



**Ministry of Jal Shakti
(A Government of India undertaking)**

**1st Floor, JP Krishna Building, Pallimukku, Pettah
Trivandrum - 695024**

TENDER DOCUMENT FOR

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF
CENTRALISED MEDICAL GAS SYSTEM AT DISTRICT HOSPITAL
CHENGANNUR**

WAP/INFRA/KERALA/2024/CMGP/494

Date: 02.12.2024

**Volume-I
TECHNICAL BID**

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NOTICE INVITING TENDER

NOTICE INVITING TENDER**WAP/INFRA/KERALA/2024/CMGP/494****Date: 02-12-2024**

WAPCOS Limited (A Govt. of India Undertaking), for and on behalf of Health and Family Welfare Department under Govt. of Kerala and funded by KIIFB invites Online Electronic Tenders on Item Rate mode from experienced and competent bidders, meeting prescribed qualifying criteria as mentioned in tender document.

1.	Name of Work:	:	Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur
2.	Location	:	Chengannur, Alappuzha
3.	Website for upload tender/ Corrigendum/ Addendum	:	www.wapcos.co.in https://www.etenders.kerala.gov.in https://eprocure.gov.in
4.	Estimated Cost of Work	:	Rs. 2,23,60,904/- + GST
5.	Tender submission fee	:	Rs. 7,500/- + GST = Rs. 8,850/- (Bidders shall remit the Tender Fee using the online payment options of eProcurement system only).
6.	Earnest Money Deposit	:	Rs. 1,00,000/- (Refundable) (Bidders shall remit the Bid Security using the online payment options of the eProcurement system only).
7.	Site Visit	:	The contractor must visit the project site for his satisfaction before submitting the bid.
8.	Pre Bid Meeting	:	No pre-bid meeting will be held. However, the queries can be emailed to wapcoscochin@gmail.com / kochi@wapcos.co.in on or before 06-12-2024 05:00 pm.
9.	Date of start of work	:	Date of signing of agreement or date of handing over of site whichever is later
10.	Project Completion Period	:	12 Months from the date of Award or till Principal Contractor finishes their work whichever is later
11.	Performance Guarantee	:	5.0% of Tendered value
12.	Security Deposit	:	2.5% of Tendered value
13.	Defect Liability Period	:	3 Years for Electrical and Mechanical Works
14.	Validity of Bid/Tender	:	90 Days
15.	Last date & time of Procurement / download of tender Document	:	23.12.2024 up to 11:00 hours The bidder must officially procure/download the tender documents from the ETS portal of WAPCOS and E tenders Kerala before the last date and time of sale of tender document in order to bid.
16.	Offline Submission of Technical document as detail in Tender	:	24.12.2024 up to 14:00 hours in the office of The Regional Manager, 1 st Floor, JP Krishna Building, Pallimukku, Pettah Trivandrum-695024
17.	Last date & time for online submission of Technical & Financial Bid.	:	23.12.2024 up to 13:00 hours
18.	Online opening of Technical Bid	:	24.12.2024 at 15:00 hours

19.	Online opening of Financial Bid	:	After Evaluation of Technical bid
20.	WAPCOS Contact information	:	WAPCOS Limited. 1 st Floor, JP Krishna Building, Pallimukku, Pettah Trivandrum-695024 Email: kochi@wapcos.co.in & wapcoscochin@gmail.com
21.	Signing of Contract	:	The Successful tenderer will have to execute an agreement in stamp paper worth 0.1% of contract agreed amount subjected to maximum of Rs.1,00,000/- in prescribed form.
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.			

The tender document has to be downloaded from above specified websites. Bidders are advised to visit above specified websites regularly for updates /Amendments/ Corrigendum, if any. The Updates/Corrigendum/Addendum shall be followed up to submission of tender and it will be the part of tender. The full details about the work, specifications, Drawings, terms and conditions shall be available in the Tender Document. The tender document has to be submitted online on websites [https:// www.etenders.kerala.gov.in](https://www.etenders.kerala.gov.in).

The purpose of this NIT is to provide Interested Bidders 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.

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.

IMPORTANT POINTS

- 1.1 The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship Company/Co-operative Society/ Registered Contractors from State Government or Central Government/ Partnership Company/ Limited company private or public or corporation.
- 1.2 All Bidders are hereby cautioned that Bids containing any deviation or reservation as described in Clauses of "Instructions to Bidders" shall be considered as non-responsive and shall be summarily rejected.
- 1.3 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.
- 1.4 No reimbursement of cost of any type or on any account will be paid to persons or entities submitting their Bid.

- 1.5 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.
- 1.6 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.
- 1.7 The contractor is bound to follow relevant Kerala State Government orders, circulars, Kerala PWD Manuals etc. prevailing at the time of contract connected to the execution of the work under the contract even through specific reference to these are not provided elsewhere in the contract conditions.

For and on behalf of WAPCOS LIMITED

Regional Manager

SECTION– I

INSTRUCTIONS TO BIDDER

SECTION- I

INSTRUCTIONS TO BIDDER

1.0 SPECIAL INSTRUCTIONS TO BIDDERS FOR E-TENDERING**1.1 GENERAL**

The Special Instructions (for e-Tendering) supplement 'Instruction to Bidders', as given in these Tender Documents. Submission of Online Bids is mandatory for this Tender.

E-Tendering is a new methodology for conducting Public Procurement in a transparent and secured manner. For conducting electronic tendering, bidders shall use the portal <https://etenders.kerala.gov.in> benefits to Suppliers are outlined on the Home-page of the portal.

Single Stage Two Envelope system, one Technical Bid (Volume-I of tender document) and financial bid (volume-III of tender document)

1.2 E-TENDERING SYSTEM (GOVT OF KERALA) – E PROCUREMENT SYSTEM PROCEDURE

e-Tendering System by Govt of Kerala also known as E Procurement System. This is an e-Submission Tender System of Kerala which enables the Tenderers to download the Tender Schedule free of cost and then submit the bids online through this portal.

You can visit the site "[https:// etenders.kerala.gov.in](https://etenders.kerala.gov.in)" and check for latest tenders and corrigendum. Various options and services available from this website includes, MIS Reports, Tenders by Location, Tenders by organization, Tenders by Classification, Tenders in Archive, Tenders Status, Cancelled Tenders, Downloads, Announcements, Awards and Site compatibility.

1.3 SERVICES AND OPTIONS AVAILABLE AT E-TENDERING SYSTEM (GOVT OF KERALA) WEBSITE

In order to check **Tenders in Archive**, you need to enter Tender ID and keyword. Below to that page you can see list shows all the Expired tenders. To check "**Tender Status**" you need to enter Tender ID, form of contact, tender type, tender status, keyword, tender category, product category etc.

You can also check "**Cancelled Tenders List**" by providing Tender ID and keyword. The site also offers **Downloads** facility by providing various Open Source Software Link. You can download and use Open office suite, AutoCAD DWF Viewer, PDF Reader, PDF Creator, JRE download, Alternate JRE Download etc.

e-Tendering System by Govt of Kerala publishes related announcements in this site. You can check them from "**Announcements**" section. Some may have difficulty in proceeding technically, if so check "**compatibility**" section. You will get Site Compatibility Test and suggestion to correct or improve it.

There is another section in this site "**Tenders Closing Today**". You can see list of tenders closing today, closing within 7 days and closing within 14 days. You can check "**Latest Active Tenders**" from the site by entering Tender ID, Tender Title and sorting option. You

can see list of latest Tender documents issued by various Government Departments, Directorates, organizations, Institutions and local bodies of Kerala.

There are also options like Tender Search By Classification, "Tender Search By Organization" and **Latest Active Corrigendum**. You can check latest Tender documents issued by various Government Departments, Directorates, Organization's, Institutions and local bodies of Kerala on the site. If you are looking for "**Results Of Tenders**" enter tender ID and keyword and search.

To check **MIS Reports**, you need login ID and password. Other options and facilities available are Tender Search By Location and Tender Search By organization.

The screenshot shows the website interface with a red header containing navigation links: **Corrigendum**, **Results of Tenders**, **Home**, **Contact Us**, and **SiteMap**. Below the header is a red banner with contact details: "The 24 x 7 Toll Free Telephonic Help Desk Number 1800-3070-2232. Mobile Nos 91-7878007972 and 91-7878007973" and "Attention - Tender Inviting Authorities - Using New Bidding Template". The main content area includes a "User Login" section circled in black, with fields for "Login ID *" and "Password *", a "Login" button, and links for "Online Bidder Enrollment", "Generate", and "Forgot Password?". To the left of the login section is a table with the following data:

Date	Bid Opening Date
15 05:00 PM	19-Oct-2015 12:00 PM
15 01:00 PM	12-Oct-2015 11:00 AM
More...	

Below the table is a search bar with the text "Search with ID/Title/Reference no".

1.4 INSTRUCTIONS FOR BIDDERS FOR E-SUBMISSION OF THE BIDS ONLINE

1. Bidders should have a Class II or above Digital Signature Certificate (DSC) to be procured from any Registration Authorities (RA) under the Certifying Agency of India. Details of RAs will be available on www.cca.gov.in. Once, the DSC is obtained, bidders have to register on www.etenders.kerala.gov.in website for participating in this tender. Website registration is a one-time process without any registration fees. However, bidders have to procure DSC at their own cost. Bidders may contact e-Procurement support desk of Kerala State IT Mission over telephone at 0471-2577088/188/388 or 0484-2336006, 2332262 or 0497-2764788, 2764188 or 0483-273294 or through email: etendershelp@kerala.gov.in or helpetender@gmail.com for assistance in this regard.
2. Bidder Should do Online Enrolment in this Portal using the option Click Here to Enroll available in the Home Page Then the Digital Signature enrollment has to be done with the e-token, after logging into the portal. The e-token may be obtained from one of

the authorized Certifying Authorities such as eMudhraCA/GNFC/IDRBT/MtnITrustline/SafeScript/TCS

3. Bidder then logs into the portal giving user id / password chosen during enrollment.
4. e-token that is registered should be only used by the bidder and should not be miss used by others.
5. DSC once mapped to an account cannot be remapped to any other account. It can only be Inactivated
6. The Bidders can update well in advance, the documents such as certificates, purchase order details etc., under My Documents option and these can be selected as per tender requirements and then attached along with bid documents during bid submission. This will ensure lesser upload of bid documents.
7. After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as per the tender document, otherwise, the bid will be rejected. Clarifications must be obtained online through the e Procurement Portal,
8. The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for that tender. Bidders are allowed to enter the Bidder Name and Values only Prepare the bid documents to be submitted as indicated in the tender schedule
9. If there are any clarifications, this may be obtained online through the eProcurement Portal, or through the contact details given in the tender document. Bidder should take into account of the corrigendum published before submitting the bids online
10. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender schedule and they should be in PDF/XLS/RAR/DWF formats. If there is more than one document, they can be clubbed together.
11. Bidder should arrange for the EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date and time for the tender.
12. The bidder reads the terms and conditions and accepts the same to proceed further to submit the bids
13. The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.
14. There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file also gets reduced. This will help in quick uploading even at very low bandwidth speeds.

15. It is important to note that, the bidder has to Click on the Freeze Bid Button, to ensure that he/she completes the Bid Submission Process. Bids Which are not Frozen are considered as Incomplete/Invalid bids and are not considered for evaluation purposes.
16. In case of Offline payments, the details of the Earnest Money Deposit(EMD) document submitted physically to the Department and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected
17. The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.
18. The bidder may submit the bid documents online mode only, through the portal. Offline documents will not be handled through this system.
19. At the time of freezing the bid, the e Procurement system will give a successful bid updation message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.
20. After the bid submission, the bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.
21. Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness.
22. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected
23. The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e-Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid submission.
24. All the data being entered by the bidders would be encrypted at the client end, and the software uses PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission and not viewable by any one until the time of bid opening. Overall, the submitted bid documents become readable only after the tender opening by the authorized individual.

25. During transmission of bid document, the confidentiality of the bids is maintained since the data is transferred over secured Socket Layer(SSL) with 256 bit encryption technology. Data encryption of sensitive fields is also done.
26. The bidders are requested to submit the bids through online eProcurement system to the TIA well before the bid submission end date and time (as per Server System Clock).

1.5 BID SUBMISSION:

The bidders shall upload their Technical and Financial Bid Online along with online payment of Tender Fee and EMD.

Broad outline of submissions are as follows:

- Technical Bid (Volume-I of tender document and Volume-II drawings)
 - Pre-Qualification or Technical proposal shall contain the scanned copies of the documents has to be uploaded in the e tender portal:
 - WAPCOS doesn't take any responsibility for any technical failure that has taken place during document upload.
- Financial bid (volume-III of tender document)
 - The Bidder shall complete the Price bid as per format given for download along with this tender.
 - Note: The blank price bid should be downloaded and saved on bidder's computer without changing file-name otherwise price bid will not get uploaded. The bidder should fill in the details in the same file and upload the same back to the website.
 - Fixed price: Prices quoted by the Bidder shall be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable/ variable price quotation will be treated as non-responsive and rejected

The detailed procedure for the Bid submission is given in the link <https://etenders.kerala.gov.in/nicgep/app?page=BiddersManualKit&service=page>.

It is necessary to click on "Freeze bid" link/icon to complete the process of bid submission otherwise the bid will not get submitted online and the same shall not be available for viewing/ opening during bid opening process

1.6 OFFLINE SUBMISSIONS OF DOCUMENTS BY BIDDER

The Bidder shall submit following Document offline *in separate sealed envelopes* also.

- *Technical Qualification Documents in original, mentioned in "**Section of Selection And Qualifying Criteria**"*

1.7 MINIMUM REQUIREMENTS AT BIDDER'S END

Computer System having configuration with minimum Windows 7 or above, and Broadband connectivity

- Microsoft Internet Explorer 7.0 or above
- Digital Certificate(s)

1.8 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 tenderer has read this notice and all other Tender Documents and has made himself aware of the scope, the specifications, conditions of contract, local conditions and other factors having bearings on the execution of the work.
- 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.

- c. The Contract shall be governed by each SECTION OF TENDER DOCUMENT i.e. instructions to bidders, selection & qualifying criteria, scope of works, General Conditions for Contract (GCC), Proforma of Schedule, Annexures & Appendices, Forms, Drawings, Technical Specification, Addendum / Clarification / Corrigendum etc. and all other Conditions mentioned in the tender documents.
- d. 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.
- e. 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.
- f. 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.

1.9 Modification, Resubmission and Withdrawal of Bids

1.9.1. Modification & Resubmission

Once submitted in e-Procurement, Bidder cannot view or modify his bid since it is locked by encryption. However, resubmission of the bid by the bidders for any number of times superseding earlier bid(s) before the date and time of submission is allowed. Resubmission of a bid shall require uploading of all documents, including financial bid afresh. The system shall consider only the last bid submitted.

1.9.2. Withdrawal

The bidder may withdraw his bid before the bid submission deadline, and it shall be marked as withdrawn.

No bid should be withdrawn after the deadline for the bid submission and before the expiry of the bid validity period. If a Bidder withdraws the bid during this period, the Procuring Entity shall be within its right to enforce Bid Securing Declaration (in lieu of forfeiture of the Bid Security), in addition to other punitive actions provided in the Tender Document for such misdemeanor.

2.0 TENDER FEE AND EARNEST MONEY DEPOSIT (EMD)

The Bidder shall remit Tender Fee and Earnest Money Deposit as mentioned in NIT and shall be Paid as mentioned in NIT to participate in the Tender.

The EMD of unsuccessful tenderer(s) except lowest three will be refunded after finalization of tender process. The Earnest Money deposit submitted by the successful tenderer shall be retained by WAPCOS Limited until the Performance Bank Guarantee (PBG) is submitted. The successful Tenderer shall sign the agreement within 21 days from Issue of LOA, failing which the EMD shall be forfeited and the award of work may be liable to be cancelled.

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

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

- 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 21 days after award of contract.
- iii. EMD shall not carry any interest.

Online Payment modes: The e-tender processing fee and EMD can be paid in the following manner through e-Payment facility provided by the e-Procurement system.

State Bank of India Multi Option Payment System (SBI MOPS Gateway): Bidders are required to avail Internet Banking Facility in any of below banks for making tender remittances in e Procurement System.

A) Internet Banking Options (Retail)			
	Allahabad Bank		Kotak Mahindra Bank
	Axis Bank		Lakshmi Vilas Bank
	Andhra Bank		Mehsana Urban Co-op Bank
	Bandan Bank		NKGSB Co-operative Bank
	Bank of Bahrain and Kuwait		Oriental Bank of Commerce
	Bank of Baroda		Punjab and Maharashtra Cooperative Bank
	Bank of India		Punjab National Bank
	Bank of Maharashtra		Punjab and Sind Bank
	Bassein Catholic Co-operative Bank		RBL Bank
	BNP Paribas		Saraswat Cooperative Bank
	Canara Bank		ShamraoVithal Cooperative Bank
	Catholic Syrian Bank		South Indian Bank
	Central Bank of India		Standard Chartered Bank
	City Union Bank		State Bank of India
	Corporation Bank		Syndicate Bank
	Cosmos Bank		Tamilnad Mercantile Bank

	DCB Bank		Tamilnadu Cooperative Bank
	Dena Bank		The KalyanJanataSahakari Bank
	Deutsche Bank		TJSB Bank (Erstwhile Thane JanataSahakari Bank)
	Dhanalaxmi Bank		UCO Bank
	Federal Bank		Union Bank of India
	HDFC Bank		United Bank of India
	ICICI Bank		Vijaya Bank
	IDBI Bank		YES Bank
	Indian Bank		
	Indian Overseas Bank		
	IndusInd Bank		
	Jammu & Kashmir Bank		
	JanataSahakari Bank		
	Karnataka Bank		
	KarurVysya Bank		
B) Internet Banking Options (Corporate)			
	Bank of Baroda		Laxmi Vilas Bank
	Bank of India		Oriental Bank of Commerce
	Bank of Maharashtra		Punjab & Maharashtra Coop Bank
	BNP Paribas		Punjab & Sind Bank
	Canara Bank		Punjab National Bank
	Catholic Syrian Bank		RBL Bank
	City Union Bank		ShamraoVitthal Co-operative Bank
	Corporation Bank		South Indian Bank
	Cosmos Bank		State Bank of India
	Deutsche Bank		Syndicate Bank
	Development Credit Bank		UCO Bank
	Dhanalaxmi Bank		Union Bank of India
	Federal Bank		UPPCL
	HDFC Bank		Vijaya Bank
	ICICI Bank		Axis Bank
	Indian Overseas Bank		
	JantaSahakari Bank		
	Jammu & Kashmir Bank		
	KarurVysya Bank		
	Kotak Bank		

During the online bid submission process, bidder shall select SBI MOPS option and submit the page, to view the Terms and Conditions page. On further submitting the same, the e-Procurement system will re-direct the bidder to MOPS Gateway, where two options namely SBI and Other Banks* will be shown. Here, Bidder may proceed as per below:

- a) SBI Account Holders shall click SBI option to with its Net Banking Facility., where bidder can enter their internet banking credentials and transfer the Tender Fee and

EMD amount.

b) Other Bank Account Holders may click Other Banks option to view the bank selection page. Here, bidders can select from any of the 54 Banks to proceed with its Net Banking Facility, for remitting tender payments.

* Bidders who are using Other Banks option under SBI MOPS Payment Gateway, are advised by SBI to make online payment 72 hours in advance before tender closing time.

Any transaction charges levied while using any of the above modes of online payment has to be borne by the bidder. The supplier/contractor's bid will be evaluated only if payment status against bidder is showing "Success" during bid opening

3.0 COST OF BIDDING

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

4.0 LANGUAGE OF BID

The Bid and all related correspondence and documents relating to the Project shall be in English language only. 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 CURRENCY OF BID

Bid prices shall be quoted in Indian Rupees.

Tender submitted by tenderer shall remain valid for acceptance as mentioned in NIT from the date set for submission of the tender. The tenderer shall not be entitled within the said period to revoke or cancel or vary the tender given or any item thereof, without the consent of WAPCOS Limited. In case tenderer revokes, cancels, or varies his tender in any manner without the consent of WAPCOS Limited, within this period, his earnest money will be forfeited.

6.0 ANNEXURES & APPENDICES AND FORMS.

The Bidder shall submit the following formats and also follow the guidelines as per "Section of Annexures & Appendices and Forms" mentioned in tender document.

ANNEXURES & APPENDICES	
ANNEXURE- I	FORMAT FOR GUARANTEE BONDS / AFFIDAVIT FOR WORK
ANNEXURE- II	FORMAT FOR GUARANTEE BOND FOR WATER PROOFING TREATMENT (NOT APPLICABLE)
ANNEXURE- III	FORMAT FOR EMD BANK GUARANTEE (NOT APPLICABLE)
ANNEXURE- IV	FORMAT FOR PERFORMANCE SECURITY

ANNEXURE- V	FORMAT FOR AFFIDAVIT
ANNEXURE- VI	FORMAT FOR ADVANCE PAYMENT BANK GUARANTEE(Not Applicable)
ANNEXURE-VII	FORMAT FOR INTREGITY PACT
ANNEXURE-VIII	FORMAT FOR RESUME OF PROPOSED PERSONNEL
ANNEXURE-IX	ACCEPTABLE MAKES OF MATERIAL
ANNEXURE-X	SAFETY CODES
ANNEXURE-XI	MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS
ANNEXURE-XII	FORMAT FOR INFORMATION REQUIRED TO CALCULATE BIDCAPACITY
ANNEXURE – XIII	CONTRACTOR’S LABOUR REGULATIONS
ANNEXURE – XIV	FORM OF APPLICATION BY THE CONTRACTOR FOR SEEKING EXTENSION OF TIME
ANNEXURE – XIV	FORMAT OF UNDERTAKING TO BE FURNISHED ON COMPANY LETTERHEAD BLACKLISTING/NON-DEBARMENT UNDERTAKING
APPENDICES	
APPENDIX - I	REGISTER OF MATERNITY BENFITS
APPENDIX - II	SPECIMEN FORM OF THE REGISTER ,REGARDING MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTORS’S LABOUR
APPENDIX - III	LABOUR BOARD
APPENDIX - IV	REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR
APPENDIX - V	MUSTER ROLL
APPENDIX - VI	REGISTER OF WAGES
APPENDIX - VII	WAGE CARD WAGE SLIP
APPENDIX -VIII	EMPLOYMENT CARD
APPENDIX - IX	SERVICE CERTIFICATE
APPENDIX - X	LIST OF ACTS AND OMISSIONS FOR WHICH FINE CAN BE IMPOSED
APPENDIX - XI	REGISTER OF FINES
APPENDIX -XII	REGISTER OF DEDUCTION FOR DAMAGE OR LOSS
APPENDIX - XIII	REGISTER OF ADVANCES
APPENDIX - XIV	REGISTER OF OVERTIME
APPENDIX - XV:	INDENTURE FOR SECURED ADVANCES
APPENDIX - XVI:	NOTICE FOR APPOINTMENT OF ARBITRATOR
FORMS	
LETTER OF TRANSMITTAL	
POWER OF ATTORNEY	
FORM ‘A’ FINANCIAL INFORMATION	
FORM ‘B’ FORMAT FOR SOLVENCY CERTIFICATE	
FORM ‘C’ STRUCTURE & ORGANISATION	
FORM ‘D’ NO CONVICTION CERTIFICATE	
FORM ‘E’ UNDERSTANDING THE PROJECT SITE	
FORM ‘F’ NO DEVIATION CERTIFICATE	

FORM 'G' PRELIMINARY AGREEMENT
FORM 'H' LIST OF EQUIPMENTS
FORM 'I' FORMAT FOR DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED
FORM 'J' FORMAT FOR PROJECT UNDER EXECUTION OR AWARDED
FORM 'K' FORMAT FOR DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK
FORM 'L' UNDERTAKING AS PER CLAUSE 46 (RULE 144 (xi) IN GENERAL FINANCIAL RULES (GFRs) 2017)
FORM 'M' UNDERTAKING REGARDING PERCENTAGE OF LOCAL CONTENT
FORM 'N' UNDERTAKING TO EXECUTE ALL LOW QUOTED ITEMS

WAPCOS Limited reserves the right to reject any or all the bids or to cancel the Tender, without assigning any reason(s) whatsoever

7.0 EXTENSION OF BID VALIDITY

Prior to the expiry of the original Bid Validity Period, WAPCOS, at its discretion, request Bidders to extend the Bid Validity Period for a specified additional period and also correspondingly extend the period of validity of EMD.

8.0 LETTER OF AWARD OF WORK

The Bidder who has been evaluated substantially responsive and has offered the lowest evaluated Bid Price (L1) would be considered as the successful bidder and notified in writing by WAPCOS by issuing the Letter of Award of work in favour of the Bidder..

Upon the furnishing by the successful Bidder of the Performance Guarantee, the Agreement Authority will promptly notify the other Bidders that their Bids have been unsuccessful and refund the Bid Security.

9.0 Signing of agreement and Submission of Performance Bank Guarantee .

The Successful bidder will have to execute an agreement in stamp paper worth 0.1% of contract agreed amount subjected to a maximum of Rs.1,00,000/- in prescribed form and submit the Performance Bank Guarantee within the stipulated time as per schedule F

For & on behalf of Tenderer

SECTION– II

SELECTION AND QUALIFYING CRITERIA

SECTION-II
SELECTION AND QUALIFYING CRITERIA

1.0 SITE VISIT

Intending Bidder(s) have to visit site 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. 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.

2.0 QUALIFYING CRITERIA: ONLINE TECHNICAL BID SUBMISSION

The intending bidders must read the terms & conditions of tender documents carefully. He should only submit his technical bid if he considers himself eligible and he is in possession of all the documents required.

The Technical Bid shall be uploaded **with coloured scanned copies of following documents. All the documents must be Serial wise as stated below along with check list**

Format of Check List				
S.N	Particular of Document	Yes	No	Page Nos. (from – to)
1)	Original Authorization Letter to sign the Tender.			
2)	Proof of online submission of EMD			
3)	Proof of online submission of Tender Fee			
4)	Letter of Transmittal on bidder letter Head to submit Technical Bid.			
5)	Yearly sales Turnover and Audited Balance Sheet for Last 5 (Five) years ending on the financial year 2022-23. (Form-A)			

	The requisite certificates must be certified by statutory auditor of the firm/company. Any such certificate must carry the UDIN (Unique Document Identification Number).			
	<ul style="list-style-type: none"> The contractor should not have incurred any loss (profit after tax should be positive) in more than two years during last Five years ending FY 2022-23 duly audited by the Statutory Auditor. 			
	<ul style="list-style-type: none"> Turnover: Average annual financial turnover on works should be at least 30% of the PAC (i.e Rs. 67,08,271/-) of work during the immediate last 3 consecutive financial years ending 2022-23. This should be duly audited by the Statutory Auditor. 			
	<ul style="list-style-type: none"> Full Balance Sheet, Profit & loss Statement of Bidder, net worth certificates should be certified by the statutory auditor of the firm/company. Any such certificate must carry the UDIN (Unique Document Identification Number). 			
6)	The contractor should also have satisfactorily completed the works as mentioned below during the last Seven years ending previous day of last date of submission of tender.			
7)	<p>SIMILAR EXPERIENCE</p> <p>I. One similar completed work costing not less than the amount equal to Rs.1,78,88,723/- (80% of PAC) Or</p> <p>II. Two similar completed works costing not less than the amount equal to Rs.1,11,80,452/- (50 % of PAC) Or</p> <p>III. Three similar completed works costing not less than the amount equal to Rs.89,44,361/- (40% of PAC)</p> <p>The Value of Similar completed Works will be brought to current costing level by enhancing the actual value of work at simple rate of 7 % per annum, calculated from the date of completion to last date of submission of bids.</p>			
	"Similar Experience" shall mean a project for Supply, Installation, Testing and Commissioning of Centralized Medical Gas Pipeline components including Gas			

	Supply System, Compressed Air Plant, Bed Head Panels, Copper Piping, etc. all composite under one agreement. Copy of Completion certificate signed by Engineer not below the rank of Executive Engineer or equivalent needs to be enclosed. In the case of the private sector work, signed completion certificate issued by competent authority must be submitted duly supported by the TDS certificates in the form 26AS duly authenticated by the chartered accountant.			
8)	Details of General/similar type of work executed indicating value of works in each contract with self-attested documentary evidence such as copy/copies of completion Certificate(s) along-with LOI(s)/W.O(s) from respective Owner(s)/Client(s) mentioning name and nature of work(s), date(s) of commencement and value(s) of the job(s) executed during last SEVEN years. Completion certificate needs to be enclosed.			
9)	<p>The bidder should not be insolvent, in receivership, bankrupt or being wound up, not have had their business activities suspended. Accordingly, Bidder shall submit Solvency certificate from Nationalized/Scheduled Commercial Bank with details of Financial Status i.e. Name of the Banker & Current Solvency Certificate (<i><u>(i.e. the solvency certificate shall be dated after the date of publication of NIT and Be addressed to the tendering authority quoting the name of the work)</u></i>) from the Banker in original for a sum of at least Rs. 89,44,361/- (40% of PAC) in order to fund the project till the time the invoices get paid. (Form-B)</p> <p>The Certificate should be issued between the publishing date of NIT & last date of submission of Bids, including extensions if any. The certificate should carry the name, designation & power of attorney of the bank official.</p>			
10)	Name, Address, details of the Organization, Name(s) of the Owner/Partners/Promoters and Directors of the firm/company. (Form-C)			
11)	Copy of P.F and PAN Number.			
12)	Copy of Goods and Service Tax (GST)			
13)	The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship Company/Co-operative Society/ Registered Contractors from State Government or Central Government/ Partnership Company/			

	Limited company private or public or corporation. Joint Ventures are not accepted. Copy of Certificate of Incorporation/Registration/Partnership Deed or any other relevant document, as applicable, as issued by the Competent Authority should be submitted along with a copy of address proof.			
14)	Bidder should not be blacklisted/ debarred by any government/ semi-government department/ PSU. Bidder should submit the declaration (Form-D) of not being ineligible for corrupt or fraudulent practices			
15)	Letter of understanding the project site on bidder letter Head (Form-E).			
16)	'No Deviation Certificate' in the prescribed format in Bidder's Letter Head (Form-F).			
17)	Consent Letter to execute the Integrity Pact & Agreement (Annexure-VII).			
18)	Information of Key Technical Representatives who is going to associate with the Project (Annexure-VIII).			
19)	Details of the Equipment's /Machinery owned /hired by the Bidder for the Project (Form-H).			
20)	Details of all work (similar experience) completed (Form-I).			
21)	Project Under Execution or Awarded (Form – J)			
22)	Details of Technical and Administrative Personnel to be employed for the Work (Form – K)			
23)	Undertaking as per Clause 46 (Rule 144 (Xi) in General Financial Rules (GFRs) 2017) (Form-L)			
24)	Undertaking Regarding Percentage of Local Content (Form-M)			
25)	<p>BID Capacity: The Bidder who interalia meet the minimum qualification criteria will be qualified only if their available Bid Capacity is more than the Total Tendered Value. The available Bid Capacity will be calculated as per following based on information mentioned enclosed in the Bid Format for Bid Capacity.</p> <p>Assessed available Bid Capacity $= (A * N * 1.5 - B)$, Where N= Number of years prescribed for completion of work for which Bid is invited</p>			

	<p>A= Maximum value of works in respect of projects executed in any one year during the last five years (updated to the price level of the year indicated in table below under note) taking into account the completed as well as works in progress. The Projects include turnkey project/item rate contract/ Construction works.</p> <p>B = Value (updated to the price level of the year indicated in table below under note) of existing commitments and on-going works to be completed during the period of completion of the works for which BID is invited.</p> <p>Note-1: The Statement showing the value of all existing commitments and ongoing works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Client or its Engineer-in-charge not below the rank of Executive Engineer or equivalent in respect of Projects (Annexure-XII).</p>																
	<table><tr><td>Year</td><td>Year - 1</td><td>Year-2</td><td>Year-3</td><td>Year-4</td><td>Year-5</td></tr><tr><td>Up dation Factor</td><td>1.00</td><td>1.05</td><td>1.10</td><td>1.15</td><td>1.20</td></tr></table>	Year	Year - 1	Year-2	Year-3	Year-4	Year-5	Up dation Factor	1.00	1.05	1.10	1.15	1.20				
Year	Year - 1	Year-2	Year-3	Year-4	Year-5												
Up dation Factor	1.00	1.05	1.10	1.15	1.20												
26)	Bidder shall submit Information on litigation history, liquidated damages, disqualification etc. in bidder Letter Head.																
25.1)	Annexure – XV: Format of Undertaking to be Furnished on Company Letterhead Blacklisting/Non-Debarment Undertaking																
27)	Each page of the all Volume of Tender document & Addendum/ Corrigendum shall be Digitally signed by the bidders submitting the Tender in token of his/their having acquainted himself/ themselves and accepted the entire tender documents including various conditions of contract. Any Bid with any of the Documents not so signed is liable to be rejected at the discretion of WAPCOS Limited.																
28)	Preliminary agreement in stamp paper worth Rs.200/- duly signed by the authored signatory and the scanned copy to be uploaded (format given in Form G)																

No information relating to financial terms of services should be included in the technical bid. Bids are to be submitted to determine that the bidder has a full comprehension of

the tendered work. Where a bidder technical submittal is found non - compliant with the requirement or work, it may be rejected. This process is to assure that only technical acceptable bids are considered for the tendered work.

3.0 SUBMISSIONS OF DOCUMENTS

3.1 The bidders shall upload the scanned copy of all the documents mentioned in “Section-II, 2.0 Qualifying Criteria” for Technical Bid i.e. along with checklist & page numbering their Technical Bid Online along with online payment of Tender Fee and EMD. The Bidder shall submit the following Document offline also.

3.2 All the documents mentioned in “Section-II: Selection and Qualifying Criteria” in Para 3.1: Qualifying Criteria for Technical Bid i.e. along with checklist & page numbering in separate sealed envelope clearly labelled as “TECHNICAL BID” for the Work (Write Name of Work/Project as mentioned in NIT) along with Details of Bidders Address, Phone, E-mail on Envelope should be submitted.

NOTE: *The offline submissions as mentioned above shall be submitted on WAPCOS address mentioned in NIT as per date & time mentioned in NIT otherwise bids are liable to be rejected.*

4.0 CONTENTS OF TECHNICAL BID

The Technical Bid Shall comprise of two part.

- a. The Online Submission of Tender Fee (Non -refundable) and EMD
- b. Scanned copy of all the original documents mentioned in the section II “2.0 QUALIFYING CRITERIA: ONLINE TECHNICAL BID SUBMISSION” and the original documents should be submitted in separate sealed Envelope.

5.0 CONTENTS OF FINANCIAL BID

The Financial Bid should be uploaded separately along with Technical bid before last date & time of submission of Tender Document.

The estimated cost mentioned in NIT is based on the rates of item of works in DSR 2018 with applicable cost index and Non-DSR items on market rate. The quoted rate filled in Schedule of Quantities, should include all costs associated with the project including any out of pocket/mobilization expenses, Taxes if any applicable as per Government norms, shall be paid by the Contractor excluding Goods and Services Tax (GST).

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 only be paid to the Agency on submission of proof of deposition of GST.

The company shall be performing all its duties of deduction of TDS and other deduction on payment made to the contractor as per applicable legislation

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.

6.0 OPENING OF TECHNICAL BID AND EVALUATION

I. Bid Opening

- a. The Bids will be opened in the presence of Bidders or their authorized representatives who may choose to attend on date & time as mentioned in Notice Inviting e-tender.
- b. Bids for which an acceptable notice of withdrawal has been submitted shall not be opened.
- c. On opening of the e-Bid, it will be checked if they contain Technical & Financial Bids and e-Tender Processing Fees and EMD/ Bid Security paid online.
- d. Technical Bids will be opened first. These will be checked for confirmation of submission of the requisite EMD/Bid Security. If the documents do not meet the requirements of the e-Tender, a note will be recorded.
- e. Technical evaluation shall be as per, Evaluation Process detailed below.

II. Technical Evaluation Criteria

In Preliminary Stage, e-Tender Fee/ Processing Fee & EMD will be checked online. E-Tender Fee / Processing Fee and EMD will be checked for authenticity of Amount and Form as required by e-tender terms and conditions. If e-Tender Fee / Processing Fee and/or EMD submitted by any bidder is not as per e-tender terms and conditions, his bid will be rejected and will not be considered for further stages of evaluation.

Bidders qualifying in Preliminary Stage will be considered for further evaluation and the Technical Bids shall be evaluated as per eligibility criteria

- i. The financial Bid of only those Bidders who are technically qualified shall be opened.
- ii. WAPCOS shall notify all the technically qualified Bidders of their technical qualification indicating the date, time and venue for opening of financial Bids.

To assist in the tender examination, evaluation, and comparison of bids, and qualification of the Bidders; the Tender Inviting Authority may ask the Bidder for required clarification on the information submitted with the bid. The request for clarification and the response shall be in writing or by e-mail, but no change in the price or substance of the Bid shall be sought, offered, or permitted.

7.0 OPENING OF FINANCIAL BID

The financial bids of the Technically Qualified bidders as decided by WAPCOS shall be opened at the notified date & time mentioned in NIT and the decision of WAPCOS shall be final and binding.

I. Financial Evaluation

- a. Evaluation Committee shall open the financial Bid of the technically qualified Bidders in the presence of the Bidders/their authorized representative, who choose to attend, at the scheduled date and time.
- b. The rates for the various items quoted by the Bidder shall be rounded to two decimal places. The decimal places in excess of two will be discarded during evaluation .The evaluation Committee shall correct arithmetic errors, if any and sign the same. If any discrepancy is found between the amount in figures and the amount in words, the amount in words shall prevail.
- c. 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.
- d. All the financial Bids shall then be ranked according to the financial Bid in increasing order with the Bidder quoting the least amount ranked L1, Bidder quoting next higher figure as L2 and so on. The quoted rates of L1 for all items may be compared with DSR and LMR (TS) ,the item whose quoted rate is more than DSR and LMR (TS) will be treated as High Quoted items and Less than DSR and LMR (TS) will be treated as Low Quoted items. The Quoted rates with deviation (+/-) 25% over TS estimate rates will be treated as Abnormally High /Abnormally Low Quoted Items .
- e. Negotiations shall be done only with L1 (If required). The rates quoted by the Bidders are final and shall not be changed at any stage during evaluation and award of work.
- f. If the grand total quoted amount by a bidder is less than 75% (seventy five percent) of the total estimated cost put to tender, then such bids will be processed based on the directions contained in Government order GO(P) No-124/2016/Fin dated 29-8-2016 or any subsequent modifications thereof.
- g. L1 will be declared as Successful Bidder and his offer will be processed further.

WAPCOS Ltd reserves the right to waive minor deviations if they do not materially affect the capability of the Tenderer to perform the contract.

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

For & on behalf of Tenderer

SECTION– III

GENERAL CONDITIONS OF CONTRACT

SECTION– III
GENERAL CONDITIONS TO CONTRACT

1.0 GENERAL RULES AND DIRECTIONS

General Rules & Directions	1.	<p>The work proposed for execution by contract will be notified in a form of invitation to tender by publication in Newspapers and / or posted on website as the case may be.</p> <p>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 as mentioned in NIT ,to be deposited with the tender, and the amount of the security deposit and Performance guarantee to be deposited by the successful tenderer and the percentage, if any, to be deducted from bills. Copies of the specifications, designs and drawings and any other documents required in connection with the work signed for the purpose of identification by the officer inviting tender shall also be open for inspection by the contractor at the office of officer inviting tender during office hours</p>
	2.	<p>In the event of the tender being submitted by a 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.</p>
	3.	<p>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</p>
	4	<p>Any person who submits a tender shall fill up the usual printed form, stating at what rate he is willing to undertake each item of the work. 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. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for each. Tender shall have the name and number of the works to which they refer, written on the envelopes.</p> <p>The rate(s) must be quoted in decimal coinage. Amounts must be quoted in full rupees by ignoring fifty paisa and considering more than fifty paisa as rupee one.</p> <p>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 offer quoting</p>

		rate 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.
		<p>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 and the lowest contractors those have quoted equal amount of their tenders.</p> <p>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.</p> <p>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.</p> <p>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.</p>
	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.	WAPCOS 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.
	8.	The tenderers shall sign a declaration under the officials Secret Act 1923,

		for maintaining secrecy of the tender documents drawings or other records connected with the work given to them.
	9.	<p>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.</p> <p>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</p>
	11	In the case of any tender where unit rate of any item/items appear unrealistic, such tender will be considered as unbalanced and in case the tenderer is unable to provide satisfactory explanation, such a tender is liable to be disqualified and rejected.
	12	All rates shall be quoted on the tender form. The amount for each item should be worked out and requisite totals given. Special care should be taken to write the rates in figures as well as in words and the amount in figures only, in such a way that interpolation is not possible. The total amount should be written both in figures and in words. 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. 2.15 P' and in case of words, the word, 'Rupees' should precede and the word 'Paise' should be written at the end. Unless the rate is in whole rupees and followed by the word 'only' it should invariably be upto two decimal places. While quoting the rate in schedule of quantities, the word 'only' should be written closely following the amount and it should not be written in the next line.
	13.	<p>i. The Contractor, whose tender is accepted, will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule-F.</p> <p>This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at call receipt of any scheduled</p>

		<p>bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank. In case of a JV, the BG towards performance security shall be provided by all partners in proportion to their participation in the project.</p> <p>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 2.5% of the tendered value of the work and 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 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.</p>
	14.	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.
	15.	<p>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. However, component of GST at time of supply of service (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.</p> <p>In view of implementation of GST w.e.f. 01.07.17 by Govt. of India, bidders are advised to quote their rates considering the positive (+ve) / negative (-ve) cost impact on their rates in present scenario.</p> <p>However, in respect of Goods and Services Tax, same shall be paid by the contractor to the concerned department on demand and it will only be paid/reimbursed to him by the Engineer-in-Charge after satisfying that it has been actually and genuinely paid by the contractor.</p>
	16.	The contractor shall give a list of WAPCOS employees related to him
	17.	The tender for the work shall not be witnessed by a contractor or contractors who himself/themselves has/have tendered or who may and has/have tendered for the same work. Failure to observe this condition would render, tenders of the contractors tendering, as well as witnessing the tender, liable to summary rejection.
	18.	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. The tenderer apart from being a registered contractor (B&R) of appropriate class, must associate himself with agencies of appropriate class which

		are eligible to tender for sanitary and water supply drainage, electrical and horticulture works in the composite tender.				
	19.	The contractor shall submit list of works which are in hand (progress) in the following form:-				
		Name of Work	Name and particulars where work is being executed	Value of Work	Position of works in progress	Remarks
		(1)	(2)	(3)	(4)	(5)
	20.	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 WAPCOS may in his discretion, without prejudice to any other right or remedy available in law, 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.				

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.	<p>In the contract, the following expressions shall, unless the context otherwise requires, have the meanings, hereby respectively assigned to them:-</p> <p>“SPV/Employer” shall mean “WAPCOS Limited”, A Government of India undertaking- Ministry of Jal Sakthi for execution of “Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur”</p> <ol style="list-style-type: none"> Having their Registered office at 5th Floor, Kailash, K.G. Marg, New Delhi-110001 India & include their successors & permitted assigns as well as their authorized officer/ representatives The “COMPANY / SPV/WAPCOS” shall mean WAPCOS Limited. The expression works or work shall, unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the works by or by virtue of the contract contracted to be executed whether temporary or permanent, and whether original, altered, substituted or additional. The Site shall mean 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. The Contractor 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. Owner/Department/Client means Health and Family Welfare (P) Department of Kerala of Govt. of Kerala and Shall Include their Legal representatives, nominees, employees and Officials. Funding Agency/ Paying Authority means KIIFB-Kerala Infrastructure and Investment Fund Board. Project Manager means the Engineer Officer appointed by WAPCOS or his duly authorized representative who shall direct, supervise and be in charge of the work for the purpose of this

		<p>Contract.</p> <p>ix. SPV(Special Purpose Vehicle) means M/s WAPCOS Limited who has been appointed SPV by Health and Family Welfare (P) Department, Government of Kerala for execution of project through Kerala Infrastructure Investment Fund Board (KIIFB).</p> <p>x. The Engineer-in-charge means the Engineer Officer appointed by WAPCOS or his duly authorized representative who shall direct, supervise and be in charge of the work for the purpose of this Contract</p> <p>xi. Accepting Authority shall mean the authority mentioned in Schedule -F</p> <p>xii. Tenderer / Bidder shall mean the firm/party who intends to participate in this Notice Inviting Tender</p> <p>xiii. 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 Accepting Authority 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.</p> <p>xiv. Market Rate shall be the rate as decided 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 Schedule -F to cover, all overheads and profits.</p> <p>xv. Schedule(s) referred to in these conditions shall mean the relevant schedule(s) annexed to the tender papers or the standard Schedule of Rates of the government mentioned in Schedule -F hereunder, with the amendments thereto issued up to the date of receipt of the tender.</p> <p>xvi. District Specifications means the specifications followed by the State Government in the area where the work is to be executed.</p> <p>xvii. The Contractor/Successful Bidder shall mean the firm or company whose bid has been accepted by WAPCOS.</p> <p>xviii. Tendered value means the value of the entire work as stipulated in the letter of award.</p> <p>xix. Date of commencement of work: The date of commencement of work shall be the date of start as specified in Schedule -F 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.</p>
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, (Not Applicable) 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. In case of a JV both the partners shall be jointly and severally liable for the successful completion of the work
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 (Not Applicable) 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:- <ul style="list-style-type: none"> i. Description of Schedule of Quantities/ Building Components. ii. Schedule- F, if any. iii. Drawings. iv. CPWD 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 Accepting Authority 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.	<p>The successful tenderer/contractor, on acceptance of his tender by the Accepting Authority, shall, within 21 days from the date of issue of LOA, sign the contract consisting of:-</p> <ul style="list-style-type: none"> i. The Successful tenderer will have to execute an agreement in stamp paper worth 0.1% of contract agreed amount subjected to maximum of Rs.1,00,000/- in prescribed form ii. Schedule -F consisting of: <ul style="list-style-type: none"> a) Various standard clauses with corrections up to the date stipulated in Schedule -F along with annexures thereto. b) Safety Code. c) Model Rules for the protection of health, sanitary arrangements for workers employed WAPCOS or its contractors. d) Contractor's Labour Regulations. e) List of Acts and omissions for which fines can be imposed. iii. No payment for the work done will be made unless contract is signed by the contractor.

2.2 CLAUSES OF CONTRACT

CLAUSE 1: PERFORMANCE GUARANTEE

- i. The contractor shall submit an irrevocable Performance Guarantee of **5%** (Five percent) of the tendered amount 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 Schedule 'F' 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 schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Cash (in case guarantee 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 guarantee 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 accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government/WAPCOS 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 Government to make good the deficit. In case of a JV, the BG towards performance security shall be provided by both the partners in proportion to their participation in the project.
- ii. The Performance Guarantee shall be initially valid up to the stipulated date of completion plus defect Liability Period plus one year claim period as mentioned in schedule F. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest. However, in case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.
- iii. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the WAPCOS.
- iv. On substantial Completion of any work which has been completed to such an extent that the intended purpose of the work is met and ready to use, then a provisional Completion certificate shall be recorded by the Engineer-in-Charge. The provisional certificate shall have appended with a list of outstanding balance item of work that need to be completed in accordance with the provisions of the contract.

This provisional completion certificate shall be recorded by the concerned Engineer- in-charge with the approval of the Regional Manager/Project Manager / Chief Engineer/Chief Project Manager, if required. After recording of the provisional Completion Certificate for the work by the competent authority, the 80 % of performance guarantee shall be returned to the contractor, without any interest. However in case of contracts involving Maintenance of building and services /any other work after construction of same building and services/ other work, then 40% of performance guarantee shall be returned to the contractor, without any interest after recording the provisional Completion certificate.

CLAUSE 1A: RECOVERY OF SECURITY DEPOSIT

The person/persons whose tender(s) may be accepted (hereinafter called the contractor) shall permit WAPCOS at the time of making any payment to him for work done under the contract to deduct a sum at the rate of 2.5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 2.5% of the tendered value of the work. Such deductions will be made and held by WAPCOS by way of Security Deposit unless he/they has/have deposited the amount of Security at the rate mentioned above in cash or in the form of Government Securities or fixed deposit receipts. In case a fixed deposit receipt of any Bank is furnished by the contractor to the WAPCOS as part of the security deposit 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.

All compensations or the other sums of money payable by the contractor under the terms of this contract may be deducted from, or paid by the sale of a sufficient part of his security deposit or from the interest arising there from, or from any sums which may be due to or may become due to the contractor by WAPCOS on any account whatsoever and in the event of his Security Deposit being reduced by reason of any such deductions or sale as aforesaid, the contractor shall within 10 days make good in cash or fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks or Government Securities (if deposited for more than 12 months) endorsed in favour of the WAPCOS LIMITED, any sum or sums which may have been deducted from, or raised by sale of his security deposit or any part thereof.

The security deposit shall be collected from the running bills and the final bill of the contractor at the rates mentioned above.

The security deposit as deducted above can be released against bank guarantee issued by a scheduled bank, on its accumulations to a minimum of Rs. 5 lac subject to the condition that amount of such bank guarantee, except last one, shall not be less than Rs. 5 lac. Provided further that the validity of bank guarantee including the one given against the earnest money shall be in conformity with provisions contained in clause 17 which shall be extended from time to time depending upon extension of contract granted under provisions of clause 2 and clause 5.

In case of contracts involving maintenance of building and services/any other work after construction of same building and services/other work, then 50% of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.

Note-1: Government papers tendered as security will be taken at 5% (five per cent) below its market price or at its face value, whichever is less. The market price of Government paper would be ascertained by the Divisional Officer at the time of collection of interest and the amount of interest to the extent of deficiency in value of the Government paper will be withheld if necessary.

Note-2: Government Securities will include all forms of Securities mentioned in Rule No. 274 of the G.F. Rules except fidelity bond. This will be subject to the observance of the condition mentioned under the rule against each form of security.

Note-3: Note 1 & 2 above shall be applicable for both clause 1 and 1A

CLAUSE 2: COMPENSATION FOR DELAY

If the contractor fails to maintain the required progress in terms of clause 5 or to complete the work and clear the site on or before the contract or justified extended date of completion as per clause 5 (excluding any extension under Clause 5.5) as well as any extension granted under clauses 12 and 15, he shall, without prejudice to any other right or remedy available under the law to the Government on account of such breach, pay as compensation the amount calculated at the rates stipulated below as the authority specified in schedule 'F' may decide on the amount of accepted Tendered Value of the work for every completed day/month (as determined) that the progress remains below that specified in Clause 5 or that the work remains incomplete.

This will also apply to items or group of items for which a separate period of completion has been specified.

i. Compensation for delay of work

With maximum rate @ 1% (one percent) per month of delay to be computed on per day basis based on quantum of damage suffered due to stated delay on the part of Contractor

Provided always that the total amount of compensation for delay to be paid under this condition shall not exceed 10 % (ten percent) of the accepted Tendered Value of work or of

the accepted Tendered Value of the Sectional part of work as mentioned in Schedule 'F' for which a separate period of completion is originally given.

Provided always that the total amount of compensation for delay to be paid under this Condition shall not exceed 10% of the Tendered Value of work or of the Tendered Value of the item or group of items of work for which a separate period of completion is originally given.

In case no compensation has been decided by the authority in Schedule 'F' during the progress of work, this shall be no waiver of right to levy compensation by the said authority if the work remains incomplete on final justified extended date of completion. If the Engineer in Charge decides to give further extension of time allowing performance of work beyond the justified extended date, the contractor shall be liable to pay compensation for such extended period. If any variation in amount of contract takes place during such extended period beyond justified extended date and the contractor becomes entitled to additional time under clause 12, the net period for such variation shall be accounted for while deciding the period for levy of compensation. However, during such further extended period beyond the justified extended period, if any delay occurs by events under sub clause 5.2, the contractor shall be liable to pay compensation for such delay.

Provided that compensation during the progress of work before the justified extended date of completion for delay under this clause shall be for non-achievement of sectional completion or part handing over of work on stipulated/justified extended date for such part work or if delay affects any other works/services. This is without prejudice to right of action by the Engineer in Charge under clause 3 for delay in performance and claim of compensation under that clause.

In case action under clause 2 has not been finalized and the work has been determined under clause 3, the right of action under this clause shall remain post determination of contract but levy of compensation shall be for days the progress is behind the schedule on date of determination, as assessed by the authority in Schedule F, after due consideration of justified extension. The compensation for delay, if not decided before the determination of contract, shall be decided after of determination of contract.

The amount of compensation may be adjusted or set-off against any sum payable to the Contractor under this or any other contract with the WAPCOS. In case, the contractor does not achieve a particular milestone mentioned in Schedule F, or the re-scheduled milestone(s) in terms of Clause 5.4, the amount shown against that milestone shall be withheld, to be adjusted against the compensation levied at the final grant of Extension of Time. Withholding of this amount on failure to achieve a milestone, shall be automatic without any notice to the contractor. However, if the contractor catches up with the progress of work on the subsequent milestone(s), the withheld amount shall be released. In case the contractor fails to make up for the delay in subsequent milestone(s), amount mentioned against each milestone missed subsequently also shall be withheld. However, no interest, whatsoever, shall be payable on such withheld amount. **(Modified OM No. DG/CON/306 dt. 04.10.2019)**

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 un-workman 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 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 Guarantee under the contract shall be liable to be forfeited and shall be absolutely at the disposal of the WAPCOS
- 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.

CLAUSE 3A

In case, the work cannot be started due to reasons not within the control of the contractor within 1/8th of the stipulated time for completion of work or one month whichever is higher, either party may close the contract by giving notice to the other party stating the reasons. In such eventuality, the Performance Guarantee of the contractor shall be refunded within following time limits :

- a) Tendered value of work is up to Rs. 1 Crore 15 days
- b) If the Tendered value of work is more than Rs. 1 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 the Schedule 'F' or the extended time in accordance with these conditions shall be the essence of the Contract. The execution of the work shall commence from such time period as mentioned in schedule 'F' or from the date of handing over of the site, notified by the Engineer-in-Charge, whichever is later. If the Contractor commits default in commencing the execution of the work as aforesaid, the performance guarantee shall be forfeited by the Engineer in Charge and shall be absolutely at the disposal of the WAPCOS without prejudice to any other right or remedy available in law.

5.1 i) As soon as possible but within 7 (seven) working days of award of work and in consideration of

- a) Schedule of handing over of site as specified in the Schedule 'F'
- b) Schedule of issue of designs as specified in the Schedule 'F' ,

the Contractor shall submit a Time and Progress Chart for each mile stone. The Engineer-in-Charge may within 7 (seven) working days thereafter, if required modify, and communicate the program approved to the contractor failing which the program submitted by the contractor shall be deemed to be approved by the Engineer-in-Charge. The work programme shall include all details of balance drawings and decisions required to complete the contract with specific dates by which these details are required by contractor without causing any delay in execution of the work. 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 Engineer-in-Charge and the Contractor within the limitations of time imposed in the Contract documents

In case of non-submission of construction programme by the contractor,

- (i) the program approved by the Engineer-in-Charge shall be deemed to be final.
- (ii) The approval by the Engineer-in-Charge of such programme shall not relieve the contractor of any of the obligations under the contract.
- (iii) 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 as per Schedule F to be decided by the NIT approving authority shall be made on per week or part basis 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) non-availability of stores, which are the responsibility of WAPCOS to supply or
- (vii) non-availability or break down of tools and Plant to be supplied or supplied by WAPCOS or
- (viii) 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 as indicated in Schedule F but shall nevertheless use constantly his best endeavors to prevent or make good the delay and shall do all that may be reasonably required to the satisfaction of the Engineer-in-Charge to proceed with the works.

The contractor shall have no claim of damages for extension of time granted or rescheduling of milestone/s for events listed in sub clause 5.2.(Modified OM DG/CON/305 dt. 19.02.2019)

5.3 In case the work is hindered by the WAPCOS or for any reason / event, for which the WAPCOS is responsible, the authority as indicated in Schedule 'F' shall, 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 damages.

5.4 Request for rescheduling of Mile stones or 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 forms i.e. Form of application by the contractor for seeking rescheduling of milestones or Form of application by the contractor for seeking extension of time (Annexure-XIV)respectively to the authority as indicated in Schedule 'F'. 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. A recovery as specified in Schedule 'F' shall be made on per day basis in case of delay in submission of the revised programme.

5.4.1 In any such case the authority as indicated in Schedule 'F' 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 authority as indicated in Schedule 'F' 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 E-in-C after affording opportunity to the contractor, may give, supported with a programme (as specified under 5.4 above), 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 clause 5.2 or clause 5.3 or clause 5.4 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 : MEASUREMENTS OF WORK DONE

Engineer-in-Charge shall, except as otherwise provided, ascertain and determine by measurement, the value in accordance with the contract of work done.

All measurement of all items having financial value shall be entered in Measurement Book and/or level field book so that a complete record is obtained of all works performed under the contract.

All measurements and levels shall be taken jointly by the Engineer-in-Charge or his authorized representative and by the contractor or his authorized representative from time to time during the progress of the work and such measurements shall be signed and dated by the Engineer- in-Charge and the contractor or their representatives in token of their acceptance. If the contractor objects to any of the measurements recorded, a note shall be made to that effect with reason and signed by both the parties. If for any reason the contractor or his authorized representative is not available and the work of recording measurements is suspended by the Engineer-in-Charge or his representative, the Engineer-in-Charge and the WAPCOS shall not entertain any claim from contractor for any loss or damages on this account. If the contractor or his authorized representative does not remain present at the time of such measurements after the contractor or his authorized representative has been given a notice in writing three (3) days in advance or fails to countersign or to record objection within a week from the date of the measurement, then such measurements recorded in his absence by the Engineer-in-Charge or his representative shall be deemed to be accepted by the Contractor.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for measurements and recording levels.

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 Engineer-in-Charge or his authorized representative in charge of the work, before covering up or otherwise placing beyond the reach of measurement any work in order that the same may be measured and

correct dimensions thereof be taken before the same is covered up or placed beyond the reach of measurement and shall not cover up and place beyond reach of measurement any work without consent in writing of the Engineer-in-Charge or his authorized representative 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 measurements without such notice having been given or the Engineer-in-Charge's 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 or his authorized representative may cause either themselves or through another officer of the WAPCOS to check the measurements recorded jointly or otherwise as aforesaid 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 recording of measurements of any item of work in the measurement book and/or its payment in the interim, on account or 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 6 A: COMPUTERIZED MEASUREMENT BOOK

Engineer-in-Charge 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 Engineer-in-Charge or his authorized representative as per interval or program fixed in consultation with Engineer-in-Charge or his authorized representative. After the necessary corrections made by the Engineer-in-Charge, the measurement sheets shall be returned to the contractor for incorporating the corrections and for resubmission to the Engineer-in-Charge for the dated signatures by the Engineer-in-Charge 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 Engineer-in-Charge and/or his authorized representative. 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 Engineer-in-Charge and/or his authorized representative 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, after getting the earlier MB cancelled by the WAPCOS. Thereafter, the MB shall be taken in the Divisional Office records, and allotted a number as per the Register of Computerized MBs. This should be done before the corresponding bill is submitted to the Division Office for payment. The contractor shall submit two spare copies of such computerized MB's for the purpose of reference and records.

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 along with two spare copies of the "bill. Thereafter, this bill will be processed by the Division Office and allotted a number as per the computerized record in the same way as done for the measurement book meant for measurements.

The contractor shall, without extra charge, provide all assistance with every appliance, labour and other things necessary for checking of measurements/levels by the Engineer-in-Charge or his representative.

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 Engineer-in-Charge or his authorized representative 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 Engineer-in-Charge or his authorized representative 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 the Engineer-in-Charge's 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 or his authorized representative 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

No payment shall be made for work, estimated to cost Rs. Two lac two Lac or less till after the whole of the work shall have been completed and certificate of completion given. For works estimated to cost over Rs Two Lac the interim or running account bills shall be submitted by the contractor for the work executed on the basis of such recorded measurements on the format of the WAPCOS in triplicate on or before the date of every month fixed for the same by the Engineer-in-Charge. The contractor shall not be entitled to be paid any such interim payment if the gross work done together with net payment/ adjustment of advances for material collected, if any, since the last such payment is less than the amount specified in Schedule 'F', in which case the interim bill shall be prepared on the appointed date of the month after the requisite progress is achieved. Engineer-in-Charge shall arrange to have the bill verified by taking or causing to be taken, where necessary, the requisite measurements of the work. In the event of the failure of the contractor to submit the bills, no claims whatsoever due to delays on payment including that of interest shall be payable to the contractor. Payment on account of amount admissible shall be made by the KIIFB/Engineer-in-Charge certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge. The amount admissible shall be paid by KIIFB as per the Schedule F after the day of presentation of the bill by the Contractor to the Engineer-in-Charge or his Authorized Engineer together with the account of the material issued by the WAPCOS, or dismantled materials, if any. In the case of works outside the headquarters of the Engineer- in- Charge, the period of ten working days will be extended to five more working days

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.

The Engineer-in-Charge in his sole discretion to the effect that the work has been completed up to the level in question make interim advance payments without detailed measurements for work done (other than foundations, items to be covered under finishing items) up to lintel level (including sunshade etc.) and slab level, for each floor working out at 75% of the assessed value. The advance payments so allowed shall be adjusted in the subsequent interim bill(s) to be submitted by the contractor within 10 days of the interim payment. In case of delay in submission of bill by the contractor a simple interest @ 10% per annum shall be paid to the WAPCOS from the date of expiry of prescribed time limit which will be compounded on yearly basis.

CLAUSE 7A

No Running Account Bill shall be paid for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.

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 shall inspect the work 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

CLAUSE 8A : CONTRACTOR TO KEEP SITE CLEAN

When the annual repairs and maintenance of works are carried out, the splashes and droppings from white washing, colour washing, painting etc., on walls, floor, windows, etc shall be removed and the surface cleaned simultaneously with the completion of these items of work in the individual rooms, quarters or premises etc. where the work is done: without waiting for the actual completion of all the other items of work in the contract. In case the contractor fails to comply with the requirements of this clause, the Engineer-in-Charge shall have the right to get this work done at the cost of the contractor either WAPCOS or through any other agency. Before taking such action, the Engineer-in-Charge shall give ten days' notice in writing to the contractor.

CLAUSE 8B : 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 by the Engineer-in-Charge, unless the contractor, by virtue of any other provision in the contract, is required to prepare such plans

In case, the contractor fails to submit the completion plan as aforesaid, he shall be liable to pay a sum of 0.1 % (zero point one percent) of accepted Tendered Value or limit prescribed in Schedule F whichever is more as may be fixed by the authority as mentioned in Schedule F and in this respect the decision of the that authority shall be final and binding on the contractor.

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. Payments of those items of the bill in respect of which there is no dispute and of items in dispute, for quantities and rates as approved by Engineer-in-Charge, will, as far as possible be made within the period specified here in under, the period being reckoned from the date of receipt of the bill by the Engineer- in- Charge or his authorized Engineer, complete with account of materials issued by the WAPCOS and dismantled materials.

- | | |
|--|----------|
| a) Tendered value of work is up to Rs. 1 crore | 2 months |
| b) If the Tendered value of work is more than Rs. 1 Cr and up to Rs. 10 Cr | 3 months |
| c) If the Tendered value of work exceeds Rs. 10 Crore : | 6 months |

CLAUSE 9A : PAYMENT OF CONTRACTOR'S BILLS TO BANKS

Payments due to the contractor may, if so desired by him, be made to his bank, registered financial, co-operative or thrift societies or recognized financial institutions instead of direct to him provided that the contractor furnishes to the Engineer-in-Charge (1) an authorization in the form of a legally valid document such as a power of attorney conferring authority on the bank; registered financial, co-operative or thrift societies or recognized financial institutions to receive payments and (2) his own acceptance of the correctness of the amount made out as being due to him by WAPCOS or his signature on the bill or other claim preferred against WAPCOS before settlement by the Engineer-in-Charge of the account or claim by payment to the bank, registered financial, co-operative or thrift societies or recognized financial institutions. While the receipt given by such banks; registered financial, co-operative or thrift societies or recognized financial institutions shall constitute a full and sufficient discharge for the payment, the contractor shall whenever possible present his bills duly receipted and discharged through his bank, registered financial, co-operative or thrift societies or recognized financial institutions.

Nothing herein contained shall operate to create in favour of the bank; registered financial, co-operative or thrift societies or recognized financial institutions any rights or equities vis-à-vis the WAPCOS.

CLAUSE 10 : MATERIALS SUPPLIED BY WAPCOS

Not Applicable

CLAUSE 10A: MATERIALS TO BE PROVIDED BY CONTRACTOR

The contractor shall, at his own expense, provide all materials, required for the works other than those which are stipulated to be supplied by the WAPCOS.

The contractor shall, at his own expense and without delay; supply to the Engineer-in-Charge 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 Engineer-in-Charge 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 Engineer-in-Charge 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 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. 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 Engineer-in-Charge 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 Engineer-in-Charge 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 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 shall also have full powers to require other proper materials to be substituted thereof and in case of default, the Engineer-in-Charge 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 schedule F.

CLAUSE 10B :

SECURED ADVANCE ON NON-PERISHABLE MATERIALS

(i)The contractor, on signing an indenture in the form in APPENDIX – XV to be specified by the Engineer-in-Charge, 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 or an amount not exceeding 75% of the material element cost in the tendered rate of the finished item of the work, whichever is lower, which are in the opinion of the Engineer-in-Charge 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.

MOBILISATION ADVANCE

(ii) Mobilization advance not exceeding 10% of the tendered value may be given, if requested by the contractor in writing within one month of the order to commence the work. The aforesaid advance of 10% may be paid in two instalments, each of five per cent. The first one may be paid on commencement of the work and provision by the contractor of the unconditional BG in respect of the advance. The second instalment may be paid on certification by the engineer of the contractor's having achieved a financial progress of 10% of the contract price, 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.

Before any installment of advance is released, the contractor shall execute a Bank Guarantee Bonds not more than 6 in number from Scheduled Bank for the amount equal to 110% of the amount of advance and valid for the period till recovery of advance. 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.

INTEREST & RECOVERY

(2) The mobilization advance in (ii) above bear simple interest at the rate of 10 percent of payment to the date of recovery, both days inclusive, on the outstanding amount of advance. Recovery of such sums advanced shall be made by the deduction from the contractors bills commencing after first ten percent 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 eighty percent 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.

(iv) If the circumstances are considered reasonable by the Engineer-in- Charge, the period mentioned in (ii) and (iii) for request by the contractor in writing for grant of mobilization advance may be extended at the discretion of the Engineer-in-Charge.

CLAUSE 10C : PAYMENT ON ACCOUNT OF INCREASE IN PRICE / WAGES DUE TO STATUTORY ORDER

If after submission of tender, if the price of any material incorporate in the work (excluding the material covered under clause 10 CA and/ or wages of labour increases

as a direct result of the coming into force of any fresh, law or statutory rule or order (but not due to any variation of rate in GST applicable on such material(s) being considered under this clause) beyond the prices/wages prevailing at the time of the last stipulated date of receipt of tenders including extensions, if any, for the work during contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, then the amount of the contract shall accordingly be varied.

If after submission of the tender, the price of any material incorporated in the works (excluding the materials covered under Clause 10CA and/or wages of labour as prevailing at the time of last stipulated date of receipt of tender including extensions, if any, is decreased as a direct result of the coming into force of any fresh law or statutory rules or order (but not due to any changes of rate in sales tax/VAT, Central/State Excise/Custom Duty), WAPCOS shall in respect of materials incorporated in the works (excluding the materials covered under Clause 10CA and/or labour engaged on the execution of the work after the date of coming into force of such law statutory rule or order be entitled to deduct from the dues of the contractor, such amount as shall be equivalent to the difference between the prices of the materials and/or wages as prevailed at the time of the last stipulated date for receipt of tenders including extensions if any for the work and the prices of materials and/or wages of labour on the coming into force of such law, statutory rule or order. This will be applicable for the contract period including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2.

Engineer-in-Charge shall call books of account and other relevant documents from the contractor to satisfy himself about reasonability of increase in prices of materials and wages.

The contractor shall, within a reasonable time of his becoming aware of any alteration in the price of any such materials and/or wages of labour, give notice thereof to the Engineer-in-Charge stating that the same is given pursuant to this condition together with all information relating thereto which he may be in position to supply.

For this purpose, the labour component of 85% of the value of work executed during period under consideration shall not exceed the percentage as specified in Schedule F, and the increase/decrease in labour shall be considered on the minimum daily wages in rupees of any unskilled Mazdoor, fixed under any law statutory rule and order. The cost of work for which escalation is applicable (W) is same as cost of work done worked out as indicated in sub-para (ii) of clause 10 CC except the amount of full assessed value of secured Advance.

CLAUSE 10CA : PAYMENT DUE TO VARIATION IN PRICES OF MATERIALS AFTER RECEIPT OF TENDER

If after submission of the tender, the price of materials specified in Schedule F increases/ decreases beyond the base price(s) as indicated in Schedule F for the work, then the amount of the contract shall accordingly be varied and provided further that any such variations shall be effected for stipulated period of Contract including the justified

period extended under the provisions of Clause 5 of the Contract without any action under Clause 2.

However for work done/during the justified period extended as above, it will be limited to indices prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work x stipulated period/tendered cost). If updated stipulated date of completion as calculated on pro-rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

The increase/decrease in prices of cement, steel reinforcement, structural steel and POL shall be determined by the Price indices issued by the Director General, CPWD. For other items provided in the Schedule 'F', this shall be determined by the All India Wholesale Price Indices of materials as published by Economic Advisor to Government of India, Ministry of Commerce and Industry. Base price for cement, steel reinforcement, structural steel and POL shall be as issued under the authority of Director General CPWD applicable for Delhi including Noida, Gurgaon, Faridabad & Ghaziabad and for other places as issued under the authority of Zonal Chief Engineer, CPWD and base price of other materials issued by concerned Zonal Chief Engineer and as indicated in Schedule 'F'. In case, price index of a particular material is not issued by Ministry of Commerce and Industry, then the price index of nearest similar material as indicated in Schedule 'F' shall be followed.

The amount of the contract shall accordingly be varied for all such materials and will be worked out as per the formula given below for individual material:-

Adjustment for component of individual material

$$V = P \times Q \times \frac{CI - CI_0}{CI_0}$$

where,

V = Variation in material cost i.e. increase or decrease in the amount of rupees to be paid or recovered.

P = Base Price of material as issued under authority of DG, CPWD or concerned Zonal Chief Engineer and as indicated in Schedule "F". For Projects and Original Works

Q = Quantity of material brought at site for bonafide use in the works since

previous bill excluding any such quantity consumed in the deviated quantity of items beyond deviation limit and extra /substituted item, paid/to be paid at rates derived on the basis of market rate under clause 12.2.

Cio = Price index for cement, steel reinforcement bars structural steel and POL as issued by the DG, CPWD and corresponding to the time of base price of respective material indicated in Schedule 'F'. For other items, if any, provided in Schedule 'F', All India Wholesale Price Index for the material as published by the Economic Advisor to Government of India, Ministry of Industry and Commerce and corresponding to the time of base price of respective material indicated in Schedule 'F'.

CI = Price index for cement, steel reinforcement bars, structural steel and POL as issued under the authority of DG, CPWD for period under consideration. For other items, if any, provided in Schedule 'F', All India Wholesale Price Index for the material for period under consideration as published by Economic Advisor to Government of India, Ministry of Industry and Commerce.

Note: (i) In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the index prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on pro-rata basis only as cost of extra work x stipulated period/ tendered cost) shall be considered. Provided always that provisions of the preceding Clause 10 C shall not be applicable in respect of Materials covered in this Clause. If updated stipulated date of completion as calculated on pro- rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

(ii) If during progress of work or at the time of completion of work, it is noticed that any material brought at site is in excess of requirement, then amount of escalation if paid earlier on such excess quantity of material shall be recovered on the basis of cost indices as applied at the time of payment of escalation or as prevailing at the time of effecting recovery, whichever is higher.

(iii) Cement mentioned wherever in this clause includes Cement component used in RMC brought at site from outside approved RMC plants, if any.

(iv) The date wise record of ready mix concrete shall be kept in a register and the cement consumption for the same shall be calculated accordingly.

(v) If built-up steel items are brought at site from workshop, then the variation shall be paid for the structural steel up to the period when the built up item/finished product is brought at site.

CLAUSE 10CC: PAYMENT DUE TO INCREASE/DECREASE IN PRICES/WAGES (EXCLUDING MATERIALS COVERED UNDER CLAUSE 10 CA) AFTER RECEIPT OF TENDER FOR WORKS

If the prices of materials (not being materials supplied or services rendered at fixed prices by the WAPCOS in accordance with clause 10 & 34 thereof) and/or wages of labour required for execution of the work increase, the contractor shall be compensated for such increase as per provisions detailed below and the amount of the contract shall accordingly be varied, subject to the condition that such compensation for escalation in prices and wages shall be available only for the work done during the stipulated period of the contract including the justified period extended under the provisions of clause 5 of the contract without any action under clause 2. No such compensation shall be payable for a work for which the stipulated period of completion is equal to or less than the time as specified in Schedule F. Such compensation for escalation in the prices of materials and labour, when due, shall be worked out based on the following provisions:-

- i. The base date for working out such escalation shall be the last stipulated date of receipt of tenders including extension, if any.
- ii. The cost of work on which escalation will be payable shall be reckoned as below :
 - a) Gross value of work done up to this quarter : (A)
 - b) Gross value of work done up to the last quarter : (B)
 - c) Gross value of work done since previous quarter (A-B) : (C)
 - d) Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) fresh paid in this quarter : (D)
 - e) Full assessed value of Secured Advance (excluding materials Covered under Clause 10 CA) recovered in this quarter : (E)
 - f) Full assessed value of Secured Advance for which escalation Payable in this quarter (D-E) : (F)
 - g) Advance payment made during this quarter: (G)
 - h) Advance payment recovered during this quarter: (H)
 - i) Advance payment for which escalation is payable in this Quarter(G- H): (I)
 - j) Extra items/deviated quantities of items paid as per Clause 12 Based on prevailing market rates during this quarter: (J)

Then, $M = C + F + I - J$

$N = 0.85 M$

Cost of work for which escalation is applicable:

$$W = N$$

Components for materials (except cement, reinforcement bars, structural steel, POL or other materials covered under clause 10 CA) labour, etc. shall be pre-determined for every work and incorporated in the conditions of contract attached to the tender papers included in Schedule 'F'. The decision of the Engineer-in-Charge in working out such percentage shall be binding on the contractors.

- iii. The compensation for escalation for other materials (excluding cement, reinforcement bars, structural steel, POL or other materials covered under clause 10 CA) shall be worked as per the formula given below:-

Adjustment for civil component (except cement, structural steel, reinforcement bars, POL and other materials covered under clause 10CA) / electrical component of construction 'Materials'

$$V_m = W \times \frac{X_m \times (M_1 - M_0)}{100}$$

$$\frac{M_1}{M_0}$$

V_m = Variation in material cost i.e. increase or decrease in the amount in rupees to be paid or recovered.

W = Cost of Work done worked out as indicated in sub-para (ii) of Clause 10CC.

Xm = Component of 'materials' (except cement, structural steel, reinforcement bars POL and other materials covered under clause 10CA) expressed as percent of the total value of work.

MI = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/ Group Items for the period under consideration as published by Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group Items. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the index prevailing at the time of updated stipulated date of completion considering the effect of extra work (extra time to be calculated on a-zette basis only as cost of extra work x stipulated period/tendered cost, shall be considered.) If updated stipulated date of completion as calculated on pro-rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

Mlo = All India Wholesale Price Index for civil component/electrical component* of construction material as worked out on the basis of All India Wholesale Price Index for Individual Commodities/Group Items valid on the last stipulated date of receipt of tender including extension, if any, as published by the Economic Advisor to Govt. of India, Ministry of Industry & Commerce and applying weightages to the Individual Commodities/Group items.

***Note: relevant component only will be applicable.**

- iv. The following principles shall be followed while working out the indices mentioned in para (iv) above.
 - a) The compensation for escalation shall be worked out at quarterly intervals and shall be with respect to the cost of work done as per bills paid during the three calendar months of the said quarter. The dates of preparation of bills as finally entered in the Measurement Book by the Engineer-in-Charge/ date of submission of bill finally by the contractor to the department in case of computerized measurement books shall be the guiding factor to decide the bills relevant to the quarterly interval. The first such payment shall be made at the end of three months after the month (excluding the month in which tender was accepted) and thereafter at three months' interval. At the time of completion of the work, the last period for payment might become less than 3 months, depending on the actual date of completion.
 - b) The index (MI/FI etc.) relevant to any quarter/period for which such compensation is paid shall be the arithmetical average of the indices relevant to the three calendar months. If the period up to date of completion after the quarter covered by the last such installment of payment, is less than three months, the index MI and FI shall be the average of the indices for the months falling within that period.
- v. The compensation for escalation for labour shall be worked out as per the formula given below:-

$$VL = W \times \frac{Y}{100} \times \frac{LI - LI_0}{LI_0}$$

VL : Variation in labour cost i.e. amount of increase or decrease in rupees to be paid or recovered.

W : Value of work done, worked out as indicated in sub-para (ii) above.

Y : Component of labour expressed as a percentage of the total value of the work.

LI : Minimum wage in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as applicable on the last date of the quarter previous to the one under consideration. (In respect of the justified period extended under the provisions of clause 5 of the contract without any action under clause 2, the minimum wage prevailing on the last date of quarter previous to the quarter pertaining to updated stipulated date of Completion considering the effect of extra work (extra time to be calculated on azette basis only as cost of extra work x stipulated period/tendered cost, shall be considered.) If updated stipulated date of completion as calculated on pro-rata basis does not cover full calendar month then indices will be considered or restricted to previous month.

LI₀ : Minimum daily wage in rupees of an unskilled adult male mazdoor, fixed under any law, statutory rule or order as on the last stipulated date of receipt of tender including extension, if any.

- vi. The following principles will be followed while working out the compensation as per sub para (vi) above.
 - a) The minimum wage of an unskilled Mazdoor mentioned in sub-para (vi) above shall be the higher of the wage notified by Government of India, Ministry of Labour and that notified by the local administration both relevant to the place of work and the period of reckoning.
 - b) The escalation for labour also shall be paid at the same quarterly intervals when escalation due to increase in cost of materials is paid under this clause. If such revision of minimum wages takes place during any such quarterly intervals, the escalation compensation shall be payable at revised rates only for work done in subsequent quarters;
 - c) Irrespective of variations in minimum wages of any category of labour, for the purpose of this clause, the variation in the rate for an unskilled Mazdoor alone shall form the basis for working out the escalation compensation payable on the labour component.
- vii. In the event the price of materials and/or wages of labour required for execution of the work decrease/s, there shall be a downward adjustment of the cost of work so that such price of materials and/or wages of labour shall be deductible from the cost of work under this contract and in this regard the formula

herein before stated under this Clause 10CC shall mutatis mutandis apply, provided that:

- a) no such adjustment for the decrease in the price of materials and/or wages of labour aforementioned would be made in case of contracts in which the stipulated period of completion of the work is equal to or less than the time as specified in Schedule 'F'.
- b) the Engineer-in-Charge shall otherwise be entitled to lay down the procedure by which the provision of this sub-clause shall be implemented from time to time and the decision of the Engineer-in-Charge in this behalf shall be final and binding on the contractor.

Viii. Provided always that:-

- (a) Where provisions of clause 10CC are applicable, provisions of clause 10C will not be applicable but provisions of clause 10CA will be applicable.
- (b) Where provisions of clause 10CC are not applicable, provisions of clause 10C and 10CA will become applicable.

Note: Updated stipulated date of completion (period of completion plus extra time for extra work for compensation under clause 10C, 10CA and 10 CC

The factor of 1.25 taken into account for calculating the extra time under clause 12.1 for extra time shall not be considered while calculating the updated stipulated date of completion for this purpose in clause 10C, clause 10CA, and clause 10CC.

CLAUSE 10D : DISMANTLED MATERIAL WAPCOS PROPERTY

The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work, etc. as WAPCOS's 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

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

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 signed by the Engineer-in-Charge 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 specified in Schedule F 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 WAPCOS without any extra expenditure to WAPCOS.

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 And Pricing

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) submit market rate claim rates, supported by proper analysis which shall include invoices, vouchers etc. and Manufacturer's specification for the work failing which the rate approved later by the Engineer-in-charge shall be

binding and the Engineer-in-Charge 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, failing which it will be deemed to have been approved.

Deviation, Substituted Items and Pricing.

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.

(a) 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).

(b) 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).

Deviations, Deviated Quantities, Pricing

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, 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 Engineer-in-Charge 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 (as per invoice, vouchers from the manufacturers or suppliers submitted by the agency and duly verified by Engineer in Charge or his representative) and the contractor shall be paid in accordance with the rates so determined.

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.

12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work in excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in

question within one month of the expiry of the said period of fifteen days having regard to the market rates.

12.4 The contractor shall send to the Engineer-in-Charge once every three months, an up to date account giving complete details of all claims for additional payments to which the contractor may consider himself entitled and of all additional work ordered by the Engineer-in-Charge which he has executed during the preceding quarter failing which the contractor shall be deemed to have waived his right.

12.5 For the purpose of operation of Schedule "F", the following works shall be treated as works relating to foundation unless & otherwise defined in the contract:

- (i) For Buildings: All works up to 1.2 metre above ground level or up to floor 1 level whichever is lower.
- (ii) For abutments, piers and well staining: All works up to 1.2 m above the bed level.
- (iii) For retaining walls, wing walls, compound walls, chimneys, overhead reservoirs/ tanks and other elevated structures: All works up to 1.2 metre above the ground level.
- (iv) For reservoirs/tanks (other than overhead reservoirs/tanks): All works up to 1.2 metre above the ground level.
- (v) For basement: All works up to 1.2 m above ground level or up to floor 1 level whichever is lower.
- (vi) For Roads, all items of excavation and filling including treatment of sub base.

12.6 Any operation incidental to or necessarily has to be in contemplation of tenderer while quoting 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 or during the progress of work, the purpose or object for which the work is being done changes due to any supervening cause and as a result of which the work has to be abandoned or reduced in scope the Engineer-in-Charge shall give notice in writing to that effect to the contractor stating the decision as well as the cause for such decision 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. 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.
- iii. Reasonable compensation for repatriation of contractor's site staff and imported labour to the extent necessary.

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), (ii) and (iii) 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/Client 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 Guarantee on the same conditions, in the same manner and at the same rate for the balance tendered amount 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 Guarantee is furnished by the contractor the Engineer-in-Charge may return the previous Performance Guarantee.

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 working 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 working 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.

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 tendered value of the work.

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) 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 Engineer-in-charge, his authorized subordinates in charge of the work and all the superior officers, officer of the Quality Assurance Unit of the WAPCOS or any organization engaged by the WAPCOS/KIIFB 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 in charge of the work or to the Chief Engineer in charge of Quality Assurance or his subordinate officers or the officers of the organization engaged by the WAPCOS/Department 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 schedule 'F' 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

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. The security deposit of the contractor shall not be refunded before the expiry of twelve months (six months in the case of work costing Rs. Ten lakhs and below except road work) after the issue of the certificate final or otherwise, of completion of work, or till the final bill has been prepared and passed whichever is later. Provided that in the case of road work, if in the opinion of the Engineer-in-Charge, half of the security deposit is sufficient, to meet all liabilities of the contractor under this contract, half of the security deposit will be refundable after six months and the remaining half after twelve months of the issue of the said certificate of completion or till the final bill has been prepared and passed whichever is later.

During this period the Contractor will get the defects rectified without any cost to WAPCOS. For the item of water proofing roof treatment the Contractor will give guarantee bond for ten years. Similarly for other items, like electrical/mechanical equipment which have guarantee/warranty period beyond one year, wherever applicable as per manufacturer recommendations, will also be given guarantee bond by the Contractor to WAPCOS.

CLAUSE 18 : CONTRACTOR TO SUPPLY TOOLS & PLANTS ETC.

The contractor shall provide at his own cost all materials (except such special materials, if any, as may in accordance with the contract be supplied from the Engineer-in-Charge's stores), machinery, tools & plants as specified in schedule F. 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 and Adolescent 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 defined in the C.P.W.D. Contractor's Labour Regulations 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.
- 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 Central Public Works Department 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 wage 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-fulfillment 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 and the C.P.W.D. Contractor's Labour Regulations 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 C.P.W.D. 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 as decided by the authority mentioned in Schedule F 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 yours,
- (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 as decided by the authority mentioned in Schedule F 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 as decided by the authority mentioned in Schedule F 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 as decided by the authority mentioned in Schedule F per day for each day of default subject to a maximum of 5 percent 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 C.P.W.D. Contractor's 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 azetted 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 19H

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 gobri on both sides. The floor may be kutcha but plastered with mud gobri 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 19I

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. The Engineer-In-Charge will display a list of contractors working in the colony/Blocks on the notice board in the colony and also at the service centre, to apprise the residents about the same.

CLAUSE 19J

It shall be the responsibility of the contractor to see that the building under construction is not occupied by anybody unauthorized 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 tendered value of work may be imposed by WAPCOS whose decision shall be final both with regard to the justification and quantum and be binding on the contractor.

However, the WAPCOS, 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 CPWD Training Institute/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 specified in schedule 'F' 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 CPWD Regional Training Institute & National Skill Development Corporation (NSDC) for certification at the level of skilled/semi-skilled tradesmen.

For work 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 CPWD Regional Training Institute & 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 19L: CONTRIBUTION OF EPF AND ESI

The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the contractor. These contributions on the part of the employer paid by the

contractor shall be reimbursed by the Engineer-in-charge to the contractor on actual basis. The verification of deployment of labour will be done through biometric attendance system or any other suitable method by the Engineer in Charge. The applicable and eligible amount of EPF & ESI shall be reimbursed preferably within 7 days but not later than 30 days of submission of documentary proof of payment provided same are in order.

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 there under 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 individual or a Hindu undivided family business concern, 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 three months after issue of notice by Engineer- in- Charge.

CLAUSE 25 : SETTLEMENT OF DISPUTES & ARBITRATION**Amicable Resolution and Mediation**

Save where expressly stated to the contrary in the Contract, any dispute, difference or controversy of whatever nature between the Parties, howsoever arising under, out of or in relation to the Contract including disputes, if any, with regard to any acts, decision or opinion of WAPCOS Limited Representative and so notified in writing by either Party to the other (the "Dispute") shall in the first instance be attempted to be resolved amicably in accordance with the procedure set out in Clause 25.1 [Amicable Resolution and Mediation] below.

25.1 [Amicable Resolution and Mediation]

Either Party may require such Dispute to be referred to a person nominated by each Party, for amicable settlement. Upon such reference, the two shall meet at the earliest mutual convenience and in any event within [15 (fifteen)] days of such reference to discuss and attempt to amicably resolve the Dispute.

In the event that the Dispute in question is not resolved amicably within 15 (fifteen) days of such meeting between the Parties in accordance with Clause 25.1 [Amicable Resolution and Mediation] either Party may refer the Dispute to arbitration in accordance with Clause 25.2 [Arbitration Procedure].

25.2 Arbitration Procedure

Save where expressly stated to the contrary in the Contract, any Dispute shall be finally settled by binding arbitration under the Arbitration and Conciliation Act 1996 by sole arbitrators appointed by CMD, WAPCOS.

Place of Arbitration

The place of arbitration shall be New Delhi.

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.

Enforcement of Award

The Parties agree that the decision or award resulting from arbitration shall be final and binding upon the Parties and shall be enforceable in accordance with the provisions of the Arbitration and Conciliation Act.

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.

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:

“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 my settlement in the said meeting(s), then the aggrieved party shall mandatory 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 WAPCOS is only working as intermediary between the Associate/Sub-Consultant/Sub-Contractor and the Principal Employer/Client, thus the event, any dispute arises under the present agreement and referred

to Arbitration for adjustment, then subject to corresponding clause in the Contract/Agreement/Work Order/Agreement between Principal Employer/Client & WAPCOS, Principal Employer/Client shall also be made party to the said Arbitration proceedings. Also, the award including costs if any passed against WAPCOS and costs incurred in the proceedings shall be the sole responsibility of Principal Employer/Client. 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 purpose between the parties to be made, in Delhi. The arbitration 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 of 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.”

CLAUSE 26 : CONTRACTOR INDEMNIFY WAPCOS AGAINST PATENT RIGHTS

The contractor shall fully indemnify and keep indemnified the WAPCOS 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 WAPCOS 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 there from, provided that the contractor shall not be liable to indemnify WAPCOS 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

When the estimate on which a tender is made includes lump sum in respect of parts of the work, the contractor shall be entitled to payment in respect of the items of work involved or the part of the work in question at the same rates as are payable under this contract for such items, or if the part of the work in question is not, in the opinion of the Engineer-in-Charge payable of measurement, the Engineer-in-Charge may at his discretion pay the lump-sum amount entered in the estimate, and the certificate in writing of the Engineer-in-Charge shall be final and conclusive against the contractor with regard to any sum or sums payable to him under the provisions of the clause.

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 state/ 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

- (i) 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 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 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 finalization 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 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.

- (ii) KIIFB/Department/WAPCOS 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 WAPCOS 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 WAPCOS or any other contracting person or persons through Engineer-in-Charge against any claim of the Engineer-in-Charge or WAPCOS 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 WAPCOS 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 WAPCOS will be kept withheld or retained

as such by the Engineer-in-Charge or the WAPCOS 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 29B : EMPLOYMENT OF COAL MINING OR CONTROLLED AREA LABOUR NOT PERMISSIBLE

The contractor shall not employ coal mining or controlled area labour falling under any category whatsoever on or in connection with the work or recruit labour from area within a radius of 32 km (20 miles) of the controlled area. Subject as above the contractor shall employ imported labour only i.e., deposit imported labour or labour imported by contractors from area, from which import is permitted.

Where ceiling price for imported labour has been fixed by State or Regional Labour Committees not more than that ceiling price shall be paid to the labour by the contractor.

The contractor shall immediately remove any labourer who may be pointed out by the Engineer in-Charge as being a coal mining or controlled area labourer. Failure to do so shall render the contractor liable to pay to WAPCOS a sum calculated at the rate of Rs.10/- per day per labourer. The certificate of the Engineer-in-Charge about the number of coal mining or controlled area labourer and the number of days for which they worked shall be final and binding upon all parties to this contract.

It is declared and agreed between the parties that the aforesaid stipulation in this clause is one in which the public are interested within the meaning of the exception in Section 74 of Indian Contract Act, 1872.

Explanation:- Controlled Area means the following areas:

Districts of Dhanbad, Hazaribagh, Jamtara – a Sub-Division under Santhal Pargana Commissionery, Districts of Bankura, Birbhum, Burdwan, District of Bilaspur.

Any other area which may be declared a Controlled Area by or with the approval of the Central Government.

CLAUSE 30 : UNFILTERED WATER SUPPLY

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 Engineer-in-Charge.

- ii. The Engineer-in-Charge shall make alternative arrangements for supply of water at the risk and cost of contractor(s) if the arrangements made by the contractor(s) for procurement of water are in the opinion of the Engineer-in- Charge, unsatisfactory.

CLAUSE 30A : ALTERNATE WATER ARRANGEMENTS

The contractor shall be allowed to construct temporary wells in the proposed land for Construction for taking water for construction purposes only after he has got permission of the 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 : CONDITION RELATING TO USE OF ASPHALTIC MATERIALS

- i. The contractor undertakes to make arrangement for the supervision of the work by the firm supplying the tar or bitumen used.
- ii. The contractor shall collect the total quantity of tar or bitumen required for the work as per standard formula, before the process of painting is started and shall hypothecate it to the Engineer-in-Charge. If any bitumen or tar remains unused on completion of the work on account of lesser use of materials in actual execution for reasons other than authorized changes of specifications and abandonment of portion of work, a corresponding deduction equivalent to the cost of unused materials as determined by the Engineer-in-Charge shall be made and the material return to the contractors. Although the materials are hypothecated to WAPCOS, the contractor undertakes the responsibility for their proper watch, safe custody and protection against all risks. The materials shall not be removed from site of work without the consent of the Engineer-in- Charge in writing.
- iii. The contractor shall be responsible for rectifying defects noticed within a year from the date of completion of the work and the portion of the security deposit relating to asphaltic work shall be refunded after the expiry of this period.

CLAUSE 33 : EMPLOYMENT OF TECHNICAL STAFF AND EMPLOYEES

Contractors Superintendence, Supervision, Technical Staff & Employees

- i. 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. Minimum requirement of such technical representative(s) and their qualifications and experience shall not be lower than specified in Schedule 'F'. 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) as per stipulation in Schedule 'F'

The Engineer-in-Charge shall within 3 days of receipt of such communication intimate in writing his approval or otherwise of such a representative(s) to the contractor. Any such approval may at any time be withdrawn and in case of such withdrawal, the contractor shall appoint another such representative(s) according to the provisions of this clause. Decision of the tender accepting authority shall be final and binding on the contractor in this respect. Such a principal technical representative and other technical representative(s) shall be appointed by the contractor soon after receipt of the approval from Engineer-in-charge and shall be available at site before start of work.

All the provisions applicable to the principal technical representative under the Clause will also be applicable to other technical representative(s). The principal technical representative and other technical representative(s) shall be present at the site of work for supervision at all times when any construction activity is in progress and also present himself/themselves, as required, to the Engineer-in-Charge and/or his designated representative to take instructions. Instructions given to the principal technical representative or other technical representative(s) shall be deemed to have the same force as if these have been given to the contractor. The principal technical representative and other technical representative(s) shall be actually available at site fully during all stages of execution of work, during recording/checking/test checking of measurements of works and whenever so required by the Engineer-in-Charge and shall also note down instructions conveyed by the Engineer-in-Charge or his designated representative(s) in the site order book and shall affix his/their signature in token of noting down the instructions and in token of acceptance of measurements/checked measurements/ test checked measurements. The representative(s) shall not look after any other work. Substitutes, duly approved by Engineer-in-Charge of the work in similar manner as aforesaid shall be provided in event of absence of any of the representative(s) by more than two days.

If the Engineer-in-Charge, whose decision in this respect is final and binding on the contractor, is convinced that no such technical representative(s) is/are effectively appointed or is/are effectively attending or fulfilling the provision of this clause, a recovery (non refundable) shall be effected from the contractor as specified in Schedule 'F' and the decision of the Engineer-In-Charge as recorded in the site order book and measurement recorded checked/test checked in Measurement Books shall be final and binding on the contractor. Further if the contractor fails to appoint

suitable technical Principal technical representative and/or other technical representative(s) and if such appointed persons are not effectively present or are absent by more than two days without duly approved substitute or do not discharge their responsibilities satisfactorily, the Engineer-in-Charge shall have full powers to suspend the execution of the work until such date as suitable other technical representative(s) is/are appointed and the contractor shall be held responsible for the delay so caused to the work. The contractor shall submit a certificate of employment of the technical representative(s) (in the form of copy of Form-16 or CPF deduction issued to the Engineers employed by him) along with every on account bill final bill and shall produce evidence if at any time so required by the Engineer-in-Charge.

- ii. 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 contractor shall provide and employ skilled, semiskilled and unskilled labour as is necessary for proper and timely execution of 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 34 : LEVY / TAXES PAYABLE BY CONTRACTOR

- i. GST, Building and other Construction Workers Welfare Cess or any other tax, levy or Cess in respect of input for or output by this contract shall be payable by the contractor and WAPCOS shall not entertain any claim whatsoever in this respect except as provided under Clause 35.
- ii. The contractor shall deposit royalty and obtain necessary permit for supply of the red bajri, stone, kankar, etc. from local authorities.
- iii. If pursuant to or under any law, notification or order any royalty, cess or the like becomes payable by the WAPCOS 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 WAPCOS 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 35 : CONDITIONS FOR REIMBURSEMENT OF LEVY/TAXES IF LEVIED AFTER RECEIPT OF TENDERS

- (i) All tendered rates shall be inclusive of all taxes and levies (including 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 Limited attributable to delay in execution of work within the control of the Contractor.
- (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 WAPCOS 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 36 : 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 37 : 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 removed from the approved list of contractors of WAPCOS. If however the contractor is registered in any other department, he shall be debarred from tendering in WAPCOS for any breach of this condition.

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

CLAUSE 38 : NO GAZETTED ENGINEER TO WORK AS CONTRACTOR WITHIN ONE YEAR OF RETIREMENT

No engineer of gazette rank or other gazette 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 39 : RETURN OF MATERIALS & RECOVERY FOR MATERIAL ISSUED

- I. After completion of the work and also at any intermediate stage in the event of non-reconciliation of materials issued, consumed and in balance – (see Clause 10), theoretical quantity of materials issued by the WAPCOS for use in the work shall be calculated on the basis and method given hereunder:-
 - a) Quantity of cement & bitumen shall be calculated on the basis of quantity of cement & bitumen required for different items of work as shown in the Schedule of Rates mentioned in Schedule F. In case any item is executed for which standard constants for the consumption of cement or bitumen are not available in the above mentioned schedule/statement or cannot be derived from the same shall be calculated on the basis of standard formula to be laid down by the Engineer-in-Charge.
 - b) Theoretical quantity of steel reinforcement or structural steel sections shall be taken as the quantity required as per design or as authorized by Engineer-in-Charge, including authorized lap pages, chairs etc. plus 3% wastage due to cutting into pieces, such theoretical quantity being determined and compared with the actual issues each diameter wise, section wise and category wise separately.
 - c) Theoretical quantity of G.I. & C.I. or other pipes, conduits, wires and cables, pig lead and G.I./M.S. sheets shall be taken as quantity actually required and measured plus 5% for wastage due to cutting into pieces (except in the case of G.I./M.S. sheets it shall be 10%), such determination & comparison being made diameter wise & category wise.
 - d) For any other material as per actual requirements.
- II. Over the theoretical quantities of materials so computed a variation shall be allowed as specified in Schedule F. The difference in the net quantities of material actually issued to the contractor and the theoretical quantities including such authorized variation, if not returned by the contractor or if not fully reconciled to the satisfaction of the Engineer-in-Charge within fifteen days of the issue of written notice by the Engineer-in-charge to this effect shall be recovered at the rates specified in Schedule F, without prejudice to the provision of the relevant conditions regarding return of materials governing the contract. Decision of Engineer-in-Charge in regard to theoretical quantities of materials, which should have been actually used as per the Annexure of the standard schedule of rates and recovery at rates

specified in Schedule F, shall be final & binding on the contractor. For nonscheduled items, the decision of the Engineer-In-Charge regarding theoretical Quantities of materials which should have been actually used, shall be final and binding on the contractor.

- III. The said action under this clause is without prejudice to the right of the WAPCOS to take action against the contractor under any other conditions of contract for not doing the work according to the prescribed specifications.

CLAUSE 40 : 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 by the Engineer In Charge upto Rs.2,00,000/- and by the WAPCOS 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 41 : 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 there under 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 42 : RELEASE OF SECURITY DEPOSIT AFTER LABOUR CLEARANCE

Release of Security Deposit of the work shall not be refunded till the contractor produces a clearance deposit after labour certificate from the Labour Officer. 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. The Engineer-in-Charge, on receipt of the said communication, shall write to the Labour Officer to intimate if any complaint is pending against the contractor in respect of the work. If no complaint is pending, on record till after 3 months after completion of the work and/or no communication is received from the Labour Officer to this effect till six months after the date of completion, it will be deemed to have received the clearance certificate and the Security Deposit will be released if otherwise due.

CLAUSE 43: INSURANCE

1. Requirements

Before commencing execution of works, unless stated otherwise in the Schedule F, 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 may be specified by the employer in the Schedule F

2. Policy in Joint Names of Contractor and Employer

The policy referred to under sub-clause 43(1) 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. Currency of Policy

The policies shall remain in force throughout the period of execution of the works and till the expiry of the defect liability period. The contractor shall, whenever called upon, produce to the engineer or his representative the various insurance policies obtained by him as also the rates of premia and the premia paid by him to ensure that the policies

indeed continue to be in force. If the contractor fails to effect or keep in force or provide adequate cover in the insurance policies mentioned in the sub clause 43(1) or any other insurance he might be required to effect under the contract, then in such cases, the employer may effect and keep in force any such insurance or further insurance and the cost and expenses incurred by him in this regard shall be deductible from payments due to the contractor or from the contractor's performance security.

CLAUSE 45: PREFERENCE TO MAKE IN INDIA

- 1) 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. In this connection, the minimum local content shall be 50% and the margin of purchase preference shall be 20%.
- 2) Verification of Local Content
 - a. 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.
 - b. 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 46: RULE 144 (xi) IN GENERAL FINANCIAL RULES (GFRs) 2017

- 1) 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.
- 2) "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- 3) "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.

4) The beneficial owner for the purpose of 1.4.2.(iii) above will be as under:

- a. 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;

Explanation:

- “Controlling ownership interest” means ownership of or entitlement to more than twenty- five per cent. Of shares or capital or profits of the company;
- “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;
- b. 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;
- c. 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;
- d. 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;
- e. 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.

5) 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

For & on behalf of Tenderer

SECTION– IV

PROFORMA OF SCHEDULES

SECTION-IV
PROFORMA OF SCHEDULES
(Operative schedule)

1.0 SCHEDULES

SCHEDULE 'A'		
	Schedule of quantities (BOQ)	Attached as Volume III, Bill of Quantities
SCHEDULE 'B'		
	Schedule of materials to be issued to the contractor	NIL – No material to be issued to the Contractor
SCHEDULE 'C'		
	Tools and plants to be hired to the contractor	NIL – No tools and plants to be hired to the Contractor
SCHEDULE 'D'		
	Extra schedule for specific requirements/document for the work, if any.	As attached in tender form for the work, if any.
SCHEDULE 'E'		
	Name of work :	Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur
	Estimated cost of work:	Rs. 2,23,60,904/- +GST
	Earnest money:	Rs. 1,00,000/-
	Performance Guarantee:	5% of Tendered value
	Security Deposit:	2.5% of Tendered value
SCHEDULE 'F'		
Clause No.	Description	Applicability/Modified/ Added
GENERAL RULES AND DIRECTIONS		
DEFINITIONS		
Add 2(ii)(a)	Owner shall mean: Health and Family Welfare (P) Department- Government of Kerala.	
2(iii)	Work Means:	

Clause No.	Description	Applicability/Modified/ Added
	Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur	
2(iv)	Site Means District Hospital Chengannur	
2 (viii)	Engineer-In-Charge Will be intimated to the successful bidder at the time of issue of Notice to Proceed the works.	
2 (ix)	Accepting Authority: Regional Manager WAPCOS Kerala	
2 (xii)	Market Rate Percentage on cost of materials and labour to cover all overheads and profits	15%
2(xiii)	Standard Schedule of Rates Schedule of Rates (Electrical) Schedule of Rates (Civil)	DSR (E&M) 2018 DSR 2018, with up to date correction slips (up to date of floating of NIT)
2(xviii)	Date of Commencement of work	Date of issue of LoA or date of handing over of site whichever is later.
9	Signing of Contract	The Successful tenderer will have to execute an agreement in stamp paper worth 0.1% of contract agreed amount subjected to a maximum of Rs. 1,00,000/- in prescribed form within 21 days from the date of LoA

CLAUSES OF CONTRACT

Clause 1	Performance Guarantee	Applicable
	i. Performance Guarantee	<p>5% of Contract Value (This guarantee shall be in the form of Deposit at call receipt of any Nationalized/Scheduled Bank /Banker's cheque of any Nationalized/Scheduled Bank /Demand Draft of any Nationalized /Scheduled Bank /Pay order of any Nationalized/Scheduled Bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Nationalized/Scheduled Bank or the State Bank of India in accordance with the prescribed form (PBG will be returned after successful completion of Defect Liability Period)</p> <p>At least 50% of these Guarantee shall be in</p>

Clause No.	Description	Applicability/Modified/ Added
	<p>ii. Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance</p> <p>iii. Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period as provided in (i) Above.</p> <p>iv. Validity of Performance Guarantee</p> <p>v. Return of Performance Guarantee</p>	<p>the form of Treasury fixed deposit as per As per G.O.(P) No. 429/15/Fin Dated 28.09.2015.</p> <p>14 days</p> <p>7 days</p> <p>The Performance Guarantee shall be valid up to the stipulated date of completion plus Defect Liability period plus one year claim period.</p> <p>Successful completion of Defect Liability period</p>
Clause 1A	Security Deposit	Applicable 2.5% of Tendered Value
	Release of security Deposit	Soon after the completion & commissioning of works and issuance of the completion certificate.
Clause 2	Compensation for Delay	<u>ADD:</u> Timely completion of the work is very much/strictly essential due to time constraints
Clause 3	When the Contract can be Determined	<u>ADD</u> (c) to determine the amount to be recovered from the Contractor for completing the remaining work or in the event the remaining work is not to be completed the loss/damage suffered, if any, by WAPCOS after giving credit for the value of the work executed by the Contractor up to the time of termination/cancellation less on account payments made till date and

Clause No.	Description	Applicability/Modified/ Added
		<p>value of Contractor's materials, plant, equipment, etc., taken possession of after termination/cancellation.</p> <p>(d) to recover the amount determined as per (a) and (b), if any, from any moneys due to the Contractor or any account or under any other Contract and in the event of any shortfall, the Contractor shall be called upon to pay the same on demand.</p>
Clause 5	<p>Time and Extension for Delay Number of days from the date of issue of letter of acceptance for reckoning date of start</p> <p>Stipulated time of completion of project</p>	<p>Applicable 7 days</p> <p>As Mentioned in NIT</p>
Clause 5.1 (1)	Non submission of construction programme by the contractor	Rs. 5000/- per day
Clause 5.4	Non submission of modified construction programme for the extended time by the contractor	Rs. 5000/- per day
Clause 6A	Computerized Measurement Book	Applicable
Clause 7	Payment on Intermediate Certificate to be Regarded as advance	Applicable
		<p>As per NIT document.</p> <p>Further, payment on account of the amount admissible shall be made by KIIFB G.O.(Ms) No. 69/2018/Fin dated 24.02.2018 directly to the contractor's account certifying the sum to which the contractor is considered entitled by way of interim payment at such rates as decided by the Engineer-in-Charge.</p>
Clause 10A	Materials to be provided by the contractor	Contractor must provide Field Testing Equipments in required number
Clause 10 B	i) Secured Advance on Non-Perishable Materials	Not Applicable
	ii) Mobilization Advances	<p>Applicable</p> <p>The Advance will be issued after necessary approvals from KIIFB</p>

Clause No.	Description	Applicability/Modified/ Added
Clause 10 C	Payment on Account of Increase in Price / Wages due to Statutory Order	Not Applicable
Clause 10 CA	Payment due to Variation in Prices of Materials (Cement, Steel & Structural Steel) after Receipt of Tender	Not Applicable
Clause 10 CC	Payment due to Increase/Decrease in Prices/ Wages (Excluding Materials covered under Clause 10 CA) after Receipt of Tender for Works	Not Applicable
Clause 11	<p>Works to be Executed in Accordance with Specifications, Drawings, Orders Etc.</p> <p>Specifications to be followed for execution of work</p>	<p>Applicable</p> <p>All works are to be executed in accordance with the specifications, BIS Standards and Codes, Indian Electricity Rules 1956, Indian Electricity Act 2003 and Fire Safety Regulations pertaining to Electric applications. Specification with up to date correction on the last date of submission of tender for work.</p> <p><u>In case specification of any item is not clear, CPWD Specifications , Indian Standards(IS), NBPDCCL Specifications with up to date correction slips issued on the last date of submission of tender for work is applicable</u></p> <p><u>Special Note:</u></p> <p><u>Works to be executed as per GRIHA norms as per the direction of Engineer in Charge for obtaining a minimum of 3 star GRIHA rating.</u></p> <p><u>Changes in the BOQ items and necessary extra items are also to be executed for achieving GRIHA NORMS as per the direction of Engineer in Charge.</u></p> <p>Special Conditions for GRIHA Compliance for works</p> <p>1. As per the project Agenda, it shall be our Endeavour to achieve 3 stars GRIHA rating for the construction being taken up under this tender document for which the contractor shall be</p>

Clause No.	Description	Applicability/Modified/ Added
		<p>responsible.</p> <p>2. The contractor shall ensure that the following provisions are complied with during the construction besides GCC provisions related to a) CPWD</p>
Clause 12.2	Deviation, Extra Items and Pricing.	<p>ADD</p> <p>In case the extra item being the Scheduled Item (Delhi Schedule of rates), these shall be paid as per the schedule rate plus applicable cost index (at the time of tender) as issued by CPWD. Tender reduction, if any, shall be applied.</p> <p>In the case of extra item(s) (items that are completely new), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis on the basis of the market rates and the contractor shall be paid in accordance with rate approved by WAPCOS.</p>
Clause 12.2	Deviation, Substituted Items and Pricing.	<p>ADD</p> <p>“The specification mentioned in Tender may be substituted as per the requirement of Owner/ WAPCOS.</p> <p>In this case of substituted item(s) being DSR item, these shall be paid as per the DSR 2018 rate plus applicable cost index (at the time of tender) as issued by CPWD. Tender reduction, if any, shall be applied.</p> <p>In the case substituted of item(s) (items that are completely new), the contractor may within fifteen days of receipt of order or occurrence of the item(s) claim rates, supported by proper analysis on the basis of the market rates and the contractor shall be paid in accordance with rate approved by WAPCOS.</p> <p>If any ALQR item is substituted by another item (having scheduled rate or market rate more than the ALQR) as per the request of the Contractor, the ALQR of the original item to be paid for the substituted item</p>
Clause 12.2 and Clause	Deviations, Deviated Quantities	Deviation limit beyond which clause 12.2 & 12.3 shall apply for works above plinth level

Clause No.	Description	Applicability/Modified/ Added
12.3	and Pricing.	– 30% (i) Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation work (except earth work)–30% (ii) Deviation limit for items in earth work subhead of DSR or related items–100%
Clause 13	Foreclosure of Contract due to Abandonment or Reduction in Scope of Work	ADD If the progress of the work or of any portion of the work is unsatisfactory, the Engineer-in-Charge, after giving the contractor 15(fifteen) days' notice in writing, without cancelling or terminating the contract, shall be entitled to employ another agency for executing the job or to carry out the work departmentally or contractually through tendering process, either wholly or partly, debiting the contractor with cost involved in engaging another agency or with the cost of labour and the prices of materials, as the case may be. The certificate to be issued by the Engineer-in-Charge for the cost of the work so done shall be final and conclusive and the extra cost, if any, shall be borne by the contractor.
Clause 16	Authority for deciding reduced rates	Competent authority of WAPCOS
Clause 17	Contractor liable for Damages, Defects during Defect Liability Period	Applicable Add: 3 Years for Electrical ,Mechanical, Electronics works from the date of successful completion and commissioning of the project in all respect and handing over of the work with full satisfaction of Department. As WAPCOS is liable to the Department, the contractor is liable to WAPCOS till the Defect Liability Period. The Defect Liability Period shall also be a free maintenance period.
Clause 19	Deciding Authority for penalty :	Engineer -In-Charge (A sum of Rs. 2000/-for each default) Further, the contractor indemnifies WAPCOS from any penalties imposed by the concerned department of Government of Kerala in case of any default in Clause-19

Clause 33		Minimum Requirement of Technical Representative(s) and monthly recovery Rate			
S. No.	Designation (Principal Technical/ Technical representative)	Discipline Minimum Qualification of Technical Representative	Minimum Experience (Yrs.)	Minimum (No.)	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 33 (i) (Rs. Per Month)
1	Project Manager	MBA	12	1	Rs.1,50,000/-
2	Project Coordinator	B. Tech/ BE (Civil)	10	1	Rs.1,20,000/-
3	Sr. MGPS Expert	B. Tech/ BE (Electrical)	8	1	Rs.1,20,000/-
4	Jr. MGPS Expert	B. Tech/ BE (Electrical)	5	1	Rs.50,000/-
5	Draughtsman	Diploma in Civil engineering	5	1	Rs.50,000/-
Clause 35	CONDITIONS FOR REIMBURSEMENT OF LEVY/TAXES IF LEVIED AFTER RECIEPT OF TENDERS		All quoted rate by contractor will be exclusive of GST		
Clause 39	Return of Material & Recovery for Material Issued		Not Applicable		
Clause 43	Insurance		The Contractor shall submit the required Insurances within One week from the date of signing of the agreement.		
Clause 45	Preference to Make in India		<p>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 with the local value addition is made.</p> <p>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</p>		

		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. The Contractor shall submit a certificate/Undertaking accordingly.
Clause 46	RULE 144 (xi) IN GENERAL FINANCIAL RULES (GFRs) 2017	Undertaking as per Form L

2.0 ADDITIONAL CONDITIONS

1. The Contractor shall be responsible for consequential effects arising out during the inspection done by the Chief Technical Examiner Cell, Central Vigilance Commission or by the Building Works Committee or third party authorized by WAPCOS or any statutory 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. Rectification of defective works or replacement of sub-standard materials or articles, as pointed out by the Chief Technical Cell, Central Vigilance Commission, Building Works Committee or authorized representative of WAPCOS or third party authorized by WAPCOS or any statutory committee, will be carried out or replaced by the Contractor at his own risk and cost. WAPCOS will not pay any extra amount for such rectification or replacement.
2. **Handing Over of the Project:** Contractor will hand over the project to Owner /Client after successful completion of each component of the project in all respect and complete satisfaction of Engineer-In-charge. **The partial handing over of building components shall not be considered.** Contractor shall also provide necessary Completion Certificate/NOC from all local Government/ Statuary Authorities including Fire, Forest, Electrical, Environment, Lift, DG Set, required before handing over the project to the client.
3. The contractor shall provide fully furnished independent office space for Engineers of SPV and Contractor's Staff along with facility of 24 hours electric and drinking water supply, sanitary facilities, furniture including Air conditioning, cupboards , tables, chairs etc and 4 no's laptop of latest version (with requisite software's) with backup along with printers (A3 & A4), scanner and internet connection at construction site for finalizing immediate technical solutions/ decisions on the site in consultation with Engineer In-Charge so that the work progress may not be hampered. All the operating expenses, water, light, other charges shall be regardless as an inclusive cost of contractor's operating cost as part of contract price. The above shall be handed over to the client after completion of the work.

4. Contractor shall provide 3 no. of vehicle to deployed Engineers of SPV for inspection of work under the project for a minimum contract period as mentioned in NIT or execution period whichever is later including running charges such as POL, driver, repairs, etc. for maximum 2000kms per month. The model of vehicle shall not be older than year of 2020 and make of vehicle shall be either Swift-Dzire, Scorpio, Etios, etc.
5. The Contractor shall render all help and assistance in documenting the total sequence of this project by way of photography, slides, audio-video recording etc. nothing extra shall be payable to the agency on this account.
6. Supply and installation to be done in line with ongoing works. However testing and commissioning shall be planned in such a way that it is completed along with civil and MEP works done by Principal Contractor. No additional payment shall be entertained if the work is prolonged
7. Bidder may be required to execute the works simultaneously with other or existing contractors / agencies of other disciplines, and hence shall work in complete coordination with other agencies. The contractor shall make their own arrangement for power supply during the execution and testing of the equipment.
8. Modifications required in existing infrastructure (including conduiting, routing etc.) to execute the scope of work stipulated in this tender shall be done by the bidder at their own cost to ensure proper installation of MGPS components and ensure proper functionality of the system. The modifications shall be done upto the satisfaction of Engineer-in-Charge
9. The contractor shall leave the workplace in proper & functioning condition after completion of their work upto the satisfaction of the Engineer-in-Charge. All damages/defects caused to the finished/unfinished building shall be rectified by the contractor at their own expense till it is brought to the actual condition
10. The work will be commenced by the Contractor only after the approval of drawings from the concerned local authorities including fire fighting's department or any other department as per statutory requirement.
11. The Contractor shall be solely responsible to follow the general clauses of the contract including labour regulations, registration of contractor, obtaining labour license from labour department, safety precautions, etc. and all other statutory provisions related to labor/works as per the prevailing General Clauses of Contract amended from time to time. The Contractor shall stick to the schedule of all activities and carry out it with mutually agreed time frame.
12. Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall be all inclusive and shall apply to all heights lifts, leads and depths of the structure and nothing extra shall be payable on this account.

13. The contractor shall make his own arrangements for obtaining electric connection and water Connection/ arrangement (if required) and make necessary payments directly to the department concerned. No dispute in this regard shall be entertained.
14. Other agencies doing works related to this project will also simultaneously execute the work and the contractor shall provide necessary facilities for the same. The contractor shall leave such necessary holes opening etc. for burying in the work pipes, cables, conduits, clamps, boxes and hooks for fan clamps etc. as may be required for other agencies. Conduits for electrical wiring / cables will be laid in a way that they leave enough space for concreting and do not adversely affect the structural members. Nothing extra over the agreement rates shall be paid for the same.
15. Some restrictions may be imposed by the security staff etc. on the working and for movement for labour materials etc. The contractor shall be bound to follow all such restrictions / instructions and nothing extra shall be payable on this account.
16. (a) The Project work will be carried out in the manner complying in all respects with the requirements of relevant bye laws of the local body under the jurisdiction of which the work is to be executed or as directed by the Engineer in charge and nothing extra will be paid on this account.

(b) 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.
17. The contractor shall give a performance test of the entire installation (s) as per standing specification before the work is finally accepted and nothing extra whatsoever shall be payable to the contractor for the test.
18. 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.
19. Samples of various materials required for testing shall be provided free of charges by the contractor. Testing charges, if any, unless otherwise provided shall be borne by the Contractor. All other expenditure required to be incurred for taking the samples, conveyance, packing etc. shall be borne by the contractor himself.
20. **The work shall be carried out in accordance with the Architectural drawings and structural drawings, to be issued from time to time, by the Engineer-in-Charge. 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 there from is complete and unambiguous. The figure and written dimension of the drawings shall be superseding the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-charge before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim whatsoever shall be entertained on this account.

21. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued by WAPCOS.
22. In the case of items of which abbreviated nomenclature is not available in the above cited publication and also in case of extra and substituted items of works for which abbreviated nomenclature is not provided in the agreement, the full nomenclature of items shall be reproduced in the measurements books and bill forms for running account bill.
The full nomenclature of the items shall be adopted in preparing abstract of final bill in the measurement book and also in the bill form for final bill.
23. The contractor shall have to make approaches to the site, if so required and keep them in good condition for transportation of labour and materials as well as inspection of works by the Engineer in charge. Nothing extra shall be paid on this account.
24. No payment will be made to the contractor for damage caused by rains, or other natural calamities during the execution of the works and no such claim on this account will be entertained.
25. Various factory made materials shall be procured from reputed and approved manufacturers or their authorized dealers. List of such approved manufacturers is available at Annexure IX. For the items / materials not appearing in the list the decision of Engineer in charge shall be final and binding.
26. Contractor shall have to execute a Guarantee Bond in respect of Water Proofing works as per Performa attached in this N.I.T. at Annexure II. He shall also have to execute guarantee bonds for water supply and sanitary installations work on the proforma available at Annexure I.
27. The terms machine batched, machine mixed and machine vibrated concrete used elsewhere in agreement shall mean the concrete produced in concrete batching and mixing plant and if necessary transported by transit concrete mixers, placed in position by the concrete pumps, tower crane and vibrated by surface vibrator /needle vibrator / plate vibrator, as the case may be to achieve required strength and durability.

28. 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.
29. Doors and frames shall be procured from specialist firms and name of such agencies shall be got approved from the Engineer in charge well in advance.
30. The construction joints shall be provided in predetermined locations only as decided by Engineer in charge. The cost of shuttering for these construction joints shall be included in item of Concrete work / RCC work and nothing extra shall be payable on this account to the contractor.
31. The gradation of fine sand to be used in plaster work, shall be strictly as per Table 3.1 (clause 3.1.3) of CPWD Specification 2009 Vol. - I conforming to IS 1542-1977. The plastered surface shall be fairly smooth without any undulation of any kind for applying paint/white wash.
32. No chase cutting/dismantling of plaster/RCC/CC shall be allowed, so contractor has to execute the electrical work accordingly.
33. The contractor shall invariably prepare the samples of finishing items as per direction of Engineer-in-charge. 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.
34. The contractor shall take instruction from the Engineer in charge for stacking of materials at any place. No excavated earth or Project material shall be stacked on areas where other buildings, roads, services or compound walls are to be constructed.
35. If as per municipal rules, the huts for labour are not be created at the site of work by the contractors, the contractor are required to provide such accommodation as is acceptable to local bodies and nothing extra shall be paid on this account.
36. Royalty at the prevalent rates shall be payable by the contractor on all the boulders, metals, shingle, sand and bajri etc. collected by him for the execution of the work, direct to the Revenue authority or authorized agent of the state Government concerned or Central Government. No such claim of Contractor on royalty shall be entertained by the WAPCOS.

37. All relevant tests for BMC / RMC as per prescribed IS codes in order to enable the Engineer in charge to conduct field tests to ensure that the quality is consistent with the prescribed specifications and nothing extra shall be paid on this account.
38. The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate himself, the results or such tests and consequences thereon shall be binding on the contractor.
39. The contractor shall get the water tested with regard to its suitability of use in the works and get written approval from the Engineer in charge before he proceeds with the use of same of execution of works. If the tubewell water is not suitable, the contractor shall arrange Municipal water or from any other sources at his own cost and nothing extra shall be paid to the contractor on this account. The water shall be got tested at frequency specified in latest CPWD specifications/BIS code.
40. The material shall conform to the quality and make as per attached list in Annexure IX. However for the items not appearing in the list preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available the quality of sample brought by the Contractor shall be judged by the standard laid down in the relevant ISI specification/CPWD specification. All materials and articles brought by the contractor to the site for use shall conform to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but stand banned by CPWD will not be used. Notwithstanding the case of materials of "Preferred Make" as given in Annexure IX, provisions of Clause 10A of the General Conditions of Contract for Central PWD works shall be applicable on the materials of "**Preferred Make**" also.
41. 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.
42. The final approval of the brand to be used shall be as per the direction of Engineer-in-Charge. The brand used shall be one of the brands in case specified in the list of **preferred make / materials annexure-IX**.
43. In case of non-availability of material of the brands specified in the list of approved materials an equivalent brand may be used after getting written approval of WAPCOS giving details to indicate that the brand proposed to be used is equivalent to the brands mentioned in the agreement.

44. Special conditions for Cement

The contractor shall procure 53 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 such as ACC, Ultratech, Ambuja, Jaypee Cement, and or from any other reputed cement manufacturer, having a production capacity not less than one million tons 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.

45. Special Conditions for Steel:-

The contractor shall procure TMT bars of Fe500/Fe500D/Fe550/Fe550D grade (the grade to be procured is to be specified) from steel producers such as SAIL, Tata Steel Ltd., RINL (VIZAG), Jindal Steel & Power Ltd. and JSW Steel Ltd. 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.

46. 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 Engineer-In-Charge, 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 Engineer-In-Charge 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 Engineer-In-Charge 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 Engineer-In-Charge should countersign the certificate recorded by the Authorized Representative.

47. 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.

48. Contractor should provide R.O. Plant sufficient for workers employed at site, his technical staff and site staff of WAPCOS free of charge.
49. Once the Project is completed and the contractor shall be responsible to attend defect pointed out by WAPCOS and then hand over the Project to the Department.
50. Contractor should hand over the warranty of the specialized items to the WAPCOS.
51. The contractor is required to deploy resources as per availability of site. However no claim will be entertained for idle labour, idle machinery, idle technical/no-technical staff, idle T&P etc.
52. 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.
53. All running account bills preferred by the contractor for advance payments shall be processed only if Engineer-in-charge is satisfied that upto date investments (excluding security deposit & performance guarantee, which are not considered as investments) made by the contractor against contracted work are more than the payments received. Accordingly, all running account bills shall be supported with an account of up-to-date payments received vis-a-vis upto date investments made on the work to enable engineer-in-charge to check to his satisfaction that the payments made by engineer-in-charge are properly utilised only on the work and nowhere else.
54. The contractor shall make all arrangements during site visits of VIPs, dignitaries, official from the Ministries of GoK or their Departments, WAPCOS officials to the Project Site during the Contract Period.
55. The Contractor shall make all arrangements towards Groundbreaking Ceremony/ Foundation Stone Laying Ceremony/Inaugural Function as required and the cost of such arrangements shall be deemed to be included in his rates/offer. No payment shall be made to the Contractor on this account
56. The contractor is bound to follow relevant Kerala State Government orders, circulars, Kerala PWD Manuals etc. prevailing at the time of contract connected to

the execution of the work under the contract even through specific reference to these are not provided elsewhere in the contract conditions.

57. The Contractor shall prepare prototype 3D model of the hospital building at his own cost as per the direction of Engineer In charge.

3.0 CONDITION OF THE PROJECT SITE

3.1 Information from WAPCOS Limited

The Contractor acknowledges and agrees that any information and data on climatic, hydrological, topographical and general conditions relating to the Project Site made available to it by WAPCOS Limited has been done so for the convenience of the Contractor and that the Contractor enters into the Contract based upon its own investigations and determinations. Without prejudice to Clause 3.1 [Background Information and the manner in which discrepancies are resolved], WAPCOS Limited shall have no responsibility to the Contractor (whether in contract, tort, for breach of statutory duty or howsoever other arising) for or in relation to such information and data whether as to its accuracy, adequacy, sufficiency or completeness.

3.2 Contractor to inspect

Without prejudice to Clause 3.1 [Information from WAPCOS Limited] and without limitation to any other provision of the Contract, the Contractor shall be deemed prior to executing the Contract, to have and warrants that it has inspected to the full extent necessary and examined to its satisfaction the Project Site and its surroundings and where applicable, any existing structures or works on, over and under the Project Site and is familiar with and has satisfied itself with the Project Site Conditions including, without limitation:

- the nature of the climatic, hydrological, topographical, ecological, environmental conditions at the Project Site (including without limitation all hazards and the potential for any contamination of the Project Site or the sub-soil by any noxious or hazardous substances) and the sub-soil and the general conditions of the Project Site
- the form and nature of the Project Site (including existing ground levels) and its adequacy for the purposes of the design and Execution of the Works;
- the risk of injury or damage to property adjacent to the Project Site and to occupiers and users of such property;
- the extent and nature of the design, work, plant and materials necessary for the design and Execution of the Works
- the means of communication with and access (including vehicular access) to and from the Project Site, the accommodation it may require and the adequacy of the rights of access set out in the Contract for those purposes (including the nature and extent of any restrictions upon access or use of the Project Site)
- the possibility of interference by persons with access to or use of or possession of the Project Site;

- the precautions and the times and methods of working necessary to prevent any nuisance, whether public or private, being caused to any third parties on or around the Project Site;
- the whereabouts of existing services and mains on or around the Project Site;
- conditions affecting shipping and transportation of Goods, plant, equipment and Materials to, through and from the Project Site;
- the availability and quality of labour required for the Works;
- the availability of water and electrical power for the Works;
- the Applicable Laws and Applicable Clearances and local customs relating to the Project Site and the Works; and
- the adequacy and suitability of any design or works carried out by other contractors on or around the Project Site which design or works the Contractor has taken over or will take over with the Project Site or with which the design and/or the Execution of the Works is required to integrate.

4.0 Claims

No claim by the Contractor for additional payment or compensation or any extension of time on the ground of any misunderstanding or misapprehension in respect of the matters referred to in this Clause 3.0 [Condition of the Project Site] or on the ground that incorrect or insufficient information was given to it by WAPCOS Limited, WAPCOS Limited Representative or WAPCOS Limited advisors or consultants, any Statutory Authority, nor shall the Contractor be relieved from any liability, risk or obligation imposed on or undertaken by it under or in relation to the Contract on any such ground or on the ground that it did not or could not foresee any matter which may in fact affect or have affected the design and Execution of the Works.

Contractor shall, before initiating the construction works, check all levels, dimensions and make proper markings on the site to assist the Engineers/ Architects to visualize the proper locations of the built forms and road network. In case, due to design or any other considerations, there are changes, then the Contractor shall extend his full cooperation in site marking as per the revised instructions till all built forms etc. are satisfactorily located. This activity shall bear no extra cost.

The Contractor shall at its own expense :

do everything necessary to acquire and maintain all Applicable Clearances and which are not specified as responsibility of WAPCOS Limited in Special Conditions of Contract. If requested by WAPCOS Limited, the Contractor shall assist WAPCOS Limited in obtaining in a timely and expeditious manner any Applicable Clearance which WAPCOS Limited is required under the Contract to maintain; take all reasonable steps, consistent with a good and experienced employer to maintain harmony and good industrial relations among the personnel employed in connection with the performance of its obligations under the Contract

SECTION– V
ANNEXURES AND APPENDICES

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Annexure –I.

**GUARANTEE TO BE EXECUTED BY THE CONTRACTOR FOR REMOVAL OF DEFECTS AFTER
COMPLETION IN RESPECT OF WATER SUPPLY AND SANITARY INSTALLATIONS, UPVC
WINDOWS, ROCK WOOL INSULATION AND POLYURETHENE FOAM**

The agreement made this _____ day of _____ two thousand and _____ between _____ S/o _____ (hereinafter called the GUARANTOR of the one part) and the WAPCOS LIMITED (hereinafter called the WAPCOS of the other part).

WHEREAS THIS agreement is supplementary to a contract. (Herein after called the Contract) dated _____ and made between the GUARANTOR OF THE ONE PART AND the WAPCOS of the other part, whereby the contractor inter alia, 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, finishing, manufacturing defects of materials and leakages etc.

NOW THE GUARANTOR hereby guarantee that work executed by him will remain structurally stable, after the expiry of maintenance period prescribed in the contract for the minimum life of ten years, to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-in-charge 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 Engineer in charge calling upon him to rectify the defects, failing which the work shall be got done by the WAPCOS by some other contractor at the guarantor's cost and risk. The decision of the Engineer in charge 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 Engineer-in-charge will be final and binding on the parties.

IN WITNESS WHEREOF those presents have been executed by the obligator _____ and _____ by for and on behalf of the WAPCOS LIMITED on the day, month and year first above written.

Signed sealed and delivered by OBLIGATOR in presence of:.

1. _____
2. _____

SIGNED FOR AND ON BEHALF OF THE WAPCOS LIMITED BY _____

_____ in the presence of:

1. _____
2. _____

Annexure –II

GUARANTEE BOND TO BE EXECUTED BY THE CONTRACTOR FOR WATER PROOFING**TREATMENT FOR BASEMENT / TERRACE / TOILETS**

The agreement made this _____ day of _____ two thousand and _____ between _____ S/o _____ (hereinafter called the GUARANTOR of the one part) and the WAPCOS Limited (hereinafter called the WAPCOS of the other part).

WHEREAS THIS agreement is supplementary to a contract. (Herein after called the Contract) dated _____ and made between the GUARANTOR OF THE ONE PART AND the WAPCOS of the other part, whereby the contractor interalia, undertook to render the structures in the said contract the work in the said contract recited completely water and leak proof.

THE GUARANTOR hereby guarantee that the 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 expiry of maintenance period prescribed in the contract.

Provided that the guarantor will not be responsible for leakage caused by earthquake or structural defects. The decision of the Engineer in charge with regard to cause of leakage shall be final.

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

That if the guarantor fails to execute the water proofing, 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 WAPCOS on the decision of the Engineer-in-charge will be final and binding on the parties.

IN WITHNES WHEREOF those presents have been executed by the obligator _____ and _____ by for and on behalf of the WAPCOS LIMITED on the day , month and year first above written.

Signed sealed and delivered by OBLIGATOR in presence of :

1. _____
2. _____

SIGNED FOR AND ON BEHALF OF THE WAPCOS LIMITED BY _____ in the presence of :

1. _____
2. _____

Annexure –III

BANK GUARANTEE FORMAT FOR EMD

EMD shall be paid by the contractor online only as per NIT

Annexure –IV
FORM OF PERFORMANCE SECURITY

WAPCOS Limited,
 76-C, Institutional Area,
 Sector-18, Gurgaon,
 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 _____ (name of work) (hereinafter called " the contract") and the Contractor having agreed to provide a Contract Performance Guarantee for the faithful performance of the entire contract equivalent to Rs. _____ (Rupees _____ only) (3 % 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. 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 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 validity of guarantee).**

Dated this _____ day of _____ at New Delhi.

For & on behalf of Tenderer

Annexure – V
FORMAT FOR AFFIDAVIT

I / We have submitted a bank guarantee for the work (Name of work) Agreement No. _____ Dated _____ from _____ (Name of the Bank with full address) to the WAPCOS Limited, New Delhi with a view to seek exemption from payment of performance guarantee in cash. This Bank guarantee expires on _____. I / We undertake to keep the validity of the bank guarantee intact by getting it extended from time to time at my / our own initiative upto a period of _____ months after the recorded date of completion of the work or as directed by the WAPCOS.

I / We also indemnify the WAPCOS against any losses arising out of non-encasement of the bank guarantee if any.

(Deponent)
Signature of Contractor

Note : The affidavit is to be given by the Executants before a first class Magistrate.

Annexure –VI
FORM OF ADVANCE PAYMENT GUARANTEE

WAPCOS Limited,
 76-C, Institutional Area,
 Sector-18, Gurgaon,
 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

- ii) Our liability under this guarantee shall not exceed Rs. _____ (Rupees _____ only);
- iii) This bank guarantee shall be valid upto _____ and
- iv) 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 New Delhi.

WITNESS

(Signature)

(Name)

(Official address)

(Signature)

(Name)

(Signature)

(Name)

(Designation with bank stamp)

Attorney as Power of Attorney
No. _____ dt. _____

ANNEXURE – VII
FORM OF INTEGRITY PACT

To

**The Regional Manager
1st Floor, JP Krishna Building,
Pallimukh Junction, Petteah
Trivandrum - 695024**

Sub: Submission of Tender for the work of “Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur”

Dear Sir,

I/We acknowledge that WAPCOS is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that the Making of the Bid shall be regarded as an Unconditional and absolute Acceptance of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by WAPCOS. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, WAPCOS shall have unqualified, absolute and unfettered right to disqualify the tenderer/bidder and reject the tender/bid in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of WAPCOS

FORMAT FOR INTEGRITY PACT

This Integrity Agreement is made at on this day of 20.....

BETWEEN

WAPCOS Limited, New Delhi (Hereinafter referred as the '**Principal/Owner**', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

.....

.....

(Name and Address of the Individual/firm/Company)

through (Hereinafter referred to as the

(Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.)
(hereinafter referred to as "Tender/Bid") and intends to award, under laid down
organizational procedure, contract

for..... (Name of work) hereinafter
referred to as the "Contract".

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

(1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

- (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- (2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- (1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the WAPCOS all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- (2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
- (a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - (b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - (c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and

addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

- (e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- (3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- (4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the WAPCOS interests.
- (5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- (1) If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- (2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to

terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.

- (3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- (1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- (3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- (1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Subcontractors/sub-vendors.
- (2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- (3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, WAPCOS

Article 7- Other Provisions

- (1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Principal/Owner, who has floated the Tender.
- (2) Changes and supplements need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- (4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.
- (6) **Independent External Monitor(s)**
Panel of IEM's will be conveyed in due course of time.

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

.....

(For and on behalf of Principal/Owner)

.....

(For and on behalf of Bidder/Contractor)

WITNESSES:

1.

(signature, name and address)

2.

(signature, name and address)

Place:

Dated :

ANNEXURE – VIII
FORMAT OF RESUME OF PROPOSED PERSONNEL

The bidder shall provide all the information requested below:

Position		
Personnel information	Name	Date of birth
	Professional qualifications	
Present employment	Name of Employer	
	Address of Employer	
	Telephone	Contact (manager / personnel officer)
	Fax	E-mail
	Job title	Years with present Employer

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company, Project , Position, and Relevant Technical and Management Experience

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

{day/month/year}

Name of Personnel

Signature

Date
{day/month/year}

**Name of authorized Representative
of the Contractor**

Signature

Date

ANNEXURE – IX
MAKES OF MATERIALS

All procurement shall be done in accordance with G.O. No. P-45021/2/2017-PP (BE-II) Government of India, Ministry of Commerce and Industry Department for Promotion of Industry and Internal Trade dated 16.09.2020. Acceptable makes of materials to be used in the work are enclosed. In case of non-availability of these makes, after the approval of WAPCOS, the Contractor can use the alternative makes only BIS marked materials. Non BIS marked materials may be permitted by the WAPCOS only when BIS marked materials are not manufactured.

MAKE LIST OF APPROVED MANUFACTURERS

<u>Approved Make List</u>		
Sl No.	Description	Approved Make
1.	OXYGEN SUPPLY SYSTEM	PRECISION UK/LINDE/MEP/G SAMRA/AKTIV
2.	N2O SUPPLY SYSTEM	PRECISION UK/LINDE/MEP/ G SAMRA/AKTIV
3.	CO2 SUPPLY SYSTEM	PRECISION UK/LINDE/MEP/ G SAMRA/AKTIV
4.	AIR COMPRESSORS	HITACHI/ BOGE/PRECISION UK/ATLAS COPCO/ INGERSOL RAND
5.	AIR DREYER AND FILTER	TRIDENT/ BOGE/PRECISION UK/
6.	MEDICAL VACUUM PUMPS	PRECISION UK /BUSCH/ANEST IWATA/ATLAS COPCO/ INGERSOL RAND
7.	AREA ALARM + AREA VALVES +GAUGES	PRECISION UK/LINDE/MEP/ G SAMRA/AKTIV
8.	MASTER PLANT ALARM	PRECISION UK/LINDE/MEP/ G SAMRA/AKTIV
9.	TERMINAL UNITS WALL/BHU/PENDANT MOUNTED	PRECISION UK/LINDE/MEP/ G SAMRA/AKTIV
10.	AGSS - AGSS-TERMINAL UNIT WITH PROBE	PRECISION UK/MEP/ G SAMRA/AKTIV
11.	ISOLATION VALVES	RB ITALY/ PRECISION UK
12.	COPPER PIPING AS PER EN13348 STANDARDS.	MANDE / MEHTA TUBE/ JANYA
13.	PROBES MATCHING	PRECISION UK/LINDE/MEP/ G SAMRA/AKTIV
14.	BED HEAD PANELS	S KUMAR/ AKTIV/ PRECISION UK/ G SAMRA
15.	PENDANTS-OT	AKTIV/ S-KUMAR/ALTOS
16.	PENDANTS-ICU	AKTIV/ S-KUMAR/ALTOS
17.	VACUUM SWITCH	INDFOSS / DANFOSS
18.	BACTERIAL FILTER	DOMINIC HUNTER/TRIDENT/ATLAS COPCO/TRIDENT /INGERSOL RAND
19.	FLOW METER/SUCTION JAR	PRECISION UK/ G SAMRA /MEP/AKTIV / S-KUMAR/GHL
20.	VACUUM UNIT	PRECISION UK/ G SAMRA /MEP/ AKTIV
21.	THEATRE SUCTION UNIT	PRECISION UK/ G SAMRA /MEP/ AKTIV
22.	HIGH PRESSURE TUBE	PRECISION UK/ G SAMRA /MEP/ AKTIV

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 up to 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 defense 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. (100 ft.) 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 bore well, 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 bore well, 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 bore well 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 eye shields.
- (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 at least 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.
 - (vi) 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/ sanitizers 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.
 - (i) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - (ii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - (iii) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (iv) Overall shall be worn by working painters during the whole of working period.
 - (v) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - (vi) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man.

- (vii) WAPCOS may require, when necessary medical examination of workers.
- (viii) 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 equipment's 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.

For & on behalf of Tenderer

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 background 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 equipment's :-

- 1. 6 small sterilized dressings.
- 2. 3 medium size sterilized dressings.
- 3. 3 large size sterilized dressings.
- 4. 3 large sterilized burn dressings.
- 5. 1 (30 ml.) bottle containing a two per cent alcoholic solution of iodine.
- 6. 1 (30 ml.) bottle containing Sal volatile 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 equipment's.

1. 12 small sterilized dressings.
2. 6 medium size sterilized dressings.
3. 6 large size sterilized dressings.
4. 6 large size sterilized burn dressings.
5. 6 (15 gms.) packets sterilized cotton wool.
6. 6. 1 (60 ml.) bottle containing a two per cent alcoholic solution iodine.
7. 1 (60 ml.) bottle containing Sal volatile 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.

- (ii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary
- (iii) Nothing except the prescribed contents shall be kept in the First-aid box.
- (iv) 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.
- (v) 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.
- (vi) 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.
- (vii) 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

- (i) 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.
- (ii) Every latrine shall be under cover and so partitioned off as to secure privacy, and shall have a proper door and fastenings.
- (iii) 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.
- (iv) (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.
- (v) There shall be at least one urinal for male workers up to 50 and one for female workers up to 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 up to the first 500 and one for every 100 or part thereafter.
- (vi) (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.
- (vii) Water shall be provided by means of tap or otherwise so as to be conveniently accessible in or near the latrines and urinals.
- (viii) 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 off 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).
- (ix) 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 meters (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 sq.m. (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 crèche 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 crèches shall be restricted to children, their attendants and mothers of the children.

9. CANTEENS

- (i) 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.
- (ii) The canteen shall be maintained by the contractor in an efficient manner.
- (iii) The canteen shall consist of at least a dining hall, kitchen, storeroom, pantry and washing places separately for workers and utensils.
- (iv) The canteen shall be sufficiently lighted at all times when any person has access to it.
- (v) The floor shall be made of smooth and impervious materials and inside walls shall be lime washed or colour washed at least once in each year.
Provided that the inside walls of the kitchen shall be lime-washed every four months.
- (vi) The premises of the canteen shall be maintained in a clean and sanitary condition.
- (vii) Waste water shall be carried away in suitable covered drains and shall not be allowed to accumulate so as to cause a nuisance.
- (viii) Suitable arrangements shall be made for the collection and disposal of garbage.
- (ix) The dining hall shall accommodate at a time 30 per cent of the contract labour working at a time.
- (x) 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 meter (10 sft) per diner to be accommodated as prescribed in sub-Rule 9.
- (xi) (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.
- (xii) Sufficient tables stools, chair or benches shall be available for the number of diners to be accommodated as prescribed in sub-Rule 9.
- (xiii) (a) 1. There shall be provided and maintained sufficient utensils crockery, furniture and any other equipment's 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 equipment's.

- (xiv) The food stuffs and other items to be served in the canteen shall be in conformity with the normal habits of the contract labour.
- (xv) 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.
- (xvi) 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.
- (xvii) 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.

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

11. 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.

For & on behalf of Tenderer

Annexure –XII

Information Required to Calculate the BID Capacity

1. To Calculate the Value of "A"

A table containing value of Civil Engineering Works in respect to Projects (Turnkey Projects/ Item rate contract/ Construction works) undertaken by the Bidder during the last 5 Years is as follows:

Sl.No.	Year	Value of Civil Engineering Works undertaken w.r.t projects (Rs. In Crores)
1	2022-23	
2	2021-22	
3	2020-21	
4	2019-20	
5	2018-19	

Maximum Value of projects that have been undertaken during the F.Y..... out of the last 5 Years and value there of is Rs..... Crore (Rupees). Further, value updated to the price level of the Year indicated in Appendix is as follows:

Rs. Crores X (Updation Factor as per Appendix) = Rs. Crores (Rupees)

<p>.....</p> <p>.....</p> <p>Authorised Signator</p> <p>For and on behalf of(Name Signatory) of the Bidder)</p>	<p>Name of the Statutory Auditor's Firm Seal of the audit firm: (Signature, name and designation and Membership No. of authorised Signatory).</p>
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2. To Calculate the value of "B"

A table containing value of all the existing commitments and on-going workings to be completed during the next Years is as follows:

Sl.	Name	Percentage	Dater of	Value of	Value	Balance	Anticip	Balance
-----	------	------------	----------	----------	-------	---------	---------	---------

No .	of project / work	of participation of Bidder in the project	start / appointed date of project	contract as per Agreement / LOA	of work completed	value of work to be completed	ated date of completion	value of work at 2021-22 price level
				Rs. In Crore	Rs. In Crore	Rs. In Crore		Rs. In Crore
1	2	3	4	5	6	7=(5-6)	8	9(3x7xuf)

Updation Factor as given below:

For Year	F.Y / Calender Year	Updation Factor
1	2022-23	1.00
2	2021-22	1.05
3	2020-21	1.10
4	2019-20	1.15
5	2018-19	1.20

The Statement showing the value of allexisting commitments and ongoing works as well as the stipulated period of completion remaining for each of the works mentioned above is verified from the certificate issued that has been countersigned by the client or its Engineer-in-charge not below the rank of Executive Engineer or equivalent in respect of projects or Concessionaire / Authorised Signatory of SPV in respect of BOT Projects. No awarded / ongoing works has been left in the aforesaid statement which has been awarded to M/s..... individually / and other member M/s and M/s, as on due date of this tender.

<p>.....</p> <p>.....</p>	
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Authorised Signatory	
For and on behalf of(Name Signatory) of the Bidder)	Name of the Statutory Auditor’s Firm Seal of the audit firm: (Signature, name and designation and Membership No. of authorised Signatory).

ANNEXURE –XIII
CONTRACTOR’S LABOUR REGULATIONS TO BE FOLLOWED IN THIS PROJECT

1. SHORT TITLE

These regulations may be called the CPWD Contractors Labour Regulations and shall be followed by the Contractor for this Project.

2. DEFINITIONS

i) **Workman** means, any person employed by Department or its contractor directly or indirectly, through a subcontractor, with or without the knowledge of the Department, 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 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 principal employers and the process is to be carried out either in the home of the out worker or in same another premises, not being premises under the control and management of the principal employer. No person below the of 14 years shall be employed to act as a workman

ii) **Fair Wages** means wages whether for time or piecework fixed and notified under the provision 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) a) Every worker shall be given a weekly holiday normally on a Sunday, in accordance with the provisions of 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.

b) 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, provided he has worked under the same contractor for a continuous period of not less than 6 days.

- c) 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 the 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 local Indian languages spoken by the majority of the workers, giving the minimum rates of the 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 or to other person authorised by him in this behalf.
- vii) All wages shall be paid in current coin or currency or in both.
- 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 acknowledgement.

- x) It shall be the duty of the contractor to ensure the disbursement of wages in presence of authorised representative of the Engineer-in-Charge who will be required to be present at the place and time of the disbursement of wages by the contractor to workmen.
- 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 maybe, in the following form:- "Certified that the amount shown in the column No.....has been paid to the workman concerned in my presence on.....at....."

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) Deductions for damage to or loss of goods expressly entrusted to the employed person for custody, or for loss of money or any other deductions 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, allows.

(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 Omission for which fines can be imposed is enclosed at Appendix-1.

(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 omission 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 him.

9. EMPLOYMENT CARD

The contractor shall issue an Employment Card in the Form XIV of 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 the 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 Department this behalf.

12. POWER OF LABOUR OFFICER TO MAKE INVESTIGATIONS OR ENQUIRY

The labour officer or any person authorised by the Central Government on their behalf shall have power to make enquiries with a view to ascertaining and enforcing due and proper observance of Fair Wage Clauses and 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 contract or under Clause 13 of these regulations, actual payment to labourers will be made by the Department after the competent authority of WAPCOS has given their recommendation on such appeal and on approval by Department.

i) Engineer in charge shall recommend for payments to the labour concerned within 45 days from the receipt of the report from competent authority of WAPCOS and approval from Department 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 Department 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 these regulations by: -

a) An officer of a registered trade union of which he is a member.

b) An officer of a federation of trade unions to which the trade union referred to in Clause (a) is affiliated.

c) 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.

ii) An employer shall be entitled to be represented in any investigation or enquiry under these regulations by:-

a) An officer of an association of employers of which he is a member.

b) An officer of a federation of associations of employers to which association referred to in Clause (a) is affiliated.

c) Where the employer 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.

No party shall be entitled to be represented by a legal practitioner in any investigation inquiry 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. SUBMISSION OF RETURNS

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

18. AMENDMENTS

The Client 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 EIC concerned shall be final.

ANNEXURE –XIV**FORM OF APPLICATION BY THE CONTRACTOR FOR SEEKING
EXTENSION OF TIME**

1. Name of contractor
2. Name of work as given in the agreement
3. Agreement no
4. Estimated amount put tender CON 297 Page 27
5. Date of commencement of work as per agreement
6. Period allowed for completion of work as per agreement
7. Date of completion stipulated in agreement
8. Period for which extension of time if has been given by authority in Schedule 'F' previously

	letter no. and date	Extension granted	
		Months	Days
	(a) 1st		
	(b) 2nd extension		
	(c) 3rd extension		
	(d) 4th extension		
	(e) Total extension previously given		

9. Reasons for which extension have been previously given (copies of the previous applications should be attached)
10. Period for which extension if applied for
11. Hindrances on account of which extension is applied for with dates on which Hindrances occurred and the period for which these are likely to last (for causes under clause 5.2/ and 5.3)

Submitted to the Authority indicated in Schedule F .

Signature of Contractor

Dated

ANNEXURE –XV

**FORMAT OF UNDERTAKING TO BE FURNISHED ON COMPANY LETTERHEAD
BLACKLISTING/NON-DEBARMENT UNDERTAKING**

To
The Regional Manager
1st Floor, JP Krishna Building,
Pallimukku, Pettah
Trivandrum-695024

Name of work:

Tender No:

This is to certify that we have taken the cognizance of Blacklisting Policy of WAPCOS Limited. 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.

For_____

Authorized Signatory:

Date:

APPENDICES

APPENDIX - I	: REGISTER OF MATERNITY BENFITS
APPENDIX - II	: SPECIMEN FORM OF THE REGISTER ,REGARDING MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTORS’S LABOUR
APPENDIX - III	: LABOUR BOARD
APPENDIX - IV	: REGISTER OF WORKMEN EMPLOYED BY CONTRACTOR
APPENDIX - V	: MUSTER ROLL
APPENDIX - VI	: REGISTER OF WAGES
APPENDIX - VII	: WAGE CARD WAGE SLIP
APPENDIX - VIII	: EMPLOYMENT CARD
APPENDIX - IX	: SERVICE CERTIFICATE
APPENDIX - X	: LIST OF ACTS AND OMISSIONS FOR WHICH FINE CAN BE IMPOSED
APPENDIX - XI	: REGISTER OF FINES
APPENDIX -XII	: REGISTER OF DEDUCTION FOR DAMAGE OR LOSS
APPENDIX - XIII	: REGISTER OF ADVANCES
APPENDIX - XIV	: REGISTER OF OVERTIME
APPENDIX - XV	: INDENTURE FOR SECURED ADVANCES
APPENDIX - XVI	: NOTICE FOR APPINTMENT OF ARBITARATOR

Appendix-I

REGISTER OF MATERNITY BENEFITS(Clause 19 F)

Name and address of the contractor.....

Name and Location of the work.....

Name of the employee	Father's/husband's	Nature of Employment	Period of actual employment	Date on which notice of confinement
1.	2.	3.	4.	5.

Date on Which Maternity Leave Commenced and ended				
Date of Delivery/miscarriage	In Case of Delivery		In Case of Miscarriage	
	Commenced	Ended	Commenced	Ended
6.	7.	8.	9.	10.

Leave Paid to the employee				Remarks
In Case of Delivery		In Case of Mis Carriage		
Rate of	Amount paid	Rate of	Amount paid	
11.	12.	13.	14.	
				15.

**SPECIMEN FORM OF THE REGISTER, REGARDING
MATERNITY BENEFIT ADMISSIBLE TO THE CONTRACTOR'S LABOUR**

Name and address of the contractor.....

Name and Location of the work.....

1. Name of the woman and her husband's name.
2. Designation.
3. . Date of appointment.
4. Date with months and years in which she is employed.
5. Date of discharge/dismissal, if any.
6. Date of production of certificates in respect of pregnancy.
7. Date on which the woman informs about the expected delivery.
8. Date of delivery/miscarriage/death
9. Date of production of certificate in respect of delivery/miscarriage.
10. Date with the amount of maternity/death benefit paid in advance of expected delivery.
11. Date with amount of subsequent payment of maternity benefit.
12. Name of the person nominated by the woman to receive the payment of the maternity benefit after her death.
13. If the woman dies, the date of her death, the name of the person to whom maternity benefit amount was paid, the month thereof and the date of payment.
14. Signature of the contractor authenticating entries in the register.
15. Remarks column for the use of Inspecting Office

Appendix-III

LABOUR BOARD

Name of work:.....

Name of contractor:

Address of contractor:.....

Name and address of Construction Unit:.....

Name of CLIENT Labour Officer:.....

Address of CLIENT Labour Officer:.....

Name of Labour Enforcement Officer:.....

Address of Labour Enforcement Officer:.....

Sl.No	Category	Minimum Wage Fixed	Actual Wage Paid	Number Present	Remarks

Weekly holiday

Wage Period

Date of Payment of Wages.....

Working hours.....

Rest Interval.....

Name and address of contractor.....

Name and address of establishment under which contract is carried on.....

Nature and location of work.....

Name and address of Principal Employer.....

Sl.No	1	
Name and Surname of Workman	2	
Age and Sex	3	
Father's/Husband's Name	4	
Nature of Employment/Designation	5	
Permannat Home address of Workman	6	
Local Address	7	
Date of Commencement of Employment	8	
Signature or Thumb Impression of Workmsn	9	
Date of Termination of employment	10	
Reason for Termination	11	
Remarks	12	

Muster Roll

Name and address of the contractor _____

Name and address of establishment under which contract is carried
on _____

Nature and location of work _____

Name and address of Principal Employer _____

For the month of fortnight _____

[illegible]

Appendix-VI

Form –XVII (See Rule 78(2) (a))

Register of Wages

Name and address of the contractor_____

Name and address of establishment under which

Contract is carried on_____

Nature and location of work_____

Name and address of Principal Employer_____

Wages period_____ Monthly/fortnightly

Sl.No.	Name of workman	Serial No.in the register of workman	Designation Nature of work done	No. of days worked	Units of work done	Daily rate of wages/piece rate	Basic Wages
1	2	3	4	5	6	7	8

Dearness allowances	Overtime	Other cash payments(Indicate nature)	Total	Deductions if any, (indicate nature)	Net amount paid	Signature or thumb impression of the workman	Initial of contractor or his representative
9	10	11	12	13	14	15	16

Appendix-VII

Wage Card

Wage Card No._____

Name and address of the contractor_____ Date of issue_____

Name and location of work_____ Designation_____

Name of Workman_____ Month/fortnight-----

Rate of Wages_____

DATE																																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Morn																																	
Eveni																																	
Init																																	

Rate_____ Amount_____

Received from_____ the sum of Rs. _____on account of my wages.

Signature

The wage card is valid for one month from the date of issue

Appendix-VII

Form-XIX
((See rule 78(2) (b))
Wages Slip

Name and address of the contractor_____

Name and Father's/Husband's name of workman_____

Nature and location of work_____

For the Week/Fortnight/Month ending_____

1. No. of days worked _____

2. No. of units worked in case of piece rate workers_____

3. Rate of daily wages/piece rate_____

4. Amount of overtime wages_____

5. Gross wages payable_____

6. Deduction, if any_____

7. Net amount of wages paid_____

Initials of the Contractors or his representative

Form-XIV [See rule 76]
Employment Card

Name and address of the contractor.....
Name and address of establishment under which contract is carried on.....
Nature of work and location of work.....
Name and address of Principal Employer.....

1. Name of Workman.....
2. SI No. in the register of workman employed.....
3. Nature of employment/designation.....
4. Wage rate (with particulars of unit in case of piece work)
5. Wages period.....
6. Tenure of employment.....
7. Remarks.....

Signature of contractor

Form – XV (see Rule 77)
Service Certificate

Name and address of contractor.....
Nature and location of work.....

Name and address of workman.....

Age or date of birth.....
Identification marks.....
Father's/Husband's name.....

Name and address of establishment in under which contract is carried on.....

Name and address of Principal Employer.....

S. No.	Total Period for which employed		Nature of work done	Rates of wages (with particular of unit in case of piece work)	Remarks
	From	To			

Signature

Appendix-X**LIST OF ACTS AND OMISSIONS FOR WHICH FINES CAN BE IMPOSED**

In accordance with rule 7(v) of the Contractor's Labour Regulations to be displayed prominently at the site of work both in English and local Language.

1. Willful insubordination or disobedience, whether alone or in combination with other.
2. Theft fraud or dishonesty in connection with the contractors beside a business or property of Department
3. Taking or giving bribes or any illegal gratifications
4. Habitual late attendance.
5. Drunkenness lighting, riotous or disorderly or indifferent behavior
6. Habitual negligence.
7. Smoking near or around the area where combustible or other materials are locked
8. Habitual indiscipline.
9. Causing damage to work in the progress or to property of the Department or of the contractor.
10. Sleeping on duty.
11. Malingering or slowing downwork.
12. Giving of false information regarding name, age father's name, etc.
12. Habitual loss of wage cards supplied by the employers.
14. Unaauthorized use of employer's property of manufacturing or making of unauthorized particles at the workplace.
15. Bad workmanship in construction and maintenance by skilled workers which is not approved by the Department and for which the contractors are compelled to undertake rectifications.
16. Making false complaints and/or misleading statements.
17. Engaging on trade within the premises of the establishments.

18. Any unauthorized divulgence of business affairs of the employees.
19. Collection or canvassing for the collection of any money within the premises of an establishment unless authorized by the employer.
21. Holding meeting inside the premises without previous sanction of the employers.
21. Threatening or intimidating any workman or employer during the working hours within the premise.

Names and address of contractor Name and
address of establishment in under which contract is carried on Nature and location
of work
Name and address of Principal Employer

[illegible]

Form – XX (see Rule 78(2)(d)) Register of Deduction for Damage or Loss

Name and address of contractor.....

Name and address of establishment in under which contract is carried on..... Nature
and location of work.....

Name and address of Principal Employer.....

[illegible]

Name and address of contractor-----
 Name and address of establishment in under which contract is carried on-----
 Nature and location of work.....
 Name and address of Principal Employer-----

[illegible]

Name and address of contractor.....

Name and address of establishment in under which contract is carried on.....

Nature and location of work.....

Name and address of Principal Employer.....

[illegible]

(FORM 31)
INDENTURE FOR SECURED
ADVANCES
(Referred to in paragraphs 10.2.20 and 10.2.22 of CPW A
Code)

(For use in cases in which the contract is for finished work and the contractor has entered into an agreement for the execution of a certain specified quantity of work in a given time)

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 LIMITED (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 KIIFB on recommendation from 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 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 Engineer -in Charge (hereinafter called the Engineer -in Charge) 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 Engineer -in Charge.
- (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 Engineer -in Charge 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 KIIFB on recommendation of 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 KIIFB/ 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 saidandby 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 by..... the said contractor in the presence of 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 saidandby 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 by..... the said contractor in the presence

Signature

.....

Witness Name

..... Address

Signed

by.....

by the order and direction of the WAPCOS in the
presence of

Signature

.....

Witness Name

..... Address

Appendix-XVI

Notice for appointment of Arbitrator
[Refer Clause 25]

To,

The Regional Manager
WAPCOS Limited
Trivandrum

Dear Sir,

In terms of clause 25 of the agreement, particulars of which are given below, I/we hereby give notice to you to appoint an arbitrator for settlement of disputes mentioned below:

1. Name of applicant
2. Whether applicant is Individual/Prop. Firm/Partnership Firm/Ltd. Co.
3. Full address of the applicant
4. Name of the work and contract number in which arbitration sought
5. Name of the Division which entered into contract
6. Contract amount in the work
7. Date of contract
8. Date of initiation of work
9. Stipulated date of completion of work
10. Actual date of completion of work (if completed)
11. Total number of claims made
12. Total amount claimed
13. Date of intimation of final bill (if work is completed)
14. Date of payment of final bill (if work is completed)
15. Amount of final bill (if work is completed)
16. Date of request made to SE for decision
17. Date of receipt of SE's decision
18. Date of appeal to you

19. Date of receipt of your decision.

Specimen signatures of the applicant
(only the person/authority who
signed the contract should sign)

I/We certify that the information given above is true to the best of my/our knowledge. I/We
enclose following documents.

1. Statement of claims with amount of claims.
- 2.
- 3.
- 4.

Yours faithfully,

(Signatures) Copy in duplicate to:

1. The Engineer -in Charge,

SECTION– VI**FORMS :**

LETTER OF TRANSMITTAL		
POWER OF ATTORNEY		
FORM-A	:	FINANCIAL INFORMATION
FORM-B	:	SOLVENCY CERTIFICATE
FORM-C	:	STRUCTURE & ORGANISATION
FORM-D	:	NO CONVICTION CERTIFICATE
FORM-E	:	UNDERSTANDING THE PROJECT SITE
FORM-F	:	NO DEVIATION CERTIFICATE
FORM-G	:	PRELIMINARY AGREEMENT
FORM -H	:	LIST OF EQUIPMENTS OWNED BY THE BIDDER AT THE TIME OF BIDDING
FORM -I	:	DETAILS OF ALL WORKS OF SIMILAR NATURE COMPLETED
FORM -J	:	PROJECT UNDER EXECUTION OR AWARDED
FORM -K	:	DETAILS OF TECHINCAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK
FORM-L	:	UNDERTAKING AS PER CLAUSE 46 (RULE 144 (xi) IN GENERAL FINANCIAL RULES (GFRs) 2017)

LETTER OF TRANSMITTAL

From:

To

The Regional Manager
1st Floor, JP Krishna Building,
Pallimukku, Pettah
Trivandrum – 695024

Subject: Submission of bids for the work of “Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur ”

Sir,

Having examined the details given in press notice and bid document for the above work, I/we hereby submit the relevant information.

1. I/we hereby certify that all the statement made and information supplied in the enclosed forms A to H and accompanying statement are true and correct.
2. I/we have furnished all information and details necessary and have no further pertinent information to supply.
3. 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

Certificate:

It is certified that the information given in the enclosed in the 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.

Enclosures:

Seal of bidder

Date of submission:

Signature(s) of Bidder(s)

**FORMAT FOR POWER OF ATTORNEY FOR SIGNING OF PROPOSAL FOR AUTHORIZED
SIGNATORY**

Know all men by these presents, we (Name of the Tenderer and address of their registered office) do hereby constitute, appoint and authorize Mr /Ms.....(name and residential address of Power of Attorney holder) who is presently employed with us and holding the position of..... as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Bid for the Project and submission of all documents and providing information / responses to _____, representing us in all matters before _____, and generally dealing with _____ in all matters in connection with our proposal for the said Project. We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

FORM 'A'
FINANCIAL INFORMATION

- I. Financial Analysis: Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

Years	Gross Annual turnover	Profit/Loss (After Tax)
2022-2023		
2021-2022		
2020-2021		
2019-2020		
2018-2019		

II. Financial arrangements for carrying out the proposed work.

III. Solvency Certificate from Bankers of the bidder in the prescribed Form "B".

Signature of Statutory Auditor
(with Seal and UDIN)

Signature of Bidder(s).
(with Seal)

FORM "B"**FORMAT FOR SOLVENCY CERTIFICATE**

[To be submitted on Bank's **Original** Letter Head]

SOLVENCY CERTIFICATE

To,
The Regional Manager
1st Floor, JP Krishna Building,
Pallimukku, Pettah
Trivandrum - 695024

Name of the work: Tender for "[Insert name of the work/project here]"

This is to certify that to the best of our knowledge and information M/s _____ having marginally noted address, a customer of our bank are/ is respectable and can be treated as good for any engagement up to a limit of Rs. _____ (Rupees _____).

This certificate is issued without any guarantee or responsibility on the Bank or any of the officers. This certificate is issued at specific request of the customer for tender purpose.

Date:

Place:

Signature of Authorized signatory of bank:

Name of Authorized signatory of bank:

E-mail id of Bank/Authorized signatory of bank:

Power of Attorney number of bank official:

Note:

1. Solvency Certificate should be on letter head of the Bank
2. Email id of bank/authorized signatory of bank should be clearly mentioned on the certificate so that genuineness of the certificate can be established via email.

FORM "C"
STRUCTURE & ORGANISATION

S.No.	Particulars	Details Submitted by Bidder
1.	Name & address of the bidder	
2.	Telephone no./Telex no./Fax no.	
3.	Legal status of the bidder (attach copies of original document defining the legal status) (a) An Individual (b) A proprietary firm (c) A firm in partnership (d) A limited company or Corporation	
4.	Particulars of registration with various Government Bodies (attach attested photocopy)	
	Organization/Place of Registration 1. 2. 3.	Registration No.
5.	Names and titles of Directors & Officers with designation to be concerned with this work.	
6.	Designation of individuals authorized to act for the organization	
7.	Has the bidder, or any constituent partner in case of partnership firm Limited Company/ Joint Venture, ever been convicted by the court of law? If so, give details.	
8.	In which field of Electrical Engineering construction the bidder has specialization and interest?	
9.	Any other information considered necessary but not included above.	

Signature of Bidder(s)

FORM-D**FORMAT FOR No-Conviction Certificate**

[On the letterhead of the Organization]

Subject: No-Conviction Certificate for --- (Name of the work / project)

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

This is also to certify that M/s _____ (Name of Organization), is not involved in any form of Corrupt and Fraudulent practices in past and will never be involved in future.

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

FORM-E**FORMAT FOR UNDERSTANDING THE PROJECT SITE***(on Bidder Letter Head)*

To

**The Regional Manager
1st Floor, JP Krishna Building,
Pallimukku, Pettah
Trivandrum - 695024**

Subject: Undertaking of the Site Visit for --- (Name of the work / project)

Sir,

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

- Location of the proposed building and its allied works.
- Site clearance and no cutting off the matured trees.
- Topography and contouring of the land where the project is to be executed to understand the cutting & filling during the construction and about depth of column/ foundation below the plinth beam.
- Nature of the ground & sub-soil of the site and accessibility to the site.
- Existing surrounding road level to finalize plinth beam level as per standard norms.
- Location of Existing Sewer line & Water pipe line network to connect the proposed building and allied works to make the building functional.
- Location of existing Electric Sub-Station to supply the electricity for the proposed building and allied works to make the building functional.

I / We hereby submit our BID considering above all facts gathered during site visit and each & every aspect have been considered in the Quoted cost of the project since it is Item Rate Contract. I / We hereby confirm that no extra/additional cost shall be claimed on above aspects

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

FORM-F**FORMAT FOR NO DEVIATION CERTIFICATE**

[To be submitted on Bidder's Letter Head]

To,
The Regional Manager
1st Floor, JP Krishna Building,
Pallimukku, Pettah
Trivandrum - 695024

Subject: No Deviation Certificate for -----(name of Work /Project)

Dear Sir,

With reference to above 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.

Thanking you,

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

FORM-G
PRELIMINARY AGREEMENT

(To be executed on stamp per Rs.200/-(Govt of Kerala Stamp Paper)

Preliminary Agreement entered into on this day
of..... Two thousand and between
.....<Tender Inviting Authority> for and on behalf of WAPCOS
LIMITED, of the one part and Sri.....
.....
..... (here enter full name and address of the Bidder) hereinafter called the
Bidder of the other part for the execution of the agreement as well as for the execution of the
work

WHEREAS the WAPCOS LIMITED invited tenders for the work of.....
.....
.....(here enter name of the work)
by Notification No.....Dated
.....in the

I/We undersigned hereby offer to construct the proposed work in strict accordance with the
contract/bid document for the consideration to be calculated in terms of the priced schedule of
quantities.

I/We undertake to complete the whole of the works as per the attached schedule from the date
of issue of intimation by you that our tender has been accepted and upon being permitted to
enter site. I/We further undertake that on failure, subject to the conditions of the contract
relating to extension of time, I/We shall pay agreed 'Liquidated Damages' for the period during
which the work shall remain incomplete.

I/We hereby deposit with you as Earnest money Rs. _____ /- (Rupees _____) [carrying no
interest] as mentioned in Tender Document in favour of <tender inviting authority> and I/We
agree that this sum shall be forfeited in the event of the Employer accepting my/our tender and
I/We fail to take up the contract when called upon to do so as per the bid document. I/We
further agree for the applicable deduction from the 'Interim Payment/RA Bill' towards the
'Performance Security Deposit', which will be returned as per the relevant clauses in the
agreement.

I/We will furnish the Performance Guarantee Bond as per the approved format, if our bid is
accepted. Bid Security deposit shall be treated as security for the proper fulfillment of the same
and shall execute an agreement for the work in the prescribed form. If I/We fails to do this or

maintain a specified rate of progress (as specified in the Milestone details of contract data in the bid document), the performance guarantee (both treasury fixed deposit and irrevocable bank Guarantee) and Performance Security Deposit if any deducted from the RA Bills shall be forfeited to Government and fresh tenders shall be called for or the matter otherwise disposed off. If as a result of such measures due to the default of the Bidder to pay the requisite deposit, sign contract or take possession of the work any loss to Government due to the same will be recovered from me/us as arrears of revenue, but should it be a saving to Government. I/We shall have no claim whatever to the difference. Recoveries on this or any other account will be made from the sum that may be due to us on this or any or other subsisting contracts or under the Revenue Recovery act or otherwise the Government may decide.

I/We further agrees that, in the case of becoming the lowest bidder in this tender and in the event of failure on part of me/us to produce any of the original documents, or submit the performance guarantee, or enter into agreement with the first part within the specified time limit, the first part may take appropriate action as provided in the bid document. In such a situation, if the second lowest bidder gets awarded with the work at his quoted rate, I shall agree to pay to the first part compensation towards the loss on account of award of work at a higher amount. Recoveries on this or any other account will be made from the sum that may be due to us on this or any or other subsisting contracts or under the Revenue Recovery act or otherwise the Government may decide.

NOW THEREFOR IN THE PRESENCE OF WITNESS it is mutually agreed as follows.

1) The terms and conditions for the said contract having been stipulated in the said tender document and forms to which the I/We have agreed and a copy of which is here to be appended which forms the part of this agreement, it is agreed that the terms and conditions stipulated therein shall bind the parties to this agreement except to the extend to which they are abrogated or altered by express terms and conditions herein agreed to and in which respect the express provisions herein shall supersede those of said tender form.

2) The I/We hereby agreed and undertake to perform and fulfill all the operations and obligations connected with the execution of the said contract work
..... (hereinafter the name of the work) if awarded in favour of the me/us.)

3) If the Bidder does not come forward and to execute the original agreement after the said work is awarded and selection notice issued in his favour or commits breach of any of the conditions of the contract as stipulated in clause of the notice inviting tenders as quoted above, within the period stipulated then the Government may rearrange the work otherwise or get it done departmentally at the risk and the cost of the Bidder and the loss so sustained by the WAPCOS LIMITED can be realized from the Bidder under the Revenue recovery Act as if arrears of land revenue as assessed quantified and fixed by an adjudicating authority consisting of the Secretary Public works, Chief Engineer (Admin) or any other officer or officers authorized by

Government in this behalf, taking into consideration the prevailing P.W.D rates and after giving due notice to the Bidder. The decision taken by such authority officer or officers shall be final and conclusive and shall be binding on the Bidder.

4) The Bidder further agrees that any amount found due to the Government under or by virtue of this agreement shall be recoverable from the Bidder from his EMD and his properties movable and immovable as arrears of Land Revenue under the provision of the Revenue Recovery Act for the time being in force or in any other manner as the Government may deem fit in this regard.

5) The Bidder further assures that it is clearly understood that the settlement of claims either by part bills or by final bills will be made only according to the availability of budget provision and allotment of funds of the work under the respective heads of account in which the work is sanctioned and arranged and also subject to the seniority of such bills. No claims for interest or for damages whatsoever shall be made for the related settlement of claims of bills.

IN WITNESS THERE OF SRI.....

..... (here enter the name of the officers of the Department)

for on behalf of the WAPCOS LIMITED

and

.....

.....

the Bidder have set their hand on the day and year first above written Signed by
Sri.....

In the presence of witnesses:

FORM-H

LIST OF EQUIPMENT OWNED BY THE BIDDER AT THE TIME OF BIDDING

[illegible]

FORM-I

DETAILS OF ALL WORKS (GENERAL AND SIMILAR EXPERIENCE)

**DURING THE LAST FIVE YEARS ENDING LAST DAY OF THE MONTH PREVIOUS TO THE
ONE IN WHICH THE BIDS ARE INVITED**

Sl. No	Name of Work/P roject & Locatio n	Owner of sponsoring Organizatio n	Cost of Wor k in lakhs	Date of commen cement as per contract	Stipulated date of completi on	Actual date of compl etion	Litigation/ Arbitratio n pending/i n progress with details*	Name & address/ Telepho ne No. of officer to whom referenc e may be made	Remark s
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

* indicate gross amount claimed and amount awarded by the Arbitrator.

Copy of work Orders and Completion Certificates of the above works should also be submitted.

Signature of Applicant

FORM-J

PROJECT UNDER EXECUTION OR AWARDED

Sl. No	Name of Work/Project & Location	Owner of sponsoring Organization	Cost of Work in lakhs	Date of commencement as per contract	Stipulated date of completion	Actual date of completion	Litigation/Arbitration pending/in progress with details*	Name & address/Telephone No. of officer to whom reference may be made	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)

* indicate gross amount claimed and amount awarded by the Arbitrator.

Completion Certificates of the above works should also be submitted.

Signature of Applicant

FORM-K

DETAILS OF TECHINCAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE

WORK

SI No.	Designation	Total Number	Number available for this work	Name	Qualification	Professional experience and details of work carried out	How these would be involved in this work	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Signature of Applicant

FORM L

UNDERTAKING

[Rule 144 (xi) in the General Financial Rules (GFRs), 2017]

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Date:

Place:

(Signature, name and designation of the Authorized signatory)

Name and seal of Bidder

(TO BE SUBMITTED ON BIDDER ORIGINAL LETTER HEAD)

FORM-M

UNDERTAKING REGARDING PERCENTAGE OF LOCAL CONTENT

Name of Work:

We..... (Name of Firm) hereby confirm that we will follow the Make in India Policy and its Guidelines at the time of execution of subjected work. We have understood the provisions of Public Procurement (Preference to make in India) Local content Policy and will achieve the minimum local content target of 50%.

Date:

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

Place:

FORM-N

Undertaking to execute all low quoted items

Sub: (Name of work)

We M/s.....selected contractors for the work ofawarded to us by WAPCOS vide LOA No..... Datedwith a total contract price of Rupees are aware of the fact that above project is being funded by KIIFB to the work requirements which form part of the contract conditions of the above mentioned work.

We have agreed to execute all low quoted items in full as per contract conditions and we shall not raise any grievance on account of the same or put forward any claim whatsoever in this regard or enter in to any litigation in that respect.

We also agree that this undertaking will be deemed to be part of the agreement for the above mentioned work.

Yours faithfully,

Date:

(Signature, name and designation
of the Authorized signatory)

Place:

Name and seal of Bidder

SECTION-VII
WORK REQUIREMENTS

SECTION-VII

WORK REQUIREMENTS

Chengannur District hospital is at Chengannur town near to MC Road towards Thiruvananthapuram. It is one kilometer away from KSRTC bus station and 1.5 kilometer away from Chengannur Railway station, Alappuzha district, state of Kerala, India. Chengannur is located in the extreme eastern part of Alappuzha district, on the banks of Pamba River. It is 117 kilometers (73 mi) north of the state capital Thiruvananthapuram on the MC Road. Chengannur is connected to Kollam and Kottayam by NH 220.

The Scope of work of project "Supply, Installation, Testing & Commissioning Of Centralized Medical Gas Pipeline System In District Hospital Chengannur-In Alappuzha District". The built up area of the proposed new building is 12250sqm.

1.0 NOC'S / APPROVALS/ CLEARANCES FROM LOCAL BODIES/ AUTHORITIES

The Bidder will take necessary Statuary Approval/ NoCs/ Clearance from all concern Local Authorities / Departments, if any, required before start of the work / during the work / after execution of work & before handing over.

The Bidder shall mobilize the resources at site after getting approval / NoCs/ Clearance from all concern Local Authorities / Departments if any, essential before start of the construction and shall not make any claim due to any delay in approval.

Bidder will follow the all rules, regulations and terms & conditions of Green building norm during the execution of the project work.

2.0 CIVIL WORK DESIGN AND DRAWINGS OF THE PROJECT / WORKS

The Scope of work, shall include execution of work as per the standard technical Specification & Description of items in Bill of Quantities mentioned in tender document. The scope of work is not limited to these Specification & Description of items mentioned in tender document. The Bidder will consider all other necessary Specification and Items of works, while quoting the cost, which are essential to complete the work in all respect.

The modifications/ improvements may be made by the WAPCOS as per the requirement of Client during execution of work.

The detailed Civil Structural Design & Drawings for the Works / Project shall be prepared by the WAPCOS.

3.0 SCOPE OF WORKS OF THE PROJECT AND ALLIED WORKS

This tender is invited for SITC of Centralized Medical Gas Pipeline system In District Hospital Chengannur in Alappuzha District. Unit rate for each item shall be offered in the tender. The quantity shown in the BOQ will be taken for evaluation.

Payment will be made only for the quantity executed at each site irrespective of the quantity mentioned in the supply / work order.

The scope of work shall include Supply, Installation, Testing & Commissioning of the following items mentioned below. This will also include testing, packing, transportation, scheduling of transportation, transit insurance, delivery at sites, unloading, storage, job site storage, insurance, installation any other services associated with the delivery of the equipment and materials providing warranty of services and operation and maintenance of other related equipment/items required for complete installation. The successful bidder will assume full responsibility of the complete system until final acceptance, according to the approved BoQ and Technical specification. The scope of work Includes the following components at that has to executed at site.

1. Oxygen Supply System

- FULLY AUTOMATIC CONTROL PANEL
- Fully Automatic Emergency Control Panel
- Liquid Oxygen Plant of 6000L
- Primary Manifold 2 x 20 Cylinders
- Secondary Manifold 2 x 4 Cylinders

2. NITROUS OXIDE SYSTEM.

- Nitrous Oxide Manifold - 2 x 4.
- FULLY AUTOMATIC CONTROL PANEL – NITROUS OXIDE.
- Nitrous Oxide Emergency Reserve Manifold - 2 X 2 Manifold
- Fully Automatic Emergency Control Panel

3. Nitrogen Supply System

- FULLY AUTOMATIC CONTROL PANEL
- Emergency Control panel with heavy duty regulator
- Primary Manifold 2 x 2 Cylinders
- Secondary Manifold 1 x 1 Cylinders

1. Carbon Dioxide Supply System

- FULLY AUTOMATIC CONTROL PANEL
- Emergency Control panel with heavy duty regulator
- Primary Manifold 2 x 2 Cylinders

- Secondary Manifold 1 x 1 Cylinders

2. MEDICAL AIR SYSTEM

- Air Receiver
- TRIPLEX AIR-COMPRESSOR -TRIPLEX
- AIR DRYER/FILTRATION SYSTEM

3. VACUUM PLANT

- Vacuum Pump
- Vacuum Receiver Tank
- Bacteria Filters
- Vacuum Pump Exhaust

4. Bacteria Double Filters

5. CYLINDERS Manifold

6. AGSS System

7. Nitrogen system

8. MS Steel Bridge

9. Area Control Unit

10. Isolation Valve

11. Secretion Trap

12. Air Compressor

13. Air Receiver

14. Vacuum Tank

15. Twin Oxygen flow meter with Humidifier Bottle

16. Vacuum regulator with Suction bottle (ward)

17. Theater vacuum units

18. Gas/Vacuum Outlets

19. Copper Pipes

20. VALVES – LINE VALVES**21. AREA VALVE SERVICE UNITS (AVSU)****22. Area Line Pressure Medical Gas Alarm****23. Horizontal / vertical Bed Head Panel****24. MATCHING PROBES FOR GAS TERMINAL UNITS – O₂, Air 4, Air 7, N₂O, Co₂, Nitrogen and Vacuum****25. INSTALLATION & TESTING****26. COLOUR CODING****27. Bed Head Panels for ICU/HDU**

The Bidder before proceeding with the work shall Submit the preinstallation requirements to the engineer in charge for the execution.

NOTE:

- The Bidder must aware about location of the proposed works, Surrounding local condition where works are to be constructed, Encroachment by local people and its consequence which may effect the progress of works. Accordingly, Bidder shall submit BID considering all these aspect and shall Quote the rates. Bidder shall not raise any extra/additional claim on these aspects.
- The Bidder is required to deploy the resources at site and start the construction. No claim shall be entertained for idle labour, idle machinery, idle technical / non-technical staff, idle T&P and if any hindrance due to any reason.
- If any dispute/ hindrance may arise during construction, the Bidder is not liable for any financial claim or damages due to such circumstances.
- 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 and shall remove all defects, if any, developed during Defects Liability Period (DLP).
- 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 as provided in the corresponding clauses of the tender document.
- 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.
- Bidder will also submit report on completed work along with drawings of completed (As-Built Drawings) work and including photographs of works.
- Bidder will take necessary approvals/clearance from the concerned departments before the start of work.

- The Bidder will submit the sample/test reports of Gas outlets, Area alarms, Bed Head Panel, Pendants, Isolation valves, Oxygen Flow Meter, ward vacuum units, matching probes etc.. to the Engineer In-Charge for approval before starting the work.
- Any material used without prior approval shall be replaced by the Bidder immediately at his own cost. No payment in this regard shall be entertained.
- The Bidder shall make his own arrangements for obtaining electric connection and water Connection/arrangement (if required).
- The Bidder shall dispose off all the dismantled materials, debris, garbage, waste outside of the campus of the works at his own cost after prior approval from Engineer in Charge and provide clear and clean site at the time of handing over the works.

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

For & on behalf of Tenderer

SUPPLY, INSTALLATION, TESTING AND COMMISSIONING
OF
MEDICAL GAS PIPELINE SYSTEM

TECHNICAL SPECIFICATIONS

A. Source Equipment & Manifold Management System

➤ **Oxygen Supply System**

➤ **Fully Automatic Oxygen Control Panel**

- Automatic control panel should be constructed in accordance with the requirement of international standards. The fully automatic oxygen control panel should comply with HTM 02-01/NFPA 99C/ DIN / EN / ISO-7396-1 standards and a certified class 2 medical devices from European notified body.
- The manifold assembly should provide two stages of pressure regulation. A single stage primary regulator, one for each cylinder bank should be used to initially reduce cylinder pressure and two single stage pressure regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure regulator in service and one should be ready for service in a standby mode. The Manifold control panel should be with digital display, fully automatic type and switches from “Bank in Use” to “Reserve bank “ without fluctuation in delivery supply line pressure.
- The liquid oxygen system 6000 LTR should be supplied and installed at site along with the Oxygen supply system without an additional cost. This shall be connected as primary source of central pipeline supply system of Medical Oxygen, conforming to all technical and statutory requirements. Liquid Oxygen after vaporization shall conform to IS:309 with 99.5% (min.) purity. Liquid Medical Oxygen shall be certified for medical use as per IP 1996.
- Changeover should be performed by electrically/pneumatically operated valves contained in the control cabinet. In the event of an electrical power failure the valves should automatically open to provide an uninterrupted gas flow. It should be 100% automatic and should not require manual adjustment.
- Indication for changing the cylinders should be clearly identified on the front of the control panel.
- All functional components should be enclosed in corrosion resistant robust material.
- All components inside the Control Panel like Pressure Regulators, piping and control switching equipment should be cleaned for Oxygen Service and installed inside the cabinet to minimize tampering with the regulators or switch settings.
- The Control Panel shall include two pressure relief valves, one high pressure approx. 200/350psi and one low pressure approx.75 psi.
- The heavy duty control panel should be provided with a flow capacity minimum of 1790 or more LPM at 50 to 60 psi.
- The Automatic Control Panel should be installed in such a way to meet the peak flow requirement of the Hospital/Institute
- Control panel should have Alarm reset switch/Mute /acknowledgement switch to control and monitor the alarm indications by the operator.

➤ **Oxygen Manifold Supply System (without Cylinders)**

- Manifold shall consist of two high pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with respective numbers of cylinder pigtail connections to suit cylinder valves as per IS.3224/ BS/ ASME incorporating a check valve at the header connection.
- Each header bar assembly shall be provided with a high pressure shut off valve. Oxygen Manifold should consist of 2 rows of respective numbers of class D-type bulk oxygen cylinders. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.

➤ **Emergency Oxygen Manifold (without Cylinders)**

- The size of Manifolds should be as mentioned in BOQ of respective Institute and it shall be compatible with Class-D type bulk cylinders.
- Manifold shall consist of two high pressure header bar assemblies to facilitate connection of respective numbers of primary and secondary cylinder supplies. Each header bar shall be provided with respective numbers of cylinder pigtail connections to suit cylinder valves as per IS.3224/ BS/ ASME incorporating a check valve at the header connection. Each header bar assembly shall be provided with a high pressure shut off valve, High pressure regulator and second stage regulator.
- Oxygen Manifold should consist of 2 rows of respective numbers of class D-type bulk oxygen cylinders. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.

➤ **Oxygen Flow meter with Humidifier Bottle**

- Back Pressure Compensated flow meter for accurate gas flow measurement with following features:
 1. Control within a range of 0-15 LPM.
 2. It should meet strict precision and durability standard.
 3. The flow meter body should be made of brass chrome plated materials.
 4. The flow tube and shroud components should be made of clear, impact resistant polycarbonate.
 5. Flow tube should have large and expanded 0-15 LPM range for improved readability at low flows.
 6. Inlet filter of stainless steel wire mesh to prevent entry of foreign particles.
 7. The humidifier bottle is made of unbreakable & reusable polycarbonate /polysulfone material auto-clavable at 121 degree centigrade.
 8. The liquid oxygen system 6000 LTR should be complete from liquid inlet to gas outlet into central pipeline supply system, conforming to all technical and statutory requirements. Liquid Oxygen after vaporization shall conform to IS:309 with 99.5% (min.) purity. Liquid Medical Oxygen shall be certified for medical use as per IP 1996.

➤ **NITROUS OXIDE MANAGEMENT SYSTEM**

➤ **Fully Automatic Nitrous Oxide Control Panel**

- The fully automatic N₂O control panel should comply with HTM 02-01/ NFPA 99 C/ EN /DIN /ISO 7396-1 STANDARD. The manifold assembly should provide two stages of pressure regulation. A single stage primary regulator, one for each cylinder bank should be used to initially reduce cylinder pressure and two single stage pressure regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure regulator in service and one should be ready for service in a Standby mode. The Manifold control panel should be digital, fully automatic type and switches from “Bank in Use” to “Reserve bank “ without fluctuation in delivery supply line pressure. Changeover should be performed by electrically/pneumatically operated valves contained in the control cabinet. In the event of an electrical power failure the valves should automatically open to provide an uninterrupted gas flow. The manifold should not require any manual resetting or adjustments after the replacements of the depleted cylinders.
- The Control Panel shall include two pressure relief valves, one high pressure Approx. 200psi and one low pressure approx.75 psi.
- The control panel should also have heaters to prevent ice formation on the regulators at high flow rates.
- The Control Panel should be made to provide Heavy Duty and have a flow capacity of minimum 500 LPM or more at 50 to 60 psi.
- The Automatic Control Panel should be installed in such a way to meet the peak flow requirement of the Hospital/Institute
- Control panel should have Alarm reset switch/Mute / acknowledgement switch to control and monitor the alarm indications by the operator.

➤ **Nitrous Oxide Manifold (Without Cylinders)**

- The size of Manifolds should be as mentioned in BOQ of respective Institute and it shall be compatible with Class-D type bulk cylinders. Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with respective number of cylinder pigtail connections to suit cylinder valves as per IS.3224/ BS/ ASME incorporating a check valve at the header connection. Each header bar assembly shall be provided with a high pressure shut off valve. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The cylinder should be locked with the help of cylinder brackets and fixing chains which should be galvanized.

➤ **Emergency N₂O Manifold (Without Cylinders)**

- Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with respective numbers of cylinder pigtail connections to suit cylinder valves as per IS 3224/ BS/ ASME incorporating a check valve at the header connection, High flow regulator and second stage regulator. Each header bar assembly shall be provided with a high pressure shut off valve. Nitrous oxide manifold should consist of 2 rows of respective numbers of cylinders.

-
- The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.

➤ **Carbon Dioxide Supply System**

- Two source gas supply as per standard having two cylinder banks of which one is primary source, one as secondary source with automatic switchover among each source without any human intervention.
- Each and every component of the system should be fully compliant to latest international standard ISO 7396-1/HTM 02-01/NFPA 99.
- Each and every component of the system must be certified as per Medical Device Directives (93/42/EEC) having the CE mark along with the four-digit code from the certifying agency.
- Each and every component of the system must be manufactured in an ISO 13485 certified facility.

➤ **Cylinder Manifold (CO₂) 2 banks X 2 Cylinders (Primary, Secondary)**

- High pressure collecting pipes made up of annealed copper pipes with integrated non-return valves for connection of 2 gas cylinders on the left and right cylinder bank side each. The high-pressure collecting pipe should be modular in nature with box nut and connector allowing any extension and combinations required in future. The collecting pipes should have integrated high-pressure non-return valves for each of the cylinders on both sides to prevent any backflow during change of gas cylinders or open connectors without any cylinders connected. Collecting pipes including brackets and fixing materials should be gas type labeled and must be fully degreased for applications intended for and certified to this effect.
- Each cylinder should be connected to the high-pressure collecting pipe using high- pressure connecting bend made up of annealed copper pipes using brass connections with washers, gas type specific and manufactured specific marking according to latest international standard ISO 7396-1/HTM 02-01/NFPA 99.
- There should be middle frame with wall bracket, chain & holder to hold each of the cylinders on both sides of the manifold.
- There should be high-pressure valve with sintered metal filter with replaceable filter element for particles down to size 50 micrometer between the manifold & the control panel on both the sides to protect foreign particles entering the control panel and also to isolate each manifold without closing individual cylinders.

- The other end of the manifold (the far end) must have manually operated relief valves on both the sides to release the pressure of the collecting pipes. The outlet of the manual relief valves should be piped suitably to the ambient out of the manifold room.

➤ **Fully Automatic Control Panel (CO2)**

- The fully-automatic CO2 control panel should be manufactured as fully compliant to latest international standard ISO 7396-1/HTM 02-01/NFPA 99.
- The fully-automatic CO2 control panel must be certified as per Medical Device Directives (93/42/EEC) having the CE mark/UL Listing along with the four-digit code from the certifying agency.
- The fully-automatic CO2 control panel must be manufactured in an ISO 13485 certified facility.

➤ **The automatic control panel should have the following**

- The rated flow capacity of the control panel (with one of the second stage regulator in operation) should be minimum LPM at 4 Bar line distribution pressure as mentioned in BOQ. The Gas Control Panel should full fill the total peak flow requirement of the Hospital for CO2.
- Two nos. of single stage primary pressure reducers as per ISO 10524-2:2005, one each for each side of the two-sided cylinder manifold.
- Each of the pressure reducers must have isolation valves to isolate any of the supply sources without affecting the operation of the system in anyway.
- Two nos. of single stage line pressure reducers as per ISO 10524-2:2005 in 100% redundant configuration so that one is in operation the other is in standby.
- It must be possible to isolate any of the line pressure reducers without affecting the operation of the automatic control panel.
- The automatic control panel must have digital display panels to indicate the source supply pressures of both the sources, namely the two sided cylinder manifolds as well as the distribution line pressure level.
- All the three pressure values should be displayed in four separate windows clearly labeled specifically for the pressure it is intended to measure.
- Each digital display should show the actual pressure level measured by the respective digital pressure sensors as per the pressure under monitoring.

- It should be possible to connect a Slave Alarm Panel for the duplication of alarms and warnings at a remote location as per the requirement of the system.
- It also must be possible to transfer all data (alarms and warnings) to a bus- system using appropriate hardware.
- The alarm panel should not have any need to be handled during the operation. It should neither be turned on nor turned off. In case of any malfunction once the same is rectified the audible alarm will be turned off and should be set to standby mode. The handling of the alarm panel should be limited to purposes of comfort, testing and adjusting.
- Control panel should have CE certificate as per Device class- II b.

➤ **Medical and Surgical Air System (Package Unit)**

- Air-cooled Oil-Less compressors for continuous duty application with highest output of compressed air, low power consumption and very low vibration resulting in low noise level.
- The medical air plant shall fully comply with the requirements of the HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1

➤ **Air Compressor Modules**

- It should be medical grade Screw Compressors to produces the plant output of {minimum 2534 Liters per Minutes (LPM) Plant capacity} as mentioned in BOQ of respective institute as primary and same as standby.
- Medical quality air shall be delivered at a nominal pressure of 400 kPa (4 bar) and 700kPa (7 bar) gauge for supply of the hospital medical air and surgical air.
- Compressor plant should be designed in such a way that compressors will switch on in a sequential manner as per flow demand.
- The compressors should be standalone ones with independent power supply. Each Compressor should be suitable for both continuous and frequent start/stop operation at a nominal plant pressure of 10bar or more.
- The duty compressors shall be automatically rotated by the plant control system to ensure even wear. Compressors shall be supplied and installed. Desiccant dryer shall be provided with a dew point sensing switch that shall provide an alarm on the plant control panel a when the water concentration in the delivered air rises above the limit. Duplex desiccant dryer and filtration modules shall be provided with three or more individual stages of filtration as follows:
 1. Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water particles down to 1micron.

2. Stage 2: Particulate filter after the desiccant dryer for dust protection and removing particles down to 1 micron.
 3. Stage 3: Bacteria filter for removing particles down to 0.01 micron.
- Purity should be tested as per the American Pharmacopeia / European Pharmacopeia standard.
 - The plant control and power management system shall monitor the safe operation of the plant, providing signal into the alarm system as per the requirements of the standard.
 - Pressure Reducing Station: for 4 bar and 7 bar should fully comply and meet with the requirements of the standard. Simplex pressure reducing station shall comprise as inline pressure regulator, with downstream pressure gauge. Isolation valves and pressure release valves should be provided as per the standard. Duplex pressure reducing station to have two branches, connected to the MGPS in parallel in order to allow maintenance on the components of one branch, while the gas flow is maintained in the other branch. Ball Valves - Full bore which operate from fully open to fully closed position with a quarter turn of the handle. Complete pressure reducing station with base plate mounted for ease of installation.
 - Padlocks available to allow locking of the valves in both open and closed positions and must have easy to read pressure gauges. Base plate mounted and supplied with copper stub pipes for ease of installation using inert jointing procedures.
 - The compressor system should have-
 1. Intake filter Delivery pipe
 2. Mounting on air tank along with all standard fittings viz. safety valve, pressure gauge, delivery valve, drain valve etc.
 3. Bidder shall provide all electric control panels, starters etc required for proper functioning of motor.
 4. Desiccant Air Dryer – 2 nos.(Duplex), Certified class 2 medical device from European notified body
 5. 2-Stage or more Breathing Air Filters – 2 sets(Duplex)
 6. Outlet pressures for drills/equipment and ventilators should be a minimum of 7 bar and 4 bar respectively.
 7. Duplex pressure reducing station
 8. The compressor should be heavy duty, reliable . Each compressor cylinder is to be protected by a temperature switch, which will stop the drive motor and provide an alarm signal in the event of abnormal discharge air temperature. Each compressor module should include an inline filter with particle retention of 10 microns, inlet isolation valve, discharge isolation valve, and pressure relief valve. The capacity should be capable to take care of total load of all the outlets.

➤ **Vertical Air Receiver**

- Total air receiver capacity shall be at least 50% of the primary plant capacity (or capacity as mentioned in the tender) in 1 minute in terms of free air delivered at normal working pressure. Each air receiver shall be protected by a pressure relief valve, a fusible plug and include a pressure gauge with isolating valve and a drain cock.
- The corrosion resistant coated receiver is to be equipped with tested safety pressure relief valve, sight glass pressure gauge, automatic drain, three-valve by-pass and source isolation valve. Should be fabricated as per ISO/ASME/BS.

➤ **Air Treatment Module**

- The air treatment module should include dual dryers, dual filtration system and a dew point transmitter with local audible and visual signals and dry contacts for remote monitoring. The components should be mounted on a common base with interconnecting copper/brass piping and upstream and downstream isolation valves. The isolation valves must allow either set of components to be serviced without shutting down the system.
- Dryers should be of heatless desiccant design and sized to provide for the peak calculated demand. The desiccant dryers should be equipped with dew point dependent switching feature to minimize the need for purge air.
- The dual filtration system should remove liquid and particulate matter, consisting of 0.5micron coalescing filters with differential pressure indicators and automatic drain, airline pressure regulators with gauges, final pressure relief valve, and sampling valve.
- Each bank should consist of three stage treatment.

➤ **System Controls**

- The “Continuous on Demand” feature will stop the operation of the motors during periods of low or no demand. The control include individual self-protected combination motor controls with short circuit protection, single phase and thermal overload protection, individual control circuit with transformers primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The cabinet shall have status display to include system pressure, dew point pump operation, accumulated time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles. All required local alarm functions shall be integrated in to the packaged system.
- The system should be designed to function even if the programmable controller fails.

➤ **VACUUM SYSTEMS (Package unit)**

Fully comply with HTM 0201/ NFPA 99 C / EN /DIN/ISO 7396-1The medical compressed air system shall

consist of following:-

➤ **Vacuum Pump Module**

- It should be Oil Sealed Rotary Vane Type to produces the plant output of {minimum Liters Per Minutes 4000(LPM) Plant capacity } as mentioned in BOQ of respective institute as primary and same as standby.
- Designed flow capacity should be minimum of 4000 LPM capacity as mentioned in BOQ of respective institute. The vacuum plant shall comprise air-cooled, oil lubricated rotary vane vacuum pumps suitable for both continuous and frequent start/stop operation at inlet vacuum levels between 500mmHg and 660 mmHg.
- The control system should normally employ automatic rotation of the lead pump to maximize pump life and ensure even wear. Vacuum pump inlets shall include a wire mesh filter and integral non-return valve to prevent oil suck back and pressure increases in the vacuum system.
- Each vacuum pump shall be fitted with anti-vibration pads between the pump foot and mounting frame. The plant shall be fitted with duplex bacteria filter system.

➤ **Vacuum Receiver**

- The vacuum receiver shall be made of rust free corrosion resistant steel and fabricated as per ASME/BS/ISO for a vacuum pressure of 760mmHg. It should include bypass valves, manual drain valves, vacuum gauge. Vacuum reservoir shall have total volume of at least 100 % of primary plant output (capacity as mentioned in the tender) in one minute in terms of free air aspired at normal working pressure.

➤ **System Controls**

- The control include individual self-protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fuse less/fused primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The system should have a status display to show the system pressure, elapsed time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles.
- All required local alarm functions should be integrated into the packaged system. The circuitry should be designed so that the audible signal can be silenced and the visual indicator will remain until the fault has been cleared and the reset button resets. Local alarm functions should be annunciated for reserve pump in use

➤ **Bacterial Filters**

- The filters should be designed for removal of solid, liquid and bacterial contamination from the suction side of vacuum pump systems, preventing damage to the pump and the potential biological infection of the surrounding environment. The dryer should be particulate filter dryer with ability to remove particles as small as 1micron.
- Each individual filter shall have the capacity to deliver full design flow such that one set is designated duty and the other will be standby. Bacteria filters shall have efficiency at least 99.999% when tested by the sodium flame method in accordance with BS 3928:1969/as per required standard utilizing particles in the 0.02 to 2 micron size range and the certifications should be submitted along with tender. The pressure drop across each clean filter at 50% of the system design flow should not exceed 25 mm Hg (3 kPa) at a vacuum of 475mm of Hg (63 kPa). Bacteria filters shall be marked with the legend 'Bio-Hazard'.
- Each bacteria filter shall be provided with a transparent sterilizable collection jar to collect condensate. The total water capacity of the pressure vessels shall be at least 100% of the design flow rate of the plant in 1 minute in terms of free air aspired.

➤ **Ward Vacuum Units**

- It must consists of the following:-
 1. 1no of Suction Regulator and 1no of 1000 ml polysulfone /polycarbonate collection jar.
 2. Suction regulator should be supplied with a safety jar, including and an anti-bacterial filter and an anti-overflow safety device. Should have wide membrane continuous suction controller
 3. Should have vacuum levels: 0-750 mm Hg or more
 4. Should have vacuum gauge fitted with a protective bumper device.
 5. Should have on/off knob allowing for the quick restoration of a readjusted vacuum level.
 6. Must have central adjustment knob with a color coded for 0 to 750 mm Hg or more. Should have Polysulfone/ polycarbonate 100cc safety jar, autoclavable at 121° C at 5mins, unbreakable, fitted with an anti-overflow safety device and equipped with antibacterial filter. It should be totally transparent, to ensure perfect sucked liquid visibility.

Added para:

7. Low flow ward vacuum unit - Should have vacuum levels: 0-150 mm of Hg +/-10%

➤ **Theatre Vacuum unit for OT**

1. It must consist of the following: -
 - Suction Regulator and 2nos. 1500ml or more polysulfone/ polycarbonate collection jar and both to be mounted on a trolley.
 - Suction regulator should be supplied with a safety jar, including an anti-bacterial filter and an anti-overflow safety device. Should have wide membrane continuous suction controller
 - Should have vacuum levels : 0-750 mm of Hg or more
 - Should have vacuum gauge fitted with a protective bumper device.

- Should have on/off knob allowing for the quick restoration of a readjusted vacuum level.
- Must have central adjustment knob with a color coded for 0-750 mm Hg or more. Should have polysulfone/ polycarbonate safety jar, autoclavable at 121° C, unbreakable, fitted with an anti-overflow safety device and equipped with antibacterial filter.
- Collection jar should be totally transparent, to ensure perfect sucked liquid visibility.

➤ **AGSS (Anesthetic Gas Scavenging System) Plant**

- Anesthetic Gas Scavenging System (AGSS) of minimum 2000 LPM as Primary & 2000LPM as Standby.)and should comply with HTM 02-01/ NFPA 99 C/EN/ISO 7396- 1.
- The package should consist of rotary vane/claw/blower type vacuum pumps (Dry/Oil less only), a control panel, and mounted on a common base frame.
- AGSS pump: AGSS pump shall operate completely dry . Each pump should be completely air cooled and have absolutely no water requirements.
- System in-line non-return valves should allow individual pump servicing. Active anesthetic gas scavenging systems should be designed to safely remove exhaled anesthetic agents from the operating environment and dispose of them to atmosphere from the highest point of the hospital building, thus preventing contamination of the operating department and providing a safe and healthy workspace for the personal. AGSS design should be dependent upon flow rate and pressure drop characteristics of the individual components of systems. It is essential that terminal units, remote controls (If required) and pump units work in synchronized manner after connection of workstation to the AGSS System.
- Installation should be on roof top/suitable location. Piping, Non-Return-Valves (NRVs), and inlet nozzle should be suitably placed. Connecting hose suitable to fit with anesthesia workstation should be provided.

➤ **DISTRIBUTION PIPING**

➤ **Piping specifications**

- Copper pipe should be as per standard BS: EN 13348:2008/ ASTM B819 standards, Solid drawn, seamless, deoxidized, non-arsenical, half hard (hard can be accepted only for sizes 54mm or more), tempered and degreased copper pipe conforming to the standard. All copper pipes should be degreased & delivered capped at both ends. The pipes should be accompanied with manufacturers test certificate for the physical properties & chemical composition.
- Copper pipe must have reputed third party inspection certificate (Eg. Lloyd's or TUV or SGS).
- Fittings should be made of copper and suitable for a working Pressure of up to 17bar and especially made for brazed socket type connections. All valves shall be pneumatically tested for twice the working pressure and factory degreased for medical gas service.
- Copper fittings should comply with EN 1254:1 factory degreased and brazing filler metals should comply with EN 1044. Fitting should be degreased, individually packed for medical use.
- The minimum thickness of copper pipes of 35mm and above outer diameter, should be 1.2mm and the thickness of copper pipes less than 28mm outer diameter, should be 1mm as mentioned in respective Institute's BOQ.

➤ **Installation & testing**

- Installation of piping shall be carried out with utmost cleanliness. Only pipes, fittings and valves that have been degreased and fittings shall be used at site. Pipe fixing clamps shall be of nonferrous or non-deteriorating plastic suitable for the diameter of the pipe.
- Inert gas welding technique should be used by passing oxygen Free Nitrogen Gas inside the copper pipes during silver brazing, in order to avoid carbon deposition inside the copper pipes. Only copper-to-copper joints are permitted on site except threaded or flanged joints may be made where pipelines are connected to items such as valves and control equipment. No flux shall be used for joining Copper to Copper joints and on for joints made on site. Copper to copper joints shall be brazed using a 5% silver-copper phosphorous brazing alloy CP104. A total of 5 joints shall be cut out for examination to establish the quality of the joints being made on site. The insides shall be clean and free from oxides and particulate matter and the minimum penetration of the brazing alloy at any point shall be three times the wall thickness of the tube. If the joints examined do not conform to these requirements, then adjacent joints shall be cut out and examined until the extent of faulty workmanship has been made good. Copper-to-brass or gunmetal joints shall only be made under controlled conditions off site. The joints are ordinarily used to join short copper pipe tails to brass, gunmetal or bronze fittings to permit their connection into the pipeline. The sub-assemblies shall be degreased and individually sealed in bags or boxes before delivery to site.
- Adequate supports should be provided while laying pipelines to ensure that the pipes do not sag. Suitable sleeves shall be provided wherever pipes cross through walls / slabs. All pipe clamps shall be non-reactive to copper.
- After erection, the pipes are to be flushed with dry nitrogen gas and then pressure tested with dry nitrogen at a pressure equal to twice the working pressure or 150 psig, whichever is higher for a period of not less than 24 hours.
- Length and quantity of individual items (Copper pipes, AVSUs, Alarm panels, Isolation valves, Outlets, pendants etc.) are mentioned. However quantity will be calculated and paid at actuals. Bidder should quote unit price for all the items as detailed
- Maximum interval between supports (Horizontal and Vertical)
- (12mm Pipe - 1.5m, 15mm pipe - 1.5m, 22mm pipe – 2m, 28mm pipe-2m, 35mm pipe- 2.5m, 42mm pipe -2.5m, 54mm pipe - 2.5m, 76mm pipe – 3meter)

➤ **Painting**

- All the pipes from manifold/plant up to the outlets should be painted with two coats of synthetic enamel paint and color codification should be as per standards followed and with consultation with competent authorities of the Institute.

➤ **Gas Outlets**

- Terminal Units (Gas Outlets) with probes/Adaptors for O₂, N₂O, Compressed Air 4, Air 7, AGSS, Vacuum & CO₂ (CO₂ can be optional depending on the requirement)
- The Medical gas outlets shall conform to HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396- 1. Front Loading Type Terminal Outlets should be designed to dispense medical gases (or an inlet for medical vacuum) to the secondary equipment (flow meters, Suction regulators, etc.) at the point

of use and is gas specific so that secondary devices cannot be “attached” to the wrong gas. When not in use the gas in a non-flowing state within the Outlet (Terminal unit) sealed by “O” ring. The adapter when inserted pushes the poppet inside and the gas starts flowing and sealing is ensured by the “O” ring or a seat. The Outlets are Quick Connect Type and gas specificity is accomplished by "Pin indexing." The outlets should have following features:

1. Push to insert and press-to-release mechanism for probes.
 2. Allows plugging of probes from front.
 3. Self-sealing valve on disengaging the probe (Quick disconnect)
 4. Smooth quite action.
 5. Non return valve for on line servicing/ repairing
 6. Indexed to eliminate inter-changeability of gas services
 7. Color-coded gas specific front plate
 8. Totally leak proof, safe & easy to operate
 9. Configurations possible: surface, flush & Bead-head.
 10. Outlets should be comply with ISO standards.
- All outlets should have respective labels (i.e.O2 / N2O / CO2 / Air4 / Air7/Vacuum/AGSS/etc.) displayed accordingly.

➤ **AREA VALVE SERVICE UNIT**

- Area valve service units should fully comply and meet with HTM 02-01/NFPA 99C/EN/DIN/ISO7396-1. It should provide a zone isolation facility for use either in an emergency or for maintenance purpose The Area Valve Service Unit should incorporate a ball valve in a lockable box with emergency access. It should be reliable and easy to operate, easy purge, sample & pressure testing and emergency supply system.
- Medical gas/vacuum services should be fixed copper, piped to and from their respective area valve service units. A color coded service identity label should be fitted behind the valve handle. The unit should provide a zone isolation facility. Gas Flow direction should be indicated.
- The box shall be made from extruded aluminium to prevent corrosion. All wetted parts (except seals and gaskets) should be brass or copper. Each unit assembly should be factory tested for gas tightness. Rubber pipe grommets should be provided to ensure any leaking gas does not escape from the unit into a wall cavity. All visible aluminum surfaces should be powder coated.

➤ **ALARM SYSTEM**

➤ **Master Alarm(Digital)**

- Complies with HTM 02-01 / NFPA 99C/EN/DIN/ ISO 7396-1 Standards.
- Each Master Alarm should be modular in design and be fitted with required number of master alarm modules. The master alarms should be capable to monitor minimum 40 Point.
- Each point represents an alarm condition that the source equipment might have. When an alarm condition exists, a red light flashes and the audible alarm sounds. If several alarm conditions occur simultaneously, the most recent alarm light should flash, while the other alarm lights

should remain lit. When an alarm condition is created, an audible alarm should be actuated. A dry contact module should be available to interface with a building management system.

- The box material should be of gauge steel of requisite thickness and equipped with mounting brackets. The emissions from alarms should conform with applicable standards.
- Master alarm management system should be designed to display alarm conditions from the source supply units indicating the broad status of the source equipment and manifolds as well as the master distribution status from the source supplies. Depending on the alarm priority, a visual and audible alarm should be initiated to indicate an alarm condition.
- Each panel shall display and/or input up to forty point alarms. Panel should be ready to use with BMS system.
- The master alarm must be able to monitor the following source alarm conditions.
 1. Oxygen Source Empty/Fault
 2. Oxygen Cylinder Bank Empty/Fault
 3. Oxygen Emergency Bank Empty/Fault
 4. Air Compressor Faulty/Operation
 5. Vacuum Pump Faulty/Operational
 6. Vacuum Deficiency Vacuum Reservoir
 7. And Other MGPS Signals & Alarms
- The alarm panels should be networkable

➤ **Medical Gas Area Alarm**

- The medical gas alarms should be capable of monitoring up to 5 medical gas services (As specified in BOQ of respective institute) by means of pressure sensors which detect deviations from the normal operating limits of either pressure or medical vacuum. The area alarm should have a digital display of pressures. The medical gas area alarm should fully satisfy the HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 requirements.
- An audible warning should sound simultaneously with any failure indication and a mute facility should be provided. "

Note: The bidder may offer combined unit of AVSU & alarm, bidder has to match the quantity of AVSU/Alarm whichever is higher.

➤ **Line Isolation Valves**

- The Lockable line valves must degreased and complete valve with stuffed pipe & fittings, factory tested and complies with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396- 1 standard.

➤ **Horizontal/ Vertical Bed Head Panel**

- It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1. The design should be approved by the respective institute before installation and it is responsibility of the bidder after getting order they have to discuss with respective institute and finalized the Bed Head Panel (Vertical/Horizontal) as per site condition.

- It should have following features:-
 1. Efficient, Safe & Robust design in extruded aluminium section.
 2. Smooth curved surfaces, and choice of base color and fascia plates.
 3. Unit should have integrated rail system to mount accessories
 4. The headwall system should be constructed of aluminium extrusions joined together to form a carcass to suit the particular application. Unit should be factory assembled for electrical and mechanical components.
 5. Segregation of services i.e. Low voltage supplies, High Voltage supply and Medical gases should be maintained with 2 tier/2 channel arrangements.
 6. Front fascia plate should be removable individually to access for respective service.
 7. It should have one rail for mounting Accessories.
 8. Each bed-head unit shall be supplied with electrical and electrical outlets pre-fitted, wired and certified. (Wired up to the distribution box provided with leakage protection & proper earthing arrangements)
- Note: Gas Outlets quantities are already taken in consideration of quantities of respective outlets in BOQ
- Should have per unit as under :
 1. Oxygen – 2
 2. Vacuum – 2
 3. Medical Air-1
 4. Holder for vacuum collection jar –1
 5. Nurse call switch – 1 (not in the scope of MGPS Vendor only space for same has to provide)
 6. Infusion pump mount pole with adapter for mounting at least two infusion pumps.
 7. 5 /15A combined Electrical outlets – 8 Nos. or more
 8. RJ-45 socket/ Ethernet – 01
 9. Two spare spaces.

14. High pressure tubes for O2, N2O, Compressed Air,& Vacuum

- It should be color coded for individual services i.e. white for Oxygen, Blue for N2O and Yellow for Vacuum, Black for air. Antistatic rubber tube should be as per ISO standards. It should be CE marked/UL Listed. (The 200m Hose- Gas wise requirement should be taken from respective institute before supply total lengths should be 200m inclusive of all type. If institute requires more than payment will be made on actual basis as per finalized BOQ rate)



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**1st Floor, JP Krishna Building, Pallimukku, Pettah
Trivandrum - 695024**

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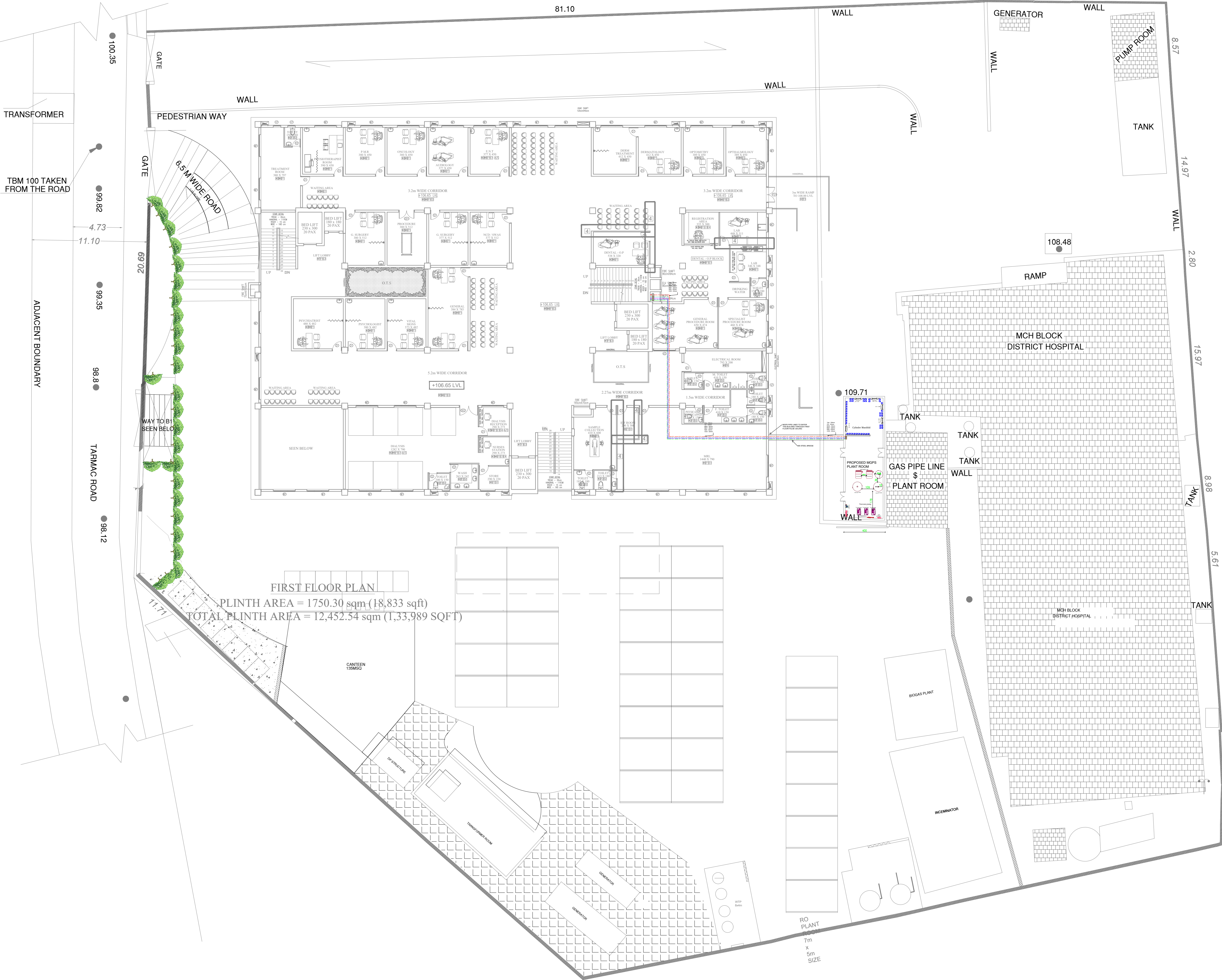
***SUPPLY, INSTALLATION, TESTING AND COMMISSIONING
OF CENTRALISED MEDICAL GAS SYSTEM AT DISTRICT
HOSPITAL CHENGANNUR***

WAP/INFRA/KERALA/2024/CMGP/494

Date: 02.12.2024

**Volume-II
DRAWINGS**

TYPE	DESCRIPTION	PPIC
1	MEDICAL AIR 4	
2	VACUUM	
3	OXYGEN	
4	NITROUS OXIDE	
5	MEDICAL AIR 7 BAR	
6	NITROGEN	
7	ACSS	
8	AREA CONTROL UNIT	
9	ISOLATION VALVE	



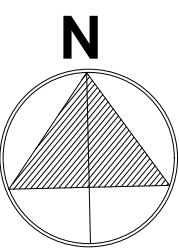
CLIENT :
HEALTH AND FAMILY WELFARE (P)
DEPARTMENT & (KIIFB)

SPV :

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Ministry of Jal Shakti
Regional Office (Kerala)
1st Floor, JP Krishna Building
Pallimukku, Pettah
Trivandrum 695024, Kerala

NAME OF PROJECT:
DEVELOPMENT OF DISTRICT HOSPITAL
AT CHENGANNUR, ALAPPUZHA

- NOTES:
- 1.ALL DIMENSIONS ARE IN CENTIMETERS
 - 2.ALL DIMENSIONS TO BE READ AND NOT SCALED
 - 3.ALL LEVELS ARE FROM THE FINISHED SURFACE
 - 4.ALL INTERNAL DIMENSIONS ARE FROM WALL TO WALL
 - 5.ALL LEVELS ARE WITH REFERENCE TO THE BENCHMARK ESTABLISHED AT SITE.



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No	Description	Date
REVISIONS		









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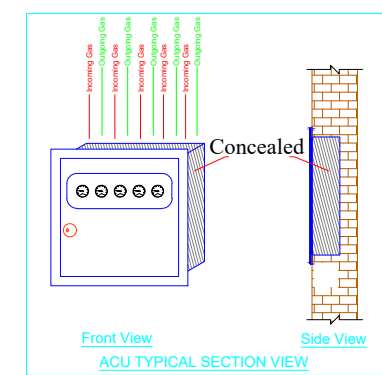
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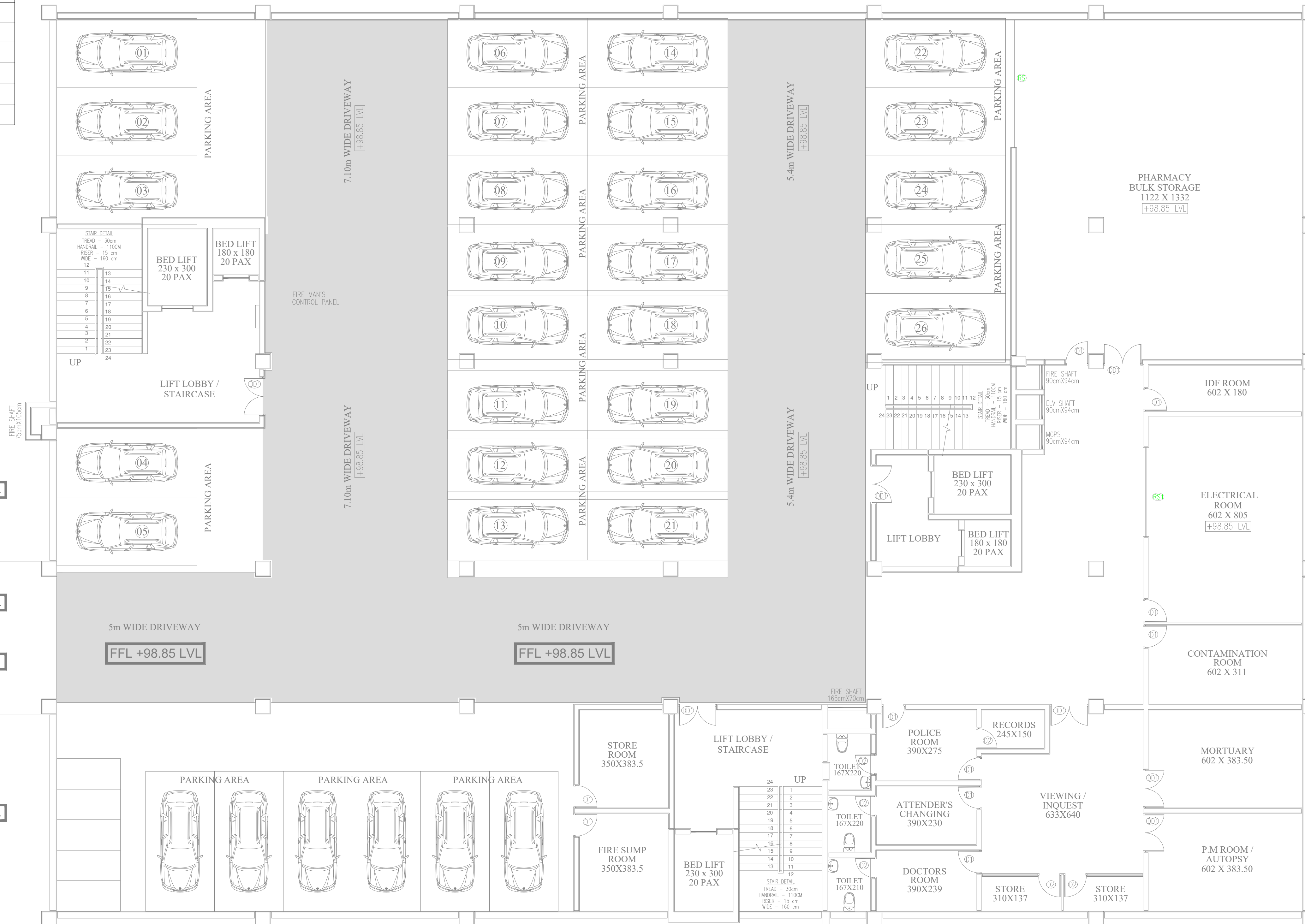
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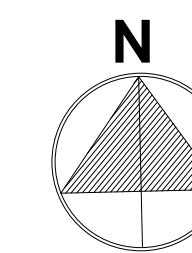
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AREA STATEMENT	
FLOOR	BUILD UP AREA
BASEMENT	1750.30 SQM
GROUND	1750.30 SQM
FIRST	1750.30 SQM
SECOND	1750.30 SQM
THIRD	1750.30 SQM
FOURTH	1750.30 SQM
FIFTH	1750.30 SQM
TERRACE	200.44 SQM
TOTAL	12,452.54 SQM



TOTAL PLINTH AREA = 12,452.54 sqm (1,33,989 SQFT)



DRAWING TITLE: MGPS LAYOUT BASEMENT FLOOR		
DRAWING No: DH-CNGR/OCT/100/MGPS_02		
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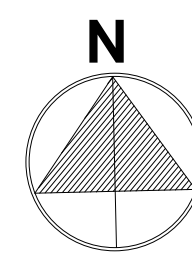
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Trivandrum 695024, Kerala

DEVELOPMENT OF DISTRICT HOSPITAL AT CHENGANNUR, ALAPPUZHA

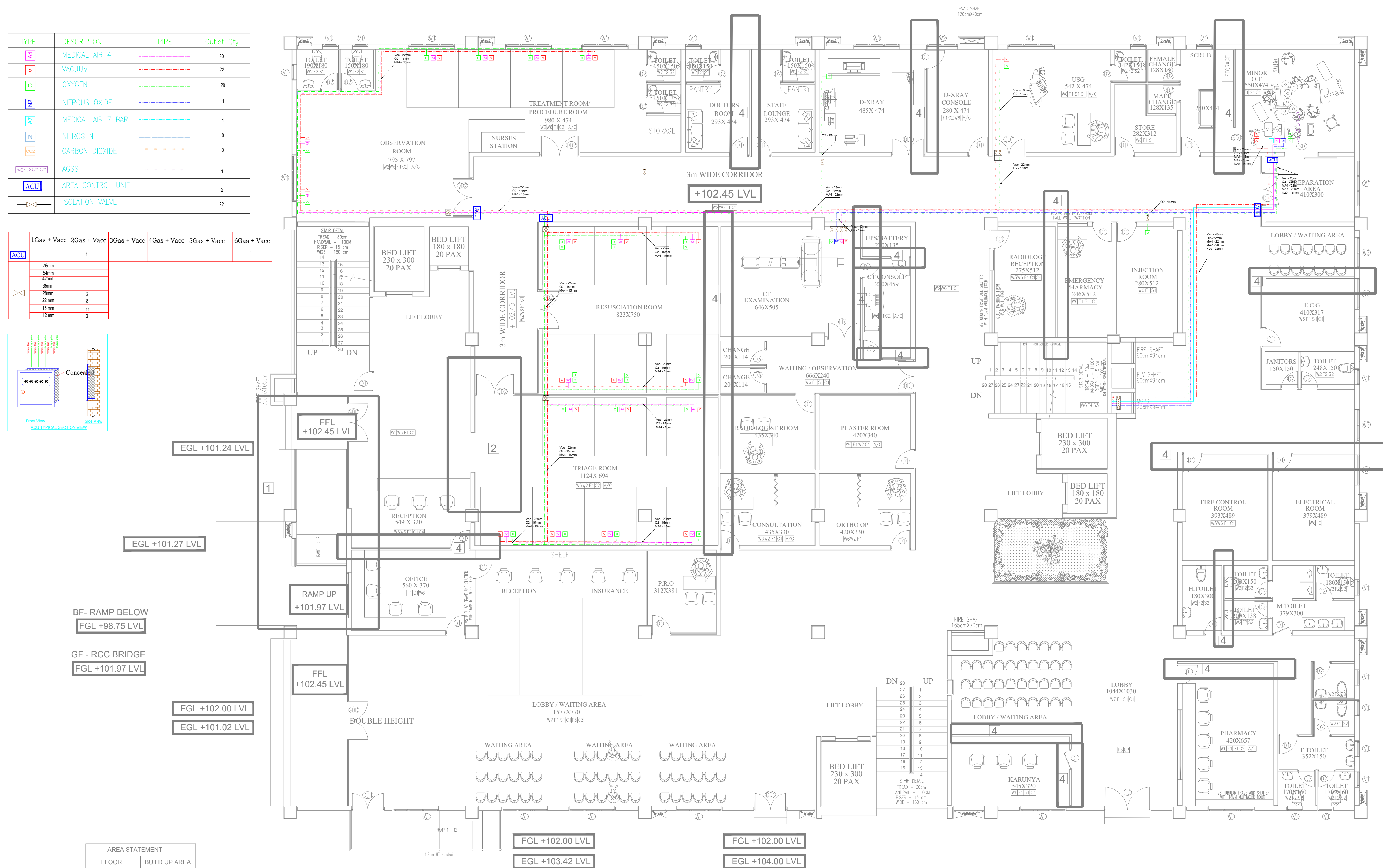
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PLINTH AREA = 1750.30 sqm (18,833 sqft)
TOTAL PLINTH AREA = 12,452.54 sqm (1,33,989 SQFT)

HEALTH AND FAMILY WELFARE (P)
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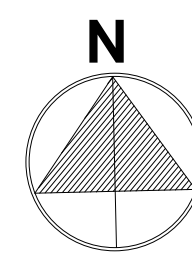
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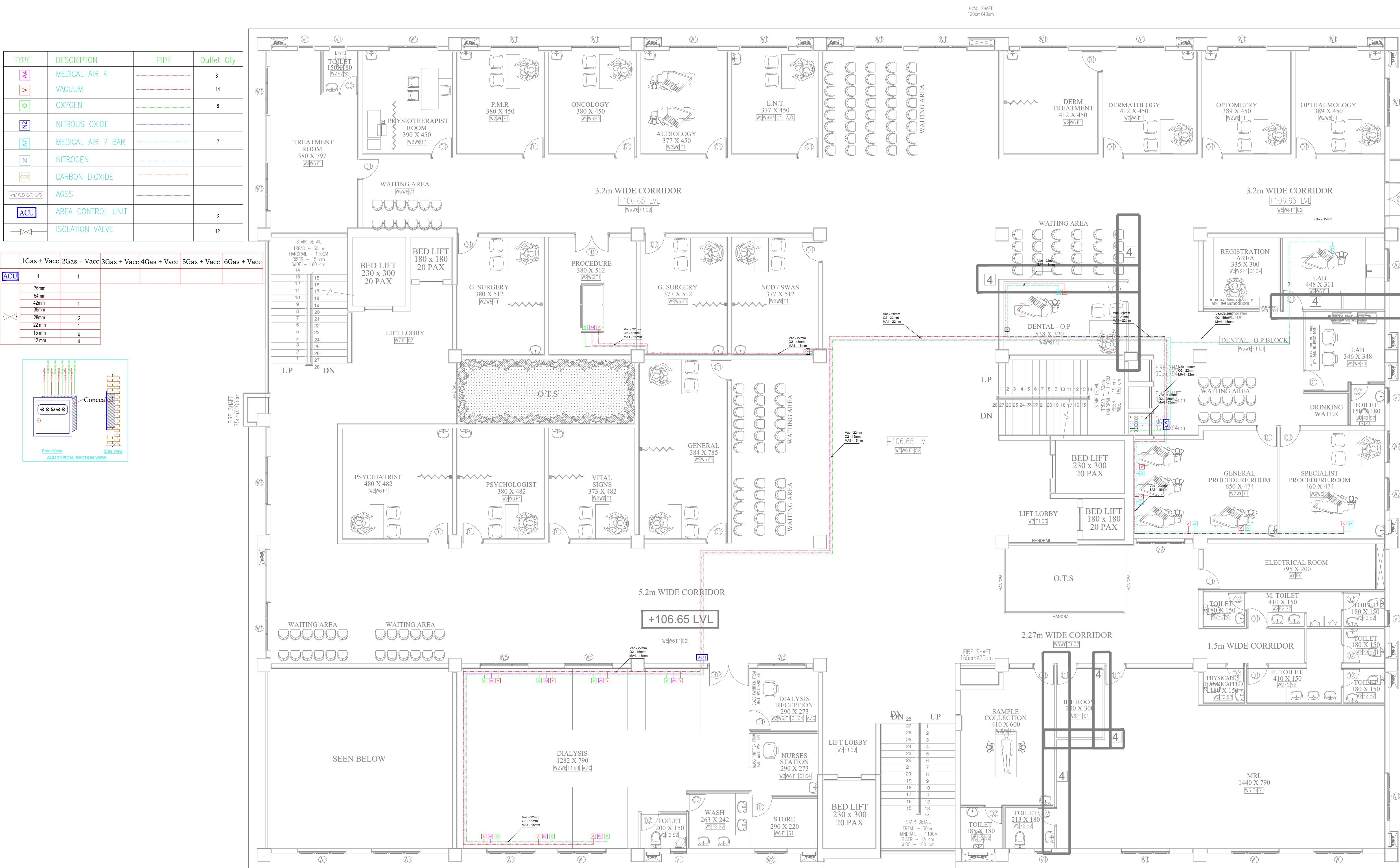
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For Tender

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HEALTH AND FAMILY WELFARE (P)
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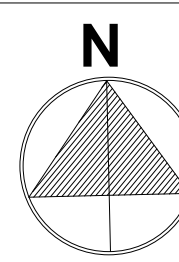
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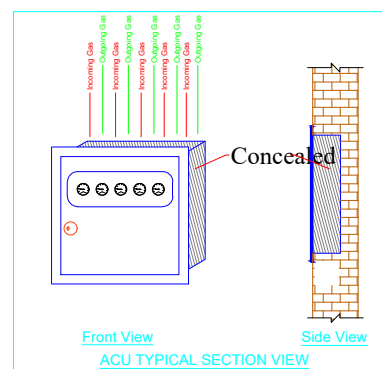
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TYPE	DESCRIPTION	PIPE	Outlet Qty
	MEDICAL AIR 4		
	VACUUM		18
	OXYGEN		17
	NITROUS OXIDE		
	MEDICAL AIR 7 BAR		
	NITROGEN		
	CARBON DIOXIDE		
	AGSS		
	AREA CONTROL UNIT		2
	ISOLATION VALVE		6

	1Gas + Vacci	2Gas + Vacci	3Gas + Vacci	4Gas + Vacci	5Gas + Vacci	6Gas + Vacci
	1					
	76mm					
	54mm					
	42mm					
	35mm	1				
	28mm	3				
	22 mm	2				
	15 mm					
	12 mm					



AREA STATEMENT	
FLOOR	BUILD UP AREA
BASEMENT	1750.30 SQM
GROUND	1750.30 SQM
FIRST	1750.30 SQM
SECOND	1750.30 SQM
THIRD	1750.30 SQM
FOURTH	1750.30 SQM
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TERRACE	200.44 SQM
TOTAL	12,452.54 SQM

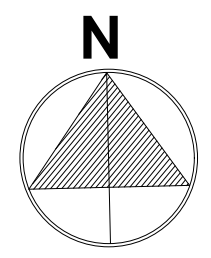
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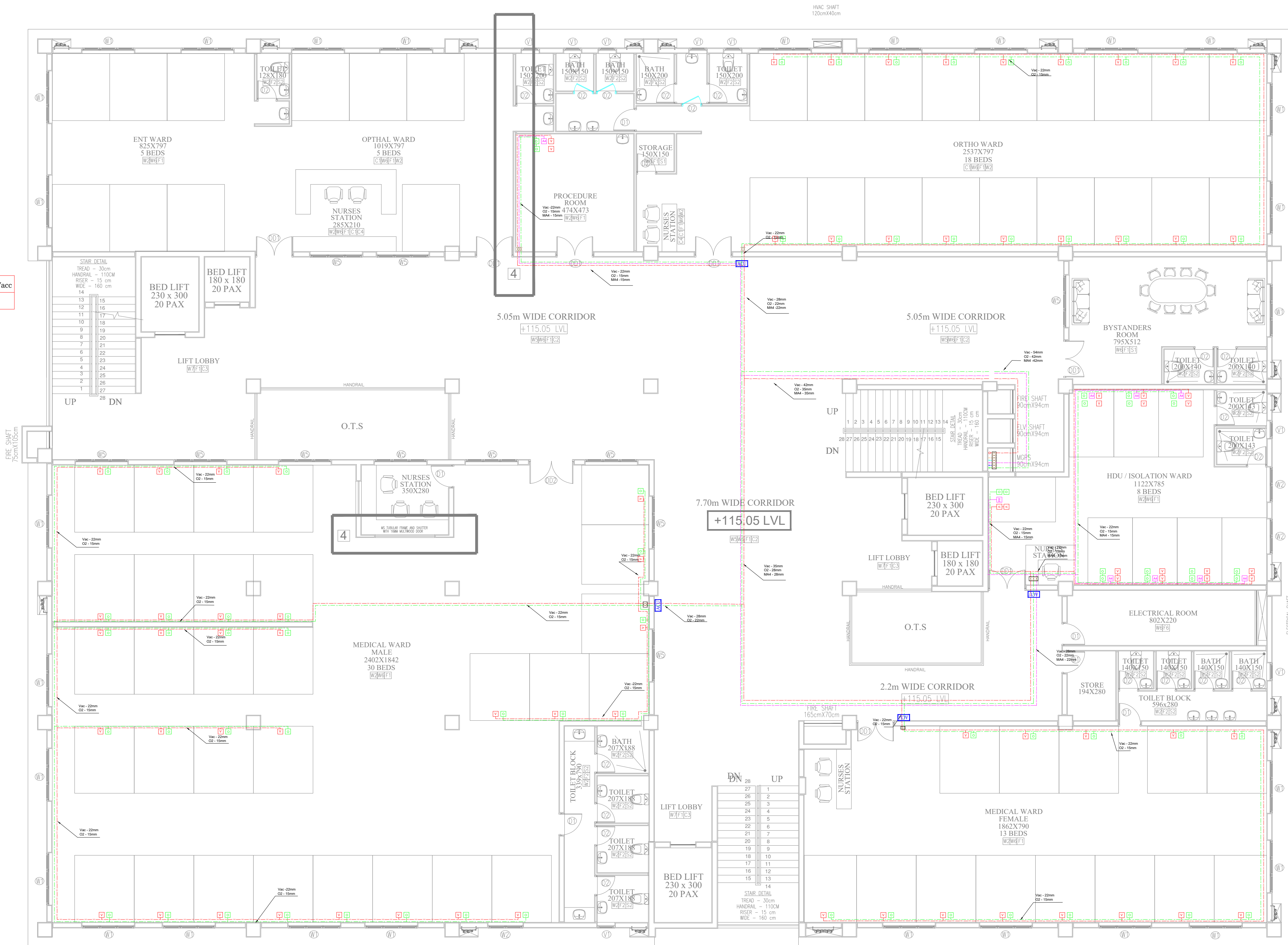
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Front View

Side View

ACU TYPICAL SECTION VIEW

AREA STATEMENT	
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BASEMENT	1750.30 SQM
GROUND	1750.30 SQM
FIRST	1750.30 SQM
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TERRACE	200.44 SQM
TOTAL	12,452.54 SQM



TOTAL PLINTH AREA = 12,452.54 sqm (1,33,989 SQFT)

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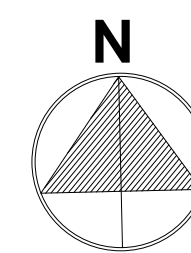
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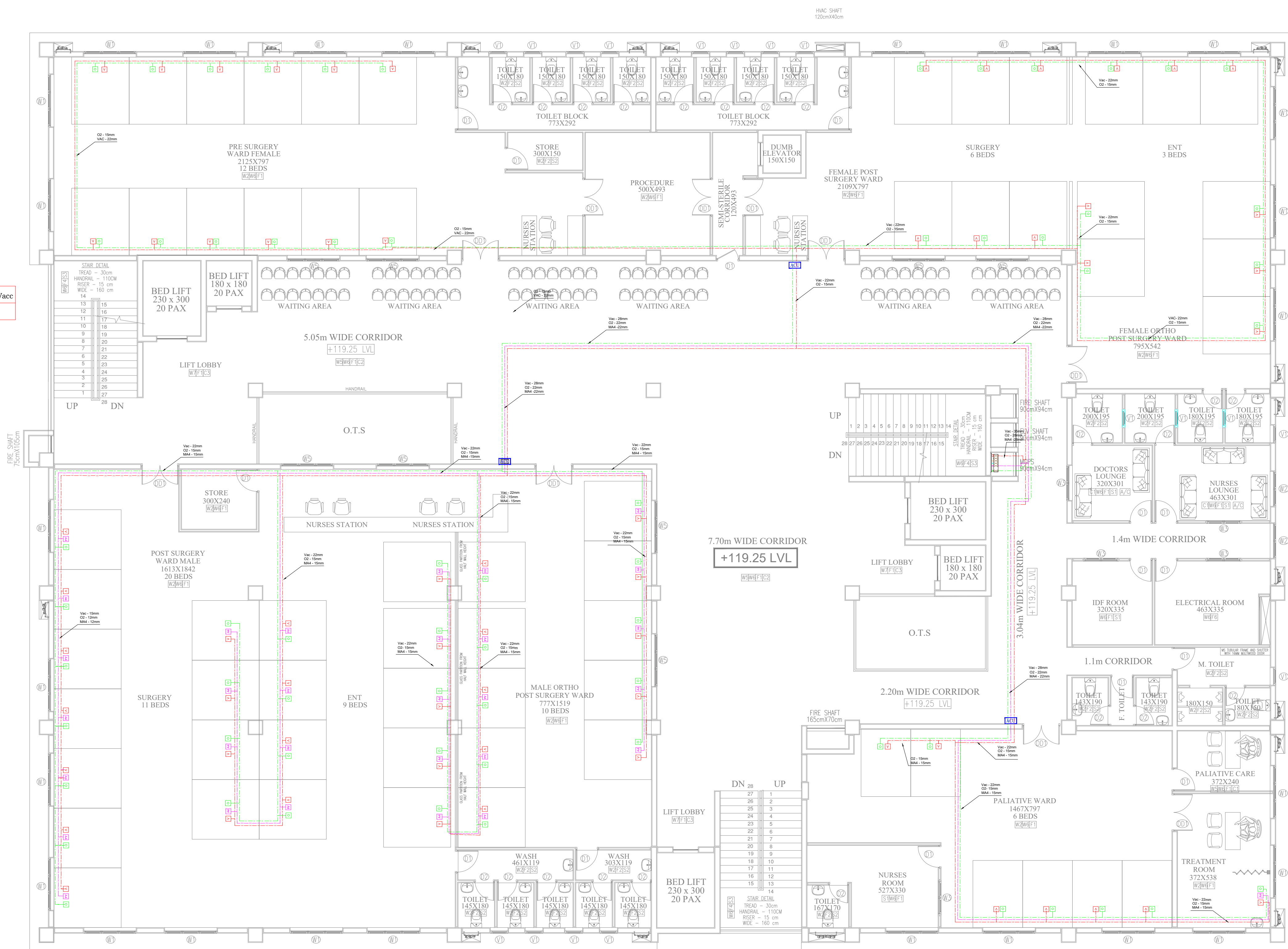
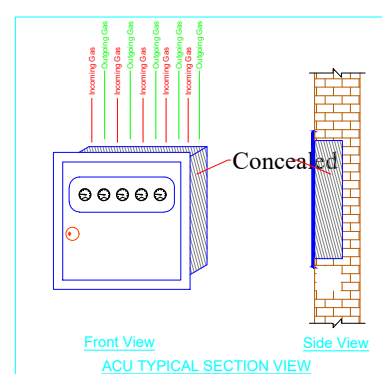
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



















SHEET SIZE: A1	SCALE: NTS	REVISIONS: R0
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	1Gas + Vacc	2Gas + Vacc	3Gas + Vacc	4Gas + Vacc	5Gas + Vacc	6Gas + Vacc
		3				
	76mm					
	54mm					
	42mm					
	35mm	1				
	28mm	3				
	22 mm	5				
	15 mm	3				
	12 mm					

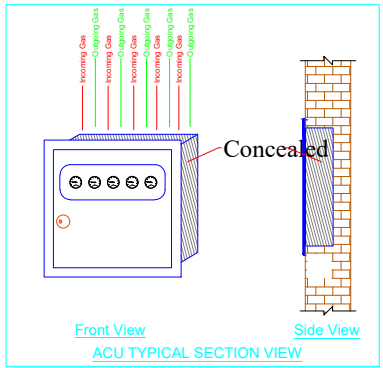


AREA STATEMENT	
FLOOR	BUILD UP AREA
BASEMENT	1750.30 SQM
GROUND	1750.30 SQM
FIRST	1750.30 SQM
SECOND	1750.30 SQM
THIRD	1750.30 SQM
FOURTH	1750.30 SQM
FIFTH	1750.30 SQM
TERRACE	200.44 SQM
TOTAL	12,452.54 SQM

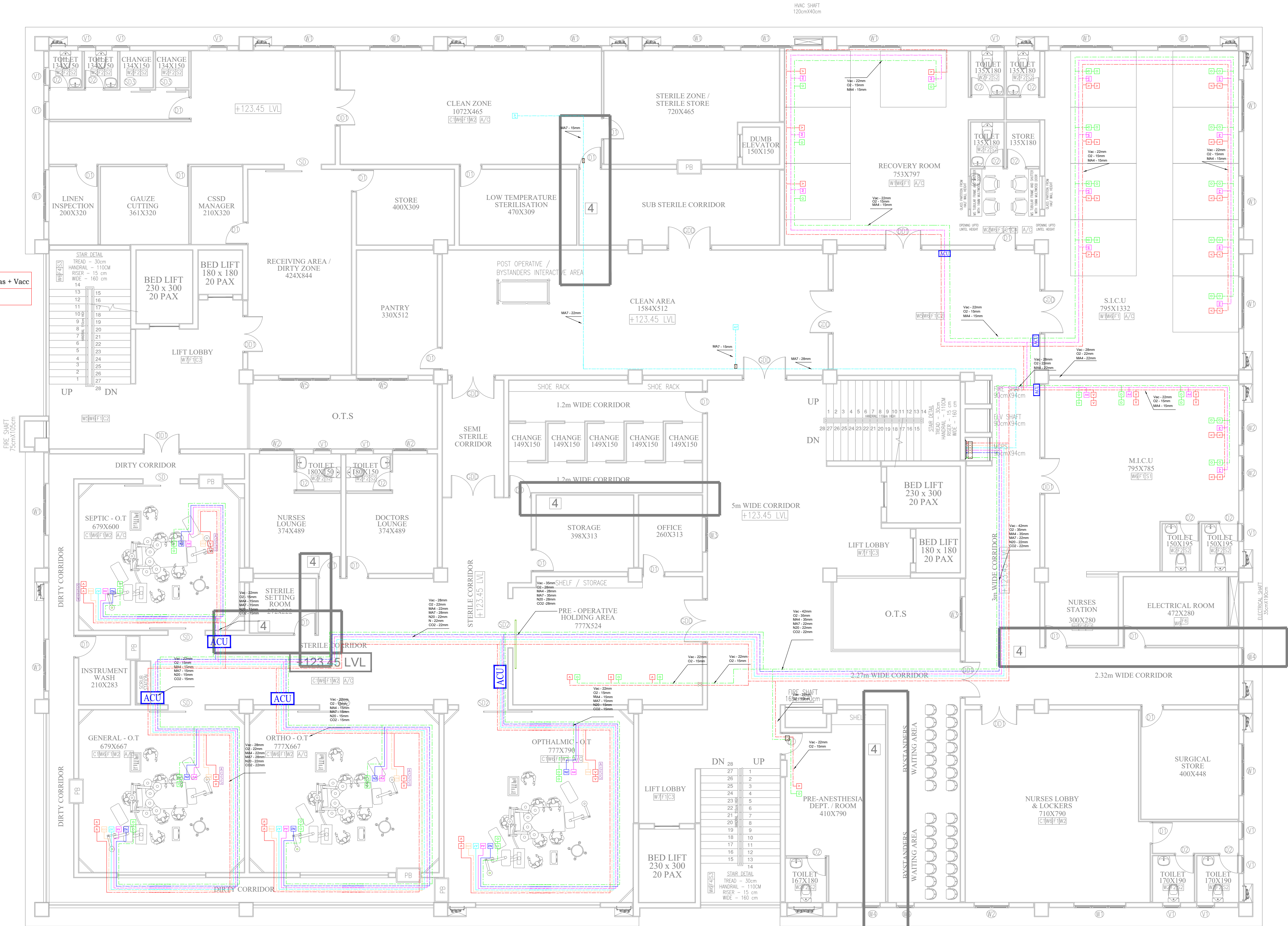
PLINTH AREA = 1750.30 sqm (18,833 sqft)
TOTAL PLINTH AREA = 12,452.54 sqm (1,33,989 SQFT)

TYPE	DESCRIPTION	PIPE	Outlet Qty
	MEDICAL AIR 4		29
	VACUUM		51
	OXYGEN		51
	NITROUS OXIDE		8
	MEDICAL AIR 7 BAR		4
	NITROGEN		0
	CARBON DIOXIDE		8
	AGSS		4
	AREA CONTROL UNIT		7
	ISOLATION VALVE		22

	1Gas + Vacc	2Gas + Vacc	3Gas + Vacc	4Gas + Vacc	5Gas + Vacc	6Gas + Vacc
ACU		3			4	
	75mm					
	56mm	2				
	42mm					
	35mm	5				
	28mm					
	22mm	1				
	15mm	7				
	12mm	7				



AREA STATEMENT	
FLOOR	BUILD UP AREA
BASEMENT	1750.30 SQM
GROUND	1750.30 SQM
FIRST	1750.30 SQM
SECOND	1750.30 SQM
THIRD	1750.30 SQM
FOURTH	1750.30 SQM
FIFTH	1750.30 SQM
TERRACE	200.44 SQM
TOTAL	12,452.54 SQM



FIFTH FLOOR PLAN

PLINTH AREA = 1750.30 sqm (18,833 sqft)

TOTAL PLINTH AREA = 12,452.54 sqm (1,33,989 SQFT)

CLIENT :

HEALTH AND FAMILY WELFARE (P)
DEPARTMENT & (KIIFB)

SPV :

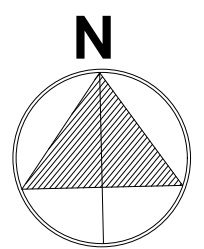


NAME OF PROJECT:

DEVELOPMENT OF DISTRICT HOSPITAL
AT CHENGANNUR, ALAPPUZHA

NOTES:

- 1.ALL DIMENSIONS ARE IN CENTIMETERS
- 2.ALL DIMENSIONS TO BE READ AND NOT SCALED
- 3.ALL LEVELS ARE FROM THE FINISHED SURFACE
- 4.ALL INTERNAL DIMENSIONS ARE FROM WALL TO WALL
- 5.ALL LEVELS ARE WITH REFERENCE TO THE BENCHMARK ESTABLISHED AT SITE.



R0	GFC	27.12.2022
No	Description	Date
REVISIONS		

DRAWN BY: NITHIN

CHECKED BY: VISWANATH

APPROVED BY:

DRAWING STATUS:
For Tender

DRAWING TITLE: MGPS LAYOUT
FIFTH FLOOR

DRAWING No:
DH-CNGR/OCT/100/MGPS_08

SHEET SIZE:	SCALE:	REVISIONS:
A1	NTS	R0

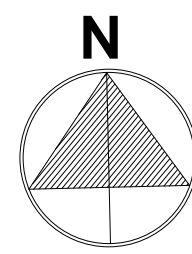
HEALTH AND FAMILY WELFARE (P)
DEPARTMENT & (KIIFB)



WAPCOS
WAPCOS LIMITED
(A Government of India Undertaking)
Ministry of Jal Shakti
Regional Office (Kerala)
1st Floor, JP Krishna Building
Pallimukku, Pettah
Trivandrum 695024, Kerala

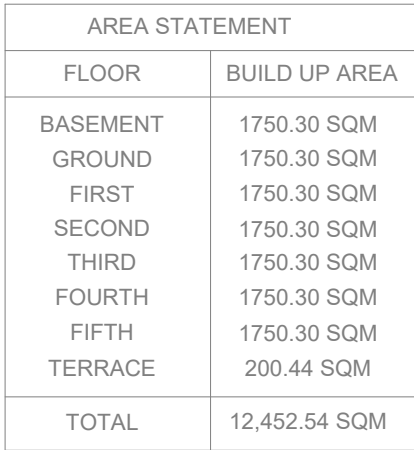
DEVELOPMENT OF DISTRICT HOSPITAL AT CHENGANNUR, ALAPPUZHA

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DRAWN BY:	NITHIN
CHECKED BY:	VISWANATH
APPROVED BY:	
DRAWING STATUS:	For Tender

DRAWING TITLE: MGPS LAYOUT TERRACE FLOOR		
DRAWING No: DH-CNGR/OCT/100/MGPS_09		
SHEET SIZE: A1	SCALE: NTS	REVISIONS: RO



PLINTH AREA = 200.44 sqm (2,157 sqft)
TOTAL PLINTH AREA = 12,452.54 sqm (1,33,989 SQFT)



**Ministry of Jal Shakti
(A Government of India undertaking)**

**1st Floor, JP Krishna Building, Pallimukku, Pettah
Trivandrum - 695024**

***SUPPLY, INSTALLATION, TESTING AND COMMISSIONING
OF CENTRALISED MEDICAL GAS SYSTEM AT DISTRICT
HOSPITAL CHENGANNUR***

WAP/INFRA/KERALA/2024/CMGP/494

Date: 02.12.2024

**Volume-III
FINANCIAL BID**

SECTION-IX

FINANCIAL PROPOSAL

FINANCIAL PROPOSAL CONTAINS:

Section IX (a): Letter of Transmittal for Financial Bid

Section IX (b): Summary of Cost

Letter of Transmittal for Financial Bid

Dated:

To,
The Regional Manager
1st Floor, JP Krishna Building,
Pallimukku, Pettah
Trivandrum - 695024

Sub: Financial Bid for Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur.

Dear Sir,

With reference to your NIT document dated, 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. I / We acknowledge that the WAPCOS will be relying on the information provided in the BID and the documents accompanying the BID 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.
2. The BID Price has been quoted by me / us after taking into consideration all the terms and conditions stated in the NIT, draft Agreement, 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.
3. 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.
4. In the event of my/ our being declared as the Selected Bidder, I/we agree to enter into a Agreement in accordance with the draft that has been provided to me/us prior to the BID Due Date. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
5. I / We shall keep this offer as specified in the NIT.
6. I / We hereby submit our BID and offer a BID Price of Rs.excluding Goods and Services Tax (Rs..... in words) 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

SUMMARY OF COST

Supply, Installation, Testing And Commissioning of Centralised Medical Gas Pipeline System at District Hospital Chengannur

Particulars	Total Quoted Amount excluding GST (INR)	
	In words	In Figures
Total cost of work		

- The estimated cost mentioned in NIT is based on the rates of item of works in DSR 2018 and Non-DSR items and these rates were inclusive of all taxes and duties, construction worker's welfare fund contribution etc. except the GST. However, in view of implementation of GST w.e.f. 01.07.17 by Govt. of India, bidders are advised to quote their rates considering the positive (+ve) / negative (-ve) cost impact on their rates in present scenario.
- The quoted rate filled in Schedule of Quantities, should include all costs associated with the project including any out of pocket/mobilization expenses, Taxes if any applicable as per Govt. terms, shall be paid by the Contractor excluding Goods and Services Tax (GST).
- It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable.
- 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.