shall also bear the figure of a man or of a woman, as the case may be.
- (vi) There shall be at least one urinal for male workers upto 50 and one for female workers upto fifty employed at a time, provided that where the number of male or female workmen, as the case may be exceeds 500, it shall be sufficient if there is one urinal for every 50 males or females upto the first 500 and one for every 100 or part thereafter.
- (vii) (a) The latrines and urinals shall be adequately lighted and shall be maintained in a clean and sanitary condition at all times.
(b) Latrines and urinals other than those connected with a flush sewage system shall comply with the requirements of the Public Health Authorities.
- (viii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (ix) Disposal of excreta: - Unless otherwise arranged for by the local sanitary authority, arrangements for proper disposal of excreta by incineration at the work place shall be made by means of a suitable incinerator. Alternately excreta may be disposed of by putting a layer of night soil at the bottom of a pucca tank prepared for the purpose and covering it with a 15 cm. layer of waste or refuse and then covering it with a layer of earth for a fortnight (when it will turn to manure).
- (x) The contractor shall at his own expense, carry out all instructions issued to him by the Engineer-in-Charge to effect proper disposal of night soil and other conservancy work in respect of the contractor's workmen or employees on the site. The contractor shall be responsible for payment of any charges which may be levied by Municipal or Cantonment Authority for execution of such on his behalf.

7. **PROVISION OF SHELTER DURING REST**

At every place there shall be provided, free of cost, four suitable sheds, two for meals and the other two for rest separately for the use of men and women labour. The height of each shelter shall not be less than 3 metres (10 ft.) from the floor level to the lowest part of the roof. These shall be kept clean and the space provided shall be on the basis of 0.6 sqm (6 sft) per head.

Provided that the Engineer-in-Charge may permit subject to his satisfaction, a portion of the building under construction or other alternative accommodation to be used for the purpose.

8. **CRECHES**

- (i) At every work place, at which 20 or more women worker are ordinarily employed, there shall be provided two rooms of reasonable dimensions for the use of their children under the age of six years. One room shall be used as a play room for the children and the other as their bedroom. The rooms shall be constructed with specifications as per clause 19H (ii) a,b & c.
- (ii) The rooms shall be provided with suitable and sufficient openings for light and ventilation. There shall be adequate provision of sweepers to keep the places clean.
- (iii) The contractor shall supply adequate number of toys and games in the play room and sufficient number of cots and beddings in the bed room.

- (iv) The contractor shall provide one ayaa to look after the children in the creche when the number of women workers does not exceed 50 and two when the number of women workers exceed 50.
- (v) The use of the rooms earmarked as creches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- a. In every work place where the work regarding the employment of contract labour is likely to continue for six months and where in contract labour numbering one hundred or more are ordinarily employed, an adequate canteen shall be provided by the contractor for the use of such contract labour.
- b. The canteen shall be maintained by the contractor in an efficient manner.
- c. The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- d. The canteen shall be sufficiently lighted at all times when any person has access to it.
- e. The floor shall be made of smooth and impervious materials and inside walls shall be limewashed or colour washed at least once in each year.
Provided that the inside walls of the kitchen shall be lime-washed every four months.
- f. The premises of the canteen shall be maintained in a clean and sanitary condition.
- g. Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- h. Suitable arrangements shall be made for the collection and disposal of garbage.
- i. The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.
- j. The floor area of the dining hall, excluding the area occupied by the service counter and any furniture except tables and chairs shall not be less than one square metre (10 sft) per diner to be accommodated as prescribed in sub-Rule 9.
- k. (a) A portion of the dining hall and service counter shall be partitioned off and reserved for women workers in proportion to their number.
(b) Washing places for women shall be separate and screened to secure privacy.
- l. Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- m. (a) 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipments necessary for the efficient running of the canteen.
2. The furniture utensils and other equipment shall be maintained in a clean and hygienic condition.
(b) 1. Suitable clean clothes for the employees serving in the canteen shall be provided and maintained.
2. A service counter, if provided, shall have top of smooth and impervious material.
3. Suitable facilities including an adequate supply of hot water shall be provided for the cleaning of utensils and equipments.
- n. The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- o. The charges for food stuffs, beverages and any other items served in the canteen shall be based on 'No profit, No loss' and shall be conspicuously displayed in the canteen.
- p. In arriving at the price of foodstuffs, and other article served in the canteen, the following items shall not be taken into consideration as expenditure namely:-
 - (a) The rent of land and building.
 - (b) The depreciation and maintenance charges for the building and equipment provided for the canteen.
 - (c) The cost of purchase, repairs and replacement of equipment including furniture,

- crockery, cutlery and utensils.
- (d) The water charges and other charges incurred for lighting and ventilation
- (e) The interest and amounts spent on the provision and maintenance of equipment provided for the canteen.
- q. The accounts pertaining to the canteen shall be audited once every 12 months by registered accountants and auditors.

10. ANTI-MALARIAL PRECAUTIONS

The contractor shall at his own expense, conform to all anti-malarial instructions given to him by the Engineer-in-Charge including the filling up of any borrow pits which may have been dug by him.

11. The above rules shall be incorporated in the contracts and in notices inviting tenders and shall form an integral part of the contracts.

12. AMENDMENTS

Government may, from time to time, add to or amend these rules and issue directions - it may consider necessary for the purpose of removing any difficulty which may arise in the administration thereof.

ANNEXURE-XII**Contractor's Labour Regulations****1. GENERAL**

These Labour regulations shall be followed by the Contractor.

2. DEFINITIONS

- (i) Workman means any person employed by contractor directly or indirectly through a subcontractor with or without the knowledge of the WAPCOS to do any skilled, semiskilled or unskilled manual, supervisory, technical or clerical work for hire or reward, whether the terms of employment are expressed or implied but does not include any person :-
 - (a) Who is employed mainly in a managerial or administrative capacity : or
 - (b) Who, being employed in a supervisory capacity draws wages exceeding five hundred rupees per mensem or exercises either by the nature of the duties attached to the office or by reason of powers vested in him, functions mainly of managerial nature: or
 - (c) Who is an out worker, that is to say, person to whom any article or materials are given out by or on behalf of the Employer/ Principal Employers to be made up cleaned, washed, altered, ornamental finished, repaired adopted or otherwise processed for sale for the purpose of the trade or business of the Employer/ Principal Employers and the process is to be carried out either in the home of the out worker or in some other premises, not being premises under the control and management of the principal employer.
 - (i) No person below the age of 14 years shall be employed to act as a workman.
 - (ii) Fair Wages means wages whether for time or piece work fixed and notified under the provisions of the Minimum Wages Act from time to time.
 - (iii) Contractors shall include every person who undertakes to produce a given result other than a mere supply of goods or articles of manufacture through contract labour or who supplies contract labour for any work and includes a subcontractor.
 - (iv) Wages shall have the same meaning as defined in the Payment of Wages Act.
3. (i) Normally working hours of an adult employee should not exceed 9 hours a day. The working day shall be so arranged that inclusive of interval for rest, if any, it shall not spread over more than 12 hours on any day.
- (ii) When an adult worker is made to work for more than 9 hours on any day or for more than 48 hours in any week, he shall be paid over time for the extra hours put in by him at double the ordinary rate of wages.
 - (iii) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of the Minimum Wages (Central) Rules 1960 as amended from time to time irrespective of whether such worker is governed by the Minimum Wages Act or not.
 - (iv) Where the minimum wages prescribed by the Government under the Minimum Wages Act are not inclusive of the wages for the weekly day of rest, the worker shall be entitled to rest day wages at the rate applicable to the next preceding day,
 - (iv) provided he has worked under the same contractor for a continuous period of not less than 6 days.

- (v) Where a contractor is permitted by the Engineer-in-Charge to allow a worker to work on a normal weekly holiday, he shall grant a substituted holiday to him for the whole day on one of the five days immediately before or after the normal weekly holiday and pay wages to such worker for the work performed on the normal weekly holiday at overtime rate.

4. DISPLAY OF NOTICE REGARDING WAGES ETC.

The contractor shall before he commences his work on contract, display and correctly maintain and continue to display and correctly maintain in a clear and legible condition in conspicuous places on the work, notices in English and in the local Indian languages spoken by the majority of the workers giving the minimum rates of wages fixed under Minimum Wages Act, the actual wages being paid, the hours of work for which such wage are earned, wages periods, dates of payments of wages and other relevant information as per Appendix 'III'.

5. PAYMENT OF WAGES

- (i) The contractor shall fix wage periods in respect of which wages shall be payable.
- (ii) No wage period shall exceed one month.
- (iii) The wages of every person employed as contract labour in an establishment or by a contractor where less than one thousand such persons are employed shall be paid before the expiry of seventh day and in other cases before the expiry of tenth day after the last day of the wage period in respect of which the wages are payable.
- (iv) Where the employment of any worker is terminated by or on behalf of the contractor the wages earned by him shall be paid before the expiry of the second working day from the date on which his employment is terminated.
- (v) All payment of wages shall be made on a working day at the work premises and during the working time and on a date notified in advance and in case the work is completed before the expiry of the wage period, final payment shall be made within 48 hours of the last working day.
- (vi) Wages due to every worker shall be paid to him direct by contractor through Bank or ECS or online transfer to his bank account.
- (vii) All wages shall be paid through Bank or ECS or online transfer.
- (viii) Wages shall be paid without any deductions of any kind except those specified by the Central Government by general or special order in this behalf or permissible under the Payment of Wages Act 1956.
- (ix) A notice showing the wages period and the place and time of disbursement of wages shall be displayed at the place of work and a copy sent by the contractor to the Engineer-in-Charge under acknowledgment.
- (x) It shall be the duty of the contractor to ensure the disbursement of wages through bank account of labour.
- (xi) The contractor shall obtain from the Junior Engineer or any other authorised representative of the Engineer- in-Charge as the case may be, a certificate under his signature at the end of the entries in the "Register of Wages" or the "Wage-cum-Muster Roll" as the case may be in the following form:-

6. FINES AND DEDUCTIONS WHICH MAY BE MADE FROM WAGES

- i) The wages of a worker shall be paid to him without any deduction of any kind except the following:-
 - a. Fines
 - b. Deductions for absence from duty i.e. from the place or the places where by the terms of his employment he is required to work. The amount of deduction shall be in proportion to the period for which he was absent.

- c. Deduction for damage to or loss of goods expressly entrusted to the employed person for custody or for loss of money or any other deduction which he is required to account, where such damage or loss is directly attributable to his neglect or default.
 - d. Deduction for recovery of advances or for adjustment of overpayment of wages, advances granted shall be entered in a register.
 - e. Any other deduction which the Central Government may from time to time allow.
- ii) No fines should be imposed on any worker save in respect of such acts and omissions on his part as have been approved of by the Chief Labour Commissioner.
Note :- An approved list of Acts and Omissions for which fines can be imposed is enclosed at Appendix-X
 - iii) No fine shall be imposed on a worker and no deduction for damage or loss shall be made from his wages until the worker has been given an opportunity of showing cause against such fines or deductions.
 - iv) The total amount of fine which may be imposed in any one wage period on a worker shall not exceed an amount equal to three paise in a rupee of the total wages, payable to him in respect of that wage period.
 - v) No fine imposed on any worker shall be recovered from him by instalment, or after the expiry of sixty days from the date on which it was imposed.
 - vi) Every fine shall be deemed to have been imposed on the day of the act or omission in respect of which it was imposed.

7. LABOUR RECORDS

- i) The contractor shall maintain a Register of persons employed on work on contract in Form XIII of the CL (R&A) Central Rules 1971 (Appendix IV)
- ii) The contractor shall maintain a Muster Roll register in respect of all workmen employed by him on the work under Contract in Form XVI of the CL (R&A) Rules 1971 (Appendix V).
- iii) The contractor shall maintain a Wage Register in respect of all workmen employed by him on the work under contract in Form XVII of the CL (R&A) Rules 1971 (Appendix VI).
- iv) Register of accident - The contractor shall maintain a register of accidents in such form as may be convenient at the work place but the same shall include the following particulars:
 - a. Full particulars of the labourers who met with accident.
 - b. Rate of Wages.
 - c. Sex
 - d. Age
 - e. Nature of accident and cause of accident.
 - f. Time and date of accident.
 - g. Date and time when admitted in Hospital,
 - h. Date of discharge from the Hospital.
 - i. Period of treatment and result of treatment.
 - j. Percentage of loss of earning capacity and disability as assessed by Medical Officer.
 - k. Claim required to be paid under Workmen's Compensation Act.
 - l. Date of payment of compensation.
 - m. Amount paid with details of the person to whom the same was paid.
 - n. Authority by whom the compensation was assessed.
 - o. Remarks
- v) The contractor shall maintain a Register of Fines in the Form XII of the CL (R&A) Rules 1971 (Appendix-XI) The contractor shall display in a good condition and in a

conspicuous place of work the approved list of acts and omissions for which fines can be imposed (Appendix-X)

- vi) The contractor shall maintain a Register of deductions for damage or loss in Form XX of the CL (R&A) Rules 1971 (Appendix-XII)
- vii) The contractor shall maintain a Register of Advances in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIII)
- viii) The contractor shall maintain a Register of Overtime in Form XXIII of the CL (R&A) Rules 1971 (Appendix-XIV)

8. **ATTENDANCE CARD-CUM-WAGE SLIP**

- i) The contractor shall issue an Attendance card-cum-wage slip to each workman employed by him in the specimen form at (Appendix-VII)
- ii) The card shall be valid for each wage period.
- iii) The contractor shall mark the attendance of each workman on the card twice each day, once at the commencement of the day and again after the rest interval, before he actually starts work.
- iv) The card shall remain in possession of the worker during the wage period under reference.
- v) The contractor shall complete the wage slip portion on the reverse of the card at least a day prior to the disbursement of wages in respect of the wage period under reference.
- vi) The contractor shall obtain the signature or thumb impression of the worker on the wage slip at the time of disbursement of wages and retain the card with himself.

9. **EMPLOYMENT CARD**

The contractor shall issue an Employment Card in Form XIV of the CL (R&A) Central Rules 1971 to each worker within three days of the employment of the worker (Appendix-VIII).

10. **SERVICE CERTIFICATE**

On termination of employment for any reason whatsoever the contractor shall issue to the workman whose services have been terminated, a Service certificate in Form XV of the CL (R&A) Central Rules 1971 (Appendix-IX)

11. **PRESERVATION OF LABOUR RECORDS**

All records required to be maintained under Regulations Nos. 6 & 7 shall be preserved in original for a period of three years from the date of last entries made in them and shall be made available for inspection by the Engineer-in-Charge or Labour Officer or any other officers authorised by the Ministry of Urban Development in this behalf.

12. **POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY**

The Labour Officer or any person authorised by Central Government on their behalf shall have power to make enquires with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and the Provisions of these Regulations. He shall investigate into any complaint regarding the default made by the contractor or subcontractor in regard to such provision.

13. **REPORT OF LABOUR OFFICER**

The Labour Officer or other persons authorised as aforesaid shall submit a report of result of his investigation or enquiry to the Engineer-in-charge concerned indicating the extent, if any, to which the default has been committed with a note that necessary deductions from the contractor's bill be made and the wages and other dues be paid to the labourers concerned. In case an appeal is made by the contractor under Clause 13 of these regulations, actual payment to labourers will be made by the Engineer-in-charge after the Competent Authority of WAPCOS has given his decision on such appeal.

- (i) The Engineer-in-charge shall arrange payments to the labour concerned within 45 days from the receipt of the report from the Labour Officer as the case may be.

14. APPEAL AGAINST THE DECISION OF LABOUR OFFICER

Any person aggrieved by the decision and recommendations of the Labour Officer or other person so authorised may appeal against such decision to the Engineer-in-charge concerned within 30 days from the date of decision, forwarding simultaneously a copy of his appeal to the Engineer-in-charge concerned but subject to such appeal, the decision of the officer shall be final and binding upon the contractor.

15. PROHIBITION REGARDING REPRESENTATION THROUGH LAWYER

- (i) A workman shall be entitled to be represented in any investigation or enquiry under
- (ii) these regulations by:-
- An officer of a registered trade union of which he is a member.
 - An officer of a federation of trade unions to which the trade union referred to in clause (a) is affiliated.
 - Where the employer is not a member of any registered trade union, by an officer of a registered trade union, connected with the industry in which the worker is employed or by any other workman employed in the industry in which the worker is employed.
- (iii) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by :-
- An officer of an association of employers of which he is a member.
 - An officer of a federation of associations of employers to which association referred to in clause (a) is affiliated.
 - Where the employers is not a member of any association of employers, by an officer of association of employer connected with the industry in which the employer is engaged or by any other employer, engaged in the industry in which the employer is engaged.
- (iv) No party shall be entitled to be represented by a legal practitioner in any investigation or enquiry under these regulations.

16. INSPECTION OF BOOKS AND SLIPS

The contractor shall allow inspection of all the prescribed labour records to any of his workers or to his agent at a convenient time and place after due notice is received or to the Labour Officer or any other person, authorised by the Central Government on his behalf.

17. SUBMISSIONS OF RETURNS

The contractor shall submit periodical returns as may be specified from time to time.

18. AMENDMENTS

The Central Government may from time to time add to or amend the regulations and on any question as to the application/Interpretation or effect of those regulations the decision of the Engineer-in-charge concerned shall be final.

NOTE: APPENDICES mentioned in above "Contractor's Labour Regulation" will be as per the General Conditions of Contract-2020 – Construction Works of CPWD.

ANNEXURE – XIII

NO CLAIM CERTIFICATE

Address to :

**The Engineer- in-Charge
WAPCOS Ltd.,**

Sub: Renovation works for proposed CBSE Regional Office at NBCC Square, New Town, Kolkata

Ref: 1. Work Order no.:-

2. Contract Agreement no.:-

Sir,

We have submitted -----nos. of bills including final bill total gross amounting for the subjected project of Rs. -----/- (Rupees ----- only).

However, following payment are due with Employer:

1. Balance Net amount (if any) of Rs. -----/- against RA Bill No.-----
2. Balance GST (if any) of Rs. -----/- against RA Bill No.-----
3. Performance Guarantee no. -----dated ----- amounting to Rs.-----
-----/- issued by -----Bank which will be released by Employer as per tender conditions.
4. Security Deposit amounting to Rs.-----/- which will be released by Employer as per tender conditions

We declare unequivocally that the above payments are full and final amount for execution of subjected works against referred Contract Agreement with WAPCOS. We will not raise any further claim and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and that we shall continue to be bound by the terms and conditions of the Contract Agreement, as regards Performance of the Contract.

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

SECTION – VII

SCOPE OF WORK

SECTION-VII

SCOPE OF WORK

1.0 INTRODUCTION

WAPCOS Limited, as Executing Agency on behalf of Central Board of Secondary Education (CBSE), Ministry of Education (MoE), Govt. of India, New Delhi invites item rate bid from interested Bidders for Construction of Renovation works for proposed CBSE Regional Office at NBCC Square, New Town, Kolkata”, herein after referred to as the Project/ Work.

2.0 Scope of Work

2.1.1 General

The scope of work covered in this tender shall be as per the Schedule / Bill of Quantities, specifications, drawings, instructions, orders issued to the Contractor from time to time during the entire period of execution. The brief scope of works covered are listed below but not limited to the following:

S. No	List of Works
1.	RENOVATION OF EXISTING BUILDING
2.	CIVIL WORKS
3.	PLUMBING/SANITARY WORKS
4.	ELECTRICAL WORKS
5.	HVAC WORKS
6.	LIGHTING WORKS
7.	FIRE ALARM & PA SYSTEM WORKS
8.	FIRE FIGHTING WORKS
9.	IT WORKS (ACTIVE+PASSIVE)
10.	EPABX WORKS
11.	AV SYSTEM WORKS
12.	FURNITURE
13.	VENTILATION WORKS
14.	MISCELLANEOUS WORKS

The Scope of work shall include “NAME OF WORK/PROJECT AS MENTIONED IN NIT” as per the Drawings, Specification and details set forth under this Tender document. And to obtain all approvals from statutory authorities for start to complete the work of “NAME OF WORK/PROJECT AS MENTIONED IN NIT”. **After the final completion and handing over of work, the comprehensive maintenance service & defect liability for the period of 12 (Twelve) months.**

Notwithstanding the Employer has provided certain information, data etc., the scope of work shall include obtaining necessary approvals including statutory approvals for any part of work which are required for the necessary completion of the project.” The bidder shall be responsible right through the entire duration of the Project for execution of all works till commissioning and handing over of project complete with all respects ready to move and shall remove all defects, if any, developed during Defects Liability Period (DLP).

The data given by the WAPCOS LIMITED is only for information and guidance of the bidder who shall verify these data and shall be responsible for the overall execution of the project. WAPCOS shall not be responsible for the technicality/accuracy of the

attachments. WAPCOS Limited reserves the right to modify the scope of work as per the requirement of user department at any stage if necessary without assigning any reason whatsoever. The Bidder shall visit the site also to collect whatever information he may require.

The responsibility of the Bidder shall include carrying out all the activities for the completion of the Project, which generally shall include the following, and any additional activities incidental to these:-

WAPCOS Limited may in their absolute discretion issue further drawings and/or written instructions, details, directions and explanations, which are, hereafter collectively referred to as “WAPCOS Limited’s instructions” in regard to:

- i) The variation or modification of the quality or quantity of works or the addition or omission or substitution of any work.
- ii) Any discrepancy in the drawings or between the Schedule of Quantities and/or drawings and/or specification.
- iii) The removal from the site of any defective material brought thereon by the Contractor and the substitution of any other material thereof.
- iv) The demolition removal and/or re-execution of any work executed by the Subcontractor(s).
- v) The dismissal from the work of any persons employed there upon.
- vi) The opening up for inspection of any work covered up.
- vii) The rectification and making good of any defects under clauses herein after mentioned and those arising during the maintenance period (retention period) /defect liability period.
- viii) Royalty at the prevalent rates and all other incidental expenditure including Environmental & Pollution Clearance Charges etc. if any shall have to be paid by the Contractor on all the materials like boulders, stone metals, earth, sand, bajri etc. collected by him for the execution of the work directly to the concerned revenue Authority of the State or Central Government. His rates are deemed to include all such expenditure and nothing extra shall be paid.

The Contractor shall forthwith comply with and duly execute any work comprised in such WAPCOS Limited’s instructions, provided always that verbal instructions, directions and explanations given to the Contractor or his representative upon the works by WAPCOS Limited shall if involving a variation be confirmed in writing to the Contractor/s within seven days. No works, for which rates are not specifically mentioned in the priced schedule or quantities, shall be taken up without written permission of WAPCOS Limited. Rates of items not mentioned in the priced Schedule of Quantities shall be fixed by WAPCOS Limited as provided in the corresponding clauses of the tender document.

Regarding all factory-made products for which ISI marked products are available, only products bearing ISI marking shall be used in the work. Other products should be supplied as per the brand name mentioned in the Technical Specifications and Special Conditions of Contract.

Contractor is advised to visit the site to understand the Scope of Work clearly before quoting the rates for the works.

The work shall be executed as per the details in Schedule of Quantities and direction of

Engineer-in Charge and shall be completed in all respect with full satisfaction of Engineer-in-Charge as per the Government guidelines, Indian standard codes & Manuals. The Bidder may assess the quantum of work before filling of tender.

Contractor will take necessary approvals/clearance from the Central Board of Secondary Education (CBSE) and Local Authorities and pay the fees at his own cost before start of the work.

The payment of final bill will be made after successful completion, commissioning and handing over of the works with complete satisfaction of Engineer In-Charge as well as Central Board of Secondary Education (CBSE).

The Contractor shall dispose off all the dismantled materials, debris, garbage, waste at his own cost and provide clear and clean site at the time of handing over the works.

It is required that Contractor shall take the responsibility to install the furniture (as per BOQ) with best suitability, convenience and best use of space available. The contractor shall prepare and submit the layout drawings for same as required by Engineer in Charge.

3.0 NOC'S / APPROVALS/ CLEARANCE FROM LOCAL BODIES/ AUTHORITIES

All the necessary Statuary Approvals/ NOCs/ Clearances such as Forest NoC, Pollution if necessary; approval of local Govt. body for architectural plans; Approval of ground water board, if necessary; clearance of height from concerned authority, if any; Fire NoC, Lift NoC, DG Sets, if any; which are required from any Govt. Department / body, before start of the work / during execution of work / after execution of work & before handing over the project, are the responsibility of the Contractor and are in the scope of work of the Contractor.

If any modification/revision is required in all the above mentioned Statuary Approvals/ NOCs/ Clearances, before start of the work / during the work / after execution of work are the responsibility of the Contractor and are in the scope of work of the Contractor. The fee deposited for getting approvals, shall be deposited by the Contractor to the concerned Department / Authorities and will be reimbursable to the Contractor on producing of original receipt of deposited fee and no extra cost for the same shall be claimed by the contractor.

4.0 TOPOGRAPHICAL SURVEY

DELETED

5.0 Reference to the Standard Codes of Practice

All Standards, Technical Specifications and Codes of practice referred to shall be latest editions including all applicable official amendments and revisions. The Contractor shall make available at site hard copies of all latest editions of relevant codes and specifications such as CPWD Specifications, Delhi Schedule Rates (2021), CPWD Specifications for Horticulture and Landscaping work (2022), and relevant/ applicable BIS codes.

Wherever Indian Standards do not cover some particular aspects of design/ construction, relevant International Standards shall be referred to. The Contractor shall make available at site such standard codes of practice.

6.0 LIST OF MAKE

Preferred makes of materials to be used in the work are as follows. In case of non-availability of these makes, after the approval of WAPCOS Project Manager (Site), the Contractor can use the alternative makes only BIS marked materials of equivalent reputed brand. Non-BIS marked materials may be permitted by the WAPCOS Project Manager (Site) only when BIS marked materials are not manufactured.

PREFERABLE MAKE OF MATERIALS				
CIVIL				
S.No	Material	Makes/ Brands		
1	Anti-Termite Treatment (Chemical Manufacturer)	VAM OrgaFurninics	Indian Pest Control	Termisol
		Pyramid		
2	Synthetic Enamel paint (First Quality)	Asian Paints Ltd	Berger Paints Ind. Ltd	Nerolac
		ICIdulux		
3	Oil Bound Distemper	Asian Paints Ltd	Berger Paints Ind.Ltd	Nippon paintsind. Ltd
4	Acrylic Emulsion Exterior	Asian Paints Ltd	Berger Paints Ind. Ltd	Nippon paintsind. Ltd
		Nerolac	Sakarni	Neel Gagan Pigmentts
5	Cement Base Paint	Asian Paints Ltd	Berger Paints Ind. Ltd	Nippon paintsind. Ltd
		Nerolac	Sakarni	Neel Gagan Pigmentts
6	Cement Primer/ Wood Primer Pink/ Red Oxide Steel Primer	Asian Paints Ltd	Berger Paints Ind.Ltd	Nippon Paintsind. Ltd
		Nerolac	Sakarni	Neel Gagan Pigmentts
7	UPVC Doors & Windows	Veka	Deceuninck	Fenesta
		Saint Gobain	Doorkey	
8	Dry Distemper	M/s. Power Paints India Pvt Ltd	M/s Godawari Paints PvtLtd	M/s Ever shine Paints & Chemicals
		Neel Gagan Pigmentts		
9	Stainless Steel Sections (Grade304)	Tata Steel	Jindal/JSW	SAIL
	Stainless Steel pipes and fittings	Jindal/JSW Alfa Press	Tata Steel	alfrapress
10	Precast Terrazzo tiles /Paving Blocks/ Chequered Cement concrete tiles/ PCC	M/s Northern India Tiles Corp. (NITCO)	Somani Tiles	Hindustan Tiles
11	Water Proofing Membrane	M/s Texsa India Ltd	M/s Pidilite	Asian Smart care
		Chryso (Sain Gobain)	Sakarni	Thermax
12	Water Proofing Compound	M/s Pidilite Industries	M/s FOSROC	Penetron
		SIKA	Thermax	Sakarni

13	Concrete Additives	M/s Pidilite Industries	SIKA	FOSROC
		Chryso (Sain Gobain)	Thermax	
14	Wood Adhesive	Fevicol	Vamicol	Dunlop
		Pidilite	Neel Gagan Pigmentts	
15	Wall Putty	Birla Wall Putty	Jk wall Putty	Asian paints
		Sakarni	Neel Gagan Pigmentts	
16	Floor & Wall ceramic Tiles & Vitrified Tiles	SIMPOLO	Kajaria	ORIENT
		Cera	RAK	
	Tile Adhesive	Sakarni	Cryton	Birla
17	Flush Doors	Merinolam	Archid Ply	Century
		Action tessa	Samrat Ply	Jayna/Doorky
18	Laminates	Merinolam	Kitply	Century
		Archidply	Samrat Ply	Jayna
19	Plain/ Veneered Particle Board	Merino lam	M/s Kitply	M/s Archid ply
		Century	Samrat Ply	
20	Pre laminated particle Board	Archid ply	Action tessa	M/s Kit Ply
		Century		
21	Block Board/ Ply Wood	Kit Ply/ Merino	Archid ply	Action Tessa
		Century	Jayna	Samrat Ply
22	Plain & Pre laminated MDF Board	Merino	Action Tessa	Century
		Archid panel	Kit Ply	Samrat Ply
23	TMT Steel Main Producers	M/s SAIL	TATA Steel	M/s RINL /Vizag
		M/s JSW Steel Ltd.	Jindal Steel & Power	
24	Structure Steel/ M.S. Tube	SAIL	TATA Steel	Jindal Steel & Power
		JSW Steel Ltd.		
25	Heat Resistant Tile	THE RMATEK	Orient bell	Ultra Tech
26	Anodised / Power coated Aluminum Hardware (heavy Duty)	Hindalco / Doorky	Jindal	Indalco
27	Aluminum Structural Members- Windows Glazing and partitions	Jindal	Indalco	Hindalco
		Nalco		
	ALUMINIUM GLASS PARTITION	BENE	SAINT GOBAIN	JEB

	Dry wall Partitions	Sakarni / Gyptech	Boral	Saint Gobain
28	SS Railing, accessories etc in grade SS316 ,304 Fabricators	Ozone	Koncept	Rinox
		Doorkey		
29	Hermitically Sealed performance glass Toughened Glass	Saint Gobain	Guardain Glass	Modiguard
	LAQUERED GLASS	SAINT GOBAIN	MODI	ASAHI
	TRANSLUCENT FILM	3M	ORAFOL	AIS
30	Aluminum Composite Panels	Alstrong	Alstone	Viva/ Eurobond
	Aluminum Skirting	BENE	SAINT GOBAIN	JEB
31	Friction Stays Hinges	Dorma	Hafele	Hettich
32	EPDM Gasket	Hanu	Osaka	Keithpayne
33	RCC Hume Pipes	M/s Orient Ceramics & Refraction Pvt.Ltd	M/s Anand Pipes, Firozpur/ ISIA pproved manufacture	Jain&Co.
34	FRP Doors	M/s Sintex BAPL	M/s Rajshree	M/s Ergaen Plastics, jodhpur
		M/s Simba FRPP.Ltd	Jayna	
35	PVC Doors	M/s Sintex BAPL	Saint Gobain	Jayna
36	Fire Check Doors, Fire Rated Glass Doors, Partitions	Navair	Dorma	Sukriti/Indian Fire
	Fire rated hardware	Dorset/Doorky	Hafele	Dorma
37	Synthetic Triangular Fiber for Concrete & Cement	M/s Reliance Industries	M/s FIBREMESH	M/s FORTA
38	Ordinary Portland Cement/ Portland Pozzolona Cement	ACC	J&K	BIRLA
		Ultratech	Ambuja	
39	White Cement	Birla Cement	J.K. White	
40	Waterproofing Compound (Crystalline)	Thermax	Penetron	Fosroc
		Chryso (Sain Gobain)		
41	EPDM Water proofing membrane	Thermax	Pidilite	AsianSmartcare
		Chryso (Sain Gobain)		
42	Shuttering Ply	Century	Archid	Kitply
		Merino		
43	AAC Block	Ferrouscrete	Ultratech	JK
		Aerocon		

44	AAC Mortar	Ferrouscrete	Ultratech	JK
45	Acoustical/Plain Tile False Ceiling /wall	Armstrong/ TRANQUIL	SMARTPANELS /Saint Gobain	Anakon/ UNIACOUSTIC
	Acoustical/Plain Lite Calcium Silicate False Ceiling	Armstrong/ Aerolite	USG Boral/Saint Gobain	Anakon
46	Mosaic/ Chequered Tile	NITCO	Orientbell	Unistone
48	Curtain Rods	Roselle	Vista	Marvel
		Deck		
49	SFRC Manhole Cover and Frame	ISI Marked as Approved by Engineer in Charge		
50	Ready Mix Concrete	Unitech Ltd	Ultra Tech Concrete	ACC
		Lafarge Concrete	JK Cement	
51	Stainless Screws	Epi-trque	Trutek	Zenith
		Crown		
52	Dash Fastener & Stone Clamps	Hilti	Fischer	Bosch
		Koncept		
53	Furniture	Herman Miller	Featherlite	Haworth
		Steelcase		
	Modular Kitchen	ALSORG	USP	HACKER
54	False Ceiling Metal	Armstrong	USG Boral	Anakon
		Aerolite		
55	Toughen partitions	Saint Gobain	Modiguard	Asahi India
56	Passengers lifts	Otis	Kone	Schindler
58	Blinds	Hunter Douglas	WALLTRACT	GRABER
59	Carpet Flooring	MILLIKEN	Wellspun	INTERFACE
		SHAW		
	TUFTED RUGS	JAIPUR RUGS	SUNDAY DESIGN	HANDS
60	Laminate Flooring	Kronos	Germany	BPERGO
		Green Panel	Deck	
	Wooden Flooring	QUICKSTEP	MIKASA	KAARA/DECOR
61	Sports Flooring	Poland	Fab Floorings	Ecoflex
		Advance Sports Tech (LLP)		
	PU Flooring	Thermax	Vebro	Tremco
62	Looking Mirror	Modiguard	Saint Gobain	
63	Clear Glass	Guardian Glass	Modiguard	Saint Gobain

64	Glwire Mesh	Tiger	Elite Shutter Industries	M/s SS Steel Industries, N.Delhi
		Selected Products Co		
65	Cockroach Trap	Chilly	Kingston	Jayana
66	Plate Rack	Kingston	Dhawan Sanitary Udyog	RA Engineering Works (Comet)
		M/s Anupam Industries (BLUE STAR)	Player/ Selected Products Co.	
67	Hardware/locks doors windows etc.	Hettich	Dorset	Hafele
		Doorky		
68	Internal Signage's	M3M	Isuzu	Prolite
69	Fountain	Aqvastar	Zodiac	Astral
70	Landscape automatic irrigation System	Rainbird	Irrigation Products International	Jain Irrigation System
71	Iron Mongery Mild Steel (ISI Marked)	Oxford	Jyoti	MC Maojoo & Co Kolkata
		Shree Ganapathi Doors		
72	Water Proofing Treatment	Pidilite	BASF	Asain Smarcare
		Sika		
73	Louvers	Vista	Pare	Histeel

PREFERABLE MAKE OF MATERIALS**PLUMBING**

S.No	Details of Materials / Equipment	Make/Brands		
1	Sanitary ware such as EWS, Wash basin, Urinal, Urinal partitions, toilet paper roll holder	Cera	Hindware	Parryware
		Kerovit	Duravit	
2	W.C. Seat cover	Cera	Hindware	Parryware
		Kerovit		
3	C.P. Brass flush valve for WC and Urinals	Cera/ Kerovit	Hindware	Parryware
4	C.P. brass fittings such as pillar cocks, stop cocks angular stop cocks, C.P. flexible pipes, C.P. brass waste, C.P. brass cast bottle trap, C.P. brass shower rose, long body bib taps, C.P. brass health faucets, single lever mixing fittings etc.	Cera	Hindware	Parryware
		Kerovit		
5	Automatic hand drier	DOLPHY	Kerovit	Cera
		TOSHI	MYSTAIR	.
6	Automatic flushing system for Urinals	Cera	Hindware	Parryware
		Kerovit		
7	Stainless Steel Kitchen Sink	Neelkanth	Jayna	Nirali
		Kerovit		
8	Cast Iron Pipes & Fittings, Manhole covers and frames.(Asper IS : 3989)	NECO	SKF	Electro steel
9	Floor Drain Fixture, Rain Water Outlets& Channel Gratings	ACO	GMGR	Koncept
10	C.P. Grating for Floor Trap	Chilly	Nirali	Colston
11	GI/MS Pipes(IS : 1239 and IS : 3589)	Tata Steel	Jindal (Hissar)	SAIL
12	GI pipes fittings	Unik	Zoloto M	Surya
13	CPVC Pipes and Valves	Astral	Finolex	Supreme
14	PVC Pipe	Supreme	Finolex	Astral
15	RCC Pipe	Sood & Sood	Pragati Concrete	Lakshmi
16	Stone ware Pipes , Gully Traps	Perfect	Hind	RK

17	GM/ Forged Brass Valves	Zoloto	Audco	Advance
18	Sluice Valve	Zoloto	Advance	Leader
19	Butter Fly Valve	Zoloto	Audco	Advance
20	Check valve	Zoloto	Audco	Advance
21	Air Release Valve	Zoloto	Advance	Leader
22	Y- Strainer	Zoloto	Advance	Lead
23	Pumps	Grundfos	CRI	Kirloskar
24	Variable Frequency Drives	Siemens	Danfoss	KSB
25	Drinking Water Cooler	Blustar	Voltas	Godrej
26	Couplings	Zoloto	Audco	Advance
27	Anti Vibration Mounting	Dunlop	Resistoflex	KSB
28	Pressure Gauge	Emerald	Fiebig	H-Guru
29	Water Meter (Mechanical Type)	Kaycee	Aquamet	Capstan
30	Level Controller (Water)	Active Controls	Minilec	Technika
31	Level Indicator (Water)	Leaders	Minilec	Zoloto /Technika
32	Plastic Encapsulated Footrest	KGM	KK	Waltzer
33	Polythene Water Storage Tank / GRP SMC Panel Tank	Sintex	Sheetal	Polycon
34	Water Treatment Plant, R.O., Filters etc.	Driplex	Thermax	Optima Water Solution
35	Water Treatment Vessel	PENTAIR	Astral	Pearl Water
36	Ultra Violet Water Purifier	Eureka Forbes	Pentair	Eurostar/ Aquatech
37	Dosing Pumps	CRI	Kirloskar	Grundfos
		KSB		
38	Insulation for Hot Water Pipes	Armacell	Aerocell	K-Flex/ Llyod/ Armflex/ Careflex
39	Flanges	Class 150		

40	Pypcoat for Buried Piping	IWL	Coaltek	
41	Welding Rods	Advani	Sri Ram arc	Ador
42	CI (LA) Pipes and fittings	Electro steel	Kartar	Neel
43	GEYSER	HAVELLES	BAJAJ	AO Smith
44	Calorifiers / PHE	Alpha level	Nimotherm	Oso
45	UPVC Pipes and Valves	Astral	Finolex	Supreme
46	Solar Panel System	TATA	Livguard	V-guard/ Renesa
47	SFRC Manhole covers, Frames & CI Grating	KK	OCR	Pargati
48	Non>Returns Valve (Check Valves)	Zoloto	Advance	Leader
49	Brass Ferrules	Kalsi	Annapurna	Dhawan Sanitary Udy
50	Stain less Steel Sink	Neelkanth	Kaff	Glen

PREFERABLE MAKE OF MATERIALS				
ELECTRICAL MAKE LIST (FOR PLUMBING&FIRE FIGHTING)				
S.No	Details of Materials/Equipment	Make / Brands		
1	Power Cables	Finolex	Polycab	KEI
		Havells		
2	Conduit ERW (ISI marked)	BEC	AKG	
3	Switches, MCCB, Contactors, Aux. contactors & Over load Relays, Starters	L&T	ABB	Siemens
		Schneider	GE	
4	Fuse link	L&T	Siemens	GE Power
5	Electronic Digital Meter	Enercon	Ducatt	
6	CT/ PT Transformer	AE	Kappa	
7	S.F. Unit	L&T / Legrand	ABB/ Siemens	Schneider /GE
8	Cable Trays	MEM	Pilco	Aditya Steel
		AKG		
9	Indicating Lamps(LED type) /Push Buttons	L&T	Siemens	GE Power
10	Electrical Pump Panels	A to Z Systems	Amptech	Jakson
		Neptune		
11	Terminal	Elemax	Tosha	
12	Indicating Instruments	AE	Equivalent	
13	Selector Switch	Kaycee	Salzer	
14	Change Over Switch	HHE Icon	HPL- Socomec	
15	MCB	GE	Siemens	ABB
16	Starter Contactor	Schneider Electric (TE)	L&T	Siemens- Sicop
17	Air Circuit Breaker	ABB	Siemens	GE
18	Over load relay with built in single phase preventer	Schneider Electric (Telemecanique)	ABB	L&T

PREFERABLE MAKE OF MATERIALS				
ELECTRICAL				
S.No	Details of Materials / Equipment	Make / Brands		
1	Air Circuit Breaker	L&T - U Power Omega (MTX3.5)	Schneider - Masterpact NW (6.0P)	Legrand - DMX3 MP4 LSIG
2	Moulded Case Circuit Breaker With rotary operating handle.	Schneider	Siemens	L&T
		ABB	Legrand	
3	Transformer / Compact Substation	ABB	Schneider	Sudhir
		Essenar		
4	Digital meters	El Measure	L&T	Conserve
		Trinity	Neptune Ducati	
5	Contactors, Timers	Schneider	ABB	L & T
		Legrand	Siemens	
6	Capacitors / capacitor with relay	Schneider	EPCOS	L & T
7	Voltmeter & Ammeter	Conserve	Enersol	HPL
8	Switch Gear	Schneider	Siemens	L&T
		ABB	Crompton	
9	Selector Switch	ABB	L & T	Legrand
10	Current Transformer	Matrix	AE	Precision
		G&M		
11	Indicating Lamp	L & T	Siemens	AE
12	Protective Relays	ABB	L & T	Siemens
		Schneider	GE	
13	Multi-functional meter	L&T	Legrend	Conzerv
14	APFC Relay (Microprocessor based)	Syntron	Enercon	L & T
		Ducati	Schneider	
15	Batteries	Exide	Amar Raja	Okaya
		Luminous		
16	Battery Charger	Uptron	Voltstat Electronics	Precision
17	L.T. / H.T. Cable	KEI	Havells	Finolex
18	DC Miniature Circuit Breaker	Schneider	Siemens	Polycab
		Legrand		
19	Cable Lug (Tinned Copper)	Dowells	Multi	Capital
20	Cable Gland	Peeco	Commet	Gripwell
		Power		
21	Main L.T. Panel, Capacitor Panel & Distribution Panel	Precision	Tricolite	Marine/ Green Galaxy
22	Emergency Lighting	Prolite	Autoglo	Acculite
23	Cable Tray / Raceway	LEGRAND	Precision/ RATAN	SCHNEIDER
24	Fire Extinguishers	Minimax	Newage	Cease Fire
25	Energy Analyzer Meter	Conserve	Elemeasure	Enersol
26	Voltmeter & Ammeter	Conserve	Elemeasure	Enersol

27	Distribution Boards with Miniature Circuit Breakers, RCCB	Schneider - Acti9	Precision	Siemens Beta Guard 10KA
28	PVC Insulated copper conductor single core Stranded wires of 650/1100 volt grade	Havells	KEI	Polycab
		Plaza	Finolex	
29	Telephone Tag Block	Krone	TVS R&M	
30	PVC Conduit	BEC	NORPACK	Polycab
31	M.S. Conduit	BEC	AKG	JINDAL
32	Modular Switches & Sockets	Legrand Lyncus	MK-Blenze	Clipal-X
33	LV System Wire	Siemens	Legrand	Havells
		polycab		
34	TV/Telephone outlet	Siemens	Legrand	Havells
		polycab		
35	Data Outlet	Siemens	Legrand	Havells
		polycab		
36	Data Rack	Siemens	APW	Legrand
		Wipro		
37	Light Fixture	Philips	Wipro	Bajaj
		Syska	Panasonic	Crompton
38	Fascade light	Forma	Meyer	Cnc india
		Orient		
39	Ceiling Fan	Bajaj	Havells	Crompton Greaves
		Orient		
40	Exhaust Fan with louvers	Bajaj	Havells	Crompton Greaves
41	Geyser	A-O Smith	Bajaj	Havells
42	RCC Hume Pipe for Electrical Works	ISI Marked of Reputed Company	Jaguar	Crompton Greaves
43	PLC	Siemens		
44	Telephone / Co axial Wire	Polycab	Allen Bradley	
45	Professional LED Panel	Panasonic	finolex	Havells
46	Public Address System	Honeywell	Samsung	Sony
		Edwards	Bosch	Tyco
47	D.G. Set (Engine)	Cummins	Catter pillar	Kirloskar
48	D.G. Set (Alternator)	Stamford	Catter pillar	Kirloskar
	D.G. Acoustic Enclosure	Jakson	Lerroy Sommer	Catterpillar
		Sudhir	Sterling	CatterPillar
		ABB		
49	H.T. Panel	Precision	Schneider	Siemens
50	H.T. Termination Kit	ABB	Denson	
51	UPS	Siemens	Vertive	APC Numeric

	Lighting Protection	Den		
52	Earthing	Den	OBO	Cape
53	Wireless Access Point	Alcatel	OBO	Cape/ Aruba
54	WAP Controller	Alcatel	Aruba	Indio Networks
55	IP EPABX	CISCO	MATRIX	AVAYA/ALTEC
56	IP Phone	NEC	Alcatel	Matrix
57	24 Port Networking Switch	Cisco/ Aruba	Alcatel	Matrix
58	24 Port PoE Networking Switch	Cisco/ Aruba	Alcatel	Extreme
59	CAT 6A Information Outlet	PANDUIT / 3C3	Alcatel/ SYSTIMAX	Extreme
60	FACE PLATE for IO	Legrand	Systimax	Panduit
61	CAT 6A PATCH PANEL	Legrand	Systimax	Panduit
62	CAT 6A CABLE	Legrand	Systimax	Panduit
63	CAT 6A PATCH CORD 1MTR	Legrand	Systimax	Panduit
64	CAT 6A PATCH CORD 2MTR	Legrand	Systimax	Panduit
65	42U RACK	APC	Systimax	Panduit
66	24U RACK	APC	Legrand	Valrack
67	PVC Conduit	Finolex	Legrand	Valrack
68	PVC Trunking	AKG	Polycab	NORPACK
		Finolex		
69	Display	Sony	Samsung	LG
70	Wall Mount	Chief	Samsung	Christie
71	Cable Cubby	Logic	Btech	Logic
72	Meeting Space Collaboration System	AMX	Kramer	Extron
73	LED Screen/UHD/HD all TV Units	Samsung	Sony	LG/Panasonic
74	Bullet, Dome & PTZ Camera, Channel network video manager server, Network management and monitoring software	HONEYWELL	LG	Panasonic/ CP Plus
75	AV over IP	AMX	Avigilon	Honeywell
76	Networking Switches	Netgear	Aurora	Extron/ Cisco
77	Digital Signal Processor	Clock Audio	TP-Link	Cisco
78	Chairman Unit	Clock Audio	Solvision	Audio Technica
79	Delegate Unit	Clock Audio	Solvision	Audio Technica
80	Digital Signal Processor	Solvision	Solvision	Audio Technica
81	Ceiling Speaker	JBL	Xilica	Biamp
82	Amplifier	JBL	WorkPro	TW Audio
83	Control Processor	AMX/Aurora	WorkPro	TW Audio
84	Tablet	AMX/Aurora	Aurora	Extron
85	Router	Netgear	CISCO	
86	HDMI	Kramer	Indio Networks	Cisco
87	15 mtr Active Extension Cable	Kramer	Extron	Tasker
88	Microphone Cable	Krystals	Manhattan	Aten
89	Speaker Cable	Krystals	Kramer	Tasker
90	Cat 6A Cable	Legrand	Kramer	Tasker
91	Networking Rack	APC	Beldon	Systimax
92	Projector	Panasonic	Legrand	Valrack/Cristi

93	Motorized Screen	Draper	Christie	Barco
94	Projector Mount Kit	Logic	Dalite	Ordain
95	Recording & Streaming Device	Arec	Custom	Ordain
96	Touch Panel	Viewsonic	Mediapoint	Sinew
97	Digital Podium	AHA	Acer	Ordain
98	Microphone	Shure	Ordain	Tcomm
99	Gas Suppression	Honeywell	Sennheiser	Beyerdynamic
100	Access Control	ONGUARD7.5 (LENEL)	Komtes	Tyco (Ansul)
101	Multiclass Smart Card readers	HID	CCURE9000 (SOFTWARE HOUSE)	Honeywell - (Pro-watch)
102	Fire Alarm system	Honeywell	Lenel	Morpho
		Notifier		
103	Smoke Detectors	Schrack	Farenhyt	Simplex
		Notifier		
104	Heat Detectors	Schrack	Farenhyt	Simplex
		Notifier		
105	Manual Call Box	Schrack	Farenhyt	Simplex
		Notifier		
106	Hooter/ Sounder	Schrack	Farenhyt	Simplex
		Notifier		
107	Response Indicator	Schrack	Farenhyt	Simplex
		Notifier		
108	Fire Panel	Schrack	Farenhyt	Simplex
		Notifier		
109	Pa Amplifier	Schrack	Farenhyt	Simplex
		Notifier		
110	Pa Speakers	Schrack	Farenhyt	Simplex
		Notifier	JBL	
111	Camera With All Accessories	Schrack	Farenhyt	Simplex
		Axis	CP Plus	

PREFERABLE MAKE OF MATERIALS				
SEWAGE TREATMENT PLANT				
S.No	Details of Materials/Equipment	Make/Brands		
1	Microbial Additive based STP with Advanced-Eco Reactor or FRP Containerized Advance MBBR Technology	Sintax	OPTIMA PVT LTD / YIMBY	Driplex
2	Rotating Biological Contactors (RBC) based Pumps	ORION Kirloskar	ECOGENE CRI	MUTHANGI WILO
3	Probiotic Microorganisms	OSI	Envirosense	Ecolog
4	Power Cable / Fire Survivable cable	Polycab Plaza	Havells	L&T
5	STP Control Panel	Fabricated Automation as preapproved technology provided specification.		
6	Switchgear & Accessories	ABB	Siemens	Schneider/L&T
7	PVC Pipes	Astral	Prince	Supreme ISI marked
8	Activated Carbon Filter	MS IS 2062 grade material fabricated		
9	Organic AER Media	Organic Solutions	Environment Technologies & System	Ecologic Waste Solutions
10	Valves	Sant	Zoloto	Audco
11	Water Cooled Ozonation System	Organic Solutions	Environment Technologies & System	Ecologic Waste Solutions
12	Ultra-Filtration	Deerfos	GE	Toray
SOLAR				
S.No	Details of Materials /Equipment	Standard Makes		
1	Solar Module	Adani	TATA	Waree/Rnewsis
2	GI Structures	Oscorp Energy	Fortune	Sunguard
2	String DC Couplers	MC4	Phoenix	
3	DC Cables	HAVELLS	Polycab	KEI
4	Solar String Inverter	ABB	DELTA	Sungrow
5	AC Distribution Box Switchgear	L & T	Siemens	ABB SPD
6	AC Cables	HAVELLS	Polycab	KEI

PREFERABLE MAKE OF MATERIALS				
HVAC				
S.No.	Items	Makes		
1	Air Cooled AC Units/ Split Acs/VRF	Mitshubhi electric	Daikin/ Hitachi	Carrier
2	DX Type AHU	Crystal	SYSTEM	AIR
		Flakt		
3	Closed cell electrometric Pipe insulation	Armaflex	Supreme	A-Flex
		K-Flex		
4	Refrigerant Piping	Mandev	Total Line	Rajco
		Mehta tube	Maxflo	Zobu/ Universal
5	Duct Acoustic Insulation	UP Twiga	Owens Corning	
6	Duct Insulation	ARMACELL	K-FLEX	SUPERLON
7	Room Acoustic Insulation	UP Twiga	Owens Corning	
8	Grilles, Diffusers, Dampers, Laminar	Tristar	Carryaire	Dynamic
		Crystal air		
9	Fire Dampers	Tristar	Carryaire	Dynamic
		Crystal air		
10	G.I. Sheets for Ducts	SAIL	Jindal	TATA
11	Power/Control Cables	KEI	Finolex	Havells
12	Hard PVC pipes	Polycab	Supreme	Prince
13	Armoured Power Cables	Finolex	Havells	KEI
14	Starters/Contactors/ Overload Relay	L&T	Siemens	
16	Inline & Axial Fan	CRYSTAL AIR	Caryair Vents	Ostberg
17	TFA unit	Mitshubhi electric	Daikin/ Hitachi	Carrier
		AKG		
7	Services/System Integrator	Oscorp Energy	Soltech Energy	Shilpi
1				

7.0 PROJECT EXECUTION

7.1 Project Execution & Supervision Aspects

1. The Bidder, who shall act as Contractor for the project shall be composed of qualified and experienced experts, who can carry out all the routine construction works as a fully competent and independent unit.

However, in preparing his proposal for the construction, the Bidder should allow for a suitable mechanism which will ensure thorough co-ordination of the design and execution teams, so that each team is at all times fully aware of the remedies to common problems used by the other team.

2. The Project Head/Project Manager Representative on behalf of the Contractor should be authorized with whom day to day interactions shall be made by the Engineer-in-Charge for execution and supervision of works. He should be a senior Civil Engineer with at least 20 years of professional experience out of which 10 years in planning and construction of building works. He should have executed at least one major building work of similar in nature as proposed by the Bidder. He should be familiar with modern construction equipment and Contract conditions. The candidate should have a thorough understanding and experience with IS code relating to building construction.
3. The Bidder shall provide competent personnel for the project execution and supervision who shall be managed by the Project Head/Project Manager at site in performing the assignment under this Contract.

The Bidder's personnel should have the required experience and expertise in conducting similar type of works with highest professional standards.

The Bidder is required to set-up the site office at the work site and make their own arrangements for the accommodation, furniture and equipment etc.

The project execution and supervision personnel should be mobilized from the date of commencement of works by the Bidder. During the Defects Liability Period, the Bidder would be expected to provide technical advisory services on an "as required" basis.

After award of the Contract, the Employer expects all of the proposed personnel to be available during implementation of the Contract.

4. Contractor shall carry out proper layout of the building to ensure appropriate alignment, line and level in column & beams by Total Station Equipment only. The Contractor must be doubly sure about the correctness of the same as per layout plan and structural drawings. The certificate of the correctness of layout of the building will be submitted by the contractor to the Engineer in Charge for release of first RA bill of particular building.
5. It is the duty of the Contractor to:
 - Ensure that high quality of construction is achieved
 - Ensure that all works are carried out in full compliance with the Engineering design, technical specifications and Contract documents;

- Check / conduct all necessary measurements, tests, and control the quality of various items of work s and in accordance with the relevant code of Building specification with the latest edition.

Key Personnel:

The contractor shall employ at his cost the adequate number of minimum technical staff during the execution of this work and defect liability period as per **Enclosure-I** or more depending upon the requirement of work. For this purpose the numbers to be deployed, their qualification, experience as decided by Employer shall be final and binding on contractor. The contractor shall not be entitled for any extra payment in this regard. The technical staff should be available at site, whenever required by WAPCOS to take instructions.

Within 15 days of letter of intent, the contractor shall submit a site organizational chart and Resume including details of experience of the Project-in-Charge and Technical staff as per following table for the approval of Employer.

The removal of such additional staff from the site shall only be with the prior written approval of Engineer-in-Charge. The contractor shall not be paid anything extra whatsoever on account of deployment of additional staff and decision of the Engineer-in-Charge shall be final and binding on the contractor. In case the contractor fails to employ the staff as aforesaid, then the amount mentioned in Enclosure-I shall be recovered from the Contractor.

7.2 Minimum Site Equipment Required

Availability (either owned or leased having validity for the period till completion of project) of the key and critical equipment required at site as per the quantum of work will be as per **Enclosure-II**. The Bidder is to provide their own estimate of the number of equipment, commensurate with their work plan and methodology.

7.3 Equipment for Testing of Materials & Concrete at Site Laboratory

All necessary equipment for conducting necessary tests shall be provided at the site laboratory by the Bidder at his own cost as per **Enclosure-III**

7.4 Instructions of Engineer-in-Charge

The Engineer-in-Charge will, but not be limited to, the following:

- give the order to commence the works;
- inspect Contractor's plant and equipment's and recommend augmentation/rectification of deficiencies, if required
- order special tests of materials and/or completed works, and/or order removal and substitution of improper materials and/or the works as required;
- review all the test result/ certificates of all construction materials and inspect sources of materials to establish their quality suitable to the required standard.
- check all bituminous mix designs and concrete mix design proposed by the Bidder where ever required and in due time and suggest modifications in the mix design, laying methods, sampling and testing procedure and quality control measures, to ensure required standard and consistency in quality at the commencement of times;
- check and certify the laboratory and field tests carried out by the Contractor and also carry out independent tests, if required. The report of such test shall be submitted to the Engineer-in-Charge within a period of 7 days of such tests.
- inspect the works during the construction period and the Defects Liability Period,

and to issue Defects Liability Certificates after rectification by the Contractor of defects notified to him by the Engineer-in-Charge;

- check the setting out the works;
- instruct the removal from the site of materials which are not as per specifications or reconstruction of parts of the works which do not comply with the specification;
- direct to submit monthly progress reports, Quarterly progress report, Final completion Report and Bar Chart / Programme chart to complete the work in stipulated time period.
- direct to prepare Running Account Bills for works carried out by the Contractor, and certify completion of parts or the totality of the works and record of measurements in the measurement book.
- direct to send certified bill to the WAPCOS office for approval of competent authority and payment.
- direct to prepare deviation / variation (if any) with duly certified supporting documents as per the provisions in contract and will send the same to WAPCOS office for the approval of Competent Authority.

7.5 Duties & Responsibilities of the Project Head/Project Manager of contractor

The duties of the Project Head/Project Manager of the Contractor are, to supervise construction of the works and, to test and examine any material to be used or workmanship employed in connection with the works. The principal responsibilities of the Project Head/Project Manager of the Contractor are likely to be but not limited to as follows:

- To follow the instructions given by the Engineer-in charge, Principal Employer and WAPCOS
- To prepare detailed bar chart depicting each & every activity of the work along with quantity and time bar, to complete the work in stipulated time period, which will be displayed in the Site office.
- To provide the all residential facility at site camp to the Engineer-in-Charge as per provisions
- to ensure that the construction work is accomplished in accordance with the technical specifications and Contract Conditions;
- to identify construction problems and delays and to recommend to the Engineer-in-Charge, actions to expedite progress
- to ensure proper keeping of records
- to monitor and check the day-to-day quality control and quantity measurements of the work carried out under the Contract
- to prepare in consultation with the Engineer-in-Charge, a Construction Supervision Manual outlining routine and procedures to be applied in Contract management, construction supervision and administration;
- to prepare a maintenance manual outlining the routines to be adopted in each specific reach and for the cross-drainage works and buildings;
- to comply with his contractual obligations in executing work in all matters concerning safety and care of the works (including the erection of temporary signs) and, if required, to request the Contractor to provide any necessary lights, guards, fencing and watchmen for smooth and effective working and traffic flow.

- to write a day-by-day project diary which shall record all events pertaining to the administration of the Contract, request forms and orders given to the Contractor, and any other information which may at a later date be of assistance in resolving queries which may arise concerning execution of the works;
- preparation & submission of monthly progress reports, Quarterly progress report, Final completion Report.
- Preparation, Submission & time to time revision of Bar Chart / Programme chart to complete the work in stipulated time period.
- Any other work as outlined in contract agreement, which is the responsibility of the Contractor.

7.6 Documents Prepared Shall be the Property of the Employer

All plans, drawings, specifications, designs, reports and other documents (both computer hard copies and soft copies) in performing the works shall become and remain the property of the Employer, and the Contractor shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Employer, together with a detailed inventory thereof. The Contractor may retain a copy of such documents but shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Employer.

7.7 Completion Schedule/deliverables

7.7.1 The works has to be completed in the following phasing:

SN.	Description of Mile stone (Financial)	Time allowed (from the date of start)
1	30% of the whole of the work	Within 01 months
2	60% of the whole of the work	Within 02 months
3	100% of the whole of the work	Within 03 months

Note:

- The work of plantation, internal & external services, etc. shall be completed simultaneously during the progress of work as and when the site is available for the same, as per direction of Engineer-in-Charge.
- The tentative time schedule is enclosed at Enclosure-IV. The contractor shall submit component wise detailed schedule plan for each activity of components, to the Employer with the condition of completion of work within stipulated time period for proper monitoring of the project.

7.8 Other Site Facilities

The cost of providing the work/facilities stated below are to be borne by the Contractor and shall be deemed to be included in the quoted cost by the Contractor.

- The Contractor shall regularly share the geotagged photographs of ongoing construction to designated what's App group. The photographs need to be shared in every stage of construction for important items and milestones like foundation reinforcement, RCC casting of foundations, columns, beams & slab, masonry work, etc. These photographs shall also be submitted as part of each Running Account Bill.
- The Contractor shall make all arrangements for ground breaking ceremony/ inaugural function etc for the project as required and the cost towards it deemed to be included in

his rates/offer.

- The same shall be furnished as per requirement of Monthly Progress report / Quarterly Progress Report/ Final completion report.
- The Contractor shall provide arrangements for firefighting at his own cost. For this purpose, he shall provide requisite number of fire extinguishers and adequate number of buckets, some of which are to be always kept filled with sand and some with water. This equipment shall be provided at suitable prominent and easily accessible places and shall be properly maintained. The Contractor may be subject to periodic fire prevention inspections and any deficiency or unsafe condition shall be corrected by the Contractor at his own cost and to approval of the Engineer-in-Charge and the relevant authorities.

These fire prevention inspections shall include but not limited to the following:

- ✓ Proper handling, storage and disposal of combustible materials, liquids and wastes.
- ✓ Work operations which can create fire hazards.
- ✓ Access for firefighting equipment.
- ✓ Type, size, number and location of fire extinguishers or other firefighting equipment.
- ✓ Inspection and maintenance records for extinguishers
- ✓ Type, number and location of containers for the removal of surplus materials and rubbish.
- ✓ General housekeeping
- For the purpose of quick communication between the Engineer-in-Charge and the Contractor or his Representative, Site Order Books shall be maintained at site in the manner as described below:

Any communication, relating to the works may be conveyed through records in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of the Contract. Each site order book shall have machine- numbered pages in triplicate and shall be carefully maintained and preserved by the Contractor and shall be made available to the Engineer-in-Charge as and when demanded. Any instruction which the Engineer-in-Charge may like to issue to the Contractor may be recorded by him in the site order book and two copies thereof taken by the Engineer-in-Charge for his record. The Contractor or his Contractor or Representative may similarly record in the site order book any communication he may like to send to the Engineer-in-Charge. Two copies thereof when sent to the Engineer-in-Charge and receipt obtained thereof, will constitute adequate services of the communication to the Engineer-in-Charge.
- The Contractor shall display all permissions, licenses, registration certificates and other statements required to be displayed under various labour laws and other legislations applicable to the works at the site office and also maintain the requisite register / records factually and up to date and keep them ready for inspection by the concerned authorities and also make available the same to the Engineer-in-Charge / Owner for inspection.
- The relevant I.S. codes of practice and other relevant codes shall be of latest version with their amendments/ revisions. The Contractor shall keep and maintain copies of the latest editions of codes at the work site and make it available to Employer whenever required.
- In case of Guarantees specified for certain periods for due performance of materials and specialist items of work, the Contractor shall be a co-guarantor with the Specialist Contractor or Supplier offering such Guarantee and shall offer such co- Guarantee in a format approved by the Employer.

- If desired by the Employer, the Contractor shall stack and spread to the required profile the excess earth available suitable for filling in layers not exceeding 200mm, watering, consolidation within the campus and dispose of all surplus material to the nearest dumping ground/ land fill area without any additional cost, etc.
- The Employer may if require, request the assistance of Contractor labour for purpose other than from part of Contract. The Contractor will not unreasonably deny such assistance and the Engineer-in-Charge decision in this regard shall be binding on the Contractor. The Contractor will be then paid on the basis of minimum wages rates and provision made in the General Conditions of Contract.
- Contractor shall provide safety gadgets to the Employer officers.

7.9 Drawings

7.9.1 Good for Construction Drawings

Before commencement of any item of work the Contractor shall correlate all the relevant architectural and structural drawings, nomenclature of items and specifications etc. issued for the work and satisfy himself that the information available from there is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale.

The levels, measurements and other information concerning the existing site as shown on the conceptual / layout drawings are believed to be correct, but the Bidders should verify the same for themselves and also examine the nature of the ground as no claim or allowance whatsoever shall be entertained on account of any errors or omissions and commissions in the levels or strata turning out different from what is shown on the drawings.

Two copy of contract documents including Drawings furnished to the Contractor shall be kept at the Sites and the same shall at all reasonable times be available for inspection.

7.9.2 Coordinated drawings

Before taking up the work, the Contractor shall prepare shop drawings for the works listed below for various civil and electrical services showing details of layout in plan including sections & elevations & large-scale details and Contractor shall plan and mobilize his resources as per these drawings and as per actual site conditions to facilitate convenient execution, installation as well as maintenance of these items. Nothing extra shall be payable on this account.

7.9.3 Shop drawings

The bill of quantities, technical specifications and drawings together shall be considered as a tender requirement and the work shall be carried out as per good for construction (GFC) drawings, issued by Engineer-in-Charge. The Contractor shall study the GFC drawings and taking into account actual site conditions and selected material and requirements shall prepare shop drawings for the following works, as fully coordinated drawings, as given above.

- Aluminum work, Stainless steel work and railings etc.
- Expansion joint work
- Reflected Ceiling Plan (RCP), coordinated with all ceiling related services.
- Marble, granite, vitreous, ceramic, tile work details.
- All Electrical work
- All Sanitary and sewerage work
- All plumbing works.
- Rainwater Pipe details/ position, roof slopes etc.

- i. Drainage details.
- j. Door Window details
- k. All steel fabrication work.
- l. Fixture, Furniture and Equipment (FFE) work.
- m. Any other works detail if required.

Within the time frame agreed with the Engineer-in-Charge, the Contractor shall prepare shop drawings using latest version of AutoCAD. Shop drawings shall show all layouts, details in plans & sections showing all connections, junctions, bends, supports, clearances. Fixing arrangements with dimensions room, etc shall be prepared by the Contractor on AutoCAD based on the architectural drawings and site measurements. All measurable items quantities shall be mentioned on each shop drawing being submitted for approval by the Contractor. 3 sets of shop drawings (soft copy also) shall be submitted for approval and Seven sets of final shop drawings after approval by Engineer-in-Charge shall be submitted by the Contractor along with the soft copy. The shop drawings, shall be prepared as per schedule given in PERT Chart.

Technical submittals of manufacturer's catalogues and technical data shall be submitted for approval. The Contractor shall designate an Engineer responsible for issue and preparation of shop drawings and control of GFC drawings.

7.9.4 As built drawings

- i. The Contractor shall make available four (04) sets of completed Building Drawings, "As Built Drawings" along with literatures, manuals, warranty certificates etc. of various installed fittings, fixtures and equipment for the completed projects. This shall be the prerequisite for payment of final bill.
- ii. The Contractor shall make available three (03) sets of all services drawings including Electrical & HVAC work internal and external services i.e. Water Supply, Sanitary line and Drainage lines. This shall be the prerequisite for payment of final bill. These drawings shall have the following information:
 - a. Run off for all piping and their diameters including soil, waste pipes and vertical stacks.
 - b. Ground and invert level of all drainage pipes together with locations of all manholes and connections, up to outfall.
 - c. Run off for all water supply lines with diameters location of control valves, access panels etc.

7.10 Testing and Commissioning

- The Contractor shall arrange electricity at his own cost for testing of the various electrical and mechanical installations as directed by Engineer-in-Charge and for the consumption by the Contractor for executing the work. Also all the water required for testing various electrical installations, fire pumps, firefighting/ firefighting equipment, fire sprinklers. and testing water supply, sanitary and drainage lines, water proofing of underground sump, overhead tanks, water proofing treatment etc. shall be arranged by the Contractor at his own cost. Nothing extra shall be payable on this account.
- Testing of equipment shall be carried out as per technical Specifications, manufacturer's recommendation and latest standards available up to date. The testing report shall be submitted along with Operation and Maintenance manual of the equipment at the time of handover.
- Contactor to provide training for operation and maintenance of equipment through respective manufacturer for the routine and preventative maintenance of equipment post Defect Liability Period.

- The Contractor shall demonstrate trouble free functioning of all the Civil and E&M installation and services. The Engineer-in-Charge or his authorized representatives shall carry out final inspection of the various Civil and E & M services and installations. Any defect(s) noticed during demonstration shall be rectified by the Contractor at his own cost to the entire satisfaction of the Engineer-in-Charge. Nothing extra shall be payable on this account.

Enclosure-I
Desired Site Organization Structure

Minimum Level of Execution Team and Qualification/Experience of Key Staff to be deployed by the Contractor during execution of relevant works/fields is as follows:

SN.	Designation	Qualification	Minimum Experience	Minimum No. Required	Rate at which recovery shall be made from the contractor in the event of not fulfilling
Principal Technical Manpower Deployment during Execution of Work					
1	Project Engineer (Civil)	Graduate Engineer (Civil)	10 years	1	Rs. 40,000/- per month
2	Interior Expert	Graduate Engineer (Civil)	10 years	1	Rs. 40,000 /- per month
3	Quantity Surveyor	Graduate Engineer/ Diploma	5 years/ 10 years	1	Rs. 25,000/- per month

The contractor must submit the CVs of above mandatory staff for approval of WAPCOS. Only upon the approval the staff shall be deployed at site by contractor. **Deployment of Interior Expert is mandatory requirement as the majority of work is for interior execution.**

Recoveries shall be made on account of non-deployment as per direction of Engineer in Charge.

SECTION – VIII

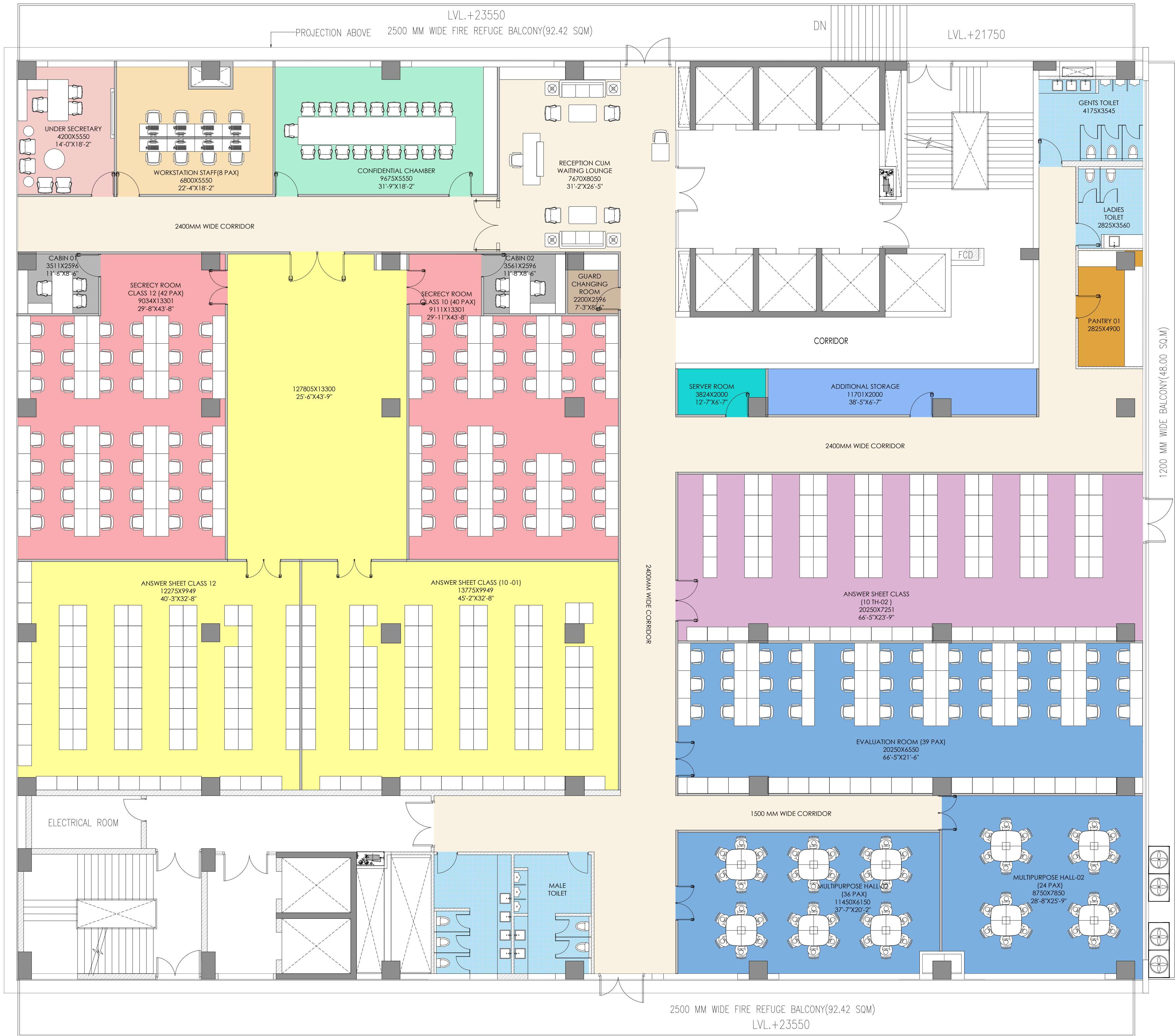
TENDER DRAWINGS



8TH FLOOR AREA SHEET				
S.NO	ROOM NAME	ROOM SIZE	AREA (SQM)	AREA (SQFT)
1	COE ROOM	10625X5885	54	580
2	PA ROOM	5500X5915	32	344
3	RECORD ROOM	5625X5915	33	359
4	JUNIOR ACCOUNTS OFFICER 01	3000X2860	9	93
5	ASST.PR SECTION OFFICER	3000X2925	9	95
6	PR SECTION OFFICER	4710X3000	14	153
7	JUNIOR ACCOUNTS OFFICER 02	3000X3300	10	107
8	JUNIOR ACCOUNTS OFFICER 03	2975X3300	11	118
9	OPEN WORKSTATION	4805X3950	19	204
10	CAFETERIA	5500X10500	57	611
11	RECORD ROOM(ADDITIONAL)	7875X5875	46	493
12	RECORD ROOM(MARKS & MIGRATION)	7875X5876	46	500
13	MARKS & MIGRATION	3825X11850	45	484
14	PANTRY 01	2825X4900	13	144
15	LADIES TOILET	2825X3560	10	106
16	GENTS TOILET	4175X3545	15	158
17	UNDER SECRETARY 01	3450X3800	13	142
18	UNDER SECRETARY 02	3450X3800	13	142
19	EXAMINATION	7000X7150	51	546
20	RECORD ROOM(EXAMINATION)	7000X7650	48	513
21	GUARD CHANGING ROOM	2225X3100	6	69
22	R&I DEPARTMENT	7000X4450	30	320
23	RECEPTION CUM WAITING LOUNGE	8600X5650	76	823
24	RO CABIN	7775X8050	63	673
25	RO MEETING ROOM	3400X5360	18	197
26	RO TOILET	3400X2575	7	73
27	DEPUTY SECRETARY	5525X4250	24	254
28	ASST. SECRETARY	5525X3700	21	221
29	PANTRY 02	2400X2625	6	68
30	PA ROOM	5075X3800	19	209
31	WORKSTATIONS	3400X3800	13	140
32	EXECUTIVE WAITING LOUNGE	5525X3800	21	227
33	CONFERENCE ROOM (57 PAX)	12800X10400	134	1439
34	RECORD ROOM (ADMIN)	4000X8450	34	364
35	ASST. SECRETARY IT 01	5800X3900	23	244
36	ASST. SECRETARY IT 02	3150X3900	12	133
37	SERVER ROOM	2540X3900	10	108
38	UPS ROOM/ELECTRICAL ROOM	2490X3900	10	106
39	RECORD ROOM	2540X3900	10	108
40	FEMALE TOILET	3360X5175	17	183
41	MALE TOILET	3360X5175	17	183
42	DRY PANTRY	4000X1850	7	80

REV NO:	REVISION DESCRIPTION	DATE
PROJECT : PROPOSED CBSE OFFICE AT NBCC SQUARE AT KOLKATA		
WAPCOS LIMITED		
CATEGORY : TENDER DRAWING		
DRAWING TITLE : 8TH FLOOR LAYOUT PLAN		
SCALE: NTS	DESIGNED DRAWN CHECKED APPROVED	NAME RM RINKU RM ... DATE 07-10-25 -
PROJECT NO :	DRG NO: CON. - 02	REV: SHEET :
DRAWING RELEASED FOR: ☒ APPROVAL ☐ WORKING DRAWING ☐ ONLY INFORMATION ☐ CONSTRUCTION		
ARCHITECT'S SIGN		OWNER'S SIGN

8TH FLOOR PLAN



5TH FLOOR PLAN

5TH FLOOR AREA SHEET				
S.NO	ROOM NAME	ROOM SIZE	AREA (SQM)	AREA (SQFT)
1	UNDER SECRETARY	4200X5550	23	251
2	WORKSTATION STAFF	6800X5550	38	406
3	CONFIDENTIAL CHAMBER	9675X5550	54	577
4	CABIN 01	3511X2596	9	93
5	SECREC ROOM CLASS 12 (42 PAX)	9034X13301	109	1175
6	ANSWER SHEET CLASS 12	12275X9949	163	1753
7	CABIN 02	3561X2596	9	100
8	SECREC ROOM CLASS 10 (40 PAX)	9111X13301	105	1132
9	ANSWER SHEET CLASS (10 -01)	13775X9949	197	2119
10	MULTIPURPOSE HALL -01	11450X6150	70	758
11	MULTIPURPOSE HALL -02	8750X7850	69	739
12	ANSWER SHEET CLASS (10TH -02)	20250X7251	157	1689
13	SERVER ROOM	3824X2000	7	77
14	ADDITIONAL STORAGE	11701X2000	23	247
15	PANTRY 01	2825X4900	13	144
16	LADIES TOILET	2825X3560	10	106
17	GENTS TOILET	4175X3545	15	158
18	RECEPTION CUM WAITING	7670X8050	62	664
19	LOUNGE			
19	FEMALE TOILET	3360X5175	17	183
20	MALE TOILET	3360X5175	17	183
21	EVALUATION ROOM	20250X6550	131	1410

REV NO		REVISION DESCRIPTION	DATE
PROJECT : PROPOSED CBSE OFFICE AT NBCC SQUARE AT KOLKATA			
5TH FLOOR LAYOUT PLAN			
CATEGORY : TENDER DRAWING			
DRAWING TITLE : 5TH FLOOR LAYOUT PLAN			
SCALE: NTS	DESIGNED	NAME RM	DATE
	DRAWN	RINKU	
	CHECKED	RM	07-10-25
	APPROVED	---	-
PROJECT NO :	DRG NO:	REV:	SHEET :
	LA. - 01		
DRAWING RELEASED FOR:			
☐ APPROVAL		☐ ONLY INFORMATION	
☐ WORKING DRAWING		☐ CONSTRUCTION	
ARCHITECT'S SIGN		OWNER'S SIGN	

SECTION – IX

FINANCIAL PROPOSAL

SUMMARY OF COST

**Renovation works for proposed CBSE Regional Office at NBCC Square, New Town,
Kolkata**

S.No	Particulars	Total Quoted Amount in Figure (Rs.)
1.	Renovation works for proposed CBSE Regional Office at NBCC Square, New Town, Kolkata	DO NOT FILL HERE
	Grand Total	DO NOT FILL HERE
	Total Quoted Amount in Words: DO NOT FILL HERE	

***NOTE:**

- The quoted cost filled in Schedule of Quantity, by bidders, should include all associated costs with the project, all activities mentioned in scope of works including any out of pocket / mobilization expenses/ Custom duty (if any), Building and Other Construction Workers Welfare Cess, TDS, etc. (except Goods and Services Tax (GST) if any applicable as per Govt. terms, shall be paid by the Contractor. The Goods and Services Tax (GST) shall be paid extra over quoted cost as per prevailing Govt. of India norms.
- It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable. The Goods and Services Tax (GST) shall be reimbursed to the Agency on submission of proof of Deposition of GST.
- The company shall be performing all its duties of deduction TDS and other deduction on payment made to the contractor as per applicable legislation in force on the date of submission of bid or to be newly / amended introduced during the execution of the Contract.
- The tenderer shall quote rates up to Two decimal and as well as in words. In case of any discrepancy rate quoted in words shall prevail.

Detailed Bill of Quantities

Renovation of Proposed CBSE Regional Office & COE at NBCC Square, New Town, Kolkata

S NO	DESCRIPTION	AMOUNT
1.00	CIVIL WORKS,PLUMBING/ SANITARY WORKS AND FURNITURE	0.00
2.00	ELECTRICAL WORKS,LIGHTING, HVAC WORKS AND VENTILATION	0.00
3.00	FIRE ALARM AND PA SYSTEM AND FIRE FIGHTING	0.00
4.00	IT WORKS (ACTIVE + PASSIVE), EPABX, CCTV WORKS AND AV SYSTEM	0.00
A	TOTAL COST	-

SCHEDULE OF QUANTITIES - CIVIL WORKS, SANITARY, PLUMBING AND FURNITURE						
S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
1	4.1	CEMENT CONCRETE: Providing and laying in position CEMENT CONCRETE of specified grade excluding the cost of centring and shuttering-all work upto plinth level.				
	4.1.5	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	cu m	242.93		-
2	11.54	RAISED FALSE FLOOR: Providing and fixing removable raised/false access flooring with system and its components of approved make for different plenum height with possible height adjustment upto 50mm, comprising of modular loadbearing floor panels supported on G.I. rectangular stinger frame work and G.I. Pedestal etc. all complete, as per the architectural drawings, as specified and as directed by Engineer-in-charge consisting of: (a) Providing at required spacing to form modular framework, pedestals made out of GI tube of thickness minimum 2 mm and 25 mm outer diameter, fully welded on to the G.I. Base plate of size 100mm x 100mm x 3mm at the bottom of the pedestal tube, G.I. pedestal head of size 75mmx75mmx3.5 mm welded with GI fully threaded stud 16mm outer diameter with two GI Check nuts screwed on the stud for level adjustment upto 50mm, locking and stabilizing the pedestal head in position at the required level. The pedestals shall be fixed to the subfloor (base) through base plate using epoxy based adhesive of approved make or the machine screw with rawl plug. (b) Stringers system in all steel construction hot dipped galvanized of rectangular size 570x20x30x0.80mm thick having holes at both ends for securing the stringers on to the pedestal head using fully threaded screws ensuring maximum lateral stability in all directions, the grid formed by the pedestal and stringer assembly shall receive the floor panel, this system shall provide adequate solid, rigid support for access floor panel, the system shall provide a minimum clear uninterrupted clearance between the bottom of the floor for electrical conduits and wiring etc. all complete as per the architectural drawings, as specified and as directed by the Engineer-in-charge. (c) Providing and fixing Access Floor panel of 600x600x32 mm medium grade Filled Steel anti static high pressure Lamination of 800H grade (FS800H). Access Floor panel shall be steel welded construction with an enclosed bottom pan with uniform pattern of 64 hemispherical cones. The top and bottom plates of Steel Gauges: top 0.6 mm and bottom 0.7 mm fused spot welded together (minimum 64 welds in each dome and 20 welds along each flange). The panel should be Corroresist epoxy coated for lifetime rust protection and cavity formed by the top and bottom plate is filled with Pyrogrip noncombustible Portland cementitious core mixed with lightweight foaming compound. The access floor shall be factory finished with Anti-static High Pressure laminate with 450mm Finished Floor Height (FFH).				
	11.54.2	450mm Finished Floor Height (FFH).	sq m	28.00		-
3	MR	ALUMINIUM SKIRTING: Supply of 100mm Aluminium (Grade 6063) Skirting with 15 micron anodising In Natural Finish. Thickness 1.30 to 1.50mm. Designed to conceal screws. Seamless finish. Complete with Rubber/ PVC Jointers and Gasket.	metre	1,472.00		-
4	MR	LAMINATED WOODEN FLOORING: Providing and laying 8mm thick AC5 grade laminate wooden flooring having good castor chair and furniture resistance strength. Plank dimension to be 606x103 mm with click locking system and wax coating for better sound resistance. Impact and abrasion resistance to be of high grade having class EN 13329. The flooring shall be laid with 2mm thick underlay and PVC sheet and prevent against moisture and foot taping sound. The item also includes the skirting and any other profiles required for proper installation.	sq m	390.00		-
5	11.41A	VITRIFIED TILES: Providing and laying Vitrified tiles in floor and wall in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @ 3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently.				
	11.41A.1.3	Size of Tile 600x1200mm	sq m	2,870.40		-
6	MR	CARPET TILES: Providing and Laying tile form Carpet - CRI Green Label Plus 100% NYLON highly resilient TYPE - 6+ fiber Solution Dyed of size 25 x 100 cm or 50 cm x 50 cm or 61 cm x 61 cm per tile having total tufted weight of 18 oz with a density higher than 5000. The Carpet shall have sufficient gauge (1/10 - 1/12). The carpet should have a minimum pile thickness of minimum 3 mm and a total thickness of minimum 5 mm. The carpet tile should have minimum SPI of 10 and should be supplied with PVC backing. Carpet tiles shall be complied with Flammability Test ASTM E648, Methenamine Pill Test ASTM D2859, Smoke Density Test ASTM E662, and Appearance Retention Hexapod test ASTM D5252. The laying of carpet shall be done with standard SR 998/SR505/MAPA Adhesives. The carpet to be installed as per the manufacture's specification and to be installed by its authorized agency or as approved	sq m	168.00		-
7	11.4	IPS FLOORING: 52mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6 mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	sq m	558.00		-
8	12.45	GYPSUM BOARD CEILING: Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with				
	12.45.1	12.5mm thick tapered edge gypsum plain board conforming to IS: 2095- (Part I) :2011 (Board with BIS certification marks)	sq m	1,082.00		-
9	MR	WOODEN VENEER CEILING: Providing and fixing wooden veneer ceiling by Fixing Natural OAK Veneer 4mm on 12mm underlay Fire retardant Ply fixed to a subframe made using 50mmx50mm Kiri seasoned and chemically treated hollock wood fixed to RCC ceiling using Fasteners.	sq m	49.00		-
10	MR	POLISH: Polishing in high gloss/matt finish melamine clear polish on wood work in required color/wooden shade texture with following process in the sequence as detailed below: 1. The surface to be polished is rubbed with sand paper 80/120 no. and then with sand paper of 160/180 nos. 2. Applying two coats of sealer with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed to dry for 8 to 12 hrs. 3. On drying of sealer coat, wet rubbing with emery cloth of finer grading with ample water to remove excess sealer layer and make the surface further smooth after this wet rubbing, then surface is applied with special grade melamine fillers to fill all the small and big holes/grooves etc. Filler coat to be allowed to dry for 4 to 6 hrs on which again a light wet rubbing is done this surface is further allowed to dry for 12 hrs. 4. On this, 1st coat of melamine polish is applied with spray gun using melamine clear polish and melamine thinner in required proportion. This 1st coat is allowed to dry for 24 hrs then this dry surface is again fine wet rubbed smooth, which is further allowed to dry for 12 hrs. The final melamine polish is applied with compressor pressure spray gun using melamine clear polish and melamine thinner mixed in required proportion complete coat to be done in 1 or 2 layers without gap of time) as per direction of Engineer-in-Charge.	sq m	49.00		-

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
11	MR	BAFFLE CEILING: Supply and Installation of U shaped profiles of size 100 mm deep and 50mm wide made with 0.5 mm thick GI, having edges bent inwards of 4-5mm, panel length as per architect requirement, powder coated as per approved shade. Panels shall be clipped to a GI carrier of 20mm wide x 40mm deep x 0.65mm thick black colour coated or of specified shade, with cut outs to hold the panels with a module as specified. Panel carrier shall be suspended by means of 4mm GI threaded rod with SS adjustable clips holding the carrier at every 1200mm at a drop height as specified and maintaining a distance of not more than 1000mm from other carrier. The suspension rod with clip is fixed to the slab by means of soffit cleat and rawl plug (fastner), Gyproc® soffit cleat 27x37x25x1.6mm {GI(IS513)YS-260Mpa,Finish-Galvanised 120GSM(IS277) } is fixed with Gyproc® Rawl Plug- Ø8x45mm {Material-IS 513 CR1 grade, Zinc coating (7 to 8 microns) pull out load- 6.8kN for M30 concrete grade} Suspension etc. System should be complete in all respect as per direction of Engineer-in-charge.	sq m	123.00		
12	MR	OPEN CELL CEILING: Supply and installtion of Metal open Cell ceiling made of GI made and powder coated of approved RAL shade. open cell ceiling with cell size of 50 x 50 mm. The cell is formed by locking of upper sections and lower sections with U shaped profiles of 40mm height 15mm width and 595 mm length. The upper and lower sections when locked are locked with end panels on all 4 sides to form a tile of 595 x 595mm. Each tile is installed on a 15mm T Grids system The grids system is formed by locking of GI made Main T of 3000mm or 3600mm length and GI Cross T of 600mm at 600mm c/c. GI wall angle 25x25 x0.4x3000mm {Material-GI(IS513).YS-280Mpa,Finish-Galvanised 90GSM(IS277)} is fixed along the periphery of the ceiling with wooden screws at 300mm centers or Hilti HPS 6x40mm placed at 600 mm c/c. The grid system is suspended by 4 mm wire rod with adjustable clip, connected to the grids system at 1200mm c/c. The suspension rod with clip is fixed to the slab by means of soffit cleat and rawl plug (fastner), at 1200mm c/c. Gyproc® soffit cleat 27x37x25x1.6mm {GI(IS513)YS-260Mpa, Finish-Galvanised 120GSM(IS277) } is fixed with Gyproc® Rawl Plug- Ø8x45mm {Material-IS 513 CR1 grade, Zinc coating (7 to 8 microns) pull out load- 6.8kN for M30 concrete grade} Suspension etc. all complete as per direction of Engineer-in-charge.. (Make- SAINT GOBAIN/ Product should be GreenPro Certified / IGBC / GRIHA Compliant. Product should be GreenPro Certified / IGBC / GRIHA Compliant. Manufacturing- Make In India (Govt. of India Initiative). System should be complete in all respect as per direction of Engineer-in-charge.	sq m	614.00		
13	MR	PERFORATED GYPSUM BOARD CEILING: Providing and fixing suspended false ceiling- Danoline: Solopanel Size 1188x1998x12.5mm Globe perforation 8/18 with 8.7% perforation with NRC upto 0.6 : Regular round perforation of glass fibre reinforced gypsum material, which includes providing and fixing GI perimeter channels of size 0.55 mm. Thk. having one flange of 20 mm and another flange of 30 mm and web of 27 mm along the perimeter of the ceiling, screw fixed to brick wall/ partition with help of nylon sleeves and screws, at 610 mm centers. The suspended GI intermediate channels of size 45 mm,0.9mm thk with two flanges of 15 mm each from the soffit at 900 mm centers with ceiling angle of width 25mm x 10mm x 0.55mm thk fixed to soffit with GI cleat and steel expansion fasteners. Ceiling section of 0.55 mm thk having web of 51.5mm & two flanges of 26mm each with lips of 10.5mm are fixed to the intermediate channels with help of connecting clips and in direction perpendicular to the intermediate channel with centers of 333 mm perforated gypboard is then screw fixed to ceiling section with 25 mm dry wall screws at 300 mm centers to G.I. framing in perfect level. Screw fixing is done mechanically either with screw driver or drilling machine with suitable attachment. Finally the boards are to be joined and finished so as to have a flush look with uniflot. Cleaneo Technology - Air purification & Air quality.Active reduction of air pollutants thanks to Cleaneo Technology effectively reduces concentrations of VOC's like alcohol, aldehydes, ketons and esters as well as unpleasant odours from e.g. food or cigarette smoke Air purification properties tested according to CEN standards and VDI guidelines by Fraunhof Insitute for Building Physics. The false ceiling surfaces shall be prepared to the satisfaction of the Architect, and shall be	sq m	98.00		
14	MR	300x1200 SUSPENDED FALSE CEILING: Supply and installation of 300mm x 1200mm x 15mm microlook soft fibre ceiling Acoustical microlook tegular edge with 15 mm thickness , easily demountable tile , manufactured from High density glass wool , each tile is 7 mm below the grid, visible surface is a batch painted glass tissue in white, back of the tile covered with glass tissue. Product should be GreenPro Certified / IGBC / GRIHA Compliant. Product should be GreenPro Certified / IGBC / GRIHA Compliant. Manufacturing- Make In India (Govt. of India Initiative). Ceiling tile Size- 1200x300x15mm Acoustics-Sound absorption(Alpha W) - 0.95 at 200 mm o.d.s as per EN ISO 354 Acoustics-Sound absorption Class - Class A at 200 mm o.d.s as per EN ISO 11654 Acoustics-Articulation class - 180 as per ASTM E1111, ASTM E1110 NRC - 0.9 NRC as per ASTM C 423 Humidity Resistance -Permanent ambient RH up to 95% at 30°C without sagging, warping and delaminating (13964:2014). Fire Safety - Tested and classified as non combustible according to EN ISO 1182 with reaction to fire classification class A2 s1 d0 according to EN 13501-1 - European Standard. Light Reflectance - 83% light reflectance. Indoor Health & Well-being - Complying with the French regulation on VOC emissions, A+ level. Certified by the Finnish Building Information Group (RTS) with the M1 label. Free from substances of very high Concern (SVHC) above 100 ppm as defined by the European REach regulation (No1907/2006).Product Certified under GRIHA council of India for Green Ratings. Environmental Product declaration (EPD) acc to International ISO 14025 & EN 15804 series of standards. Circularity - Re-cycled content of more than 70% CE marking - CE-marked according to the harmonised standard EN 13964:2014 all complete as per direction of Engineer-in-charge.	sq m	929.00		
15	MR	LINEAR METAL CEILING: Supply and fixing Open Metal Ceiling system, the system will consist of linear box shaped panels fixed to an adjustable suspension system. Providing and installation of metal false ceiling panels of 84 mm width with round edges with 16mm open groove, made of 0.7mm thick roll formed Aluminium of AA8011 grade, coated on a continuous paint line. Panels rest on GI wall angles, and snap fit to GI carriers hung from true ceiling with 4mm GI Rod fixed on Soffit cleats. Carriers - made with 0.65mm thick GI, painted black, the size of punched carrier would be 40mm x 20mm x 40mm bent channel with holes for suspension and fixing hangers. GI wall angle 24x20x0.4x3000mm {Material-GI(IS513).YS-280Mpa,Finish- Galvanised 90GSM(IS277)} is fixed along the periphery of the ceiling with wooden screws at 300mm centers or Hilti HPS 6x40mm placed at 600 mm c/c. Wall angles have provision for locking the panels rested on it. Gyproc® soffit cleat 27x37x25x1.6mm {GI(IS513)YS-260Mpa,Finish-Galvanised 120GSM(IS277) } is fixed with Gyproc® Rawl Plug- Ø8x45mm {Material-IS 513 CR1 grade, Zinc coating (7 to 8 microns) pull out load- 6.8kN for M30 concrete grade} Suspension - The carriers would be placed at every 1000mm (maximum) and suspended by means of a secondary channel / big clip fixed to the carrier at every 1200mm and this secondary member in turn would be suspended by means of a GI Rod and level adjustment clip fixed to the slab by means of soffit cleat and rawl plug (fastener), at 1200mm c/c. Carriers provided with prongs to hold panels in a standard module of 100 mm, etc. System should be complete in all respect as per direction of Engineer-in-charge.	sqm	179.00		
16	MR	ALUMINIUM SYSTEM FOR STRAIGHT GLASS PARTITION : Supply and installation of aluminum profile for single-glazed straight partition with top, bottom and side profiles of size 30mm x 21mm Matt Black anodised finish and suitable gaskets for insertion with 10mm thick toughened glass. It consists of 2 way polycarbonate profiles, 90 Degree L Junction and T Junction profiles and suitable fasteners for fixing profiles including installation charges.	sq m	296.52		
17	MR	WPC BOARD PARTITION: Providing and fixing 12 WPC board partition upto ceiling height consisting of Aluminium frame and required board, including providing and fixing of frame work made of aluminium sections 50x50mm, consisting of floor and ceiling channel 50mm wide, fixed to the floor and ceiling at the spacing of 600 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs. 75 mm overall thickness with 12 mm wide WPC board on each side of the aluminium frame.	SQM	90.00		
18	MR	FRAMELESS HINGED GLASS DOOR: Supply & Insallation of door with Door Profile frame of size 45X60X45mm along with necessary seals, door to be fixed on Hinges & Lock with lever handle for rebated door in matt black/ natural Alu finish with Top Mounted Door closer along with Slide Channel on Top and saddle plate for fixing on the Glass door suitable for 10mm thick clear toughened glass and necessary seals to be provided all around the door frames. Hardwares should match colour of door frames and profiles. All necessary hardware should be in same colour including Hinges and minimum 3 hinges are required in each door depending on door size. Necessary Hardwares includes Lock with Lever Handles, Seals, Hinges & door closers as per Architect choice. All Hardwares should be from same brand which is supplying profiles. Installation rates should be inclusive and vendors shall provide end to end solution. Lever handle should be Solid in aluminium alloy in curved/square shape as per architects choice Finish: Aluminium	Nos.	38.00		
19	9.1	WOODEN DOOR FRAMES: Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately).				
	9.1.1	Second class teak wood	cu m	1.43		

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
20	8.27	WOODEN BATTENS: Providing and fixing specified wood frame work consisting of battens 50x25mm fixed with rawl plug and drilling necessary holes for rawl plug etc. including priming coat complete.				
	8.27.1	Kiln seasoned and chemically treated hollock wood	cu m	0.50		-
21	MR.	FLUSH DOOR SHUTTERS: Providing and fixing on all height prefabricated factory made 40mm thick flush door shutter in existing door frame bounded with BWP type synthetic resin adhesive & wooden fillers as per IS 848 -1974 shutter should be confirm IS:2202 (part-1) non decorative type flush door of area up to 1.80 to 2.50 sqm and nothing shall be paid on account of size variation upto 5% plus minus of make Greenlam, Duro, Century or Equivalent with both side 4mm thick decorative teak veneering of make sapele/white american oak/vintage teak including fixing on all edges 8mm thick second class teak wood margin/lipping with 8 mm thick clear vision/frosted glass fitted vertically in flush door shutter of make Saint Gobin, Modi Guard & Hindustan National Glass fixed all-round by 4mm thick second class teak wood margin/molding and size of cut in flush door shutter will be approx. 200x1800mm or as per approved drawing and one no. of door rubbershutter finished complete with PU polish all-round i/c SS butt hinges and SS screws all complete as per the direction of engineer-in-charge. (Note: this item is inclusive of all material, T&P and labour involved and the work shall be executed as per the approved drawing).	sq m	115.20		-
22	9.23	WOODEN LIPPING: Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	sq m	10.00		-
23	MR	FLUSH DOOR FLOOR MACHINE : Providing Double cylinder Floor Spring D-120 for Wooden door with Closing Force EN 4 with Maximum door weight 120 Kg. Maximum door width 1250 mm.Closing speed : 130° Final closing speed : 15-0°. Hold Open (standard): 90° hold open. Weight of floor spring approx : 6kg, 5,00,000 cycles Tested. approved make and model all complete as per the direction of Engineer-in-charge.	set	17.00		-
24	MR	TOP & BOTTOM STRAP : Providing top and Bottom Strap for wooden doors of approved make and model all complete as per the direction of Engineer-in-charge.	set	17.00		-
25	MR	FLUSH DOOR DEAD LOCK : Providing and Fixing 160 mm Euro Dead lock with Rose rings for wooden doors of approved make and model all complete as per the direction of Engineer-in-	Each	17.00		-
26	MR	FLUSH DOOR LOCK CYLINDER : Providing and Fixing 60 mm Eco Pin Cylinder 1CK SS Cylinder One side knob and one side regular key for wooden doors of approved make and model all complete as per the direction of Engineer-in-charge.	Each	14.00		-
27	MR	FLUSH DOOR HANDLE : Providing 32x840 mm SS 304 H type Handle for wooden doors. Material : Stainless Steel. Finish : Satin Stainless Steel (SSS). of approved make and model all complete as per the direction of Engineer-in-charge.	Each	17.00		-
28	MR	WOODEN DOOR LOCK: Providing and Fixing Dead lock Back set- 50 mm with Key Hole of approved make and model all complete as per the direction of Engineer-in-charge.	Each	-		-
29	MR	GLASS FILMS: Providing & Fixing Frosted Translucent, cast PVC, self-adhesive vinyl, special CRYSTAL-effect film to reproduce Sand-blasting effect on glass with customised designs, thickness of 2 mil (0.05mm) without adhesive & 3mil (0.8) with adhesive having minimum tensile strength of 3.5 pound/inch at 73 F (0.6 kg/cm at 23 C). Adhesion after 24hrs of installation should be 4 pounds/inch (0.7 kg/cm) on Acrylic, Glass Polycarbonate: MCS warranty of 3yrs (if exposed to direct sunlight) to 15yrs (indoors).	sq m	93.23		-
30	MR	TOILET DOOR MORTIZE LOCK: Providing and Fixing ss 304 D Type Tube Lever Mortise Combi SET with 60 mm Cylinder keyless and Lock Body SS for wooden Toilet doors of approved make and model all complete as per the direction of Engineer-in-charge.	Each	14.00		-
31	MR	TOILET DOOR LOCK BODY : Providing and Fixing 240 mm lock body for wooden doors of approved make and model all complete as per the direction of Engineer-in-charge.	Each	14.00		-
32	MR	TOILET DOOR CLOSER : Providing and Fixing Door closer Hercules -60 kg for wooden doors of approved make and model all complete as per the direction of Engineer-in-charge.	Each	14.00		-
33	MR	TOILET DOOR HINGES : Providing and Fixing SS 304 Hinges Four Ball Bearing 100x75x3 mm (with screws) for wooden doors of approved make and model all complete as per the direction of Engineer-in-charge.	Each	14.00		-
34	MR	LACQUERED GLASS: Providing and fixing of 6mm thick annealed SGG Planilaque Evolution (premium GRIHA rated lacquered glass) of approved color by Architect/ Client / Customer, fixed with SGG ULTRAFIX (compatible neutral core silicon/ double sided tape) on a perfectly leveled 12mm thick water proof marine plywood / MDF / Mineral fibre board which is mounted on the RCC wall/any other structure. Lacquered glass must be made industrially (via curtain coating process); opaque (if viewed against a support wall), coated with PU lacquer (50 micron thick); color consistency (measured by Minolta spectrophotometer CM5081); highly durable (passes PERSOZ hardness test for minimum 220 oscillations); humid resistant (conforms to BS EN 1036 1999); environmentally friendly (no lead, no arsenic, no copper, no formaldehyde); appropriate recycled content (12% post industrial/ 6% post consumer); compressive strength (1000 MPa) & tensile	sq m	116.00		-
35	9.105	GYPSUM BOARD PARTITION: Providing and fixing partition upto ceiling height consisting of G.I. frame and required board, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm dia meter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450mm centre to centre, and fixing of boards to both side of frame work by 25mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99mm width (0.9mm thick having two flanges of 9.5mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25mmx25mmx0.5mm), joint finisher and two coats of primer suitable for board as per manufacturer's specification and direction of engineer in charge all complete.				
	9.105.1	75mm overall thickness partition with 12.5mm thick double skin fire rated Glass Reinforced Gypsum (GRG) plaster board conforming to IS: 2095: part 3 (Board with BIS certification marks)	sq m	2,021.40		-
36	MR	ACRYLIC SOLID SURFACE CLADDING: Supply & Installation of 12 mm thick Thermoformable Acrylic Solid Surface Sheets (DuPont Corian/ Tristone/ Lotte), over a robust substrate made out of BWP/ Flexi Ply/ MS- Aluminum sections etc. as required, to achieve stated design intent. ASS in 12mm thickness, shall be manufactured as per guidelines of ISO 19712. ASS sheets to be cut, pasted and finished over the substrate as provided, to achieve smooth and seamless finish. Item cost include intend adaptation, supply, freight and installation of ASS sheets to site, wastage, finishing, creating provisions/ cut-outs for accessories and final placement of table. Work shall be done by company's authorized Quality Network (QN) fabricator, as per satisfaction of Engineer-in-Charge. Colours : Basic, Solid and small speckled (Group I & 2)	sq m	24.84		-
37	MR	WINDOW BLINDS : Providing & supplying of fabric venetian Window Blinds as per the approved sample, consisting of 3" vane size having head rail, rotator rail and bottom rail made of aluminium alloy 6063-T6 PER ASTM B221 - 85 extruded profile, powder coated and provided in standard natural white color. The rolling tube should be made up of aluminium alloy from extruded profile of 34mm dia. The head rail dimensions should be of suitable size according to the length of head rail and space available and finished with fabric cover matching with the louver fabric. The cassette should conceal the working mechanism rotary-clutch. (White polycarbonate spring tempered rotary clutch which raises), lower and tilts the blinds. White polycarbonate limit assemblies control vane over-rotation, located on either side of individual blinds. The room darkening fabric of Blind should be of anti-static polyester vanes which have facings between two sheer layers (50 mm wide) to reduce glare. Sheer layers should be of white 100% knit polyester, the colors, textures and opacities as approved. The fabric shall be made of spun- bonded 100% polyester fiber (having green guard certification) treated with soil & dust repellent requiring minimum regular interval cleaning. GREEN GUARD Gold certified for low-emitting products to maintain Indoor environment. Up to 80% ultraviolet protection with vanes open and 90% with vanes closed. The shading to be operated by Easy rise mechanism with a continuous cord loop operating system. All parts.	sq m	300.00		-
38	MR	PELMET: Fabricate and install pelmet made of 19mm thick board, up to 300mm high and in line with external glazing as per details of Architect. Rate to include finishing exposed surfaces of the Pelmet with 1mm laminate.	RM	72.00		-

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
39	13.26	Providing and applying plaster of paris putty of 2 mm thickness over plastered surface to prepare the surface even and smooth complete	sq m	50.00		-
	13.85	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content.				
	13.85.3	With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	sq m	50.00		-
40	13.88	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	sq m	50.00		-
	13.80	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth	sq m	50.00		-
41	13.83	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour				
	13.83.2	Two coats	sq m	3,324.40		-
42	14.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
	14.1.2	With cement mortar 1:4 (1cement: 4 coarse sand)	sq m	50.00		-
43	MR	5.5mm THICK HDHMR BOARD (BOTH SIDE RAW): Providing and fixing in wall lining, partitions etc. Confirming to ASTM E-84-2021 class1 BOTH side raw, having even grade low emission, high moisture resistance, fire resistance, borer, termite & fungus resistance, green material and environmental friendly with necessary fixing arrangement and screws etc. , complete as per direction of Engineer-in-Charge	sq m	102.75		-
		5.5mm thick HDHMR Board				
44	MR	11 mm THICK HDHMR BOARD (BOTH SIDE RAW): Providing and fixing 11mm thick HDHMR board in wall lining, partitions etc. both side raw. Extra density, high moisture resistance, borer, termite & fungus resistance, green material and environmental friendly with necessary fixing arrangement and screws etc. Complete				
		11 mm thick HDHMR Board	sq m	647.40		-
45	21.1	ALUMINIUM FRAME: Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing/ paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
	21.1.1.3	Polyester powder coated aluminium (minimum thickness of polyester powder coating 50 micron)	Kg	900.00		-
46	26.7	PARTITION INSULATION: Providing and Fixing 50 mm thick extruded polystyrene rigid Polyester rigid insulation boards for cavity as per specifications	sq m	600.00		-
47	MR	ACOUSTIC PET WALL PANELLING: Providing and fixing Smart Acoustical Wall Panels with square edges made of Polyester fiber substrate 12mm thick with acoustical properties and with an option of 12 colours as per the choice of the Architect/ Person in-charge, providing a minimum sound absorption level of 0.50-0.90 NRC, to be affixed to wall using Adhesive. The material should adhere to Formaldehyde emission standards of GB18580-2001 class E1, asbestos-free, non-toxic, non-irritant and recyclable. Material to have fire resistance as per B1 Chinese standards. The sheets to have density of 200 kg/m3 and weight of 2.0 kg/m2. The sheets to be made available as per the V groove design approved by Architect/ Person in charge(attached Pic). Cutting to be in done by supplier using blade cutting as per requirement.	sq m	185.43		-
48	MR	Providing, Fitting and fixing of wall panel up by G.I. frame work with 600 x 300mm c/c to be fixed on wall (channel section placed 300 c/c and intermediate section will be placed 600 c/c), all the framing materials of ultra section made of Saint Gobin / Anutone. Thereafter Acoustical backing by Ploy fibre wool of thickness 50mm having density of 20 Kgs/M3 tie up with Galvanized wire mesh and Galvanized wire, to avoid sagging. On top provide 20 mm Soak cord Binary (600 x 600/1200 mm of size) having density 400Kg/M3 and fire class 1 & P and NRC up-to 0.95 covered by the thick fabric to be fixed by H-Spline to maintain the functional activities & aesthetic decor of the hall. This kinds of treatment to be provided on both side wall of the Hall. Design of wall to be made for popper sound reproduction. all complete as per direction of the Engineer – in – Charge.	SQM	90.00		
49	9.127	LAMINATE PANELLING: Providing & Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt/ suede finish with high density protective surface layer and reverse side of adhesive bonding quality conforming to IS : 2046 Type S, including cost of adhesive of approved quality.				
	9.127.2	1.0 mm thick	sq m	102.75		-
50	MR	MODULAR KITCHEN - UNDER COUNTER STORAGE CABINETS: Modular kitchen - Under counter storage cabinets: Providing & fixing factory made modular kitchen cabinets in modular type knockable cabinet boxes with openable shutters and sufficient number of drawers made of 18 mm thk.HDHMR board with lamination in frosty white laminate with 0.8 mm laminate complete with 0.8 mm edge banding.All shelves should be supported on approved quality SS pins and shall be adjustable for different heights as per requirements.Shutters and drawers fascia shall be at least 18mm thic with laminate on both sides with 18mm wide 2mm thick PVC edge banding, All Shutters/ drawers finished in high gloss acrylic of approved make- Rehau,Omare,Senosan and having handleless profiles.The cabinet boxes of floor units will be supported by 100mm height vertical adjustable legs (Hettich make) which will be covered with PVC skirting (Rehau or equivalent make) in brushed aluminum finish attached by hardware of skirting. The unit shall be fixed to the floor/ wall/slab using metal screws of appropriate size and raw plugs. Only front face area of cabinets and skirting from floor to top of boxes shall be considered for measurement and payment. Cabinet boxes size would be varies from 400x580x710MM to 1000x580x710MM (approx.) and join together as per site requirements etc. Handle Profile, Aluminum Handle Profile for lift ups, O* Hinges, Corner Hinges, PVC legs, Skirting, Connector, Screws, Wall Mount set complete all as per the direction of Engineer-in-Charge.	sq m	21.60		-
51	MR	MODULAR KITCHEN - OVERHEAD STORAGE WALL UNITS: Modular Kitchen - Overhead storage wall units: Providing & fixing factory made modular kitchen cabinets in modular type knockable cabinet boxes with openable shutters and sufficient number of drawers made of 18 mm thk. HDHMR board with lamination in frosty white laminate with 0.8 mm laminate complete with 0.8 mm edge banding.All shelves should be supported on approved quality SS pins and shall be adjustable for different heights as per requirements.Shutters and drawers fascia shall be at least 18mm thic with laminate on both sides with 18mm wide 2mm thick PVC edge banding, All Shutters/ drawers finished in high gloss acrylic of approved make- Rehau,Omare,Senosan and having handleless profiles. The unit shall be fixed to the floor/ wall/slab using metal screws of appropriate size and raw plugs. Only front face area of cabinets and skirting from floor to top of boxes shall be considered for measurement and payment. Cabinet boxes size would be varies from 400X320X710MM to 1000X320X710MM (approx.) and join together as per site requirements etc. Handle Profile,Aluminum Handle Profile for lift ups,O* Hinges,Corner Hinges,PVC legs,Skirting,Connector,Screw,Wall Mount set. Complete all as per the direction of Engineer in	sq m	12.00		-
52	MR	Providing and fixing of Innotech with metal sides and quadro channels .	Each	10.00		-
53	MR	Providing and fixing of Bottle pulout 200mm.	Each	3.00		-
54	MR	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.	sq m	320.00		
		Size of Tile 800 x 1600 mm				

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
55	22.3	WATERPROOFING: Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: (i) Ist course of applying cement slurry @ 4.4 kg/sqm mixed with water proofing compound conforming to IS 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. (ii) IInd course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. (iii) IIInd course of applying blown or residual bitumen applied hot at 1.7 kg. per sqm of area. (iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 kg/sqm).	sq m	194.00		-
56	1.1.18	Disposal of moorum/building rubbish/ malba/ similar unserviceable, dismantled or waste material by mechanical transport including loading, transporting, unloading to approved municipal dumping ground for lead upto 10 km for all lifts, complete as per directions of Engineer-in-charge. Note - item to be applicable in urban areas having directions for restricted hours for movement/ plying of load carrying motor vehicle of 3.5 cum or more.	cum	10.00		-
57	4.1.	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				-
	4.1.3	1:2:4 (1 cement : 2 coarse sand (zone-II) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	cum	5.00		-
58	5.9	Centering and shuttering including strutting, propping etc. and removal of form for				-
	5.9.1	Foundations, footings, bases of columns, etc. for mass concrete	sqm	9.00		-
59	5.22A	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				-
	5.22A.6	Thermo-Mechanically Treated bars of grade Fe-500D or more.	kg	10.00		-
60	6.4.	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in				-
	6.4.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	188.78		-
61	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				-
	6.13.1	Cement mortar 1: 3 (1 cement: 3 coarse sand)	sqm	10.00		-
		DEMOLITION & DISMANTLING WORKS				-
62	15.7.4	Demolition of brickwork manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per the direction of the engineer in charge.	cu m	5.00		-
63	15.12.2	Dismantling door, windows and clerestory widows (steel or wood) shutter including chowkats, architrave, holdfasts etc complete and stacking within 50 metres lead	Nos	5.00		-
64	MR	CUSTOMISED STORAGE UNIT: Supply and fixing of full height storage units (upto 450mm depth) made out of 18mm plywood finished with approved .8mm laminate on the inside and outside. Hardware used of Hettich make.Complete as per the direction of Engineer in charge	sqm	42.50		-
65	MR	TOILET CUBICLES: Providing and fixing Toilet Cubicles with the following specifications: Thickness of Compact Laminate : 12 mm Color of HPL Boards: As approved by Engineer-in-charge Size of Cubicles: As per Drawing Door Size: 1935mm (H) x 600mm (W) Divider Size : 1550x1935mm Overall Height Of Cubicle : 2100mm (Including bottom Gap of 150mm) Accessories: Stainless Steel - 304 Grade accessories) a) SS "U" & Door Stopper Channel b) SS "F" channel (Only Corner Unit) c) SS Coat Hook d) SS Privacy Thumb turn c/w Occupancy Indicato e) SS Door Knob f) SS Spring Loaded Butt Hinges with Cover g) SS Shoe Box Leg 18mm - 316 Grade h) Rubber Lining for Groove i) S.S.Screws 304 G & P . V.C Wall Plugs j) SS Door Stopper Channel SPECIAL NOTE - Warpage Criteria is 3.0 mm/1000mm for MRS panels as per EN standard- 438	each	22.00		-
66	18.84.1	Providind and fixing chrome plated brass battery based infrared sensor operated pillar cock having foam flow technology: 15 mm dia nominal bore	each	24.00		-
67	MR	Providing and fixing Table top wash basin Size : 500x415x200 mm of approved make and as per given design all complete as per direction of Engineer-in-Charge.	each	24.00		-
						
68	17.69.2	Providing and fixing PTMT Waste Coupling for wash basin and sink of approved quality and color: Waste coupling 38 mm dia of 83 mm length and 77 mm breadth, weighing not less than 60 gms	each	24.00		-
69	17.22A	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge	each	24.00		-
70	17.78	Providing and fixing white vitreous china extended wall mounting water closet of size 780x370x690 mm of approved shape including providing & fixing white vitreous china cistern with dual flush fitting, of flushing capacity 3 litre/ 6 litre (adjustable to 4 litre/ 8 litres) including seat cover and cistern fittings, nuts, bolts and gasket etc complete	each	24.00		-
71	18.53.1	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931: 15 mm nominal bore	each	80.00		-
72	18.52.1	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931: 15 mm nominal bore	each	36.00		-
73	MR	Providing and fixing CP brass handshower (health faucet) with 1.2 mtr. flexible tube with wall hook of approved make with all fittings and fixture all complete as per direction of Engineer-in-charge.	each	24.00		-
74	17.28	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				-
	17.28.2	Flexible pipe				-
	17.28.2.1	32mm dia	EACH	27.00		-
75	17.31	Providing and fixing mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	EACH	24.00		-
76	17.61	Cutting chases in brick masonry walls for following diameter sand cast iron/centrifugally cast (spun) iron pipes and making good the same with cement concrete 1:3:6 (1 cement: 3 coarse sand: 6 graded stone aggregate 12.5 mm nominal size) including necessary plaster and pointing in cement mortar 1:4 (1 cement : 4 coarse sand) :				-
	17.61.1	100 mm dia	METRE	24.00		-
77	18.76	Cutting holes upto 30x30cm in walls including making good the same.				-
	18.76.1	With common burnt clay F.P.S. (non modular) bricks	EACH	24.00		-
78	18.78	Making chases upto 7.5 X 7.5 cm in walls including making good and finishing with matching surface after housing G.I. pipe etc.	METRE	24.00		-
	18.7	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge.				-
		Internal work - Exposed on wall				-
79	18.7.2	20mm nominal outer dia pipes	METRE	30.00		-
80	18.7.3	25mm nominal outer dia pipes	METRE	40.00		-
81	18.7.4	32mm nominal outer dia pipes	METRE	40.00		-
82	18.7.5	40mm nominal outer dia pipes	METRE	20.00		-
83	18.7.6	50mm nominal outer dia pipes	METRE	10.00		-

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	18.8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge.				
		Concealed work including cutting chases and making good the walls etc.,				
84	18.8.1	15mm nominal outer dia pipes	METRE	100.00		-
85	18.8.2	20mm nominal outer dia pipes	METRE	60.00		-
86	18.8.3	25mm nominal outer dia pipes	METRE	40.00		-
87	18.8.4	32mm nominal outer dia pipes	METRE	40.00		-
88	18.51	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.				
	18.51.1	15 mm nominal bore	EACH	2.00		-
89	MR	Providing and fixing 300 mm long and 25 mm dia round Stainless Steel handle of approved make or equivalent for 12 mm thick frameless toughen glass including making necessary holes the glass for fixing the handles all complete as per direction of Engineer in charge.	Nos	62.00		
90	MR	Providing, fixing, jointing and testing in position of ISI marked UV stabilized UPVC pipes for soil, waste, and vent, Type-B as per IS : 13592 suitable for rubber ring joints, including all necessary specials and fittings (confirming to IS:14735) i.e. bends, tees, junctions (with or without doors), reducers, WC connectors, couplers, expansion joints / bellows, cowels, clamps, rubber rings, clean outs etc. fixing at wall/ ceiling/ floor level supported by clamp & hangers etc. in concealed / inside duct / under floor & basement ceiling / external work etc. including chase cutting as required, excavation and back filling in all kind of soils, suspended from floor under false ceiling or embedding the pipes laid under floors / building in 75 mm. around 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of shuttering for proper completion of the work, breaking and making good the walls and floors etc. after pipes have been duly laid and tested. The rubber ring shall confirm to IS:5382.				
		The Pipes will be supported with threaded G I rods & U clamps with nuts, washers etc on 50x50x5 mm slotted angle. The cost will include all support arrangements. The work includes commissioning of all pipes lines as per drawings and specifications and as directed by engg-in-charge at site.				
91		110 mm dia (Wall Thickness - 3.2 to 3.8 mm)	METRE	160.00		-
		75 mm dia (Wall Thickness - 3.2 to 3.8 mm)	METRE	80.00		-
	MR	Providing, fixing, jointing and testing in position ISI marked (IS:4985) UPVC pipes of min 6 Kg/ Sqcm rating with fitting for waste pipe from fixtures to floor trap including reduces, enlarger, socket, couplers, bends, tees etc including fixing at wall/ ceiling level supported by clamp & hangers etc. cutting holes in wall/ floors/ slabs and making good the same with cement concrete 1:2:4 complete as required.				
92		32 mm dia.	METRE	30.00		-
		40mm dia	METRE	10.00		-
93	MR	Providing & fixing UPVC Floor trap of self cleansing design with stainless steel grating complete in all respects.				
		Plain Floor Trap (4" Ht) with 50 / 75 outlet and with height raiser	EACH	45.00		-
94	MR	Extra for providing & fixing 125 mm dia C.P. grating in place of C.I. grating over floor traps.	EACH	45.00		-
95	MR	Providing & fixing of SS Floor Cleanout, round or square with rubber seal and flat round cover with screws and other required fitting complete as required.	EACH	45.00		-
96	MR	Supply, Installation, testing and Commissioning of 15 liter geyser with 5 star rating with all accessories complete in all respect	EACH	13.00		-
97	17.73.2	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	EACH	2.00		-
	17.10	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required :				
	17.10.1	Kitchen Sink with Drain Board				
98	17.10.1.1	510 x1040 mm bowl depth 250 mm	Each	3.00		-
99	MR	Supply, Installation, Testing and Commissioning of single lever sink mixer (table mounted) with extractable hand shower dual flow complete with 1.2 m long tube with 450 mm long braided hoses	EACH	3.00		-
100	17.80	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx size 610 x 390 x370 mm having pre and post flushing with water (250 ml & 500 ml consumption) having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of engineer in charge	Each	12.00		-
101	17.34.1	Providing and fixing toilet paper holder : CP Brass	Each	24.00		-
	Ref. Image					
102		The overall size of table shall 2200L x 800D x 780H with Side Unit Extension 1010L x 500D x 650H. The table top shall be made of 25mm thick with Pre laminate Partical board with all side 2mm pvc edge band finish. The working table top shall have size of 1800L x 800D. The table top visible side shall be 50mm thick. The edge of table top shall be cover with L-shaped aluminium extrusion with size of 10mm x 15mm. This aluminium extrusion shall increase the overall look of the table top. The main table top shall be supported on one side top supported pedestal and other side of side unit. 3 equal drawer unit shall be provided with size of 495 W x 800D x 650H. The drawer unit shall be made of 18mm thick pre laminate partical board with 2mm pvc edge band finish. The front modesty shall be made of 18mm thick pre laminate Partical board with 450mm height. Modesty shall be fitted on gable end with helps of mini fix. Wire Management: 1 No. Aluminium Flip Up and provision to mount switches and sockets on metal cable Dump and vertebra considered for wire uptake from floor to cable dump. Side return unit shall have overall size of 1010L x 500D x 650H. The body of side unit shall be made of 18mm thick pre laminte Partical board with 2mm PVC edge band finish. The side table design should be such that it has flexibility to be fixed either in right hand side or left hand side of the user during the time of assembly. The side unit shall have one openable shutter with 2 equal compartment to keep the documents and rest area shall have open compartment. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. RO CABIN + COE CABIN TABLE (As per reference image)	Nos	2.00		-
103		High Back Chair (Leatherite) High back Chair having overall height 1200-1300mm, back height of 790 mm from seat level and width of 460 mm from top & 520 from mid (lumbar) level. Seat Depth shall be 490 mm and adjustable upto 530mm. seat width shall be 520 mm measured at centre of the seat. Seat height shall range between 430 mm to 520 mm. Armrest shall be finished with foam & leatherite on the top & the structure of the armrest shall a die cast aluminium with buffed finish & fixed with the seat below. The length of the top of the arm shall be 250 mm & width of 60 mm. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat, back & headrest shall be upholstered with Leatherette 75% PVC & 25% polyester – 640 GSM, Abrasion-100000 cycles over PU faom. The synchro mechanism shall be provided having 3 position multilocking & seat adjustable on the left hand side and height adjustment on the right hand side of the user. The mechanism shall allow 360 degree revolving feature along with height adjustability. Aluminium die cast pedestal having length 5 twin 60 mm wheel castors heavy duty shall be provided. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. tolerance of 25mm for seat & back size to be considered. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. COE CABIN AND RO CABIN HIGH BACK CHAIR (As per reference image)	Nos	2.00		-

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
104		Medium Back Chair (Leatherite) Medium back Chair having overall height 1050-1150mm, back height of 590 mm from seat level and width of 460 mm from top & 520 from mid (lumbar) level. Seat Depth shall be 490 mm and adjustable upto 530mm. seat width shall be 520 mm measured at centre of the seat. Seat height shall range between 430 mm to 520 mm. Armrest shall be finished with foam & leatherite on the top & the structure of the armrest shall a die cast aluminium with buffed finish & fixed with the seat below. The length of the top of the arm shall be 250 mm & width of 60 mm. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat and back shall be upholstered with Leatherette 75% PVC & 25% polyester – 640 GSM, Abrasion-100000 cycles over PU faom. The synchro mechanism shall be provided having 3 position multilocking & seat adjustable on the left hand side and height adjustment on the right hand side of the user.The mechanism shall allow 360 degree revolving feature along with height adjustability. Aluminium die cast pedestal having length 5 twin 60 mm wheel castors heavy duty shall be provided. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. tolerance of 25mm for seat & back size to be considered.The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. COE CABIN AND RO CABIN MEDIUM BACK CHAIR (As per reference image)	Nos	12.00		-
105		The overall size of the table shall be 1050 L x 525 D x 450 H mm. The top surface of the table shall be in boat shape design having maximum size at the middle & lesser at the ends to form this unique shape. The table top shall be made up of 18mm thick Prelaminated particle board of E1 norms. The edges shall be sealed properly with 2mm thick PVC edge banding on automatic machine. The understructure of the table shall be made from solid wood i.e properly treated & seasoned kiln dried beach wood, finished with clear synthetic PU coating for the best resilience and high durability. The legs and the frame shall be joined together by method of tenon and mortise for durability and better aesthetics. Four legs shall be provided and the cross section of leg at the bottom shall be 35x35 and top shall be 55x35 provided in tapered finish for better looks. The outer side of the legs shall be rounded & inner side shall be corner edges. The wooden frame shall be of size 55mm x 22mm thick with visible face of 55 mm front and 22mm shall be below the table top running at all four ends as well as one support in the middle.The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. WOODEN CENTER TABLE (As per reference image)	Nos	2.00		-
106		The overall size of the table shall be 600 L x 600 D x 450 H mm. The top surface of the table shall be in boat shape design having maximum size at the middle & lesser at the ends to form this unique shape. The table top shall be made up of 18mm thick Prelaminated particle board of E1 norms. The edges shall be sealed properly with 2mm thick PVC edge banding on automatic machine. The understructure of the table shall be made from solid wood i.e properly treated & seasoned kiln dried beach wood, finished with clear synthetic PU coating for the best resilience and high durability. The legs and the frame shall be joined together by method of tenon and mortise for durability and better aesthetics. Four legs shall be provided and the cross section of leg at the bottom shall be 35x35 and top shall be 55x35 provided in tapered finish for better looks. The outer side of the legs shall be rounded & inner side shall be corner edges. The wooden frame shall be of size 55mm x 22mm thick with visible face of 55 mm front and 22mm shall be below the table top running at all four ends as well as one support in the middle. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification.WOODEN SIDE TABLE (As per reference image)	Nos	4.00		-
107		3 Seater Sofa : Overall size shall be 2210 mm W x 1000 mm D x 880 mm H. Sofa inner frame structure shall be made from the combination of treated solid wood and plywood having high quality webbing belts to ensure good strength, rigidity & stable construction to offer high durability. There shall be extra padding between the armrest & the seat on both sides for better comfort & polyfilled in arms & backrest. The polyurethane (PU) foam shall be used in Seat & back rest having 40 density and 32 density respectively. Seat to backrest angle should be ergonomically designed to offer the best seating comfort. Seat height shall be normally between 16 to 18 inches and depth shall be between 20-22 inches. The sofa shall have solid wooden leg. Upholstery shall be of high quality Leatherite offer the best feel & comfort.The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. 3 SEATER SOFA (As per reference image)	Nos	3.00		-
108		The overall size of the Ante Room Table shall be 914 mm diameter and 750 mm height. The top shall be made up of 25mm thick Prelaminated Particle board E1 grade. The understructure shall consists of metal frame to support the workstop and hold 3 legs. The legs shall be made up of CRCA Pipes of Dia 30mm or higher having reduced dia in a cone shape at bottom towards floor for better aesthetics. The legs shall be powder coated in the wooden finish. the legs shall be provided with metallic levellers. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. ROUND TABLE (As per reference image)	Nos	2.00		-
109		Cabin Table in size of 1950W X 900D X 750H. Side unit of 1200W X 450D X 750H Table Top: 25mm thick Pre laminate particle board E1 norms with 2mm PVC edge lipping on all exposed edges. Two Long sides of the work surface shall be provided with reverse tapered edge design created by chamfering the board at 45 degree inside for 17mm length & keeping 8mm straight & then edges sealed with 2mm thick PVC Lipping on automatic machine. Leg: shall be made up of high pressure aluminium die casted 20 degree tapered, number "7" shape & oblong cross section of about 55mm on top, 45mm at bottom and of 725mm length to get 750mm table height, it acts as vertical structural support member, connected by a horizontal cross beams 50x25x1.6thk (16g) ERW tube & connected to the Aluminium diecast vertical legs through a high pressure Aluminium diecast 90deg – 02 way connectors. The connector should have "V" / "U" shape tapered groove for sliding a Aluminium diecast slider nut. The slider nut shall be an Aluminium diecast part that has same taper as of "V" / "U" shape in the diecast connector. Modesty Panel: 18mm thk pre lam board with 2mm PVC edge lipping of 450mm Ht. Wire Management: 450mm Aluminium Flip Up and provision to mount switches and sockets on PVC cable dump and Vertical wire entry cover. Cross Beam: Leg to Leg shall be connected using cross beams made from 50x25x1.60mm (16g) Rectangular tube and to give floating look & to connect the table top with cross beams injection moulded polycarbonate spacers should be used of dia 61mm x 42.50mm H insert moulded with M6x1P zinc blue plated bolt of 22mm L.Spacer height including bolt should be 64.50mm. Side Composite Storage (Openable Shutter +3D+1F) Top & Sides : 18mm Thk pre laminated particle board Back E1 norms: 9mm Thk pre laminated particle board Shutters : 18mm Thk pre laminated particle board Handle. Handless Finger groove shall be created on top edge of shutter doors by providing a reverse tapered profile edge of 6mm straight surface & 12 mm tapered towards inside at 45 degree & then sealed with minimum 2mm thick PVC lipping on automatic machine. Suitable number lock shall be provided. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. DEPUTY & ASST. SECRETARY (As per reference image)	Nos	2.00		-
110		The overall size of Chair shall be : Total height 1160 to 1260 +/-5 mm, Back Width 480 mm at Top and 420mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 460+/-5 mm and Seat height 460mm to 560 mm +/-5mm range. And over all chair width should be 615 +/-5mm and Overall chair depth should be 640 +/-5mm. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat, back & headrest shall be upholstered with Leatherette 75% PVC & 25% polyester – 640 GSM, Abrasion-100000 cycles over PU faom. The chair shall be supplied with Dynaflex Two Piece Back Construction with cushion made by 25mm foam at 55kg/m3 density. Hardness of 25+3kgf at 50% deflection conforming to IS 3400. Back shall be provided With 260mm width, 160mm height and 50mm height adjustable Headrest. The Chair should be provided with Synchro tilt Mechanism with three Multi lock features. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provied with height adjustment button made of Delrin P 500. The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon Base to be provied. Twin castors 60 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards. the axle pin shall be rust protected zinc passivated. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification.DEPUTY & ASST. SECRETARY HIGH BACK CHAIR (As per reference image)	Nos	2.00		-

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111		The overall size of Chair shall be : Total height 1010 to 1110 +/-5 mm, Back Width 480 mm at Top and 420mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 460+/-5 mm and Seat height 460mm to 560 mm +/-5mm range. And over all chair width should be 615 +/-5mm and Overall chair depth should be 640 +/-5mm. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat & back shall be upholstered with Leatherette 75% PVC & 25% polyester – 640 GSM, Abrasion- 100000 cycles over PU foam. No flaming or progressive smoldering within one hour of placement of the cigarettes. Fire rated fabric conforming to BS EN 1021 (match) should be used. The chair shall be supplied with additional Dynaflex mechanism Two Piece Back Construction with cushion foam at 55kg/m3 density having PP back. The Chair should be provided with Synchro tilt Mechanism – with three Multi lock features. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provided with height adjustment button made of Delrin P 500. The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon Base to be provided. Twin castors 60 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards, the axle pin shall be rust protected zinc passivated. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. DEPUTY & ASST. SECRETARY MEDIUM BACK CHAIR (As per reference image)	Nos	6.00		-
112		3 Seater Sofa : Overall size shall be 2020 mm W x 975 mm D x 820 mm H. Sofa inner frame structure shall be made from the combination of treated solid wood and plywood having high quality webbing belts to ensure good strength, rigidity & stable construction to offer high durability. There shall be extra padding between the armrest & the seat on both sides for better comfort & polyfilled in arms & backrest. The polyurethane (PU) foam shall be used in Seat & back rest having 40 density and 32 density respectively. Seat to backrest angle should be ergonomically designed to offer the best seating comfort. Seat height shall be normally between 16 to 18 inches and depth shall be between 20-22 inches. Sofa shall be elevated from ground by about 3 inches using Golden finished metal legs creating provision for easy cleaning & better look. Upholstery shall be of high quality Leatherite offer the best feel & comfort. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. 3 SEATER SOFA (As per reference image)	Nos	2.00		-
113		Cabin Table in size of 1800W X 750D X 750H, Side unit of 900W X 450D X 750H Table Top: 25mm thick Pre laminate particle board E1 norms with 2mm PVC edge lipping on all exposed edges. Two Long sides of the work surface shall be provided with reverse tapered edge design created by chamfering the board at 45 degree inside for 17mm length & keeping 8mm straight & then edges sealed with 2mm thick PVC Lipping on automatic machine. Leg: shall be made up of high pressure aluminum die casted 20 degree tapered, number "7" shape & oblong cross section of about 55mm on top, 45mm at bottom and of 725mm length to get 750mm table height, it acts as vertical structural support member, connected by a horizontal cross beams 50x25x1.6thk (16g) ERW tube & connected to the Aluminium diecast vertical legs through a high pressure Aluminium diecast 90deg – 02 way connectors. The connector should have "V" / "U" shape tapered groove for sliding a Aluminium diecast slider nut. The slider nut shall be an Aluminium diecast part that has same taper as of "V" / "U" shape in the diecast connector. Modesty Panel: 18mm thk pre lam board with 2mm PVC edge lipping of 450mm Ht. Wire Management: 450mm Aluminium Flip Up and provision to mount switches and sockets on PVC cable dump and Vertical wire entry cover. Cross Beam: Leg to Leg shall be connected using cross beams made from 50x25x1.60mm (16g) Rectangular tube and to give floating look & to connect the table top with cross beams injection moulded polycarbonate spacers should be used of dia 61mm x 42.50mm H insert moulded with M6x1P zinc blue plated bolt of 22mm L. Spacer height including bolt should be 64.50mm. Side Composite Storage (Openable Shutter +3D+1F) Top & Sides : 18mm Thk pre laminated particle board Back E1 norms: 9mm Thk pre laminated particle board Shutters : 18mm Thk pre laminated particle board Handle. Handless Finger groove shall be created on top edge of shutter doors by providing a reverse tapered profile edge of 6mm straight surface & 12 mm tapered towards inside at 45 degree & then sealed with minimum 2mm thick PVC lipping on automatic machine. Suitable number lock shall be provided. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. PA CABIN (As per reference image)	Nos	2.00		-
114		The overall size of Chair shall be : width 600 +/-5mm, depth 640 +/-5mm. Total height 1170 to 1270 +/-5 mm, Back Width 425 mm at Top and 500mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 470+/-5 mm and Seat height 470mm to 570 mm +/-5mm range. Seat made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. Fire rated fabric conforming to BS EN 1021 (match) should be used. The chair shall be supplied with Mesh Back rest. The back frame shall be made up of Injection molded PPGF 20%. PU Adjustable Lumbar Support full length of size 365 mm, 110 mm height and 25mm thickness. The Chair should be provided with Self Calibrating Multilock Mechanism that should adjust the tension of the back sensing weight of the user. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provided with height adjustment button of size 73mm x 18mm made of Delrin P 500. The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon base shall be provided. Twin castors 50 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. HIGH BACK CHAIR (As per reference image)	Nos	2.00		-
115		The overall size of Chair shall be height 870 to 970 +/-5 mm, Back Width 415 mm at Top and 470mm at bottom, and 450mm at the lumbar support. Seat Width 480 +/-5 mm, Seat Depth 440+/-5 mm and Seat height 420mm to 520 mm +/-5mm range. over all chair width should be 540 +/-5mm and Overall chair depth should be 610 +/-5mm. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. No flaming or progressive smoldering within one hour of placement of the cigarettes. Fire rated fabric conforming to BS EN 1021 (match) should be used. The back frame shall be made up of PPGF and the injection molded in black color, armrest also in black color. The chair shall be supplied with Mesh Back rest. The Chair should be provided with center tilt two position lock Mechanism. The mechanism plate shall be attached to seat with 2.5mm thick plate. The mechanism shall allow 360 degree revolving feature along with height adjustability. Fixed arms connected to seat and back in the same colour. Armrest shall be Single piece die casted trapezium shaped arm rest overall size of 280 L x 230 H x 11mm thick at user side. The mechanism shall possess seat to back recline ratio of 1:1. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon Base to be provided. Twin castors 50 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards, the axle pin shall be rust protected zinc passivated. The base shall be made up of nylon glass filled black color. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. MID BACK CHAIR (As per reference image)	Nos	4.00		-
116		Reception table : The overall size of the reception table shall be 2400 mm length, 750 mm depth & 1050 mm height. On the front side both ends shall be provided with groove design strips to enhance the overall look. At the centre of the front side L shape surface shall be provided fixed up with hinges to paste logo of the University. The entire table shall be made up of 25mm / 18mm thick pre laminated particle board of E1 norms. Inside of table a working height shelf should be provided or height 750 mm to keep desktop/ laptop and normal working with sitting. the edges of the visible surface shall be sealed with 2mm thick PVC lipping on automatic machine. Unless specified tolerance of +/- 5mm to be considered for product dimensions Length, Depth & height and tolerance of 5% to be considered in thickness & size of material & components used. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. RECEPTION (As per reference image)	Nos	2.00		-

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117		The overall size of Chair shall be height 1020 to 1120 +/-5 mm, width should be 595 +/-5mm and depth should be 640 +/-5mm. Back Width 435 mm at Top and 490mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 465+/-5 mm and Seat height 450mm to 550 mm +/-5mm range. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. No flaming or progressive smoldering within one hour of placement of the cigarettes. Fire rated fabric conforming to BS EN 1021 (match) should be used. The chair shall be supplied with Mesh at the back rest. The back frame shall be made up of injection molded nylon GF 3. Adjustable Lumbar Support of size 300 mm length, 150 mm height and 3mm thickness travel upto 65mm. The Chair should be provided with Snychro mechanism with single lever with one position lock. The mechanism shall allow 360 degree revolving feature along with height adjustability one Way with height adjustment button made of Delrin P 500 & arm top shall be PU material. The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon Base to be provided. Twin castors 50 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. RECEPTION (As per reference image)	Nos	2.00		-
118		The overall size of the sofa shall be 2050 L x 790 D x 790 H. Sofa inner frame structure shall be made mainly from the combination of treated pine wood of 20-25mm thick & neem based plywood sheets. The polyurethane (PU) foam of density 32 and 40 shall be used in seat constructions and 32 density foam used in back construction along with the webbing belts. Seat height should be 440mm (+/- 10mm) and seat depth shall be 525mm (+/- 20mm). Each sofa individual set type shall consist of 4 metal legs of 200 mm height that shall be laser cut and press formed in 2mm thick CR steel in compliance with IS 513: 2008. The legs shall be formed in V-shape with 125 x 125mm length flanges on its top face and moulded leg bush shall be fixed at its bottom that shall support height adjustment of upto 10mm. To support the sofa two nos wide flanges of the leg shall be provided. Legs shall be pretreated through nano ceramic process that shall be environment friendly to enable powder coating to the thickness of 50-80 microns. The fabric used shall be 450-475 gms per meter having abrasion resistance of more than 50K rubs high quality polyester fabric. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. 3 SEATER SOFA (As per reference image)	Nos	4.00		-
119		The overall width lounge chair shall be 890 mm width x 860 mm depth x and 910 mm height as measured from floor. The Seat height shall be 460 mm as measured from floor level. The Seat & back including armrest level shall be made up of integrated moulded foam upholstered with fine quality fabric. A separate cushion made up of PU foam upholstered in different color shall be supplied at seat level. back shall be tapered from seat to provide comfort while seating. The understructure shall be made up of CRCA steel tubes of 19-25mm dia 1.2-1.6 mm thickness made in angular designs for legs and back support. The entire metal understructure shall be duly powder coated. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. SINGLE COUCH (As per reference image)	Nos	12.00		-
120		Cabin Table in size of 1650W X 750D X 750H. Side unit of 900W X 450D X 750H Table Top: 25mm thick Pre laminate particle board E1 norms with 2mm PVC edge lipping on all exposed edges. Two Long sides of the work surface shall be provided with reverse tapered edge design created by chamfering the board at 45 degree inside for 17mm length & keeping 8mm straight & then edges sealed with 2mm thick PVC Lipping on automatic machine. Leg: shall be made up of high pressure aluminum die casted 20 degree tapered, number "7" shape & oblong cross section of about 55mm on top, 45mm at bottom and of 725mm length to get 750mm table height, it acts as vertical structural support member, connected by a horizontal cross beams 50x25x1.6thk (16g) ERW tube & connected to the Aluminium diecast vertical legs through a high pressure Aluminium diecast 90deg -02 way connectors. The connector should have "V" / "U" shape tapered groove for sliding a Aluminium diecast slider nut. The slider nut shall be an Aluminium diecast part that has same taper as of "V" / "U" shape in the diecast connector. Modesty Panel: 18mm thk pre lam board with 2mm PVC edge lipping of 450mm Ht. Wire Management: 450mm Aluminium Flip Up and provision to mount switches and sockets on PVC cable dump and Vertical wire entry cover. Cross Beam: Leg to Leg shall be connected using cross beams made from 50x25x1.60mm (16g) Rectangular tube and to give floating look & to connect the table top with cross beams injection moulded polycarbonate spacers should be used of dia 61mm x 42.50mm H insert moulded with M6x1P zinc blue plated bolt of 22mm L.Spacer height including bolt should be 64.50mm. Side Composite Storage (Openable Shutter +3D+1F) Top & Sides : 18mm Thk pre laminated particle board Back E1 norms: 9mm Thk pre laminated particle board Shutters : 18mm Thk pre laminated particle board Handle. Handless Finger groove shall be created on top edge of shutter doors by providing a reverse tapered profile edge of 6mm straight surface & 12 mm tapered towards inside at 45 degree & then sealed with minimum 2mm thick PVC lipping on automatic machine. Suitable number lock shall be provided.The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. JUNIOR ACCOUNT, ASST. PR SECTION OFFICR, PR AND ASST. SECRETARY OFFICE (As per reference image)	Nos	15.00		-
121		The overall size of Chair shall be : Width 660mm , Depth 660mm & Height 1250 to 1350 mm. Seat Size shall be : width 490mm, Actual depth 520mm, Effective depth 430mm and height 475mm to 575mm. Width of the back shall be 425mm at bottom & Lumbar level 440mm & min 480mm at shoulder level. Back height shall be 690mm as measured from seat level. The chair shall be supplied with high quality Mesh at the back. Back outer shall be injection moulded with Nylon GF30% material. Seat should be made up of foam pre moulded at 55 kg/m3 density & hardness of 25+ 3kgf at 50% deflection conforming to IS 3400.The chair shall be supplied with Dynaflex Two Piece Back Construction with IS20D Mesh upholstred. Back shall be provided With 260mm width, 160mm height and 50mm height adjustable Headrest Thickness of seat foam shall be 55 mm. Seat shall be upholstered with micro fabric 100% polyester 180 GSM having abrasion > 50000 cycles fire rated fabric conforming to BS EN 1021. Plywood used shall be 12mm thick 9 ply hot pressed. The Chair should be provided with Synchro tilt Mechanism allowing 360 degree revolving movement along with height adjustability & tilt tension. The mechanism shall allow seat to back recline ratio of 2:5. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Height adjustable Arms to be provided operated through button made of Delrin P 500. Arm pad material shall be polyurethane with 2mm metal insert. Nylon Base having PCD of 660mm five pronged base made up of PA6, 30% glass filled reinforced with bottom ribbing to be provided. 50mm dia twin castors with PA6 material to be provided.Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. HIGH BACK CHAIR (As per reference image)	Nos	15.00		-
122		The overall size of Chair shall be : Total height 830 +/-5 mm, Back Width 415 mm at Top and 450mm at bottom, Seat Width 480 +/-5 mm, Seat Depth 440+/-5 mm and Seat height 420mm +/-5mm . And over all chair width should be 560 +/-5mm and Overall chair depth should be 600 +/-5mm. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. No flaming or progressive smoldering within one hour of placement of the cigarettes. Fire rated fabric conforming to BS EN 1021 (match) should be used. The chair shall be supplied with black Mesh Back rest. The Chair should be provided with 22 dia x 1.6 oval tube understructure shall connected with 4 PVC leg shoes. Understructure shall powder coated upto 40microns. PP Fixed arms connected to seat and back. The armrests shall be fixed with seat & back in such a way that the contour of the back matches the contour of back frame. Chair backrest frame shall be injection molded PPGF 20% in black shade, armrest shall also be in black shade. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. MEDIUM BACK CHAIR (As per reference image)	Nos	45.00		-

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123		The overall size of workstation shall be 1200L x 600D x 750H. The worktop shall be made of 25mm thick pre laminate particle boards with E1 norms duly finish with 2mm pvc edge band all the side of worktop. The main tables shall be supported by special design legs. The legs at the visitor's side shall be 90° and other side shall be 110°. The legs shall be Dia 44mm ERW Tube conforming to IS 4923 : 1997 – 16g. Main leg members shall be connected through a horizontal member size 1.6mm thk, 50x25 cold formed ERW tube by the aluminium die casted connector which having opening of 44mm dia on vertical side & 50 x 25 on the horizontal side to accommodate connection of Leg & horizontal frame. The legs shall have clear & tough polycarbonate leg bush & swivel type levelers to cater for floor undulations ± 20 mm. The legs shall be connected with Cross beams. The Cross Beams shall be of 40x20 mm ERW tubes- 16 g. The cross beams shall be connected to the legs with specially designed Aluminum Die Cast connectors by using Hi Tensile Allen bolts as per the design. High pressure aluminum die cast connectors are of ADC-12 material conforming to ASTM E 1251-2011, IS 7658-1990 & IS 11035 – 1190. For chemical composition and IS 1608 – 2005 for UTS & Ys. The Engineering plastic components shall be made with Acrylonitrile butadiene styrene (ABS) which are conforming to ASTM D256 for Izod Impact (1/4") for Leg shoe and levelers. The spacers shall be fitted to the main leg to give a floating look as well to support the table top. The spacers shall be made of Polycarbonate (PC). For ease of wire management, a 300 mm length & 142mm breadth flip up cover made up of aluminum having soft closure should be provided. A flip down mechanism enabled cable tray shall be provided below the worktop to mount switches and sockets. Metal cable tray shall be made of 0.8mm thick CRCA sheet with separator for data and power cables provided below the work surface for carrying wires from one end to other end of the cluster. Designed to accommodate 50-60 CAT-6 cables. The switch/sockets shall mounted on the switch plate on the cable tray and are accessed by Flip top mounted on table surface. The front fabric screen shall be provided of size 1050 mm L x 350 mm ht. made up of 18 mm thick prelam particle board of grade E1 upholstered by fabric, having aluminum extrusion at all three sides having cross section size of 12mm x 5mm & joined at all 4 corners with Zinc mazak5 die cast connector of size 15 L x 15 H x 12mm W. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. WORKSTATION (As per reference image)	Nos	38.00		-
124		The overall size of Chair shall be width 600 +/-5mm, depth 640 +/-5mm. Total height shall be 980 to 1080 +/-5 mm, Back Width 425 mm at Top and 500mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 470 +/-5 mm and Seat height 470mm to 570 mm +/-5mm range. Seat shall be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. Fire rated fabric conforming to BS EN 1021 (match) should be used. The chair shall be supplied with Mesh Back rest. The back frame shall be made up of Injection molded PPGF 20% in light grey shade, armrest support also in light grey shade. PPGF Frame thickness shall be minimum 4.8mm. Adjustable Lumbar Support made up of PU having size 365 mm x 110 mm x 25mm thick shall be provided for better comfort. Lumbar Support material Integrated one-piece Molded PU. The Chair should be provided with Self Calibrating Multilock Mechanism (Bio Synchrony mechanism) that should adjust the tension of the back sensing weight of the user. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provided with height adjustment button of size 73mm x 18mm made of Delrin P 500. Armrest Height shall be 170mm to 260mm adjustable from Seat The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Metal base shall be provided of light grey color matching the chair back & armrest. The base shall be made up of mild steel powder coated in grey shade to match the entire grey theme of chair. Metal base powder coated made up of sheet thickness 2mm. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. WORKSTATION (As per reference image)	Nos	38.00		-
125		Board Room Conference Table- 6200 X 1800 X 750HT The overall size of V-shaped conference table shall be 6200L x 1800D1 (main side) - 3000D2 x 750H. The main table shall be provided on one side of the table with size of 1800L x 750D x 750H. The 4 add on table shall be provided on both side with size of, 4 table with 1350L x 600D x 750H. The worktop shall be made of 25mm thick prelam particle boards with 2mm dully finish all the visible side. Modesty Panel shall be made up of 18mm thick 600mm ht prelaminated modesty panel should be considered. It shall be provided with machine pressed 2mm thick imported PVC liping glued with hotmelt Eva glue free from any VOC. The understructure shall be made of 25mm thick prelaminate particle board with 2mm pvc edge band all the visible side. Wire Management: Openable Flipup Top of Full Length and full length cable tray shall be provided below the table top. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. BOARD ROOM TABLE (As per reference image)	Nos	1.00		-
126		The overall size of Chair shall be : Total height 1050 – 1150 +/-5 mm, Back Width 480 mm at Top and 470mm at bottom, Seat Width 490 +/-5 mm, Seat Depth 460 +/-5 mm and Seat height 440mm to 540 mm +/-5mm range. And over all chair width should be 560 +/-5mm and Overall chair depth should be 660 +/-5mm. Seat and back should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat and back shall be made up of PU foam pre moulded at 55kg/m3 density. Hardness of 25+ 3kg at 50% deflection conforming to IS 3400. Seat and back shall be upholstered with leatherette 75% PVC & 25% polyester - 640 GSM, Abrasion - 100000 cycles. The Chair should be provided with synchro mechanism with single lever with one position lock. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provided with height adjustment button made of Delrin P 500. The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon Base to be provided. Twin castors 50 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards. the axle pin shall be rust protected zinc passivated. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. BOARD ROOM TABLE HIGH BACK CHAIR (As per reference image)	Nos	1.00		-
127		The overall size of Chair shall be : Total height 950 – 1050 +/-5 mm, Back Width 480 mm at Top and 470mm at bottom, Seat Width 490 +/-5 mm, Seat Depth 460 +/-5 mm and Seat height 440mm to 540 mm +/-5mm range. And over all chair width should be 560 +/-5mm and Overall chair depth should be 660 +/-5mm. Seat and back should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat and back shall be made up of PU foam pre moulded at 55kg/m3 density. Hardness of 25+ 3kg at 50% deflection conforming to IS 3400. Seat and back shall be upholstered with leatherette 75% PVC & 25% polyester - 640 GSM, Abrasion - 100000 cycles. The Chair should be provided with synchro mechanism with single lever with one position lock. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provided with height adjustment button made of Delrin P 500. The mechanism shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Nylon Base to be provided. Twin castors 50 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards. the axle pin shall be rust protected zinc passivated. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. BOARD ROOM TABLE CHAIR (As per reference image)	Nos	32.00		-
128		Supplying & placing cafe table with an overall size 900 X 900 X 750. The top of the table shall be made 18mm thick PrelamHydroshield Top. The profile shall be in square shape. The top shall be supported on MS powder coated 2mm thick sheet. The table under structure shall be made up of SS grade 202 base pole leg having size 60mm X 60mm with 1.2mm thick. The base plate shall be SS 202 grade base having size 460mm X 460mm. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. CAFÉ TABLE (As per reference image)	Nos	6.00		-

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
129		The chair shall be made from a single-piece injection-molded polypropylene material with a half-round back contour to offer enhanced comfort and support. The overall width of the chair shall be 500 mm, depth 530 mm, and height 800 mm. The seat height from the floor shall range from 435 mm, and the back height from the seat shall be 400 mm. The backrest will feature a half-round contour, with a lumbar width from end to end at lumbar level shall be at least 450 mm and a top width of 430 mm. The front of the seat will include a waterfall edge with a minimum height of 25 mm. The seat width, measured from the center, shall be 440 mm, with a depth of 400 mm. The backrest will be perforated with a triangular pattern for ventilation and flexibility. Ribs beneath the seat, extending from front to back, will have a minimum height of 12 mm to enhance stability. The thickness of the chair at the various polypropylene edges shall range from 7 mm, 8mm, 9mm respectively. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. CAFÉ CHAIR (As per reference image)	Nos	24.00		-
130		Providing and placing of Slotted Angle Racks of Overall Size 1800 mm (H) x 900mm (W) x Depth 450 mm(D). Each rack shall be provided with 5 panels for loading having 100kgs Load carrying capacity (Uniformly Distributed Load) per panel. Open type Rack system consists of Angle, Decking Panel, Corner plate, Nuts & Bolts. Angles : Material of Angles is as per IS 10748. The thickness of the angles when made from sheet steel shall be 1.6 mm. Angles shall be of rolled formed construction and free from twist, sharp edges and burrs. Angles shall have holes provided at a pitch of 19.05mm. Size of the Angles should be 35mm x 35mm x 1.6 mm(Thick). Panels : Material of panels is as per IS 10748 / ISS986- Fe 410. Panels shall be 6 bend panels and shall be made from mild steel sheets not less than 0.8 mm in thickness with lipped flanges. Width of flange being 31mm and depth of lip 17mm. The panels shall have 9mm holes for corner plates. Size of the Panels is 905 W x 371 D x 0.8 mm thick. Will have 6 bends & get bolted to the Angles at each of the four corners according to Minimum of 100 Kg load per level. Corner Plates (Gussets): Material of corner plates is as per IS 513D. 8Nos Corner Plates, four on each face shall be fitted to the open type rack. They shall be made of mild steel sheet and be provided with a powder coated finish. Corner Plates of 1.6 mm thickness to be provided for ensuring rigidity of the structure. Nuts & Bolts : All fasteners like nuts, bolts, clips etc. shall be supplied in galvanised condition for protection against environment and corrosion. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. Fixing of Racks into the roofs incl all materials may be required as per direction of CBSE if desired. RACKS (As per reference image)	Nos	454.00		-
131		The overall size of conference shall be 6600L x 1200D x 750H. The worksurface of the table shall be made up of 25mm thick Pre-laminate particle board as per E1 norms and its edges duly sealed with 2mm PVC Lipping on automatic machine at visible sides. Two Long sides of the work surface shall be provided with reverse tapered edge design created by chamfering the board at 45 degree inside for 17mm length & keeping 8mm straight & then edges sealed with 2mm thick PVC Lipping on automatic machine. Leg: shall be made up of high pressure aluminum die casted 20 degree tapered, number "7" shape & oblong cross section of about 55mm on top, 45mm at bottom and of 725mm length to get 750mm table height, it shall acts as vertical structural support member, connected by a horizontal cross beams 50x25x1.6thk (16g) ERW tube & connected to the Aluminium diecast vertical legs through a high pressure Aluminium diecast 90deg – 02 way connectors. Wire Management: 450mm Aluminium Flip Up and provision to mount switches and sockets on PVC cable dump and Vertical wire entry cover made up of steel sheets. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. MEETING TABLE (As per reference image)	Nos	1.00		-
132		The overall size of Chair shall be : width 600 +/-5mm, depth 640 +/-5mm. Total height 1170 to 1270 +/-5 mm, Back Width 425 mm at Top and 500mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 470+/-5 mm and Seat height 470mm to 570 mm +/-5mm range. Seat made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. Fire rated fabric confirming to BS EN 1021 (match) should be used. The chair shall be supplied with Mesh Back rest. The back frame shall be made up of Injection molded PPGF 20% in light grey shade, armrest support also in light grey shade. PPGF Frame thickness shall be minimum 4.8mm. Adjustable Lumbar Support made up of PU having size 365 mm x 110 mm x 25mm thick shall be provided for better comfort. Lumbar Support material Integrated one-piece Molded PU. The Chair should be provided with Self Calibrating Multilock Mechanism (Bio Snchyro mechsanim) that should adjust the tension of the back sensing weight of the user. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provied with height adjustment button of size 73mm x 18mm made of Delrin P 500. Armrest Height shall be 170mm to 260mm adjustable from Seat The mechsanim shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Metal base shall be provided of light grey color matching the chair back & armrest.The base shall be made up of mild steel powder coated in grey shade to match the entire grey theme of chair.Metal base powder coated made up of sheet thickness 2mm.Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. HIGH BACK CHAIR (As per reference image)	Nos	1.00		-
133		The overall size of Chair shall be width 600 +/-5mm, depth 640 +/-5mm. Total height shall be 980 to 1080 +/-5 mm, Back Width 425 mm at Top and 500mm at bottom, Seat Width 500 +/-5 mm, Seat Depth 470+/-5 mm and Seat height 470mm to 570 mm +/-5mm range. Seat shall be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. Fire rated fabric confirming to BS EN 1021 (match) should be used. The chair shall be supplied with Mesh Back rest. The back frame shall be made up of Injection molded PPGF 20% in light grey shade, armrest support also in light grey shade. PPGF Frame thickness shall be minimum 4.8mm. Adjustable Lumbar Support made up of PU having size 365 mm x 110 mm x 25mm thick shall be provided for better comfort. Lumbar Support material Integrated one-piece Molded PU. The Chair should be provided with Self Calibrating Multilock Mechanism (Bio Snchyro mechsanim) that should adjust the tension of the back sensing weight of the user. The mechanism shall allow 360 degree revolving feature along with height adjustability. One Way Adjustable Arms (Height) to be provided with height adjustment button of size 73mm x 18mm made of Delrin P 500. Armrest Height shall be 170mm to 260mm adjustable from Seat The mechsanim shall possess seat to back recline ratio of 3:7. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. Metal base shall be provided of light grey color matching the chair back & armrest.The base shall be made up of mild steel powder coated in grey shade to match the entire grey theme of chair.Metal base powder coated made up of sheet thickness 2mm.Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. MEDIUM BACK CHAIR (As per reference image)	Nos	18.00		-
134		The overall size of the café table is 1200 dia,he top shall be made up of 25mm thick pre laminated partical board with 2mm PVC edge band. Leg: shall be made up of high pressure aluminum die casted 20 degree tapered, number "7" shape & oblong cross section of about 55mm on top, 45mm at bottom and of 725mm length to get 750mm table height, it shall acts as vertical structural support member, connected by a horizontal cross beams 50x25x1.6thk (16g) ERW tube & connected to the Aluminium diecast vertical legs through a high pressure Aluminium diecast connectors. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. ROUN DTABLE (As per reference image)	Nos	10.00		-

S NO	DSR-2023/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
135		The overall size of workstation shall be 1200I x 600D x 750H. The worktop shall be made of 25mm thick pre laminate particle boards with E1 norms duly finish with 2mm pvc edge band all the side of worktop. The understructure shall be made up of MS powder coated legs Constructed by using specially tooled & designed "D" shape ERW Tube 60mm x 30mm x 1.60mm thick (16g), which gets connected at the top by high pressure aluminum die cast connectors and fitted at the bottom by leg bush & levelers made of Acrylonitrile butadiene styrene (ABS), a very tough material. The 2 angular vertical legs shall be connected by horizontal beams. The Diecast connector will have same shape of "D" vertical leg at one side and another side matching to horizontal cross section 50x25. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. TABLE (As per reference image)	Nos	129.00		-
136		Overall size : Width 560 +/-5mm and Depth 670 +/-5mm. Total height 990 to 1090 +/-5 mm, Back Width 415 mm at Top and 450mm at bottom, Seat Width 480 +/-5 mm, Seat Depth 460+/-5 mm and Seat height 460mm to 560 mm +/-5mm range. Seat should be made up of foam pre moulded at 55 kg/m3 density. hardness of 25+ 3kgf at 50% deflection conforming to IS 3400. Seat shall be upholstered with micro fabric 100% polyester 180 GSM abrasion > 50000 cycles. No flaming or progressive smoldering within one hour of placement of the cigarettes. Fire rated fabric confirming to BS EN 1021 (match) should be used. The chair shall be supplied with Mesh Back rest. The Chair should be provided with Synchro tilt Mechanism. The mechanism shall allow 360 degree revolving feature along with height adjustability. The mechanism shall possess seat to back recline ratio of 1:1. The Gas Lift used shall be class 4 tested as per ANSI BIFMA standards. One Way Adjustable Arms (Height) to be provided with height adjustment button made of Delrin P 500. Nylon Base to be provided. Twin castors 50 mm dia with PA6 material complying to ANSI/ BIFMA X 5.1 2017 standards. the axle pin shall be rust protected zinc passivated. The base shall be 660 mm PCD (26 inches) five pronged bases made up of PA6, 30% glass filled reinforced with bottom ribbing for additional buttress and strength. Tolerance of +/- 5mm to be considered for product sizes i.e Length, Depth & height and tolerance of 5% to be considered in pipe thickness & Pipe sizes. The OEM shall have ISO 9001, BIFMA Level 2, India Design Mark, Green Guard UL & IGBC Gold Rated Factory Certification. CHAIR (As per reference image)	Nos	129.00		-
		TOTAL				-

SCHEDULE OF QUANTITIES						
S NO	DSR E&M-2025/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
1	1.10	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required				
	1.10.3	Group C	Point	500.00		-
2	1.55	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required.				
	1.55.3	Group C	Point	650.00		-
3	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable for loop earthing as required.	Metre	5,500.00		-
	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
4	1.24.1	5/6 amps switch	Each	431.00		-
5	1.24.3	15/16 amp switch	Each	115.00		-
6	1.24.4	3 pin 5/6 amp socket outlet	Each	431.00		-
7	1.24.5	6 pin 15/16 amp socket outlet	Each	115.00		-
8	1.24.8	Bell Push	Each	2.00		-
9	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	200.00		-
	1.27	Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc. as required.				
10	1.27.1	1 or 2 Module	Each	10.00		-
11	1.27.2	3 Module	Each	546.00		-
12	1.27.3	4 Module	Each	5.00		-
13	1.27.4	6 Module	Each	20.00		-
14	1.27.5	8 Module	Each	20.00		-
15	1.27.6	12 Module	Each	40.00		-
16	1.14	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
17	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	1,200.00		-
18	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	2,400.00		-
19	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	10.00		-
20	1.14.4	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Metre	10.00		-
21	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	Metre	160.00		-
22	1.14.11	4 X 16 sq. mm + 2 X 6 sq. mm earth wire	Metre	160.00		-
	11.1	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
23	11.1.21	3½ X 35 sq. mm (32mm)	Each	4.00		-
24	11.1.22	3½ X 50 sq. mm (35mm)	Each	4.00		-
25	11.1.23	3½ X 70 sq. mm (38mm)	Each	8.00		-
26	11.1.24	3½ X 95 sq. mm (45mm)	Each	4.00		-
27	11.1.25	3½ X 120 sq. mm (45mm)	Each	8.00		-
	MR	Supply & complete laying of following XPLE armoured 1.1 KV grade conforming to I.S.7098/1554 Aluminium Conductor Cables :				
		Supply & complete laying of following sizes of PVC sheathed PVC/XLPE insulated Aluminium conductor armoured cable of 1.1 KV grade conforming to IS:7098 part-1 / IS:1554 part-1 respectively & ISI marked.				
28	(a)	3.5 C x 120 Sqmm XLPE cable	RM	100.00		-
29	(b)	3.5 C x 95 Sqmm XLPE cable	RM	50.00		-
30	(c)	3.5 C x 70 Sqmm XLPE cable	RM	25.00		-
31	(d)	3.5 C x 50 Sqmm XLPE cable	RM	25.00		-
32	(e)	3.5 C x 35 Sqmm XLPE cable	RM	25.00		-
33	(f)	3.5 C x 300 Sqmm XLPE cable	RM	100.00		-
34	(g)	3.5 C x 25 Sqmm XLPE cable	RM	200.00		-
35	(h)	2 C x 10 Sqmm XLPE copper cable	RM	320.00		-
	MR	Supply of & complete laying following sizes of copper cables -PVC sheathed PVC/XLPE insulated Copper conductor armoured cable of 1.1 KV grade conforming to IS:7098 part-1 / IS:1554 part-1 respectively & ISI marked.				
36	(a)	4 C x 16 Sqmm XLPE copper cable	RM	100.00		-
37	(b)	4 C x 25 Sqmm XLPE copper cable	RM	50.00		-
38	(c)	3.5 C x 35 Sqmm XLPE copper cable	RM	25.00		-
39	(d)	3.5 C x 50 Sqmm XLPE copper cable	RM	25.00		-
40	2.11	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	Each	100.00		-
	2.10	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
41	2.10.1	Single pole	Each	420.00		-
	2.13	Supplying and fixing following rating, four pole, 415 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
42	2.13.1	40 amps	Each	10.00		-
43	2.13.2	63 amps	Each	8.00		-
44	2.13.3	100 amps	Each	1.00		-
	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/ RCCB/ Isolator)				
45	2.4.3	8 way (4 + 24), Double door	Each	4.00		-
46	MR	12 way (4 + 36), Double door	Each	14.00		-
	2.14	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
47	2.14.1	25 amps	Each	30.00		-
48	2.14.2	40 amps	Each	24.00		-
49	2.14.3	63 amps	Each	6.00		-
50	MR	Supply, installation, testing & Commissioning of 1 module 16A SWITCH SP 1 way for floor box.	Set	2.00		-
51	MR	Supply, installation, testing & Commissioning of 2 module 16 A Socket for floor box box.	Set	2.00		-
52	MR	Supply, installation, testing & Commissioning of Specific Backbox for Carpet for Floor Box along with LID and TRIM for tiles/ marble 15 to 20mm thickness material for headband and single cable outlet/ galvanized steel, paint RAL 7031 for floor box.	Set	2.00		-
53	MR	Supply, installation, testing & Commissioning of 150 x 38 mm, 2 compartment 1.5mm thickness rectangular Box type mig welded 275 GSM Grade GI under floor duct in 1.5 mm thickness, 38 mm height, base and cover supplied in 2.5 meters per length with additional accessories of Duct connecting shackle cum fastening Clamp, vertical access box, etc. in line with EN 50085-2-2. These ducts must have "L" shaped spot welded partitions (for multi compartment ducting) of the suitable thickness as base and cover and all the spot welded joints and mig welded covers shall have to be galvanized for maintaining the required galvanizing coating thickness referred above.	Set	44.00		-
54	MR	Supply, installation, testing & Commissioning of Specific Backbox for Wooden Flooring for Floor Box along with LID and TRIM for tiles/ marble 15 to 20mm thickness material for headband and single cable outlet/ galvanized steel, paint RAL 7031 for floor box.	Set	2.00		-
55	MR	Supply, installation, testing & Commissioning of flat support plate 8 module for integration of Mechanism for Floor Box	Set	2.00		-
56	MR	Supply, installation, testing & Commissioning of waved support plates for 4 module (2x2) modules for Floor Box	Set	2.00		-
	1.24	Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
57	1.24.7	TV antenna socket outlet	Set	10.00		-
	MR	Supply, Installation, Testing and Commissioning of Galvanized Iron (GI) Raceways along with required suitable number of GI couplers for joining raceways and fixing GI brackets and all accessories complete in all respect as per the directions of engineer in charge				
58	(a)	300mmx38mm(GI) - 3 compartment	Mtr	20.00		-
59	(b)	225mmx38mm(GI) - 3 compartment	Mtr	60.00		-
60	(c)	150mmx38mm(GI)	Mtr	60.00		-
61	(d)	100mmx38mm(GI)	Mtr	45.00		-
62	(e)	75mmx38mm(GI)	Mtr	120.00		-
63	(f)	50mmx38mm(GI)	Mtr	350.00		-

S NO	DSR E&M-2025/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)		
	MR	Supply, Installation, Testing and Commissioning of Junction boxes for direct access to cables at the intersection of raceways supplied completely with base and cover plates, height adjustable junction box 65- 90 mm including all accessories ss plate of 3mm thick complete in all respect as per the directions of engineer in charge						
64	(a)	300x 300 x 65-90 mm	Each	10.00		-		
65	(b)	225x 225x 65-90 mm	Each	20.00		-		
66	(c)	150x 150 x 65-90 mm	Each	120.00		-		
67	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/recessed steel/ PVC conduit as required	Meter	400.00		-		
	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.						
68	1.21.2	25mm	Metre	400.00		-		
	4.1	Supplying and installation following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5% in convenient sections, joined with connectors, suspended from the ceiling with two numbers MS/GI Suspenders i/c base of suitable size MS/GI angle, bolts & nuts, painting suspenders, fastener etc as required.						
69	4.1.6	450 mm width x 50 mm depth x 2 mm thickness	Metre	50.00		-		
70	5.4	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 Meter long etc. with charcoal/ coke and salt as required.	SET	12.00		-		
71	5.14	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	MTR	50.00		-		
72	5.15	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	MTR	400.00		-		
73	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	MTR	1,000.00		-		
74		Designing, fabricating, transporting, unloading, storing, fixing in position, testing and commissioning the following sheet steel cubicle type panels fabricated from 1.6mm thick CRCA sheet, dust and vermin proof, outdoor type double door with canopy, TPN Panels with hinged lockable doors fabricated from 2mm thick CRCA sheet, suitable for 415V, 3 phase 4 wire 50Hz AC supply with rear access for cable alley and with segregated bus-bar chamber with tinned aluminium bus bar and including supplying and fixing following switchgears, meters and accessories, inter-connections, bonding to earth, powder coated painting and marking as specified. Switch boards complete as per schematic diagram:						
		Type of construction: Form 3						
		IP classification: 42						
		The LT PANEL shall be electrically inter-locked as shown in Schematic diagram and as detailed in the Specifications						
		Colour: Gray Powder Coated, as per approved sample.						
		Incomings:						
		1 nos, 320 Amps, 4 pole MCCB , i.e four pole Moulded Case Circuit Breaker of fault breaking capacity 25 KA (ICS=ICU up to 433 V) complete in all respect						
		Bus Bars:						
		TPN aluminum bus bars of minimum of 400 Amps capacity with heat shrinkable colored sleeves and I/C DMC/SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc. for withstanding fault level of 25 MVA for 1 Sec.						
		Outgoings:						
75	MR	(a) 63 Amps, TPN, MCB +ELCB - 8 Nos.						
		(b) 40 Amps, TPN, MCB +ELCB - 4 nos						
		Panel complete as above	Each	2.00		-		
		Floor Panels						
		Designing, fabricating, transporting, unloading, storing, fixing in position, testing and commissioning the following sheet steel cubicle type panels fabricated from 1.6mm thick CRCA sheet, dust and vermin proof, indoor type TPN Panels with hinged lockable doors fabricated from 2mm thick CRCA sheet, suitable for 415V, 3 phase 4 wire 50Hz AC supply with rear access for cable alley and with segregated bus-bar chamber with tinned aluminium bus bar and including supplying and fixing following switchgears, meters and accessories, inter-connections, bonding to earth, powder coated painting and marking as specified. Switch boards complete as per schematic diagram:						
		Type of construction: Form 3						
		IP classification: 42						
		The LT PANEL shall be electrically inter-locked as shown in Schematic diagram and as detailed in the Specifications						
		Colour: Gray Powder Coated, as per approved sample.						
		Incomings:						
76	2.21	1 nos, 160 Amps, 4 pole MCCB , i.e four pole Moulded Case Circuit Breaker of fault breaking capacity 25 KA (ICS=ICU up to 433 V) complete in all respect						
		Bus Bars:						
		TPN aluminum bus bars of minimum of 200 Amps capacity with heat shrinkable colored sleeves and I/C DMC/SMC bus bars supports at required intervals complete for cross section, size supports & their spacing etc. for withstanding fault level of 25 MVA for 1 Sec.						
		Outgoings:						
		(a) 63 Amps, TPN, MCB - 4 Nos.						
		(b) 40 Amps, TPN, MCB - 6 nos						
		Panel complete as above	Each	2.00		-		
		Providing and fixing MV danger notice plate of 200mm x 150mm made of mild steel, atleast 2 mm thick, and vitreous enamelled white on both sides and with inscription in single red colour on front side as required	Nos.	6.00		-		
		77	26.2	Online UPS- Input supply: Three Phase, Output supply: Three Phase- Supplying, installation, Testing & Commissioning of following capacity at full load (Unity Power Factor) at operating temperature 0 to 40 0C, Relative humidity 0 to 95%, Online double conversion true sine wave Uninterrupted hot swappable (allow for the replacement or addition of battery modules without shutting down the entire system) modular Power Supply (UPS) system with N+1 modules (N denotes total number of modules required for rated capacity). The UPS shall include a Rectifier, inverter, battery bank suitable for 30 minutes back up (Battery VAH capacity shall not be less than 1600 VAH per KVA of UPS rating per Hour backup time) on full load (Battery shall be VRLA, SMF in ABS Container) and Static Bypass switch along with provision for manual bypass, suitable isolation transformer for additional protection against neutral faults etc. UPS shall have inbuilt phase sequence correction. The UPS systems offered are to be of the latest technology with Digital Control microprocessor based for reliable operation using Insulated Gate Bipolar Transistor (IGBT)'s both for the rectifier & inverter (3 Level) with PWM (Pulse Width Modulation). The quality of design, manufacturing and inspection process should confirm to the relevant Inter-national standards such as IEC/EN/VDE. The operating efficiency of the UPS systems shall be >96% while operating on battery mode and delivering quality power to the 100% non-linear loads. Current total harmonic effect(THD) on the input grid shall be < 5% at 50 %load. (The required LC (inductor (L) and a capacitor (C)) filters shall be included in UPS cost), extreme power factor kit to be included to limit the input power factor (PF) to 0.99 and output power factor shall be unity (i.e. kw rating of the UPS shall be kva rating x 1), however UPS shall be suitable to take load at 0.7 lagging to 0.7 leading power factor loads. UPS shall be suitable for incoming supply AC : 3Phase 400V +/-20%, 50 Hz +/-5 Hz, AC Output voltage: 3Phase 415 Volt, 50 Hz +/- 0.2Hz, Overload capacity of 120% for 10 mins, Sine wave output. Non condensing, noise level less than 60db at 1 meter distance, protections: Input Under voltage over voltage, abnormal out voltage, battery over charging, output over current, short circuit protection, battery deep discharge protection, 10KV surge. UPS must comply with low voltage electromagnetic compatibility (EMC) achieved as per EN 6204, EN6204 Part I and Part 2, it shall be a Voltage and Frequency Independent (VFI)-type UPS. Communication RS232/ RS485/ SNMP port open protocol for BMS integration, all hardware & software for IoT Communication as per approved by Engineering in charge. Required battery racks and interconnecting copper conductor cables of suitable size and connectors and all required accessories are inclusive of the cost). This system must provide a means for logging and alarming of all monitored points plus email notification. Forced air-cooling with integral inbuilt fans with redundancy (if one fan fail UPS should be able to handle at least 80% of the load. Noise 10KVA (Each Power module shall be ≤ 10 KVA)				
				77	26.2.1	10KVA (Each Power module shall be ≤ 10 KVA)	Nos.	1.00
78	26.2.3			30KVA (Each Power module shall be ≤ 10 KVA)	Nos.	1.00	-	
LIGHTING FIXTURES								

S NO	DSR E&M-2025/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
	1.1	LED Down lighter (SMD Type) (System lumen efficacy $\geq 105 < 120$ lm/Watt) Supplying, installation, Testing & Commissioning of LED Recessed/ surface Down lighter (Round/ square/ Rectangular) SMD type of following body material with PMMA and prismatic diffuser and construction as per IS: 10322 with driver as per the requirement with Driver efficiency >85%, Operating voltage AC 140-270 Volt, frequency 50/60 hz, Operating temp range -15 deg to 40 deg centigrade, internal surge protection of 2.5 KV with Short & Open circuit protection, THD < 10%, P. F. ≥ 0.95 , IP20, CRI >80, UGR (Unified Glare Rating) < 19, Flicker free (flicker should be below 5%), life time (LED, Driver & electrical circuitry), of minimum 50000 Burning Hours with 70% of initial Lumen maintained till life ends, CCT 3000°K/ 4000°K / 5700°K / 6000°K / 6500°K (As per ANSI Bin), SDCM (Standard Deviation Color Matching) <3, Maximum power consumption should not more than the specified rating and Fixture shall be confirming to relevant BIS standards and trade mark certificate (T.C.). Manufacturers Word Mark/ Name Engraved/ Embossing/ Screen printing on housing Complete in all respect i/c connections with 1.5 sq mm FRLS, PVC insulated copper conductor single core cable and earthing etc. as required with Minimum 5 year OEM warranty. System lumen efficacy ≥ 105 and <120 lm/Watt output. LM79 & LM80 Test report from NABL lab for all testing required for LED fixtures as per BIS shall be submitted. Shape size and CCT shall be as approved by Engineer-in-Charge as per requirement. (Thermal management: heat sink of aluminum housing such that LED junction temperature shall not rise above 90°C) Powder coated die cast /Extruded aluminum Body including trim				
79	1.1.1	5-7 watt	nos	143.00		-
80	1.1.3	12-15 watt	nos	232.00		-
81		Supply of Integral, SMD 4x1 Backlit LED Panel, IP 20, 30W LED recessed mounted fixture with system efficacy of minimum 100lm/W and system lumen output of minimum 3000lm, operating in ambient temperature of 0°C to 45°C at 50Hz frequency. Luminaire shall have CRCA housing coated in white (RAL9016) with translucent HET diffuser for uniform illumination and wider light distribution. LEDs used in the product shall comply with IEC 62471. LM 80-08 compliant LEDs from reputed makes such as Nichia/Creel/ Bridgelux/ Lumiled/ Osram/Seoul should be provided. The LED shall comply with L70 life of 50000 burning hours tested at maximum current. The LEDs used should be with CCT of 4000 K and CRI of Minimum 80. LED Driver shall be Isolated type, Constant Current topology driver with proper heat sink for heat dissipation suitable to operate in input voltage range of 140V to 300V (nominal rated voltage – 240V) with 4KV internal surge protection, Power factor of minimum 0.95 and total harmonic distortion (THD) of less than or equal to 10% should be integral to the luminaire. Manufacturer shall have inhouse lab approved by NABL or ministry of science of govt of India. LM 79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters. Compliance to Indian Standards of IS10322 Part 5 / Sect 5:1967; 16105 : 2012; IS 16106 : 2012; IS 15885 (Part2/Sec13) : 2012; IS 16108 : 2012.	nos	407.00		
82		Supply of 30W, recessed/ suspended by 1.5m suspension wire, 4 feet linear, IP20, SMD LED luminaire with system efficacy of 110 lumen/watt and system lumen output of 3300 lumen, operating in an ambient temperature of 0°C to 45°C. Operating at 50Hz frequency, luminaire shall have extruded aluminium housing in white with high efficiency transluence diffuser and must have provision for end to end seamless connectivity. EMC package of wattage of 0.2-0.5 W LEDs used in the product shall comply with IEC 62471 for Photo-biological safety. LM 80-08 compliant LEDs from reputed makes such as Nichia/Creel/ Bridgelux/ Lumiled/ Osram/Seoul should be provided. The LED shall comply with L70 life of 50000 burning hours tested at maximum current. The LEDs used should be with CCT of 4000 K and CRI of Minimum 80, with MacAdam CCT binning ≤ 3 mounted on 1.6mm FR4 / MCPCB with 35 micron cu layer. LED Driver shall be Isolated type, Constant Current topology driver with proper heat sink for heat dissipation suitable to operate in input voltage range of 140V to 300V (nominal rated voltage – 240V) with 3KV internal surge protection, Power factor of minimum 0.95, driver efficacy of minimum 85% and total harmonic distortion (THD) of less than or equal to 10% should be integral to the luminaire. Manufacturer shall have inhouse lab approved by NABL or ministry of science of govt of India. LM 79 and LM80 reports need to be submitted from a NABL/UL accredited lab to verify above parameters. Compliance to Indian Standards of IS10322 Part 5 / Sect 5:1967; 16105 : 2012; IS 16106 : 2012; IS 15885 (Part2/Sec13) : 2012; IS 16108 : 2012. Dimension: 1205 X 51 X 85mm, weight: 2.5Kg	nos	54.00		
83	MR	Design, manufacture, supply, installation, and commissioning of a Electronically Driven, Non Dimmable (but capable for dimming with just changing the Driver, if required in future) customized translucent ceiling-mounted fabric and light engine. Sketch Lighting make illuminated Ceiling, or equivalent from any approved makes, matching below specifications. from any approved makes The light box will be installed as per the architectural requirements and must meet the following technical specifications. The light box will be ceiling-mounted, size as approved by the architect. The ceiling box should have a uniform depth of 250 mm or as requested by the light manufacturer for spotless and glare-free illumination. Structure: The side walls of the light box will be constructed by the GC as part of the ceiling. Wooden box which is not part of this item, should be made from 18 mm thick moisture and termite-resistant plywood or HDDMR (High-Density High-Moisture Resistant Board), as approved by the architect. The roof of the box shall also be made of the same moisture and termite-resistant plywood or HDDMR board. Interior Finish: The inner side of the box shall be primed and painted in matte white for even light reflection and the white part should not be visible after installation of the fabric. Thermal Management: Before installing the LED light engine, the interior of the light box must be equipped with Thermal Interface Material for optimal heat dissipation. Thermally conductive metal sheets should be securely attached to the interior roof of the wooden box to further enhance heat dissipation. LED Light Engine: The light engine must be low voltage ranging from 12- 24V. The color temperature (CCT) shall be customizable, offering the client four options to choose one from: 3000K, 4000K, 5700K and 6500K. The lux level on the workplane should be minimum 1000 lux and it should be compatible for dimming. The input voltage for the light engine must be 24V and should have a protection rating of IP20. All LED drivers should be installed outside of the light box, in an easily accessible location for maintenance purposes. Diffuser: A jointless translucent diffuser made from polyester knitted fabric coated with polyurethane (PU) must be installed inside the ceiling box, approximately 20-30 mm up from the bottom edge of the structure. The remaining 20-30 mm exposed surface outside the diffuser should be finished to match the color of the wooden ceiling surface and edges. The diffuser fabric should be: Heavy-duty, with a minimum weight of 200 gm/m ² and a minimum thickness of 0.3 mm. Matte, smooth, and uniform in appearance to reduce glare and provide a soft ambient glow even at higher lux levels. It should have a light transmission efficiency of 50-60%, ensuring low glare, soothing ambient lighting. The diffuser must Supply, Installation, Testing and Commissioning of Pendant customised luminaire with HE-High Efficiency LED (Light Emitting Diode) system power: 12 W/Mtr, the luminous flux of luminaire 960 lm, color temperature of 4000 K, CRI > 90, SDCM<3, THD<10%, 230 V constant current driver, 70% of luminous flux after 50,000 operating hours, direct light emission, luminaire profile in aluminium, black powder-coated, opal diffuser for uniform illumination, Electronic control gear. Protection class I, IP20 L = 1000 mm, B = 55 mm, H = 75 mm, PL max = 1500 mm (one customised suspended Ring type fixture of 3800mm Diameter respectively)	sqm	75.00		
84		Supply, Installation, Testing and Commissioning of Pendant customised luminaire with HE-High Efficiency LED (Light Emitting Diode) system power: 12 W/Mtr, the luminous flux of luminaire 960 lm, color temperature of 4000 K, CRI > 90, SDCM<3, THD<10%, 230 V constant current driver, 70% of luminous flux after 50,000 operating hours, direct light emission, luminaire profile in aluminium, black powder-coated, opal diffuser for uniform illumination, Electronic control gear. Protection class I, IP20 L = 1000 mm, B = 55 mm, H = 75 mm, PL max = 1500 mm (one customised suspended Ring type fixture of 3800mm Diameter respectively)	Mtr	12.56		
85		SITC of Non Dimmable Recessed 10-12 Watts Open Cell Ceiling Downlight with glare-free black deflector. CRI > 90. CCT - 4000 Kelvin. TRIMLESS DESIGN. Sketch Lighting make DOMO OC or equivalent from approved makes. Housing Dimensions: TO BE MANUFACTURED AS PER THE OPEN CELL CEILING. NO SPRINGS ACCEPTABLE Materials:Light Housing: Made of aluminum, ensuring lightweight and high heat dissipation for the light engine. Powder coated in color OF ARCHITECTS CHOICE. High-efficiency electronic Light Engine utilizing COBs with > 120 lumens per watt and Electronic Driver Driver of PF > 0.9 and THD < 10%.	No's	439.00		
86	7.3	VRF OUTDOOR UNIT: Supply, Installation, Testing & Commissioning of Modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor units suitable for cooling/heating having 100% hermetically sealed inverter type twin Rotary/Scroll Compressor(s), minimum two compressors (with individual separate PCB) for above 14HP modules, microprocessor based Controller, top discharge type condensing unit(s), with R-410-A Refrigerant or equivalent, vibration Isolators with suitable foundation etc. complete as required. To have better efficiency condenser fan shall be capable to operate at different speed with respect to load. The unit shall deliver the rated capacity and in confirmation as per IS 18728:2024 and CPWD Specifications and work even at 50°C ambient temperature without tripping. The system shall be able to deliver 100% of the rated capacity upto 39 Degree Celcius. The unit shall be suitable to work on 400V +/- 10%, 3 Phase, 50Hz AC power supply and BMS compatible. The unit shall be filled with first charge of the refrigerant and ready for use as required. The condenser should be coated with a hydrophilic film to prevent water accumulation on the surface of the heat exchanger, enhance water dispersion, and reduce the risk of degradation, thereby improving overall performance and durability. The Indian Seasonal Energy Efficiency Ratio (ISEER) of the unit shall be as per Energy Conservation and Sustainable Building Code (ECSBC) 2024 as below and complete as per CPWD specification, connections, inter connections etc. as required. (For capacity <40 kW ISEER 7.4, Capacity > 40 and <70 ISEER 7.5, Capacity > 70 ISEER 7.6 for Super ECSBC Building) For Cooling or Heating or Both				

S NO	DSR E&M-2025/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
87	7.3.3	14 HP to 22 HP	per HP	180.00		-
	7.8	VRF INDOOR UNITS: Supply, Installation, Testing and Commissioning of following minimum capacity High wall type Indoor unit equipped with and comfort washable synthetic media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V ± 10%, 50 Hz, single phase AC supply, complete as required. The Indoor units must shut down upon receiving a signal from the BMS System/Fire Signals. The system shall be capable to adjust air flow as per room requirement automatically. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature. (Make will be same as of Outdoor)				-
88	7.8.4	1.2 TR	Nos	9.00		-
89	7.8.5	1.6 TR	Nos	1.00		-
90	7.8.6	2.0 TR	Nos	1.00		-
	7.6	Supply, Installation, Testing and Commissioning of following minimum capacity Single way wall/corner VRF/VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration Isolation, Corded remote control etc., suitable for operation on single phase 230 V ± 10%, 50Hz AC supply, complete, as required. The Indoor units must shut down upon receiving a signal from the BMS System/Fire Signals. The system shall be capable to adjust air flow as per room requirement automatically. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature. (Make will be same as of Outdoor)				-
91	7.6.5	1.6 TR	Nos	6.00		-
92	7.6.6	2.0 TR	Nos	12.00		-
	7.4	INDOOR UNIT Supply, Installation, Testing and Commissioning of following minimum capacity 4 way Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration Isolation, Corded remote control etc., suitable for operation on single phase 230 V ± 10%, 50Hz AC supply, complete, as required. The Indoor units must shut down upon receiving a signal from the BMS System/Fire Signals. The system shall be capable to adjust air flow as per room requirement in auto mode. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature. (Make will be same as of Outdoor)				-
93	7.4.1	0.8 TR	Nos	4.00		-
94	7.4.2	1.0 TR	Nos	1.00		-
95	7.4.3	1.2 TR	Nos	4.00		-
96	7.4.4	1.6 TR	Nos	3.00		-
97	7.4.5	2.0 TR	Nos	6.00		-
98	7.4.6	2.4 TR	Nos	1.00		-
99	7.4.7	2.6 TR	Nos	21.00		-
100	7.4.8	3.6 TR	Nos	9.00		-
101	7.4.9	4.1 TR	Nos	6.00		-
102	7.4.10	4.6 TR	Nos	6.00		-
	7.13	Supply, Installation, Testing and Commissioning of Y/T/Multi Joints. Joints shall be of same Original Equipment Manufacturer (OEM) make as of ODU's and IDU's				-
103	7.13.1	Indoor Units	Nos	90.00		-
104	7.13.2	Outdoor Multi Joint	Nos	15.00		-
	7.14	Supply, Installation, testing and commissioning including vaccumization and Nitrogen testing of following nominal sizes of soft/hard drawn copper refrigerant piping for VRF/VRF system, complete with fittings, with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastomeric nitrile rubber tubular sleeves sections of 19 mm thick insulation as given below for Suction and Liquid lines, all accessories as per specifications etc. as required:				-
105	7.14.1	6.4 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	Metre	450.00		-
106	7.14.2	9.5 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	Metre	900.00		-
107	7.14.3	12.7 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	Metre	450.00		-
108	7.14.4	15.86 mm dia (OD) (Soft drawn) with tube thickness 1.2 mm	Metre	900.00		-
109	7.14.5	19 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	Metre	150.00		-
110	7.14.6	22.2 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	Metre	150.00		-
111	7.14.7	25.4 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	Metre	100.00		-
112	7.14.8	28.58 mm dia (OD) (Hard drawn) with tube thickness 1.2 mm	Metre	100.00		-
113	7.14.9	31.8 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm	Metre	75.00		-
114	7.14.10	34.9 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm	Metre	75.00		-
115	7.14.11	38.1 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm	Metre	25.00		-
116	7.14.12	41.27 mm dia (OD) (Hard drawn) with tube thickness 1.62 mm	Metre	25.00		-
	MR	Providing and fixing of uPVC/cPVC/PVC drain pipe				-
117		32 mm	Metre	900.00		-
118		25 mm	Metre	450.00		-
119	MR	Supplying, receiving, storing, laying, effecting proper connections, testing and commissioning of the following sizes of 1.1 KV grade PVC insulated copper conductor unarmoured stranded control cable complete as required.				-
120		2C x 1.5 mm² Cu (Communication cable from ODU to IDU for VRF units)	Metre	1,350.00		-
	30.12.2	Supplying, installation, balancing and commissioning of fabricated at site GSS sheet metal rectangular/round ducting complete with neoprene rubber gaskets, elbows, splitter dampers, vanes, hangers, supports, bends, transitions, reducers, end caps, collars etc as required complete in all respect in confirmation with IS : 655 and approved drawings and specifications of following sheet thickness complete as required.				-
121	30.12.2.1	Thickness 0.63 mm sheet	Sqmt	100.00		-
122	20.12.2.2	Thickness 0.80 mm sheet	Sqmt	100.00		-
	30.19	Supplying, Fixing, installation, testing and commissioning of thermal insulated flexible duct of following sizes duly supported at regular interval as per site requirement etc. in confirmation to SMACNA/IS and as per specifications complete etc. as required.				-
123	30.19.1	200 mm dia	Metre	200.00		-
	MR	Supply, Installation, Testing & Commissioning of Silent type circular /rectangular inline fans for exhaust air complete with sheet metal casing, 25mm thick acoustic insulation, direct driven centrifugal fan, motor with proper protection and inspection door. Fan shall be suitable for operation on 220+6 % volts, 50 Hz, 1 phase AC power supply. Flanges to be provided on both sides to facilitate duct connections. Fan shall be installed as shown in the drawings and will be of following characteristics: All single phase inline fans shall be provided with factory fitted speed regulators. All Fans Should be complete with Plug Top & necessary power cable. Fans shall have low noise level in rage of 35-40dBA @3m and shall be suitable for indoor installations.				-
124		200 CFM S P of 13-14 for Toilet	Nos.	3.00		-
125		500 CFM S P of 13-14 for Pantry/ Common Toilets	Nos.	10.00		-
	MR	Supply, installation, testing, and commissioning of a low-flow Treated Fresh Air (TFA) unit designed for approximately 1 ACH per floor, maintaining a slight positive pressure of 5 Pa inside the building to prevent ingress of humid air. The TFA unit shall include the following filtration and conditioning stages: MERV 8 Prefilter for primary filtration. Electronic Air Cleaner (MERV 14 efficiency) for fine particle control with UL 2998 Zero Ozone as part Component . Along with Plasma Air Ionizer to improve Indoor air quality by using Bi-polar Ionization technology, producing equal amounts of positive and negative oxygen ions. The system kills microorganism and pathogens, remove Odour, and VOC and reduce dust particle /particulate matter / PM2.5 /PM 10. The product should UL / Intertek listed. The product has minimal or negligible pressure drop & low power consumption. The life of the Tube should be 17,600* hours. The power consumption of 3000 CFM units should not exceed 8 watts. The power consumption of 5000 CFM units should not exceed 16 watts. The power consumption of 10000 CFM units should not exceed 50 watts. The unit shall be installed inside on Supply Duct utilizing a contractor-supply mounting bracket. Power to the ionization unit should be interlocked with the system fan operation. A five-position ion level control knob shall be their to vary the ion output between 50% and 100%. Tube-Based Model Should be Underwriters Laboratories Inc. Standards UL867and UL1995. Classified as plenum rated per UL 2043. Technology should have the following certificates Product should have UL 867 and UL 2998 certification (for zero ozone emission). The OEM shall have Efficacy test report on COVID from any Internationally/Nationally recognised Laboratory. The technology shall also have UL 2043 for Fire and Smoke safety certificate , ISO 16000 for safety against any Organic Byproduct and CSA C22.2#187 , CARB certification.				-
126		3000 CFM	Nos.	2.00		-
	MR	Supply, installation, testing, and commissioning of standalone desiccant-based dehumidifiers suitable to maintain indoor relative humidity at 50 ±5%, operating continuously to achieve 2–3 Air Changes per Hour (ACH) for each floor. Each unit shall be capable of delivering 600–700 CFM treated air with RH control and shall include the following components: Desiccant rotor with reactivation heater. Filter section with MERV 14 Electronic Air Cleaner (EAC) followed by activated carbon pad. Housing with thermal insulation and corrosion protection coating.				-

S NO	DSR E&M-2025/MR	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
127		Dehumidification System	Nos.	10.00		-
		TOTAL				-

SCHEDULE OF QUANTITIES FIRE FIGHTING AND FIRE ALARM SYSTEM						
S No	DSR (E&M) 2025/MR	Description of Items	UNIT	QUANTITY	RATE	AMOUNT (Rs.)
1	28.2	Supplying, installation, testing and commissioning of micro processor based intelligent addressable main fire alarm panel, central processing unit with the following loop modules and capable of supporting not less than 240 devices (including detectors) and minimum 120 detectors per loop and loop length up to 2 km, network communication card, minimum 320 character graphics/ LCD display with keypad and minimum 4000 events history log in the non volatile memory (EPROM), power supply unit (230 ± 5% V, 50 hz), 48 hrs back-up with 24 volt sealed maintenance free batteries with automatic charger. The panel shall have facility to connect printer to printout log and facility to have seamless integration with analog/digital voice evacuation system (which is part of the schedule of work under SH: PA System) and shall be complete with all accessories . The panel shall be compatible for IBMS system with open protocol BACnet/ Modbus over IP complete as per specifications				
	28.2.1.2	Two Loop Panel.	Each	1.00		-
2	28.2.4	Supplying, installation, testing & commissioning of intelligent analog addressable photothermal detector with in-built isolator complete with mounting base complete as required.	Each	364.00		-
3	28.2.5	Supplying, installation, testing & commissioning of response indicator on surface/recessed MS Box having two LED, metallic cover complete with all connections etc as required.	Each	182.00		-
4	28.2.7	Supplying, installation, testing & commissioning of fault isolator complete with base as required.	Each	30.00		-
5	28.2.9	Supplying, installation, testing & commissioning of intelligent addressable thermal detector with rate of rise cum fixed temperature thermistor having in-built isolator complete with base as required.	Each	6.00		-
6	28.2.10	Supplying, installation, testing & commissioning of addressable fire control module complete as required.	Each	1.00		-
7	28.2.11	Supplying, installation, testing & commissioning of addressable phone control module complete as required.	Each	1.00		-
8	28.2.14	Supplying, installation, testing & commissioning of addressable manual call point complete as required.	Each	12.00		-
9	28.2.15	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required.	Each	8.00		-
10	28.2.13	Supplying, installation, testing and commissioning of addressable duct detector including suitable photo detector complete with base as required	Each	2.00		-
11	28.3.1	Supplying, installation, testing & commissioning of 6 zone, voice alarm controller with USB, MP3 player (including 6 zone button paging station) with seamless integration facility with main fire alarm panel for voice evacuation complete as required.	Each	1.00		-
12	28.3.2	Supplying, installation, testing & commissioning of 1.5/3/6W ceiling speaker complete as required.	Each	105.00		-
13	28.3.3	Supplying, installation, testing & commissioning of 1.5/3/6W metal box ceiling/wall speakers complete as required.	Each	1.00		-
14	28.3.7	Supplying, installation, testing and commissioning of digital audio amplifier 75 watt, 25V rms operating at 240 Volt AC Supply complete as required	Each	4.00		-
15	28.3.9	Supplying, installation, testing & commissioning of Voice command keypad 6 zone, with microphone assembly complete as required.	Each	1.00		-
16	28.5.2	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS/HFFR outer sheath complete as required.	Each	3,700.00		-
17	28.5.4	Supplying and fixing 25 mm dia MS flexible pipe with PVC coating along with all ancillaries and accessories like coupler etc. as required.	Metre	1,260.00		-
		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required				
18	28.5.3.1	Speaker cable Single pair, 2-core, 1.5 sqmm	Mtr.	1,260.00		-
	27.7	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/ IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required :				
19	27.7.1	25 mm. dia	Mtr.	200.00		-
20	27.7.2	32 mm. dia	Mtr.	50.00		-
21	27.7.3	40 mm. dia	Mtr.	100.00		-
22	27.7.4	50 mm. dia	Mtr.	100.00		-
23	27.7.5	65 mm. dia	Mtr.	10.00		-
24	27.7.6	80 mm. dia	Mtr.	10.00		-
25	27.7.7	100 mm dia	Mtr.	10.00		-
26	27.7.8	150 mm dia	Mtr.	10.00		-
	27.21	Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories :				
27	27.21.1	Pendent Sprinkler	Each	448.00		-
28	27.21.2	Upright Sprinkler	Each	100.00		-
	27.25	Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes complete as required				
29	27.25.4	1500 mm	Set	448.00		-
30	27.29	Providing, installation, testing & commissioning of adjustable rosette plate for 15mm dia in white finish UL Listed or FM approved complete as required	Each	444.00		-

S No	DSR (E&M) 2025/MR	Description of Items	UNIT	QUANTITY	RATE	AMOUNT (Rs.)
31	MR	SAFETY SIGNAGE:Providing and fixing of photo luminiscent/visual markers signage made out of photo luminiscent, produced luminization with suitable colours combination (Glow in dark) with high intensity luminous properties covered with U/V statilized coating having following features complete as required. (a) Thickness of aluminium/ACP sheet 2.00 mm ±10% (b) Service temperature - 40 C to 120 C (c) Suitable for indoor surface, glow visibility for more than 8 hrs in total darkness. One sided signage written in English and also in regional Language, if required, for the below dimension Fire Safety Signages.				
		Signage printed with the above stated specification for (i) "NO SMOKING" with board size 4" x 12" at suitable point, (ii) Floor indentification signage with board size 4"x12" at suitable point, (iii) Exit signage board size 4"x12" at suitable point, (iv) Colour signages for " EVACUATION MAP OF EACH FLOOR" with board size of 18"x24" at suitable point, (v)Lift Alert with board size 8"x12" at suitable point, (v)the signages of " FIRE ORDER" with the board size of 24"x36" at main exit/entry (Gr. Floor)	Sq. inch	3,456.00		-
32	MR	Supply,Installation,Testing & Commissioning of Carbon-di-oxide type fire extinguishers with capacity of 4.5 Kg.consisting of welded M.S.cylindrical body, internal discharge tube, discharge nozzle, suspension bracket, conforming to IS:15683, finished externally with red enamel paint and fixed to wall with brackets complete with internal charges.	Each	4.00		-
33	MR	Supply,Installation,Testing & Commissioning of Dry chemical powder type fire extinguishers of capacity of 6 Kg consisting of welded M.S cylindrical body, internal discharge tube, discharge nozzle,suspension bracket, conforming to IS:15683, finished externally with red enamel paint and fixed to wall with brackets complete with internal charges.	Each	4.00		-
34	MR	Supply,Installation,Testing & Commissioning of "ABC Powder Automatic (Nitrogen) Type Fire Extinguishers" of capacity 5 Kg shall confirm IS:15683 & IS:14609 with initial fill & all mounting accessories etc.complete.	Each	4.00		-
35	MR	Supply,Installation,Testing & Commissioning of Foam type fire extinguishers of capacity 9 Ltr. consisting of welded M.S. cylindrical body,discharge nozzle, suspension bracket, conforming to IS:15683 finished externally with red enamel paint and fixed to wall brackets complete with internal charges.	Each	4.00		-
36	MR	Supply,Installation,Testing & Commissioning of 5 Kg Ceiling Mounted Fire Extinguisher Clean Agent HFC, Zero ODP, Stored PressureType, Pressure Gauge, Gross Weight 7.7 Kg, empty Weight 2.7 Kg, Can Height 267MM, Diameter 230MM, Discharge Time less than 8 Secs, Auto discharge mechanism on temperature rise, applicable on Class A,B,C and electrically started Fire, Can Construction : Valve Construction : Forging & Machining, Internal Coating of Can : Epoxy Powder coating, Sheet metal thickness: 1.60 MM For Server & UPS Rooms	Each	4.00		-
		TOTAL				-

SCHEDULE OF QUANTITIES IT WORKS, EPBAX, CCTV WORKS AND AV SYSTEM						
S No	DSR E&M 2025/ MR	Item Description	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
	39.13	Supplying, Installation, Testing and commissioning of following CAT6A Patch Cord should have ETL/UL verification program certificate for compliance with ANSI/TIA-568.2-D etc. complete as required.				
1.00	39.13.1	Copper Patch Cords of length 1m (3ft)	Set	243.00		-
2.00	39.13.2	Copper Patch Cords of length 3m (10ft)	Set	243.00		-
3.00	MR	Supply, Installation, Testing and Commissioning of loaded Patch Panel 24 Port Cat 6A U/UTP ,The Cat-6A transmission performance is in compliance and Exceeds ANSI/TIA/EIA-568.2-D Standard. Supports 1000-Base-T. 90 Degree (Top Entry) or 180 Degree Punch Down Design for Convenient Network Terminations, Individual replaceable jack module panel design as applicable.UL Listed, Complaint to RoHS Directive 2011/65/EU and (EU) 2015/863 and ASTM B 117 Certified. OEM should have ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 or latest.All networking passive material (Fiber Cable, Copper Cables, Networking Racks and their connectivity components) should be from one OEM make only for Data as per given Specification etc. all complete	Nos	11.00		-
4.00	MR	Supply Installation Testing & Commissioning of 1 uPVC Cable Manager as per given specification etc.	Nos	11.00		-
5.00	MR	Supply, Installation, Testing & Commissioning of Mounting Hardware pack of 10pcs as per given specification etc. all complete	Nos	4.00		-
6.00	39.25	Supplying and fixing 42U Rack with 6 inch Castor wheels and front brake Floor Standing Rack with Main Frame Pillar of 1.6mm CRCA Sheet with removable side panels, L- Shape adjustable Vertical Mounting Rail of 2mm with 'U'Marking completely knocked-down condition (CKD) Shape, fitted with 4 number cooling fans, minimum 8nos two line cable entry/exit provision at top and bottom with rubber protection, Front door 5mm Toughened Glass with MS frame or MS perforated with lock, Rear MS vented or perforated door, Powder coated Color- RAL- 7035 or black, complied with UL & RoHS, 2 x 6 sockets 16A power distribution units, 3 numbers closed cable organizer, Hardware mounting screws packet of 20 x 1 number, etc. complete as required.	Nos	2.00		-
7.00	39.15	Supplying, Installation, Testing and commissioning of CAT6A Copper Information Outlet (IO) with face plate of color as per site requirement, should have ETL/UL verification program certificate for compliance with ANSI/TIA-568.2-D. All copper Cable and components should be from same OEM to maintain compatibility and interoperability etc. complete as required.	Nos	243.00		-
	39.18	Supplying, drawing, Testing and commissioning of Cat6A UTP 4 pair, 23 AWG solid copper cable in existing conduit/ on surface, U/FTP, LSZH, Non-Plenum, Horizontal (solid) Cable suitable for high speed data networking application supporting upto 10Gbps over a 100 meter channel. The 4 Unshielded Twisted Pairs (UTP) cable with color coded insulation for easy identification should have FLAME PROPERTIES i.e. Flammability Test - IEC 60332-1, Smoke Density - IEC 61034, LSZH standards compliance: ANSI/TIA-568 C.2, ISO/IEC 11801, IEEE 802.3an, RoHS. Delay Skew should be < 45NS. The outer Cable Diameter should be 7.5 + 2 mm. Cable should have been tested and verified by UL/ ETL etc. complete as required.				
8.00	39.18.1	1 Run of cable	Nos	100.00		-
9.00	39.18.2	2 Run of cable	Nos	100.00		-
10.00	39.18.3	3 Run of cable	Nos	2,440.00		-
11.00	39.18.4	4 Run of cable	Nos	100.00		-
12.00	39.16	Supplying, Installation, Testing and commissioning of RJ45 Connector for CAT 6/6A Cables. RJ45 modular plug supports 4 twisted pairs, 8 positions, 8 connectors. Housing: PC, UL94V-2, transparent color, Use for 24- 26 AWG stranded wires etc. complete as required.	Nos	243.00		-
13.00	39.20	Supplying and drawing following core Multi mode Fiber Optic Cable having corrugated steel armoring, lesser optimize 50/125 µm with HDPE jacket, LSZH (Low smoke Zero Halogen), Tight-buffered or loose tube, maximum attenuation: < 3.5 dB/km at 850 nm, < 1.5 dB/km at 1300 nm, bandwidth > 2000 MHz-km at 850 nm, > 500 MHz-km at 1300 nm compliance and certifications: ISO/IEC 11801 Ed. 2.2, ANSI/TIA-568-C.3, ITU-T G.651.1 RoHS compliant. Multi Mode Fiber shall be Central-loose tube filled with Thixotropic jelly, duly following Standards: ISO 11801, IEC 60793-1/60794-1-2, ITU-T-REC G.652D and Telecordia GR-20-core, High quality Electro Chromium Coated Corrugated Steel tape (ECCS) and HDPE- Sheath, Operating ambient Temperature should be – 5 0C to +50 0C and Storage Temperature should be – 5 0C to +50 0C, Maximum Attenuation ± 3.5 dB/km at Operational Wavelength 850 nm and ± 1.5 dB / km at Operational Wavelength 1300 nm . type of fiber should be 50/125 / G.652D & Refractive Index should be 1.483/1.478, The value for Mode-field, Cladding Diameter 50 ± 2.5 µm and 125 ± 1µm correspondingly i/c splicing & marking etc complete as required.				
	39.20.1	6 Core Multi Mode Optical Fiber Cable	meter	100.00		-
14.00	39.4	Supplying, installation, Testing and commissioning of following capacity 24 port Layer 3 Network Switch having features and specifications etc. as mentioned here under: At least 20 X RJ-45 Gigabit Ethernet Ports and additional 4 combo 10/100/1000 base-T/SFP Ports with additional 4 SFP+ ports non-blocking architecture by having Switching capacity of min. 128Gbps and packet forwarding rate of 95Mpps or higher, 16K MAC table. Console Port, USB port, Internal AC Power supply with operating temperature of 0 to +50 0C. Stacking port with stacking support of minimum 8 units per stack. 48K Mac address, 9K or more Jumbo frame, ERPS with enabling ring to converge in less than 50 ms from node or link failure, Static routing, Static, 6to4, ISATAP and GRE, IPv6 Neighbor Discovery (ND), BGP, ISIS, MPLS, VRRP v2, OSPFv2/v3, PBR, Route Redistribution, RIPv1/v2/ing, IP Helper all L3 Protocols should support from day 1 for both IPv6 and IPv4, 802.1x, Port security, Radius C TACACS+ authentication C accounting, DAD, DAI, DoS attack prevention, SSH, Guest VLAN, IP Access List, MAC Access List. Multicast: VLAN, PIM-SM, PIMDM, PIM- SDM, PIM-SMv6, DVMRP v3 and MSDP, IGMP C MLD Snooping, Flow mirroring, IGMP C MLD Snooping Querier, Per-VLAN IGMP C MLD Snooping. SNMP, Dual configurations, Multiple images, RMON, LLDP/LLDP-MED, sFlow, DHCP/BOOTP Client, IPv4/IPv6, Syslog server, Debug command, 802.3ah Ethernet Link OAM, 802.1ag Connectivity Fault, Y.1731 OAM, 802.1Qbb Priority- based Flow Control (PFC), Dying Gasp, Cable Diagnostics , 6 kV surge protection on all Gigabit Ethernet ports and on all GE RJ-45 access ports. Certifications: UL, CE, FCC, RoHS, MTCTE, OEM/Product must be on Trusted Telecom Portal of Department of Telecommunication, Government of India etc. complete as required.	Nos	1.00		-

S No	DSR E&M 2025/ MR	Item Description	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
	39.3	Supplying, installation, Testing and commissioning of following capacity 24 port Layer 2 indoor Network Switch having features and specifications etc. as mentioned here under: At least 24 X RJ-45 Gigabit Ethernet Ports and additional 2 X 10G Base -T with 4 X SFP Ports with non-blocking architecture by having Switching capacity of min. 168Gbps and packet forwarding rate of 125Mpps or higher, 16K MAC table. Console Port, USB port, Stacking support of min. 8 units per stack. Internal dual AC Power supply, STP, RSTP, MSTP, BPDU Filter, BPDU Restriction, Min. 9K Jumbo Frame, LBD, IGMP Snooping V1/V2/V3, MLD Snooping V1/V2. IGMP /MLD Groups 1K or more, IPv4/IPv6 Loopback Interface, 16 L3 IP Interface, Ipv6 ND, VRRPv3, UDP Helper, ECMP. VLAN: 802.1Q, Port based, Q-in-Q, Multicast VLAN, Protocol VLAN, VLAN Trunking, DHCP Snooping, Server, server Screening. RADIUS , TACACS+ Authentication, QoS: 802.1P, 8 queues per port, QoS : WRR, Strict+WRR, WRED, 802.1p. ACL: MAC based, IPv4C IPv6, TCP/UDP Port number, time based ACL, TFTP Client, SNMP V1, v2c, v3, SNMP traps, RMON, DHCP server, relay, client, LLDP, LLDP-MED, OAM, Dying Gasp, 802.3ah, sflow, RIP, OSPF v2/v3, policy based route, SSL, SSH. 6 kV surge protection on all Gigabit Ethernet ports and on all GE RJ-45 access ports. Certifications: UL, CE, FCC, RoHS, MTCTE, OEM/Product must be on Trusted Telecom Portal of Department of Telecommunication, Government of India etc. complete as required.				
15.00	39.3.1	24 port PoE Layer 2 Network Switch with PoE Support of 370W or higher with each copper port supporting 802.3at PoE+ min.	Nos	2.00		-
16.00	39.3.2	24 port Layer 2 Non-PoE Network Switch	Nos	3.00		-
	39.6	Supplying, Installation, Testing and commissioning of small form-Pluggable (SFP) for Network Switches. Must be hot Pluggable, RoHS Complaint, etc. complete as required.				
17.00	39.6.2	1G Copper SFP	Nos	10.00		-
18.00	39.6.3	10 G SFP + Single Mode/Multi Mode	Nos	2.00		-
19.00	MR	Supply, Installation, Testing & Commissioning of EPABX with 2 PRI and 100 analog extension expandable till 200 extensions capable of being PCM/TDM with voice mail, auto apending , call forwarding etc facilities with operator console complete in all respect as per the directions of engineer in charge and all complete with license.	Nos	1.00		-
20.00	MR	SITC of Analog type Master /KTS Phones complete with handset having features like digital display, redial, contact memory, multiple direct/landline support (min. 6 keys), call hold /transfer & pause, electronic volume control, handsfree speaker phone etc. including telephone/power cords etc. as required.	Nos	2.00		-
21.00	38.4	Supplying, Installation, Testing & Commissioning of Analog phones having standard feautres like 16 digit LCD display, 2 way speaker, caller ID and number storage facility etc. complete as required.	Nos	78.00		-
22.00	38.5	Supplying and drawing 20 Pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC Conduit etc. complete as required.	Metre	200.00		-
	40.1	Supplying Installation Testing and Commissioning of 2MP IP IR Dome Camera having following specifications, type of lens and features etc : 1) Signal System: PAL/NTSC, Signal to Noise Ratio: >50 dB, Camera should display Camera title, Date & Time in live & recorded video 2) Image Sensor: 1/2.8" or better progressive Scan CMOS to get color image even at night condition(Minimum Illumination: 0.006 Lux@ F1.4, AGC ON, 0 lux with IR or better) True Day & Night High Performance Mechanical IR cut filter with auto switch, Integrated IR Source (Auto, Manual)- Inbuilt IR LED's with effective distance upto 50 meter or better and 30 meter for colour view in night, Imaging: 1/3s to 1/30000s electronic shutter support, Auto Gain Control , White Balance- Auto, Back Light Compensation, Multi zone Privacy Masking, HLC, Digital Watermarking. 3) Compression (Minimum):-Video:- H.265 or better, H.264H, H.264, Audio:- G.711U/A, G.711Mu, G.726, AAC, G.723 4) Wide Dynamic Range:- WDR (120db or more) 5) Digital Noise Reduction:- DNR (3D) On/Off 6) Video Streaming & Frame Rates :- Triple streaming, configurable (Main stream: 2MP (1920 ×1080)@25/30 fps,Sub streams minimum: 720P@25/30 fps). 7) Image Setting: Rotate Mode, saturation, brightness, contrast, sharpness adjustable through client software or web browser, Edge Analytics: Tripwire, Intrusion, Motion Detection 8) Cyber Security: AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot. 9) Onboard Storage: Camera should support built-in micro SD/SDHC/SDXC Card slot upto 512 GB. It should be supplied with minimum 128GB memory Card 10) Recording Management: Format SD, overwrite, storage management, video to NAS device 11) Alarm Trigger : Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection 12) Network Protocol: SFTP, IPv6, IPv4, DNS,RTCP, NTP, RTP, HTTP, HTTPS.				
23.00	40.1.1	2MP (@ 25/30fps@1080P (1920×1080)) IP IR Dome Camera with 2.8/ 3.6mm fixed lens	Nos.	32.00		-

S No	DSR E&M 2025/ MR	Item Description	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
24.00	40.11	Supplying Installation Testing and Commissioning of following Channel Network Video Recorder (NVR) with camera licenses to record for all channels having specifications and features etc as mentioned below: 1) Network Video Recorder Embedded/ Installed OS (Linux) along with Camera Licenses to record per NVR and to provide a live view, storage and simultaneously Multi-channel playback of all IP camera or more and must be ONVIF with minimum support of 384 Mbps incoming Bandwidth. 2) NVR should support video compressions : H.265 or better, H.264, MJPEG. 3) Must support 1 channel RCA Input, 2 channel RCA Output for Two-way Talk with G.711U/A, G.711u, PCM, G726 audio compressions. 4) Intelligent auto power on when power resumes after power outage. 5) Storage: It should support minimum 8 SATA Slots with 20TB capacity/ Slot and RAID support of RAID 0/1/5/6/10. 6) Connectivity Interface : 2 Nos. x 10/100/1000 Mbps Ethernet Ports, 1x RS485, 1x RS232, 1x eSATA Port 7) Backup Interface : Its should have 4 Nosx USB port (2x USB3.0, 2xUSB2.0) 8) Video Output Ports: 2x HDMI and 2 VGA 9) Alarm Ports: It should have 16/8 Ch In/ Out ports to connect various type of external sensors and output devices like hooter/ Siren etc. 10) Email & SMS Alert options: Option for SMS/ Email Alerts to minimum 5 designated mobile number for power failure, HDD failure, vandalism, tempring, network disconnection and panic 11) Web & Mobile Application: Web, Mobile app (For iPhone, iPad, Android Phone) for alerts and viewing. 12) Protocols: HTTP, HTTPS, TCP/IP, IPv4/IPv6, UDP, DHCP, DNS, SMTP, UPnP, IP Filter, PPPoE, FTP, DDNS, Alarm Server, IP Search, Multicast, Auto Registration, ONVIF (Profile T, Profile S, Profile G), CGI, SDK and OEM Cloud for remote monitoring without any public IP need. 13) Standards: CE, FCC, RoHS, BIS Certified 14) Power Supply : Should support AC100-240V, 50/60Hz Power supply. 15) Operating Condition: -5°C to 50°C, humidity 90% (max) (non-condensing) 16) The VMS application shall support all the features & functionalities of the offered				
	40.11.1	32 Channel Network Video Recorder (NVR) having display split :- Main screen: 1/4/8/9/16/25/32(36), 2nd screen: 1/4/8/9/16	Nos.	1.00		-
25	40.12	Supplying, Installation, Testing and Commissioning following capacity Serveillance grade Hard Disk with upto 256MB/s Transfer Rate, 256 MB Cache, 7200 RPM Disk Speed, 3.5 inch form factor, SATA Interface, BSMI, ICES-003/NNB-003, CE, FCC, KC, Maghreb, RCM, UKCA, VCCI, CB-Scheme, TUV, UL Certifications.				
	40.12.4	10TB (Terabytes)	Nos.	2.00		-
26	42.4	Supplying, Installation, Testing and Commissioning of following size LED display (LED monitor) industrial grade with 3840x2160 resolution or better, USB playback, bluetooth and miracast connectivity, 4X HDMI 2.0, DP 1.2, HDR 10/10+, brightness: 500-nits or better, Video wall mode should be available, contrast ratio: 1200:1, OPS slot, viewing angle (H/V): 170°/ 170°, response time less than 12ms, Display control shall be on monitor screen and programmable with remote (remote shall be supplied with system), Key Board, Optical Mouse, etc. as required.				
	42.4.3	55 inch or larger	Nos.	1.00		-
27	MR	SITC of 98" Professional Ultra HD Display Panel, 4K UHD (3840x2160) Resolution, Brightness 600 Nits, Viewing angle (horizontal / vertical): 178 / 178 degree, Display Colours: 1.07 Billion, Panel technology: IPS / Direct LED, Contrast ratio (typical) 1200:1, Connectivity: Video Input: 3 HDMI 2.0, 2 USB 2.0, DVI-I, Audio In, Audio Out, COnrol: RS232, Ethernet, 2x10W Built-in speakers, System version Andriod 11, 4GB RAM/ 32GB ROM, Mali G31 MP2 GPU etc all complete	Nos	1.00		-
28	42.4	Supplying, Installation, Testing and Commissioning of following size LED display (LED monitor) industrial grade with 3840x2160 resolution or better, USB playback, bluetooth and miracast connectivity, 4X HDMI 2.0, DP 1.2, HDR 10/10+, brightness: 500-nits or better, Video wall mode should be available, contrast ratio: 1200:1, OPS slot, viewing angle (H/V): 170°/ 170°, response time less than 12ms, Display control shall be on monitor screen and programmable with remote (remote shall be supplied with system), Key Board, Optical Mouse, etc. as required.				
	42.4.3	55 inch or larger	Nos	4.00		-
29	MR	SITC of Fixed Wall Mount, capable of holding up to 75 kg and supports 37" to 100" displays, VESA Compliant etc all complete	Nos	4.00		-
30	MR	SITC of Cable Cubby with flip top, cover and 6 Pass Through Holes for multi-format cables, 2 Universal Power Socket , 1 HDMI, 1 USB-C for Data Transfer, made of aluminium etc all complete etc all complete	Nos	3.00		-
31	MR	SITC of Network PTZ Conference Camera, 12x optical zoom and 60° horizontal FoV, 1/2.8" low-noise CMOS Sensor, Sensor Scanning Mode: Progressive, Horizontal Rotation Range: ±170°, Vertical Rotation Range: -30° to +90°, Image rotation for ceiling mounting, White Balance: Auto, indoor, outdoor, one-push, manual, specified color temperature, IP Stream Resolutions: H.264 @ 360p, 270p or 180p, a single network cable for video, power and control data transport, HDMI 2.0 etc all complete	Nos	1.00		-
32	MR	SITC of Universal Switcher with HDMI and USB-C connectivity, 2 HDMI Inputs, 2 USB-C connectivity (4K Video, Audio, Data, Power charge), 2 HDMI Outputs, 4 USB-A 3.0 Connection (for USB Devices), 2 USB-B 3.0 Connection (for PC hosts), USB host switching, Analog audio de-embedding,etc all complete	Nos	2.00		-
33	MR	SITC of HDMI 2.0 Matrix Switcher, 4HDMI Inputs, 3 Outputs, with breakout Audio, Occupancy Sensor input and various control features, Supports HDMI 4K signal formats (4K UHD @60Hz RGB 4:4:4, up to 18 Gbps), HDMI 2.0, HDMI 1.x, DVI Complaint, HDCP 1.x, HDCP 2.2 support, GPIO control ports, Device control via Ethernet (TCP/IP) etc all complete	Nos	1.00		-
34	MR	SITC of HDMI 2.0 Extender (Set of TX & RX) , Supports HDMI 4K signal formats (4K UHD @60Hz RGB 4:4:4, up to 18 Gbps), Extends HDMI 2.0, audio, Ethernet, RS-232 up to 100m over one CATx cable, HDR and Low Latency Dolby Vision support, Bi-directional RS-232 extension (pass-through) etc all complete	Nos	3.00		-
35	MR	SITC of Digital Interactive Podium with 21inch Full HD (Electromagnetic + Capacitive) Interactive Display with Electromagnetic Pen, with Motorized Tilting of the Interactive Panel, with provision to install Gooseneck Microphone, Interactive panel, Keyboard Tray, Visualizer Tray and space to store AV equipment, Interactive display with full HD resolution of 1920x1080, Technology IPS LCD, Aspect ratio16:9, Brightness 250 cd/m2, Contrast ratio1000:1, Pen Type shall be Pressure-sensitive and cordless. Provision of i5 CPU with Windows OS . Provision of Wired and wireless presenation.	Nos	1.00		-

S No	DSR E&M 2025/ MR	Item Description	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
36	MR	SITC of Boundary Layer Microhone Cardioid, Supercardioid and Omnidirectional polar patterns Programmable, Silent membrane switch, TTL Logic LED input and TTL Logic switch ouput LED indicator, Cardioid: -27.5 dBV/Pa (42.2 mV) Supercardioid: -26.5 dBV/Pa (47.3 mV) Omnidirectional: -22.0 dBV/Pa (79.4 mV) Dynamic Range 1 kΩ load at 1 kHz: 94DB etc all complete	Nos	9.00		-
37	MR	SITC of Wireless System with Handheld Transmitter, Supercardioid Dynamic Microphone capsule , 24-bit digital audio, Extended 20 Hz to 20 kHz frequency range, 118 dB dynamic range, Digital predictive switching diversity, 44 MHz tuning bandwidth, 32 available channels per frequency band, Up to 10 compatible systems per 6MHz TV band; 12 systems per 8 MHz band, RF Carrier Frequency Range: 470–937.5 MHz, Working Range 100 m (328 ft), Network Interface, RF Power: 10 mW, Antenna Type: Integrated Single-Band Helical, Up to 8 hours from 2 AA batteries or rechargeable battery etc all complete	Nos	1.00		-
38	MR	SITC of Open Architecture Digital Signal Processor with 64-bit architecture. Audio Processing - 32-bit floating point. Mic/Line Inputs - 16 or more with +48VDC Phantom Power on each channel. Line Outputs -8 or more. GPIO ports for external control - 8x8 or more. AEC channels - 24 or more with 200ms tail length for Analog and Networked Microphones. Minimum 8x8 Dante channels and support for up to 128x128 Network audio channels via Dante /AES67 or similar protocol. SIP Softphone integration for Audio conferencing. USB port for AV USB Bridging for software or web-based conferencing applications emulating USB Audio (Speakerphone) and USB Video (Camera) driver. USB Audio Bit depth - minimum 24 bit, USB Channel - 16x16 or more, USB Sample rate - 48 kHz, A/D-D/A converters - 24 bit or better, Sample Rate - 48 kHz, Input frequency response - 20 Hz to 20 kHz or better, Input and Output dynamic range > 108 dB or better. Front Panel Control and Indicators with OLED Display.. etc all complete	Nos	1.00		-
39	MR	SITC of 6.5-inch, 2-Way Ceiling Speaker, Rated Power: 60W, Frequency Range: 65 Hz – 20 kHz, Sensitivity: 88 dB, Rated Coverage 135° conical DMT, Maximum continuous SPL 106 dB, Nominal impedance: 8 / 16 Ohm, Transformer taps: 60W / 30W / 15W at 100 / 70V, IP-34 Rated, Low-saturation and low-loss 70/100V transformers with 16Ω bypass, UL and CE Certified etc all complete	Nos	6.00		-
40	MR	Supply, Installation, Testing & Commissioning of dual-band 802.11a/b/g/n/ac/ax Indoor Wireless Access Point with Multi-Gigabit Ethernet backhaul, 4x4:4 on 5Ghz , 1x 2.5Gbps Ethernet,1x1Gbps ethernet PoH/UPoE/802.3at PoE support. Mounting bracket to be supplied along with the APs. AP should be TEC and NDCPP certified.5 years OEM advance hardware replacement warranty & 5 Year 24 x7 OEM Remote Technical Support .All types of Switches, transceivers, WIFI,WLC should be from the same OEM for better compatability,management and after sales support.For detailed specifications please refer tender document.	Nos	20.00		-
41	MR	Supply installation testing commissioning of Content Sharing-using app, Google Chrome web browser, Miracast® screen mirroring technology for latest Windows, Mac, Android and iOS mobile devices. Dual window support.Able to view minimum 2 x wirelessly shared sources, side by side on a single screen and should work on last in first out (LIFO) sequence for content sharing. Wireless Conferencing Feature. Able to access the soundbars, cameras, or speakerphones on PC / Laptop conferencing application wireless, via wireless presenter App, Dongle / Adapter supplied, for bring your own meeting experience. Able to upload minimum 5x image files Room Booking Integration with Microsoft Exchange Server (for Outlook® and Microsoft 365® software users), Google Calendar™, room scheduling software. Via I/O / RJ45 port for controlling room display based on room occupancy or vacancy. Network Security Active Directory® service authentication, 802.1X network access control, TLS, SSH, AES content encryption and HTTPS to ensure IT policies compliance. And need to be configured and shown during installation. 1x USB dongle/Adapter for content sharing via latest iOS, Android, Windows, Mac devices, without the need to download any app, no need to run any plugin or software.1 x Connect Endpoint to enables wireless presentation and conferencing , devices connection can be done via a single USB-C connection or through HDMI and USB connections 1 x HDMI Output, 1 x LAN port and 2 x USB port for peripherals connection. TCP/IP, UDP/IP, DHCP, SSL, SFTP (SSH File Transfer Protocol). Wi-Fi Able to create own Wi-Fi network for guest nework creation. OEM supplied stand for 1 x Dongle /Adapter HDCP 2.2. Compliant- Compliance: UL, CE, FCC, RoHS / WEEE. (Additional BIS to be shared if applicable). Power Supply- Included. Additional hardware can be used to meet the requirement.	Nos	1.00		-
40	MR	SITC of 4 Channel Class-D Amplifier, Power (per channels driven): 200 W at 8 Ω / 4 Ω / 100V / 70V, FlexAmp Technology, Frequency Response: 20 Hz – 20 kHz, Signal to Noise > 103 dB, Input impedance >10k, balanced or unbalanced, User-configurable operating modes, etc all complete	Nos	1.00		-
41	MR	SITC of 10.2" Apple iPad LED-backlit Multi-Touch display with IPS technology with User Control Interface (UCI) Deployment etc all complete	Nos	1.00		-
42	MR	SITC of Apple docking and charging station with all required accessories etc all complete	Nos	1.00		-
43	39.1	Supplying, installation, Testing and commissioning of following capacity 8 port Layer 2 indoor Network Switch having features and specifications etc. as mentioned here under: Minimum 8 X RJ-45 Gigabit Ethernet Ports and additional 2 X 1G SFP Ports with non-blocking architecture by having Switching capacity of minimum 20Gbps and packet forwarding rate of 14Mpps or higher, 8K MAC table. Internal dual AC Power supply with operating temperature of -5 0C to +50 0C. Jumbo frame: 10KB or higher, IGMP Snooping, IGMP snooping querier and support for IGMP Snooping Fast Leave, Should create 250 or more MLD groups, MLD Snooping, Per VLAN MLD Snooping C MLD Snooping Fast Leave, STP, RSTP, MSTP, Loopback detection, Multicast filtering, VLAN Tagging, QOS: 8 Que per port, WRR, IPv4/IPv6 Interface : minimum 100 IPv4 static route entries and minimum 50 IPv6 static route entries, 700 Access Control entries, SSH CSSL for IPv4 and IPv6, 802.1x, ARP Spoofing, DHCP Snooping and server screening, IP+MAC+Port Binding, Per Port Bandwidth Control, 802.1X Authentication (Supports local/RADIUS database, Port-based Access Control and EAP, OTP, TLS, TTLS, PEAP Support) Cable Diagnostic feature, LLDP, LLDP-MED, SNTP/NTP, RMON, SNMP v1,v2c, v3 and SNMP Traps. Certifications: UL, CE, FCC, RoHS, MTCTE, OEM/Product must be on Trusted Telecom Portal of Department of Telecommunication, Government of India etc. complete as required.				

S No	DSR E&M 2025/ MR	Item Description	UNIT	QUANTITY	RATE	AMOUNT(Rs.)
	39.1.1	8 port PoE Layer 2 Network Switch with PoE Support of 130W or higher with each copper port supporting 802.3at PoE+	Nos	2.00		-
44	39.7	Supplying, Installation, Testing and commissioning of indoor Wireless Access Point for Low Density use having features and specifications etc. as mentioned here under - Dual-band Wi-Fi6 (802.11ax) 574Mbps (2.4GHz) + 1200Mbps (5GHz), Wi-Fi 6 Certified, 1xRJ45 console port, 1G LAN POE Port, factory reset, WPA/WPA2/WPA3™ Personal/Enterprise, WEP 64/128-bit, SSID broadcast disable, MAC address access control, Internal RADIUS server, SNMP, Customizable Captive Portal, Auto Channel, Works as Access Point, WDS, WDS with AP, Wireless Client, Web (HTTP), Secure Socket Layer (SSL), Traffic control, Support ATF/Fast Roaming/Band Steering, Supports enhanced security – WPA-PSK/WPA2-PSK/WPA3-PSK and RADIUS client, and Cipher negotiation, and MAC/ IP ACL for networks, Certifications: MTCTE, CE, FCC. Should also work as Standalone and must be Compatible with S/W & H/W Controller with additional features like - Real-Time Monitoring and Alerts, Rich Advanced Features, Centralized Device Management, Role-Based Administration, Real-Time Monitoring, VLAN and Access Control, Auto RF Management and Bandwidth Optimization, Multi-SSID and Captive Portal Authentication.OEM/Product must be on Trusted Telecom Portal of Department of Telecommunication, Government of India etc. complete as required.	Nos	1.00		-
45	MR	SITC of 2 Meter Premium High Speed HDMI 2.0b Flexy Cable, Bandwidth up to 18Gbps, Up to 4096x2160@60Hz at RGB 4:4:4 video resolution, High Dynamic Range (HDR10), Dolby Vision and Hybrid log-gamma (HLG) video etc all complete	Nos	8.00		-
46	MR	SITC of 15 Meter Active Copper HDMI Cable, Data Rate: Up to 18.2Gbps, Colour Depth: Up to 16 bits, Colour Formats: RGB 4:4:4 / Y'CBCR 4:2:2 / Y'CBCR 4:2:0, Consumer Electronic Control (CEC), Auto Lip-Sync Correction, Audio Return Channel (ARC), Enhanced Audio Return Channel (eARC), High Dynamic Range (HDR) etc all complete	Nos	2.00		-
47	MR	SITC of 2 Meter USB Full-Featured Type-C cable for USB 3.1 Gen2, 4 Lane Displayport Alt mode (4K60FPS Video and Audio), Supporting peripherals via USB 2.0 up to 480 Mbps (Mouse, Keyboard, Thumb Drive, Speakerphone and Webcam) etc all complete	Nos	6.00		-
48	MR	SITC of 15 Meter USB 3.1 Gen1 SuperSpeed Active Extension Cable TypeA/male to TypeA/female, Supports 4K Webcam, SSD storage, Native USB2/USB1 and USB3 extension, Plug and play compatible with PC, Mac, and Linux etc all complete	Nos	1.00		-
49	MR	SITC of 2 Conductor 16 AWG Speaker Cable, stranded Bare copper conductors, PVC/Nylon insulation, PVC jacket (as per actual) etc all complete	Meter	200.00		-
	39.18	Supplying, drawing, Testing and commissioning of Cat6A UTP 4 pair, 23 AWG solid copper cable in existing conduit/ on surface, U/FTP, LSZH, Non-Plenum, Horizontal (solid) Cable suitable for high speed data networking application supporting upto 10Gbps over a 100 meter channel. The 4 Unshielded Twisted Pairs (UTP) cable with color coded insulation for easy identification should have FLAME PROPERTIES i.e. Flammability Test - IEC 60332-1, Smoke Density - IEC 61034, LSZH standards compliance: ANSI/TIA-568 C.2, ISO/IEC 11801, IEEE 802.3an, RoHS. Delay Skew should be < 45NS. The outer Cable Diameter should be 7.5 + 2 mm. Cable should have been tested and verified by UL/ ETL etc. complete as required.				
50	39.18.1	1 Run of cable	Meter	305.00		-
51	MR	SITC of Various Cables, relay modules & Connectors etc all complete	Nos	4.00		-
52	39.23	Supplying and fixing of following size Wall Mount Rack having Fixed Structure with 0.8mm CRCA Sheet, completely knocked-down condition (CKD) Shape, Vertical Mounting Rail 1.6 mm with 'U'Marking, Minimum 2 cable entry/exit provision at Top and bottom with rubber protection, Front 5mm Toughened Glass with lock, wall mounting kit, Powder coated Color- RAL- 7035, complied with UL & RoHS, 2 x 6 sockets 16A power distribution units, 3 numbers closed cable organizer, Hardware mounting screws packet of 20 x 1 number, etc. complete as required.				
	39.23.3	15U Rack	Nos	1.00		-
		TOTAL				-