NOTICE INVITING E-TENDER

for

ANNUAL REPAIR MAINTENANCE AND OPERATION (ARMO) OF ELECTRICAL WORKS IN ESI-PGIMSR, ESIC MEDICAL COLLEGE & ESIC HOSPITAL & O.D.C (EZ), JOKA, KOLKATA (PACKAGE-2)

NIT No.: WAP/ENVT/ESIC-ARMO/JOKA/2025/02; dt.05.06.2025



WAPCOS Limited (A Government of India Undertaking) 76-C, Sector -18, Gurgaon- 122 015 Telephone: 0124-2397396

E-mail: esic@wapcos.co.in

NIT No.: WAP/ENVT/ESIC-ARMO/JOKA/2025/02; dt.05.06.2025

NOTICE INVITING TENDER (NIT)

For

Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)

Employees State Insurance Corporation (ESIC), has awarded WAPCOS Limited, for providing the Services. WAPCOS Limited (A Govt. of India Undertaking), for and behalf of Medical Superintendent, Employees State Insurance Corporation (ESIC) Medical College, Joka, Kolkata, Online Submission of Technical document, Tender Fees, EMD etc. as detail in Tender Percentage Rate mode from experienced and competent bidders, meeting prescribed qualifying criteria as mentioned in tender document. The contract will be initially for a period of one year. However, the contract may be extended subsequently, on mutual consent for a period of not more than one year at a time (up to a maximum period of two years) on review of performance depending upon the requirements and administrative conveniences of WAPCOS/ESIC on same terms and conditions. Tender is based on percentage basis.

1.	Name of Work:	:	Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package- 2)
2.	Location:		ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata
3.	Website for viewing tender/ Corrigendum/ Addendum	:	https://etenders.gov.in/eprocure/app
4.	Website for Procurement/ downloading and uploading Tender document/ Corrigendum/ Addendum		https://etenders.gov.in/eprocure/app
5.	Estimated Cost of Work	:	Rs. 4,32,80,494/- (excluding GST) (Indian Rupees Four Crores Thirty-Two Lakhs Eighty Thousand Four Hundred and Ninety-Four Only)
6.	Tender submission fee	:	Rs.10,000/- (Non-refundable) in form of Demand Draft in favour of WAPCOS Limited payable at Gurgaon/New Delhi
7.	Amount of Earnest Money Deposit	:	Rs. 8,65,610/- (Indian Rupees Eight Lakhs Sixty-Five Thousand Six Hundred and Ten Only) 2% of the estimated cost (Refundable) in the form of RTGS/NEFT/D.D./Banker's cheque/FDR/Insurance

			Surety Bond in favors of 'WAPCOS Limited' payable at Gurugram, Haryana For online through NEFT/RTGS. WAPCOS LIMITED, Indian Overseas Bank A/C NO. 193502000000075 IFSC: IOBA0001935 The proof of online payment is to be attached with
			Technical Proposal.
8.	Time Period	:	1 year or as per the requirement of ESIC/WAPCOS Limited the same shall be extend or decreased.
9.	Validity of Bid/Tender	:	90 Days
10.	Pre-bid Meeting	:	NA
11.	Last date & time of Procurement/ download of tender Document	:	19.06.2025 up to 11:00 hours The bidder must officially procure/download the tender documents from the portal of CPPP Portal or WAPCOS before the last date and time of sale of tender document in order to bid.
12.	Last date & time for submission of Technical & Financial Bid.	:	19.06.2025 up to 13:00 hours
13.	Offline Submission of Tender Fees, EMD etc. as detail in Tender	:	19.06.2025 up to 13:00 hours in the office of Chief Executive Director (Envt & CM) WAPCOS Limited, Environment Division, 76-C, Sector -18, Gurgaon- 122 015
14.	Opening of Technical Bid	:	20.06.2025 at 15:30 hours
15.	Opening of Financial Bid	:	Will be intimated to Eligible Bidders
16.	WAPCOS Contact information	:	Chief Executive Director (ENVT & CM), WAPCOS Limited, Environment Division,76-C, Sector -18, Gurgaon- 122 015 Telephone: 0124-2397396; E-mail: esic@wapcos.co.in
17	Deadline for Clarification by the Applicants	:	Queries to be sent through E-mail on esic@wapcos.co.in till 16.06.2025 upto 18:00 hours
18	Signing of Contract	:	The Successful tendered will have to execute an agreement in stamp paper worth 0.1% of contract agreed amount 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 dates/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 website https://etenders.gov.in/eprocure/app

The purpose of this NIT is to provide interested parties with information to assist the preparation of their bid. While WAPCOS Limited has taken due care in the preparation of the information contained herein, and believe it to be complete and accurate, neither it nor any of its authorities or agencies nor any of its respective officers, employees, agents or advisors give any warranty or make any representations, expressed or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

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/ Partnership Company.
- 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 At the first instance the Technical Bids will be evaluated by the Tender Evaluation Committee (TEC) constituted for the purpose by WAPCOS. At the second stage, the financial bids of only those bidders, who qualify in the Technical Bid will be opened by the Committee members. The bid opening committee after evaluation of the Financial bids, will give its specific

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recommendations regarding the lowest responsive bid, which is to be selected along with a comparative statement duly signed by the members of the bid opening committee.

For and on behalf of WAPCOS LIMITED

CED (Envt & CM)
WAPCOS Limited

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SECTION-I

INSTRUCTION TO BIDDERS

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

More information useful for submitting online bids on the CPP Portal may be obtained at:

https://etenders.gov.in/eprocure/app.

REGISTRATION

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

SEARCHING FOR TENDER DOCUMENTS

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

PREPARATION OF BIDS

1) Bidder should take into account any corrigendum published on the tender document before

submitting their bids.

- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, audito r certificates etc.) has been provided to the bidders. Bidders can use "My Space" or ''Other Important Documents' area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

Note: My Documents space is only a repository given to the Bidders to ease the uploading process. If Bidder has uploaded his Documents in My Documents space, this does not automatically ensure these Documents being part of Technical Bid.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise, the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all

the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

For any assistance regarding the Tender Document and/or term and conditions the bidders may contact Dr. Aman Sharma CED (Envt & CM) or Mr. Deepender Lamba (Sr. Engineer), WAPCOS Limited, Environment Division, Plot No-76-C, Sector-18, Gurugram: Phone Number: 0124-2397396, 0484-2413544; Email: esic@wapcos.co.in during office hours.

2.0 INSTRUCTION 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 incompetent 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), Special Conditions for Contract (SCC), Annexures,

Forms, 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.

3.0 EARNEST MONEY DEPOSIT (EMD)

The Earnest Money Deposit **as mentioned in NIT and shall be submitted** in physical form in favour of WAPCOS Ltd payable at Gurgaon/New Delhi. The earnest money may be accepted only in the form of Demand Draft of a Scheduled Bank.

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 Guarantee is submitted. The successful Tenderer shall accept the LOI within 15 days from receipt of the same, failing which the EMD shall be forfeited and the award of work may be liable to be cancelled.

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

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

Failing in submission in required format, bid will be rejected.

4.0 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.

5.0 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.

6.0 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.

7.0 ANNEXURES

The Bidder follow the guidelines as per "Section of Annexures" mentioned in tender document. WAPCOS Limited reserves the right to reject any or all the bids or to cancel the Tender, without assigning any reason(s) whatsoever.

- The Bill of quantity of tender along with rate and amount is enclosed at Section Financial Proposal Volume-II
- The Performa for filling the percentage is given in Microsoft excel sheet. Bidder shall fill the percentage only upto two decimal place in soft format. The bidder will upload same filled percentage quote in soft Microsoft Excel copy during uploading of financial bid.

For and on behalf of WAPCOS LIMITED

(Sd/-)
CED (ENVT & CM)
WAPCOS Limited

<u>SECTION-II</u> 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. 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 and other factors having a bearing on the execution of the work.

2.0 QUALIFYING CRITERIA: 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 and clearly marked page no. on each page (MANDATORY).

Format of Check List

S.No.	Particular of Document	Yes	No	Page Nos.
a)	Authorization Letter to sign the Tender on bidder's original letter head or Power of attorney			
b)	Scanned copy of EMD as mentioned in NIT.			
c)	Scanned copy of Demand Draft for Tender Fee			
d)	Letter of Transmittal on bidder letter Head to submit Technical Bid (Form-A)			
e)	Yearly Turnover and Audited Balance Sheet for Last 5 (five) years ending on the financial year 2023-24. (Form-B)			

S.No.	Particular of Document	Yes	No	Page Nos.			
	 The contractor should not have incurred any loss (profit after tax should be positive) in more than two years during last five years ending 2023-24 duly audited by the Chartered Accountant. Turnover: Average annual financial turnover should be at least 50% of the estimated cost of work during the last 3 consecutive financial years ending 2023-24. This should be duly audited by the Chartered Accountant doing Statutory Audit and mentioned UDIN Number on that certificate Net worth of the Company/firm as on 31st march of previous Financial Year, should be positive Audited Full Balance Sheet and Profit & loss Statement of Bidder for last 5 years should be verified by Chartered Accountant and mentioned UDIN 						
f)	The bidder should have a Solvency of an Amount equal to 40% of the estimated cost after the date of publication of tender. The Solvency Certificate shall be issued by Nationalized/Scheduled Commercial bank after the date of publishing of Tender document. The solvency certificate should be marked to tender Authority of WAPCOS Limited along with Name of the project (Form C)						
g)	The contractor should have satisfactorily completed the works as mentioned below during the last seven years ending previous day of last date of submission of tender. Details should be enclosed (Form D)						
	One similar assignment costing not less than 80% of the estimated cost of work put to tender Or Two similar assignments of order value each not less than 50% of the estimated cost of work put to tender. Or Three similar assignments of order value each not less than 40% of the estimated cost of work put to tender						

S.No.	Particular of Document	Yes	No	Page Nos.

*Similar work refers to "ARM Works Electrical at government hospital / dispensaries." (Please submit copy of PO/Work order and completion certificate issued by the client). Note:

- 1. Completion certificates and work orders with bill of quantities should be enclosed which clearly indicates the name and nature of work, value of work and time period.
- 2. TDS (26 AS) downloaded from the web matching with the experience certificate should be attached.
- 3. All the eligible similar works executed and submitted by the bidders may be inspected by a committee which may consist of client or any other authority as decided by NIT approving authority.
- 4. Experience certificate issued by the same management/ sister concern/ joint venture etc. are not acceptable.

h)	Name, Address, details of the Organization, Name(s) of the Owner/Partners/Promoters and Directors of the firm / company. (Form-E)	
i)	The Blacklisting policy of the company is available on the official website of WAPCOS Limited. The bidder have to mandatorily furnish an undertaking addressing the same to Engineer-in-charge in the form of certificate to abide the contents of Blacklisting Policy. The format of undertaking is provided. Any action in violation of the blacklisting policy or to the certificate furnished shall result in cancellation of tender at the stage before or after the award of work. Bidder should submit the declaration (Form-F)	
j)	Letter of understanding the project site on bidder letter Head (Form-G).	
k)	'No Deviation Certificate' in prescribed format in Bidder's Letter Head (Form-H).	
1)	Consent Letter to execute the Integrity Pact along with Rs. 100 stamp paper (Integrity agreement) (Form-I).	

S.No.	Particular of Document	Yes	No	Page Nos.
m)	Goods and Service Tax (GST): Bidders are advised to get themselves registered for GST in at different place, which are mandatory, as per Govt. of India notification regarding GST. Accordingly, bidder shall submit relevant documents if already registered. If not			
	registered till date of submission of bid, bidder will give undertaking on bidder letter head stating that they will get registered in GST as per Govt. norms before submission of bills.			
n)	The bidder should be an Indian Registered Company under Companies Act 1956/ Proprietorship Company/Partnership Company/Limited company private or public or corporation. Joint Ventures/Consortia of firms are not accepted. Copy of Certificate of Incorporation/			
	Registration/ Partnership Deed or any other relevant document, as applicable, should be submitted along with a copy of address proof.			
p)	Copy of PAN Number, GST registration, Labor Registration, EPF & ESIC registration (copy of registration)			
q)	Each page of the all Volume of Tender document & Addendum/ Corrigendum shall be signed (use scanned signature) 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. (Do Not Submit with the document of Offline Submission)			
r)	The experience in similar nature of work should be supported by certificates issued by the client's organization.			
s)	Escalation: All rates as per Estimated cost fixed for entire contract period as well as extended period for completion of the works. No escalation shall be applicable on this contract. As manpower or other works which are not part of this boq			

S.No.	Particular of Document	Yes	No	Page Nos.	
	shall be carried out as per the requirement of ESIC/WAPCOS Limited	•			
t)	The Bidder should have valid A class contractor license in composite category or Civil/Electrical from Delhi or registration certificate (CPWD or any government department)				
u)	Undertaking regarding police Clearance of Employees posted at ESIC Hospitals				
v)	Firm must have valid ISO Certificate				
w)	Affidavit (Undertaking) towards Payment of Minimum Wages to the workers engaged as per applicable order CLC Daily wages and to enhance the rates, as and when it is revised.				
x)	Bidder shall submit the undertaking for understanding regarding that Defect Liability Period shall be one year.				
xi)	Undertaking regarding the Validity of the bid should be 120 days and after the award of work, if he (firm) is not taking over the work than his firm can be blacklisted for 2 years in participating of WAPCOS future tender.				
xii)	Organization Structure Chart				
	**The agency/contractor shall comply to the requirements, stipulations in the codes, standards and regulation Central Electricity authority/ Delhi Norms. (Measurements relating to Safety and Electric Supply) Regulations 2010 with all its amendments up to date. • If the bidder fail to submit any of the above document than it is liable to be				
	 rejected at the discretion of WAPCOS Limited. All uploaded tender document should be readable. In case the uploaded tender documents are found not readable even after zoom, the bidder will stand ineligible. 				
	If a tendered quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section/subhead in percentage rate tender, the tender shall be treated as invalid				

Financial Bid should not be included in the Technical Bid. if found so, the bid shall be summarily rejected.

Technical Bids are to be submitted to determine that the bidder has a full comprehension of the tendered work. Where a bidder is technical submittal is found non - compliant with the requirement

or work, it may be rejected. The Financial Bid will be opened only for the agencies whose technical bids are accepted by the competent authority.

3.0 OFFLINE SUBMISSIONS OF DOCUMENTS

The Bidder shall submit following Document offline

Proposal should be submitted in sealed envelope (Technical bid in on enevelope) by 3:00 PM on 19.06.2025 at the following address:

Dr. Aman Sharma CED (Envt & CM) 76-C, Institutional Area, Sector-18, Gurgaon, Haryana-122015 Tel: 0124-2397396

Email id: esic@wapcos.co.in

Signed Tender Documents along with addendum/corrigendum and Originals EMD, Solvency Certificate and Tender submission fee in the form of Demand Draft in separate sealed envelopes clearly labelled as "EMD AND TENDER FEE" for the Work (Write Name of Work/Project as mentioned in NIT) along with Details of Bidders Address, Phone, E-mail on Envelope.)

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 will be rejected. Also, SFMS system will be used for receiving confirmation of Inward bank Guarantee. Indian Overseas Bank

NHB Gurgaon, Branch Code- 1935, IFSC Code- IOBA0001935, beneficiary- WAPCOS Limited

Note-2:

- 1. Financial Bid should not be included in the Technical Bid. if found so, the bid shall be summarily rejected.
- 2. The offline submissions as mentioned above shall be submitted on WAPCOS address mentioned in NIT as per date & time mentioned in NIT otherwise bids will be rejected. Also, SFMS system will be used for receiving confirmation of Inward bank Guarantee. Indian Overseas Bank NHB Gurgaon, Branch Code-1935, IFSC Code-10BA0001935, beneficiary-WAPCOS Limited
- 3. The proposal shall be in indelible ink and shall be signed by the Bidder or duly authorized person(s).
- 4. Proposals received by facsimile shall be treated as defective, invalid and rejected.
- 5. Only detailed proposals complete in all respect and in the forms indicated shall be treated as valid.
- 6. No Bidder is allowed to modify, substitute or withdraw the Proposal after its submission
- 7. Proposal shall be submitted in two parts (Technical & Financial). Each page of all parts should be page numbered and in conformance to the eligibility qualifications should be clearly indicated using an index page. The proposals should not contain any irrelevant or superfluous documents
- 8. The bidder who has qualified the minimum qualifying criteria as outlined in NIT, shall be liable for financial opening.
- 9. The bidder with lowest financial bid among those who passed the technical evaluation shall be liable for award of work.
- 10. Evaluation Committee may, at its discretion, call for additional information from the Bidder(s). Such information has to be supplied within the given time frame, otherwise the Evaluation Committee

shall make its own reasonable assumptions at the total risk and cost of Bidders and the proposal is likely to be rejected. Seeking clarifications cannot be treated as acceptance of the Proposal.

11. After the public opening of Bids, information relating to the examination, clarification, evaluation and comparison of Bids and recommendations concerning the Award of Contract shall not be disclosed to Bidders or other persons not officially concerned with such process.

3.1 CONTENTS OF FINANCIAL BID

The Financial Bid should be uploaded separately before last date & time of submission mentioned in the tender document.

The estimated cost mentioned in NIT is based on the rates of item of works in DSR and Non-DSR items on market rate. The quoted rate filled in Schedule of Quantities should include all associated costs with the project including any out of pocket / mobilization expenses, necessary lead or lift associated with and not specified excluding GST and other taxes., TDS, if any applicable as per Govt. terms, shall be paid by the Contractor. Rates quoted in the price bid shall be exclusive of GST. GST shall be reimbursed on submission of GST submission proof.

Deduction of TDS and other deductions on payment made to the contractor shall be applicable as per extant rules.

The payment will be made for actual measurements certified by Engineer in Charge at the accepted rates in the price schedule / Bill of Quantities (BoQ).

3.2 OPENING OF FINANCIAL BID

The financial bids of the approved eligible bidders who are technically qualified shall be opened at the notified date & time mentioned in NIT.

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

3.3 AWARD CRITERIA

After closing of Technical & Financial Bid process, WAPCOS Ltd. will award, the contract to the bidder, whose tender has been determined to be substantially responsive, complete and in accordance with the tender document, and whose total evaluation price for the undertaking the project as detailed in the scope of work is the lowest. If the financial bids of lowest two bidders are equal, then the tender will be treated as cancelled and shall be re-tendered as per the WAPCOS rules.

For & on behalf of Tenderer

(Sd/-)
CED (Envt & CM)
WAPCOS Limited

Signature of the authorized representative:

Name of the agency :
Name and designation :
Contact Details a) Communication address :
b) E-mail id :
c) Contact Nos. :

For & on behalf of Tenderer

SECTION- III GENERAL CONDITIONS TO CONTRACT

4.1 Validity of offer

The offer shall be valid for a period of ninety (90) days from the date of submission.

4.2 EMD and cost of Tender Document

Contractor/Agency shall submit an EMD and cost of Tender Document as specified in the Tender Notice by Demand Draft from any Scheduled Bank drawn in favour of WAPCOS LTD payable at Gurgaon/New Delhi. The EMD of unsuccessful tenderers will be re-funded.

4.3 Rates

The rates quoted shall include all the taxes (exclusive GST), PF, ESI, etc. All the personnel employed by the Contractor should have PF account and ESI. Necessary proof shall be produced in the office of WAPCOS LTD. Statutory obligations like ESI, Provident Fund, Insurance, Medical expense/claim due to any accidents etc., of the personnel employed by the Contractor/Agency shall be met by the Contractor, and WAPCOS LTD./ESIC shall not be held liable nor responsible for any such defaults. TDS shall be deducted from the Contractor's bills as per rules. The rates shall be firm for the period from the date of the award of contract till the completion of the works as per agreement and no escalation whatsoever will be allowed during this period.

In addition to this, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the tenderer, rate of such item shall be treated as "0" (ZERO).

4.4 Agreement

The selected agency will have to sign an agreement with WAPCOS Limited as per the format specified in Annexure B.

The agreement is non-exclusive in nature. The agreement shall not restrict WAPCOS/ESIC from contracting for identical or similar services from any other person/party.

- **4.5 Duration of agreement:** This agreement shall initially be valid for a period of eleven month the contract from the issuing of letter of award which may be extended for an additional period unless as provided herein revoked earlier for whatever reasons. If at any stage during the tenure of this agreement, it comes to the notice of WAPCOS, directly or through some other complaint, that the agency had misrepresented the facts or submitted any false information or hidden any information, which could have affected the signing of this agreement with the agency, this agreement shall stand terminated immediately upon intimation to the agency. However, the agency shall continue to discharge their responsibilities on the same terms and conditions till the next agency takes over.
- **4.6 Restrictions on Transfer agreement:** The agency shall not assign or transfer its right in any manner whatsoever under this agreement to a third party or enter into any agreement for subcontracting and/or partnership relating to any subject matter of the agreement to any third party either in whole or in any part i.e. no sub-contracting/partnership/third party shall be created without

the prior written consent of WAPCOS/ESIC.

- **4.7 Liability:** Except as provided in this Agreement, hereinbefore, WAPCOS shall not be liable to the Agency by virtue of termination of this agreement for any reason whatsoever for any loss or profit or on account for any expenditure, investment, leases, capital improvements or any other commitments made by the other party in connection with their business made in reliance upon or by virtue of this Agreement.
- **4.8 Market Rates** :Shall be determined as per various sub-clauses under the clause 6.0 shall be on the basis of Prevailing rates of Material excluding GST (unless mentioned otherwise), Relevant Labour authority rate for Labour (CLC Wages), market rates of T&P etc. plus 15% or approved percentage from ESIC towards Contractors' Profits and Overheads.

The following factors may be considered in the justification of rates on which contractor profit and overhead shall not be applicable:

- Building and other construction workers as applicable in the state of work place.
- EPF (Employer Contribution) component, as per EPF act on the portion of labor's wages.
- GST on works contract.

4.9 Suspension, Revocation or Termination of agreement

WAPCOS on behalf of ESIC reserves the right to suspend the operation of this agreement, at any time, due to change in its own license conditions or upon directions from the competent government authorities. In such a situation, WAPCOS/ESIC shall not be responsible for any damage or loss caused or arisen out of aforesaid action. Further, the suspension of the agreement will not be a cause or ground for extension of the period of the agreement and suspension period will be taken as period spent. During this period, no charges shall be payable by WAPCOS/ESIC.

WAPCOS may, without prejudice to any other remedy available for the breach of any conditions of agreement, by a written notice of fifteen days issued to the agency at its registered office, terminate / or suspend this agreement under any of the following circumstances:

- a) The agency failing to perform any obligation(s) under the agreement.
- b) The agency failing to rectify, within the time prescribed, any defect as may be pointed out by WAPCOS/ESIC.
- c) Non-adherence to undertakings which ESIC has committed to consumer.
- d) The agency going into liquidation or ordered to be wound up by competent authority.

If the agency is wound up or goes into liquidation, it shall immediately (and not more than a week) inform about occurrence of such event to WAPCOS in writing. In that case, the written notice period can be reduced by WAPCOS as deemed fit under the circumstances. WAPCOS may also either decide to issue a termination notice or to continue the agreement by suitably modifying the conditions, as it feels fit under the circumstances.

It shall be the responsibility of the agency to maintain the agreed quality of service, even during the period when the notice for surrender/termination of agreement is pending and if the quality of performance is not maintained, during the said notice period, it shall be treated as material breach liable for termination at risk and consequent of agency and Security Deposit shall be forfeited, without any further notice.

Whenever breach of non-fulfillment of agreement conditions may come to the notice of WAPCOS

through complaints or as a result of the regular monitoring, wherever considered appropriate WAPCOS may conduct an inquiry either suo-moto or on complaint to determine whether there has been any breach in compliance of the terms and conditions of the agreement by the agency or not. The agency shall extend all reasonable facilities and shall Endeavour to remove the hindrance of every type upon such inquiry.

- **4.10** Actions pursuant to Termination of Agreement: Notwithstanding any other rights and remedies provided elsewhere in the agreement, upon termination of this agreement.
- a) The Agency shall not represent the WAPCOS/ESIC in any of its dealings.
- b) The Agency shall not intentionally or otherwise commit any act(s) as would keep a third party to believe that it is still the WAPCOS/ESIC's service provider.
- c) The expiration or termination of the Agreement for any reason whatsoever shall not affect any obligation of either Party having accrued under the Agreement prior to the expiration of termination of the Agreement and such expiration or termination shall be without prejudice to any liabilities of either Party to the other Party existing at the date of expiration or termination of the Agreement.

4.11 Security Deposit

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. The Security deposit will be collected by deductions from the running bills as well as final bill of the contractor at the rates mentioned above. WAPCOS Ltd. shall deduct Security Deposit of 2.5%. The Security Deposit will be refunded after satisfactory completion of contract period. Security Deposit shall be released after satisfactory completion of Defect liability period

4.12 PERFORMANCE GUARANTEE

- i. The contractor shall submit an irrevocable Performance Guarantee of 3% (Three percent) of the tendered amount (This guarantee shall be in banker's cheque of any scheduled bank/DD of any scheduled bank/pay order of any scheduled bank (in case bank guarantee is less than Rs.10000/-) or government securities or fixed deposit receipts or bank guarantee of any scheduled bank or in accordance with the prescribed form) 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 7 days period 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 of 7 days on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in Charge. However, in case last day of submission of PG happens to be a bank holiday the last day of submission shall be the next working day.
 - i. The Performance Guarantee shall be valid up to the stipulated date of completion plus 60 days beyond that and claim period should be one year after the date of validity. 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, then 50%

of Performance Guarantee shall be retained as Security Deposit. The same shall be returned year wise proportionately.

- i. The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which WAPCOS is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - a. Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.
 - b. Failure by the contractor to pay WAPCOS any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- ii. 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.
- iii. The Performance Guarantee shall be returned to the Contractor soon after the completion of works and issuance of the completion certificate.

4.13 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 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 therefrom, 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 fixed deposit receipt tendered by the State Bank of India or by Scheduled Banks endorsed in favour of 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 which shall be extended from time to time depending upon extension of contract granted under provisions of clause

The Security Deposit shall be released after successful completion of Defect Liability Period

4.14 Payment

The Associate/Sub-consultant/ Sub-Contractor acknowledge that under the present Contract/Agreement/Work Order/Arrangement, WAPCOS is only working as intermediary between (Name of client) being Principle Employer/Client and Associate/Sub-consultant/Sub Contractor. Thus the Association/Sub consultant/Sub Contractor unconditionally acknowledges that the payments under the present Contract/Agreement /Work order/Arrangement shall be made proportionately by WAPCOS only on back to back basis i.e., after 21 days subject to receipt of payment from (Name of Client) being Principal Employer/Client. The Associate/Sub-Consultant/Sub Contractor also unconditionally agree that in the event the payment or part thereof, under the present Contract/Agreement/Work Order/Arrangement is not received from (Name of client) (Principal Employer/Client), then WAPCOS &/or any of its Employer/Office shall not be responsible to pay any amount to Associate/Sub-Consultant/Sub-Contractor. The said condition shall supersede any and all other conditions of Contract/Agreement/Work Order/Arrangement between the parties.

The Contractor / Agency shall submit the bills at the end of every month and payment will be made within 30 (thirty) days of receipt of the bill subject to verification of attendance. All the applicable taxes and duties will be deducted from each bill. Along with Bill, Contractor will submit the consumable item sheet duly verified by engineer In charge WAPCOS/ESIC/Satisfactory person. Payment terms will be same as per Work Order received by WAPCOS from ESIC. The copy of the same is attached in NIT.

- Payment to labour shall be dispersed by the contractor by the 7th of every month positively.
- Payment of contractor shall be given by WAPCOS on the basis of proof submission by the contractor for the disbursement of payment to labour minimum wages as per CLC,ESI,EPF etc employed by him.
- All emergent Repair and Maintenance related complaints shall be attained to within 48 hours with concern of WAPCOS/ESIC, failing which a recovery of rs 1000.00 per event per day shall be made from the subsequent payments to the agency and old material / items replaced with new one shall be deposit to ESIC with care and returned certificate should be submit along with subsequent bill.
- In the event of failure to attended the compliant within 03 days, the authorized officer of WAPCOS will get the work done at the risk and cost of the agency and expenditure incurred will be deducted from the subsequent payment of the agency.
- On submission of consumable item sheet duly verified by engineer In charge WAPCOS/ESIC/Satisfactory person.
- Contractor will submit monthly bills along with ESI, EPF Proof of manpower and other proofs like diesel register, complaint registers etc.
- 4.15 **Penalty for error/variation:** In case any error or variation fraudulent activities of manpower, illegal, theft than what was intended for is detected in the work executed by the Agency and such error or variation is the result of negligence or lack of due diligence on the part of the Agency, the consequential damages thereof shall be quantified by WAPCOS/ESIC in a reasonable manner and recovered from the Agency

from payments due to them by way of penalty, 0.5 to 1% per week subjected to a maximum of 10% (ten percent) of the fee for the contract value. However, if the Agency submits justification for the variation to the satisfaction of WAPCOS/ESIC, then the penalty shall not be imposed.

4.16 Conveyance

The Contractor shall provide vehicle for site visit of WAPCOS/ESIC personnel as and when required.

4.17 Insurance for Contractor's personnel

The Contractor/Agency shall maintain accident insurance (Group) policy for all the personnel employed by him in the Zone. Necessary proof of this shall be produced to WAPCOS LTD./ESIC authorities for verification. Statutory obligations like payment of PF, ESI of the personnel employed shall also be the responsibility of the Contractor/Agency and WAPCOS LTD./ESIC shall not be held responsible for any failure by the Agency on these counts.

4.18 Removal of an employee from duties

The service provided by each person engaged by the Contractor/Agency shall be satisfactory to WAPCOS LTD./ESIC. If WAPCOS LTD./ESIC intimates the Contractor/Agency regarding misconduct, incapability, delay in discharging duties or non-performance of any personnel employed by the Contractor, he shall be removed from his duties in the ARM work and the Contractor/ Agency shall provide suitable substitutes immediately.

4.19 Assignment

The rights and obligations arising out of this agreement shall not be assigned or transferred to a third party without prior written consent of either party.

4.20 Completion of tenure

On completion of the tenure of the agreement, if not renewed, the Contractor/Agency shall handover all the materials belongings to ESIC to WAPCOS LTD. Contractor shall remove all materials belonging to him including the workforce without any delay. However, the Contractor shall continue to discharge their responsibilities till the next Contractor takes over the duty and the Contractor shall train the staff of the new Contractor.

4.21 Force Majeure

If performance by either party of its duties and obligation under this agreement is prevented or delayed by circumstances of force majeure including, but not limited to fire, flood, earthquakes, strike, war, riots, insurrection, any action undertaken or restriction imposed by authority of any Government agency of court, shortage of equipment or raw materials or any other act beyond its reasonable control, the time within which the affected party must perform shall be delayed for a period under such circumstances to a maximum of 120 days during which the parties shall use alternate methods, but after which period either party shall have the right to terminate the

agreement. Determination of this agreement shall not relieve either party from the payment of the sum or performance of other duties and obligations, which may be owing to the other, as a result of the operation of this agreement prior to such termination.

4.22 Termination

Notwithstanding anything contained herein, either party to this agreement shall have the right to terminate this contract by giving the other party 30 days notice in writing. If the service of the Contractor/Agency is found to be not satisfactory, the contract will be terminated with one month notice and the Contractor/Agency will not be eligible for any compensation on this account.

4.23 Settlement of Disputes

Any dispute, controversy or claims arising out of or relating to this agreement or the breach, termination or invalidity thereof, shall be settled through dispute resolution 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 meetings, wherein minutes of the said meetings shall be prepared and countersigned by the all the parties. It is mandatory to prepare minutes of meetings and to be countersigned by all the parties, irrespective of the outcome of the said meetings.
- b) In the event the parties are unable to reach on any settlement in the said meetings, then the aggrieved party shall mandatory resort to pre-litigation mediation mechanism with the 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 in the event, any dispute arises under the present agreement and referred to arbitration for adjudication, 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 purposes between the parties to be made, in Delhi. The arbitral procedure shall be conducted in English language and any award or awards shall be rendered in English. The procedural law of the arbitration shall be Indian law. The award of the arbitrator shall be final and conclusive and binding upon the Parties.
- g) The contract and any dispute or claim arising out of or in connection with it or its subject matter or formation (including non-contractual disputes or claims) shall be governed by and constructed in accordance with the laws of India and the Parties submit to sole & exclusive jurisdiction of courts at Delhi.

4.24 Compensation Clause

If the Agency is engaged to execute any project based on a separate work order, the WAPCOS shall be entitled to include a clause for liquidated damages as under: Should the agency fails to deliver its responsibilities within the period prescribed and agreed, WAPCOS without prejudice to other remedies available to it, shall be entitled to recover liquidated damages for breach of contract without any necessity to prove the same, a sum equivalent to 0.5% of the value of the work for each week of delay or part thereof for a period up to 10 (Ten) weeks, and thereafter at the rate of 0.7% of the value of the delayed commissioning for each week of delay or part thereof for another 10 weeks of delay. The Agency should acknowledge that the said amount represents reasonable compensation as it is difficult to prove the quantum of damages that will be suffered by WAPCOS/ESIC. The total value of the liquidated damages as per above shall be limited to a maximum of 10% (Tent percent) i.e. LD shall be levied up to 20 weeks only. However, in case of delay due to reasons beyond the control of the Agency, suitable extension of time shall be granted.

Without prejudice to its rights and any other remedy, WAPCOS may en-cash SD in case of any breach of terms and conditions of the agreement or in case of business loss suffered by WAPCOS/ESIC due to failure of service on the part of the agency.

4.25 Confidentiality of Information & Intellectual Property:

Subject to conditions contained in this Agreement, the agency shall take all necessary steps to safeguard the privacy and confidentiality of any information about WAPCOS/ESIC consumers from whom it has acquired such information by virtue of the service provided and shall use its best endeavors to secure that:

The agency shall take necessary steps to ensure that the agency itself and any person(s) acting on its behalf observe confidentiality of client/consumer information.

The agency shall, prior to commencement of this agreement, confirm in writing to WAPCOS/ESIC that the agency has taken all necessary steps to ensure that it and its employees shall observe confidentiality of customer information.

This clause shall survive the termination or expiry of this Agreement.

Neither party will use the other party's name nor marks, refer to or identify the other party in any advertising or publicity releases or promotional or marketing correspondence to others without such other party's written approval.

4.26 Indemnification

The agency agrees to protect, defend, indemnify and hold harmless WAPCOS/ESIC and its employees, officers, directors, agents or representatives from and against any and all liabilities, damages, fines, penalties and costs (including legal costs and disbursements) arising from or relating to:

Any breach of the terms and conditions in this agreement by the agency.

The agency shall be fully responsible for the employment and payment of wages to its employees and shall fully comply with all laws, rules, regulations, notifications, directions orders etc. of the Govt. whether Central, State, Local or Municipal relating to such employment, payment of wages etc. and all others matter connected therewith and hereby indemnifies and agrees to continue indemnifying WAPCOS/ESIC in this regard.

The employees of the Agency shall have no right for employment either with the Client during the pendency of the agreement or after, or with the Agency. The personnel employed by the Agency shall at all times be employees of the Agency and all statutory dues to and obligations and liabilities in respect of such employees shall be promptly paid and discharged by it. Notwithstanding their responsibility to comply with any directions or instructions given by the Client, the personnel employed by the Agency will not, for any purposes whatsoever, be treated or deemed to be employees of Client or have any claim or right whatsoever for employment with the Client and the Client will have no obligations or liabilities whatsoever in relation to any of them or in respect of anything done or omitted to be done by any of them

This clause shall survive the termination or expiry of this Agreement.

4.27 Relationship: Each party understands that it is an independently owned business entity and this Agreement does not make it, its employees, associates or agents as employees, agents or legal representatives of the other party for any purpose whatsoever. Neither party has express or implied right or authority to assume or to undertake any obligation in respect of or on behalf of or in the name of the Other Party or to bind the Other Party in any manner. In case, any party, its employees, associates or agents hold out as employees, agents, or legal representatives of the other party, the former party shall forthwith upon demand make good any/all loss, cost, damage including consequential loss, suffered by the other party on this account. However, on a written consent from the WAPCOS/ESIC, the agency may represent WAPCOS/ESIC.

4.28 Jurisdiction

Any dispute connected with this contract shall fall within the jurisdiction of Courts at Delhi.

4.30 **CARRYING OUT PART WORK AT RISK & COST OF CONTRACTOR** If contractor:

- (i) At any time makes default during currency of work or does not execute any part of the work with due diligence and continues to do so even after a notice in writing of 7 days in this respect from the Engineer-in-Charge; or
- (ii) Commits default in complying with any of the terms and conditions of the contract and does not remedy it or takes effective steps to remedy it within 7 days even after a notice in writing is given in that behalf by the Engineer-in-Charge; or

Fails to complete the work(s) or items of work with individual dates of completion, on or before the date(s) so determined, and does not complete them within the period specified in the notice given in writing in that behalf by the Engineer-in-Charge. The Engineer- in-Charge without invoking action under clause 3 may, without prejudice to any other right or remedy against the contractor which have either accrued or accrue thereafter to WAPCOS, by a notice in writing to take the part work / part incomplete work of any item(s) out of his hands and shall have powers to:

(a) Take possession of the site and any materials, constructional plant, implements, stores, etc., thereon; and/or

(b) Carry out the part work / part incomplete work of any item(s) by any means at the risk and cost of the contractor.

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

4.30 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 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 for Quality Assurance or to the Chief Technical Examiner or his subordinate officers, that any work has been executed with unsound, imperfect, or unskilful 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 Lacs 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 Additional Conditions of Contract may consider reasonable during the preparation of on account bills or final bill if the item is so acceptable without detriment to the safety and utility of the item and the structure or he may reject the work outright without any payment and/or get it and other connected and incidental items rectified, or removed and re-executed at the risk and cost of the contractor. Decision of the Engineer-in-Charge to be conveyed in writing in respect of the same will be final and binding on the contractor.

4.31 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 of Rs.200/- 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.

4.32 MINIMUM WAGES ACT TO BE COMPLIED WITH

The contractor shall comply with all the provisions of the Minimum Wages Act, 1948, and Contract Labour (Regulation and Abolition) Act, 1970, amended from time to time and rules framed thereunder and other labour laws affecting contract labour that may be brought into force from time to time.

4.33 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.

4.34 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.

4.35 WITHOLDING AND LIEN IN RESPECT OF SUM DUE FROM CONTRACTOR

a) Whenever any claim or claims for payment of a sum of money arises out of or under the contract or against the contractor, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold and also have a lien to retain such sum or sums in whole or in part from the security, if any deposited by the contractor and for the purpose aforesaid, the Engineer-in-Charge or the WAPCOS shall be entitled to withhold the security deposit, if any, furnished as the case may be and also have a lien over the same pending 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 the WAPCOS shall be entitled to withhold and have a lien to retain to the extent of such claimed amount or amounts referred to above, from any sum or sums found payable or which may at any time thereafter become payable to the contractor under the same contract or any other contract with the Engineer-in-Charge of the WAPCOS or any contracting person through the Engineer-in-Charge pending finalization of adjudication of any such claim.

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

b) 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 Government shall not be entitled to recover any sum overpaid, nor the contractor shall be entitled to payment of any sum paid short where such payment has been agreed upon between the WAPCOS on the one hand and the contractor on the other under any

term of the contract permitting payment for work after assessment by WAPCOS.

4.36 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.

4.35 ACTION WHERE NO SPECIFICATIONS ARE SPECIFIED

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

4.36 NO GAZETTED ENGINEER TO WORK AS CONTRACTOR WITHIN ONE YEAR OF RETIREMENT

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

4.37 APPRENTICES ACT PROVISIONS TO BE COMPLIED WITH

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

4.38 SITE OFFICES AND FACILITIES

The cost of providing the work/facilities stated in the sub-clauses of this clause are to be borne by the Contractor and shall be deemed to be included in the rates quoted by the Contractor.

The Contractor shall supply, erect and satisfactorily maintain Site Office for the Employer in good condition until final completion of works, a well-lighted, well ventilated and air-conditioned and adequately weather proofed temporary, burglar proof readily available Site Office (Portable Cabins) of adequate capacity having the covered area not less than 500 Sq. Ft. with all facilities such as telephone, fax, internet, photocopier, computer/ laptop & printer along with operator, regular electric & purified drinking water supply etc. and 4-wheeled transportation/inspection vehicle, in running condition & duly maintained as per the requirement of the project, without any extra cost to employer. The Contractor shall provide adequate access to the office. The Contractor shall be responsible during the continuance of the Contract for the security of the office and for all plans, documents and papers and other clauses contained therein. The sitting of the office shall be in accordance with the instructions of the Engineer-in-Charge. Service personnel shall also be made available at the Office at all times and shall clean site office daily. The Contractor shall provide uninterrupted power and water to the Office as directed for 24 hours free of cost. An amount equal to 1% of gross bill from all running account & final bill shall be recovered, if the above facilities are not provided by the Contractor.

The Contractor shall dismantle and remove from site all such temporary structures on completion of Contract or whenever required by the Employer.

The contractor shall also make sufficient arrangement for Photography/ Videography preferably by maintaining a camera/video camera at site so that video and photographs can be taken of a specific activity at any point of time. The contractor shall also provide software like MS Project/Primavera etc. for the purpose of preparing progress report etc.

The Contractor shall provide at his own cost, One Site sign Board, at directed location of overall size 2.40 metres wide and 1.50 metres height and of approved design. The names of the Project, Employer, Consultants, Engineer and Contractor etc. shall be exhibited as directed.

The Contractor shall maintain daily weather record. Daily maximum and minimum temperature and corresponding, humidity shall be recorded and charted. Rainy days shall be recorded when the rain lasting more than one hour hampers the work. Any other inclemency in weather shall be recorded. The records shall be regularly shown to the Engineer-in-Charge and his signature obtained.

The Contractor shall arrange at his own cost to maintain a progress record of the works by taking (5"x 7")/8'X10" size colour photographs minimum 6 Nos. or more per month as directed by the Engineer-in-Charge during the construction stages and after completion and shall supply one set to the Engineer-in-Charge at no extra cost. These photographs shall also be submitted as part of the Contractors R.A. Bills.

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

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

• Proper handling, storage and disposal of combustible materials, liquids and wastes.

- Work operations which can create fire hazards.
- Access for firefighting equipment.
- Type, size, number and location of fire extinguishers or other firefighting equipment.
- Inspection and maintenance records for extinguishers
- Type, number and location of containers for the removal of surplus materials and rubbish.
- General housekeeping

For the purpose of quick communication between the Engineer-in-Charge and the Contractor or his Representative, Site Order Books shall be maintained at site in the manner as described below:

Any communication, relating to the works may be conveyed through records in the site order book. Such a communication from one party to the other shall be deemed to have been adequately served in terms of the Contract. Each site order book shall have machine- numbered pages in triplicate and shall be carefully maintained and preserved by the Contractor and shall be made available to the Engineer-in-Charge as and when demanded. Any instruction which the Engineer-in-Charge may like to issue to the Contractor may be recorded by him in the site order book and two copies thereof taken by the Engineer-in-Charge for his record. The Contractor or his Contractor or Representative may similarly record in the site order book any communication he may like to send to the Engineer-in-Charge. Two copies thereof when sent to the Engineer-in-Charge and receipt obtained thereof, will constitute adequate services of the communication to the Engineer-in-Charge.

4.39: Data, Services and Facilities to be provided by the Employer

Attention is drawn to the following which are not provided by the Employer and are to be arranged by the Contractor at his own cost.

- The Employer will not provide office accommodation. The Contractor shall make his own office accommodation arrangements for their office staff for each of the field supervision teams including furniture, equipment, operation and maintenance.
- The Employer will not provide project vehicles to the Contractor. The Contractor shall make his own arrangements in respect of vehicles. The Contractor shall ensure that vehicles for the team are of good makes and are of excellent working condition.
- The Contractor shall be responsible for making his own arrangements for survey equipment.
- The Contractor shall be responsible for making his own arrangements for communications.

4.29 Order of Precedence of Documents

In case of difference, contradiction, discrepancy, with regard to conditions of contract, specifications, Drawings, Bill of Quantities etc. forming part of the contract, the following shall prevail in order of precedence.

- > WAPCOS and ESIC MOU and terms and condition lay over by time to time.
- Letter of Award, along with statement of agreed variation and its enclosures, if any.
- ➤ Special Condition of Contract
- > Scope of Work
- ➤ Description of Bill of Quantity/Schedule of Quantities

- ➤ Technical Specification (General, Additional and Technical Specification) as given in Tender Documents
- ➤ General Condition of Contract
- ➤ Drawings, if any
- ➤ CPWD/MORTH specification (as specified in Technical Specification in Tender) update with correction slips issued up to last date of receipt of tenders.
- ➤ Relevant B.I.S codes

Clause-4.30: PREFERENCE TO MAKE IN INDIA

- The provision 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%.
- 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 at with 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 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- Office Set up at Site for WAPCOS officials

Vehicle for site visit, permanent one vehicle for WAPCOS officials for site monitoring like bolero/Scorpio should be provided during the entire tenure of construction and office set up at site for WAPCOS officials shall be provided by the contractor at his own cost. The Contractor shall provide uninterrupted power and water to the Office as directed for 24 hours free of cost. An amount equal to 1% of gross bill from all running account & final bill shall be recovered, if the above facilities are not provided by the Contractor.

For & on behalf of Tenderer

Signature of the authorized representative:
Name of the agency:
Name and designation:
Contact Details a) Communication address:

b) E-mail id c) Contact Nos.

SECTION-IV

SPECIAL CONDITIONS TO CONTRACT

I. The contract means the documents forming the tender and acceptance thereof and the formal agreement executed between the competent authority on behalf of WAPCOS Limited and the contractor/agency together with the documents referred to therein including these conditions, instructions issued from time to time by the Engineer-in-charge all these documents taken together shall be deemed to form one contract and shall be complementary to one another. In case of difference, contradiction, discrepancy, dispute with regard to General Condition of Contract (G.C.C), the provision made in the Special Conditions of Contract (SCC) will prevail.

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 statuary 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.

II. Completion Period

The duration of contract will be Twelve (12) **month** from the date of start of work which shall be increased or decreased as per the requirement of ESIC/WAPCOS as per the same terms and conditions.

III. The agency shall be responsible to collect the feedback from client on the weekly/monthly/quarterly basis. Based on the observations, if any, recorded by the allotted, necessary action shall have to be initiated by the agency and defects/deficiency shall have to be attended immediately and is to be brought to the Notice of WAPCOS

IV. Goods and Service Tax

The quoted rate shall be exclusive of Goods and Service tax (GST), However, GST shall be reimbursed on actual basis after the submission of GST proof.

- V. The agency will depute appropriate resources to monitor and manage the progress of the project.
- VI. The liability to insure the spares and tools, if any, in the possession of the agency will be of the agency and the liability for any loss or damage due to any fire, burglary, theft,

etc. will be that of the agency.

VII. Obligations of WAPCOS/ESIC

WAPCOS/ESIC shall -

- Facilitate entry pass to all staff and personnel of the agency
- Ensure timely payment as specified elsewhere in this NIT.

VIII. Decision of WAPCOS For Recovery Of Reduced Worker force Shall Be Final And Binding:

WAPCOS has given its provisional requirement of different categories of workforce for different work in subsequent paras. This will be the minimum quantity of workers to be deployed by the Contractor at site. However, if WAPCOS choose/decides to reduce the workforce at any time, recovery shall be made from the contractor's payment at the rate decided by WAPCOS which shall be final & binding on the contractor/agency. The reduction amount shall be calculated on the basis of BOQ rate and plus & minus rate quoted by the bidder.

No extra payment shall be made by WAPCOS if contractor choose to deploy more workforces on its own then mentioned in the tender documents.

IX. Minimum Wages

If shall be the responsibility of contractor to pay minimum wages as per CLC. Notification to the workers as applicable/revised time to time during the tenure of the contract. This tender is prepared on the basis of minimum wages applicable as on the date of publication of this tender except the following post.

However, any increase or decrease in minimum wages by the Government after the last date of submission of the tender during the tenure of the project shall be reimbursed/deducted with/from the in their monthly bills of the contractor based on the applicability of revised rates and on production of suitable evidences as per the norms except the following person.

➤ In Case the agency fails to abide by any of the conditions a financial penalty on every default as decided by WAPCOS management will be imposed

X. Fore closure Of Contract Due To Abandonment or Reduction in Scope of Work

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

The contractor shall be paid at contract rates, full amount for works executed at site.

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

XII. Payment of Wages

- a. 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) CLC Rules, wherever applicable.
- b. 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.
- c. In respect of all labour directly or indirectly employed in the works for performance of the contractor's part of this contract, the contractor shall comply with or cause to be complied with the Contractor's Labour Regulations made by WAPCOS from time to time in regard to payment of wages, wage period, deductions from wages recovery of wages not paid and deductions unauthorized made, maintenance of wage books or wage slips, publication of scale of wages and other terms of employment, inspection and submission of periodical returns and all other matters of the like nature or as per the provisions of the Contract Labour (Regulation and Abolition) Act, 1970, and the Contract Labour (Regulation and Abolition) Rules, CLC rules, wherever applicable.
- d. (i) The Engineer-in-Charge concerned shall have the right to deduct from the moneys due to the contractor any sum required or estimated to be required for making good the loss suffered by a worker or workers by reason of non-fulfilment of the conditions of the contract for the benefit of the workers, non-payment of wages or of deductions made from his or their wages which are not justified by their terms of the contract or non-observance of the Regulations.
 - (ii) Under the provision of Minimum Wages (CLC) Rules, 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. CLC rules also applicable.
- e. 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, CLC Minimum wages Act, or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time.

- f. 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/CLC Labour rule without prejudice to his right to claim indemnity from his subcontractors.
- g. 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.
- h. 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.
- i. 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.
- XIII. 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 of Rs.200/- 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.
- XIV. 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.
- XV. In the event of the contractor(s) committing a default or breach of any of the provisions of the WAPCOS, Contractor's Labour Regulations and Model Rules for the protection of health and sanitary arrangements for the workers as amended from time to time or furnishing any information or submitting or filing any statement under the provisions of the above Regulations and' Rules which is materially incorrect, he/they shall, without prejudice to any other liability, pay to the Government a sum not exceeding Rs.200/- for every default, breach or furnishing, making, submitting, filing such materially incorrect statements and in the event of the contractor(s) defaulting continuously in this respect, the penalty may be enhanced to Rs.200/- per day for each day of default subject to a maximum of 5 per cent of the estimated cost of the work put to tender. The decision of the Engineer-in-Charge shall be final and binding on the parties.
- XVI. 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) CLC rules, for the protection of health and sanitary arrangements for work-people employed by the contractor(s) (hereinafter referred as "the said Rules") the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that

the said Rules be complied with and the amenities prescribed therein be provided to the work-people within a reasonable time to be specified in the notice. If the contractor(s) shall fail within the period specified in the notice to comply with and/observe the said Rules and to provide the amenities to the work-people as aforesaid, the Engineer-in-Charge shall have the power to provide the amenities hereinbefore mentioned at the cost of the contractor(s). The contractor(s) shall erect, make and maintain at his/their own expense and to approved standards all necessary huts and sanitary arrangements required for his/their work-people on the site in connection with the execution of the works, and if the same shall not have been erected or constructed, according to approved standards, the Engineer-in-Charge shall have power to give notice in writing to the contractor(s) requiring that the said huts and sanitary arrangements be remodelled and/or reconstructed according to approved standards, and if the contractor(s) shall fail to remodel or reconstruct such huts and sanitary arrangements according to approved standards within the period specified in the notice, the Engineer-in-Charge shall have the power to remodel or reconstruct such huts and sanitary arrangements according to approved standards at the cost of the contractor(s).

XVII. 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.

XVIII. 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 therefrom, provided that the contractor shall not be liable to indemnify the 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.

XIX. 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.

XX. If Relative Working In WAPCOS Then the Contractor Not Allowed To Tender

The contractor shall not be permitted to tender for works in the WAPCOS responsible for award and execution of contracts in which his near relative is posted in WAPCOS. He shall also intimate

the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Officer in the WAPCOS. Any breach of this condition by the contractor would render him liable to be debarred from tendering in WAPCOS any breach of this condition.

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

XXI. Criminal charges against violating Bidder(s)/Contractor(s)/Subcontractor(s)

If the Principal obtains knowledge of conduct of a Bidder/Contractor or any employee or a representative or an associate of a Bidder/Contractor, which constitutes a criminal offence under the IPC/PC Act, or if the Principal has substantive suspicion in this regard, the Principal will forthwith inform the same to the Chief Vigilance Officer, WAPCOS.

XXII. 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/ESIC 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.

XXIII. 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, BSI standards and codes, Indian electricity rule 1956, Indian electricity act 2003 and fire safety regulation pertaining to electric applications. The specification with up to date correction on the last date of submission of tender for work. In case specification of any item is not clear, MoRTH Specification, CPWD specification, Indian standard (IS) IRC (Indian Road Congress) specification, NBPDCL specifications with up to date correction slips issued on last date of submission of tender of work is applicable.

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 Additional Conditions of Contract 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.

XXIV. SECURED ADVANCE ON NON-PERISHABLE MATERIALS: Not applicable

XXV. **MOBILISATION ADVANCE**: Not applicable

XXVI. PLANT MACHINERY & SHUTTERING MATERIAL ADVANCE: Not applicable

XXVII. INTEREST & RECOVERY: Not Applicable

XXVIII. Requirement of Technical Staff:

Min. Qualification/ Experience	Nos.	Designation	Penal recovery if not employed
1. Graduate Engineer (Electrical)/ Diploma holder (Electrical) with minimum seven years' experience in the relevant field (Nodal Officer for ESIC)	1	Site-in-charge	40,000/- per month

• Note: Salary of the above-posted employee shall be beard by the contractor only. No reimbursement/payment shall be done by WAPCOS or ESIC.

XXIX. Other Conditions Required

- The firm/contractor shall furnish a list of the workers deployed along with their full names, father's/husband's name, date of birth, full residential addresses (present & permanent), contact tel. No. etc. The firm/contractor shall be responsible to get the character and antecedents of the persons verified by the Police before deploying them in ESIC. The authenticated copies of Police verification certificate/documents of the persons, who are to be deployed in ESIC, shall be submitted by the firm to WAPCOS. WAPCOS/ESIC reserve the right to conduct the test, as may be deemed fit to adjudge the suitability of the persons provided by the firm/contractor. WAPCOS/ESIC also reserves the right to get the person's character and antecedents verified by the Police, if deemed necessary.
- The firm will also ensure that the persons deployed in ESIC are medically fit and will keep record of their medical fitness. The firm shall withdraw such persons, who are not found suitable by ESIC/WAPCOS for any reasons, immediately on receipt of such request from WAPCOS/ESIC. The copies of medical fitness certificate of the persons who are to be deployed in ESIC, shall be submitted by the successful bidder to WAPCOS/ESIC.
- There shall be no representation of any kind, implied or otherwise, of any automatic absorption, regularization, continued engagement or concession or preference in employment security for the persons engaged by the service provider for any engagement. service or employment in any capacity, in any office or establishment of the Govt. A copy of each of the agreement entered into by the firm with the persons, deployed in ESIC are required to be submitted to WAPCOS/ESIC within a fortnight of deployment.
- The contract does not amount to employment with the Government or confer any right on the contractor/firm or the workers engaged by the firm/contractor, nor any representation by the Government as to the possibility or preference in. employment at any time in future in respect of security and other personnel of the contractor/firm in any office/ establishment of the Government.
- The firm/contractor shall appoint a coordinator, who would be responsible for immediate interaction with WAPCOS/ESIC and so that optimal services are available

- without disruption.
- The worker engaged will observe discipline and decorum and shall not-misbehave with any WAPCOS/ESIC officer.
- If at any point of time, any person absent himself/herself, a substitute shall be provided immediately.
- In case, any person is absent on a particular day and substitute is not provided, a daily rate/ pro rate shall be deducted from the bill for the month. In case the firm is asked to provide a substitute and fails in doing so within 3 (three) days, then a penalty equal to 10% of the daily wages of the worker will be imposed on the firm, besides deduction of daily wages.
- The firm/contractor shall be directly responsible for settlement of any dispute or grievance of the 'Worker' relating to his/her deployment in ESIC and any other matters that may arise in this regard and WAPCOS/ESIC, in no way, be responsible for settlement of such issues/dispute.
- Any liability regarding payments of wages to the 'workers' arising due to non compliance with any provisions of the Labour Laws or due to any human loss/injury during the course of work will be the sole and personal responsibility of the firm/contractor. The successful firm/contractor shall submit, a notarized affidavit on a stamp paper of appropriate value to the effect that the firm undertake to pay Minimum Rates of wages to the persons engaged as per applicable orders of CLC, GOVERNMENT OF INDIA and to enhance the rates, as and when it is revised as well as all the statutory dues w.r.t ESI, EPF etc. to ESIC. The contractor will submit the copies of the EPF statement/pass Book, ESI Card and Service Tax Challans long with monthly bill, without which the payment to the contracting firm will not be released.
- The successful bidder will submit an undertaking in form of duly executed affidavit to deposit EPF contribution of the Employer and Employee in the EPF Account of the workers every month.
- The successful bidder will also submit an undertaking in form of duly executed affidavit to the effect that if the contractor does not provide copies of depositing Employer and Employees share in the EPF Account of the employee, he will not be entitled for these payments.
- The successful bidders will also submit an undertaking in the form of duly executed affidavit to comply with the instructions relating to payment of EPF in respect of those employees who are not in excluded category as per instruction issued by the Government on the subject.
- The employer's share of EPF will not be paid to the contractor for those persons, who are in the excluded category of EPF contribution as per latest guidelines issued by Ministry of Labour & Employment in this regard. The employer's share of EPF will be paid to the Contractor on production of documentary evidence of depositing the share in the individual employee's EPF account opened for the employee in his/her name.
- The firm/contractor shall undeliake to provide the services for the entire duration regularly failing which the Performance Security Deposits and such other amount that may be due from WAPCOS/ESIC to the firm shall stand forfeited.
- If at any point of time, the services being provided by the firm/contractor are found to be unsatisfactory in any manner, the WAPCOS/ESIC will have full authority to discontinue the services of the firm/contractor by giving notice of 15 days. The decision of WAPCOS in this regard shall be final and binding on the firm/contractor.
- The working hours of the workers on the basis of 6 days working in a week. The workers shall have to sign the attendance both at the time of arrival and departure.
- In emergent situations the services of the persons may be required on

- Sundays/Holidays also.
- If, any workers arrives late or leaves early, a deduction of the daily rate shall be made on half day basis.
- If, at any point of time, the services of any person provided by the firm/contractor are found to be unsatisfactory or not of the expected level in any manner, the firm/contractor shall change the worker immediately.
- The workers shall not be entitled for any financial benefit that are admissible to regular employees of WAPCOS/ESIC. However, the firm/contractor is required to pay wages to the workers engaged strictly as per the Minimum Wages Act modified from time to time including EPF, ESI and other social security schemes of the Government of CLC, Government of India and Ministry of Labour & Employment. The wages to the workers would be dynamic. The weekly rest etc. should also be allowed to workers as per statutory provisions. This is required to be quoted by all bidders at the time of submitting bids, which would be increased as and when increased by the Government authorities. All the statutory requirements such as obtaining valid Labour Licence on the basis of contract letter and compliance of all the provisions of social security legislations in general and provisions of the Contract Labour (Regulation & Abolition) Act, 1970 and the Contract Labour (R&A) Rules 1971 in particular are required to be complied with by the contactor. The firm/contractor should quote their Service Charge for providing services of workers for WAPCOS/ESIC over and above the statutory payments to be made to each worker. so deployed. Except the Administrative Service Charges, quoted by the service provider, no other amount is to be retained by the service provider out of the minimum wages, EPF, ESI etc. as mandated by the statutory provisions on the subject. The proof of depositing the service tax with the appropriate authorities have to be submitted to WAPCOS periodically.
- The administrative Service Charges per worker Quoted by the firm in the financial bid shall be commensurate with the administrative and supervisory efforts required for executing the contract.
- The rates of wages and the consequential revision in the statutory contribution on worker's wages will be revised by CLC from the date of statutory revision in minimum wages of the workers and in case of revision in the rate of contribution on worker's wages (i.e EPF,ESI etc.) by the CLC Government/Central Government whatsoever may be the case. However, there will be no increase in the Administrative Service Charges quoted by the firm/contractor.
- The firm should be registered with ESI, PF, Service Tax, Work Contract Tax, Labour Licence & PAN (GST) with the concerned authorities.
- The contractor shall comply with all relevant Laws and the Rules made there under viz. Income Tax, ESI Act, PF Act, Factories Act, ID Act and Contract Labour (Regulation & Abolition) Act, Private Security Agencies (Regulation) Act, 2005 and Private Security Agencies Central Model Rules, 2006. Payment shall be conditional on fulfillment of the provisions of these Acts and the rules framed there under.
- The payment of wages to the workers have to be made by the contractor in accordance with the provision of Section 21 of the Contract Labour (Regulation & Abolition) Act, 1970.
- The firm/contractor will make payment of wages to the workers provided by 7th of every month.
- In case of failure to make payment of wages to the workers within the prescribed period or making short payment by the firm/contractor, the Performance Security Deposit amount deposited by the firm/contractor with WAPCOS Limited will be forfeited. The firm will also be blacklisted.

- Vehicle for site visit and office set up at site for WAPCOS officials shall be provided by the contractor at his own cost.
- The Firm/ contractor shall be responsible for all commission and omissions on the part of manpower engaged for the purpose. WAPCOS Limited shall not be held responsible in any manner whatsoever, in matter of injury/death/health etc. of the contractor's employee performing duties under this contract.
- If it is found that the information/certificates furnished by the participating firm is incorrect/wrong or bogus, the firm shall be blacklisted, its bids will be ignored and EMD will be forfeited.
- WAPCOS Limited has reserve the right to execute more items or quantities or manpower as per the ESIC or site requirement.
- This tender is based upon the estimations on the basis of site conditions(tentative) enclosed with technical specifications and BOQ. WAPCOS Limited reserves the right to vary any individual item to any extent either positive or negative within the scope of work as defined as per the requirement of ESIC/WAPCOS Limited. The decision as to items are within the scope of work shall be of WAPCOS Limited which is final & binding. Therefore in case of variation in quantity as given in BOQ either positive or negative no rate revision is applicable. In case of New Rate or Price of the Substituted/Extra/deduction items shall be derived from any relevant rates or prices in the Contract. New rate or price of the substituted/Extra/deduction items shall be derived from the Delhi Schedule of Rates -2021 and latest upto date DSR. In case the rates are not available in DSR, the same shall be derived from the competitive market quotes, obtained by WAPCOS Limited/WAPCOS Limited representative. The contractor's profit and overheads together shall be taken as 15% only. ESI, Bonus, CPoH and EPF etc. as applicable also taken in case of changes in the manpower. In Substitute Item or extra item, being the scheduled Item (Delhi Schedule of rates), these shall be paid as per Delhi Schedule of rates plus/minus tender percentage with respect to estimated cost.
- The completion cost of any maintenance work shall not exceed 2.00 times the tendered amount and 10% of the sanctioned cost for budgeted works. The Engineer-in-charge shall record reasons for such deviation beyond the contract amount and take necessary approval from competent authority.
- The material shall conform to the quality and make as per attached list in Technical Specifications. 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, provisions of Clause 10A of the General Conditions of Contract for Central PWD works shall be applicable on the materials of "Preferred Make" also.

For & on behalf of Tenderer

ANNEXURE – I

FORM OF PERFORMANCE SECURITY (GUARANTEE)

WAPCOS Limited,
76-C, Sector 18,
<u>Gurgaon-122015.</u>
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 up towithout 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 datedo
the bank granted to him / us by the Bank. We the said bank do hereby declare and undertake that you
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 up to an 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
(December 1) and the second of
i) our liability under this guarantee shall not exceed Rs (Rupees only);
only) ;
only); ii) This bank guarantee shall be valid upto (indicate a date two months after the
only); ii) This bank guarantee shall be valid upto (indicate a date two months after the
only); This bank guarantee shall be valid upto (indicate a date two months after the probable date of completion) Our liability to make payment shall arise and we are liable to pay the guaranteed amount or any par 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 three months after validity of

For & on behalf of Tenderer

ANNEXURE – II

FORMAT FOR AFFIDAVIT

Dated _	from	(Name of the Bank with
	S Limited, New Delhi with a view to s	
performance guarantee in ca	sh. This Bank guarantee expires on	
	I / We un	ndertake to keep the validity of the
bank guarantee intact by get	ting it extended from time to time at m	y / our own initiative up to a period
of	months after the recorded date of c	completion of the work or as directed
by the WAPCOS.		
guarantee if any.		
		(Deponent)
		(Deponent) Signature of Contractor
Note : The affida	vit is to be given by the Executants bef	Signature of Contractor
	vit is to be given by the Executants bef	Signature of Contractor

ANNEXURE – III FORMAT OF RESUME OF PROPOSED PERSONNEL

The bidder shall provide all the information requested below:

1 OSITIOII											
Personnel information	Name		Date of birth								
	Professio	Professional qualifications									
Present employment		Name of Employer									
	Address	Address of Employer									
	Telephor	ne	Contact (manager / personnel officer)								
	Fax		E-mail								
	Job title		Years with present Employer								
		al experience in reverse chronologic relevant to the project.	ogical order. Indicate particular technical and								
From	То	Company, Project , Position, an Experience	d Relevant Technical and Management								

Certification:

Dogition

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	1
-----------------	---

Name of Personnel Signature Date

{day/month/year}

Name of authorized Representative of the Contractor

Signature

Date

ANNEXURE-IV

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 ½ to 1(½ 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 ¼" 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 of 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:-
 - (q) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.
 - (r) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.
 - (s) Overalls shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

- 9. The Contractor shall not employ women and men below the age of 18 on the work of painting with product containing lead in any form, wherever men above the age of 18 are employed on the work of lead painting, the following principles must be observed for such use:
 - (i) White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.
 - (ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.
 - (iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.
 - (iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.
 - (v) Overall shall be worn by working painters during the whole of working period.
 - (vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.
 - (vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man.
 - (viii) WAPCOS may require, when necessary medical examination of workers.
 - (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.
- 10. When the work is done near any place where there is risk of drowning, all necessary 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 - IV

MODEL RULES FOR THE PROTECTION OF HEALTH AND SANITARY ARRANGEMENTS FOR WORKERS EMPLOYED BY CONTRACTORS

1. APPLICATION

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

2. **DEFINITION**

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

3. FIRST-AID FACILITIES

- (i) At every work place, there shall be provided and maintained, so as to be easily accessible during working hours, first-aid boxes at the rate of not less than one box for 150 contract labour or part thereof ordinarily employed.
- (ii) The first-aid box shall be distinctly marked with a red cross on white back ground and shall contain the following equipment:-
 - (a) For work places in which the number of contract labour employed does not exceed 50- Each first-aid box shall contain the following 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.
- (iii) Adequate arrangements shall be made for immediate recoupment of the equipment when necessary
- (iv) Nothing except the prescribed contents shall be kept in the First-aid box.
- (v) The first-aid box shall be kept in charge of a responsible person who shall always be readily available during the working hours of the work place.
- (vi) A person in charge of the First-aid box shall be a person trained in First-aid treatment in the work places where the number of contract labour employed is 150 or more.
- (vii) In work places where the number of contract labour employed is 500 or more and hospital facilities are not available within easy distance from the works. First-aid posts shall be established and run by a trained compounder. The compounder shall be on duty and shall be available at all hours when the workers are at work.
- (viii) Where work places are situated in places which are not towns or cities, a suitable motor transport shall be kept readily available to carry injured person or person suddenly taken ill to the nearest hospital.

4. DRINKING WATER

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

(iv) A reliable pump shall be fitted to each covered well, the trap door shall be kept locked and opened only for cleaning or inspection which shall be done at least once a month.

5. ANTI-MALARIAL PRECAUTIONS

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

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

7. 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

SECTION-VI

ELEGIBILITY CRITERIA AND IT, S FROMS: FORM 'A' LETTER OF TRANSMITTAL

To Chief Executive Director (Envt & CM) WAPCOS Limited Environment Division 76-C, Sector -18, Gurgaon -122015

Subject: Submission of bids for the work of "Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)".

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 J and accompanying statement are true and correct.
- 2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
- 3. We also authorize WAPCOS Limited to approach individuals, employers, Firms and Corporation to verify our experience certificates of similar works and any / all the documents submitted herewith the bid document along with general reputation and competence.
- 4. 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 technical 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.

omistinont in case any information faring	ned by me, as realize to be meet rees.
Enclosures:	
	Seal of bidder
Date of submission:	Signature(s) of Bidder(s)

FORM 'B'

1	H,	Ĥ	N	1/	٨	N	J	Γ.	IA	N	Γ.	1	١	1	П	F	ſ	R	1	M	[/	\	П	[N	1	V	I

1. Financial Analysis: Details to be furnished duly supported by figures in balance sheet/ profit & loss account for the last three 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)
2023-2024		
2022-2023		
2021-2022		
2020-2021		
2019-2020		

Signature of Chartered Accountant (UDIN Number and Seal)

Signature of Bidder(s). (with Seal)

FORM C SOLVENCY CERTIFICATE FROM A SCHEDULED COMERCIAL BANK

To

Chief Executive Director (Envt & CM) WAPCOS Limited Environment Division 76-C, Sector -18, Gurgaon -122015

Subject: Submission of bids for the work of "Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)".

This is to certify that to the best of our knowledge and	information that
M/s	having marginally noted address, as a
Customer of our bank are/is respectable and can be tre	ated as good for any engagement upt o a limit
of Rs	
(Rupees	
)	
This certificate is issued without any guarantee or resp	onsibility on the bank or any of the officers.
	(Signature) For the Bank (Email id of Bank)

NOTE:

- 1. Bankers Certificates should be on letter head of the Bank, addressed to tendering authority.
- 2. In case of Partnership firm, certificate should include names of all partners as recorded with the Bank.

FORM D DETAILS OF ELIGIBLE SIMILAR NATURE OF WORKS COMPLETED DURING LAST FIVE YEARS

Sl.	Name of	Owner or	Cost of	Date of	Stipulated	Actual	Name and
N	Project &	sponsoring	work	Commen	date of	date of	address/
О	Location	organizatio	in crores	-	completio	complet	telephone number
		n	of	cement	n	ion	of officer to
			rupees	as			whom
				per			reference may be
				contract			made
1							
2							
3							

(Signature of the Bidder)

Note: This should be accompanied by Completion certificate and work order along with bill of quantities

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

(On Rs. 100 stamp paper)

Know	all	men	by	these		presents	5,	we
						(Nar	ne of	the
Tenderer a	nd address of t	heir registered	office) do he	reby consti	tute, appo	oint and a	uthori	ze Mr
/Ms				(name	and resid	lential ad	dress o	of Power
of Attorney	holder) who	is presently	y employed	with us	and	holding	the	position
of								
as our atto	rney, to do in o	our name and	on our behalf,	, all such ac	ets, deeds	and thin	gs nec	essary in
connection	with or incide	ntal to our Bid	for the Proj	ect and su	bmission	of all d	locum	ents and
providing	information /	responses to						
	, represe	enting us in all	matters before	re		_, and ge	nerally	dealing
with								
	in all r	natters in co	nnection with	n our prop	osal for	the said	l Proj	ect. We
hereby agre	ee to ratify all	acts, deeds and	l things lawfu	lly done by	our said	attorney p	pursua	nt to this
Power of A	Attorney and the	hat all acts, de	eeds and thing	gs done by	our afor	esaid atto	rney s	hall and
shall alway	s be deemed to	have been do	ne by us.					

FORM "E" (On letter head) STRUCTURE & ORGANISATION

S.No.	Particulars	Details Submitted by Bidder
1.	Name & address of the Bidder:	
2.	Telephone no./Mobile No./Telex no./Fax no.	
3.	Email id for communication	
4.	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	
	Particulars of registration with various Government Bodies (attach attested photocopy)	
5.	Organization/Place of Registration	Registration No.
	1.	
	2.	
	3.	
6.	Names and titles of Directors & Officers with designation to be concerned with this work along with their contact number and Email id	
7.	Designation of individuals authorized to act for the organization	
8.	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.	
9.	Banker of Agency with full address (Attach bankers certificate of account maintenance for the last two years) Telephone number of banker	

WAP/ENVT/ESIC-ARMO/JOKA/2025/02

10	PAN of the firm	
11	Statutory requirements: a) Whether the firm/company is registered with labour Department of State Government/UT Administration b) Whether the firm/company is registered under the employees State Insurance Act, 1948 c) Whether the firm/company is registered under the Employees Provident Fund and Miscellaneous Provision Act, 1952.	
12.	ESI, P.F, GST, Labour Registration No.	
13.	GST Paid last receipt	
14	Affidavit by the firms to pay minimum rates wages to the workers engaged as per applicable order Government CLC and to enhance the rates, as and when it is revised.	
15.	Undertaking by the firm to provide clearance from police authorities in respect of workers.	
16.	Any other information considered necessary but not included above.	
	·	

Signature of Bidder(s)
Name:
Seal (firm/company)

Date:

Place:

(Note all the supporting documents shall be attached with Bid documents)

FORM-F

Format of Undertaking to be furnished on Company Letter Head with regard to Blacklisting/Non-Debarment by the contracting Agency

Name of work:
Ref: Tender Nodated
<u>To</u>
Chief Executive Director (Envt & CM) WAPCOS Limited 76-C, Industrial Area Gurgaon, Haryana
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/deregistered/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:-

FORM-G

FORMAT FOR UNDERSTANDING THE PROJECT SITE

(on Bidder Letter Head)

To

Chief Executive Director (Envt & CM) WAPCOS Limited Environment Division 76-C, Sector -18, Gurgaon -122015

Subject: Undertaking of the Site

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 Location and conditions etc.

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 as per BOQ

Yours faithfully,

Date: (Signature, name and designation of the Authorized signatory)
Place:

Name and seal of Bidder

FORM-H

FORMAT FOR NO DEVIATION CERTIFICATE

[To be submitted on Bidder's Letter Head]

To,

Chief Executive Director (Envt. & CM), WAPCOS Limited Environment Division 76-C, Sector -18, Gurgaon - 122015

Subject: No Deviation Certificate

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-I

CONSENT LETTER FOR INTEGRITY PACT

To,

Chief Executive Director (Envt & CM) WAPCOS Limited **Environment Division** 76-C, Sector -18, Gurgaon -122015

Sub: Integrity Pact

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 is accordance with terms and conditions of the tender/bid.

	Yours faithfully,
Date:	(Signature, name and designation of the Authorized signatory)
Place:	Name and seal of Bidder

FORMAT FOR INTEGRITY PACT (On Rs. 100 stamp paper)

BETWEEN

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

	ınless					the "Principal/Owner", which expression include its successors and permitted
	AND					
		and		of	the	Individual/firm/Company) through (Hereinafter referred to as the
		duly autl	norized signate	ory) "Bid	lder/Cont	ractor" and which expression shall unless uccessors and permitted assigns)
Pream	ıble					
(herein	nafter lure, c	referred ontract f	to as "Tender	/Bid") ar	nd intends	to award, under laid down organizational (Name of work)
rules,	regula		onomic use of			npliance with all relevant laws of the land, fairness/transparency in its relation with its
Integri of whi	ity Ag	reement	(hereinafter ref	erred to a	ıs "Integri	the parties have agreed to enter into this ty Pact" or "Pact"), the terms and conditions of the Tender/Bid documents and Contract
			E, in consideraws and this Pac			venants contained in this Pact, the parties
(1) Th	e Prince (a) N mem a pro perso	cipal/Ow following to employ bers, will mise for on is not l	g principles: wee of the Prince in connection or accept, for segally entitled	self to tak cipal/Owr with the elf or thin to.	te all meas ner, person Tender, or rd person,	ures necessary to prevent corruption and to ally or through any of his/her family the execution of the Contract, demand, take any material or immaterial benefit which the process, treat all Bidder(s) with equity and
	reaso provi	n. The P	rincipal/Owner Bidder(s) the s	will, in pame infor	oarticular, mation an	before and during the Tender process, d will not provide to any Bidder(s) ich 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 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)/ Contract(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 intensions.
- (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.

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
2
Place:
Dated:

FORM-J

Affidavit Payment of Wages

- Wages due to every worker shall be paid to him direct by contractor through Bank or ECS or online transfer to his bank account.
- All wages shall be paid through Bank or ECS or online transfer
- It shall be the duty of the contractor to ensure the disbursement of wages through bank account of labour
- The contractor shall obtain from the authorized representative of the Engineer-in-charge as the case maybe, a certified under his signature at the end of the entire in the "Register of wages" or the "Wages cum-Muster Roll" as the case may be in the following form:

"Certified that the amount shown in column no.......has been paid to the workman concerned through bank account of labour on.....at....."

The field units may also pursue with contractors of the existing contract to make payment to the labour by the contractor through Bank or ECS or online transfer also.

FORM-K 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 fulfils all requirements in this regard and Is eligible to be considered.

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Place

Signature, name and designation of the Authorized signatory)

FORM-L

Affidavit

We -----, undertake and confirm that eligible similar works(s) have not been got executed through another contractor on back-to-back basis. Further that, if such a violation comes to the notice of Department, then we shall be debarred for bidding in WAPCOS in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit / Performance Guarantee.

On behalf of -----

Sign and Seal of firm

SECTION-VII

SCOPE OF WORK

The scope of work includes "Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)" for the period of 1 (One) year . ESIC/WAPCOS reserves the right to add or delete any dispensary/ office in the below mentioned list.

S.	Name of the Buildings/Premises	Location
No.		
1	ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata	Joka, Kolkata

For carrying out comprehensive Repairs & Maintenance of its existing infrastructure comprising of Buildings & Services including Equipment and Plants rendering specialized services:

- Annual Repairs and Maintenance & Operations (ARMO) of Buildings & Services
- Day to day Maintenance of Buildings & Services
- Day to day Operation & Maintenance of Equipment and Plants rendering specialized services
- The contractor will carry out all preventive maintenance / Checks as per CPWD Specification and works procedure.

After a comprehensive condition survey of the existing infrastructure i.e. Buildings, Services, Equipment is & Plants including ancillary structures existing inside the premises/complex shall be carried out by them to assess the maintenance needs for each component of the infrastructure for restoring and sustaining the utility of the facilities.

Electrical maintenance (E&M)

Scope of Responsibility of the Selected Agency

The agency/bidder selected through the tendering process shall be responsible for the comprehensive **operation and maintenance** of the following systems within the ESIC Medical College & Hospital, Joka:

- Domestic Water Distribution (PHE) System
- Stormwater Drainage System, including Pond Pumps
- Electrical Maintenance and Electro-Mechanical (E&M) Systems

The selected agency shall implement a **Preventive Maintenance Program**, aligned with standard building safety protocols and operational guidelines. Their responsibilities shall include, but not be limited to:

- Planned Preventive Maintenance (PPM)
- Routine Testing, Cleaning, Oiling, and Greasing of equipment
- Timely repair and upkeep of all relevant systems and components

Scope of Work

Operation and Maintenance of Electrical & Mechanical (E&M) Services and Electrical Maintenance

At ESIC Medical College & Hospital, Joka, Kolkata

1. Objective

To ensure uninterrupted, safe, and efficient operation and maintenance of all Electrical & Mechanical systems within the premises of ESIC Medical College & Hospital, Joka, Kolkata. The services shall cover both preventive and corrective maintenance and ensure compliance with safety standards, statutory requirements, and hospital operational needs.

2. Location

- ESIC Medical College & Hospital Campus, Joka, Kolkata, West Bengal
- Including:
- o Hospital Block
- o Medical College Block
- o Academic and Administrative Buildings
- Hostels and Residential Quarters
- Outdoor Infrastructure and Utility Areas

3. Scope of Services

A. Electrical Maintenance

1. HT & LT Panel Maintenance

- o Routine inspection and cleaning
- o IR value testing, contact tightening, thermographic scanning
- Load balancing and functional checks

2. Transformers

- o Oil testing (BDV, acidity), filtration if required
- o Checking of bushings, earthing, temperature gauges, and protection relays

3. DG Sets

- Operation during power failures
- o Routine servicing, fuel management, load testing
- o Battery health checks and periodic overhaul

4. UPS Systems

- Monitoring and maintaining battery banks
- Routine testing and logging of backup performance
- Coordination with OEMs for repairs

5. Internal Electrical Distribution

- o Maintenance of DBs, MCBs, wiring, junction boxes, switches, sockets
- o Ensuring power supply to critical areas (ICUs, OTs, labs, etc.)

6. Lighting & Fixtures

- o Routine replacement of defective lights, fans, switches
- o Maintenance of emergency lighting, exit signage, etc.

7. Earthing & Lightning Protection

- o Periodic testing of earth resistance
- o Maintenance of lightning arrestors and earth pits

8. Energy Monitoring

- Load profiling and daily energy consumption reports
- Suggestion of energy-saving measures

9. Liaisoning with Power Utility

o Assisting in meter reading, billing disputes, breakdowns, and shutdowns

B. Electro-Mechanical Systems (E&M)

1. Lifts & Elevators

- o Routine checks and coordination with AMC providers
- o Daily operation inspection and breakdown coordination

2. HVAC Systems (if applicable)

- o Routine maintenance of AHUs, FCUs, chillers
- o Filter cleaning, thermostat control, leak checks

3. Water Pumps & Motors

- o Regular lubrication, alignment, and bearing check
- o Checking of valves, headers, and motor control panels

4. Sewage Treatment Plant (STP) & Drainage Pumps

- o Pump maintenance, control panel operation
- o Ensuring 24x7 operation and preventing flooding/blockages

5. RO/Water Softening Plant

- o Operation and maintenance of water treatment systems
- o Logging of parameters and preventive servicing

4. Preventive and Breakdown Maintenance

- Preparation of maintenance schedules for all equipment
- Preventive maintenance to be carried out as per OEM guidelines
- Fault diagnostics, immediate repair/replacement of faulty components
- Use of original spare parts and materials

5. Record Keeping & Reporting

- Logbooks for all equipment (DG sets, panels, UPS, lifts, etc.)
- Daily, weekly, and monthly reports on performance and faults
- Maintenance checklists, history cards, and AMC schedules

• Fault escalation and incident reporting

6. Safety and Compliance

- Adherence to electrical safety norms (IE Rules, IS standards)
- Use of PPE and proper isolation procedures
- Periodic electrical safety audits and fire drills support
- Compliance with local electrical inspectorate and statutory bodies

7. Manpower Deployment

- Deployment of qualified Electricians, Supervisors, and Helpers
- 24x7 shift duty coverage in critical areas like the Hospital block
- Skilled personnel for handling HT/LT panels, UPS, DG sets, etc.
- Immediate mobilization of additional manpower during emergencies

8. Tools & Equipment

- Contractor to arrange standard electrical testing equipment (megger, clamp meter, IR tester, etc.)
- Tools required for routine and emergency maintenance
- Safety equipment like gloves, helmets, harnesses, first aid kits

S.No	Description	Qualification	Category	Duty hours/Shift	Manpow er	Relieve r	Total Manpow er
1	Supervisor (Electrical)	Diploma in Electrical Engineering with 10 year experience/BE electrical with 3year experience/ (electrical supervisory license) in Maintenance Job	Highly Skilled	General Duty	1.00		1.00
2	Lift Operator cum Technician	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	10.00	1.67	11.67
3	Electrician	ITI Certificate with 3 year of Experience/ Wireman license holder compulesary	Skilled	2(per shift) + General Shift 1	6.00	1.00	7.00
4	Substation Attendant Cum DG Operator/Electrici an	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	6.00	1.00	7.00
5	PUMP OPERATOR	ITI Certificate with 3 year of Experience/ Wireman license holder compulesary	Skilled	1 (per shift)	3.00	0.50	3.50
6	Helpers/ khallasi	Experience in Maintenance	Unskilled	3(per Shift)+ 2 General	3.00	0.50	3.50
					29.00	4.67	33.67

Electrical Supervisor(Highly skilled)-1 No's – Scope of Work

1. Supervision and Team Management

- Supervise and coordinate the daily activities of electrical maintenance staff, electricians, and technicians.
- Allocate manpower and resources effectively to ensure smooth operation and timely completion of tasks.
- Monitor work progress and ensure that all electrical tasks are performed as per schedule.
- Verify that technicians follow safety standards and work procedures correctly.
- Conduct regular tool-box talks and ensure adherence to site discipline and PPE compliance.

2. Operation and Maintenance Oversight

- Oversee the operation and maintenance of all electrical systems including HT/LT panels, transformers, UPS systems, DG sets, switchgear, and control panels.
- Supervise preventive and breakdown maintenance of lighting systems, power outlets, distribution boards (DBs), rising mains, earthing systems, and other related installations.
- Ensure timely troubleshooting and rectification of electrical faults or complaints.
- Review inspection and test reports and provide technical inputs or corrective measures as necessary.

3. Safety and Compliance

- Ensure that all electrical operations and maintenance activities are carried out in strict compliance with safety regulations, Indian Standard (IS) codes, and statutory norms.
- Enforce proper lock-out/tag-out (LOTO) procedures during maintenance.
- Conduct safety audits, risk assessments, and inspections to identify and mitigate hazards.
- Report incidents or near-miss events and implement preventive actions.

4. Technical Supervision and Quality Control

- Review electrical drawings, single-line diagrams (SLDs), layouts, and equipment specifications.
- Provide technical guidance for installation, testing, and commissioning of electrical systems and equipment.
- Ensure quality workmanship in installations, wiring, terminations, and panel modifications.
- Supervise testing procedures such as insulation resistance, earth resistance, continuity, and voltage tests.

5. Documentation and Reporting

- Maintain and verify maintenance records, fault logs, test reports, and inventory of spares/tools.
- Prepare and submit daily, weekly, and monthly reports on electrical operations, maintenance activities, and manpower deployment.
- Record and analyze energy meter readings, equipment performance data, and load patterns.
- Assist in preparing material requests, job cards, and maintenance schedules.

6. Coordination and Liaison

- Coordinate with other departments such as HVAC, civil, plumbing, and fire safety for integrated facility management.
- Liaise with vendors, OEMs, contractors, and statutory authorities for inspections, AMC services, and compliance requirements.
- Participate in meetings with clients or senior management to report progress and discuss electrical system requirements or upgrades.

7. Training and Development

- Train and mentor junior staff and technicians in electrical safety, troubleshooting, and standard operating procedures.
- Encourage continuous skill development and upskilling within the electrical team.
- Organize or attend periodic workshops and training sessions on updated technologies or regulatory changes.

8. Miscellaneous Responsibilities

- Take full responsibility for the smooth operation of electrical systems within the premises.
- Ensure standby equipment like DG sets or UPS are tested and ready for emergency use.
- Perform any other duties assigned by the engineer-in-charge, facility manager, or management related to electrical systems.

2. Deployment of Manpower: The appointed Contractor will have to deploy minimum manpower as under.

Electrical Manpower Duty(Skilled) (24*7 Round of Clock)- 7 No's-Scope of Work

1. Operation and Monitoring

- Continuous monitoring and operation of electrical systems, including HT/LT panels, UPS systems, and control panels.
- Operation and maintenance of switchgear equipment such as circuit breakers, relays, isolators, etc.
- Monitoring of power consumption and ensuring proper load balancing.
- Attending to daily complaints related to internal electrical installations, fans, compound lighting, main boards, distribution boards (DBs), and compact rising mains in the designated buildings.
- Maintenance of a complaint register and worker diaries.

Preventive Maintenance Tasks:

- Regular inspection of DBs, main boards, and rising mains.
- Routine checks of electrical systems, including wiring, fixtures, and appliances.
- Identification of faults or hazards.
- Troubleshooting system failures and resolving issues.
- Reviewing electrical blueprints to understand wiring layouts.
- Testing electrical systems using oscilloscopes, voltmeters, and ohmmeters.
- Conducting repair work on old or malfunctioning fixtures.
- Promptly responding to fault calls and requests.
- Recommending replacement of outdated or faulty equipment.
- Preparing and maintaining electrical maintenance reports.
- Installation of new electrical appliances within the building premises.
- Ensuring adherence to safety and performance standards.
- Performing earth resistance testing and insulation resistance testing.
- Recording all maintenance activities and test results in the maintenance register with proper identification references.

2. Maintenance Work

- Routine preventive and breakdown maintenance of all electrical installations.
- Replacement or repair of faulty lights, fixtures, wiring, fans, switches, MCBs, DBs, etc.
- Lubrication, cleaning, and tightening of electrical terminals and components as per the scheduled maintenance plan.
- Maintenance and inspection of earthing and lightning protection systems.

3. Safety Compliance

- Ensuring that all electrical operations comply with applicable safety regulations and Indian Standard (IS) codes.
- Using appropriate Personal Protective Equipment (PPE) and following established safety protocols during all activities.
- Immediate response to emergency situations such as power failures, fire alarms, or electrical hazards.

4. Record Keeping & Reporting

- Maintaining logbooks to record daily readings, operations, breakdowns, and maintenance activities.
- Reporting faults and submitting daily, weekly, and monthly reports to the concerned authority.
- Recording energy meter readings and maintaining historical data for analysis and audit purposes.

5. Support in Installation & Upgrades

- Assisting in the installation, testing, and commissioning of new electrical equipment and systems.
- Coordinating with vendors or Original Equipment Manufacturers (OEMs) for major repairs, upgrades, or technical support.

6. Coordination and Miscellaneous Tasks

- Coordinating with other engineering departments such as HVAC, plumbing, and civil teams to ensure integrated facility maintenance.
- Participating in regular training sessions and safety drills.
- Performing any other electrical-related tasks as assigned by the supervisor or engineer-incharge.

Substation Manpower Duty (Skilled) (24*7 Round of Clock) -7Nos – Scope of Work

1. Operation and Monitoring

- Continuous monitoring and operation of substation systems including HT/LT panels, transformers, circuit breakers, and control panels.
- Routine operation of switchgear equipment such as ACBs, VCBs, SF6 breakers, relays, isolators, and protective devices.
- Monitoring of power supply parameters, voltage levels, current load, and maintaining proper load distribution across feeders.
- Attending to daily complaints related to substation-connected electrical installations, internal electrical systems, compound lighting, main boards, and distribution boards (DBs), and rising mains in all assigned buildings.
- Maintenance of complaint registers, equipment logs, and shift worker diaries for transparency and record-keeping.

Preventive and Predictive Maintenance:

- Regular inspection of substation equipment including DBs, LT panels, rising mains, and bus ducts.
- Routine checks for overheating, loose connections, dust accumulation, or abnormal noise/vibrations in equipment.
- Identification and rectification of faults, hazards, or abnormal conditions in the electrical system.
- Troubleshooting system failures using proper diagnostic tools and techniques.
- Reviewing electrical schematics and wiring diagrams to aid maintenance and repair work.
- Testing of electrical systems using megger (insulation resistance testing), earth testers, voltmeters, ammeters, and oscilloscopes.
- Performing maintenance on old, worn-out, or faulty installations and fixtures.
- Responding promptly to fault calls or system breakdowns.
- Providing technical recommendations for the replacement or upgrading of substation equipment.
- Preparing detailed maintenance and incident reports.
- Assisting in the installation of new electrical equipment and systems.
- Ensuring all operations follow standard safety and performance protocols.

2. Maintenance Activities

- Performing scheduled preventive maintenance and attending to breakdowns of substation components and associated electrical systems.
- Replacement or repair of defective parts such as MCBs, contactors, relays, fuses, lights, switches, and cable terminations.
- Cleaning, lubrication, and tightening of bus bars, cable joints, terminals, and earthing connections as per the maintenance plan.
- Regular inspection and testing of earthing and lightning protection systems, ensuring proper resistance values.

3. Safety Compliance

- Ensuring strict compliance with electrical safety standards and Indian Standard (IS) codes during all operational and maintenance activities.
- Use of appropriate Personal Protective Equipment (PPE) including arc flash suits, gloves, helmets, and safety footwear.
- Strict adherence to lock-out/tag-out (LOTO) procedures during maintenance.
- Immediate response to emergencies such as power outages, equipment failure, fire alarms, or electrical shocks.
- Participation in routine safety drills and mock emergency response exercises.

4. Record Keeping & Documentation

- Maintaining shift-wise logbooks and records for electrical readings, system parameters, maintenance activities, and breakdowns.
- Logging of energy meter readings, transformer oil levels, breaker operations, and load data for analysis.
- Submission of daily, weekly, and monthly performance and fault reports to the supervisor or engineer-in-charge.
- Maintaining historical data and inspection records for audits and preventive planning.

5. Support in Installation, Testing & Commissioning

- Assisting in the installation, testing, and commissioning of new substation equipment such as transformers, panels, and switchgear.
- Coordination with OEMs, contractors, and technical teams for major repairs, upgrades, or retrofitting projects.
- Supporting load testing and system performance verification post-installation.

6. Coordination and Miscellaneous Duties

- Coordinating with other engineering departments (e.g., HVAC, plumbing, fire systems, BMS) for integrated facility operations.
- Participation in technical training sessions, safety briefings, and knowledge-sharing meetings.
- Carrying out any other work related to substation operations and electrical systems as assigned by the engineer-in-charge or facility manager.

Total number of Lift -24 Nos.

1. Operation and Monitoring

- Regular monitoring and inspection of all lifts (passenger, stretcher, goods, etc.) to ensure safe and efficient operation.
- Performing routine start-up and shutdown procedures as per the manufacturer's guidelines.
- Monitoring the lift control panel for any fault indicators or abnormal operations.
- Ensuring lifts are operational during working hours and responding promptly to any malfunctions or emergency stoppages.
- Coordinating with the control room or building management for updates on lift status and emergency calls.

2. Preventive and Breakdown Maintenance

- Conducting scheduled preventive maintenance of lift systems including motors, controllers, door mechanisms, ropes, and brakes.
- Cleaning and lubrication of guide rails, pulley systems, and mechanical moving parts.
- Checking alignment and leveling of lift cars.
- Performing routine inspections of safety gear, buffers, limit switches, and interlocks.
- Promptly attending to breakdowns, lift entrapments, or sudden stoppages and resolving issues to minimize downtime.
- Troubleshooting and repairing faults in electrical wiring, sensors, and control circuits.
- Coordinating with OEMs or AMC providers for major faults or component replacements.

3. Safety Compliance

- Ensuring strict compliance with applicable lift safety codes, standards, and manufacturer guidelines.
- Performing routine safety checks of emergency alarms, intercom systems, and automatic rescue devices (ARD).
- Verifying the proper functioning of overload sensors, brake systems, and emergency lighting.
- Using appropriate safety tools and PPE (Personal Protective Equipment) during maintenance and operation.
- Assisting during periodic statutory inspections by government authorities or third-party inspectors.
- Participating in safety drills related to lift rescue and emergency evacuation procedures.

4. Record Keeping & Reporting

- Maintaining a daily logbook for lift operations, maintenance, and service calls.
- Recording all preventive maintenance activities, breakdowns, fault history, and action taken.
- Submitting daily, weekly, and monthly reports to the engineer-in-charge or facility supervisor.
- Maintaining historical service records for each lift for audit and reference purposes.

5. Support during Installation & Upgrades

- Assisting during the installation, testing, and commissioning of new lifts or modernization of existing lift systems.
- Coordinating with vendors or OEMs for technical inspections, repairs, or upgrades.
- Supporting load testing and certification processes.

6. Coordination and Miscellaneous Duties

- Coordinating with building management, electrical, civil, and fire safety teams for integrated maintenance tasks.
- Attending training sessions and technical workshops on lift operations and emergency procedures.
- Performing any other duties related to lift maintenance and operation as assigned by the engineer-in-charge or management.

Pump Operator -4 Nos 24*7 (Round of clock)—Scope of Work

1. Operation and Monitoring

- Operate and monitor all water pumps, sewage pumps, booster pumps, and associated systems to ensure smooth and uninterrupted service.
- Perform regular checks on the pump control panel for voltage, current, pressure, and flow rates.

- Ensure timely switching ON/OFF of pumps as per schedule or requirement.
- Maintain water level in overhead tanks, underground sumps, and reservoirs as per standard operating procedures.
- Monitor pressure gauges, suction and discharge lines, and ensure optimal performance.

2. Preventive and Routine Maintenance

- Conduct daily inspection of pumps, motors, valves, strainers, pipelines, and control systems.
- Perform routine cleaning, lubrication, and tightening of mechanical parts.
- Check for leakages, vibrations, abnormal noises, overheating, or pressure drops and take corrective action.
- Assist in periodic preventive maintenance as per schedule, including greasing of bearings and alignment of couplings.
- Report any wear and tear, part failures, or abnormalities to the supervisor or maintenance engineer.

3. Breakdown and Emergency Response

- Promptly attend to pump failures, motor trips, electrical faults, or pipeline bursts.
- Assist maintenance teams in troubleshooting and restoring operations in case of breakdowns.
- Ensure alternative pump arrangements during emergencies to maintain uninterrupted water or sewage flow.

4. Record Keeping and Reporting

- Maintain a daily logbook for pump operation timings, running hours, pressure readings, and maintenance performed, and faults attended.
- Record the usage of diesel or power supply for pump sets (if applicable).
- Submit daily, weekly, and monthly reports to the supervisor or engineer-in-charge.
- Keep records of water tank levels and pump performance for inspection and audits.

5. Water Quality and Control

- Ensure that water pumps are operated in a manner that maintains clean and safe water supply.
- Assist in chlorination or basic water treatment processes if required.
- Report any signs of contamination, foul smell, or turbidity to the concerned authority.

6. Safety and Compliance

- Follow all safety procedures during pump operation and maintenance.
- Use Personal Protective Equipment (PPE) such as gloves, boots, helmets, and goggles.
- Ensure proper isolation and lock-out/tag-out (LOTO) procedures during maintenance activities.
- Prevent unauthorized access to the pump house and equipment.

7. Coordination and Miscellaneous Duties

- Coordinate with plumbing, electrical, and civil teams for integrated facility maintenance.
- Support the installation, testing, and commissioning of new pump sets or systems.
- Attend training sessions and emergency drills related to pump operation and maintenance.
- Perform any other duties assigned by the supervisor or engineer-in-charge relevant to pump operations.

Helper / Khalasi -4 Nos. 24*7 (Round of clock) – Scope of Work

1. Assistance in Electrical and Mechanical Works

- Assist electricians, fitters, plumbers, and other technical staff in their day-to-day tasks.
- Carry tools, equipment, and materials to the worksite as per requirement.
- Help in basic electrical tasks such as holding ladders, passing wires, fixing clamps, and cleaning electrical panels under supervision.
- Support mechanical works like pump maintenance, tightening bolts, cleaning mechanical parts, or assisting during equipment installation.

2. Routine Maintenance Support

- Assist in preventive maintenance and routine service activities across all technical departments.
- Clean and lubricate parts, panels, or machinery as instructed.

- Ensure work areas are kept clean, tidy, and free from obstructions after maintenance or repair work.
- Help during the inspection of DBs, control panels, water tanks, and other installations.

3. Material Handling and Logistics

- Load, unload, and transport tools, materials, spares, and consumables within the facility or to designated work areas.
- Organize and store equipment or tools properly in store or workshop areas.
- Maintain cleanliness and proper arrangement in storage rooms.

4. Emergency Assistance

- Provide support during breakdowns, fire drills, or emergency maintenance activities.
- Follow instructions quickly during fault response or shutdown procedures.
- Assist in carrying emergency tools and materials to the fault location.

5. Safety and Housekeeping

- Follow all safety instructions and wear appropriate Personal Protective Equipment (PPE) like gloves, boots, and helmets.
- Keep work areas, pump rooms, substations, electrical panels, and common technical areas clean and safe.
- Report any unsafe conditions or hazards to the supervisor immediately.

6. Coordination and Other Duties

- Work under the direction of the electrician, plumber, fitter, or technical supervisor as per daily job assignments.
- Attend training sessions or safety briefings as instructed by the facility team.
- Carry out any other unskilled or semi-skilled duties as assigned by the engineer-in-charge, supervisor, or technician.

Fire Fighting Manpower – Scope of Work

Job: Operation, maintenance, servicing, monitoring of entire Firefighting system(internal /external system), Domestic water distribution, Fire detection, fighting and safety equipment fitted in this Hospital premises at ESIC Medical College & Hospital, Joka. Kolkata for a period of One year.

- 1. The bidder/agency which will be selected after tender process will be responsible for operation and maintenance of Domestic water distribution (PHE) system, storm water drainage (Pond) pumps and fire safety of the hospital by implementing preventative measure, building safety stranded and to undertake the operation and Repair/Maintenance (Planned Preventive Maintenance, Testing/cleaning/Oiling/greasing) of the entire Domestic water distribution (PHE), fighting and safety equipment fitted in this Hospital premises, which include fire Hydrant, Riser, Sprinkler system, Hose Reel. Butterfly valve, Fire pumps, operation of Fire DG sets, Portable Fire Extinguisher etc. on regularly basis. The agency have to make sure that all the system related to firefighting arrangement fitted in this hospital are fully operational all the time.
- 2. Deployment of Manpower: The appointed Contractor will have to deploy minimum manpower as under.

S.No	Description	Qualification	Category	Duty hours/Shift	Manpo wer	Reliever	Total Manpo wer
1	Supervisor (Fire Fighting)	Diploma in Safety Engineering with 10 year experience/BE Safety Engineering with 3year experience (Supervisory) in Maintenance Job	Highly Skilled	General Duty	1.00	0.00	1.00
2	Fire Fighting Technician	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	6.00	1.00	7.00

3	Helpers/ khallasi	Experience in Maintenance	Unskilled	3(per Shift)+ 2 General	1.00	1.00
						9.00

Scope of Work

1. General Responsibilities

The selected bidder/agency will be responsible for the operation and maintenance of the Domestic Water Distribution (PHE) system, stormwater drainage (pond) pumps, and fire safety systems of the hospital. Tasks include preventive maintenance, testing, cleaning, oiling, greasing, and repair of fire safety equipment such as fire hydrants, risers, sprinkler systems, hose reels, butterfly valves, fire pumps, Fire DG sets, and portable extinguishers. The agency must ensure all fire safety systems remain fully operational at all times.

2. Working Hours

The operation and maintenance services for the Domestic Water Distribution (PHE) system and Fire Fighting Systems/Equipment must be provided **24x7**, including Sundays, festivals, national holidays, and other official holidays.

3. Personnel Qualifications

Fire Supervisor/Fire Officer:

Must hold a Diploma in Safety Engineering with a minimum of 10 years' experience or Safety Engineering with 3 years' supervisory experience. Should be experienced in high-rise building fire safety and familiar with advanced firefighting systems and evacuation procedures. Age: 18–60 years.

o Maintenance Technician (Mechanical/Electrical):

Must have an ITI certificate with 3 years of experience and a valid wireman license. Should be skilled in handling fire alarm panels, smoke detectors, manual call points, pumps, and other fire safety equipment. Must assist the pump operator. Age: 18–60 years.

4. Supervision and Training

The Fire Supervisor must have working knowledge of West Bengal Fire and Emergency Services (WBF&ES) codes and NBC guidelines. Duties include preparing job schedules, conducting training, firefighting coordination, maintaining records/logbooks, and reporting to ESIC officials. One supervisor must be available per shift.

5. Deployment Requirements

The agency must deploy a minimum of three personnel per shift: one pump operator and two firemen. These individuals must have complete operational knowledge of the water and firefighting systems and be capable of conducting firefighting/rescue operations. Daily attendance logs must be maintained and submitted.

6. System Upkeep

The firefighting system and pump rooms must be kept in clean, operational condition at all times.

7. Storm water Management

Operation and maintenance of storm water pond drainage pumps fall under the agency's responsibility.

8. Mock Drills

Weekly fire drills must be conducted with prior approval from hospital authorities. Attendance logs must be submitted.

9. Fire Safety Training

The agency is responsible for quarterly fire safety training for security, housekeeping, maintenance staff, and hospital personnel. Training logs must be maintained.

10. Fire Audits

Internal fire inspections and audits must be conducted quarterly as per WBF&ES and NBC standards. Reports must be submitted.

11. Fire NOC Renewal

Renewal of the Fire NOC from WBF&ES is the responsibility of the agency.

12. Extinguisher Maintenance

Monthly checks and refilling of fire extinguishers must be performed, with detailed records maintained.

13. Additional Repairs/Tests

Any special tests or repairs must be performed as per fire safety norms. Materials required must be approved by ESIC and reimbursed against valid bills.

14. Material Standards

All materials used must be BIS certified or certified by a government-authorized agency. Replacements should match the original manufacturer's specifications.

15. Staff Identification

All deployed staff must be provided with uniforms, ID cards, and nameplates. Fire-resistant clothing must be provided to firefighters.

16. Emergency Response

In case of fire, the agency must liaise with the local fire brigade, submit required documentation, and report to PCRA (Petroleum Conservation Research Association).

17. Tools & Equipment

All necessary tools and equipment must be supplied by the agency free of cost.

18. Shutdown Conditions

Routine shutdowns during office hours are not permitted. Maintenance may be performed after hours or on holidays with prior approval.

19. Contact Details

The agency must provide valid mobile numbers of all deployed manpower.

1. Fire Fighting Supervisor-1 Nos – Scope of Work

1.1 Supervision and Coordination

- Supervise and lead the fire fighting team including operators and helpers.
- Ensure daily inspection and smooth operation of all fire safety systems.
- Allocate duties, monitor performance, and ensure that the team follows all safety protocols.
- Coordinate with electrical, HVAC, plumbing, and civil teams for integrated fire safety compliance.
- To inspect

1.2 System Monitoring and Maintenance

- Oversee operations of fire pumps (jockey, main, and diesel), hydrant lines, sprinkler systems, hose reels, and fire alarm systems.
- Conduct routine inspections of fire panels, alarm circuits, detectors, manual call points (MCP), and annunciation panels.
- Ensure all fire equipment such as extinguishers, fire buckets, and hoses are present and in serviceable condition.

1.3 Documentation and Compliance

- Maintain logbooks for fire system operations, pump testing, inspections, and maintenance records.
- Ensure compliance with IS standards, NBC norms, and local fire authority regulations.
- Coordinate for fire audits, inspections, and drills; assist in preparing inspection reports and action plans.

1.4 Training and Emergency Response

- Conduct regular fire drills and basic fire-fighting training for building occupants and maintenance staff.
- Lead response during fire alarms or emergencies and coordinate evacuation procedures.
- Report any safety violations or system faults immediately and take corrective action.

2. Fire Fighting Operator -7 Nos – Scope of Work

2.1 Operation and Monitoring

- Operate all fire-fighting systems including hydrant pumps, sprinkler pumps, jockey pumps, and diesel-driven pumps.
- Perform routine testing of fire pumps and ensure proper water pressure in the system.
- Monitor fire alarm panels, smoke detectors, MCPs, and fire indicators for proper functioning.

2.2 Inspection and Maintenance

- Check fire water tank levels and ensure valves, pressure gauges, flow switches, and pump controllers are working.
- Assist in the maintenance and repair of fire-fighting pipelines, sprinklers, hose reels, and standpipes.
- Ensure fire extinguishers are refilled and replaced before expiry or as needed.

2.3 Emergency Support

- Immediately respond to any fire-related emergency, activate the fire pump system, and assist in evacuation if needed.
- Coordinate with the supervisor and security personnel during fire incidents or alarms.
- Provide support in operating manual and automatic suppression systems.

2.4 Record Keeping

- Log daily pump test results, alarm panel status, and any discrepancies observed during routine checks.
- Maintain records of extinguisher inspections, fire water tank levels, and fire drill participation.

3. Fire Fighting Khalasi / Helper -1Nos – Scope of Work

3.1 General Assistance

- Assist fire fighting operators and technicians in routine checks, maintenance, and emergency responses.
- Carry tools, fire hoses, and safety equipment to and from the site as required.
- Clean and maintain pump rooms, fire extinguishers, hose cabinets, and hydrant valves.

3.2 Maintenance Support

- Help in the installation, refilling, and shifting of extinguishers and fire safety materials.
- Support inspection teams during fire system testing or maintenance activities.

3.3 Emergency Response

- Assist in fire drills by helping with evacuation routes, crowd management, and fire equipment handling.
- Provide immediate support during fire incidents by following instructions from the supervisor/operator.

3.4 Safety and Housekeeping

- Follow all safety procedures and wear required PPE such as helmets, gloves, and boots.
- Ensure cleanliness in fire pump rooms, water tank areas, and fire hose storage cabinets.
- Report any damaged fire equipment or unsafe practices to the supervisor.

Maintenance Schedule for Fire Fighting, Alarm & Detection Systems, and Domestic Water Distribution System

All maintenance activities must comply with manufacturers' recommendations and be undertaken in consultation with the Officer-in-Charge, ESIC. This brief schedule may be revised to enhance effectiveness. The contractor shall follow the maintenance plan below and maintain a **Fire Fighting System History Card**, recording full equipment details and frequency of checks to ensure 24x7 operational readiness.

1. Fire Hydrant System

Regular Maintenance:

- Ensure Fire-Main System functions within specified limits as per industry standards.
- Routine inspection and maintenance of all valves, accessories, and electrical parameters.
- Address general complaints and replace unserviceable parts promptly.

Monthly Preventive Maintenance:

- Internal cleaning and checking of control panels, pumps, alarms, valves, NRVs, etc.
- Check motor mounting bolts for tightness.
- Inspect alignment of motors and pumps; correct misalignment.
- Replace worn-out gaskets, valve gland packings, and tyre couplings.
- Lubricate and grease pump and motor bearings as required.

Quarterly Preventive Maintenance:

- Complete servicing of pumps, electrical panels, fire alarm panels, valves, NRVs.
- Conduct merger testing and test all electrical parameters.
- Drain and refill fire water tanks if necessary.
- Maintain detailed records of all tests.

Weekly/Monthly Checks:

- Weekly: Visual and physical inspection of hydrants, hoses, and boxes for rust, rot, or damage.
- Monthly: Discharge test using one internal and one external hydrant (preferably from the terrace), confirming auto start of pump.
- Weekly: Greasing of nipples, visual checks of washers, couplings, valve logos, etc.

2. Fire Pumps / Jockey Pump / Control Panel

- Ensure automatic start/stop of Jockey Pumps at set pressure (monthly).
- Starter contact cleaning: Twice a month.
- Insulation resistance test of pump/motor circuits.
- Maintenance of pumps/motors installed in STP/ETP is also included.
- Follow OEM guidelines for all electrical/mechanical inspections.

3. Fire Alarm and Detection System

Responsibilities:

- Fire staff shall monitor the fire alarm panel and peripherals (smoke/heat detectors, MCPs, hooters).
- System software and programming maintenance lies with the AMC contractor.
- Weekly detector checks by fire staff to ensure each detector is tested at least once per quarter.

Schedule:

- Monthly: Visual inspection of all detectors.
- Quarterly: Activation test of at least one detector per floor.
- Monthly: Circuit and panel testing for "fault" condition.
- Quarterly: Circuit and panel testing for "fire" condition.

• Public address system to be manually tested quarterly.

4. Fire Extinguishers (CO₂, ABC, Foam Types)

Refilling & Inspection:

- Annual refilling or earlier if used.
- Pressure check to ensure recommended level.
- Verify discharge path is clear and tamper seal intact.
- Quarterly weight check.
- Shake dry powder type extinguishers quarterly to prevent packing.

Documentation:

- Maintain record/history card for each extinguisher.
- Certification after inspection/refilling.
- Ensure proper placement after use, servicing, or drills.

5. Daily Routine Checks

- Keep the pump room clean and dry; prevent waterlogging and mosquito breeding.
- Clean external surfaces of all equipment.
- Ensure ventilation openings are unobstructed.
- Priming tanks (if available) must be kept full.
- Control panel selector switch must be in **AUTO** mode.
- Log voltage, battery status, and water pressure (at pump room and top floor).
- Inspect entire piping network for leaks or damages and address immediately.

6. Stock & Tools Management

- Maintain adequate stock of essential spares and consumables to minimize downtime.
- Contractor shall supply and maintain:
 - o Electric Arc Welding Machine
 - o Electrodes and accessories
 - o Safety gear for welders
 - o Special tools for breakdown maintenance

7. Joint Inspections & Verification

- All maintenance reports (daily/monthly/quarterly) must be signed off by the Fire Officer, confirming satisfactory completion in his presence.
- Fire detection system checks must be jointly conducted by fire staff and maintenance team.

A. Weekly Maintenance Tasks

1. Fire Pump Room Checks

• Pressurization Pump Test:

- o Operate the test valve to start and stop the pump.
- o Record pressure during start and stop operation.

Pump Operation Test:

- o Run each pump individually for 5 minutes.
- Observe for:
 - Unusual noise or vibration.
 - Burning smell at cable ends.
 - Heating of bearing surfaces.
- Alarm System Check: Ensure all alarms are operational.

• Battery Maintenance (Engine Starter):

- o Check electrolyte level; top up with distilled water.
- o Check specific gravity and cell voltage.
- o Charge battery if required; inspect trickle charger.

2. Wet Riser System Checks

• Hydrant Points (All Floors):

- o Clean internal hydrants.
- o Ensure hydrant areas are free of dumped materials.

• Component Integrity:

- o Check for pilferage/damage (e.g., front glass cover).
- o Inspect piping for leakage; tighten bolts or replace gaskets.

Roof Tank & Downcomer:

Visual inspection for defects.

Auto Operation Test:

- o Operate each hydrant (internal & external) for 1–2 mins.
- o Ensure water is drained properly to prevent flooding.
- o Fire hose reel must rotate freely lubricate if needed.

B. Six-Monthly Maintenance Tasks

Hose Pipe Testing:

- o Roll out and fill with water to check for leaks.
- o Wash and hang vertically in shaded area to dry.
- o Once dry, roll up from female end or mid-fold both ends out.

• Valve Inspection:

o Inspect and lubricate all gate valves (pump room, risers).

• Sprinkler Heads:

- o Clean bulb and head externally.
- o Ensure proper repositioning.

• Corrosion Check:

- o Inspect metallic and GI earthing components.
- o Clean and repaint corroded areas with anti-corrosive paint.

Electrical Control System:

- o Clean contacts, ensure secure terminations.
- Inspect fuses and cable ends; tighten connections.

C. Annual Maintenance Tasks

• Static Tank Cleaning:

o Drain, clean, and refill (or every 2 years if no sediment).

• Sprinkler Piping Flush:

o Flush and ensure clear water flow. Recharge system.

• Suction System Check:

o Inspect strainer, foot valve, and hardware.

• Pump Set Inspection:

- o Check shaft alignment.
- o Inspect anti-vibration mountings.

• Painting Works:

- o Paint external MS parts, excluding couplers and bulbs.
- o Check signage boards for fire safety repaint/replace if needed.

• Fuel Tank Maintenance:

o Inspect and clean for sediment.

• Electrical Testing:

- o Megger test during monsoon.
- o Earth test in summer.

• Engine Oil Change:

o As per running hours and OEM guidelines.

D. Fire Alarm System – Weekly Inspection (Visual and Functional)

• Panel Check:

- o Investigate fault lights.
- o Test all panel lamps using the test button.

• Power Supply Simulation:

o Simulate mains failure and test alarm system.

• Zone Testing:

- Test each zone via sector panel.
- o Confirm AV alarm and sounder activation in both Zonal and C&I panels.

Talkback & PA System:

o Test communication in both directions.

• AC/Ventilation Cut-off Check:

- Ensure AC stops on simulated fire signal.
- o If not interconnected escalate for modification.

E. Associated Items (Weekly/Monthly)

• Fire Exit Lights:

o Confirm operation; clean or replace lamps.

• Fire Lift:

o Confirm operability and Fireman's switch condition.

• Building Electrical Safety:

- o No temporary wiring.
- o No jointed cords on ACs/equipment.
- o No exposed/bare wiring.
- o No heaters in records/storage rooms.
- o Clear space in front of SDBs.

• Joint Inspection (Single Occupancy):

o Conduct with authorized officer from client department.

F. Documentation & Records

- Maintain updated logbooks for:
 - o Preventive maintenance activities.
 - o System health status.
 - o Mock drills and fire training.
 - o Extinguisher servicing.
 - o Pump and DG set maintenance.
- History book to record major repairs and replacements.

MGPS Operator-7Nos – Scope of Work

Operation and Maintenance of MGPS & PSA Plant

The selected bidder/agency, upon finalization of the tender process, shall be responsible for the comprehensive operation and maintenance of the Medical Gas Pipeline System (MGPS) and Pressure Swing Adsorption (PSA) Plant installed at the hospital. The scope includes the implementation of preventive measures, adherence to building safety standards, and undertaking regular operation and repair/maintenance activities.

This shall involve, but not be limited to, planned preventive maintenance (PPM), testing, cleaning, oiling, greasing, and servicing of all MGPS and PSA Plant equipment installed within the hospital premises. The agency must ensure that the entire MGPS arrangement and related systems are kept fully operational at all times, without interruption, to support the hospital's critical care and other medical functions.

2. Deployment of Manpower: The appointed Contractor will have to deploy minimum manpower as under.

S.No	Description	Qualification	Category	Duty hours/Shift	Manp ower	Reliever	Total Manp ower
1	PSA MGPS Operator	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	6.00	1.00	7.00
		Total MGPS Manpower					7

1. Operation and Monitoring

- Operate and monitor the **Medical Gas Pipeline System (MGPS)** including oxygen, nitrous oxide, medical air, vacuum, and other specialized gases used in healthcare facilities.
- Ensure continuous and uninterrupted gas supply to all designated zones such as ICUs, OTs, wards, emergency rooms, etc.
- Monitor pressure gauges, control valves, and alarms to detect any anomalies or pressure fluctuations.
- Start and stop compressors, vacuum pumps, or gas manifolds as per operational requirements and safety protocols.

2. Equipment Supervision

- Operate and maintain gas manifolds, pressure regulators, gas alarm panels, control panels, vacuum pumps, and air compressors.
- Check and maintain terminal units, zone valves, and pressure-reducing stations in all hospital areas.
- Monitor automatic changeover devices for seamless gas supply from primary to secondary sources.

• Keep a close check on **oxygen bank levels** (D-type cylinders, liquid oxygen tanks) and initiate refills/replacement when necessary.

3. Preventive and Routine Maintenance

- Conduct routine inspection of MGPS pipelines, manifolds, compressors, and vacuum systems.
- Clean filters, check leakages, tighten fittings, and ensure all joints are secure.
- Lubricate moving parts of vacuum and compressor systems as per the maintenance schedule.
- Report any abnormalities in pressure, gas odor, or system noise to the concerned authority for corrective action.

4. Safety and Compliance

- Ensure strict compliance with medical gas safety norms and applicable **NFPA**, **HTM 02-01**, and local healthcare guidelines.
- Follow lockout/tag-out (LOTO) procedures before carrying out any maintenance on the system.
- Respond immediately to alarms and gas supply disruptions in critical areas like ICUs, OTs, and emergency zones.
- Use proper PPE and observe safety protocols during operation and maintenance.

5. Record Keeping and Documentation

- Maintain accurate logbooks of gas pressures, compressor/vacuum pump running hours, cylinder replacements, and breakdowns.
- Record the levels of liquid medical oxygen (LMO), cylinder inventories, and refilling schedules.
- Maintain service history, fault records, and maintenance checklists for inspections and audits.

6. Coordination and Emergency Support

- Coordinate with hospital engineering, biomedical, and administrative teams for MGPS-related issues or shutdowns.
- Liaise with gas suppliers for timely cylinder/LMO refills and tank level monitoring.
- Assist during emergency situations such as MGPS failures, low-pressure warnings, or gas leakages.
- Participate in mock drills, hospital safety training, and MGPS awareness programs.

7. Miscellaneous Duties

- Assist in the installation, testing, and commissioning of new MGPS pipelines, terminal units, and manifold systems.
- Maintain cleanliness and hygiene in MGPS plant rooms, manifold areas, and compressor/vacuum equipment zones.
- Perform any other duties assigned by the Engineer-in-Charge or hospital management related to MGPS operations.

Scope of Work: Operation, Maintenance, Servicing & Monitoring of Medical Gas Pipeline System (MGPS)

1. Operation & Monitoring

- Continuous **24x7 operation** and monitoring of the MGPS system, including:
 - o Oxygen, Nitrous Oxide, Medical Air, Vacuum, and any other gases in use.
 - Manifold Room, Liquid Oxygen (LOX) plant, and Medical Air Compressors/Vacuum Pumps.
 - o Valve Boxes, Zone Valve Assemblies, Alarm Panels, and Terminal Outlets.
- Monitoring and recording of gas pressures, flow rates, cylinder usage, and LOX levels.
- Coordinating with gas suppliers for timely refilling of LOX tanks and gas cylinders.
- Switching over between cylinder banks (manual or automatic) as required.
- Immediate action on any **alarm panel alerts** or deviation in gas pressures.
- Ensuring pressure regulation and uninterrupted supply across all zones.

2. Preventive & Routine Maintenance

- Periodic inspection and maintenance of:
 - o Central pipeline distribution networks.
 - o Medical gas outlets and vacuum inlets in wards, OTs, ICUs, etc.
 - o Alarm systems, manifold systems, and pressure regulators.
- Checking for and rectifying leaks, loose connections, and worn-out components.
- Maintenance of filters, pressure gauges, pressure regulators, and valves.
- Calibration and functional check of alarm systems and pressure regulators.
- Ensuring oil-free operation of medical air compressors and dry vacuum pumps.

3. Breakdown Maintenance

- Immediate response to any failure or breakdown.
- Diagnosing faults and restoring services on priority with minimal downtime.
- Replacement of faulty parts with genuine, OEM-approved components.
- Documentation of all breakdowns and corrective actions taken.

4. Safety & Compliance

- Ensuring MGPS operation complies with **NABH/NABL**, **NFPA 99**, and **HTM 02-01** standards.
- Conducting periodic leak tests and pipeline integrity checks.
- Verification of non-interchangeability and proper labelling of gas lines.
- Ensuring color coding, marking, and warning signs are as per norms.
- Coordinating with third-party agencies for annual MGPS certification and audits.

5. Record Keeping & Reporting

- Maintaining logbooks for:
 - o Daily system readings (pressure, flow, tank levels).
 - o Preventive maintenance schedules and reports.
 - o Breakdown records and service reports.
 - Calibration and inspection records.
- Submission of monthly performance and maintenance reports to hospital authorities.
- Recommendations for system improvement, upgrades, or spare procurement.

6. Manpower Deployment

- Deployment of skilled technicians and operators with knowledge of MGPS systems.
- Minimum deployment should include:
 - 1 Supervisor (MGPS certified full time)
 - o 2-3 Trained Technicians (in shifts for 24x7 coverage)
- Personnel must be trained in:
 - o MGPS equipment handling and safety.
 - o First response in case of gas leakage or supply failure.
 - o Fire and emergency evacuation procedures.

7. Training & Awareness

- Periodic training sessions for hospital staff on:
 - o Proper usage of medical gas outlets.
 - o Identifying and reporting MGPS issues.
 - Emergency handling and safety protocols.

a) NATURE OF THE WORK AS REQUIRE: ARM OF ELECTRICAL WORKS

E & M Service's i/c Electrical Internal & External Installations., Street Lights etc.

- i. To attend to day-to-day complaints of Internal E.I & Fans, compound lights, mainboards, DB's, compact rising mains etc. in following buildings, maintenance of complaint register and worker diaries.
- ii. Taking steps for preventing maintenance
 - (a) Checking of DB's mainboard, rising main etc.
 - (b) Routinely inspecting electrical systems such as wiring, fixtures, and appliances.
 - (c) Identifying faults or hazards.
 - (d) Troubleshooting system failures.
 - (e) Reviewing blueprints to understand wiring placement.
 - (f) Testing of electrical systems with oscilloscopes, voltmeters, and ohmmeters.
 - (g) Conducting maintenance repairs on old or faulty fixtures.
 - (h) Responding to fault requests.
 - (i) Providing suggestions for equipment replacement.
 - (j) Writing electrical maintenance reports.
 - (k) Installing new electrical appliances in the building.
 - (l) Adhering to safety and performance standards.
 - (m) Earth testing
 - (n) Insulation testing
- iii. Maintenance activities carried out as per schedule should be noted in the maintenance register. When tests are carried out the test result should be recorded with appropriate identification reference.

Fire Fighting Services, Water Supply i/c Pumps and Sewerage System/Network.

- a. Operation and maintenance of all fire-fighting, fire alarm & PA system installation as specified in Schedule of Work or as directed by the Engineer-in- charge or his authorized representative on 24x7 hours basis.
- b. Performing the daily/weekly/six-monthly checks and taking remedial action for proper maintenance.
- c. Weekly testing: During the weekly testing a particular block shall be taken up and all internal Cleaning of all equipments.
- d. Conducting of fire drills: Fire drills shall be carried out monthly for which caretakers of Campus/ building shall be informed and shall be involved in conducting fire drills. Operation of the system shall be demonstrated so that all users are confident of the system and aware of the duties and responsibilities during a fire. All the fire drills shall be recorded in a register.
- e. Healthiness of the system: The healthiness of the system in Automatic Mode shall be checked through daily testing and grants and adjoining yard hydrants of the same block shall be operated and checked, for automatic functioning of the jockey and

main electric pump. During the subsequent week, different blocks shall be selected so as to ensure that all the internal hydrants and yards hydrants of a block are checked once every month. The details of such weekly testing shall be conducted in presence in JE (E) and PM I in charge to the extent feasible and shall be recorded in the register along with the date, timing and findings. The contractor shall maintain the logbooks of pumps and shall be checked by SITE IN CHARGE concern regularly as per CPWD norms.

- f. Fire Alarm and PA system: The operation and routine maintenance of the same has to be ensured by the agency on a 24x7 hours basis. Routine inspection/ testing of Fire Alarm, Smoke Detectors, Amplifiers, speakers and mike etc. must be done and a record of the same has also to be maintained.
- g. Maintenance of Hermetic sealed CPGI door, including all required accessories.

DG Sets & Sub Station.

- a. Type of work involves Operations, Testing and routine maintenance of sub-station equipment comprising of Transformers, HT Panel, LT Panel, RMU Panel & Capacitor Panel etc. and DG Sets on 24x7 hours basis.
- b. The maintenance work shall be done as per Rules & specifications of CPWD and as per I.E. Rules and acts as amended up to date. The Contractor's personnel will be required to provide maintain the logbook and other records as prescribed by the department. All installations and Sub Station rooms shall be kept clean and safe from the risk of fire/theft/accidents and damage etc.
- c. The routine preventive maintenance of the Sub-Station equipment set shall be carried out during holiday/Sunday without disturbing the office working of the client department.
- d. General servicing of HT Panel & LT Panel. All LT panels and HT panels will be opened after getting shut down and cleaned thoroughly. All nuts& bolts of LT & HT panel, bus trucking shall be tightened. Proper insulating tape is to be used where the PVC insulation is worn out.
- e. Supply of Diesel Mobil oil etc for the operation of D.G. Sets.
- f. The D.G. Set operator shall test the D.G. Set on no-load daily in the morning for 5 minutes run and D.G.Set shall operate in case of failure of normal electric supply from BSES.
- g. Cleaning of D.G. Set, checking of battery connection level of water in radiator & battery etc.
- h. Inspect the Logbook maintained by the operator and analyze the performance parameters like coolant temperature, oil temperature and oil pressure. If there is any deviation from the recommended limits suitable action will be initiated if it is within purview of service visit (suggested for its implementation for satisfactory performance and monitoring)

- i. Study the fuel and oil consumption patterns and ensures these are within manufacturers recommended specifications. Any abnormality will be brought to the notice of higher management and suitable remedial recommendation will be given for taking necessary action from your end.
- j. Check whether daily/weekly maintenance checks are carried out by the operationstaff.
- k. Check belts, hose and battery condition and if required take corrective action.
- 1. Check engine oil and fuel condition visually and their proper storage.
- m. Check all engine electrical system for loose connections.
- n. Run the engine on load and observe the performance.
- o. Inform in advance regarding scheduled maintenance like 'B', 'C' and 'D' checks.
- p. Checking of all power cable and control cable termination tightness of Alternator.
- q. Check Insulation Resistance of Windings at every 1500 hours or once a year of generating set operation.
- r. Advice regarding procurement of necessary spares required for carrying out the above scheduled maintenance checks.
- s. Minor repairs such as replacement of water pump, thermostat, turbo chargers, fuel pump, electronic controllers, harness, starter motor, battery, battery charging alternators, air cleaner, belts, hoses injector and valve adjustment, Pcc calibration (One Time), sensor/safety switch replacement, rocker cover hoses, electrical switches, AVR and radiator fan all fall under the category of minor.
- t. Check Magnetic Pickup Unit sensing of Governor.
- u. Check Actuator response of Governor.

Circuit Breakers:

Hourly:

a) Check Air and Gas pressure.

Daily:

- a) Check the operation of compressors /motors. Check timing and sound.
- b) Check gas density in each shift.

Monthly:

- a) Air cleaning with blower.
- b) Cleaning of circuit breaker body and bushings.
- c) Auxiliary contacts cleaning.
- d) Tightening of nuts and bolts.
- e) Checking breaker Operation (Local/Remote operation).
- f) Check anti-condensation protection.
- g) Check of motor control
- h) Checking and sealing of cable entry holes.
- i) Use of anti-corrosion spray where required.

Quarterly:

- a) Check for SF6 leaks.(Gas leakage test)
- b) Oiling and greasing of all moving parts.
- c) Functional check of trip circuit.
- d) Checking the settings of air and gas pressure switches.

Control & Relay Panels:

- a) Check for any tripping chattering in the electrical parts, abnormal noise, overheating in the panels.
- b) Check whether indication lamps, annunciator lights, bell, buzzers and hooter are working.
- c) Check all terminal cubicles for healthy contacts, minor repairs/services/cleaning etc.
- d) Observe the annunciation window, and there is any alarm then consults the concerned authority.
- e) Check panel for proper closing.
- f) Cleaning of relay cases of dirt etc.
- g) Cleaning the panels, relay covers, blowing dust from inner side of panels.
- h) Voltage of DC supply.
- i) Physical checks of all wiring & connections

Lifts.

- a. The scope of work includes the operation of lifts i/c general upkeep of lifts and lift machine rooms.
- b. The lift car shall be swept and cleaned daily. Following daily checks shall be performed and recorded before putting the lifts in operation:-

Landing Locks:

- (i) Movement of the car with gate open.
- (ii) Try to open the gate when the car is moving.

Car gate switch:

- (i) Movement of the car with gate open
- (ii) Open the gate while the car is moving Door operation safety, functioning of an emergency stop button, call bell, car lights etc.
- c. Any breakdown should be immediately reported to the firm to whom the maintenance contract is awarded by the Department, and the matter should be immediately reported to SITE IN CHARGE concern. Necessary entries in the maintenance register indicating the time of occurrence of fault; nature of the fault, time of its rectification etc. should be recorded. Cleaning of lift machine room frequently.
- d. The agency shall deploy technically trained, skilled, qualified personnel to inspect, service, repair, replace and maintain the equipment.

- e. The persons so deployed shall exercise all reasonable care and due diligence to maintain the equipment in a proper and safe operating condition.
- f. The agency shall in accordance with the terms hereof, regularly examine, lubricate and adjust the equipment and carry out the planned maintenance in a systematic and controlled manner using its developed techniques and expertise. The frequency of examination will depend on the type of equipment and its location.
- g. The agency shall replace all wire ropes as often as in its judgement is necessary to maintain an adequate factor of safety to equalize the tension on all hoisting ropes, repair or replace conductor cables and hoist way & machine room elevator wiring.
- h. The agency shall provide suitable lubricants compound to our rigid specifications.
- i. In performing the services under this contract, The agency will replace (identical or equivalent item) or at its option any component of the equipment rendered defective due to normal wear and tear and arising out of ordinary and reasonable use of the equipment.

HVAC System

- a. Operation and maintenance of installation as specified in Schedule of Work or as directed by the Engineer-in-charge or his authorized representative.
- b. Performing the daily/weekly/six-monthly checks & taking remedial action for proper maintenance.
- c. O & M work shall be done as per rules & specifications of CPWD as amended up to date.
- d. To inspect the chiller once in four months.
- e. To check Refrigerant leakage of the machines.
- f. To rectify the system defeat causing leakage.
- g. To carry the proper functioning of microprocessor and take the controls test.
- h. To check all electrical components, and terminals for proper tightness.
- i. To clean electrical panel and chiller plant room periodically.
- j. To check functioning of water flow switch and interlock with the system.
- k. To check all safety controls for proper functioning and replace if the same is defective.
- 1. All the breakdowns including compressor failure will be attended.
- m. To check Refrigerant filter and drier core. Replace the same, if found necessary.
- n. Supply of all the material/spare parts free of cost EXCEPT electrical spares. (Likes fuses, Incoming electrical controls, cables etc.)
- o. Cooling Tower fan: Service includes general preventive maintenance such as jet pump water servicing, sump cleaning, motor rewinding, mechanical seal replacement, bearing replacement and belt replacement are covered.

- p. Pumps and Motors: Service includes flange to flange maintenance like general cleaning & greasing, rewinding, cable termination, bearing replacement, mechanical seal replacement are covered.
- q. AHU Coil cleaning, Filter servicing, motor rewinding repair, motor bearing repair & replacement, pulley repair, belt replacement, drain tray cleaning, drain hose replacement, Lamp, limit switch replacement.
- r. The Descaling will be done with in the value.

CCTV

- a. Providing, installing, testing & commissioning of PVC-conduit, Laying Cat 6 Cable for fixing of cameras inside ground-floor-lobby, suitable cameras at each podium-floor and suitable cameras at ground-floor.
- b. Conduct monthly inspection and ensure that all equipment, systems and other components are in good working condition
- c. Maintenance of all CCTV systems facilities including additional installation of equipment, shifting and replacement of equipment, of all CCTV system
- d. Technical staff shall be available at all times, including weekends and holidays (24x7x365) as and when required by the Company to ensure expeditious resolution of problems.
- e. Provide performance report (periodically) during the Service Period.

b) Manpower Deployment:

- Deployment of adequate manpower like Electrician, Lift operator, DG Operator, Fire technician, Mason, Plumber, Carpenter, Helpers, Gardner, Sewer man, Supervisor etc. so as to ensure the Smooth functioning of the offices and maintenance of the buildings.
- Manpower attendance register is to be maintained properly. AEBAS attendance is compulsory for manpower.
- Uniform, ID Card, safety shoes and other tools have to be provided to each and every staff by the agency.
- The Working Staff should be professionally qualified and must be trained.
- Number of manpower to deploy at site will be increased or decreased as per the requirement
 of ESIC/WAPCOS Limited. Supervisor required to be deployed at site by Contractor at his
 own cost for smooth function of work at site. Similarly, quantities of item mentioned in the
 BoQ shall be increased or decreased as per the site requirement or ESIC/WAPCOS
 directions.
- Manpower deployment schedule has to be finalized by the contractor as per the WAPCOS/ESIC Guidelines and in consultation with WAPCOS/ Medical Superintendent /Engineer as per respective jurisdiction of buildings.

- c) The contractor will carry out all preventive maintenance / Checks as per CPWD Specification and works procedure.
- d) The scope of work under this contract can be increased/decreased accordingly on same terms and condition as per prevailing DSR/ NDSR (at the time of extension, if any) with rates will be applicable in contract. Any increase in the scope of work shall be in terms of CVC guidelines and with prior approval of competent authority of ESIC
- e) Ensuring that the Contractor(s) implement required Health, Safety & Environmental (HSE) practices at the Construction Sites and they also comply with all statutory obligations relate to workmen deployed at the Site like compliance of Labour laws, minimum wages as per CLC, ESI, EPF & Bonus etc.
- f) Obtaining necessary Statutory Approvals / Permission / Clearances/ Certificates from the concerned Local Bodies & Statutory Authorities like Municipal Corporation, Town Planning Board, Electricity Board / Fire Department, State / Central Pollution Control Boards, State / Central Environmental Authorities etc. as applicable.
- g) Intimating ESIC/WAPCOS about any excess expenditure likely to be incurred over and above the approved estimate and also about possibility of Time Overrun as soon as it comes to its knowledge along with reasons and justifications thereof for necessary approvals from ESIC before committing / incurring the extra / additional expenditure.
- h) All emergent Repair and Maintenance related complaints shall be attended to within twenty four hours and routine/ non-emergent Repairs shall be attended within 48 hours, falling which a recovery of Rs. 1000.00 per event per day shall be made from the subsequent payments to the agency.
- i) In the event of failure to attend the complaint within 03 days, The Authorized officer of ESIC/WAPCOS will get the work done at the risk and cost of the agency and expenditure incurred will be deducted from the subsequent payment of the agency.
- j) The contractor shall compensate ESIC/WAPCOS for any losses incurred by theft, illegal or fraudulent Activities of the manpower deployed directly or through his manpower/contractor
- k) The agency has to maintain daily category wise attendance register recording the name and designation of staff & workers. The attendance shall be marked in register by agency's manager/engineer in charge at the start & closer of each shift. The engineer-in-charge or his authorized representative may check the physical attendance of any staff and worker at any time. If any staff and/or workers found absent without his substitute (duly authorized by

- agency) the penalty shall be recovered from the running or final bills of the agency as per rate quoted by the bidder.
- 1) The engineer-in-charge or his authorized representative may check the performance on day to day basis and if it is found poor performance, penalty of Rs. 50,000 shall be imposed. In case of repetition, penalty shall be increased by 1.00 lakh to 1.5 lakh and after 3rd term contract may be terminated.
- m) Agency shall not execute any work without knowledge of WAPCOS/ESIC. Any increase in the scope of work shall be in terms of CVC guidelines and with prior written approval of competent authority of ESIC then only consider else agency should bear cost and expenditure with his at risk and cost.

The integration between the functions of the various components based on Office building & its premises requirement is of paramount importance.

LIST OF MAKE

Acceptable makes of materials to be used in the work are as follows. In case of non-availability of these makes, after the approval of WAPCOS/ESIC, 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.

ELECTRICAL WORKS

ITEM	MANUFACTURERS NAME
AIR CIRCUIT BREAKER	SCHNEIDER /SIEMENS/ L&T/ABB
MOULDED CASE CIRCUIT BREAKER	SCHNEIDER/ SIEMENS/ L&T/ ABB/
WITH ROTARY OPERATING HANDLE.	POLYCAB
TRANSFORMER / COMPACT	ABB/ SCHNEIDER/ KRILOSKAR/
SUBSTATION	CROMPTON
DIGITAL METERS	EL MEASURE / L&T/ CONSERVE/ TRINITY / NEPTUNE DUCATI
CONTACTORS, TIMERS	SCHNEIDER/ ABB/ L & T/ LEGRAND/ SIEMENS
CAPACITORS / CAPACITOR WITH	SCHNEIDER/ EPCOS/ L & T
RELAY	
VOLTMETER & AMMETER	CONZERVE/ ENERSOL/ HPL
SWITCH GEAR	SCHNEIDER/ SIEMENS/ L&T/ ABB/
	CROMPTON
SELECTOR SWITCH	KAYCEE/ L & T
CURRENT TRANSFORMER	MATRIX/AE/ C&S / G&M
INDICATING LAMP	L & T/ SIEMENS/ AE
PROTECTIVE RELAYS	ABB/ L & T /SIEMENS/SCHNEIDER / GE
MULTI FUNCTIONAL METER	L&T/ LEGREND/ CONZERV

APFC RELAY (MICROPROCESSOR	SYNTRON/ ENERCON/ L & T/ DUCATI/
BASED)	SCHNEIDER
BATTERIES	EXIDE/AMAR RAJA/OKAYA/LUMINOUS
BATTERY CHARGER	UPTRON/VOLTSTAT ELECTRONICS
L.T. / H.T. CABLE	POLYCAB/ HAVELLS/ FINOLEX/ KEI
DC MINIATURE CIRCUIT BREAKER	SCHNEIDER/SIEMENS/POLYCAB/
	LEGRAND
CABLE LUG (TINNED COPPER)	DOWELLS/ MULTI/CAPITAL
CABLE GLAND	PEECO/ COMMET/ GRIPWELL/ POWER
MAIN L.T. PANEL, CAPACITOR	SPC ELECTROTECH/ TRICOLITE/
PANEL &	ADLEC/
DISTRIBUTION PANEL	APPLICATION CONTROL/ PRECISION
CABLE TRAY / RACEWAY	PILCO/CTM
	ENGINEERS/KME/SLOTCO/STEELWAYS
FIRE EXTINGUISHERS	ZENITH/MINIMAX/NEWAGE/ CEASE FIRE
ENERGY ANALYZER METER	CONZERVE/ELEMEASURE/ENERSOL
VOLTMETER & AMMETER	CONZERVE/ ELMEASURE/ ENERSOL
DISTRIBUTION BOARDS WITH	HAGER/LEGRAND/ POLYCAB/L & T/
MINIATURE CIRCUIT BREAKERS,	HAVELLS
RCCB	
PVC INSULATED COPPER	HAVELLS/FINOLEX /POLYCAB
CONDUCTOR SINGLE	
CORE STRANDED WIRES OF 650/1100	
VOLT GRADE	
TELEPHONE TAG BLOCK	KRONE/ TVS R&M
PVC CONDUIT	BEC/AKG/POLYCAB/ RMCON/ ASTRAL
M.S. CONDUIT	BEC/AKG / RMCON/ JINDAL
MODULAR SWITCHES & SOCKETS	LEGRAND/HAVELLS/POLYCAB/ ANCHOR
LV SYSTEM WIRE	SIEMENS/LEGRAND/ AMP/
	HAVELLS/POLYCAB
TV/TELEPHONE OUTLET	SIEMENS/LEGRAND/ HAVELLS/POLYCAB
DATA OUTLET	SIEMENS/LEGRAND/ HAVELLS/POLYCAB
DATA RACK	SIEMENS/APW/LEGRAND/ WIPRO
LIGHT FIXTURE	PHILIPS/HAVELLS/POLYCAB/ WIPRO
LAMPS	PHILIPS/ HAVELLS/ POLYCAB/ WIPRO
CEILING FAN	ORIENT/HAVELLS/CROMPTON
	GREAVES/BAJAJ
EXHAUST FAN WITH LOUVERS	ORIENT/HAVELLS/CROMPTON
	GREAVES/BAJAJ
GEYSER	HAVELLS/ BAJAJ/V-GUARD/ A-O SMITH/
	JAGUAR/ CROMPTON GREAVES
FIRE ALARM SYSTEM	NOTIFIER HONEYWELL/ SIEMENS/
DDEGENGE DETECTOR	TYCO/ EDWARDS/ AGNI
PRESENCE DETECTOR	HAGGER/LEGRAND/PHILIPS
RCC HUME PIPE FOR ELECTRICAL	ISI MARKED OF REPUTED COMPANY
WORKS	CHEMENIC/ALLENI DD A DLEV
PLC	SIEMENS/ALLEN BRADLEY
TELEPHONE / CO AXIAL WIRE	POLYCAB/FINOLEX/HAVELLS
PROFESSIONAL LED PANEL	PANASONIC/ SAMSUNG/SONY

PUBLIC ADDRESS SYSTEM	HONEYWELL/ BOSCH/TYCO/EDWARDS
D.G. SET (ENGINE)	CUMMINS/CATTERPILLAR/STAMFORD/KI
	RLOSKAR
D.G. SET (ALTERNATOR)	STAMFORD/ LERROYSOMMER/
, , , , , , , , , , , , , , , , , , ,	CATTERPILLAR
D.G. ACCOUSTIC ENCLOSURE	JAKSON/STERLING/CATTERPILLER/SUDHI
	R
H.T. PANEL	ABB/ SCHNEIDER/SIEMENS
H.T. TERMINATION KIT	RAYCHEM/DENSON
SMOKE DETECTORS	NOTIFIER HONEYWELL/ TYCO/ SIEMENS
	CERBERUS-PRO/SHRACK
HEAT DETECTORS	NOTIFIER HONEYWELL/ TYCO/ SIEMENS
	CERBERUS-PRO/SHRACK
MANUAL CALL BOX	NOTIFIER HONEYWELL/ TYCO/ SIEMENS
	CERBERUS-PRO/SHRACK
HOOTER/ SOUNDER	NOTIFIER HONEYWELL/ TYCO/ SIEMENS
	CERBERUS-PRO/SHRACK
RESPONSE INDICATOR	NOTIFIER HONEYWELL/ TYCO/ SIEMENS
	CERBERUS-PRO/SHRACK
FIRE PANEL	NOTIFIER HONEYWELL/ TYCO/ SIEMENS
	CERBERUS-PRO/SHRACK
PA AMPLIFIER	HONEYWELL/ BOSCH/HEINRICH/ATIES
PA SPEAKERS	HONEYWELL/ BOSCH/HEINRICH/ATIES
LINE MATCHING TRANSFORMER	HONEYWELL/ BOSCH/HEINRICH/ATIES
GOOSE NECK MIKE	HONEYWELL/ BOSCH/HEINRICH/ATIES
INVERTER	TOPAZ INTERNATIONAL/ LUMINOUS/
	HYTES/ SU- KAM/ MICROTECH
CAMERA WITH ALL ACCESSORIES	AXIS / INPULSE/ IDIS/ BOSCH/PELCO
ROAD BARRIER	NICE/ MAGNETICS/ GODREJ/ GE
CARD READER	SENSORMATIC-USA/ MOTOROLA
	/HONEYWELL(XLS- 3000)
MONITOR	LG/ SAMSUNG/SONY
MULTIPLEXER	SENSORMATIC OR EQUIVALENT
SEQUENCER	ALBA/ VANTAGE
PROXIMITY CARD	MOTOROLA/ HUGHES/
	HONEYWELL/GE/SIEMENS/HID
TELEPHONE TAG BLOCK	CTM
	ENGG/SYSTIMAX/SCHNEIDER/PANDUIT
TELEPHONE CABLES	DELTON / SKYTONE/ CLIPSAL/ HAVELLS
CO-AXIAL CABLES	FINOLEX/ HAVELLS/ POLYCAB
EPABX	ALKATEL/ SIEMENS/ NEC/ AVAYA/
	PANASONIC
CCTV SYSTEM	AXIS / IMPULSE/ IDIS/ BOSCH/
	HONNEYWELL
	TYCO
ACCESS CONTROL SYSTEM	HONEYWELL/ SIEMENS/SYRIS
NURSES CALL SYSTEM	AMTEK/RAULAND/AFCON/DAKSH
VIDEO CONFERENCE SYSTEM	POLYCOM/SONY/SYSCO
AUDIO PROCESSOR	BOSE/BSS/CLEARONE
LICETO I ICOCLODOCIC	E CALI DANI CHLI II(OI IL

BMS	IBM/HP/DELL
CONTROLLER/SOFTWARE CENTRAL	
CONTROL BMS SERVER	
BUILDING MANAGEMENT SYSTEM,	SIEMENS/HONEYWELL EBI/TYCO /
BUILDING MANAGEMENT WEB	SCHNEIDER
BASED SERVER SOFTWARE,	
PROGRAMMABLE & APPLICATION	
SPECIFIER CONTROLLER	
SENSOR & FIELD DEVICES	SIEMENS/KELE/SAUITER RACE
IMMERSION TYPE TEMPERATURE	
SENSORS, FLOW METER, ULTRA	
SONIC THERMAL ENERGY METER,	
OUTSIDE T+RH SENSOR	
WATER LEVEL SWITCHES, FLAME	KELE/ VESKLER/FLIPRO
PROOF LEVEL	
SWITCHES	
DC VOLTAGE TRANSDUCER,	KELE/SITU/OMICRON
CURRENT RELAY	
ROOM TYPE TEMP. SENSOR, CO2	SIEMENS/KELE/TRANE
SENSOR, AMBIENT TEMP. SENSOR	
CO SENSOR	DWYER/KALE/MSR GERMAN
PRESSURE TRANSMITTER	SIEMENS/TRANE/OMICRON
DIFFERENTIAL PRESSURE SENSOR	SIEMENS/TRANE/VESKLER
FIRE SUPPRESSION SYSTEM	SIEMENS/KIDDE/TYCO
HIGH MAST AND POLES	BAJAJ ELECTRICALS / MY FAIR LIGHT/
	PARUTHI ENGINEERING
SERVICE/ PASSENGER ELEVATORS	KONE/SCHINDLER/OTIS

NOTE: Above list of makes is the General List of makes for various items used in the works. However, contractor will select the makes from above list in accordance with the scope of works mentioned for this work and other makes may be ignored. Some makes of material also mentioned in Bill of quantity and tender drawings/images. In case of any discrepancy between makes of material mentioned in Bill of quantity & tender drawings/images AND above "List of Make" then make of material mentioned in Bill of quantity & tender drawings/images will prevail.

VOLUME II

FINANCIAL PROPOSAL

Letter of Transmittal for Financial Bid

Total Cost of Works

Detailed Bill of Quantity

LETTER OF TRANSMITTAL FOR FINANCIAL BID

To

CED (ENVT & CM), WAPCOS Limited Environment Division 76-C, Sector -18, Gurgaon -122015

Subject: "Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)"

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 an 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 for undertaking the aforesaid Project in accordance with the Bidding Documents and the Agreement.

Date:	(Signature, name and designation of the Authorized signatory)
Place:	Name and seal of Bidder

TOTAL COST OF WORKS

Description	Percentage Quoted(below / above / at par)	Total Amount as per % Quoted (excluding GST) (Rs.)
Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)	DO NOT FILL PERCENTAGE HERE	DO NOT FILL COST HERE
Total amount in words:		

DO NOT FILL COST HERE AS IT IS TECHNICAL PROPOSAL FILE

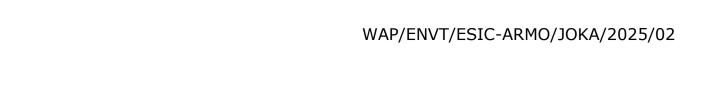
Note:-

- The Bill of quantity of tender along with rate and amount is enclosed at Volume-II-Financial proposal.
- The Performa for filling the percentage is given in Microsoft excel sheet. Bidder shall fill the percentage only up to two decimal place in soft format. The bidder will upload same filled percentage quote in soft Microsoft Excel copy during uploading of financial bid.
- The Bidder shall quote Percentage up to two decimal only in bill of quantity of tender.
- The bidder shall quote keeping in view all associated costs with the project including any out of pocket/ mobilization expenses/ Custom duty (if any), Buildings and other construction/maintenance workers welfare cess, TDS, taxes if any applicable as per Govt. terms, shall be paid by the Contractor.
- It is mandatory to bidders to deposit GST within time limit framed by Govt. of India, if applicable. The Goods and Services Tax (GST), shall be reimbursed to the Agency only after uploading of bills by Contractor on GST Portal to avail Input benefit of GST.

- The company shall be performing all its duties of deduction TDS and other deduction on payment made to the contractor as per applicable legislation in force on the date of submission of bid or to be newly / amended introduced during the execution of the Contract.
- WAPCOS has the right to (i) ask replacement of any workers due to their mis behaviours or lack of performing duties and (ii) terminate the contract due to lack of performing duties; with a one month notice in writing in either cases.
- Conditional Bid will not be accepted under any circumstances
- The staff working in the said work shall not be allowed to carry out any part time jobs inside the zone or shall not be deployed for any other works inside the zone other than ESIC Authority works. If such instance is noticed, shall lead to termination of the contract without any advance notice and lead to further forfeiture of Security Deposit.
- Rate quoted shall be inclusive all the equipments required for the work.
- The financial quote shall be submitted only in the prescribed format.
- ESI 3.25%, EPF13.61%, bonus 8.33% will be Reimbursement from ESIC/WAPCOS after received of ESI, EPF and Bonus Challan as per CLC rules from outsourcing agency.

(Signature, name and designation of the Authorized signatory)

Name and seal of Bidder



Detailed Bill of Quantity

Work Name: "Annual Repair Maintenance and Operation (ARMO) of Electrical Works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)".

	SUMMARY -TOTAL COST Electrical Works					
S.No.	Description	Amount(Rs.)				
1	ELECTRICAL Maintenance excluding GST	11628886.62				
2	Electrical Manpower excluding GST	12235922.00				
3	Total (i)	23864808.62				
4	FIRE Fighting and alram system excluding GST	5887346.55				
5	Fire fighting Manpowerexcluding GST	3346300.00				
6	Total (ii)	9233646.55				
7	PSA + MGPS PLANT SERVICE excluding GST	7622139.05				
8	MGPS and PSA Plant Operator excluding GST	2559900.00				
9	Total (iii)	10182039.05				
E	Sub Total (i+ii+iii)	43280494.23				

^{* *}Above mentioned rates excludes GST and includes labour cess, other services charges and Administrative service Charges per worker as per only latest CLC norms per month quoted by the firm in financial bid shall be commensurate with the administrative and supervisory efforts required for the executing the contract

^{*} Payment shall be released only for executed quantity and manpower as per the direction of Engineer-in Charge/ESIC

Total Manpower for Electrical works

S.No	Description	Qualification	Category	Duty hours/Shift	Manpower	Reliever	Total Manpower	Rates per Month	Total Cost for One Month	Total Cost for one year	Remarks
1	Supervisor (Electrical)	Diploma in Electrical Engineering with 10 year experience/BE electrical with 3year experience/ (electrical supervisory license) in Maintenance Job	Highly Skilled	General Duty	1.00		1.00	32,897.00	32,897.00	394764.00	
2	Lift Operator cum Technician	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	10.00	1.67	11.67	30,475.00	355,541.67	4266500.00	
3	Electrician	ITI Certificate with 3 year of Experience/ Wireman license holder compulesary	Skilled	2(per shift) + General Shift 1	6.00	1.00	7.00	30,475.00	213,325.00	2559900.00	
4	Substation Attendant Cum DG Operator/Electricia n	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	6.00	1.00	7.00	30,475.00	213,325.00	2559900.00	
5	PUMP OPERATOR	ITI Certificate with 3 year of Experience/ Wireman license holder compulesary	Skilled	1 (per shift)	3.00	0.50	3.50	30,475.00	106,662.50	1279950.00	
6	Helpers/ khallasi	Experience in Maintenance	Unskilled	3(per Shift)+ 2 General	3.00	0.50	3.50	27,974.00	97,909.00	1174908.00	
					29.00	4.67	33.67				
	TOTAL MANPOWER WITHOUT GST							12235922.00			

Note:

* General Duty Hours shall be from 9:00am to 5:30 pm and may be vary as per the direction of Engineer In-charge

^{*} Minimum wages as per CLC norms shall be follow on worker time to time by WAPCOS Limited .

^{*} Manpower can be increased or decreased as per the requirement of ESIC/WAPCOS Limited. Payment shall be released to only actual present manpower approved by ESIC/WAPCOS in respective month.

^{* *}Above mentioned rates Excludes GST& Includes labour cess, other services charges and Administrative service Charges per worker as per only CLC norms per month quoted by the firm in financial bid shall be commensurate with the administrative and supervisory efforts required for the executing the contract

Electrical works	for DSR&	Market items	Itams Reference	DSR -202	Specification)
Electrical Works	מאכט זטוו	iviai ket iteilis	items referance	2 D3K -2U24	Specification

SI. No.	DSR/ NDSR	Description of item	UNIT	QTY.	Rate	Amount
		DSR supply ITMS				
1	1706	6 amps. to 32 amps. ratings , SP MCB, "C" curve,10 KA breaking capacity	Each	100	135.00	13500.00
2	1707	6 amps. to 32 amps. ratings , SPN MCB, "C" curve,10 KA breaking capacity	Each	50	394.00	19700.00
3	1709	6 amps. to 32 amps. ratings , TP MCB, "C" curve,10 KA breaking capacity	Each	30	702.00	21060.00
4	1710	6 A to 32 A ratings, TPN MCB, "C" curve, 10 kA breaking capacity	Each	80	869.00	69520.00
5	1730	20 amps. SPN, industrial type socket outlet, with plug top and metal chained cover in sheet steel enclosure	Each	50	680.00	34000.00
6	1431	S.P. 5/6 amps, one way switch, piano type ISI marked	Each	500	10.00	5000.00
7	1433	S.P. 15/16 amps, one way switch, piano type ISI marked	Each	100	48.00	4800.00
8	1434	3 pin 5/6 amps socket outlet, piano type ISI marked	Each	200	19.00	3800.00
9	1435	6 pin 15/16 & 5/6 amps socket outlet, piano type ISI marked	Each	100	60.00	6000.00
10	1452	PVC Batten/ Angle Holder	Each	100	22.00	2200.00
11	1201	20 mm dia. ISI marked, steel conduit	metre	100	73	7300.00
12	1202	25 mm dia. ISI marked, steel conduit	metre	100	93	9300.00
13	1224	20 mm dia. ISI marked, PVC conduit	Metre	2000	21	42000.00
14	1225	25 mm dia. ISI marked, PVC conduit	Metre	1000	29	29000.00
15	1222	50 mm dia. ISI marked, PVC conduit	Metre	100	97	9700.00
16	1211	20 mm sockets	each	500	8	4000.00 1800.00
17	1212	25 mm sockets	each	200	9	
18	1215 1218	50 mm sockets	each	50 200	36 8	1800.00 1600.00
19	1218	20 mm iron staples/ saddles/ screws	each			2000.00
20 21	1219	25mm iron staples/ saddles/ screws	each	200 10	10 22	220.00
22	1229	50 mm iron staples/ saddles/ screws 20 mm PVC bends	each	200	8	1600.00
23	1230	25 mm PVC bends	each each	100	11	1100.00
24	1233	50 mm PVC bends	each	20	47	940.00
25	1234	20 mm PVC couplers	each	1000	6	6000.00
26	1235	25 mm PVC couplers	each	1000	7	7000.00
27	1238	50 mm PVC couplers	each	500	18	9000.00
28	1230	Metal Boxes	cucii	300	10	0.00
29	1216	20 mm metal junction box, one way	Each	100	34	3400.00
30	1217	20 mm metal junction box, two way	Each	100	34	3400.00
31	1239	20 mm PVC junction box, one way	Each	500	18	9000.00
32	1240	20 mm PVC junction box, two way	Each	300	19	5700.00
33	1241	75 mm X 75 mm X 50 mm PVC box	Each	300	22	6600.00
34	1307	100 mm X 100 mm X 60 mm deep metal box	Each	100	35	3500.00
35	1309	150 mm X 150 mm X 60 mm deep metal box	Each	100	53	5300.00
36	1314	200 mm X 300 mm X 60 mm deep metal box	Each	100	112	11200.00
37	1315	250 mm X 300 mm X 60 mm deep metal box	Each	100	139	13900.00
38	1606	200 amps. TPN switch fuse unit with ISI marked HRC fuses	Each	2	7009.00	14018.00
39	1603	100 amps. TPN, switch disconnector fuse unit(Panel mounted type) with ISI marked HRC fuses	Each	2	4346.00	8692.00
40	1101	1.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	Metre	4000	18.00	72000.00
41	1102	Supply of 2.5 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	Metre	3500	28.00	98000.00
42	1103	Supply of 4.0 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	Metre	2000	42.00	84000.00
43	1104	Supply of 6.0 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	Metre	500	63.00	31500.00
44	1105	10 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	Metre	100	106.00	10600.00
45	1106	16 sq. mm ISI marked, FRLS PVC insulated, single core copper conductor cable	Metre	100	164.00	16400.00
46	1225	25 mm dia. ISI marked, PVC conduit	Metre	30	29.00	870.00
47	1212	25 mm sockets	Metre	10	9.00	90.00
48	1219	25mm iron staples/ saddles/ screws	each	10	10.00	100.00
49	1230	25 mm PVC bends	Each	10	11.00	110.00
50	1722	63 A rating, 4 pole RCCB, 30mA	Each	20	2052.00	41040.00
51	1721	40 A rating, 4 pole RCCB, 30mA	Each	20	2290.00	45800.00
52	1739	8 way, SPN, double door, MCB DB	each	5	1624.00	8120.00
	1740	12 way, SPN, double door, MCB DB	each	5	1429.00	7145.00
53 54	1761	8 way (4+24), TPN, vertical type, MCB DB, double door	each	5	7297.00	36485.00

93	2944	Paint	EdCII	1	7040	7840.00
92	1578	, , , , , , , , , , , , , , , , , , , ,	Each	1	7840	7840.00
		400 amps. TPN, TAP OFF Box for compact rising mains including all accessories	Each	1		
90	2533 1576	200 amps. TPN, TAP OFF Box for compact rising mains including all accessories			6400	6400.00
90	2533	XLPE aluminium conductor cable of 33 KV grade as required : 240 sq. mm	Each	1	52629	52629.00
89		Supplying outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core,				
88	2444	300 sq. mm	Each	1	15743	15743.00
87	2443	240 sq. mm	Each	1	15743	15743.00
86	2442	120 sq. mm	Each	1	14009	14009.00
85	2441	70 sq. mm	Each	1	13048	13048.00
84		complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 KV grade as required:				
		telephone cable Supplying outdoor cable end termination with heat shrinkable jointing kit				
83	1113	4 pair, 0.5 mm dia annealed copper conductor, FRLS PVC insulated, unarmoured,	Metre	100	25	2500.00
82	1112	2 pair, 0.5 mm dia annealed copper conductor, FRLS PVC insulated, unarmoured, telephone cable	Metre	100	13	1300.00
81	1111	1 pair, 0.5 mm dia annealed copper conductor, FRLS PVC insulated, unarmoured, telephone cable	Metre	100	8	800.00
80	1450	Astrononical time switch suitable for 3 output (1 output per phase) and suitable for three phase supply	Each	5	7709	38545.00
79	1445	PIR Occupancy sensor	Each	10	3183	31830.00
78	2943	Salt	kg	200	10.80	2160.00
77	2942	Coke	kg kg	200	13.50	2700.00
75 76	2940 2942	Tin solder etc. Charcoal	L.S	30 100	7.20 9.00	216.00 900.00
74	2939	Cleaning materials like soap/ detergent	kg	10	54.00	540.00
73	2938	Cotton waste, cleaning cloth etc.	kg	10	49.00	490.00
72	2858	PVC clip for fixing cable	Each	100	0.45	45.00
70 71	2853 2854	Iron screws, 40 mm X 6 mm Iron screws, 45 mm X 6 mm	Each Each	50 50	1.80 1.80	90.00
69	2852	Iron screws, 35 mm X 6 mm Iron screws, 40 mm X 6 mm	Each	50	1.80	90.00
68	2851	Al. Alloy/ cadmium plated iron screws, 20 mm	Each	200	0.90	180.00
67	2214	Aluminium lugs for 300 sq. mm cable	Each	15	67.50	1012.50
66	2207	Aluminium lugs for 70 sq. mm cable	Each	20	7.43	148.60
65	2205	Aluminium lugs for 25 sq. mm cable	Each	20	4.13	82.60
64	2202	Aluminium lugs for 16 sq. mm cable Aluminium lugs for 16 sq. mm cable	Each	20	3.00	60.00
63	2201	Aluminium lugs for 6 sq. mm cable Aluminium lugs for 10 sq. mm cable	Each Each	20	2.10	42.00
62	2201	Aluminium lugs for 6 sg. mm cable		20	1.58	31.60
61	2130	Brass compression gland for (70 mm) 3½ X 300 sq. Mm 1.1 KV grade cable	Each	10	386.25	3862.50
60	2122	Brass compression gland for (35 mm) 3½ X 50 sq. Mm 1.1 KV grade cable Brass compression gland for (45 mm) 3½ X 95 sq. Mm 1.1 KV grade cable	Each	30	111.00	3330.00 4995.00
59	2120 2122	Brass compression gland for (28 mm) 3½ X 25 sq. Mm 1.1 KV grade cable Brass compression gland for (35 mm) 3½ X 50 sq. Mm 1.1 KV grade cable	Each Each	30 30	75.75 111.00	2272.50 3330.00
		Proce compression gland for (20 mm) 21/ V 25 ca. New 1.1 V// grade call-				
58	1772	2 + 8 way, SPN, prewired MCB DB with extended loose wire box, single door	each	5	2902.76	14513.80
	1773	2 + 12 way, SPN, prewired MCB DB with extended loose wire box, single door	Each	5	4298.81	21494.05

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94	1.8	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm.FRLS PVC insulated copper conductor single core cable etc. As required .				
95	1.8.1	Group A	Point	10	993.00	9930.00
96	1.8.3	Group C	Point	20	1445.00	28900.00
97	1.15	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/recessed steel/PVC conduit including dismantling as required		-		
98	1.15.1	Group – A	Point	20	574.00	11480.00
99	1.15.3	Group – C	Point	30	894.00	26820.00
100	1.14	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.	Foint	30	834.00	20820.00
101	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	100	233.00	23300.00
102	1.14.2	2 X 2.5sq. mm + 1 X 2.5 sq. mm earth wire	Metre	100	275.00	27500.00
103	1.14.3	2 X 4.0 sq. mm + 1 X 4.0 sq. mm earth wire	Metre	80	334.00	26720.00
104	1.14.4	2 x 6 sq. mm + 1 x 6 sq. mm earth wire.	Metre	20	439.00	8780.00
105	1.14.5	2 X 10 sq. Mm + 1 x 6 sq. mm earth wire	Metre	10	570.00	5700.00
106	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conducter ,single core cable in the existing surface/recessed steel/PVC conduct as required				
107	1.17.2	2x1.5sq mm	Metre	150	70.00	10500.00
108	1.17.11	2x2.5sg mm	Metre	150	98.00	14700.00
109	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
110	1.18.2	2 Pair	Metre	10	38.00	380.00
111	1.21	Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
112	1.21.1	20 mm	Metre	200	128.00	25600.00
113	1.22	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc. as required.				
114	1.22	100 mm X 100 mm X 60 mm deep	Each	60	209.00	12540.00
115	1.22	150 mm X 75 mm X 60 mm deep	Each	60	216.00	12960.00
116	9.2	Supplying and making outdoor end termination with cast resin compound including aluminium lugs and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.				
117	9.2.17	3½ X 25 sq. mm	Each	3	1410.00	4230.00
118	9.2.18	3½ X 35 sq. mm	Each	3	1503.00	4509.00
119	9.2.20	3½ X 70 sq. mm	Each	3	1645.00	4935.00
120	9.2.22	3-1/2x120 sq mm	Each	1	1799.00	1799.00
121	9.2.23	3-1/2x150 sq mm	Each	1	2392.00	2392.00
122	9.2.27	3-1/2x300 sq mm	Each	1	3088.00	3088.00
123	9.4	Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.				
124	9.4.17	3½ X 25 sq. mm	Each	3	2478.00	7434.00
125	9.4.18	3½ X 35 sq. mm	Each	3	2478.00	7434.00
126	9.4.20	3½ X 70 sq. mm	Each	3	3363.00	10089.00
127	9.4.22	3½ X 120 sq. mm	Each	1	4538.00	4538.00
128	9.4.23	3-1/2x150 sq mm	Each	1	4538.00	4538.00
129	9.4.27	3-1/2x300 sq mm	Each	1	6107.00	6107.00
130	5.2	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and	Each	10	6855.00	68550.00
		watering pipe etc.with charcoal/ coke and salt as required.				

Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required. 132 5.16 Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required. 133 1.24 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 134 1.24.1 5/6 A switch Each 100 135 1.24.3 15/16 A switch Each 100 136 1.24.4 3 pin 5/6 A socket outlet Each 100 137 1.24.5 6 pin 15/16 A socket outlet Each 100 138 1.24.6 Telephone socket outlet Each 10 139 1.24.7 TV antenna socket outlet Each 10 140 1.24.8 Bell push Each 10 141 1.25 Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate etc. as required. 142 1.27 Supplying and fixing following size/ modules, Gl box alongwith modular base& cover plate etc. as required. 143 1.27.1 1 or 2 Module (125mmX75mm) Each 50 144 1.27.2 3 Module (125mmX75mm) Each 50 145 1.27.3 4 Module (125mmX75mm) Each 50 146 1.27.4 6 Module (125mmX75mm) Each 50 147 1.27.5 8 Module (125mmX75mm) Each 50 148 1.27.6 12 Module (200mmX75mm) Each 50 149 1.26 Supplying and fixing modular plate as required. 150 Supplying and fixing modular plate as required. 151 1.28 Supplying and fixing modular plate as required. 152 1.28 Supplying and fixing modular plate as required. 153 1.28.1 1 or 2 Module (200mmX15mm) Each 50 150 Supplying and fixing modular plate as required. 153 1.28.1 1 or 2 Module (200mmX15mm) Each 50 156 1.28.3 4 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 50 159 1.28.5 8 Module Each 50 150 1.28.5 12 Module Each 50 150 1.28.5 12 Module Each 50 150 1.28.5 12 Module Each 50	13838.00 70.00 103.00 156.00 122.00 197.00 148.00 1440.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00 158.00	69190.00 35000.00 10300.00 15600.00 12200.00 19700.00 2960.00 1480.00 73800.00 20860.00 19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
131 5.6 arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required. Supplying and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required. Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 1.24.1 5/6 A switch Each 1.00	70.00 103.00 156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	35000.00 10300.00 15600.00 12200.00 19700.00 2960.00 1480.00 14000.00 20860.00 19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
Salt as required. Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required. Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. Each 100	103.00 156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00	10300.00 15600.00 12200.00 19700.00 2960.00 1480.00 14000.00 73800.00 20860.00 19620.00 17150.00 22700.00 22700.00 2000.00
132 5.16 Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required. Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 124.1 5/6 A switch Each 100 135 1.24.3 15/16 A switch Each 100 136 1.24.4 3 pin 5/6 A socket outlet Each 100 137 1.24.5 6 pin 15/16 A socket outlet Each 100 138 1.24.6 Telephone socket outlet Each 100 138 1.24.7 TV antenna socket outlet Each 100 124.8 Bell push Each 100 Each 100	103.00 156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00	10300.00 15600.00 12200.00 19700.00 2960.00 1480.00 14000.00 73800.00 20860.00 19620.00 17150.00 22700.00 22700.00 2000.00
133 1.24 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. 1.24.1 5/6 A switch Each 100 135 1.24.3 15/16 A switch Each 100 136 1.24.4 3 pin 5/6 A socket outlet Each 100 137 1.24.5 6 pin 15/16 A socket outlet Each 100 138 1.24.6 Telephone socket outlet Each 100 138 1.24.6 Telephone socket outlet Each 100 1.24.8 Bell push Each 100 1.24.8 Bell push Each 100 1.24.8 Bell push Each 100 1.24.8 Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required. 1.27 Supplying and fixing following size/ modules, Gl box alongwith modular base& cover plate for modular switches increess etc. as required. 1.27.1 1 or 2 Module (75mmX75mm) Each 50 1.27.3 4 Module (125mmX75mm) Each 50 1.27.3 4 Module (125mmX75mm) Each 50 1.27.4 1.27.5 8 Module (125mmX125mm) Each 50 1.28.1 1.27.6 12 Module (200mmX75mm) Each 50 1.28.1 1.28.1 1 or 2 Module as required. 1.28.1 1.28.1 1 or 2 Module 1.28.1 1.28.1 1 or 2 Module 1.28.1 1.28.2 3 Module 1.28.3 4 Module 1.28.3 4 Module 1.28.3 4 Module 1.28.4 6 Module 1.28.5 1.28.3 4 Module 1.28.5 1.28.5 1.28.6 1.28.6 1.28.6 1.28.7	103.00 156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00	10300.00 15600.00 12200.00 19700.00 2960.00 1480.00 14000.00 73800.00 20860.00 19620.00 17150.00 22700.00 22700.00 2000.00
1.24	156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	15600.00 12200.00 12700.00 2960.00 1480.00 1480.00 73800.00 20860.00 19620.00 17150.00 22700.00 16410.00 2000.00
1.24	156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	15600.00 12200.00 12700.00 2960.00 1480.00 1480.00 73800.00 20860.00 19620.00 17150.00 22700.00 16410.00 2000.00
Tequired. Fequired. Fequired. Feach 100	156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	15600.00 12200.00 12700.00 2960.00 1480.00 1480.00 73800.00 20860.00 19620.00 17150.00 22700.00 16410.00 2000.00
1.24.1 5/6 A switch Each 100	156.00 122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	15600.00 12200.00 12700.00 2960.00 1480.00 1480.00 73800.00 20860.00 19620.00 17150.00 22700.00 16410.00 2000.00
1.24.4 3 pin 5/6 A socket outlet Each 100	122.00 197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	12200.00 19700.00 2960.00 1480.00 14000.00 73800.00 20860.00 19620.00 17150.00 22700.00 22700.00 2000.00
1.24.5 6 pin 15/16 A socket outlet Each 100	197.00 148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	19700.00 2960.00 1480.00 14000.00 73800.00 20860.00 19620.00 17150.00 22700.00 16410.00 2000.00
1.24.6 Telephone socket outlet Each 20	148.00 148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00	2960.00 1480.00 14000.00 73800.00 20860.00 19620.00 17150.00 22700.00 16410.00 2000.00
1.24.7 TV antenna socket outlet Each 10	148.00 140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00	1480.00 14000.00 73800.00 20860.00 19620.00 20100.00 22700.00 16410.00 2000.00
1.24.8 Bell push Each 100	140.00 369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	20860.00 19620.00 17150.00 20100.00 22700.00 16410.00
Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required. 142 1.27 Supplying and fixing following size/ modules, GI box alongwith modular base& cover plate for modular switches inrecess etc. as required. 143 1.27.1 1 or2 Module (75mmX75mm) Each 60 144 1.27.2 3 Module (100mmX75mm) Each 60 145 1.27.3 4 Module (125mmX75mm) Each 50 146 1.27.4 6 Module (200mmX75mm) Each 50 147 1.27.5 8 Module (125mmX125mm) Each 50 148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. 150	369.00 298.00 327.00 343.00 402.00 454.00 547.00 40.00 133.00 151.00	73800.00 20860.00 19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
1.25	298.00 327.00 343.00 402.00 454.00 547.00 40.00	20860.00 19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
142 1.27 Supplying and fixing following size/ modules, GI box alongwith modular base& cover plate for modular switches inrecess etc. as required. 1.27 1 or 2 Module (75mmX75mm)	298.00 327.00 343.00 402.00 454.00 547.00 40.00	20860.00 19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
142 1.27 Supplying and fixing following size/ modules, GI box alongwith modular base& cover plate for modular switches inrecess etc. as required. Each 70 143 1.27.1 1 or 2 Module (75mmX75mm) Each 70 144 1.27.2 3 Module (100mmX75mm) Each 60 145 1.27.3 4 Module (125mmX75mm) Each 50 146 1.27.4 6 Module (200mmX75mm) Each 50 147 1.27.5 8 Module (125mmX125mm) Each 50 148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. Each 50 150 1.28 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 70 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 50 155 1.28.3 4 Module Each 50 156	327.00 343.00 402.00 454.00 547.00 40.00	19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
1.27	327.00 343.00 402.00 454.00 547.00 40.00	19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
143 1.27.1 1 or 2 Module (75mmX75mm) Each 70 144 1.27.2 3 Module (100mmX75mm) Each 60 145 1.27.3 4 Module (125mmX75mm) Each 50 146 1.27.4 6 Module (200mmX75mm) Each 50 147 1.27.5 8 Module (125mmX125mm) Each 50 148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. Each 50 150 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 50 152 1.28 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 70 153 1.28.1 1 or 2 Module Each 60 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 50	327.00 343.00 402.00 454.00 547.00 40.00	19620.00 17150.00 20100.00 22700.00 16410.00 2000.00
144 1.27.2 3 Module (100mmX75mm) Each 60 145 1.27.3 4 Module (125mmX75mm) Each 50 146 1.27.4 6 Module (200mmX75mm) Each 50 147 1.27.5 8 Module (125mmX125mm) Each 50 148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. Each 50 150 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 50 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 50	343.00 402.00 454.00 547.00 40.00	17150.00 20100.00 22700.00 16410.00 2000.00
145 1.27.3 4 Module (125mmX75mm) Each 50 146 1.27.4 6 Module (200mmX75mm) Each 50 147 1.27.5 8 Module (125mmX125mm) Each 50 148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. Each 50 150 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 50 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 50	343.00 402.00 454.00 547.00 40.00	17150.00 20100.00 22700.00 16410.00 2000.00
147 1.27.5 8 Module (125mmX125mm) Each 50 148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. Each 50 150 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 70 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	454.00 547.00 40.00 133.00 151.00	22700.00 16410.00 2000.00 9310.00
148 1.27.6 12 Module (200mmX150mm) Each 30 149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. Each 50 150 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 70 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	547.00 40.00 133.00 151.00	16410.00 2000.00 9310.00
149 1.26 Supplying and fixing modular blanking plate on the existing modular plate& switch box excluding modular plate as required. 50 150 151 50 152 1.28 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. 50 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	133.00 151.00	2000.00
149 1.26 switch box excluding modular plate as required. 50 150 151 152 1.28 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	133.00 151.00	9310.00
Switch box excluding modular plate as required.	133.00 151.00	9310.00
151 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. 153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	151.00	
152 1.28 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. Each 70 153 1.28.1 1 or 2 Module Each 60 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	151.00	
152 1.28 metal boxes etc. as required. Each 70 153 1.28.1 1 or 2 Module Each 60 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	151.00	
153 1.28.1 1 or 2 Module Each 70 154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	151.00	
154 1.28.2 3 Module Each 60 155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	151.00	
155 1.28.3 4 Module Each 50 156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30		
156 1.28.4 6 Module Each 50 157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	158.00	9060.00
157 1.28.5 8 Module Each 50 158 1.28.5 12 Module Each 30	402.00	7900.00
158 1.28.5 12 Module Each 30	182.00 211.00	9100.00 10550.00
	272.00	8160.00
INDIDIVIDE AND TIXING 3 DID 5 A CHING FOSE OF THE EXISTING HINCTION BOY/ WOODEN!	272.00	
159 1.33 Supplying that haifing 5 pin, 5 Y certaing rose on the existing junction 50x, Wooden Each 50	87.00	4350.00
Providing and fixing extra conduit down rod of 20 mm dia, 2 X 10 cm length		
wiring with 2 X 1.5 sq. mm FRLS PVC insulated, copper conductor, single core		
160 1.43 Each 50	55.00	2750.00
cable including painting etc. as required. (Note : More than 5 cm length shall be		
rounded to the nearest 10 cm and 5 cm or less shall be ignored)		
161 1.51 Installation of exhaust fan in the existing opening, including making good the Each 20	207.00	4140.00
damage, connection, testing, commissioning etc. as required.	207.00	4140.00
Painting of ceiling fan in installed position with one or more coats of spray		
162 1.52 painting with synthetic enamel paint of approved brand and manufacture to give Each 20	154.00	3080.00
an even shade, including cleaning of surface with detergent etc as required.		
Supplying and fixing suitable size GI box with modular plate and cover in front on		
163 1.56 surface or in recess, including providing and fixing 2 nos. 3 pin 5/6 amps modular Each 30	676.00	20280.00
cocket outlets and 2 nos 5/6 ames modular switches, connection ats as required		
socket outlets and 2 nos 5/6 amps modular switches, connection etc. as required. Supplying & fixing suitable size GI box wih modular plate and cover in front on	+	
1.57 surface or in recess i/c providing and fixing 25 amp modular socket outlet and 25 Each 20	727.00	14540.00
Amps modular SP MCB, "C" curve including connection, painting etc. as required.		
Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild		
165 2.21 steel, at least 2 mm thick, and vitreous enameled white on both sides, and with Each 30	269.00	8070.00
inscription in single red colour on front side as required.		
Providing and fixing H.T. danger notice plate of 250 mm X 200 mm, made of mild		
steel, at least 2 mm thick, and vitreous enameled white on both sides, and with Each 10	292.00	2920.00
inscription in single red colour on front side as required.		
Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm		
167 6.2 long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base Each 10	518.00	5180.00
plate including holes etc. complete as required.		
Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any		
168 other metallic object) by riveting / nut bolting/ sweating and soldering etc as Each 10	113.00	
required.		1130.00

169	6.7	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	Mtr	10	126.00	1260.00
170	6.8	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)	Mtr	10	197.00	1970.00
		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1				
171	7.1	KV grade of following size direct in ground including excavation, sand cushioning,				
172	7.1.2	protective covering and refilling the trench etc as required.	N.4+r	200	405.00	91000 00
172 173	7.1.2	Above 35 sq. mm and upto 95 sq. mm Above 95 sq. mm and upto 185 sq. mm	Mtr Mtr	200 100	405.00 422.00	81000.00 42200.00
174	7.1.3	Above 185 sq. mm and upto 400 sq. mm	Mtr	100	474.00	47400.00
1/4		Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power		100	474.00	47400.00
175	7.7	cable of 1.1 KV grade of following size on wall surface as required.				0.00
176	7.7.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	Metre	200	130.00	26000.00
177	7.7.3	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	Metre	100	153.00	15300.00
178	7.8	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power				0.00
		cable of 1.1 KV grade of following size on cable tray as required Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)				
179	7.8.2		Metre	100	92.00	9200.00
180	7.8.3	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	Metre	100	115.00	11500.00
		Supplying and laying of following size DWC HDPE pipe ISI marked along with all				
		accessories like socket, bend, couplers etc. conforming to IS 14930, Part II				
181	14.16	complete with fitting and cutting, jointing etc.direct in ground (75 cm below				
101	14.10					
		ground level) including excavation and refilling the trench but excluding sand				
		cushioning and protective covering etc. , complete as required.				
182	14.16.1	63 mm dia (OD-63 mm & ID-51 mm nominal)	Metre	500	247.00	123500.00
183	14.16.2	90 mm dia (OD-90 mm & ID-76 mm nominal)	Metre	100	290.00	29000.00
184	14.16.3	120 mm dia (OD-120 mm & ID-103 mm nominal)	Metre	100 100	368.00	36800.00
185	14.16.5	200 mm dia (OD-200 mm & ID-175 mm nominal) Providing and fixing following capacity TP&N disconnector fuse switch unit inside	Metre	100	668.00	66800.00
186		the existing panel board with ISI marked HRC fuses including drilling holes in				
187	2.1.4	cubicle panel, making connections, etc. as required. 125 A TP&N	Each	2	7189.00	14378.00
188	2.1.6	200 A TP&N	Each	2	9689.00	19378.00
100	2.1.0	Providing and fixing following rating and breaking capacity and pole MCCB with			3003.00	15570.00
189		thermomagnetic release and terminal spreaders in existing cubicle panel board				
		including drilling holes in cubicle panel, making connections, etc. as required.				
190	2.2.1	100 A, 16 KA,TPMCCB	Each	0	3777.00	0.00
191	2.2.2	125 A, 16 KA,TPMCCB	Each	0	4821.00	0.00
192	2.2.3	200 A, 16 KA,TPMCCB	Each	0	5992.00	0.00
193	2.2.7	250 A, 35 KA,TPMCCB	Each	0	13881.00	0.00
194	2.2.9	400 A, 35 KA,TPMCCB	Each	0	21586.00	0.00
195	2.2.13	100 A,30KA,FPMCCB	Each	0	7723.00	0.00
196	2.2.15	200 A,36KA,FPMCCB	Each	0	15206.00	0.00
197	2.2.18	400 A,50KA,FPMCCB	Each	0	42665.00	0.00
198	2.13.1	40A 4 pole isolator	Each	50	970.00	48500.00
199	2.13.2	63A 4 pole isolator Total DSR rates only for supply & fixing items	Each	50	1034.00	51700.00 1494929.00
		Total ban rates only for supply & fixing feems				1434323.00
		TOTAL	DSR (Supp	ly item + supp	ly and fixing)	3366028.63
		NDSR ITEMS				
		Supplying of approved make exhaust fan heavy duty with mounting frame, blades				
201	NDSR	AC 230-250 complete connection and including, frame bolt/anchor hole fasteners				
		etc. complete finished and as required.				
202	NDSR	380mm sweep RPM 900 /1400	Each	15	3271	49065.00
203	NDSR	450mm sweep RPM 900 / 1400	Each	5	4259	21295.00
204	NIDCD	Supplying, erection and testing of approved make air circulator fan A.C. 230-250				
204	NDSR	volts with blades speed regulator etc duly wired with all necessary material				
	NDSR	complete as required Air circulator wall mounting fan				
205	NDSR	450 mm sweep	Each	15	5149	77235.00
200	NDSR	Air circulator pedestal fan		1.7	31-3	,,233.00
206	NDSR	450 mm sweep	Each	15	5741	86115.00
		i the state of the				

		Supplying, erection and testing of approved make wall mounting fan oscillating				
		type with base, blades, guard, speed regulator etc. AC 230-250 volts with				
207	NDSR	connections and including raw bolt/anchor hole fastener etc. complete finished	Each	10	2478	24780.00
		and as required. 300 mm sweep				
		Supplying, installation/fixing, and testing of approved make exhaust/fresh Air				
		inline fan Ac 220-240V, 50 Hz size 150mm (6 inches) 23-25 watts including frame				
208	NDSR	, , , ,				
		bolt/ anchor hole fastners etc. having fully copper winding motor, silent				
200	NDCD	operation and delightful aesthetics complete including connections.	Each	10	2048	20490.00
209	NDSR	150mm (SS Finished) Supply of Linear profile suspended LED lumanaire, of 32/40 Watt having color	Each	10	2048	20480.00
		temp upto 6500K & having 20000 burning hrs life with minimum @ L 70, system				
		lumen output should be minimum with efficacy>80lm/W. LED driver PF > 0.9,				
		THD < 20% & surge protection 5KV. The colour rendering index of LED light				
		should be more than 80. Housing made of pressure die cast aluminium / CRCA				
210	NDSR	powder coated frame with high transmission diffuser. Submission LM 80-08 Form	Each	10	7478	74780.00
		LED Source Manufacturer & LM79-08 / IS16106 from NABL approved lab.				
		Manufacturer manadatory. i/c mounting arrangment, connection ladder wire,				
		testing etc. to complete the job. Guarantee as per tender agreement				
		condition.Make : Havels,philips and any approved by ISI				
		Supply of street light of 150 watt with high power LED of 3 to 6 Watt each on				
		existing bracket assembled on single MCPCB and additional unique peanut lens				
		on each LED, system lumens output with efficacy>120 lm/Watt. luminiare having				
		color temp upto 6500K & 50000 hrs. burning life with minimum @ L 70, The				
211	NDSR	colour rendering index of LED light should be more than 70. Luminiare comprises	Each	30	12000	360000.00
		of driver, PF> 0.95 & surge protection 10KV. Housing made of pressure die cast				
		aluminium with heat resistant flat glass, IP65 protection. Submission LM 79-				
		08/IS16106 (2012), IEC60598, IEC61347 i/c connection ladder ,wire, testing etc.				
		to complete the job.Make : Havels,philips and any approved by ISI			+	
		Supplying flood light with high power LED of 3 to 6 Watt each assembled on				
		single MCPCB and additional unique peanut lens on each LED, system lumens				
		output with efficacy>120 lm/Watt. luminiare having color temp upto 6500K &				
212	NDSR	50000 hrs. burning life with minimum @ L 70, The colour rendering index of LED				
		light should be more than 70. Luminiare comprises of driver, PF > 0.95 & surge				
		protection 10KV. Housing made of pressure die cast aluminium with heat				
		resistant flat glass, IP65 protection. Submission LM 79-08/IS16106 (2012),				
213	NDSR	IEC60598, IEC61347i/c connection wire, testing etc. to complete the job. 60/50Watt, color temp 3000-6500k as required.	Each	5	5000	25000.00
214	NDSR	90/100Watt, color temp 3000-6500k as required.	Each	10	8500	85000.00
		Supplying, & testing of approved make flexible LED strip comprising of 60 LED per				
		meter W/O driver for direct mounting complete with all accessories including				
215	NDSR	connection lead, fixing, connection as required. Submission LM 79-08/IS16106				
		(2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.				
		Flexible LED strip 24Watt/25Watt - 5 M indoor cove light W/O Driver IP 20 -33				
216	NDSR	Treatible 225 Strip 244 Vatey 25 Vate 5 111 mason cove night vi/ 5 5 NVCi ii 25 35	Each	25	1236	30900.00
		Supplying of LED fire signage i/c 6V. 9AH, lithium battery sealed 2hrs backup				
217	NDSR	double side hanged/fixed on wall or ceiling etc. as required with necessary	Each	10	7093	70930.00
21/	NDSK		Lacii	10	7055	70330.00
		material to complete the job. Guarantee as per tender agreement condition.			+	
		Supply of surface mounting type LED light fixture, LED of 1 to 3 Watt each				
		assembled on single MCPCB, having color temp upto 6500K & having 50000				
		burning hrs. life with minimum @ L 70, system lumen output should be minimum				
218	NDSR	with efficacy>100 lm/Watt. LED driver, PF> 0.95, THD < 20% & surge protection				
		4KV. The colour rendering index of LED light should be more than 70. Housing				
		made of CRCA powder coated frame with glare free diffused polycarbonate				
		cover. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection				
219	NDSR	wire, testing etc. to complete the job. LED luminiare 2' X 2', 36Watt, color temp 3000-6500k as required.	Nos	800	3103	2482400.00
417	אכשוו	TEED IGHINITIALE 2 A 2, 30 Watt, color temp 3000-0300k as required.	1405	500	2102	2702400.00

		LED Signage Board - Design, fabrication, supply and fixing 3D LED Sign Board of				
		size 15ft (width) x 4ft (height) ,of The English , Hindi & Bengali letters having 2 ft				
		height and 2.5 inch depth made with 3mm thick acrylic sheet (as per ESIC				
		specified colours specification). The base of the letter should be of ACP sheet of				
		minimum 3mm thickness, The letters will be fixed on 4mm thick perforated ACP				
		sheet (Alstone/Alumax/AluDecor or equivalent make), The acrylic letters will be				
		fitted with LED lighting with Samsung LED modules 12V DC (IP67) water proof				
220	NDCD		Naa	2	CE000	120000 00
220	NDSR	along with water proof adaptor (Hi-Tech or equivalent),cables, plug and sockets,	Nos	2	65000	130000.00
		as per site requirement. Adequate number of LED modules should be provided in				
		the letter to ensure uniform and bright illumination during night as per the				
		satisfaction of the Enginner-in-charge. The LED modules shall have a warranty of				
		2 years. The logo of ESIC will be 5.5 ft high, 2.5 inch in depth made of acrylic with				
		UV printing on acrylic with Samsung LED modules and accessories as per				
		specification mentioned in 1 (c) above. Letters in the logo will be laser cut				
		embossed with 3mm thick ACP sheet as base.				
		Supply of surface mounting LED down lighter, LED of 1 to 3Watt each assembled				
		on single MCPCB, having color temp upto 6500K & having 50000 burning hrs. life				
		with minimum @ L 70, system lumen output should be minimum with				
		efficacy>100 lm/Watt. LED driver PF > 0.95, THD < 20% & surge protection 4KV.				
221	NDSR	The colour rendering index of LED light should be more than 70. Housing made of				
		pressure die cast aluminium/CRCA powder coated frame with glare free diffused				
		polycarbonate cover. Submission LM 79- 08/IS16106 (2012), IEC60598,				
222	NDCD	IEC61347i/c connection wire, testing etc. to complete the job	Nos	1000	920	920000 00
222	NDSR NDSR	14/15 Watt, color temp 3000-6500k as required. Supply of 9 watt LED bulb of approved make.	Nos Each	1000 500	820 110	820000.00 55000.00
		Supply of 25/27 watt 50Hz 230 volt led tube light of approved make such as				
224	NDSR	phillips, havells etc.	Each	500	722	361000.00
		Supply of MH lamp single ended (complete set type ISI marked of approved make				
225	NDSR	as required as per specification				
226	NDSR	150 Watt	Each	5	891	4455.00
		Rewinding of exhaust/fresh Air inline fan Ac 220-240V, 50 Hz appropriate size by				
		copper enameled wire of suitable gaugeincluding all required material, insulation,				
227	NDSR	varnishing, connection leads, oiling .greasing etc complete with testingincluding	Each	35	3600	126000.00
		dismantling & refitting of fan at site. Scrap old material is not returnable to the				
		department.				
228	NDSR	Bollard LED 8-10 Watt cylindrical shape height > 700mm, color temp 3000-6000k	Each	5	4614	23070.00
		Repairing and re-winding of A.C ceiling fan of all size complete with all required			+ +	
229	NDSR	materials.	Each	400	640	256000.00
230	NDSR	Replacement ball/ baring /bush of A.C Ceiling fans.	Pair	100	160	16000.00
		Repairing and re-winding of A.C stand fan of all size complete with all required				
231	NDSR	materials.	Each	50	730	36500.00
232	NDSR	Replacement of 2.5 M.F.D fan condenser.			25	1 1000 00
	NDCD	[Replacement of 2.5 M.F.D fall condenser.	Each	400	35	14000.00
233	NDSR	Replacement of 4 M.F.D Stand fan condenser.	Each Each	400 50	50	2500.00
233 234	NDSR					
234	NDSR	Replacement of 4 M.F.D Stand fan condenser.	Each Roll	50 45	50 16	2500.00 720.00
		Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm.	Each	50 45 125	50	2500.00 720.00
234 235 236	NDSR NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch.	Each Roll Metre Each	50 45 125 5	50 16 18 3500	2500.00 720.00 2250.00 17500.00
234 235 236 237	NDSR NDSR NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top.	Each Roll Metre Each Each	50 45 125 5 200	50 16 18 3500 45	2500.00 720.00 2250.00 17500.00 9000.00
234 235 236 237 238	NDSR NDSR NDSR NDSR NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top.	Each Roll Metre Each Each Each	50 45 125 5 200 100	50 16 18 3500 45 75	2500.00 720.00 2250.00 17500.00 9000.00 7500.00
234 235 236 237 238 239	NDSR NDSR NDSR NDSR NDSR NDSR NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch	Each Roll Metre Each Each Each each	50 45 125 5 200 100	50 16 18 3500 45 75 292	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00
234 235 236 237 238 239 240	NDSR NDSR NDSR NDSR NDSR NDSR NDSR NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type	Each Roll Metre Each Each Each Each Each	50 45 125 5 200 100 10 3	50 16 18 3500 45 75 292 600	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00
234 235 236 237 238 239 240 241	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor I&t make	Each Roll Metre Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2	50 16 18 3500 45 75 292 600 9800	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00
234 235 236 237 238 239 240 241 242	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/SA for street light panel indoor type MNX 95 3 pole contactor I&t make MNX 70 3 pole contactor I&t make	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3	50 16 18 3500 45 75 292 600 9800 7400	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00 19600.00
234 235 236 237 238 239 240 241 242 243	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2	50 16 18 3500 45 75 292 600 9800 7400 2100	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00 19600.00 22200.00
234 235 236 237 238 239 240 241 242 243 244	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor I&t make MNX 70 3 pole contactor I&t make Thermal overload relay L/ T make analog timmer for street light control	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2	50 16 18 3500 45 75 292 600 9800 7400 2100 2060	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4200.00
234 235 236 237 238 239 240 241 242 243 244 245	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 2 2	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33	2500.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00
234 235 236 237 238 239 240 241 242 243 244	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor I&t make MNX 70 3 pole contactor I&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs.	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2	50 16 18 3500 45 75 292 600 9800 7400 2100 2060	2500.00 720.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4200.00 4120.00 660.00
234 235 236 237 238 239 240 241 242 243 244 245 246	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MINX 95 3 pole contactor I&t make MINX 70 3 pole contactor I&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs.	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 2 2 20 25	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10	2500.00 720.00 720.00 2250.00 17500.00 9000.00 7500.00 19600.00 19600.00 4200.00 4120.00 660.00
234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor I&t make MNX 70 3 pole contactor I&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB)	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 2 2 20 25 30 5	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800	2500.00 720.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4120.00 660.00 250.00 4500.00
234 235 236 237 238 239 240 241 242 243 244 245 246 247 248	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital wolt Metre Digital multiMetre	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 2 2 20 5 5 5 20 3	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200	2500.00 720.00 720.00 7250.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4200.00 4120.00 660.00 250.00 11000.00 9000.00
234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 15 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/SA for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital multiMetre Selector switch	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 2 20 25 30 5 5 5	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800 3240 360	2500.00 720.00 720.00 17500.00 9000.00 7500.00 1800.00 19600.00 4200.00 4120.00 4500.00 11000.00 9000.00 6480.00 3600.00
234	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital volt Metre Digital multiMetre Selector switch Aviation obstartion light	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 3 2 3 2 2 2 20 25 30 5 5 5 5 2	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800 3240 360 4500	2500.00 720.00 720.00 17500.00 9000.00 7500.00 1800.00 19600.00 4200.00 4120.00 660.00 250.00 4500.00 11000.00 9000.00 6480.00
234	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital multiMetre Selector switch Aviation obstartion light 4 way bake-lite connector strip	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 3 2 3 2 2 2 20 25 30 5 5 5 2	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800 3240 360 4500 178	2500.00 720.00 720.00 720.00 17500.00 9000.00 7500.00 1800.00 19600.00 4200.00 4120.00 660.00 250.00 4500.00 11000.00 9000.00 6480.00 3600.00
234	NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay L/T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital multiMetre Selector switch Aviation obstartion light 4 way bake-lite connector strip sign board smps 33A,400W	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 20 25 30 5 5 2 10 2 5 10 10 10 10 10 10 10 10 10 10	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800 3240 360 4500 178 1690	2500.00 720.00 720.00 720.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4200.00 4120.00 660.00 250.00 41000.00 9000.00 6480.00 3600.00 9900.00 8900.00
234	NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor I&t make MNX 70 3 pole contactor I&t make Thermal overload relay L/ T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital multiMetre Selector switch Aviation obstartion light 4 way bake-lite connector strip sign board smps 33A,400W street light junction box(sintex make)	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 3 2 3 2 2 2 20 25 30 5 5 5 2	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800 3240 360 4500 178	2500.00 720.00 720.00 720.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4200.00 4120.00 660.00 250.00 41000.00 9000.00 6480.00 3600.00 9900.00 8900.00
234	NDSR NDSR	Replacement of 4 M.F.D Stand fan condenser. Supply of PVC insulated tape 12mm. Supply of copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make Supply of 63 Amps. TPN rotary Main switch. Supply of 5 Amps. 3 pin top. Supply of 15 Amps. 3 pin top. Push bottom N/O, N/C switch current transformer 100/5A for street light panel indoor type MNX 95 3 pole contactor l&t make MNX 70 3 pole contactor l&t make Thermal overload relay L/T make analog timmer for street light control Supply of 16 Sqm. Size copper lugs. Supply of 6 Sqm. Size copper lugs. LED indicator for panel(230 v RYB) Digital Ampere Metre Digital multiMetre Selector switch Aviation obstartion light 4 way bake-lite connector strip sign board smps 33A,400W	Each Roll Metre Each Each Each Each Each Each Each Each	50 45 125 5 200 100 10 3 2 3 2 2 20 25 30 5 5 2 10 2 5 10 10 10 10 10 10 10 10 10 10	50 16 18 3500 45 75 292 600 9800 7400 2100 2060 33 10 150 2200 1800 3240 360 4500 178 1690	2500.00 720.00 720.00 2250.00 17500.00 9000.00 7500.00 2920.00 1800.00 22200.00 4200.00 4120.00 660.00 250.00 4500.00

258	NDSR	Supply of following size board cover for existing board (Hylam make 3 mm thick)				
259	NDSR	150mm x 100mm	Each	20	72	1440.00
260	NDSR	180mm x 100mm	Each	20	78	1560.00
261	NDSR	LED batten 5 watt, 1Feet	Nos	20	315	6300.00
262	NDSR	Adopter for led celling light	Nos	20	800	16000.00
262	NDCD	Supply as per specification call bell/buzzer of approved make with necessary				
263	NDSR	materials complete.				
264	NDSR	Ding dong bell	Each	50	130	6500.00
265	NDSR	Remote/cordless bell	Each	10	890	8900.00
266	NDSR	Supply of PVC insulated copper flexible speaker wire twin FRLS 1100 Volts as per				
		IS:694-1990 of approved make			20	1150.00
267	NDSR	(32/0.2 mm) Twin core 1.00 sq.mm	mtrs	58	20	1160.00
		Painting of poles Removing of old paint from steel and other metallic surface and making surface				
268	NDSR	even.	sqmt	10	57	570.00
		Prima coat over new steel and other metallic surface with red oxide zinc				
269	NDSR	chromide paint complete with supply of material labour etc. including	sqmt	10	76	760.00
		preparation of surface.	- 1			
270	NOCO	Prima coat with aluminium paint, brushing complete with material and labour		10	06	050.00
270	NDSR	including preparation of surface	sqmt	10	96	960.00
		Supply of XLPE insulated power cable (conforming IS-7098 Part-I) 1100 Volt				
271	NDSR		mtrs	150	195	29250.00
		grade,10 sqmm 4 core ISI marked with alu. stranded /solid conductor				
		Supply of XLPE insulated power cable (conforming IS-7098 Part-I) 1100 Volt				
272	NDSR		mtrs	150	370	55500.00
		grade,16 sqmm 4 core ISI marked with alu. stranded /solid conductor				
273	NDSR	supply of Weather proof 35 sq mm. 4 core pvc/ xlap ARMOURED cable with aluminium conductor 650/1100 v grade as required	mtrs	20	515	10300.00
		supply of Weather proof 95 sq mm. 4 core pvc/ xlap ARMOURED cable with				
274	NDSR	aluminium conductor 650/1100 v grade as required	mtrs	20	700	14000.00
		supply of Weather proof 120 sq mm. 4 core pvc/ xlap ARMOURED cable with				
275	NDSR	aluminium conductor 650/1100 v grade as required	mtrs	20	1200	24000.00
276	NDCD	supply of Weather proof 300 sq mm. 4 core pvc/ xlap ARMOURED cable with		20	2200	44000.00
276	NDSR	aluminium conductor 650/1100 v grade as required	mtrs	20	2200	44000.00
277	NDRS	Supply of 12v, 180 Ah lead acid battery	Each	2	15000	30000.00
278	NDRS	Supply of 12v, 160 Ah quanta sealed battery	Each	2	13500	27000.00
279	NDRS	Supply of 12v, 75 Ah quanta sealed battery	Each	2	6700	13400.00
280	NDRS	Supply of 12v, 12 Ah quanta sealed battery	Each	10	2100	21000.00
281	NDRS	Supply of battery charger 230v AC/ 24v DC, 10 amp	Each	11	8000	8,000.00
282	NDRS	Supply of battery charger 230v AC/ 24v DC, 20 amp	Each	1	8000	8,000.00
283	NDRS	Supplying of CT as per site selectable busbar				
203	NDINS	dimension of approved make in existing main panel for power factor Panel including connections etc. as required as per specification.				
284	NDRS	50/5 Amp	Each	1	30932	30,932.00
285	NDRS	100/5 Amp	Each	1	53814	53,814.00
286	NDRS	200/5 Amp	Each	1	53814	53,814.00
		Supplying of PT as per site selectable busbar				•
287	NDRS	dimension of approved make in existing main panel for power factor Panel				
		including connections etc. as required as per specification.				
288	NDRS	33000/110 volt	Each	1	21610	21,610.00
		Supply and erection of approved make safe earthing electrode consisting pipe-in-				
		pipe technology as per IS 3043-1987 made of corrosion free G.I. pipes with				
289	NDSR	constant ohmic value surrounded by highly conductive compound with high				
		charge dissipation suitable for effective and maintenance free earthing in earth				
		pit of minimum bore dia. 150mm size, as mentioned below:				
		With 3 metre pipe of 80mm outer dia., 40mm inner dia and 14mm terminal dia.				
290	NDSR	In soft/hard rock/marshy soil with 50 kgs. (two bag) back filling bentonite compound UL listed and confirm to relevant International/Indian standards	Each	2	21419	42838.00
		around electrode upto ground level.				
291	NDSR	Fixing of new geyser with nuts ,bits etc.	Each	5	300	1500.00
292	NDSR	supply fixing geyser thermosat	Each	5	300	1500.00
293	NDSR	geyser opening ,checking and refixing with nuts ,bits etc.	Each	5	250	1250.00
294	NDSR	Supply and fixing of connecting fixable connector 2 fit for geyser.	Each	10	150	1500.00
295	NDSR	supply and fixing geyser coil 1000 watt	Each	5	700	3500.00
296	NDSR	supply and fixing geyser coil 2000 watt	Each	5	800	4000.00
297	NDSR	supply and fixing geyser coil 2500/3000watt	Each	5	900	4500.00
T		Chemical servicing of window/split air conditioning unit 1TR/1.5TR/2TR/3TR				
298	NDSR	capacity including cleaning of cooling & condensing units, filters, grills etc & all	Each	400	1500	600000.00
	112311			-100		555565.00
		other parts oiling & greasing of fan motor, testing of A.C unit etc.				

299	NDSR	Dismantling & shifting of window air conditioning unit 1.0TR/ 1.5TR/2TR capacity	Each	50	1155	57750.00
		excluding fascia and cutting, welding complete work as required within town				
300	NDSR	Dismantling &shifting, installation, testing & commissioning of split air conditioning unit 1.0TR/1.5TR/2TRcapacity including indoor / outdoor unit	Each	10	1455	14550.00
		complete as required within town. Gas charging (R410A/Eco Friendly Green Gas) of window/split air conditioning				
		Gas charging (N410A/ECO Friendry Green Gas) of window/split all conditioning				
301	NDSR	unit including flushing of cooling & condensing units with nitrogen gas &	Each			0.00
		rectification of leakage, replacement of filter, flair nut etc. if any				
302	NDSR	1.5tr	Each	50	1836	91800.00
303	NDSR	2tr	Each	50	2042	102100.00
		Supply suction/discharge copper pipe line in split air conditioning unit 1.0/1.5				
304	NDSR	TR/2 TR/3 TR capacity including brazing, nitrile rubber insulation 6/9mm thick	Each			0.00
		class 'O', etc complete as required.				
305	NDSR	Copper tube 1/4"	mtr	100	437	43700.00
306	NDSR	Copper tube 1/2"	mtr	100	550	55000.00
307	NDSR	Replacement of compressor capacitor(non blast of split/window AC machine/mortury	Each	100	390	39000.00
200	NDCD	Replacement of fan capacitor(non blast of split/window AC machine/mortury	E. d.	100	110	44000.00
308	NDSR		Each	100	110	11000.00
309	NDSR	Replacement of compressor of split AC /window AC 1.5 Tr Rotory type.	Each	10	8500	85000.00
310	NDSR	Replacement of compressor of split AC /window AC 2 Tr Rotory type.	Each	10	9500	95000.00
311	NDSR	Complete repairing ,testing and fitting of display PCB circuit Board of split AC	Each	100	1450	145000.00
		/window AC/Mortury				
312	NDSR	Replacement of display PCB circuit board of split/Window AC machine	Each	10	3500	35000.00
313	NDSR	Replacement of Blower of split/Window AC machine	Each	10	1500	15000.00
314	NDSR	Replacement of new remote of split/Window AC machine	Each	10	800	8000.00
315	NDSR	Replacement of out door fan of split/Window AC machine	Each	10 10	3500 850	35000.00 8500.00
316 317	NDSR NDSR	Replacement of relay of split/Window AC machine Replacement of 30A 300 volt connector of split AC machine	Each Each	10	550	5500.00
318	NDSR	Replacement of 230 volt, 2pole contactor of split/Window AC machine	Each	10	550	5500.00
319	NDSR	Replacement of thermostat swtich of split/Window AC machine	Each	10	350	3500.00
320	NDSR	supply of water drain out pipe(PVC) of window /split ac	mtr	150	110	16500.00
321	NDSR	Replacement of Swing motor of split/Window AC machine	Each	10	3500	35000.00
322	NDSR	Repair of condenser copper coil of split/Window AC machine	Each	10	5000	50000.00
323	NDSR	Brazing/welding charges	Each	10	500	5000.00
324	NDSR	Repair of Fan motor 2/1.5tr of split/Window AC machine	Each	10	1500	15000.00
325	NDSR	SITC of 3 phase 20 Hp centrifugal pump with motor including all fitting as when required.	Each	1	150000	150000.00
226	NDCD	SITC of 3 phase 03 Hp Submersible motor with motor including all fitting as when	Faab	2	35500	71000.00
326	NDSR	required.	Each	2	35500	71000.00
327	NDSR	SITC of 3 phase 5 Hp Sewerage/ drain motor.with motor including all fitting as	Each	3	65500	196500.00
327	NDSK	when required.	Lacii	3	03300	150500.00
		Supply & Laying 6 sqmm 3 core flat submersible cable including necessary				
328	NDSR	electrical connection complete all as directed by Engineer-in-Charge.	Rm	3	220	660.00
		Make:- Phinolex, Polycab, KEI, Havels or equivalent.				
		Material & labour for taking out submersible pumpset 3 Hp capacity from				
329	NDSR	capacity from borewell and lowering the same after repairing including electrical	Job	3	35555	106665.00
323	NDSIN	connection with commpress wash etc complete all as directed by Engineer-in-	300	3	33333	100003.00
		Charge.				
		Material & Labour for rewinding of 3Hp submersible motor with proper gauge of				
330	NDSR	copperwire, insulating material, varnishing including fitting of Pump & motor and	Job	3	5520	16560.00
		electrical connection, testing & commissioning complete all as directed by				
		Engineer-in-Charge.			1	
		3-PHASE 07 Hp CENTRIFUGAL PUMP rewinding with proper gauge of copperwire,				
331	NDSR	insulating material, varnishing including fitting of Pump & motor and electrical connection, testing & commissioning complete all as directed by Engineer-in-	Job	1	9000	9000.00
		Charge.				
		3-PHASE 10 Hp CENTRIFUGAL PUMP rewinding with proper gauge of copperwire,				
		insulating material, varnishing including fitting of Pump & motor and electrical				
332	NDSR	connection, testing & commissioning complete all as directed by Engineer-in-	Job	1	13000	13000.00
		Charge.	<u></u>	<u>L</u>		
222	NDCD	Air blowers - 04 (7.5HP) servicing and replacing the defective parts , refixing the	No-	4	E4000	34,000,00
333	NDSR	same including testing & commisioning.	Nos.	4	54000	216000.00
334	NDSR	Repair works for proper functioning of Collection sludge Pumps.	Nos.	1	15000	15000.00
335	NDSR	Repair works for proper functioning of Aeriation Pumps	Nos.	1	18500	18500.00
336 337	NDSR	Repair works for proper functioning of Recyling pumps	Nos.	1	13000	13000.00
	NDSR	Repair works for proper functioning of Filer Feed Pumps	Nos.	1	12000	12000.00

338	NDSR	3-PHASE 20 Hp CENTRIFUGAL PUMP rewinding.with proper gauge of copperwire, insulating material, varnishing including fitting of Pump & motor and electrical connection, testing & commissioning complete all as directed by Engineer-in-Charge.	Job	1	20000	20000.00
339	NDSR	10 Hp pound pump set rewinding.with proper gauge of copperwire, insulating material, varnishing including fitting of Pump & motor and electrical connection, testing & commissioning complete all as directed by Engineer-in-Charge.	job	1	11000	11000.00
340	NDSR	Star delta starter for suitable UPTO 20 HP pump set	Nos	1	14000	14000.00
341	NDSR	Star delta starter for suitable UPTO 7.5 HP pump set	Nos	1	9000	9000.00
342	NDSR	Star Delta starter repair	job	2	3500	7000.00
				Total NDSR		8579998.00
		Total DSR				3366028.63
		Total NDSR				8579998.00
		Add CP & OH 15%				1286999.70
		Sub Total				9866997.70
		Add@18% GST			1776059.59	
		Total NDSR/NDSR including GST		10356057.59		
		Total DSR+NDSR/NDSR including GST			13722086.21	
			11628886.62			

S.No	Description				Annual Repair Maintenance and Operation (ARMO) of Electrical works in ESI-PGIMSR, ESIC Medical College & ESIC Hospital & O.D.C (EZ), Joka, Kolkata (Package-2)- Bill of Quantity												
S.No	Description			Total Manpower for firefighting													
		Qualification	Category	Duty hours/Shift	Manpower	Reliever	Total Manpower	Rates per Month	Total Cost for One Month	Total Cost for one year	Remarks						
1 (Supervisor (Fire Fighting)	Diploma in Safety Engineering with 10 year experience/BE Safety Engineering with 3year experience (Supervisory) in Maintenance Job	Highly Skilled	General Duty	1.00	0.00	1.00	32897.00	32897.00	394764.00							
2	Fire Fighting Technician	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	6.00	1.00	7.00	30475.00	213325.00	2559900.00							
3 He	Helpers/ khallasi	Experience in Maintenance	Unskilled	3(per Shift)+ 2 General	1.00	0.17	1.17	27974.00	32636.33	391636.00							
	то	TAL MANPOWER					9.17		278858.33	3346300.00							
								То	tal (excluding GST)	3346300.00							
Note :-						l .											
General Du	uty Hours shall be	e from 9:00am to 5:30 pm and ma	y be vary as per	the direction of En	gineer In-charge												
* Minimum v	wages as per CLC	norms shall be follow on worke	r time to time by	WAPCOS Limited													
* Manpower	r can be increased	d or decreased as per the require	ment of ESIC/W	APCOS Limited. Pay	ment shall be relea	sed to only actu	al present manpow	er approved by	ESIC/WAPCOS in re	spective month.							

Fire System works (for DSR Items Referance DSR -2022 Specification)

Sl. No.	DSR/ NDSR	Description of item	UNIT	QTY.	Rate (In Rs.)	Amount (In Rs.)
1	18.6	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. direct in ground including welding exavation cement concret blocks etc complete as required:				
2	18.6.2	150mm dia	Rm	10	3804.00	38040.00
3	18.7	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required.				
4	18.7.8	b) 150 mm dia	Rm	50	3574.00	178700.00
5	18.7.7	c) 100 mm dia	Rm	20	2555.00	51100.00
6	18.7.6	d) 80mm dia	Rm	20	1885.00	37700.00
7	18.7.5	d) 65 mm dia	Rm	20	1614.00	32280.00
8	18.7.3	e) 40 mm dia	Rm	20	1034.00	20680.00
9	18.7.2	f)32 mm dia	Rm	20	851.00	17020.00
10	18.7.1	f)25 mm dia	Rm	20	744.00	14880.00
11	18.10.1	Supplying and fixing Single headed external yard hydrant valve with 1 No. 63 mm dia instantaneous FM Gunmetal/Stainless Steel coupling and cast iron wheel, ISI marked, conforming to IS 5290 (type A) with blank Gunmetal/Stainless Steel cap and chain as required: (Gun metal)	Each	10	7646.00	76460.00
12	18.11	Supplying, fixing, testing and commissioning ofbutterfly valve of PN 1.6 rating with bronze/ gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 offollowing sizes as required:				
13	18.11.2	50mm dia butterfly valve	Set	2	3784.00	7568.00
14	18.11.4	80mm dia butterfly valve	Set	2	4982.00	9964.00
15	18.11.5	100mm dia butterfly valve	Set	2	6667.00	13334.00
16	18.11.6	150mm dia butterfly valve	Set	10	8960.00	89600.00
17	18.11.7	200mm dia butterfly valve	Set	2	15207.00	30414.00
18	18.11.8	250mm dia butterfly valve	Set	2	20426.00	40852.00
19	18.12	Supplying, fixing, testing& commissioning ofdouble flanged sluice valve of rating PN 1.6 with non rising spindle, bronze/gun metal seat, ISI marked complete with nuts, bolts, washers, gaskets and conforming toIS780 offollowing sizes as required:				
20	18.12.2	50mm DIA Sluice Valve	Set	2	7207.00	14414.00
21	18.12.4	80mm DIA Sluice Valve	Set	2	10696.00	21392.00
22	18.12.5	100mm DIA Sluice Valve	Set	2	14641.00	29282.00
23	18.12.6	150mm DIA Sluice Valve	Set	10	22762.00	227620.00
24	18.12.7	200mm DIA Sluice Valve	Set	2	39332.00	78664.00
25	18.12.8	250mm DIA Sluice Valve	Set	2	46517.00	93034.00

Supplying and fising orifice plate made outoff mm thick stainless steel (Crade 304) with orifice of required size to be fitted between range& landing valve of external and internal hydrants to roduce pressure at the outiet to the level of 3.5 kg/cm2 complete as required. 27 18.14 28 18.146. Fig. 18.15 supplying and fising orifice plate to the level of 3.5 kg/cm2 complete as required. 29 18.145. 100mm dis Non Return Valve 29 18.145. 100mm dis Non Return Valve 30 18.147. 100mm dis Non Return Valve 30 18.147. 100mm dis Non Return Valve 31 18.153. 100mm dis Non Return Valve 32 18.155. 100mm dis Non Return Valve 33 18.153. 100mm dis Non Return Valve 34 18.151. 100mm dis Non Return Valve 35 18.152. 100mm dis Non Return Valve 36 18.152. 100mm dis Non Return Valve 37 18.152. 100mm dis Non Return Valve 38 18.153. 100mm dis Non Return Valve 39 18.153. 100mm dis Non Return Valve 30 18.154. 100mm dis Non Return Valve 30 18.154. 100mm dis Non Return Valve 30 18.155. 100mm dis Non Return Valve 31 18.155. 100mm dis Non Return Valve 32 18.155. 100mm dis Non Return Valve 33 18.153. 100mm dis Non Return Valve 34 18.161. 100mm dis Non Return Valve 35 18.157. 100mm dis Non Return Valve 36 18.157. 100mm dis Non Return Valve 37 18.158. 100mm dis Non Return Valve 38 18.158. 100mm dis Non Return Valve 39 18.157. 100mm dis Non Return Valve 39 18.157. 100mm dis Non Return Valve 30 18.158. 100mm dis Non Return Valve 31 18.159. 100mm dis Non Return Valve 32 18.159. 100mm dis Non Return Valve 33 18.159. 100mm dis Non Return Valve 34 18.161. 100mm dis Non Return Valve 35 18.171. 100mm dis Non Return Valve 36 18.171. 100mm dis Non Return Valve 37 18.171. 100mm dis Non Return Valve 38 18.171. 100mm dis Non Return Valve 38 18.171. 100mm dis Non Return Valve 39 18.171. 100mm dis Non Return Valve 39 18.171. 100mm dis N							
steel (Grade 304) with orifice of required size to be fitted between flange® landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required. Providing, installation, testing and commissioning of non-return valve offoliowing sizes confirming to IS: 5312 complete with rubber pasket, Globits, muts, washers etc. as required. 28 18.14.4 80mm dia Non Return Valve Set 1 1756.00 1708.00 11050.00 1708.00 11050.00 1708.00 17			Supplying and fixing orifice plate made outof6 mm thick				
26 18.13 between flange& landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required. 27 18.14 Providing, installation, testing and commissioning of non-return valve offollowing sizes confirming to is: 5312 complete with nubber as required. 28 18.14.4 Slomm dia Non Return Valve Set 1 7691.00 7691.00 11050.00 11050.00 1 1 1050.00 1 1 1050.00 1 1 1050.00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			stainless				
18.13 flange& landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required. Providing, installation, testing and commissioning of non-testure valve defollowing sizes confirming to IS: 5312 complete with rubber asaket, 61 bolts, nuts, washers etc.as required: 28 18.14.4 80mm dia Non Return Valve 28 18.14.7 150mm dia Non Return Valve 29 18.14.5 100mm dia Non Return Valve 30 18.14.7 150mm dia Non Return Valve 31 18.15.1 300mm dia Non Return Valve 31 18.15.1 300mm dia Non Return Valve 32 18.15.2 100mm dia Non Return Valve 33 18.15.3 18.15.3 18.5 18.5 18.5 18.5 18.5 18.5 18.5 18.5			steel (Grade 304) with orifice of required size to be fitted				
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reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required. Providing, installation, testing and commissioning of non-return valve offollowing sizes confirming to is: 5312 complete with rubber of commissioning of non-return valve offollowing sizes confirming to is: 5312 complete with rubber of commissioning sizes confirming to is: 5312 complete with rubber of commissioning sizes confirming to is: 5312 complete with rubber of commissioning of sizes in the commission of the size of the commissioning of sizes in the commiss	26	18.13	flange& landing valve of external and internal hydrants to	Each	10	1321.00	13210.00
pressure at the outlet to the level of 3.5 kg/cm2 complete as required. Providing, installation, testing and commissioning of non-return valve diffoliowing sizes confirming to 15: 5312 complete with rubber asaeke, G blotts, nuts, washers etc. as required: 8							
required. Providing, installation, testing and commissioning of non- return valve effollowing sizes confirming to 15: 5312 complete with vulber 28							
Providing, installation, testing and commissioning of non-return valve offollowing sizes confirming to 15: 5312 complete with vulber pasket, of boths, nuts, washers etc.as required: 28							
18.14 value offoliowing sizes confirming to IS: 5312 complete with rubber value offoliowing sizes confirming to IS: 5312 complete with rubber value offoliowing sizes confirming to IS: 5312 complete with rubber value of IS: 5312 complete with rubber value of IS: 5312 complete with value of IS: 5312 complete			·				
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28 18.14.4 80mm dia Non Return Valve Set 1 7691.00 7691.00	27	18.14					
28 18.144 80mm dia Non Return Valve Set 1 7691.00 7691.00		10.11					
28							
18.14.7 150mm dia Non Return Valve	28	18.14.4		Set	1	7691.00	7691.00
Providing, installation, testing and commissioning of stainless steel 31 18.15 Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheetwith3 mm dia holes with stainless steel flange. 32 18.15.2 100mm dia	29	18.14.5	100mm dia Non Return Valve	Set	1	11050.00	11050.00
steel 31 18.15	30	18.14.7	150mm dia Non Return Valve	Set	1	17786.00	17786.00
18.15.1 V-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheetwith3 mm dia holes with stainless steel flange. 2 18.15.2 100mm dia 2 18.15.3 150mm dia 15.3 150mm dia 15.3 150mm dia 15.3 150mm dia 15.4 11144.00 11144.			Providing, installation, testing and commissioning of stainless				
304, sheetwith3 mm dia holes with stainless steel flange. 31 18.15.2 100mm dia Each 1 6664.00 6664.00 6664.00 33 18.15.3 150mm dia Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to 15 636 (type-A) as required: Gun Metal 34 18.16.1 Supplying and fixing first-aid Hose Real with MS construction spray painted in post office red, conforming to 15 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal internal dia under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 20 mm nominal under hose thermoplastic (Textile reinforced) type -2 as per 15. 12585 2			steel				
sheetwith 3 mm dia holes with stainless steel flange. 32 18.15.2 100mm dia 33 18.15.3 150mm dia 34 18.16.1 1 6664.00 11144.00 35 3 18.17.1 1 1144.00 11144.00 36 mm dia male and female couplings duly bound with Gi wire, rivets etc. conforming to IS 636 (type-A) as required : Gun Metal 36 m dia male and female couplings duly bound with Gi wire, rivets etc. conforming to IS 636 (type-A) as required : Gun Metal 37 18.17.1 1 1288 2 0 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 1258 2 0 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 1258 2 0 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 1258 2 0 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 1258 2 0 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipments on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) 36 18.19 with gun metal male instantaneous inlet couplings complete with cap and chain as required : 37 18.19.1 2way, 100mm dia 38 18.20 connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. 39 18.21.1 with prediction, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg (C, conventional type including with CI taper special confirming to 85 164. The rate shall also include suspending arrangement with ceiling, wall beam clamps, fasteners etc., complete.	31	18.15	Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade				
18.15.2 100mm dia Each 1 6664.00 6664.00 11144.0			304,				
18.15.3 150mm dia Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with Gl wire, rivets etc. conforming to IS 636 (type-A) as required: Gun Metal Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required: Om m nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required. Supply, Frection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete.							
Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with Gi wire, rivets etc. conforming to 15 G36 (type-A) as required: 50 m/spray painted in post office red, conforming to 15 884 complete with the following as required. 20 mm nominal internal dia supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to 15 884 complete with the following as required. 20 mm nominal internal dia with rose thermoplastic (Textile reinforced) type -2 as per 15: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to 15 904 as required: 37 18.19.1 2way, 100mm dia Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged 38 18.20 connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg. C, conventional type including with C1 taper special confirming to 85 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete.	—						
18.16.1 18.16.	33	18.15.3			1	11144.00	11144.00
18.16.1 rivets etc. conforming to IS 636 (type-A) as required : Gun Metal Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia pun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as requ. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade assrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with C1 taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with C2 include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete.							
Metal Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cit paper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete.	34	18.16.1		l Each	50	5202.00	260100.00
Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with C1 taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete.							
spray painted in post office red, conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS. 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with CI taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete.							
with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including							
18.17.1 water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER)							
18.17.1 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00							
nozzle. Drum and brackets for fixing the equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00	35	18.17.1		Ecah	10	12073	120730.00
Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with CI taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall sarrangement with ceiling, wall arrangement with ceiling, wall sarrangement with ceiling including to 2 1546.00 3092.00							
M.S. Pipe and socket. (40METER) Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00							
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with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37			Supplying and fixing of fire brigade connection of cast iron body				
with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required: 37	20	10.10	with gun metal male instantaneous inlet couplings complete				
37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00	36	18.19	with cap and chain as regd. for suitable dia MS pipe connection				
37 18.19.1 2way, 100mm dia Each 2 6742 13484.00 Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00			conforming to IS 904 as required:				
Supplying and fixing air vessel madeof250mm dia,8 mm thick MS sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00	37	18.19.1		Each	2	6742	13484.00
MS sheet, 1200 mm in height with airrelease valve on top and flanged 28 28 28 20 20 20 20 21 21 21 21 21 21 21 22 21 24 20 21 24 20 20 20 20 20 20 20 20 20 20 20 20 20					=		5.5.30
sheet, 1200 mm in height with airrelease valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade asrequired. Supply, Erection, testing and commissioning of 15mm dia nomial bore quartzoid bulb pendant sprinklers with temperature rating of 68 deg C, conventional type including with Cl taper special confirming to BS 164. The rate shall also include suspending arrangement with ceiling, wall arrangement with ceiling, wall beam clamps, fasteners etc., complete. Nos. 50 522.00 26100.00							
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with ceiling, wall beam clamps, fasteners etc., complete. 40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00		10.21.1	with CI taper special confirming to BS 164. The rate shall also			522.00	
40 18.22 Providing& fixing of pressure switch in M.S. pipe line including 2 1546.00 3092.00			include suspending arrangement with ceiling, wall arrangement				
			with ceiling, wall beam clamps, fasteners etc., complete.				
connection etc. as required.	40	18.22			2	1546.00	3092.00
			connection etc. as required.	Each			

	1					
		Providing& fixing flow switch in following sizes M.S. pipe				
41	18.23	including				
		connection etcas required.				
42	18.23.1	100 mm dia	Each	1	7514.00	7514.00
43	18.23.2	150 mm dia	Each	1	9021.00	9021.00
44	17.2.15	Supplying, installation, testing & commissioning of	each	50	3506	175300.00
	_	addressable horn cum strobe complete as required.				
		Supplying, installation, testing & commissioning of intelligent				
45	17.2.4	analog addressable photothermal detector complete with	each	100	2858	285800.00
		mounting base complete as required				
46	17.2.14	Supplying, installation, testing & commissioning of addressable	each	20	3871	77420.00
		manual call point complete as required.				
47	17.2.5	Supplying, installation, testing & commissioning of response	Each	20	276	5520.00
		indicator on surface/recessed MS Box having two LED, metallic				
		cover complete with all connections etc as required.				
48	17.2.6	Supplying, installation, testing & commisssioning of intelligent	each	25	2651	66275.00
		addressable programmable sounder complete as required.				
49	17.2.11	Supplying, installation, testing & commissioning of addressable	each	8	3267	26136.00
		phone control module complete as required.				
50	17.2.10	Supplying, installation, testing & commissioning of addressable	each	8	3003	24024.00
	_	fire control module complete as required.				
51	17.2.17	Supplying, installation, testing & commissioning of fire fighter	each	8	5740	45920.00
		telephone handset complete as required.				
52	17.3.3	Supplying, installation, testing & commissioning of 1.5/3/6W	each	50	1793	89650.00
		metal box ceiling/wall speakers complete as required.				
		Supplying, installation, testing & commissioning of digital audio		_		
53	17.3.7	amplifier 75 Watt, 25V rms operating at 240 Volt AC Supply	each	2	145793	291586.00
		complete as required.				
54	17.2.7	Supplying, installation, testing & commissioning of fault isolator	each	40	3270	130800.00
		complete with base as required.				
		Supplying, installation, testing & commissioning of				
55	17.3.4	ceiling/wall mounted loud speaker, 3/1.5 Watt in ABS	Each	10	2428	24280.00
		enclosure complete as required.				
		supplying & laying of 2x1.5 sqmm fire survival armoured cable			0.50	
56	17.5.1	600/1000 v rated with annealed copper conductor as required	Mtr	100	359	35900.00
57	17.5.3.2	speaker cable Two pair, 2-core, 1.5 sqmm	Rm	1000	89	89000.00
		SITC of Micro processer based intellgent addressable main fire				
		alram pannel, central processing unit with following loop				
58	17.2.1	modules and capable of supporting 240 devices and minimum				
		120 detectors per loop and loop length up to 2 km (other				
		details may find from DSR-2022)	_			
59	17.2.1.2	2 loop panel	Each	1	239225	239225.00
60	17.2.1.1	10 loop panel	Each	0	455534	0.00
1	ı	Total DSR rates only for supply & fixing items				3237420.00
		DSR SUPPLY ITEMS Sprinkler flevible drops stainless steel complete with 15 NDT on			1	
		Sprinkler flexible drops stainless steel complete with 15 NPT on			1	
		reducer thread with maximum working pressure of 175 PSI test			1	
		pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT			1	
61		male thread to sprinkler head (Outlet) 15mm NPT female			1	
		thread 1 No. reducer + 1 No. Nipple + 2 Side Brackets + 1			1	
		Center Bracket + 625 mm			1	
62	40.10	stockbar	F- 1	40	705	7050.00
62	4218	700mm flexible drop	Each	10	795	7950.00
63	4219	1000mm flexible drop	Each	10	945	9450.00
64	4220	1200mm flexible drop	Each	10	1015	10150.00
65	4221	1500mm flexible drop	Each	10	1137	11370.00
66	4222	Water flow switch for 100mm dia pipe	Each	5	4945	24725.00
67	4223	Water flow switch for 150mm dia pipe	Each	5	6083	30415.00

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68		hydraulic alarm valve with water motor gong bell and constant				
50	4224	pressure trim assembly complete as required	- 1	4	24022	24022.00
69	4224	150mm dia hydraulic alarm valve with water motor gong	Each	1	34933	34933.00
70	4225	100mm dia hydraulic alarm valve with water motor gong	Each	1	32517	32517.00
71	4226	80 mm dia hydraulic alarm valve with water motor gong Deluge valve with wet pilot basic trim assembly with test and	Each	1	30777	30777.00
72		alarm, drip and drain valve with water motor gong				
73	4230	50mm dia deluge valve	Each	1	60280	60280.00
74	4229	80 mm dia	Each	1	60732	60732.00
75	4228	100mm dia	Each	1	68238	68238.00
76	4227	150mm dia	Each	1	84888	84888.00
77	4232	Electric release trim assembly for deluge valve with two way	Each	1	5382	5382.00
78	4233	solenoid valve, weather proof operation on 24 volts DC Adjustable rosette plate for 15mm dia (Powder Coated)	Each	1000	80	80000.00
,,,	4233		Lucii	1000	30	551807.00
		Total DSR rates only for supply items				551807.00
		Catrage charge @ 1%				5518.07
		Total				557325.07
		Add GST @ 18% Total				100318.51
		Add CP & OH 15%				657643.58 98646.54
		Supply DSR item total				
		Supply DSK Item total		1		756290.12
		Total D	CD rates onl	for supply &	fiving itoms	3237420.00
				y for supply & ly item + supp		3993710.12
		TOTAL	L DSIN (Supp	ly item : supp	ly and name,	3333710.12
		Providing & Fixing of weather proof hose cabinets fabricated				
		from 16 S.W.G. M.S. Sheet with centre opening full front glass				
		door and locking arrangement, suitable to accommodate one				
79	NDRS	landign valve (Yard Hydrant), 2 nos. 15M long hoses and 1 no.				
		Branch pipe with nozzle. Teh cabinet shall be painted with one				
		coat of primer and 2 or more coasts of synthetic enamel paint				
		of approved make & shade and shall be suitably mounted on a				
		raised masonry platform complete as reqd.				
80	NDRS	a) 900 x 600 x 450	Each	10	6000	60000.00
81	NDRS	Cleaning of smoke detector with air blower, and checking	Each.	1000	100	100000.00
		connection Fire alarm panel firmware upgradation				
82	NDRS	Restart the Panel: Reboot the system after the upgrade completes. Run Diagnostics: Check for any error codes or warnings on the panel. Test System Functions: Verify the operation of all connected devices (smoke detectors, alarms, etc.) and the communication with monitoring services.	Job	1	100000	100000.00
83	NDRS	Rewinding of 75 hp motor with all required accessesories and material	Job	1	50000	50000.00
84	NDRS	Rewinding of 100 hp motor with all required accessesories and material	Job	1	75000	75000.00
		Supply/Refilling of extinguisher				
85	NDRS	Refilling of CO2 extinguisher with pressure testing 4.5 kg	Each	200	980	196000.00
86	NDRS	Refilling of DRY CHEMICAL POWDER extinguisher with pressure testing 25 kg	Each	20	3200	64000.00
87	NDRS	Refilling of DRY POWDER extinguisher with pressure testing 6kg	Each	100	800	80000.00
88	NDRS	Refilling of FOAM extinguisher with pressure testing 9ltr	Each	230	650	149500.00
89	NDRS	Refilling of water type extinguisher with pressure testing 9ltr	Each	250	500	125000.00
90	NDRS	Supply of co2 fire extinguisher 4.5 kg	Job	50	4800	240000.00

91	NDRS	Supply of DRY powder fire extinguisher 6 kg	Job	50	2400	120000.00
92	NDRS	Supply of FOAM fire extinguisher 9ltr	Job	50	2800	140000.00
93	NDRS	Supply of water fire extinguisher 9ltr	Job	10	3300	33000.00
94	NDRS	Supply of DRY powder fire extinguisher 25 kg	Job	2	9000	18000.00
95	NDRS	S.S Fire Door Lock with key	Job	50	1800	90000.00
96	NDRS	S.S Fire Door Handel Pair with complet Assoccesoires	Job	50	2500	125000.00
97	NDRS	Fire Door closer with Heavy Duty	Job	50	4200	210000.00
98	NDRS	Fire Resist Glass for Fire Door and other fittings	Job	50	3500	175000.00
99	NDRS	Fire Door Hing	Job	50	250	12500.00
100	Chipping/scrapping of coroded portion of MS Pipe through ware brafing wheel and nit to be clean then apply the sen paper and ware brush for further after the cleaning, applying two coat red oxide primer(burger/AsianMake) and two coat synthetic Aname signal Red Hy Glose(Burger/Asian make) All painting works through painting brush including supplying of primer, paints with consumables items and manpower &tools tackles as per instruction of engineer in charge.					
101	NDSR	25 mm dia	Rm	500	53.10	26550.00
102	NDSR	32mm dia	Rm	200	66.37	13274.00
103	NDSR	40mm dia	Rm	300	79.65	23895.00
104	NDSR	50 mm dia	Rm	200	102.90	20580.00
105	NDSR	65 mm dia	Rm	200	132.75	26550.00
106	NDSR	80 mm dia	Rm	100	159.30	15930.00
107	NDSR	100mm dia	Rm	100	312.40	31240.00
108	NDSR	150mm dia	Rm	100	318.60	31860.00
109	NDSR	200mm dia	Rm	100	408.80	40880.00
110	NDSR	250mm dia	Rm	100	531.00	53100.00
					Total NDSR	2446859.00
				Add CP	& OH @ 15%	367028.85
	1				SUB Total	2813887.85
					dd@18% GST	506499.81
				al NDSR/MR i	_	2953358.81
				R+NDSR/MR i		6947068.93
	1		Total DSF	R+NDSR/MR e	xcluding GST	5887346.55

					Total Manpow	er For MGPS 8	PSA				
S.No	Description	Qualification	Category	Duty hours/Shift	Manpower	Reliever	Total Manpower	Rates per Month	Total Cost for One Month	Total Cost for one year	Remarks
1	PSA MGPS Operator	ITI Certificate with 3 year of Experience/ Wireman liciense holder compulesary	Skilled	2 (per shift)	6.00	1.00	7.00	30,475.00	213,325.00	2,559,900.00	
	TOTAL MANPOWER 7.00 213,325.00 2,559,900.00										
	Total (Amount) 2,559,900.00										
	GST @18% 460,782.00										
	In Total Amount (Inc GST) 3,020,682.00										
Note:											
General	Duty Hours shal	l be from 9:00am to 5:30 pm	and may be va	ry as per the dire	ction of Engine	er In-charge					
Minimu	m wages as per (CLC norms shall be follow or	worker time to	time by WAPCO	S Limited .						
* Manpower can be increased or decreased as per the requirement of ESIC/WAPCOS Limited. Payment shall be released to only actual present manpower approved by ESIC/WAPCOS in										IC/MADCOC :	

Supply of various materials regarding MGPS's maintenance and PSA Plant works Rate Amount SI. No. DSR/MR Description of item UNIT OTY. (In Rs.) (In Rs.) Checking and maintainanceof Various services of PSA and MGPS Oxygen plant I/N Changing its supply spare parts, Routine checkup of All spare parts of PSA Plant, Basic lubricant of PSA Plant (Greasing and Oiling of COMPRESSOR 75 kw make- kaisahn, 37 kw make- elgi, Air Dryer (700 CFM, Make- GEM Equipment's), Air Cooled Stabilizer (150 KVA, 3PH NDSR JOB 12 30000.00 360000.00 1 AC. Make- Fuii Electric), Oxygen Generator Tank system, Oxygen Conservator Tank system), Maintaining of All record of PSA Plant (Maintaining LOGbook), Checking of Purity of PSA Plant Checking Flow of oxygen supply. Other as per requirement After Filter 2 **NDSR** Each 59000.00 59000.00 4300.00 NDSR Oil Filter 4300.00 Each 1 NDSR Air Oil Separator 78600.00 78600.00 4 Each 1 37000.00 5 **NDSR** Air Filter Each 37000.00 6 NDSR Service kit Each 1 39000.00 39000.00 **NDSR** 52000.00 52000.00 7 Air-lube UT SYN Plus Oil (20Ltr) Each 1 8 NDSR 31000.00 31000.00 Minimum pressure valve kit Each 1 9 ACTR Repair Kit with Spring 13000.00 **NDSR** Each 13000.00 10 NDSR 8000.00 8000.00 Solenoid valve 155000.00 11 NDSR 1 155000.00 Auto Drain Valve-F3 Each Pipe Coupling 2-1/2 STY12 ACM 2400.00 12 NDSR 2400.00 Fach 1 13 NDSR rewinding of 75 hp motor including replacing of bearing Each 130000.00 130000.00 1 NDSR 1 6200.00 6200.00 14 EG75 Coupling Element Each 15 NDSR Each 1 13000.00 13000.00 Actuator 100000.00 16 NDSR 100000.00 Intake valve Each 1 NDSR 6600.00 6600.00 17 Blow down valve (BDV) Each 1 NDSR 16000.00 16000.00 18 Pressure regulator valve Each 1 19 **NDSR** Thermal valve element Each 1 13000.00 13000.00 10000.00 10000.00 20 **NDSR** Safety valve Each 1 NDSR NRV (Non-Return Valve) 8800.00 8800.00 21 Each 1 22 NDSR Bacteria Filter Each 1 95000.00 95000.00 23 **NDSR** Micro Filter Each 1 75000.00 75000.00 **NDSR** 13000.00 24 Pressure Regulator Each 1 13000.00 23000.00 25 NDSR Dryer Filter Each 1 23000.00 26 NDSR Each 20000.00 20000.00 Controller 1 27 **NDSR** Gas R134 Each 1 2400.00 2400.00 28 NDSR Hot gas bypass valve Each 1 35000.00 35000.00 NDSR 29 1 6200.00 6200.00 **Delay Timer** Each 30 NDSR PLC of PSA 300000.00 300000.00 Each 1 NDSR 48000.00 48000.00 31 HMI of PSA Each 1 32 NDSR PLC of Automatic Electrical Control panel Each 1 66000.00 66000.00 9000.00 33 **NDSR** 3 pole Contactor Each 1 9000.00 62000.00 34 NDSR Oxygen sensor Each 1 62000.00 35 NDSR Pre filter Each 2200.00 2200.00 1 59000.00 36 **NDSR** Fine filter Each 1 59000.00 37 **NDSR** Carbon Filter Each 1 59000.00 59000.00 108000.00 108000.00 38 NDSR Neuron-III Each 1 39 NDSR Each 11000.00 11000.00 ADV 2200.00 41 **NDSR** Copper Pipe (12mm) - Specified MGPS Colour Code Mtr. 200 11.00 42 **NDSR** Copper Pipe (12mm) - Repairing & Servicing 200 95.00 19000.00 Mtr. 43 NDSR 100 649.00 64900.00 Copper Pipe (12mm) - New Pipe Line Installation Mtr. 44 NDSR Mtr. 300 15.00 4500.00 Copper Pipe (15mm) - Specified MGPS Colour Code Copper Pipe (15mm) - Repairing & Servicing 20200.00 45 NDSR Mtr. 200 101.00 46 NDSR 100 873.20 87320.00 Copper Pipe (15mm) - New Pipe Line Installation

47	NDSR	Copper Pipe (22mm) - Specified MGPS Colour Code	Mtr.	250	21.80	5450.00
48	NDSR	Copper Pipe (22mm) - Repairing & Servicing	Mtr.	300	117.00	35100.00
49	NDSR	Copper Pipe (22mm) - New Pipe Line Installation	Mtr.	100	1085.60	108560.00
50	NDSR	Copper Pipe (28mm) - Specified MGPS Colour Code	Mtr.	200	32.00	6400.00
51	NDSR	Copper Pipe (28mm) - Repairing & Servicing	Mtr.	100	142.00	14200.00
52	NDSR	Copper Pipe (28mm) - New Pipe Line Installation	Mtr.	35	1593.00	55755.00
53	NDSR	Copper Pipe (35mm) - Specified MGPS Colour Code	Mtr.	50	44.00	2200.00
54	NDSR	Copper Pipe (35mm) - Repairing & Servicing	Mtr.	50	150.00	7500.00
55	NDSR	Copper Pipe (35mm) - New Pipe Line Installation	Mtr.	30	2065.00	61950.00
56	NDSR	Copper Pipe (42mm) - Specified MGPS Colour Code	Mtr.	50	45.00	2250.00
57	NDSR	Copper Pipe (42mm) - Repairing & Servicing	Mtr.	50	155.00	7750.00
58	NDSR	Copper Pipe (42mm) - New Pipe Line Installation	Mtr.	18	3009.00	54162.00
59	NDSR	Copper Pipe (54mm) - Specified MGPS Colour Code	Mtr.	50	60.00	3000.00
60	NDSR	Copper Pipe (54mm) - Repairing & Servicing	Mtr.	50	166.00	8300.00
61	NDSR	Copper Pipe (54mm) - New Pipe Line Installation	Mtr.	14	4543.00	63602.00
62	NDSR	Copper Pipe (105mm) - Specified MGPS Colour Code	Mtr.	50	70.00	3500.00
63	NDSR	Copper Pipe (105mm) - Repairing & Servicing	Mtr.	50	220.00	11000.00
64	NDSR	Copper Pipe (105mm) - New Pipe Line Installation	Mtr.	10	8850.00	88500.00
65	NDSR	Outlet Point - O2	No.	100	3141.60	314160.00
66	NDSR	Outlet Point - N2O	No.	30	1047.20	31416.00
67	NDSR	Outlet Point - Vacuum	No.	100	3141.60	314160.00
68	NDSR	Outlet Point - Air	No.	30	1047.20	31416.00
69					258.72	
	NDSR	Outlet Probes - O2	No.	150		38808.00
70	NDSR	Outlet Probes - N2O	No.	30	184.80	5544.00
71	NDSR	Outlet Probes - Vacuum	No.	150	258.72	38808.00
72	NDSR	Outlet Probes - Air	No.	30	184.80	5544.00
73	NDSR	Outlet Cover	No.	300	106.20	31860.00
74	NDSR	O-ring	No.	1000	26.25	26250.00
75	NDSR	Oxygen Flowmeter with Humidifier Bottle	No.	100	1047.20	104720.00
76	NDSR	Vacuum Regulator with 600ml Jar	No.	100	1786.40	178640.00
77	NDSR	Silicon Suction Pipe Set (2 Mtr.)	No.	600	147.84	88704.00
78	NDSR	Vaccume Canula Connector	No.	250	24.64	6160.00
79	NDSR	Y Canula Connector (PP)	No.	250	44.80	11200.00
80	NDSR	Alarming System (Digital) - 2 Gas System	No.	2	26609.00	53218.00
81	NDSR	Alarming System (Digital) - 3 Gas System	No.	2	40710.00	81420.00
82	NDSR	Alarming System (Digital) - 4 Gas System	No.	2	50150.00	100300.00
83	NDSR	Alarming System (Digital) - 5 Gas System	No.	1	57348.00	57348.00
84	NDSR	Servicing of Alarming System (Digital) - All Gas	No.	3	7080.00	21240.00
85	NDSR	Valve Box with specified Valve & Pressure Gauge System -2 Gas System	No.	7	6944.00	48608.00
86	NDSR	Valve Box with specified Valve & Pressure Gauge System - 3 Gas System	No.	4	9296.00	37184.00
		Valve Box with specified Valve & Pressure Gauge System - 4				
87	NDSR	Gas System	No.	2	11648.00	23296.00
		Valve Box with specified Valve & Pressure Gauge System - 5				
88	NDSR		No.	2	14000.00	28000.00
89	NDSR	Gas System Pressure Gauge 2" dia	No.	15	728.00	10920.00
90	NDSR	Pressure Gauge 2" dia Pressure Gauge 4" dia		8	3920.00	31360.00
90	INDSK	Pressure dauge 4 uia	No.	٥	3920.00	31300.00
91	NDSR	Isolation Valve with both side Adaptor System - 12 mm Valve	No.	80	1736.00	138880.00
92	NDSR	Isolation Valve with both side Adaptor System - 15 mm Valve	No.	15	2184.00	32760.00
93	NDSR	Isolation Valve with both side Adaptor System - 22 mm Valve	No.	10	3304.00	33040.00
94	NDSR	Isolation Valve with both side Adaptor System - 28 mm Valve	No.	5	4368.00	21840.00
95	NDSR	Isolation Valve with both side Adaptor System - 35 mm Valve	No.	2	5208.00	10416.00
96	NDSR	Isolation Valve with both side Adaptor System - 42 mm Valve	No.	2	6216.00	12432.00
		. ,				
97	NDSR NDSR	Isolation Valve with both side Adaptor System - 54 mm Valve	No.	1	8064.00 84560.00	8064.00
00		New OT Pendent Installed - 5 Gas System	No.			84560.00 92288.00
98		Now OT Pondont Installed 6 Cas System				
99	NDSR	New OT Pendent Installed - 6 Gas System	No.	1	92288.00	
99 100	NDSR NDSR	OT Pendent Service with Spare - 5 Gas System	No.	3	19096.00	57288.00
99 100 101	NDSR NDSR NDSR	OT Pendent Service with Spare - 5 Gas System OT Pendent Service with Spare - 6 Gas System	No. No.	3	19096.00 22792.00	57288.00 68376.00
99 100	NDSR NDSR	OT Pendent Service with Spare - 5 Gas System	No.	3	19096.00	57288.00

104	NDSR	Bed Head Panel Servicing	No.	8	5310.00	42480.00	
105	NDSR	OT Theater Suction Unit	No.	3	16240.00	48720.00	
106	NDSR	New Installed Control Panel (Analoge) - Oxygen	No.	1	115050.00	115050.00	
107	NDSR	New Installed Control Panel (Analoge) - Nitrous	No.	1	115050.00	115050.00	
108	NDSR	Control Panel (Analoge) - Oxygen Service / Spare	No.	1	13629.00	13629.00	
109	NDSR	Control Panel (Analoge) - Nitrous Service / Spare	No.	1	13629.00	13629.00	
110	NDSR	IOX-14	No.	2	17110.00	34220.00	
111	NDSR	IOX-69	No.	1	12449.00	12449.00	
112	NDSR	Control Panel Diaphragm	No.	10	1575.00	15750.00	
113	NDSR	Installation of New Manifold System (1/1 NR Type)	No.	1	7280.00	7280.00	
114	NDSR	Non Return Valve (NRV) - Oxygen	No.	8	885.00	7080.00	
115	NDSR	Non Return Valve (NRV) - Nitrous	No.	8	885.00	7080.00	
116	NDSR	Copper Tail Pipe - Oxygen	No.	8	2537.00	20296.00	
117	NDSR	Copper Tail Pipe - Nitrous	No.	8	2537.00	20296.00	
118	NDSR	Flexiable Tail Pipe	No.	8	3717.00	29736.00	
119	NDSR	Single Stage Double Gauge Mox Regulator	4	2655.00	10620.00		
120	NDSR	Double Stage Double Gauge Mox Regulator	No.	3	3717.00	11151.00	
121	NDSR	High Pressure Flexiable Tube - O2/N2O/Air/Vac	Mtr.	20	371.70	7434.00	
122	NDSR	Vacuum / Air Compressor Service with spare (10 to 15 HP)	53100.00	212400.00			
123	NDSR	Motor Winding with Servicing & Others (10 to 15HP) No. 4 18408.00					
124	NDSR	Electric & Electronics Control Panel Servicing	94400.00				
125	NDSR	Dryer servicing with spare & others	· · · · · · · · · · · · · · · · · · ·				
126	NDSR	Solenoid valve					
127	NDSR	Vacuum / Air Filter servicing with spare & others	No.	3	10030.00	30090.00	
128	NDSR	Complete Filter Regulator Replacement	No.	3	12390.00	37170.00	
129	NDSR	Oxygen Musk	No.	200	196.00	39200.00	
130	NDSR	Nebulizer Musk	No.	200	224.00	44800.00	
131	NDSR	Nasal Cannula (Adult/Pediatric/Infant)	No.	200	134.40	26880.00	
132	NDSR	FA Valve	No.	30	2968.00	89040.00	
		Total Amount				6627947.00	
					Total NDSR	6627947.00	
	Add CP & OH @15 %						
					SUB TOTAL	7622139.05	
					Add@18% GST	1371985.03	
				Total NDSR	/MR including GST	8994124.08	
				Total DSR+NDSR	/MR including GST	8994124.08	
				Total DSR+NDSR	/MR excluding GST	7622139.05	

	Wages Calculation as per Central Minimum Wages (CMW) W.e.f 1st Mar-2024						
			Area A				
	DESCRIPTION	MIN WAGE	Days	Total			
1		1035	26	26,910.00			
			TOTAL (A)	26,910.00			
		Bonus on (A)	8.33%	-			
			Total(B)	26,910.00			
		GST on B		-			
			Total C	26,910.00			
		CP&OH on (C)	15%	4,037.00			
	High Skilled (Supervisor)	EPF(on 15000) on (A)	13%	1,950.00			
		ESI (up to 21000)	3.25%	-			
			Total D	5,987.00			
			Total E=C+D	32,897.00			
		Labour cess	1%	-			
]		Total G	32,897.00			
			Grand Total	32,897.00			
	DESCRIPTION	MIN WAGE	Days	Total			
2		954	26	24,804.00			
			TOTAL (A)	24,804.00			
		Bonus on (A)	8.33%	-			
			Total(B)	24,804.00			
		GST on B		-			
			Total C	24,804.00			

_	7			
		CP&OH on (C)	15%	3,721.00
	Skilled (Electrician Gr- 1, Civil: Pump Operator,Plumber,	EPF(on 15000) on (A)	13%	1,950.00
	Carpenter, Masons etc)	ESI (up to 21000) on A	3.25%	-
]		Total D	5,671.00
			Total E=C+D	30,475.00
		Labour Cess on F	1%	-
]		Total G	30,475.00
	-			
			Grand Total	30,475.00
	DESCRIPTION	MIN WAGE	Days	Total
3	1	868	26	22,568.00
	1		TOTAL (A)	22,568.00
		Bonus on (A)	8.33%	-
	_		Total(B)	22,568.00
	1			
	1	GST on B		-
	-		Total C	22,568.00
	-			
		CP&OH on (C)	15%	3,385.00
	Semi-Skilled (Sewer man & Gardener& Mason)	EPF(on 15000) on (A)	13%	1,950.00
		ESI (up to 21000) on A	3.25%	-
]		Total D	5,335.00
			Total E=C+D	27,903.00
		Labour Cess on F	1%	-
]		Total G	27,903.00
			Grand Total	27,903.00
	DESCRIPTION	MIN WAGE	Days	Total

4		783	26	20,358.00
			TOTAL (A)	20,358.00
		Bonus on (A)	8.33%	1,696.00
			Total(B)	22,054.00
		GST on B		-
			Total C	22,054.00
		CP&OH on (C)	15%	3,308.00
	Un-Skilled (Civil & Electrical Helper)	EPF(on 15000) on (A)	13%	1,950.00
		ESI (up to 21000) on A	3.25%	661.64
			Total D	5,919.64
			Total E=C+D	27,973.64
		Labour Cess on F	1%	
			Total G	27,973.64
			Grand Total	27,974.00

Wages rate as per CLC Order dated & w.e.f 1st Oct-2024