Ujjain Smart City Limited

Request for Proposal

for

“Development Works at Gadkalika Mata Mandir and Precinct at Ujjain”

NIT No. USCL/422

Tender ID: 2026_UAD_497006_1 Ujjain Date: 03/04/2026

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Ujjain Smart City Limited
Mela Office, Kothi Road,
Ujjain, Madhya Pradesh – 456010

Ujjain Smart City Limited

Mela Office, Kothi Road,
Ujjain, Madhya Pradesh – 456010
Phone No. 0734 2525856; E-mail: ujjainsmartcity@mpurban.gov.in
Website: https://ujjainsmartcity.com/en/about-uscl/

NIT No. USCL/422 Tender ID: 2026_UAD_497006_1 Ujjain Date: 03/04/2026

Ujjain Smart City Limited (USCL) invites online bids from eligible bidders for ***"Development Works at Gadkalika Mata Mandir and Precinct at Ujjain"*** as per details given below:

SNo	Particulars	Details
1	Name of Work and Site	**Development Works at Gadkalika Mata Mandir and Precinct at Ujjain**
2	Cost of Tender Document / Bid submission Fee	Rs 30,000/- plus GST
3	Earnest Money Deposit (EMD) / Bid Security	Rs 6,57,083/-
4	Probable Amount of Contract (PAC)	Rs. 13,14,16,417/- (Rupees Thirteen Crores fourteen lac sixteen thousand four hundred seventeen only) (Excluding GST)
5	Purchase of Tender Date	03/04/2026
6	Pre-bid Meeting	10/04/2026 Time 15:00 hrs. at Mela Karyalaya Office, Kothi Road, Ujjain
7	Purchase of Tender End Date	27/04/2026up to 17:00 hrs.
8	Financial and Technical Bid Submission End Date (Online)	27/04/2026 up to 17:00 hrs.
9	Technical Bid Submission End Date (Physical Only)	Not Applicable
10	Technical Bid opening	28/04/2026after 11:00 hrs.
11	Financial Bid opening	To be notified
12	Completion Period	Twelve (12) Months
13	Validity period of Bids	120 Days after the Last date of Submission
14	Mode of selection of Contractor	Open Tender through e-procurement. The contract shall be awarded to the Lowest **(L1)** responsive bidder meeting all eligibility criteria
Note: In case of any mismatch in key dates, key dates showing on e-portal shall be final. For more details, please refer to e-procurement website: www.mptenders.gov.in. Corrigendum or amendments, if any, shall be uploaded on this website only.		

UJJAIN SMART CITY LIMITED (USCL)

MADHYA PRADESH

APPENDIX 2.10

TENDER DOCUMENT

Office of the		:	**Ujjain Smart City Limited**
NIT Number and Date		:	USCL/422
Date of NIT		:	03/04/2026
Agreement Number and Date		:	
Name of Work		:	**Development Works at Gadkalika Mata Mandir and Precinct at Ujjain**
Name of the Contractor		:	
Probable Amount of Contract	In Fig	:	**Rs** 13,14,16,417/- (excluding applicable GST)
	In words	:	(Rupees Thirteen Crores fourteen lac sixteen thousand four hundred seventeen only) (Excluding GST)
Contract Amount	In Fig	:	
	In words	:	
Stipulated Period of Completion		:	*12 (Twelve) Months including intervening rainy season*

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SECTION 1
Notice Inviting e-Tenders
Ujjain Smart City Limited

Online percentage rate bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S. No.	Name of Work	Probable Amount of Contract (In Rupees)	Earnest Money Deposit (EMD) (In Rupees)	Cost of Bid Document (In Rupees)	Period of completion (In Months)
1	**Development Works at Gadkalika Mata Mandir and Precinct at Ujjain**	**Rs.** 13,14,16,417/-	Rs 6,57,083/-	**Rs. 30,000/-**	**12 Months (Including intervening rainy season)**

1. All details relating to the Bid Document(s) can be viewed and downloaded free of cost on the website.
2. Bid Document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card/ internet banking. / NEFT/RTGS/ System generated Challan
3. At the time of submission of the bid the eligible bidder shall be required to:
   a. Pay the cost of bid document.
   b. Deposit the Earnest Money
   c. Submit a check list and
   d. Submit an affidavit.
   Details can be seen in the Bid Data Sheet. The above details are to be submitted online only.
4. **Eligibility for Bidders:**
   a. The Bidder shall be a Company incorporated under the Companies Act, LLP, Partnership Firm, or Proprietorship Firm; registered under applicable laws in India and operational for at least last three (3) years.
      In case of Proprietorship Firm, the bidder shall be required to submit valid registration documents, GST registration, PAN, and certified financial statements. The Authority reserves the right to apply additional scrutiny regarding financial and technical capacity, and may require enhanced performance security to safeguard contract performance.
   b. At the time of submission of the Bid the bidder should have valid registration with the Government of Madhya Pradesh, PWD in appropriate class. However, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for registration can also submit their bids after having applied for registration with appropriate authority.
   c. The bidder / ~~One of the members of Joint Venture /~~ Sub-contractor should have valid A Class Electrical Contractor License from Madhya Pradesh Government Electrical Licensing Board (Office of Chief Electrical Inspector, MP Govt.) at the time of signing of the Contract.
   d. The bidder would be required to have valid registration with MPPWD in appropriate class at the time of signing of the Contract.
   e. Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.
5. The Bid Document can be purchased only online as per brief NIT Other key dates may be seen in bid data sheet.
6. Amendments to NIT, if any, would be published on website only, and not in newspaper.

Executive Director
Ujjain Smart City Limited

Notice Inviting e- Tenders
Ujjain Smart City Limited
Office of the Executive Director, Ujjain Smart City Limited

N.I.T.NO. USCL/422 **Dated. 03/04/2026**

Online percentage rate bids for the following works are invited from registered contractors and firms of repute fulfilling registration criteria:

S. No.	Name of Work	Probable Amount of Contract (In Rupees)	Earnest Money Deposit (EMD) (In Rupees)	Cost of Bid Document (In Rupees)	Period of completion (In Months)
1	**Development Works at Gadkalika Mata Mandir and Precinct at Ujjain**	**Rs. 13,14,16,417/-**	**Rs 6,57,083/-**	**Rs. 30,000/-**	**12 Months (Including intervening rainy season)**

1. Document & other details shall be available on website ***https://mptenders.gov.in***
2. The Bid Document can be purchased only online as per the schedule given in Brief NIT.
3. ***Pre-Bid Meeting*** is scheduled on ***3:00 PM*** as per the schedule given in Brief NIT ***at USCL office Mela Karyalaya Ujjain.***
4. Amendments to NIT, if any, would be published on website only, and not in Newspaper.
5. The EMD shall be deposited online through portal via Electronic EMD (RTGS, NEFT).
6. Key Dates:

S.No.	Particulars	Details
1	Purchase of Tender End Date (Online)	as per the schedule given in Brief NIT
2	Pre- Bid Meeting	as per the schedule given in Brief NIT
3	Financial and Technical Bid Submission End Date (Online)	as per the schedule given in Brief NIT
4	Technical Bid opening (Online)	as per the schedule given in Brief NIT

Note: In case of any mismatch in key dates, key dates showing on e-portal shall be final. For more details, please refer to e-procurement website: www.mptenders.gov.in. Corrigendum or amendments, if any, shall be uploaded on this website only.

Executive Director
Ujjain Smart City Limited

SECTION 2
INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

PROJECT OBJECTIVE AND KEY COMPONENTS

1. SCOPE OF BID

1.1. The detailed description of work, hereinafter 'work', is given in the **Annexure E** of this document. The main Scope of work includes **Development Works at Gadkalika Mata Mandir and Precinct at Ujjain.**

2. GENERAL QUALITY OF WORK:

2.1. The work shall have to be executed in accordance with the drawings prepared by USCL/ Consultant (except for stone artwork and artforms) and approved by the competent authority, technical specifications specified in the Bid Data Sheet/Contract Data, and shall have to meet high standards of workmanship, safety and security of workmen and works.

3. PROCEDURE FOR PARTICIPATION IN E-TENDERING

The procedure for participation in e-tendering is given in the Bid Data Sheet. as well as in Annexure F.

4. ONE BID PER BIDDER

4.1. The bidder can be an individual entity or a joint venture (if permitted as per Bid Data Sheet). In case the J.V. is permitted, the requirement of joint venture shall be as per the Bid Data Sheet.

4.2. No bidder shall be entitled to submit more than one bid whether jointly or severally. If he does so, all bids wherein the bidder has participated shall stand disqualified

5. COST OF BIDDING:

The bidder shall bear all costs associated with the preparation and submission of his bid, and no claim whatsoever for the same shall lie on the Government/ UMC/ USCL or the Authority

6. SITE VISIT AND EXAMINATION OF WORKS:

The bidder is advised to visit and inspect the site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the work. All costs in this respect shall have to be borne by the bidder.

B. BID DOCUMENTS

7. CONTENT OF BID DOCUMENTS:

The Bid Document comprises of the following documents:

1. NIT with all amendments.
2. Instructions to Bidders, Bid Data Sheet with all Annexure
3. Conditions of Contract:
   I. Part I General Conditions of contract and the Contract Data with all Annexure, and
   II. Part II Special Condition of Contract.
4. Specifications
5. Drawings / Suggestive Graft is given in Annexure E
6. Priced bill of quantities
7. Technical and Financial bid
8. Letter of Acceptance

9. Agreement, and
10. Any other document(s), as specified

8. EXAMINE

The bidder is expected to examine carefully all instructions, conditions of contract, the Contract data, forms, terms and specifications, bill of quantities, forms and drawings in the bid document, Bidder shall be solely responsible for his failure to do so.

9. PRE-BID MEETING (WHERE APPLICABLE)

Wherever the Bid Data Sheet provides for pre-bid meeting:

9.1. Details of venue, date and time would be mentioned in the Bid Data Sheet. Any change in the schedule of pre-bid-meeting would be communicated on the website only, and intimation to bidders would not be given separately.

9.2. Any prospective bidder may raise his queries and/or seek clarifications in writing before or during the pre-bid meeting. The purpose of such meeting is to clarify issues and answer questions on any matter that may be raised at that stage. The Employer may, at his option, give such clarifications as are felt necessary.

9.3. Minutes of the pre-bid meeting including the gist of the questions raised and the responses given together with any response prepared after the meeting will be hosted on the website.

9.4. Pursuant to the pre-bid meeting, if the employer deems it necessary to amend the bid Documents, it shall be done by issuing amendment to the online NIT.

10. AMENDMENT OF BID DOCUMENTS:

10.1. Before the deadline for submission of bids, the Employer may amend or modify the bid document by publication of the same on the website.

10.2. All amendments shall form part of the Bid Document.

10.3. The Employer may, at its discretion, extend the last date for submission of bids by publication of the same on the website.

C. PREPARATION OF BID

11. BID PREPARATION

The bidders have to prepare their bids online, encrypt their Bid Data in the Bid Forms and submit Bid Seals (Hashes) of all the envelopes and documents related to the bid required to be uploaded as per the time schedule mentioned in the key dates of the Notice Inviting e-tenders after signing of the same by the Digital Signature of their authorized representative.as per guideline given on portal.

12. DOCUMENTS COMPRISING THE BID:

The bid submitted online by the bidder shall be in the following parts:

Part 1- This shall be known as online Envelop A and would apply for all bids. Online envelop A shall contain the following as per details given in the bid data sheet:

i) Registration number or proof of application for registration and organizational details in the format given in the bid data sheet.
ii) Payment of the cost of Bid Document.
iii) PAN Number
iv) GST Number
v) Earnest Money: and
vi) Duly notarised Affidavit On Non Judicial stamp of Rs. 100 as per Annexure -B.

The above details are to be submitted online only.

Part 2 – This shall be known as Online **Envelope B** and required to be submitted only in work where pre-qualification conditions and / or special eligibility conditions are stipulated in the Bid Data Sheet.

Online Envelope B shall contain a self-certified sheet duly supported by documents to demonstrate fulfilment of pre-qualification conditions.

Part 3- This shall be known as online **Envelope C** and would apply to all bids. Envelop C shall contain financial offer in the prescribed format enclosed with the Bid Data Sheet and shall only be submitted online.

13. LANGUAGE:

The bid as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Employer shall be in English or Hindi. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in English. In such case, for the purposes of interpretation of the bid, such translation shall govern.

14. TECHNICAL PROPOSAL:

14.1. Only, in case of bids with pre-qualification conditions defined in the Bid Data Sheet, the Technical Proposal shall comprise of formats and requirements given in the Bid Data Sheet.

14.2. All the documents/ information enclosed with the Technical Proposal should be self-attested and certified by the bidder. The Bidder shall be liable for forfeiture of his earnest money deposit, if any document/information is found false/fake/untrue before acceptance of bid. If it is found after acceptance of the bid, the bid sanctioning authority may at his discretion forfeit his performance security / guarantee, security deposit, enlistment deposit and take any other suitable action.

15. FINANCIAL BID:

15.1. The bidder shall have to quote rates in format referred in Bid Data Sheet, in overall percentage, and not item wise, if the bid is in absolute amount, overall percentage would be arrived at in relation to the probable amount of contract given in NIT. The overall percentage rate would apply for all items of work.

15.2. Percentage shall be quoted in figures as well as in words. If any difference in figures and words is found, lower of the two shall be taken as valid and correct.

15.3. The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies except Goods & Services Tax (GST). The amount of applicable GST will be paid separately to the contractor with each bill at the time of payment; and the Employer shall not be liable for any duties, taxes (Except GST) royalties and levies.

15.4. The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

16. PERIOD OF VALIDITY OF BIDS:

The bids shall remain valid for a period specified in the Bid Data Sheet after the date of "close for biding" as prescribed by the Employer. The validity of the bid can be extended by mutual consent in writing.

17. EARNEST MONEY DEPOSIT (EMD)

17.1. The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), in the amount specified in the Bid Data Sheet.

17.2. EMD/ Bid Security shall be submitted only online using options available in the tender portal within the specified time limit. Bidders are advised to process it well in advance. No claim shall be entertained due to delay in online transactions via payment gateway/banking portal."

17.3. Bid not accompanied by EMD shall be liable for rejection as non-responsive.

17.4. EMD of all bidders except L1 will be returned within ten working days of the decision on the bid.

17.5. EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement after furnishing the required Performance security.

17.6. Failure to sign the contract by the selected bidder, within the specified period, for whatsoever reason, shall result in forfeiture of the earnest money.

D. SUBMISSION OF BID

18. BID SUBMISSION

The Bidder is required to submit digitally signed Bid ie. Envelop A, B & C Online only. No physical submission of the Bid will be accepted except in exceptional case under clause 19.7."

E. OPENING AND EVALUATION OF BID

19. PROCEDURE:

19.1. Envelope "A" shall be opened first online at the time and date notified and its contents shall be checked. In cases where Envelope "A" does not contain all requisite documents, such bid shall be treated as non-responsive, and Envelope B and / or C of such bid shall not be opened.

19.2. Wherever Envelope 'B' (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelope 'B' Envelope 'C' (financial bid) of bidders who are not qualified in Technical Bid (Envelop 'B') shall not be opened.

19.3. Envelope 'C' (Financial Bid) shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Envelope 'C'

19.4. After opening Envelope 'C' all responsive bids shall be compared to determine the lowest evaluated bid.

19.5. The Employer reserves the right to accept or reject any bid, and to annul the bidding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases reasons shall be recorded.

19.6. The employer reserves the right of accepting the bid for the whole work or for a distinct part of it.

19.7. "In exceptional case, if physical submission of certain documents is found essential, then expressed prior permission must be obtained in writing by the tender issuing authority from an authority, as authorized by the State Government. In such a case, such documents are required are to be submitted physically at the place and date specified in the Bid Data Sheet. In case of any mismatch in the documents submitted in the physical form and that uploaded or ie online, or if the contractor fails to submit the document physically, the bid shall be liable for rejection as non- responsive.

20. CONFIDENTIALITY:

20.1. Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until final decision on the bid.

20.2. Any Attempt by a bidder to influence the employer in the evaluation of the bids or contract award decisions may result in the rejection of his bid.

F. AWARD OF CONTRACT

21. AWARD OF CONTRACT:

The Employer shall notify the successful bidder by issuing a 'Letter of Acceptance' (LOA) that his bid has been accepted. The original copy of Affidavit will have to be submitted by the successful bidder at the time of signing of contract.

22. PERFORMANCE SECURITY

22.1. Prior to signing of the contract, the bidder to whom LOA has been issued shall have to furnish performance security of the amount in the form and for the duration, etc. as specified in the Bid Data Sheet.

22.2. Additional performance security, if applicable, is mentioned in the Bid data sheet and shall be in the form and for the duration, etc. similar to Performance Security.

23. SIGNING OF CONTRACT AGREEMENT:

23.1. The successful bidder shall have to furnish Performance Security and Additional Performance Security, if any, and sign the contract agreement within 15 days of issue of LOA

23.2. The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the employer to the contractor for commencement of work.

23.3. In the event of failure of the successful bidder to submit Performance Security and Additional Performance Security, if any or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the employer for taking any other action against the bidder.

24. CORRUPT PRACTICES:

The Employer requires that bidders observe the highest standard of ethics during the procurement and execution of contracts. In pursuance of this policy, the employer.

i. May reject the bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract; and

ii. May debar the bidder declaring ineligible, either indefinitely or for a stated period of time, to participate in bids, if it at any time determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

For the purposes of this provision, the terms set forth above are defined as follows:

a. ***'Corrupt Practice'*** means the offering, giving, receiving or soliciting directly or indirectly, anything of value to influence improperly the actions of another party.

b. ***'Fraudulent Practice'*** means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a fanatical or other benefit or to avoid an obligation:

c. ***'Coercive Practice'*** means impairing of 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,

d. 'Collusive practice' means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

(END OF ITB)

BID DATA SHEET

GENERAL			
SR.NO.	**PARTICULARS**	**DATA**	
1	Office inviting tender	***UJJAIN SMART CITY LIMITED***	
2	NIT No.	**N.I.T.NO. USCL / 422**	
3	Date of NIT	***03/04/2026***	
4	Bid document download available from date & time	***03/04/2026***	
5	Website link	https://mptenders.gov.in	
SECTION 1 – NIT			
CLAUSE REFERENCE	**PARTICULARS**	**DATA**	
2	Portal fees	***As notified in e-tendering website***	
3	Cost of bid document	***Rs 30,000/- + portal processing fees etc.***	
	Cost of bid document payable at	***As notified in e-tendering website***	
	Cost of bid document in favour of	***As notified in e-tendering website*** (Bidders shall be directed to the payment gateway through the portal)	
4	Affidavit format	***As per ANNEXURE B***	
5	Pre-Qualifications required	***Yes***	**-**
	If yes, details	***As per ANNEXURE C***	
6	Special Eligibility	***Yes***	
	If Yes, details	***As per ANNEXURE D***	
7	Key dates	***As per ANNEXURE A***	
SECTION 2 – IT B			
CLAUSE REFERENCE	**PARTICULARS**	***DATA***	
1.	Name of 'work'	***Development Works at Gadkalika Mata Mandir and Precinct at Ujjain***	
2.	Specifications	***As per ANNEXURE –E***	
3.	Procedure for participation in e-tendering	***As per ANNEXURE –F***	
4.	Whether joint venture is allowed	***No***	***~~Maximum Two (2) Nos including Lead Bidder~~***
	If yes, requirement for joint venture	***As per ANNEXURE – G***	
	Pre bid meeting to be held		***Yes***
	If Yes, Date, Time & Place	***As per NIT*** ***Place: Mela Office, Kothi Road,*** ***Ujjain, Madhya Pradesh – 456010***	

CLAUSE REFERENCE	**PARTICULARS**	***DATA***

12	Envelop A containing: i. Registration number or proof of application for registration and organizational details as per Annexure H ii. Cost of Bid Document iii. EMD iv. An affidavit duly notarized as per Annexure – B	Online submission Only
	Envelope-B Technical Proposal	***ANNEXURE – I and*** ***ANNEXURE –I (Format I-1 to I-5)***
	Envelope-C Financial Bid	***Annexure – J (SHOULD BE SUBMITTED ONLINE)***
	Materials to be issued by the department	***ANNEXURE – K***
	Period of Validity of Bid	***120 Days***
17	Earnest Money Deposit	**Rs 6,57,083/-**
	Forms of Earnest Money deposit	***e-EMD (RTGS / NEFT)***
	EMD valid for a period of	***120 Days beyond the final validity period of bids from the last date of submission of bids.***
19	Opening and evaluation of bid: Procedure	***Refer Annexure -00 at the end of Bid Data Sheet***
21	Letter of Acceptance (LoA)	***ANNEXURE L***
22	Amount of Performance Security	***Performance Security at the rate of three (3) percent of the contract value shall be required*** ***In case of any discrepancy in provisions on performance security, the latest guidelines issued by Finance Department/PWD/UADD of Govt. MP shall be applicable.***
	Additional Performance Security, if any	***In case the quote of the Successful Bidder is more than 10% below the PAC amount, then additional performance security shall be required to be submitted by the successful bidder. the latest circular issued by PWD of MP Govt. shall be applicable. (MPPWD Order No. F-53/02/2011/YO/19/525, DATED- 14/02/2025) (as attached)*** ***The Additional Performance Security shall not be treated as part of Performance Security and shall be released on completion of project.*** ***In case of any discrepancy in provisions on performance security or additional performance security, the latest guidelines issued by Finance Department/PWD/UADD of Govt. MP shall be applicable.***

मध्यप्रदेश शासन
लोक निर्माण विभाग
मंत्रालय

क्रमांक–एफ–53/02/2011/यो/19 भोपाल, दिनांक

//आदेश//

मध्यप्रदेश शासन, लोक निर्माण विभाग द्वारा जारी आदेश क्रमांक–एफ–53/02/2011/यो/19/2022 भोपाल, दिनांक 10 अगस्त 2022 में अतिरिक्त परफॉरमेंस गारंटी की राशि की गणना के लिए उल्लेखित गणितीय विधा के बिन्दु क्रमांक 3(अ) एवं 3(ब) में निम्नानुसार संशोधन उपरांत प्रतिस्थापित किया जाता है:–

3.1 निविदा में 10 प्रतिशत कम दर प्राप्त होने पर कोई अतिरिक्त परफॉरमेंस गारंटी की राशि नहीं लिया जाना है।

3.2 निविदा में 10 से 20 प्रतिशत तक कम दर आने पर निविदा दर 10 प्रतिशत से बढकर जितने प्रतिशत कम होगी PAC राशि का उतना प्रतिशत अतिरिक्त परफॉरमेंस गारंटी की राशि निम्नानुसार होगी:–

उदाहरण– यदि निविदा की अनुमानित लागत (PAC) Rs. 100.00 लाख है, तथा सफलतम निविदाकार की दर 14 प्रतिशत Below SOR हो तो अतिरिक्त परफॉरमेंस गारंटी की गणना निम्नानुसार होगी:–

एफ.डी.आर. के रूप में प्रस्तुत की जाने वाली अतिरिक्त परफॉरमेंस गारंटी की राशि:–

Probable Amount of Contract (PAC)X Rates Below SOR Beyond 10%=100 (14%-10%)= Rs. 4.00 लाख

3.3 निविदा में 20 प्रतिशत से अधिक कम दर (RATES BELOW SOR BEYOND 20%) आने पर निविदा दर आने पर गणना निम्नानुसार होगी:–

उदाहरण– यदि निविदा की अनुमानित लागत (PAC) Rs. 100.00 लाख है तथा, सफलतम निविदाकार की दर 24 प्रतिशत Below SOR हो तो अतिरिक्त परफॉरमेंस गारंटी की गणना निम्नानुसार होगी:–

एफ.डी.आर. के रूप में प्रस्तुत की जाने वाली अतिरिक्त परफॉरमेंस गारंटी की राशि:– A+B

A. Probable Amount of Contract X1 x Rates Below SOR Beyond 10% upto 20%) = 100x1x (10%) = Rs. 10.00 लाख

B. Probable Amount of Contract X Rates Below SOR Beyond 20% = 100x2x (4%) = Rs. 8.00 लाख

अर्थात कुल अतिरिक्त परफॉरमेंस गारंटी की राशि– (A+B)= Rs. 18.00 लाख

परिपत्र -Latter-2025-I

/2/

3.4 ऐसे अनुबंध मे जिनमें 10 प्रतिशत कम दर की सीमा से अधिक कम दरों पर अनुबंध निष्पादित किये जाने उन अनुबंधित कार्यो के पूर्ण होने के उपरांत उनके अंतिम देयको का भुगतान संबंधित अधीक्षण यंत्री के निरीक्षण उपरांत संतोषजनक पाये जाने पर तदानुसार अधीक्षण यंत्री द्वारा अनुमति प्रदान किये जाने के पश्चात ही किए जावे।

3.5 उपरोक्त के अतिरिक्त कार्य स्थल पर स्थापित बैच मिक्स प्लांट, रेडीमिक्स कांक्रीट (RMC) प्लांट का अधीक्षण यंत्री के द्वारा निरीक्षण किये जाने के उपरांत ही कार्य प्रारंभा किया जावे।

3.6 राशि रूपये 2.00 से 10.00 करोड़ तक के कार्यो के लिये स्थल पर स्थापित लेबोरेट्री का निरीक्षण अधीक्षण यंत्री के द्वारा तथा राशि रूपये 10.00 करोड़ से अधिक के कार्यो के लिये स्थापित लेबोरेट्री का निरीक्षण मुख्य अभियंता द्वारा किये जाने के उपरांत ही कार्य प्रारंभ किया जावे।

अतिरिक्त परफॉरमेंस गारंटी की एफ.डी.आर. कार्यपूर्णता के उपरांत ही विमुक्त की जा सकेगी।

14/2/25
(ए. आर. सिंह)
उप सचिव
म0प्र0 शासन, लोक निर्माण विभाग

पृ. क्रमांक–एफ–53/02/2011/यो/19/525 भोपाल, दिनांक 14/02/2025

प्रतिलिपि:–

1. प्रमुख अभियंता, (सड़क/पुल) लोक निर्माण विभाग भोपाल।
2. प्रबंध संचालक, म.प्र. सड़क विकास निगम भोपाल।
3. प्रमुख अभियंता (भवन) लोक निर्माण विभाग भोपाल।
4. प्रबंध संचालक, म.प्र. भवन विकास निगम भोपाल।
5. विशेष सहायक, माननीय मंत्री जी लोक निर्माण विभाग भोपाल।
6. समस्त मुख्य अभियंता, (सड़क/पुल) लोक निर्माण विभाग।
7. समस्त मुख्य अभियंता, (भवन) लोक निर्माण विभाग।
8. समस्त अधीक्षण यंत्री, लोक निर्माण विभाग मध्य प्रदेश।
9. समस्त कार्यपालन यंत्री लोक निर्माण विभाग मध्य प्रदेश।
10. कार्यपालन यंत्री, (भवन) लोक निर्माण विभाग मध्य प्रदेश।

की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

14/2/25
उप सचिव
म0प्र0 शासन, लोक निर्माण विभाग

	Performance security in the format	***ANNEXURE M***
	Performance security in favour of	***Executive Director, USCL***
	Performance security valid up to	***Valid till issue of Physical Completion Certificate plus Defect Liability Period plus, three months***
	Additional Performance security valid up to	***Valid till issue of Physical Completion Certificate plus, three months***

Annexure – A
(See clause 1, 7 of Section 1-NIT)

KEY DATES

Please Refer Brief NIT

Annexure – B
(See clause 3 of Section 1-NIT)

|| AFFIDAVIT ||
(To be contained in *Envelope A*)
(On Non Judicial stamp of Rs. 100)[1]

I/We _____ who is / are _____ (status in the firm / company) and competent for submission of the affidavit on behalf of M/S _____ (contractor) do solemnly affirm an oath and state that :

I/We am / are fully satisfied for the correctness of the certificates/ records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No._____ for _____ (name of work) dated _____ issued by the _____ (name of the Department).

I/We am/ are fully responsible for the correctness of following self- certified information / digitally signed documents and certificates.

1. That the self – certified information given in the bid document is fully true and authentic.
2. That :
   ~~1. Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.~~[2]
   1. Information regarding financial qualification and annual turnover submitted online is correct.
   2. Information regarding various technical qualifications submitted online is correct.
3. No. close relative of the undersigned and our firm/company is working in the department.

Or

Following close relatives are working in the department:

Name _____- Post _____ present Posting _____

Signature with seal of the Deponent (bidder)

I/We, _____ above deponent do hereby certify that the facts mentioned in above paras 1 to 4 are correct to the best of my knowledge and belief. . In the event of any information is to be found to be incorrect / untrue or found violated, then without giving any prior notice, our bid shall be liable for rejection or termination of contract, with prejudice to any other rights of Remedy including the forfeiture of the bid security / Performance security.

Verified today _____ (dated) at _____ (place).

Signature with seal of the Deponent (bidder)

The original copy of **Affidavit** will have to be submitted by the successful **bidder** at the time of **signing** of contract

[1] Deleted Order issued by Chief Engineer MP PWD vide order No क्रमांक401/सा/विविध/002/2014/2012भोपाल,दिनांक 08-01-2015

[2] Deleted as EMD is paid online.

Annexure—C

(Sec clause 5 of Section 1-NIT)

PRE- QUALIFICATIONS CRITERIA

The bidder should have:

A. Financial & Physical

i. Experience of having successfully executed as prime contractor:

a) three similar works each costing not less than the amount equal to 20% of the probable amount of contract during the last 5 years; or

b) two similar works each costing not less than the amount equal to 30% of the probable amount of contract during the last 5 Years; or

c) one similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 5 years.

~~**(For Joint Ventures)**~~

~~For the meeting the minimum qualification criteria of experience of similar nature work,~~

~~a) Out of 3 (three) similar works of value more than 20% of PAC, at least 2 (two) works must be done by lead partner and 1 (one) work to be done by other partner.~~

~~Or~~

~~b) Out of 2 (two) similar works of value more than 30% of PAC, at least 1(one) work must be done by lead partner and 1 (one) work to be done by other partner.~~

~~Or~~

~~c) In case of one similar work of value more than 50% of PAC the lead partner must satisfy the criteria. However, the other partner must satisfy the criteria of least one work of 20% of PAC.~~

~~ii~~. ***Average Annual Turnover*** on the similar works/services ***shall not be less than 50%*** of the probable amount of contract during ***the last 3 financial years ending on 31.03.2025.***

~~iii. Executed similar items of work in any one financial year during the last 3 financial years, which should not be less than the minimum, physical requirement, if any, fixed for the work.~~

iv. ***Bid Capacity —*** Bidder shall be allotted work up to his available Bid Capacity, which shall be worked out as given in ***Format 1-2 of Annexure I***. ***Bid Capacity shall be equal to or higher than the bid amount (PAC).***

Note:

1. **The similar work shall mean**

Temple / Heritage Building / Public Campus / Institutional Campus Development, including RCC + Architectural Stone + MEP and Landscaping works.

Projects may be executed for Government / PSU / Autonomous Bodies / Cultural institutions.

2. The following shall not be considered as Similar Work:

Pure building construction without public realm component; Or Routine road works / resurfacing works; Or Only MEP works without civil component; Or Interior furnishing works

Annexure —D
(See clause 6 of Section 1-NIT)

SPECIAL ELIGIBILITY CRITERIA

The Bidder shall demonstrate proven capability for at least one (1) completed project involving Architecture Stonework of 20% of PAC.

This experience may be part of a project or a standalone architecture stonework contract.

Annexure —E
(See clause 2 of Section 2 —ITB & clause 10 of GCC)

SCOPE OF WORKS & SPECIFICATIONS

Development Works at Gadkalika Mata Mandir and Precinct at Ujjain

[A] SCOPE OF WORK

1. Project Background

The Gadhkalika Mata Temple & Precinct Development Project at Ujjain is conceived as a comprehensive initiative to revitalize one of the city's ancient and culturally significant Shakti shrines, deeply associated with local faith, traditional festivals, and the broader pilgrimage circuit of Ujjain. The existing temple precinct presently faces challenges such as aging structures, inadequate infrastructure, unorganized access and circulation, and lack of essential pilgrim amenities, particularly during peak periods like Navratri and Simhastha. In line with the vision of strengthening Ujjain's identity as a "City-Temple" and preparing for increased footfall during Simhastha 2028, the project aims to integrate heritage conservation with modern urban design principles. The proposed development focuses on structural restoration of the temple, creation of a well-organized and shaded pilgrim forecourt, improved access and circulation systems, enhanced public amenities, landscape and ecological interventions, and overall upgradation of infrastructure to ensure a safe, efficient, and spiritually enriching experience for devotees while preserving the site's traditional character.

2. Scope Overview

The Contractor shall undertake comprehensive development of Gadhkalika Mata Temple & Precinct, including heritage conservation, precinct development, infrastructure augmentation, landscape works, and allied facilities to transform the site into a high-capacity pilgrimage node for Simhastha 2028.

The development shall be executed in an integrated manner, respecting:

- Heritage character of temple
- Shakti Peeth identity and cultural significance
- Target capacity enhancement from ~5,000 to 12,000 pilgrims/day

3. Detailed Scope of Work

3.1. Temple Restoration & Conservation Works

Scope:

- Structural assessment and stabilization of:
    - Shikhara
    - Parapet walls
    - Load-bearing elements
- Crack stitching using heritage-compatible techniques
- Lime plaster restoration (NO cement plaster allowed)
- Stone repair/replacement using matching stone
- Surface cleaning and heritage treatment

Technical Specifications:

- Lime mortar: Traditional lime-surkhi mix (ratio as per conservation expert)
- Stone: Buff sandstone matching existing tone and grain
- No mechanized cutting on heritage surfaces
- Conservation methodology to be approved by:
    - Heritage Expert / PDMC
    - Engineer-in-charge

3.2. Temple Forecourt & Sacred Courtyard Development

Scope:

- Development of pilgrim congregation plaza
- Construction of:
    - Colonnaded forecourt
    - Ritual platforms
    - Seating areas (stone-based)
- Integration of traditional motifs and sacred geometry

Technical Specifications:

- Flooring: Red & buff sandstone (minimum 40–60 mm thick); Anti-skid finish
- Jointing: Lime mortar joints
- Load bearing: Designed for heavy crowd (5–7 kN/sqm minimum)

3.3. Tensile / Shaded Canopy Structures

Scope:

- Design, fabrication, and erection of:
    - Modular canopy structures over plaza
    - Covered queue pathways

Technical Specifications:

- Structure: Structural steel (IS 2062 / equivalent); Hot-dip galvanized
- Roofing: Tensile membrane / PTFE / HDPE fabric; UV resistant (minimum 15-year life)
- Wind load: Designed as per IS 875
- Drainage: Integrated rainwater collection

3.4. Internal Queue Management System

Scope:

- Design and installation of: Segregated entry & exit; Queue holding system (350–400 persons capacity)
- Covered queue with shading

Technical Specifications:

- Railings: Stainless Steel (Grade 304/316) / Brass finished
- Layout: Minimum 1.5–2.0 m width lanes
- Accessibility: Separate senior citizen / divyang access
- Safety: Emergency exit points at regular intervals

3.5. Entrance Gate, Exit Gate & Architectural Elements

Scope:

- Construction of Main entrance gate (ornamental); Exit/VIP gate
- Integration of Sculptural panels; Traditional carvings

Technical Specifications:

- Material: Sandstone + RCC structural backing
- Finish: Hand-carved detailing
- Structural design: As per seismic zone requirements

3.6. Flooring & Paving Works (Entire Precinct)

Scope:

- Development of Plaza flooring; Pathways; Internal courtyard flooring

Technical Specifications:

- Material: Natural stone (buff/red sandstone)
- Thickness: 40–80 mm depending on location
- Sub-base: Compacted GSB + PCC base
- Drainage slope: Minimum 1:60

3.7. Approach Road & External Infrastructure

Scope:

- Road widening and improvement
- Pedestrianization near temple
- Bollards and traffic calming

Technical Specifications:

- Road: Rigid pavement / stone paving
- Footpaths: Minimum 2.0 m width
- Accessibility: Universal design (ramps ≤1:12 slope)

3.8. Parking Development

Scope:

- Development of parking area
- Marking, circulation, entry-exit control

Technical Specifications:

- Surface: Paver blocks / stone paving
- Lighting: LED street lighting
- Drainage: Surface + underground drainage

3.9. Landscape & Ecological Development

Scope:

- Plantation of sacred species: Peepal, Bilva, Ashoka
- Development of: Planters; Green buffers
- Baori (stepwell) structural and ecological restoration

Technical Specifications:

- Soil: Enriched with organic manure
- Irrigation: Drip irrigation system
- Rainwater harvesting: Recharge pits

3.10. Public Amenities & Utilities

Scope:

- Construction of:
    - Toilets (separate for male/female/divyang)
    - Drinking water kiosks
    - Cloakroom
    - Vending zones (organized)

Technical Specifications:

- Toilets: Modular / RCC structure; Bio-digester / sewer connection
- Finishes: Anti-skid tiles
- Plumbing: CPVC / UPVC piping

3.11. Electrical & Illumination Works

Scope:

- Complete electrical infrastructure including:
    - Façade lighting
    - Pathway lighting
    - Landscape lighting

Technical Specifications:

- Lighting: Warm LED (2400–2700K)
- Fixtures: IP65 minimum
- Cabling: Underground armored cables
- Smart control: Timer/automation based lighting

3.12. Drainage & Sewerage System

Scope:

- Storm water drainage network
- Surface water management
- Connection to city sewer

Technical Specifications:

- Drain type: Covered RCC drains
- Slope: Self-cleansing velocity ensured
- Rainwater harvesting integration

3.13. Signage & Wayfinding System

Scope:

- Directional signage
- Informational boards
- Cultural interpretation panels

Technical Specifications:

- Material: Stone / metal / etched panels
- Language: Hindi + English
- Design: Heritage compatible

3.14. Security & Surveillance System

Scope:

- CCTV surveillance
- Control room setup

Technical Specifications:

- Cameras: IP-based HD cameras
- Coverage: All entry, queue, plaza, parking
- Integration: Central monitoring system

3.15. Solid Waste Management

Scope:

- Installation of bins
- Waste collection & disposal system

Technical Specifications:

- Segregation: Wet / Dry / Religious waste
- Composting: Organic waste treatment (if space permits)

4. Design & Execution Requirements

4.1. Architectural Control

- Contractor shall follow: Approved architectural drawings and Heritage design guidelines

4.2. Capacity Compliance

Works must achieve:

- 10,000–12,000 pilgrims/day capacity
- Peak holding 800–1000 persons/hour

4.3. Safety & Crowd Management

- Emergency evacuation ≤12 minutes
- Fire safety provisions as per NBC
- Crowd flow simulation (if required)

4.4. Sustainability Requirements

- Rainwater harvesting
- Energy-efficient lighting
- Minimal tree cutting

5. Testing, Commissioning & Handover

- All systems shall be tested:
    - Electrical
    - Plumbing
    - Structural stability
- Trial run during peak load simulation
- Submission of:
    - As-built drawings
    - O&M manuals

6. Operation & Maintenance

- Contractor shall maintain works for **Defect Liability Period (DLP)**
- Regular upkeep of:
    - Landscape
    - Lighting
    - Public amenities

7. Deliverables

- Detailed design drawings
- Shop drawings
- Method statements
- Quality assurance plans

8. Special Conditions

- Work shall be executed **without disturbing temple rituals**
- Night-time / phased execution may be required
- Coordination with temple trust & local authorities mandatory

9. Applicable IS Codes & Standards

All materials, workmanship, testing and execution shall conform to the latest applicable Indian Standards (IS Codes), National Building Code (NBC), MP PWD Specifications, and other relevant codes. In case of discrepancy, the decision of the Engineer-in-Charge shall be final and binding.

9.1. General

All works shall conform to the latest editions (including amendments) of:

- Relevant **Indian Standards (IS Codes)**
- **National Building Code (NBC), 2016**
- **MP PWD Specifications & SOR 2024**
- Applicable MoRTH / CPWD specifications (where relevant)

In case of conflict, the **more stringent specification shall prevail**, as directed by the Engineer-in-Charge.

9.2. Civil & Structural Works

9.2.1. Concrete & RCC Works

- IS 456 – Plain and Reinforced Concrete – Code of Practice
- IS 10262 – Concrete Mix Proportioning
- IS 383 – Coarse and Fine Aggregates
- IS 516 – Methods of Tests for Strength of Concrete
- IS 1199 – Sampling and Analysis of Concrete
- IS 9103 – Concrete Admixtures

9.2.2. Reinforcement Steel

- IS 1786 – High Strength Deformed Steel Bars
- IS 432 – Mild Steel Bars
- IS 2502 – Bending and Fixing of Bars

9.2.3. Structural Design

- IS 800 – General Construction in Steel
- IS 875 (Part 1 to 5) – Design Loads (Dead, Live, Wind, etc.)
- IS 1893 – Earthquake Resistant Design
- IS 13920 – Ductile Detailing of Reinforced Concrete

9.2.4. Masonry Works

- IS 1905 – Structural Use of Unreinforced Masonry
- IS 2212 – Brickwork Code of Practice
- IS 1077 – Common Burnt Clay Bricks

- IS 2185 – Concrete Masonry Units

9.3. Stone, Flooring & Finishes

- IS 1121 – Methods of Test for Natural Building Stones
- IS 3316 – Structural Design of Natural Stone Masonry
- IS 1237 – Cement Concrete Flooring Tiles
- IS 1443 – Code of Practice for Laying Stone Flooring
- IS 2571 – In-situ Cement Concrete Flooring

9.4. Heritage & Conservation Works (Relevant References)

(To be used in conjunction with conservation best practices)

- IS 1666 – Lime Pozzolana Mixtures
- IS 712 – Building Limes
- IS 2116 – Sand for Masonry Mortars
- INTACH Guidelines for Heritage Conservation (latest)

9.5. Roads, Pavements & External Development

- IRC:37 – Design of Flexible Pavements
- IRC:58 – Design of Rigid Pavements
- IS 2386 – Testing of Aggregates
- MoRTH Specifications for Road & Bridge Works

9.6. Water Supply & Plumbing

- IS 1172 – Water Supply for Buildings
- IS 2065 – Water Supply in Buildings
- IS 10500 – Drinking Water Quality
- IS 4985 – UPVC Pipes
- IS 1729 – CI Pipes

9.7. Sewerage & Drainage

- IS 1742 – Building Drainage
- IS 4111 – Sanitary Fittings
- IS 5329 – Code for Sanitary Pipework
- CPHEEO Manual on Sewerage & Drainage

9.8. Electrical Works & Illumination

- IS 732 – Electrical Wiring Installations
- IS 3043 – Earthing
- IS 5216 – Safety Procedures for Electrical Work
- IS 3646 – Interior Illumination
- IS 10322 – Luminaires

9.9. Fire & Safety

- NBC 2016 (Part 4 – Fire & Life Safety)
- IS 2190 – Fire Detection & Alarm System
- IS 3844 – Fire Fighting Equipment
- IS 15105 – Sprinkler Systems

9.10. Accessibility & Universal Design

- NBC 2016 (Part 3 – Accessibility)
- Harmonised Guidelines for Universal Accessibility (MoHUA)

9.11. Landscape & Horticulture

- IS 14458 – Retaining Wall Design
- CPWD Specifications for Horticulture & Landscaping
- IRC Guidelines for Avenue Plantation

9.12. Structural Steel & Fabrication (Canopies, etc.)

- IS 800 – Steel Design
- IS 2062 – Structural Steel
- IS 875 (Wind Loads)
- IS 814 – Welding Electrodes

9.13. Testing & Quality Control

- IS 1200 – Method of Measurement of Building Works
- IS 4926 – Ready Mixed Concrete
- IS 4031 – Cement Testing
- IS 2720 – Soil Testing

9.14. Environmental & Sustainability

- CPCB/MPSPCB Norms
- MoEF Guidelines
- Rainwater Harvesting – CGWB Guidelines

9.15. Miscellaneous

- IS 3696 – Safety in Construction
- IS 4082 – Stacking and Storage of Materials
- IS 3764 – Excavation Work Safety

10. Project Implementation Milestones & Timelines

Below is an indicative milestone-based implementation schedule for the *Development Works at Gadkalika Mata Mandir and Precinct at Ujjain*, considering:

- Total execution period: **12 months**

- Parallel construction activities
- Operational temple environment
- Target: Simhastha 2028 readiness

11. Other Instructions:

6.1 Stakeholder Consultation & Master Planning

Based on the Concept Plan issued by USCL, the contractor after conducting topographical surveys and geotechnical investigation, shall prepare a comprehensive Master Plan covering all components of the scope and services.

The Master Plan shall be presented to stakeholders including Heritage, Archaeological and Cultural Committee of USCL, Temple Management Committee, and other Stakeholders/other agencies as facilitated by Ujjain Smart City Limited (USCL) and/or PDMC.

The Contractor shall:

- Record all comments and observations
- Incorporate approved suggestions into the revised Master Plan
- Submit the final Master Plan for approval of USCL

No execution work shall commence without written approval of the Master Plan.

No additional cost or time claim shall be admissible on account of stakeholder consultations or incorporation of approved suggestions.

20.1 Structural Stability of Temple Structure

The Contractor shall be fully responsible for ensuring the structural stability, safety, and integrity of the Main Temple structure proposed to be restored/constructed using basalt stone elements. The Contractor shall prepare all necessary structural designs, calculations, erection methodologies, connection/anchoring details, and stability analyses required for such construction. The Contractor shall also conduct all required tests, structural validations, and independent technical checks through a reputed third-party agency approved by USCL, to verify the adequacy and safety of the proposed system. All costs associated with structural design, analysis, testing, third-party review, and compliance shall be borne by the Contractor and deemed to be included in the quoted tender premium, and no additional payment shall be admissible on this account.

No additional payment or extension of time shall be admissible on account of such studies, vetting, or design revisions.

20.2 Manufacturer's Test Reports, QAPs & Compliance Documentation

The Contractor shall submit, for review and approval of USCL/PDMC, all relevant manufacturer's test reports, factory test certificates, compliance certificates, and Quality Assurance Plans (QAPs) for materials, equipment, systems, and other products proposed to be used in the Project. The QAPs shall clearly define quality control procedures, inspection stages, testing methods, acceptance criteria, and hold points for USCL/PDMC review. No procurement, or installation activity shall commence without written approval of the applicable QAPs and test reports. Approval of such documents shall not absolve the Contractor of responsibility for performance, quality, safety, or compliance with the Contract, and no additional cost or time claim shall be entertained on this account.

20.3 Third-Party Inspection (TPI) of Materials & Equipment

The Contractor shall, at his own cost and arrangement, provide for third-party inspection (TPI) of all major materials, equipment, systems, and components proposed to be supplied and installed under the Project. Such inspections shall be carried out through an independent inspection agency of repute, approved by Ujjain Smart City Limited (USCL). The scope of TPI shall include review of material specifications, workmanship, factory acceptance tests, performance parameters, and compliance with approved standards and drawings. Dispatch, installation, or deployment of any such material or equipment shall be permitted only after submission and acceptance of the TPI reports and certificates by USCL/PDMC. No additional payment or time claim shall be admissible on account of third-party inspection.

20.3.1 Pre-Dispatch Inspection of Major Equipment

The Contractor shall arrange pre-dispatch inspection of major equipment and specialized lighting fixtures.

Inspection shall be conducted by an independent agency approved by USCL, in presence of USCL / PDMC representatives.

Dispatch shall be permitted only after acceptance of inspection reports.

20.4 Miniature Models & Prototypes for Sculptural / Artistic Elements

The Contractor shall prepare and submit scale models / mock-ups / prototypes (physical and/or digital) of all major components, artistic elements, and signature components for approval of USCL and its designated Heritage, Archaeological & Cultural Committee.

For major sculptural or artistic elements, the following approvals shall be mandatory:

1. Concept-stage model – form, proportions, theme
2. Final detailed model – material, surface finish, texture, lighting integration

The executed full-scale work shall strictly conform to the final approved model. No fabrication or installation shall commence without such approval.

All costs for preparation, revisions, and compliance shall be deemed included in the Contract Price/Tender Premium.

20.5 Handling, Conservation and Re-installation of Existing Sculptures

The Contractor shall, at his own cost and arrangement, be responsible for the safe identification, documentation, lifting, handling, packing, internal transportation, conservation treatment, and re-installation of all existing sculptures, fragments, and heritage objects presently lying in temple premises or as identified by USCL. All handling and movement shall be carried out using suitable, non-invasive, and conservation-safe methods, including appropriate lifting equipment, protective supports, cushioning, and trained personnel, strictly in accordance with approved conservation protocols. After completion of conservation treatment and upon approval of the PDMC/USCL, the Contractor shall install and position such components at their designated display locations on approved pedestals, mounts, or display systems, ensuring proper alignment, stability and safety. Any damage, loss, or deterioration arising due to improper handling, transportation, conservation, or installation shall be the sole responsibility of the Contractor, and no additional cost or time claim shall be admissible on this account.

20.6 Testing, Commissioning & Handover

20.6.1 Testing & Commissioning

The Contractor shall conduct testing and commissioning of HVAC, MEP, internal/external lighting, façade lighting, etc

20.6.2 Training & Documentation

The Contractor shall provide:

- Training to O&M staff
- O&M manuals, as-built drawings, asset registers
- Periodic cleaning maintenance protocols

20.6.3 Soft Launch & Handover

- Trial operation / soft launch for minimum 30 days
- Rectification of issues observed during trial
- Final handover after compliance certification by PDMC / USCL

20.7 Defect Liability & Post-Installation Support

The Contractor shall provide a Defect Liability Period (DLP) of **36 months** covering all civil, architectural, HVAC, MEP and other infrastructure/services created under the contract.

During DLP, the Contractor shall attend defects, malfunctions, or failures at no additional cost.

20.8 General No-Claim & Responsibility Clause

Approval of designs, models, content, or methodologies by USCL / PDMC shall not relieve the Contractor of responsibility for safety, performance, accuracy, or compliance with standards.

No claim for extra cost or time shall be entertained on account of approvals, revisions, stakeholder inputs, or coordination requirements.

Annexure —F
(See clause 3 of section 2-ITB)

PROCEDURE FOR PARTICIPATION IN E-TENDERING

1. Bidder should do Online Enrolment in this Portal using the option Click Here to Enroll available in the Home Page. Then the Digital Signature enrolment has to be done with the e-token, after logging into the portal. The e-token may be obtained from one of the authorized Certifying Authorities such as MudhraCA/ GNFC/IDRBT/ Mtnl Trust line / SafeScrpt/TCS.

2. Bidder then logs into the portal giving user id / password chosen during enrolment.

3. The e-token that is registered should be used by the bidder and should not be misused by others.

4. DSC once mapped to an account cannot be remapped to any other account. It can only be Inactivated.

5. The Bidders can update well in advance, the documents such as certificates, purchase order details etc., under My Documents option and these can be selected as per tender requirements and then attached along with bid documents during bid submission. This will ensure lesser upload of bid documents.

6. After downloading / getting the tender schedules, the Bidder should go through them carefully and then submit the documents as per the tender document, otherwise, the bid will be rejected.

7. The BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant coulmns, else the bidder is liable to be rejected for that tender. Bidders are allowed to enter the Bidder Name and Values only.

8. If there are any clarifications, this may be obtained online through the eProcurement Portal, or through the contact details given in the tender document. Bidder should take into account of the corrigendum published before submitting the bids online.

9. Bidder, in advance, should prepare the bid documents to be submitted as indicated in the tender schedule and they should be in PDF/XLS/RAR/DWF formats. If there is more than one document, they can be clubbed together.

10. Bidder should arrage for the EMD as specified in the tender. The original should be posted/couriered/given in person to the Tender Inviting Authority, within the bid submission date and time for the tender.

11. The bidder reads the terms and conditions and accepts the same to proceed further to submit the bids

12. The bidder has to submit the tender document(s) online well in advance before the prescribed time to avoid any delay or problem during the bid submission process.

13. There is no limit on the size of the file uploaded at the server end. However, the upload is decided on the Memory available at the Client System as well as the Network bandwidth available at the client side at that point of time. In order to reduce the file size, bidders are suggested to scan the documents in 75-100 DPI so that the clarity is maintained and also the size of file also gets reduced. This will help in quick uploading even at very low bandwidth speeds.

14. It is important to note that, the bidder has to Click on the Freeze Bid Button, to ensure that he/she completes the Bid Submission Process. Bids Which are not Frozen are considered as Incomplete/Invalid bids and are not considered for evaluation purposes.

15. ~~In case of Offline payments, the details of the Earnest Money Deposit (EMD) document submitted physically to the Department and the scanned copies furnished at the time of bid submission online should be the same otherwise the Tender will be summarily rejected~~

16. The Tender Inviting Authority (TIA) will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders due to local issues.

17. The bidder may submit the bid documents online mode only, through this portal. Offline documents will not be handled through this system.

18. At the time of freezing the bid, the eProcurement system will give a successful bid up- dation message after uploading all the bid documents submitted and then a bid summary will be shown with the bid no, date & time of submission of the bid with all other relevant details. The documents submitted by the bidders will be digitally signed using the e-token of the bidder and then submitted.

19. After the bid submission, the bid summary has to be printed and kept as an acknowledgement as a token of the submission of the bid. The bid summary will act as a proof of bid submission for a tender floated and will also act as an entry point to participate in the bid opening event.

20. Successful bid submission from the system means, the bids as uploaded by the bidder is received and stored in the system. System does not certify for its correctness.

21. The bidder should see that the bid documents submitted should be free from virus and if the documents could not be opened, due to virus, during tender opening, the bid is liable to be rejected

22. The time that is displayed from the server clock at the top of the tender Portal, will be valid for all actions of requesting bid submission, bid opening etc., in the e- Procurement portal. The Time followed in this portal is as per Indian Standard Time (IST) which is GMT+5:30. The bidders should adhere to this time during bid submission.

23. All the data being entered by the bidders would be encrypted at the client end, and the software uses PKI encryption techniques to ensure the secrecy of the data. The data entered will not be viewable by unauthorized persons during bid submission and not viewable by any one until the time of bid opening. Overall, the submitted bid documents become readable only after the tender opening by the authorized individual.

24. During transmission of bid document, the confidentiality of the bids is maintained since the data is transferred over secured Socket Layer (SSL) with 256 bit encryption technology. Data encryption of sensitive fields is also done.

25. The bidders are requested to submit the bids through online eProcurements system to the TIA well before the bid submission end date and time (as per Server System Clock).

Annexure — G
(See clause 4 of Section 2 -ITB)

JOINT VENTURE (J.V.)

Not Applicable

If J.V. is allowed following conditions and requirements must be fulfilled -

1. Number of partners in a Joint Venture shall not exceed 3 (three). The partners shall comply with the following requirements:

   a. One of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners.

   b. The bid and, in case of successful bid, the Agreement, shall be signed so as to be legally binding on all partners.

   c. The partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge.

   d. All the partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under [c] above, as well as in the bid and in the Agreement [in case of successful bid.

   e. Bidder shall submit the joint venture agreement indicating precisely the role and responsibilities of all the members of JV in respect of planning, design, construction equipment, key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer.

   f. a copy of the Joint Venture Agreement entered into by the partners shall be submitted with the bid.

   g. The joint venture agreement shall be registered at the time of agreement, so as to be legally valid and binding on all partners.

2. All the partners should meet out the minimum qualifying criteria required for the bid and collectively must meet the criteria specified in full. Failure to comply with this requirement will result in rejection of the joint venture's bid.

3. The performance security of joint venture shall be in the name of the partner Lead partner/joint venture.

4. Attach the power of attorney of the partners authorizing the Bid signatory(ies) on behalf of the joint venture

5. An individual Bidder cannot at the same time be member of a Joint Venture applying for this Bid. Further, a member of a particular Bidder Joint Venture cannot be member of any other Bidder Joint Venture applying for this bid

6. A copy of the Joint Venture agreement entered into by the partners made on Rs 500/- Non-judicial stamp duly notarized shall be submitted with the bid. However at the time of

agreement bidder shall get the joint venture agreement registered, so as to be legally valid and binding on all partners.

7. Furnish details of participation proposed in the joint venture as below:

PARTICIPATION DETAILS	FIRM 'A' (Lead Partner)	FIRM 'B'	FIRM 'C'
Financial			
Name of the Banker(s)			
Planning			
Construction Equipment			
Key personnel			
Execution of Work (Give details on contribution of each)			

8. The partners of J.V. should satisfy the qualification criteria as below,

   a. The Lead Partner must have the share of 51% in the J.V.

   b. The other partner(s) must have a share of minimum 25% in the J.V.

   c. The lead partner and the other partners must also meet 51% and 26% of the all qualification criteria respectively except for the requirement of work experience described in Annexure 'C'. However both the partners must satisfy the full 100% qualification criteria jointly. For this purpose the qualification of individual partners shall be added (for Average annual turnover, Net worth).

9. For the meeting the minimum qualification criteria of experience of similar nature work,

   (i) Out of 3 (three) similar works of value more than 20% of PAC, at least 2 (two) works must be done by lead partner and 1 (one) work to be done by other partner.

   Or

   (ii) Out of 2 (two) similar works of value more than 30% of PAC, at least 1(one) work must be done by lead partner and 1 (one) work to be done by other partner.

   Or

   (iii) In case of 1 (one) similar work of value more than 50% of PAC the lead partner must satisfy the criteria. However, the other partner must satisfy the criteria of least one work of 20% of PAC.

Annexure-H

(See clause 12 of Section 2 —ITB & clause 4 of GCC)

ORGANIZATIONAL DETAILS
(To be contained in Envelope- A)

S.No.	Particulars	Details
1	Registration number issued by Centralized Registration System of Govt. of M.P. or Proof of application for registration.	'(If applicable, scanned copy of proof of application for registration to be uploaded)
1a	MSME Registration	No. ____Date_____(Scanned copy of Registration to be uploaded)
2	Valid Registration of bidder in appropriate class through Centralized Registration of Govt. of MP	Registration No. ____Date_____(Scanned copy of Registration to be uploaded)
3	Name of Organization/ Individual/ Proprietary Firm/Partnership Firm	
4	Entity of Organization Individual/ Proprietary Firm/ Partnership Firm (Registered under Partnership Act)/Limited Company (Registered under the Companies Act—1956/2013)/ Corporation / Joint Venture	
5	Address of Communication	
6	Telephone Number with STD Code	
7	Fax Number with STD Code	
8	Mobile Number	
9	E-mail Address for all communications	
	Details of Authorized Representative	
10	Name	
11	Designation	
12	Postal Address	
13	Telephone Number with STD Code	
14	Fax Number with STD Code	
15	Mobile Number	
16	E-mail Address	
17	PAN Number	
18	GST Number	

Note: In case of partnership firm and limited company certified copy of partnership deed/ Articles of Association and Memorandum of Association along with registration certificate of the company shall have to be enclosed.

Signature of Bidder with Seal

Date: _____

Annexure —I
See clause 14 of Section 2 -ITB)

Envelope — B, Technical Proposal
Technical Proposal shall comprise the following documents:

S. No.	Particulars	Details to be submitted
1	Experience — Financial & Physical	Annexure - I (Format: I-1)
2	Annual Turnover	Annexure - I (Format: I-2)
3	List of technical personnel for the key positions	Annexure - I (Format: I-3)
4	List of Key equipment/ machines for quality control labs	Annexure - I (Format: I-4)
5	List of Key equipment/ machines for construction work	Annexure - I (Format: I-5)

Note:
1. *Technical Proposal should be uploaded duly page numbered and indexed.*
2. *Technical Proposal uploaded otherwise will not be considered.*

Annexure - I (Format: I-1)
(See clause 14 of Section 2 -ITB)

The bidder should have:

A. Financial & Physical

i. Experience of having successfully executed as prime contractor:

a) three similar works each costing not less than the amount equal to 20% of the probable amount of contract during the last 5 years; or

b) two similar works each costing not less than the amount equal to 30% of the probable amount of contract during the last 5 Years; or

c) one similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract during the last 5 years.

(For Joint Ventures)

For the meeting the minimum qualification criteria of experience of similar nature work,

Out of 3 similar works of value more than 20% of PAC, at least 2 works must be done by lead partner and one work to be done by other partner.

Or

Out of 2 similar works of value more than 30% of PAC, at least 1(one) work must be done by lead partner and 1 (one) work to be done by other partner.

Or

In case of one similar work of value more than 50% of PAC the lead partner must satisfy the criteria. However the other partner must satisfy the criteria of least one work of 20% of PAC.

iii) The lead partner and the other partner must also meet 51% and 26% of the all qualification criteria respectively except for the requirement of work experience described in Annexure-I-1(A) . However, both the partners must satisfy the full {100%} qualification criteria jointly. For this purpose the qualification of individual partners shall be added { For Annual Average Turn Over and for Bid Capacity Only }.

To be filled in by the contractor:

I. Details of successfully completed similar works shall be furnished in the following format

ii. Certificate duly signed by the employer shall also be enclosed for each completed similar work.

Agreement Number & Year	Name of Work	Date of Work Order	Date of Completion	Amount of Contract	Employer's Name and Address

Existing commitments— (Value of 'C' for Bid Capacity formula)

Agreement Number & Year	Name of Work	Date of Work Order	Date of Completion	Amount of Contract	Amount of balance work	Employer's Name and Address

~~B. Physical Requirement:~~

~~Execution of similar items of work in any one financial year during the last 3 financial years should not be less than the minimum physical. Requirement fixed for the work.~~

~~S.No.~~	~~Particulars~~	~~Actual Quantity Executed (To be filled in by the contractor)~~		
		~~Year - 1~~	~~Year - 2~~	~~Year - 3~~
	~~Physical qualification required~~	~~Yes~~		
~~1~~				

Note:

1. Certificate duly signed by the employer shall be enclosed for the actual quantity executed in any one year during the last 5 financial years,

Annexure-I(Format: I-2)
(See douse 14 of Section 2 -ITB)

ANNUAL TURN OVER

Requirement:

Average annual construction turnover on the construction works not less than 50% of the probable amount of contract during the last 3 financial years.

To be filled in by the contractor:

Financial Year Payments received for contracts in progress or completed

Financial Year	**Payments received for contracts in progress or completed**
1. 2020-2021	
2. 2021-2022	
3. 2022-2023	
4. 2023-2024	
5. 2024-2025	

Note:

i Annual turnover from construction should be certified by the Chartered Accountant.
ii. Audited Balance sheet including all related notes, and income statements for the above financial years as well as Income Tax Returns for the relevant years to be enclosed.

Bid Capacity

Applicants who meet the minimum qualifying criteria in the evaluation as stated above are to be evaluated further for bid capacity as under:
Bid Capacity = (1.5A X B) – C and its should be more than PAC.
Where
A. = Maximum value of civil engineering works executed in any one year during the last five year (10% weightage per year shall be given to bring the value of work executed at present price level)
B = Proposed contract period in number of years prescribed for completion of the works (period up to 1 year shall be taken as one year),
C = Value at current price level of existing commitments and ongoing works to be completed in the next 'B' years.

FY	2024-25	2023-24	2022-23	2021-22	2020-21
MF	1.00	1.10	1.21	1.33	1.46

Bids shall be opened in order of their listing in one NIT. In case of bidder's participation in multiple tenders listed in ine NIT, his bid capacity shall be exhausted, if found L1, in order of tenders opened. Soon after bid capacity of a bidder has exhausted, his next bid shall not be opened

Annexure - I (Format : I-3)
(See clause 14 of Section 2-ITB & Clause 6 of GCC)

List of Technical Personnel for the Key Positions[3](to be referred for civil works)

The Contractor will have to appoint the following key personnel during the execution and entire contract period, apart from other key personnel and support staff as necessary.

The qualification and experience requirements are as under.

S.No.	Details	Qualification	Experience
1.	Project Manager (Site In-Charge) (1 No)	B.E./B.Tech Civil / Construction Management	10 years
2.	Structural Engineer (1 No)	M.Tech / B.E. Structural Engineering	7 years
3.	Stone Architecture / Stone Artwork Expert (1 No)	Degree/Diploma in Architecture / Sculpture / Traditional Stone Craft	7 years
4.	Architect (1 No)	B.Arch / B.E. Civil	5 years
5.	MEP Engineer (1 No)	B.E./B.Tech Electrical/Mechanical	5 years
6.	QA/QC Engineer (1 No)	B.E./B.Tech Civil	3 years
7.	EHS Officer (1 No)	Diploma / Degree in Safety Engineering	3 years
8.	Landscape Architect / Horticulture Expert (1 No)	Degree in Landscape Architecture / Horticulture	3 years
9.	Electrical Site Engineer (1 Nos)	B.E./B.Tech Electrical	3 years
10.	Civil Site Engineers (2 Nos)	B.E./Diploma Civil	3 years

NOTE: At the time of signing of the agreement the contractor must submit the biodata of experts for above positions for the approval from USCL and shall be mobilized after the approval only.

Penalty for non-deployment of above staff are as follows:

S. No.	Details	Penalty to be computed on Per Month basis
1	Project Manager	Rs. 100,000/- p.m.
2	Other Experts	Rs. 75,000/- p.m.
3	Field Staff	Rs. 50,000/- p.m.

Note:
1. Aforesaid personnel shall be deployed within the period starting from the date of award of contract as stipulated in the contract.
2. Approval of the superintending engineer about suitability of personnel shall be obtained before deployment.
3. The Bidder shall submit CVs of proposed personnel confirming eligibility, experience and suitability of the personnel for the project.

The Contractor shall fill the following format:

S. No	Key Positions	Qualifications	Age	Similar Work Experience	Total Work Experience	Name of Personnel	Key Position	Qualification	Similar Work Experience	Total Work Experience
1.										
2.										
3.										
4.										
5.										
6.										
7.										
Total										

Note:

1. Aforesaid personnel shall be deployed within the period starting from the date of award of contract as stipulated in the contract.
2. Approval of the superintending engineer about suitability of personnel shall be obtained before deployment.

Annexure - I (Format : I-5)
(See clause 14 of Section 2-ITB)

LIST OF EQUIPMENTS / MACHINES FOR CONSTRUCTION WORK

			Available with the bidder	
S. No.	Name of Equipment/ Machinery	Quantity	Name of Equipment/ Machinery	Quantity
1	Set of I. S. sieves			
2	Atterberg Limit Apparatus			
3	Sand replacement Apparatus			
4	Crushing Strength Testing Machine			
5	Flexural Strength Testing Machine			
6	Compression Testing Machine, Capacity 50 tones.			
7	Aggregate Crushing value Apparatus			
8	Los Angeles Abrasion Machine			
9	Aggregate Impact Test Machine			
10	Concrete Batching Plant			
11	Length and Thickness Gauges			
12	Vicat apparatus for testing setting times			
13	Slump testing apparatus			
14	Needle & Plate Vibrator			
15	500gm, 10 Kg balances			
16	Length and Thickness Gauges.			
17	Electrical Oven			

Annexure — J
(See clause 14 of Section 2 -ITB)

FINANCIAL BID
(To Be Contained in Envelope-C)

NAME OF WORK_____

I/We hereby bid for the execution of the above work within the time specified at the **lumpsum item rate (in figures) _____(in words) _____** based on the Bill of Quantities and item wise rates given therein in all respects and in accordance with the specifications, designs, drawings and instructions in writing in all respects in accordance with such conditions so far as applicable. I/We have visited the site of work and am/are fully aware of all the difficulties and conditions likely to affect carrying out the work. I/We have fully acquainted myself/ourselves about the conditions in regard to accessibility of site and quarries/kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions effecting accommodation and movement of labour etc. required for the satisfactory execution of contract.

Should this bid be accepted, I/We hereby agree to abide by and fulfill all the terms and provisions of the said conditions of contract annexed- hereto so far as applicable, or in default thereof to forfeit and pay to the Ujjain Smart City Limited or his successors in office the sums of money mentioned in the said conditions.

Note:

i. Only one rate of percentage above or below or at par based on the Bill of Quantities and item wise rates .given therein shall be quoted.
ii. Percentage shall be quoted in figures as well as in words. If any difference in figures and words is found lower of the two shall be taken as valid and correct rate. If the bidder is not ready to accept such valid and correct rate and declines to furnish performance -security and sign the agreement his earnest money deposit shall be forfeited.
iii. In case the percentage “above” or “below” is not given by a bidder, his bid shall be treated as non-responsive.
iv. All duties, taxes, and other levies except Goods and services tax (GST) are included in the rates (in case of Percentage Rate Bids)/ Lump sum offer (in case of Lump-sum Bids quoted by the bidder.

Signature of Bidder
Name of Bidder

The above bid is hereby accepted by me on behalf of the Ujjain Smart City Limited dated the _____ day of _____ 20_____

Signature of Officer
by whom accepted

Annexure — K

(See clause 15 of Section 2 -ITB)

MATERIALS TO BE ISSUED BY THE DEPARTMENT

Not Applicable for this contract

Annexure—L
(See clause 21 of Section 2 -ITB)

LETTER OF ACCEPTANCE (LOA)

No. _____ Dated: _____

To,
M/s._____
(Name and address of the contractor)

Subject: _____
(Name of the work as appearing in the bid for the. work)

Dear Sir(s),
Your bid for the work mentioned above has been accepted on behalf of the Ujjain Smart City Limited at your bided amount _____ for the Bill of Quantities and item wise rates given therein.

You are requested to submit within 15 (Fifteen) days from the date of issue of this letter:
a. The performance security/ performance guarantee of Rs. _____ (in-figures) (Rupees _____ in words only). The performance security shall be in the shape of term deposit receipt / bank guarantee of any nationalized / schedule commercial bank valid up to three months after the expiry of defects liability period.
b. Sign the contract agreement.

Please note that the time allowed for carrying-out the work as entered in the bid is _____ months including/ excluding rainy season, shall be reckoned from the date of signing the contract agreement.

Signing the contract agreement shall be reckoned as intimation to commencement of work and no separate letter for commencement of work is required. Therefore, after signing of the agreement, you are directed to contact the Engineer-in-charge for taking the possession of site and necessary instructions to start the work.

Yours Faithfully

Executive Director
Ujjain Smart City Limited

Annexure — M
(See clause 22 of Section 2 -ITB)

FORM OF BANK GUARANTEE

Performance Security/Additional Performance Security

The Executive Director,

Ujjain Smart City Limited

Ujjain

WHEREAS:

A. _____ [name and address of contractor] (hereinafter called the "Contractor") and Ujjain Smart City Limited, _____, (hereinafter called the "Employer") have entered into an agreement (hereinafter called the "Agreement") for the Construction of ***<Project name>***in the state of Madhya Pradesh on online percentage rate (the "percentage rate") basis, subject to and in accordance with the provisions of the Agreement.

B. The Agreement requires the Contractor to furnish a Performance Security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the {Construction Period/ Defects Liability Period and Maintenance Period} (as defined in the Agreement) in a sum of Rs….. cr. (Rupees ……..….. crore) (the "Guarantee Amount").

C. We, …….. through our branch at ……. (the "Bank") have agreed to furnish this bank guarantee (hereinafter called the "Guarantee") by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Contractor's obligations during the {Construction Period/ Defects Liability Period and Maintenance Period} under and in accordance with the Agreement, and agrees and undertakes to pay to the Employer, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Contractor, such sum or sums up to an aggregate sum of the Guarantee Amount as the Employer shall claim, without the Employer being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Employer, under the hand of an officer not below the rank of Engineer in Charge in the Ujjain Smart City Limited, that the Contractor has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Employer shall be the sole judge as to whether the Contractor is in default in due and faithful performance of its obligations during and under the Agreement and its decision that the Contractor is in default shall be final and binding on the Bank, notwithstanding any differences between the Employer and the Contractor, or any dispute between them pending before any court, tribunal, arbitrators or any other employer or body, or by the discharge of the Contractor for any reason whatsoever.
3. In order to give effect to this Guarantee, the Employer shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Contractor and/or the Bank,

whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.

4. It shall not be necessary, and the Bank hereby waives any necessity, for the Employer to proceed against the Contractor before presenting to the Bank its demand under this Guarantee.
5. The Employer shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfillment and/ or three of all or any of the obligations of the Contractor contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Employer against the Contractor, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Employer, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Employer of the liberty with reference to the matters aforesaid or by reason of time being given to the Contractor or any other forbearance, indulgence, act or omission on the part of the Employer or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Employer in respect of or relating to the Agreement or for the fulfillment, compliance and/or performance of all or any of the obligations of the Contractor under the Agreement.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force for the period specified in paragraph 8 below and unless a demand or claim in writing is made by the Employer on the Bank under this Guarantee all rights of the Employer under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Guarantee shall cease to be in force and effect on ****$. Unless a demand or claim under this Guarantee is made in writing before expiry of the Guarantee, the Bank shall be discharged from its liabilities hereunder.
9. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Employer in writing and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
10. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the envelope containing the notice was posted and a certificate signed by an officer of the Employer that the envelope was so posted shall be conclusive.
11. This Guarantee shall come into force with immediate effect and shall remain in force and effect for up to the date specified in paragraph 8 above or until it is released earlier by the Employer pursuant to the provisions of the Agreement.
12. This guarantee shall also be operatable at our…… …….. Branch at <……> , from whom, confirmation regarding the issue of this guarantee or extension / renewal thereof shall be made available on demand. In the contingency of this guarantee being invoked and payment thereunder claimed, the said branch shall accept such invocation letter and make payment of amounts so demanded under the said invocation.

Signed and sealed this ……. day of …….., 20…… at ……..

SIGNED, SEALED AND DELIVERED

For and on behalf of the Bank by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

(i) The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

(ii) The address, telephone number and other details of the head office of the Bank as well as of issuing branch should be mentioned on the covering letter of issuing branch.

SECTION 3

Conditions of Contract
Part - I General Conditions of Contract [GCC]
Table of Clauses of GCC

Clause	Particulars	Clause	Particulars

A. General

1. DEFINITIONS

1.1. **Bill of Quantities:** means the priced and completed Bill of Quantities forming part of the Bid.

1.1 A **Chief Executive officer** (C.E.O) means Chief Executive officer , Ujjain Municipal Corporation, Ujjain

1.1 B **Commissioner** :means Commissioner, Ujjain Municipal Corporation, Ujjain

~~1.2. **Chief Engineer:** means Chief Engineer of the zone/ basin concerned:~~

13. **Completion:** means completion of the work as certified by the Engineer-in-Charge, in accordance with provisions of agreement.

1.4. **Contract:** means the Contract between the Employer and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.

1.5. **Contract Data:** means the documents and other information, which comprise of the Contract.

1.6. **Contractor:** means a person or legal entity whose bid to carry out the work has been accepted by the Employer.

1.7. **Contractor's bid:** means the completed bid document submitted by the Contractor to the Employer.

1.8. **Contract amount:** means the amount of contract worked out on the basis of accepted bid.

1.9. **Completion of work:** means completion of the entire contracted work; Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.

1.10. **Day:** means the calendar day.

1.11. **Defect:** means any part of the work not completed in accordance with the specifications included in the contract.

1.12. **Department:** means Ujjain Smart City Limited .

1.13. **Drawings:** means drawings including calculations and other information provided or approved by the Engineer-in-Charge.

1.14. **Employer:** means the party as defined in the Contract Data, who employs the Contractor to carry out the work. The Employer may delegate any or all functions to a person or body nominated by him for specified functions. The word Employer / Government / Department wherever used denote the Employer.

1.15. **Engineer:** means the person named in the Contract Data.

1.16. **Engineer in charge:** means the person named in the Contract Data.

1.17. **Equipment:** means the Contractor's machinery and vehicles brought temporarily to the Site far execution of work.

1.17B **Executive Engineer**: / EE mean Executive Engineer appointed by USCL from time to time.

1.17 C **Executive Director** means Executive Director of , Ujjain Smart City Limited

1.18. **Government:** means Government of Madhya Pradesh.

1.19. **In Writing:** means communicated in written form and delivered against receipt.

1.20. **Material:** means all supplies, including consumables, used by the Contractor for incorporation in the work.

1.21. **Superintending Engineer:** means Superintending Engineer-in-Charge of Ujjain Smart City

1.22. **Stipulated period of completion:** means the period in which the Contractor is required to complete the work. The stipulated period is specified in the Contract Data.

1.23. **Specification:** means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.

1.24. **Start Date:** means the date of signing of agreement for the work.

1.25. **Sub-Contractor**: means a person or corporate body who has a Contract with the Contractor, duly authorized to carry out a part of the construction work under the Contract.

1.26. **Temporary Work:** means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.

1.27. **Tender/Bid, Tendered/Bidder**: are the synonyms and carry the same meaning where ever used. -

1,28. **Variation:** means any change in the work which is instructed or approved as variation under this contract.

1.29. **Work:** The expression "work' or "works" where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional,

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations

In the contract, except where the context requires otherwise:

a. words indicating one gender include all genders;

b. Wards indicating the singular also include the plural and vice versa.

c. provisions including the word "agree", "agreed" or "agreement' require the agreement to be recorded in writing.

d. written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.

2.2 Documents Forming Part of Contract:

1. NIT with all amendments.

2. Instructions to Bidders (ITB, Bid Data Sheet with all Annexure's)

3. Conditions of Contract:

I. Part I General Conditions of Contract and the Contract Data; with all Annexures

II. Part II Special Conditions of Contract.

4. Specifications

5. Drawings

6 Bill of Quantities

7. Technical and Financial Bid

8. Agreement, and

9. Any other document(s), as specified.

3. Language and Law

The language of the Contract and the law governing the Contract are stated in the Contract Data

4. Communications

All certificates, notice or instruction to be given to the Contractor by Employer/Engineer shall be sent to the address or contact details given by the Contractor in [Annexure H of ITB]. The address and contact details for communication with the Employer/Engineer shall be as per the details given in the Contract Data. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic means

(email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in- Charge.

5. Subcontracting

Subcontracting shall be permitted for contracts of value more than amount specified in the Contract Data with following conditions.

a. The Contractor may subcontract up to 25 percent of the contract price with the approval of the Employer in writing, but will not assign the Contract. Subcontracting shall not alter the Contractors obligations.

b. Following shall not form part of subcontracting:

I. Hiring of labour through a labour contractor.

II. The purchase of Materials to be incorporated in the works.

III. Hiring of plant & machinery.

c. The sub-contractor will have to be registered in the appropriate category in the centralized registration system for contractors of the GoMP.

6. Personnel

6.1 The Contractor shall employ for the construction work and routine maintenance the technical personnel as provided in the Annexure I-3 of Bid Data Sheet if applicable. If the Contractor fails to deploy required number of technical staff, recovery as specified in the Contract Data will be made from the Contractor.

6.2 If the Engineer asks the Contractor to remove a person who is a member of the contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within three days and has no further connection with the Works in the Contract.

7. Force Majeure

7.1 The term "Force Majeure" means an exceptional event or circumstance:

(a) Which is beyond a Party's control,
(b) Which such Party could not reasonably have provided against before entering into the Contract
(c) Which, having arisen, such Party could not reasonably have avoided or overcome, and
(d) Which is not substantially attributable to the other Party.

Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

i. War, hostilities (whether war be declared or not), invasion, act of foreign enemies,
ii. Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,
iii. Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
iv. Munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
v. Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.

7.2. In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.

7.3 For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of price adjustment clause.

7.4 The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contact after holding mutual discussions.

8. Contractor's Risks -

8.1 All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.

8.2 All risks and consequences arising from the inaccuracies or falseness of the documents, drawing, designs, other documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that the design/ drawings or other documents have been approved by the department.

9. Liability for Accidents to Person

The contractor shall be deemed to have indemnified and saved harmless the Corporation against all action, suits, claims, demands, costs etc. arising in connection with injuries suffered by any persons employed by the contractor or his subcontractor for the works whether under the General law or under workman's compensation Act or any other statute in force at the time of dealing with the question of the liability of employees for the injuries suffered by employees and to have taken steps properly to ensure against any claim there under.

10. Contractor to Construct the Works

10.1 The Contractor shall construct install and maintain the Works in accordance with the Specifications and Drawings as specified in the Contract Data.

10.2 In the case of any class of work for which there is no such specification as is mentioned in Contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.

10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, machinery, tools and implements, and generally of all means used for the fulfilment of this contract whether such means may or may not be approved or recommended by the Engineer.

11. Discoveries

Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Employer. The Contractor shall notify the Engineer of such discoveries and carry out the Engineer's instructions for dealing with them.

12. Dispute Resolution System

12.1 No dispute can be raised except before the Competent Authority as defined in Contract Data in writing giving full description and grounds of dispute. It is clarified

that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.

12.2 No dispute can be raised after 45 days of its first occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such dispute.

12.3 The Competent Authority shall decide the matter within 45 days.

12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract Data. The Appellate Authority shall decide the dispute within 45 days.

12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under Madhya Pradesh *Madhyastham Adhikaran Adhiniyam, 1983.*

12.6 The Contractor shall have to continue execution of the Works with due diligence notwithstanding pendency of a dispute before any authority or forum.

B. Time Control

13. **Programme**

13.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods arrangements, order and timing for all the activities for the construction of works.

13.2 The program shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the works for its execution. The contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme.

13.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.

13.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.

13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations.

14. Extension of Time

14.1. If the Contractor desires an extension of time for completion of the work on the ground of his having been unavoidably hindered in its execution or on any other grounds, he shall apply, in writing, to the Engineer-in-charge, on account of which he desires such extension. Engineer-in-Charge shall forward the aforesaid application to the Competent Authority as prescribed.

14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause 15 of this agreement.

14.3 In case the work is already in progress, the Contractor shall proceed with the execution of the works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid with all due diligence.

15. Compensation for delay

15.1 The. time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.

15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.

15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.

15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data.

15.5 In the event of delay in execution of the Works as per the time lines mentioned in the Contract Data the Engineer-in-charge shall retain from the bills of the Contractor amount equal to the liquidated damages leviable until the Contractor makes such delays good. However, the Engineer-in-charge shall accept bankable security in lieu of retaining such amount.

15.6 If the Contractor is given extension .of time after liquidated damages have been paid, the Engineer in Charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.

15.7 In the event the Contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against the liquidated damages levied.

16. Contractor's quoted percentage

The Contractor's quoted percentage rate referred to in the "Bid for works' will be deducted added from/to the net amount of the bill after deducting the cost of material supplied by the department.

C. Quality Control

17. Tests

17.1 The Contractor shall be responsible for:

a. Carrying out the tests prescribed in specifications, and

b. For the correctness of the test results, whether preformed in his

laboratory or elsewhere.

17.2 The contractor shall have to establish field laboratory within the time specified and having such equipments as are specified in the Contract Data.

17.3 Failure of the Contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.

17.4 Ten percent of the mandatory test prescribed under the specification shall be got carried out through laboratories accredited by national Accreditation Board of laboratories (NABL) By

the Engineer-in-charge and the cost of such testing shall be deducted form the payments due to contractor .

18. Correction of Defects noticed during the Defect Liability Period

18.1 The Defect Liability Period of work in the contract shall be as per the Contract Data.

18.2 The Contractor shall promptly rectify all defects pointed out by the Engineer well before the end of the Defect Liability Period. The Defect Liability Period shall automatically stand extended until the defect is rectified.

18.3 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period to the satisfaction of the Engineer, within the time specified by the Engineer, the Engineer will assess the cost of haying the Defect corrected, and the cost of correction of the Defect shall be recovered from the Performance Security or any amount due or that may become due to the contractor and other available securities.

D. COST CONTROL

19. Variations - Change in original Specifications, Designs, and Drawings etc.

19.1 The Engineer-in-charge shall have power to make any alterations, omissions or additions to or substitutions in the original specifications, drawings, designs and instructions, that may appear to him to be necessary during the progress of the work and the contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Engineer-in-charge, and such alterations, omission, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the contractor may be directed to do in the manner above specified, as part of the work, shall be carried out by the contractor on the same conditions in all respects on which he agrees to do the main work.

19.2 The time for the completion of the work shall be adjusted in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer-in-charge shall be conclusive as to such proportion.

20. Extra items

20.1 All such items which are not included in the priced BOQ shall be treated as extra items.

21. Payments for Variations and / or Extra Quantities

21.1 The rates for such additional (Extra quantity), altered or substituted work / extra items under this clause shall be worked out in accordance with the following provisions in the irrespective order:

a. The contractor is bound to carry out the additional (Extra quantity), work at the same rates as are specified in the contract for the work.

b. If the item is not in the priced BOQ and is. included in the SOR of the department, the rate shall be arrived at by applying the quoted tender percentage on the SOR rate.

c. If the rates for the altered or substituted work are not provided in applicable SOR - such rates will be derived from the rates for a similar class (type) of work as is provided in the contract (priced BOQ) for the work.

d. If the rates for the altered, substituted work cannot be determined in the manner specified in the sub clause (c) above - then the rates for such composite work item shall be worked out on the basis of the concerned Schedule of Rates minus/plus the percentage quoted by the contractor.

e. If the rates for a particular part or parts of the item is not in the Schedule of Rates and the rates for the altered, or substituted work item cannot be determined in he manner specified in sub clause (b) to (d) above, the rate for such part or parts will be determined by the Competent Authority, as defined in the Contract Data on the basis of the rate analysis derived out of prevailing market rates when the work was done.

f. But under no circumstances, the contractor shall suspend the work on the plea of non-acceptability of rates on items falling under sub clause (a) to (d). In case the contractor does not accept the rate approved by the Engineer in Charge for a particular item, the contractor shall continue to carry out the item at the rates determined by the Competent Authority. The decision on the final rates payable shall be arrived at through the dispute settlement procedure.

22. No compensation for alterations in or restriction of work to be carried out.

22.1. If at any time after the commencement of the work, the Engineer-in-charge for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out the Engineer-in-charge shall give notice in writing of the fact to the Contractor and withdraw that whole or any part of the work.

22.2 The Contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.

22.3 The Engineer-in-charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to his rights.

23. 'No Interest Payable

No interest shall be payable to the Contractor on any payment due or awarded by any authority.

24. Recovery from Contractors

Whenever any claim against the Contractor for the payment arises under the contract, the Department may be entitled to recover such sum by:

(a) Appropriating, in part or whole of the Performance Security and Additional Performance Security, if any; and/or Security Deposit and / or any sums payable under the contract to the contractor.

(b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor -under any other contract of the department, including the securities which become due for release.

(c) The department shall, further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land-Revenue Code.

25. Tax -

25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the sales and other levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities. But the GST shall be paid extra to the contractor as per rules.

25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the Contractor.

25.3 Any changes in the taxes due to change in legislation or for any other reason shall not be payable to the contractor.

26. Check Measurements

26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.

26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.

26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

27. Termination by Engineer in charge

27.1 If the Contractor fails to carry out any obligation under the Contract, the Engineer in Charge may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.

27.2 The Engineer in Charge, shall be entitled to terminate the Contract if the Contractor

a) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract;
b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
c) without reasonable excuse falls to comply with the notice to correct a particular defect within a reasonable period of time;
d) the Contractor does not maintain a valid instrument of financial security as prescribed;
e) the Contractor has delayed the completion of the Works by such duration for which the maximum amount of liquidated damages is recoverable;
f) If the Contractor fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data;
g) If the contractor, in the judgment of the Engineer in chargé has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
h) Any other fundamental breaches as specified in the Contract Data.

27.3 In any of these events or circumstances, the Engineer in Charge may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site, However, in the case of sub-paragraph (b) or (g) of clause 27.2, the Engineer in Charge may terminate the Contract immediately.

27.4 Notwithstanding the above, the Engineer-in-Charge may terminate the Contract for convenience by giving notice to the Contractor.

28. Payment upon Termination

28.1 If the contract is terminated under clause 27.3, the Engineer shall issue a certificate for value of the work accepted on final measurements, less Advance Payments and Penalty as indicated in the Contract Data. The amount so arrived at shall be determined by the Engineer-in-Charge and shall be final and binding on both the parties.

28.2 Payment on termination under clause 27.4 above -

If the Contract is terminated under clause 27.4 above, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation, of the

Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

28.3 If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be recovered as per clause 24 above.

29. Performance Security

The Contractor shall have to submit, performance security and additional performance security, if any, as specified in the Bid Data Sheet at the time of signing of the contract. The contractor shall have to ensure that such performance security and additional performance security, if any remains valid for the period 'as specified in the Contract Data.

30. Security Deposit-

30.1 Security Deposit shall be deducted from each running bill at the rate as specified in the Contract Data. The total amount of Security Deposit so deducted shall not exceed the percentage of Contract Price specified in the Contract Data.

30.2 The security deposit may be replaced by equivalent amount of bank guarantee or fixed deposit receipt assigned to the Employer, with validity up to completion of Defect Liability Period/ extended Delectability Period.

30.3 The Security Deposit shall be refunded on completion of' Defect Liability Period plus 3(three) Months.

31. Price Adjustment (Not Applicable for this project)

~~**31.1 Applicability**~~

~~1. Price adjustment shall be applicable only if provided for in the Contract Data.~~

~~2. The price adjustment clause shall apply only for the works executed from the date of signing of the agreement until the end of the initial intended completion date or extensions granted for reasons attributed to the Employer by the Engineer.~~

~~3. The Contractor shall not be entitled to any benefit arising from the price adjustment clause for extension in the contract period for reasons attributed to the Contractor.~~

~~4. In the Force Majeure event the price escalation clause shall apply.~~

~~**31.2 Procedure**~~

~~1. Contract price shall be adjusted for increase or decrease in rates and price of labor, materials, fuels and lubricants in accordance with following principles and procedures and as per formula given in the contract data.~~

~~2. The price adjustable shall be determined during each quarter from the formula given in the contract data.~~

~~3. Following expression and meaning are assigned to the work done during each quarter:~~

~~R = Total value of work during the quarter. It would include the amount of secured advance granted, if any, during the quarter, less the amount of secured advance recovered, if any during the quarter, less value of material issued by the department, if any, during the quarter.~~

~~4. Weightages of various components of the work shall be as per the Contract Data.~~

~~31.3 To the extent that full compensation for any rise or fail in costs to the contractor is not covered by the provisions of this or other clauses in the contract the unit rates and prices included in the~~

~~contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.~~

~~31.4 The index relevant to any quarter, for which such compensation is paid, shall be the arithmetical average of the indices relevant of the calendar month.~~

~~31.5 For the purpose of clarity it is pointed out that the price adjustment may be either positive or negative, i.e. if the price adjustment is in favour of the Employer, the same shall be recovered from the sums payable to the Contractor.~~

32. Mobilization and Construction Machinery Advance (Not Applicable to this contract)

~~32.1 Payment of advances shall be applicable if provided in the Contract Data.~~

~~32.2 If applicable, the Engineer in Charge shall make interest bearing advance payment to the contractor of the amounts stated in the Contract Data, against provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/ scheduled banks, in the name as stated in the Contract Data in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the contractor.~~

~~32.3 The rate of interest chargeable shall be as per Contract Data.~~

~~32.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of construction machinery and admissible only for new construction machinery.~~

~~32.5 The advance payment shall be recovered as stated in the Contract Data by deducing proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.~~

33. Secured Advance (Not Applicable to this contract)

~~33.1 Payment of Secured Advance shall be applicable if provided in the Contract Data.~~

~~33.2 If applicable, the Engineer shall make advance payment against materials intended for but not yet incorporated in the Works and against provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/ scheduled bank, in the name as stated in the Contract Data, in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been adjusted, but the amount of the guarantee shall be progressively reduced by the amounts adjusted by the contractor.~~

~~33.3 The amount of secured advance and conditions to be fulfilled shall be as stipulated in the Contract Data.~~

~~33.4 The Secured Advance paid shall be recovered as stated in the Contract Data.~~

34. Payment Certificates

The payment to the contractor will be as follows for construction work:

(a) The Contractor shall submit to the Engineer monthly statements of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.

(b) The Engineer shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.

(c) The value of work executed shall be determined, based on the measurements approved by the Engineer/ Engineer-in-charge.

(d) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed:

(e) The value of work executed shall also include the valuation of Variations and Compensation Events.

(f) All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.

(g) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.

(h) Payment of intermediate certificate shall be regarded as payments by way of advance, against the final payment and not as payments for work actually done and completed.

(i) Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.

(j) The payment of final bill shall be governed by the provisions of clause 36 of GCC.

E. Finishing the Contract

35. Completion Certificate

35.1 A Completion Certificate in the prescribed format in Contract Data shall be issued by the Engineer-in-Charge after physical completion of the Work.

35.2 After final payment to the Contractor a Final Completion Certificate in the prescribed format in the Contract Data shall be issued by the Engineer-in Charge.

36. Final Account

36.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 days of issue of certificate of physical completion of works. The Engineer shall issue a Defects Liability Certificate and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to the Competent Authority as defined in the Contract Data, who shall decide on the amount payable to the Contractor after hearing the Contractor and the Engineer in Charge.

36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 32.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

F. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labourfrom time to time employed by the Contractor on the Site and such other information as the Engineer may require.

39. Compliance with Labor Regulations

39.1 During continuance of the Contract, the Contractor and his Sub Contractors shall abide at all times by all existing labor enactments and rules made there under, regulations, notifications and bye laws of the, State or Central Government or local authority and any other labor law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labor law in future either by the State or the Central Government or the local authority. Salient features of some of the major labour laws that, are applicable to construction industry are given in the Contract Data. The Contractor shall keep the Employer indemnified in

case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made their under, regulations or notifications including amendments, If the Employer is caused to pay or reimburse, such amounts as may .be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/ byelaws/ Acts/Rules / regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct from any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub Contractor in no case shall be treated as the employees of the Employer at any point of time.

40. Audit and Technical Examination

Government shall have the right to cause an audit and technical examination of the works and the final bill of the contract 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 sun is found to have been overpaid in respect of any work done by the contractor under the contract or any work claimed by him to have been done under the contract and found not to; have been executed, the Contractor shall be liable to refund the amount of overpayment and it shall be lawful for Government to recover the same from him in the manner prescribed in clause 24 above 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 Government to the Contractor.

41. Death or Permanent Invalidity of Contractor

If the Contractor is an individual or a proprietary concern, partnership concern, dies during the currency of the contract or becomes permanently incapacitated, where the surviving partners are only minors, the contract shall be closed without levying any damages/compensation as provided for in clause 28.2 of the contract agreement However, if the competent authority is satisfied about the competence of the survivors, then the competent authority shall enter into a fresh agreement for the remaining work strictly on the same terms and conditions under which the contract was awarded.

42. Jurisdiction

This contract has been entered in the State of Madhya Pradesh and its validity, construction, interpretation and legal effect shall be subjected to the courts at the place where this agreement is entered into. No other jurisdiction shall be applicable.

[End of GCC]

Contract Data

Clause reference	***Particulars***	***Data***
1.14	Employer	**Executive Director on behalf of USCL, Ujjain**
1.15	Engineer	Engineer Nominated by USCL
1.16	Engineer in Charge	Superintending Engineer
1.12	Stipulated period of completion	**Twelve (12) months** (including Rainy season)
3	Language & Law of Contract	Indian Contract Act 1872
4	Address & contact details of the Contractor	As per Annexure H
	Address & contact details of the Employer/ Engineer- phone, Fax, email.	Executive Director, USCL
5	Subcontracting permitted for the Contract Value	Up to 25% by approval of employer
6	Technical Personnel to be provided the contractor—requirement, &	As per Annexure - I (Format I-3)
	Penalty, if required Technical Personnel not employed (for full time staff) . In case the part time Personnel are not deployed as per requirements the payments shall be deducted on pro Rata basis.	As defined Annexure-I
10	Specifications	As per Annexure E
	Drawings / Location	As per Annexure N
12	Competent Authority for deciding dispute under Dispute Resolution System	Chief Executive officer USCL
	Appellate Authority for deciding dispute under Dispute Resolution System	Executive Director, USCL
13	Period for submission of updated construction program	Initial Work Plan shall be submitted within Seven days of Contract signing and then shall be updated. (a) Every Three Months Or (b) At end of every Milestone, Whichever is less
	Amount to be withheld for hot submitting execution program in prescribed period	As per rule (The contractor shall submit the planned as well as executed work in file compatible with Microsoft Project)
13.1	Additional supports for ensuring proper Monitoring	As per Annexure – W
14	Competent Authority for granting Time Extension.	Superintending Engineer / Chief Executive Officer USCL
15	Milestones laid down for the	YES, Refer Scope of Work

	contract	
	If Yes, details of Milestones	As per Annexure – O/ Scope of Work
	Liquidated damage	As per Annexure – P
17	List of equipment for lab	As per Annexure - Q
	Time to establish lab	30 days from the signing of Agreement.
	Penalty for not establishing field Laboratory	Not applicable
18	Defect Liability Period	***36 months (3 years***) after physical completion of work. **Note** – in accordance with clause 18.3 (GCC), the Engineer in charge shall intimate the contractor about the cost assessed, for making good the defects, action for correction of defects shall be taken by the Engineer in Charge as below: a) Deploy departmental labour and material or b) Engage a contractor by issuing a work order at contract rate/SOR rate or c) Sanction supplementary work in a existing agreement to a contractor of similar other work or d) Invite open tender or e) Combination of above
21	Competent Authority for determining the rate	Superintending Engineer, USCL
27	Any other condition for breach of contract	Yes, as below: If the contractor fails to achieve 50 % financial progress in any milestone and/or fails to achieve 75% financial progress in two consecutive milestone
28	Penalty	Penalty Shall include (a) Security deposit as per clause 30 of General Conditions of Contract and (b Liquidated Damages imposed as per clause 15
29	Performance guarantee (Security) shall be valid up to	Till issue of physical Completion Certificate as per Clause 35.1 plus Defect Liability Period plus 3 months.
	Additional Performance guarantee (Security)	The Additional Performance guarantee shall be refunded on completion plus 3 Months.
30	Security Deposit to be deducted from each running bill	At the rate of 7%. of Gross amount of running bill
	Maximum limit of deduction of Security Deposit	Up to 7% of Final Contract Amount.
	30.3 Security deposit refund	50% of the security deposit (accumulated Retention Money) shall be released upon the successful completion of the project and the issuance of the Completion

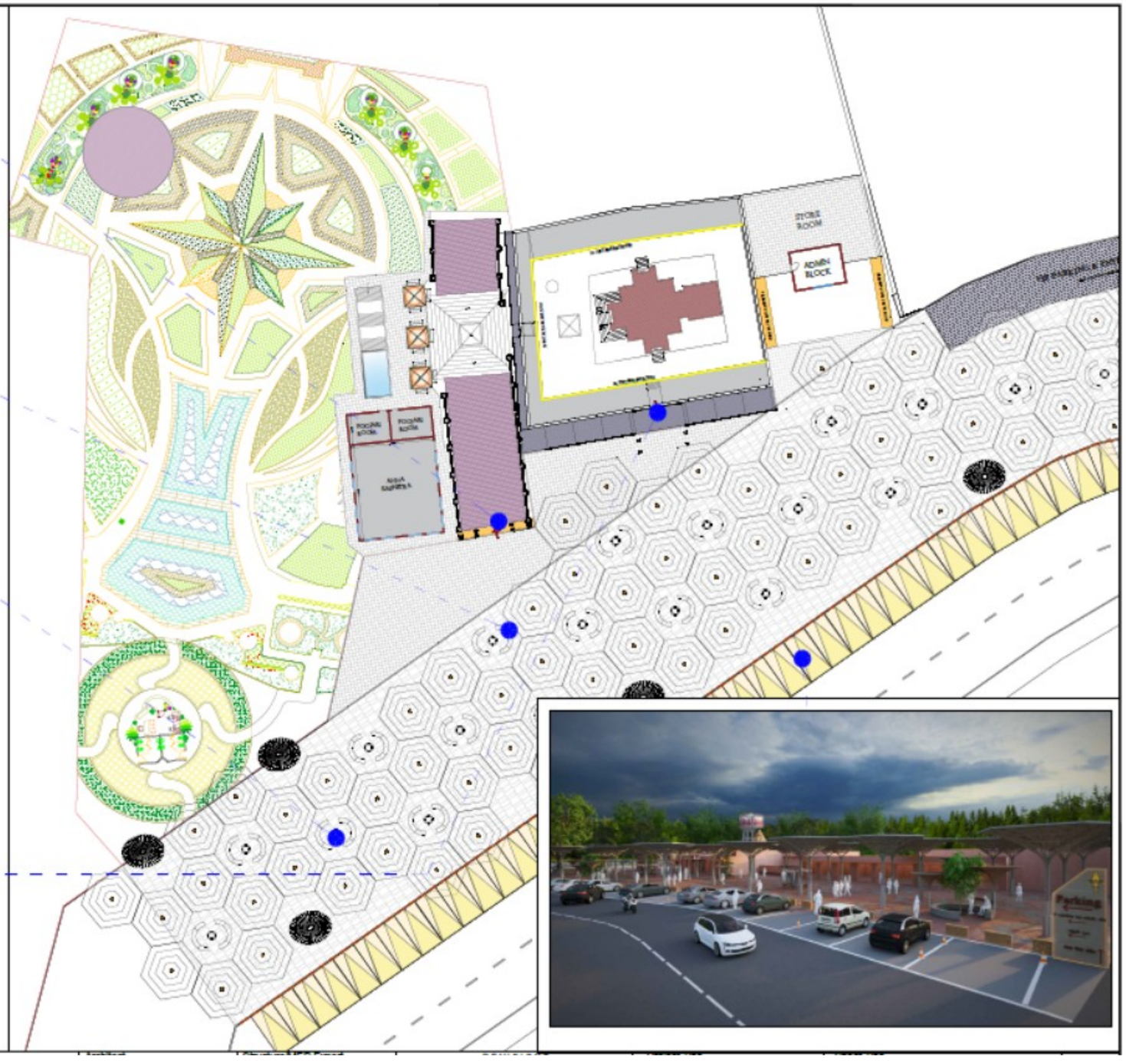
		Certificate by USCL. The remaining 50% shall be released upon the successful completion of the Defect Liability Period and the issuance of the Final Acceptance Certificate.
31	Price Adjustment formula and procedure to calculate	Not Applicable.
31.1 (1)	Price adjustment shall be applicable	NO
32	32:1 Mobilization and Construction Machinery Advance Applicable	No Mobilization and Construction Machinery Advance shall be payable.
	32.2 If yes, Unconditional Bank Guarantee	Not Applicable
	32.3 If yes, Rate of interest chargeable on advances	Not applicable
	32.4 If yes, Type & Amount of Advance payment that can be paid	Not Applicable
	32.5 If yes, Recovery of advance payment	Not Applicable.
33	33.1 secured Advance Applicable	No Secured Advance payable.
	33.2 if yes, Unconditional Bank Guarantee	Not Applicable
	33.2 if yes, Amount of Secured Advance:	Not Applicable
	33.3 if yes, Conditions for secured advance.	Not Applicable
	33.4 if yes, Recovery of Secured advance	Not Applicable
35	Completion certificate - after physical completion of the Work	As per Annexure - U
	Final Completion Certificate — after final payment on completion of the Work	As per Annexure-V
	35.2 Final Payment	The final payment, including the release of the remaining Retention Money, shall be made only after the satisfactory conclusion of the DLP and the issuance of the Final Acceptance Certificate, confirming that the facility is functioning as per the contract specifications.
36	Competent Authority for deciding unsatisfactory Final Accounts	***Executive Director, USCL***
37	Salient features of some of the major labour laws that are applicable	As per Annexure – W

Annexure—N
(See clause 10 of Section 3— GCC)

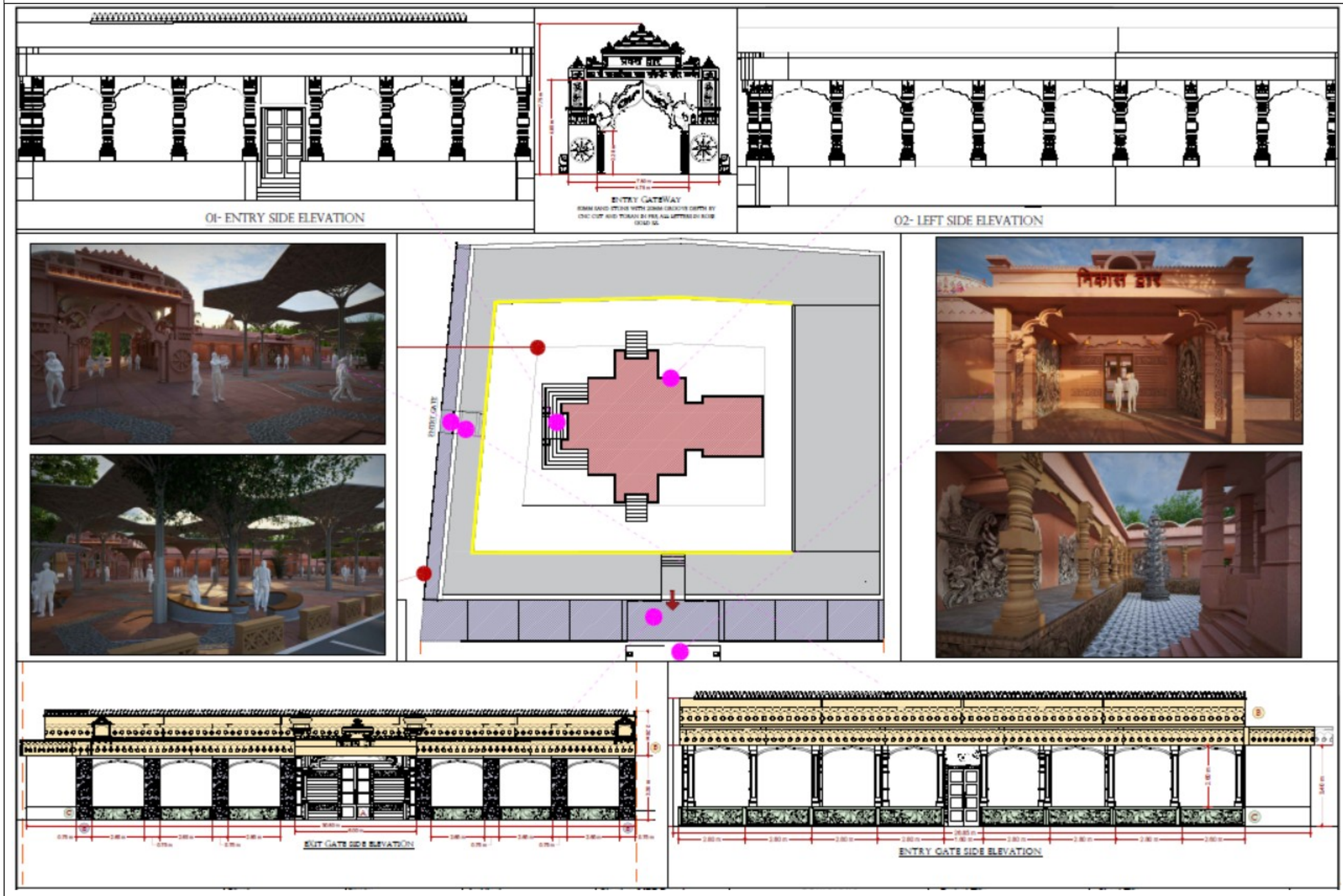
Drawings

The Concept Drawings are attached with the document.

Master Plan



Architectural Plan



ANNEXURE—O
(See clause 15 of Section 3 -GCC)

Details of Milestones

Milestones to be followed are as under:

The time allowed for carrying out the work shall be strictly observed by the contractor and shall be deemed to be essence of the contract

The work shall throughout the stipulated period of contract be proceeded with all due diligence keeping in view that time is the essence of the contract. The contractor shall be bound in all cases to complete the following financial target:

i. **Milestone 1:** 1/8th of the whole work before 1/4th of the whole time has elapsed

ii. **Milestone 2:** 3/8th of the whole work before half of the whole time has elapsed

iii. **Milestone 3:** 3/4th of the whole work before 3/4th of the whole time has elapsed

iv. **Milestone 4:** Complete work within Stipulated time

Note*: The commencement date of the project shall be considered from the date of actual Signing date of Contract Agreement.*

ANNEXURE—P

(See clause 15 of Section 3-GCC)

Compensation for Delay

If the contractor fails to achieve the milestones, and the delay in execution of work is attributable to the contractor, the Employer shall retain an amount from the sums payable and due to the contractor as per following scale -

i. Slippage up to 25% in financial target during the milestone under consideration 2.5% of the work remained unexecuted in the related time span.
ii. Slippage exceeding 25% but Up to 50% in financial target during the milestone under consideration - 5% of the work remained unexecuted in the related time span.
iii. Slippage exceeding 50% but Up to 75% in financial target during the milestone under consideration -7.5% of the work remained unexecuted in the related time span,.
iv. Slippage exceeding 75% in financial target during the milestone under consideration-10% of the work remained unexecuted in the related time span.

Note: *For arriving at the dates of completion of time span related to different milestones, delays which are not attributable to the Contractor shall be considered. The slippage on any milestone is if made good in subsequent milestones or at the time of stipulated period of completion, the amount retained as above shall be refunded. In case the work is not completed within the stipulated period of completion along with all such extensions which are granted to the Contractor for either Employer's default or Force Majeure, the compensation shall be levied on the contractor at the rate of 0.05% per day of delay limited to a maximum of 10% of contract price. The decision of Superintending Engineer shall be final and binding upon both the parties.*

Annexure – Q

(See clause 17 of Section 3 GCC)

List of Equipment for Quality Control Lab

Suggestive list of equipment required in the field laboratory to be set up by Contractor at no additional cost to Authority.

S.No.	Equipment	Min. Nos. Required.
	For Building Construction Projects	
1.	IS sieves with lid/pan: Size in mm: 100, 90, 80, 63, 53, 45, 37.5, 26.5, 19,13.2,11.2,9.5,4.75,2.8,5.6,3.35,2.36, 600 , 500, 425,355, 250, 212, 180, 150, 90, 75, 63,53,45,and 38 micron,	1 set
2.	Cube moulds 70 mm for mortar	6
3.	Cube moulds for CC 150 mm	6
4.	Compression testing machine 200t	1
5.	Electronic/digital balance 1 kg with least count of 0.01g	1
6.	Electronic / digital balance 5 kg	1
7.	Pan balance with weight box 5 kg.	1
8.	Enameled tray	6
9.	Oven (300oC) thermostatically controlled, sensitivity 1oC	1
10.	Slump cone	1
11.	First Aid Box	1
12.	Vicat Apparatus	1
13.	Room cooling equipment for temperature control	1 or 2
14.	Atterberg Limit Apparatus	1
	For Road Construction Projects:	
1.	Additional -IS sieves with lid/pan: Size in mm: 125, 106, 75, 50, 40, 31.5, 25, 22.4, 20, 16, 12.5, 10, 8.6, 8, 6.7, 6.3, 4.75,2.8,5.6, 125, and 38 micron,	1set
2.	Balance 20 kg with 1 gm accuracy	1
3.	Proving ring 10kg, 50kg,100kg capacity	1 each
4.	Dial Gauge 25 mm, 50 mm travel (sensitivity 0.01 mm /division)	6 each
5.	Water bath (Electrically operated and thermostatically controlled) , water still (capacity 4 lit/hour)	1 each
6.	Thermometers: -Metallic type (Mercury in steel) with 300mm stem for near and distant readings. Glass type (mercury in glass) range of 110oC to 250oC	4 4
7.	Glassware: Flasks, beakers, Graduated cylinders, spatulas, wire gauges, scoops, steel scales, measuring tapes (30m, 15m, 5m), filter paper, glass marking pencils, heat resistant hand gloves, vernier calipers etc. Table lamp	
8.	Camber boards 3 m long	3
9.	Straight Edge 3 m long	1
10.	Thickness gauge	1
11.	Precision Level and staff, total station/theodolite	1 set each
12.	Rapid moisture meter.	1 set
13.	Liquid limit device	1
14.	Post hole auger (100 mm dia)	1
15.	Sampling Pipette 10 ml.	1
16.	B.S. Compaction apparatus	1
17.	Sand replacement equipment.	1
18.	Lab CBR equipment	1
19.	Core 100 mm cutter.	1
20.	Flakiness and Elongation gauges	1

S.No.	Equipment	Min. Nos. Required.
21.	Aggregate Impact value apparatus.	1
22.	Digging tools pickaxe, pan, axe, shovels,	LS
30.	Sieve shaker	1
31.	Steel tapes 50 m	1
32.	Steel tapes 5m	2
34.	Computer, printer , modem and internet	1 set.
35.	Others if required:	

- The contractor shall arrange to provide fully furnished and adequately equipped field laboratory with adequate qualified technical staff. Preferably located adjacent to the Project Office and provided amenities like water supply, electric supply etc.
- The laboratory equipment shall confirm I.S. specifications and MOST/MORTH/Applicable specifications. The Contractor shall carry out the calibration of the instruments as directed by the Engineer in- Charge on expiry date of calibration. On completion of work in all respect, the equipment will be the sole property of the contractor.
- It shall be considered as incidental to the work, and no extra payment will be made, what so ever, will not be made for the same.

ANNEXURE - R

(See clause 31 of Section 3 -GCC)

Price Adjustment

(Not Applicable)

The formulas for adjustment of price are as follow:

R = Value of work as defined in Clause 31.2(3) of General Conditions of Contract

Weightages* of component in the work

S.No.	Component	Percentage of Component in the work
1.	Cement -P_e	
2.	Steel -P_s	
3.	Bitumen -P_b	
4.	POL P_f	

* Weightages of various components of the work shall be as determined by the competent Technical authority.

Adjustment for cement component

(ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:

V_e= 0.85 x P_e/100 x R x (C_1-C_0)/C_0

V_e= increase or decrease in the cost of work during the month under Consideration due to changes in rates for cement.

C_0= The all India wholesale price index for Grey cement on the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi (www.eaindustry.nic.in)

C_1= The all India average wholesale price Index for grey cement for the month under consideration as published by Ministry Government of India, New Delhi. (www.eaindustry.nic.in)

P_e= Percentage of cement component of the work

Note: For the application of this clause, index of Grey Cement has been chosen to represent Cement group.

Adjustment of steel component

(iii) Price adjustment for increase or decrease in the cost of steel procured by the Contractor shall be paid in accordance with the following formula:

V_s= 0.85 x P_s x /100 x R x (S_1-S_0)/S_0

V_s= Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.

S_0 = The all India wholesale price index for steel (Bars and Rods) on the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi (www.eaindustry.nic.in)

S_1= the all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi (www.eaindustry.nic.in)

P_s= Percentage of steel component of the Work.

Note : *For the application of this clause, index of Bars and Rods has been chosen to represent steel group.*

Adjustment bitumen component

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~~(iv) Price adjustment for increase or decrease is the cost of bitumen shall be paid in accordance with the following formula:~~

~~$V_b = 0.85xP_b/100xRx(B_i-B_0/B_o$~~

~~V_b= Increase or decrease the cost of work during the month under consideration due to changes in rates for bitumen.~~

~~B_0= The official retail price of bitumen at IOC depot at nearest center on the date of opening of Bids.~~

~~B_i = The official retail price of bitumen of IOC depot at the nearest center for the 15th day of the month under consideration.~~

~~P_b = Percentage of bitumen component of the work.~~

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~~**Adjustment of POL (fuel and lubricant) component**~~

~~(V) Price adjustment for increase or decrease in cost of POL (fuel and lubricant) shall be paid in accordance with the following formula:~~

~~$V_f = 0.85x\ P_f/100x(F_i - F_o)/F_o$~~

~~V_f= Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricant.~~

~~F_0= the official retail price of High speed Diesel (HSD) a the existing consumer pumps of IOC at nearest center on the date of opening of Bids.~~

~~f_i = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month of the under consideration.~~

~~P_f= Percentage of fuel and lubricants component of the work.~~

~~Note: For the application of this douse, the price of High Speed Diesel has been chosen to represent fuel and lubricants group.~~

Annexure - S
(See clause 32 of Section 3-GCC)

Bank Guarantee Form for Mobilization and Construction Machinery Advance

Not applicable for this Contract

~~To~~

~~_____[name of Employer)~~
~~_____[address of Employer]~~
~~_____[name of Contractor)~~

~~In accordance with the provisions of the General Conditions of Contract, clause 31 ("Mobilization and Construction Machinery Advance") of the above-mentioned Contract _____[name and address of Contractor] (hereinafter called "the Contractor")' shall deposit with _____ [name of Employer) a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of _____[amount of Guarantee]* _____ [in words].~~

~~We, the _____(bank of financial institution), as instructed by the Contractor., agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to _____(name of Employer) on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, the amount not exceeding '[amount of guarantee]* _____ in words.~~

~~We further agree that no change or addition to or other modification of the terms of the Contractor or Works to be performed thereunder or of any of the Contract documents which may be made between _____[name of Employer] and the Contractor, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.~~

~~This guarantee shall remain valid and in full effect from the date of the advance payment under the contract until _____ [name of Employer] receives full repayment of the same amount from the Contractor.~~
~~Yours truly,~~

~~Signature and Seal:_____~~
~~Name of Bank/Financial Institution:_____~~
~~Address:_____~~
~~Date:_____~~

~~* An amount shall be inserted by the Bank or Financial Institution representing the amount of the Advance Payment and denominated in Indian Rupees.~~

Annexure - T
(See clause 33 of Section 3 -GCC)

Bank Guarantee Form for Secured Advance

(Not Applicable for this Contract)

~~INDENTURE FOR SECURED ADVANCES~~

~~This indenture made the _____ day of _____ 20__ BETWEEN _____ (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his executors, administrators and assigns) or the one part and the Employer of the other part.~~

~~Whereas by an agreement dated _____ (hereinafter called the said agreement) the contractor has agreed.~~

~~AND WHEREAS the contractor has applied to the Employer that he may be allowed advanced on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to executive at rates fixed for the finished work inclusive of the cost of materials and labour and other charges)~~

~~AND WHEREAS the Employer has agreed to advance to the Contractor the sum of Rupees _____ on the security of materials the quantities and other particulars of which are detailed in Account of Secured Advance attached to the Running Account Bill for the said works signed by the Contractor on _____ and the Employer has reserved to himself the option of making any further advance or advances on the authority of other materials brought by the Contractor to the site of the said works.~~

~~Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rupees _____ on or before the execution of these presents paid to the Contractor by the Employer (the receipt where of the Contractor doth hereby 'acknowledge) and of such further advances (if any) as may be made to him as a for said the Contractor doth hereby covenant and agree with the President and declare as follows:~~

~~That the said sum of Rupees _____ so advanced by the Employer to~~

~~(1) the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall be employed by the Contractor in or towards expending the execution of the said works and for no other purpose whatsoever.~~

~~(2) That the materials details in the said Account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own propriety and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance, on the security Of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer against all claims to any materials in respect of which an advance has be made to him as aforesaid.~~

~~(3) That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may here after be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer.~~

~~(4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.~~

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~~(5) That the said materials shall not be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.~~

~~(6) That the advances shall be repayable in full when or before the Contract receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Employer will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.~~

~~(7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default were payable by the Contractor to be the Employer together with interest thereon at twelve percent per annum from the date or respective dates of the advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Employer to reply and pay the same respectively to him accordingly.~~

~~(8) That the Contractor hereby charges all the said materials with the payment to the Employer of the said sum of Rupees _____ and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the powers therein if and whenever the covenant for payment and repayment here in before contained shall become enforceable and the money owing shall not be paid in accordance therewith the Employer may at any time thereafter adopt all or any of the following courses as he may deem best~~

~~(a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provision in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due to the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor, he is to pay same to the Employer on demand.~~

~~(b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or repayable to the Employer under these presents and pay over the surplus (if any) to the Contractor.~~

~~(C) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.~~

~~(9) That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.~~

~~(10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.~~

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Annexure - U
(See clause 35 of Section 3 -GCC)

Physical Completion Certificate

Name of Work:

.....

.....

.....

Agreement No .....Date .....

Amount of Contract Rs .....

Name of Agency .....

UsedMB No. .....

Last measurement recorded

a. Page No. &MB No. _____

b. Date _____

Certified that the above mentioned work was physically completed on .....(date) and taken over on .....(date) and that I have satisfied myself to best of my ability that the work has been done properly.

Date of issue

Executive Engineer/Engineer-in-charge

.....

.....

Annexure-V
(See clause 35 of Section 3-GCC)

Final Completion Certificate

Name of Work:

.....

.....

.....

Agreement no .....Date .....

Name of Agency: .....

Used MB No. .....

Last measurement recorded

a: Page No. & MB No. _____

b. Date _____

Certified that the above mentioned work was physically completed on .....(date) and taken over on .....(date).

Agreemented amount Rs .....

Final Amount paid to contractor Rs. .....

Incumbency of officers for the work

I have satisfied myself to best of my ability that the work has been done properly.

Date of issue

Executive Engineer

.....

.....

Annexure - W

(See clause 39 of Section 3 -GCC)

Salient Features of Some Major Labour Laws Applicable

a) **Workmen Compensation Act 1923** The Act provides for compensation in case of injury by accident arising out of and during the course of employment.

b) **Payment of Gratuity Act 1972:-** Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days'(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.

c) **Employees P.F. and Miscellaneous Provision Act 1952:** The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%), The benefits payable under the Act are:

i. Pension or family pension on retirement or death as the case may be.

ii. Deposit linked insurance on the death in harness of the worker.

iii. Payment of P.F. accumulation on retirement/death etc.

d) **Maternity Benefit Act 1951:** - The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.

e) **Contract Labour (Regulation & Abolition) Act 1970:** - The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the contractor fails to provide, the same are required to be provided, by the Principal Employer by Law.. The principal Employer is required to take certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.

f) **'Minimum Wages Act 1948;** - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.

g) **Payment of Wages Act 1936: -** It lays down as to by what date the wages are to be paid when it will be paid and what deductions can be made from the wages of the workers.

h) **Equal Remuneration Act 1979:** - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.

I) **Payment of Bonus Act 1965: -** The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.

j) **Industrial Disputes Act 1947:** - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.

k) **Industrial Employment (Standing Orders) Act 1946:** - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the designated Authority.

I) **Trade Unions Act 1926: -** The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have, 'been given certain immunities from civil and criminal liabilities.

m) **Child Labour (Prohibition & Regulation) Act 1986:** - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.

n) **Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979:** - The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Traveling expenses from home up to the establishment and back etc.

o) **The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996** - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

p) **Factories Act 1948:** - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power, or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

SECTION 4

CONDITIONS OF CONTRACT [Part II: Special Conditions of Contract (SCC)]

1. All works shall be carried out in strict accordance to the norms, procedure and specifications issued and enforced by BIS in Relevant Indian Standard specifications and code of Practices with up-to-date amendments and revisions, latest edition of National building code and National electric code. In addition, the installation shall comply in all respects with the requirements of Indian Electricity Act 1910 and Indian Electricity Rule 1956 with up-to-date amendments and revisions and special requirements if any of the M.P. State Electricity Board or Chief Electrical Advisor to Government of Madhya Pradesh cum Chief Electrical Inspector and his subordinate office.
2. The contractor shall make his own arrangements for supply of water and electricity at his expense required for execution of work. The USCL shall neither make any such arrangements nor shall make any payments in this regard.
3. The contractor has to construct at his own cost his site office and store at site on a suitable place and location as permitted by USCL. The USCL shall not provide any place or room in the building under construction for storage of equipment's required for work. No amount shall be paid to the contractor in this regard. The site office shall have also an arrangement of one room for office of Employers representatives. No additional cost shall be paid for same.
4. Proper upkeep and maintenance and safety of store and stocks of materials brought at site shall be the sole responsibility of the contractor. The materials got damaged due to negligence of its up keeping at site or due to mishandling shall have to be replaced by the contractor at his own cost. On discovery of such damages the USCL shall recover the amount paid through the running bills to the contractor and shall only be reimbursed after the replacement of the same. The USCL shall also not be responsible for theft of materials from site and the contractor has to replace all such materials at his own cost. No compensation whatsoever shall be payable to the contractor on above grounds.
5. Time being the essence of the contract, the contractor shall before drawl of agreement prepares a detail time bound work execution program which shall be approved by Engineer in charge. The contractor has to execute the work in strict accordance to the time bound execution program (The contractor shall submit the planned as well as executed work in file compatible with Microsoft Project) submitted by him, mutually agreed, approved.
6. Time schedule can be revised by the USCL for any unforeseen unavoidable reasons whatsoever. It may be necessary to stop the work at certain place due to some unavoidable reasons and restart the work at later date. Such contingencies shall not vitiate the contract and shall not be considered a ground for extra claim for any reason whatsoever. However time extension shall be allowed only for such days for which the work was stopped by USCL.
7. The contractor shall not be entitled to any compensation for any loss suffered by him on account of delay in commencement or execution for work whatever the cause of delay may be including delay arising out of other materials, supply of materials, transportation for any matter related with MPPKVV Co. Ltd. &Electrical Safety Department or any other reasons whatsoever, the USCL shall not be liable for any claim in respect thereof.
8. Rate quoted shall be applicable for works at all height unless otherwise specified in theschedule of quantities.
9. The contractor shall submit test reports of the equipment's to be supplied and drawings for approval of the Engineer in charge before supplying/Installation the equipment. The successful tenderer shall also submit the purchase bill of all items as required and directed at no cost.
10. The contractor shall have to arrange all free of cost facilities for the inspection, such as employ or material labor etc. and any fees payable to Government or any competent authority at his own cost.
11. The consultant / Contract employees appointed by USCL are authorized for following:

a) To visit the site from time to time to inspect the quality of work.
b) To check / issue working drawings with specifications to the contractor.
c) Technically guide the contractor if required.
d) To accompany USCL officials for factory inspections of material if required.

12. The contractor shall be responsible for removal of all defects and shall make rectification in the work at his own cost if any at the time of handing over without any claim forcompensation.
13. The contractor has to quote his rates for items in strict accordance to the list of approved make of materials. The tenderer has to ensure before filling up the rates regarding their availability and period of delivery.
14. The contractor shall note that during the execution of works there is likelihood in charge of site/ specification and change in quantities of items entered in the schedule of items for which the contractor has tendered his rates. The increase or decrease in the quantities of such items may be up to any extent and the tenderer shall not been entitled to any compensation for any loss suffered by him on account or procurement of additional quantities of such items due to such changes.
15. Time schedule may be revised by the USCL from time to time keeping in view of the approval of concepts / drawings or items or for any reasons whatsoever. It may be necessary to stop the work at certain places due to some unavoidable reasons and restart the work at later date. Such contingencies shall not vitiate the contract and shall not be considered a ground for extra claim.
16. The contractor shall not be entitled to many compensations for any loss suffered by him on account of delay in commencement or execution of work whatever the cause of delay may be including delay arising out of other materials or any reasons whatever and the USCL shall not be liable for any claim in respect thereof.
17. The Contractor shall:
a. comply with all applicable safety regulations,
b. take care for the safety of all persons entitled to be on the Site,
c. use reasonable efforts to keep the Site and Works clear of unnecessary obstruction so as to avoid danger to the persons. provide fencing, lighting, guarding and watching of the Works until completion.
18. Provide any Temporary Works (including roadways, footways, guards and fences) which may be necessary, because of the execution of the Works, for the use and protection of the public and workers.
19. The Contractor has to ensure that the works included in this contract are done in strict accordance with all approved concepts and specifications and in accordance with manufacturer's instructions for application.
20. The site shall have to be sprinkled with water so that dust settles down. Dust control sprinkling shall have to be done several times a day during hot, dry weather depending on the site requirement.
21. Contractor shall ensure safe workplace and shall install safety signs.
22. The excavation is to be done carefully to avoid damage to underground cables and other service lines.
23. Appointment of Agency will be done on lowest rate quoted in tender, Quantity and place of work shall be decided by the authority and shall be binding to Successful bidder.
24. Order of precedence

In a situation of contractual disputes or ambiguities the priority of documents is set out as
a. the Contract Agreement (if any).
b. any Addenda / Corrigendum
c. the Letter of Acceptance. (if any).
d. the Letter of Tender. (if any).
e. the Particular Conditions.
f. General Conditions,
g. Site Works Instructions
h. the Specification.
i. the Drawings, and
j. the Schedules and any other documents forming part of the Contract.

25. Extra items

All such items which are not included in the priced BOQ shall be treated as extra items.
-Not Applicable

26. COVID-19 Health and Safety Protocols

General Obligations of the Contractor:

- To take all necessary precautions to maintain the health and safety of the Contractor's Personnel.
- To ensure, in collaboration with local health authorities, access to medical help, first aid and ambulance services are available for workers/labors, as and when needed.
- Provide health and safety training/orientation on COVID19 to all workers and staff and other employees of the sub-contractor (tips on cough etiquette, hand hygiene and social distancing).
- Prepare a detailed profile of the project work force, key work activities, schedule for carrying out such activities, different durations of contract and rotations, confirmed addresses of the labor and any underlying health conditions that increases the risk of severe infection, to facilitate tracking of workers in case of COVID-19 exposure.
- All laborers to be provided with photo ID cards for accessing the construction site.
- All laborers engaged at construction site to be provided with the required Personal Protection Equipment (PPE) – safety helmet and shoes, secured harness when working at heights, electrical gloves, eye protection for welding etc., without which entry to the construction site shall not be allowed.
- In relation to COVID19, masks, adequate hand washing/ sanitization, clean drinking water and sanitation facilities to be provided at construction site.
- All workers/labor to be regularly checked for symptoms before allowing entry to the work site.
- Paid leave to be mandatorily given if labor contacts COVID-19 and/or any other contagious disease while working at the construction site or in the labor camp.

For Labour Camp:

- Contractor to provide hygienic living conditions and safe drinking water.
- Separate toilets for male and females and adequate hand washing/sanitization facilities.
- Monthly/weekly health check up to be organized at the camp for all labors/family.
- Organize awareness campaign for social distancing and general health and hygiene.

Construction Management in Upgrading of Existing Facilities:

- Maintain a roster of workers/staff at work site indicating their health condition and symptoms and ensure screening procedures (non-physical temperature measurement) at work sites.
- Depute and assign monitoring and reporting responsibilities on environmental management, health and personnel safety.
- Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such worker for 14 days.
- Place posters and signage's at/around the site, with images and text in local languages relating to personal safety, hygiene and on COVID-19 symptoms and guidelines.
- Ensuring hand washing facilities supplied with soap, disposable paper towels and closed waste bins exist at key places throughout site, including at entrances/exits to work areas; where there is a toilet, canteen or food distribution, or provision of drinking water; in worker accommodation; at waste stations; at stores; and in common spaces.
- Segregate lunch hours at worksite of workers to maintain social distancing.
- Securing the construction site with entry only for authorized personnel and disinfecting of the worksite to be undertaken at close of work every day or as may be required.
- Any medical waste produced during the care of ill workers should be collected safely in designated containers or bags and treated and disposed of following relevant requirements (e.g., Biomedical Waste Rules-2018, WHO).

27. Coordination with other Contractors

Due to the peculiar nature and location of the project, and in view of the objective of proper laying of all utility services, and adjacent works being done by other contractors the different contractors will need to work simultaneously and ensure proper mutual coordination. EMPLOYER reserves the right to require each Contractor to schedule the order of performance of their Work in such a manner as will minimize interference with work of any of the parties involved.

28. Photographic record of works

All the processes of conservation works should be well documented before , during and after execution of the works through photographs by the contractor's team and submitted to the USCL Project regularly, supported with relevant photographs. These photographed should be saved date wise as per work description

29. Add the following Additional Clause 17.5 under C. Quality Control, 17 – Tests in GCC (General Conditions of Contract)

17.5 Third Party Inspection

17.5.1 The bidder will also facilitate third party quality control and inspections on behalf of Engineer in charge as required. All the cost of third party inspection shall be born by the contractor and the contractor shall the quote accordingly.

17.5.2 The inspection and testing of the samples from a lot will be carried out by the employer and or inspecting agency approved by the employer, in the manufacture's workshop, before application of any paint. All the tests, as required as per the IS, shall be carried out on samples from each lot (number of samples from a lot shall be as per the relevant IS for sampling and testing), in presence of the inspecting agency. The materials will be dispatched only after issue of the test certificate by the inspecting agency for satisfactory performance of the tested materials. The inspection charges for such tests shall be paid by the contractor to the inspecting agency, No Reimbursement shall be made for the same and the rates quoted for this bid shall include these costs also.

17.5.3 Ten percent (10%) of the mandatory test prescribed under the specification shall be got carried out through laboratories accredited by national Accreditation Board of laboratories (NABL) By the Engineer-in-charge and the cost of such testing shall be deducted form the payments due to contractor.

17.5.4 The supplier shall give the inspection notice before or at least 10 days prior to the last date of supply of material. The material will be dispatched by the supplier after inspection by the representative of USCL. The supplier is required to dispatch the material within 10 days from the date of acceptance of material. In case the time taken in dispatch the material exceeds 10 days, the excess period shall be counted for levy of penalty. USCL's representative will visit the manufacturer's work and witness the tests as per specifications on each type of lighting fixtures as per the samples selected by USCL's representative. The sample of the material may also be sent to the government approved NABL laboratory at the cost of supplier for any kind of specific test required by USCL. Supplier shall submit the schedule with date, time & venue of the inspection to USCL in writing for the inspection of the material. USCL is authorized to get the material tested from the approved laboratory at the supplier cost for any kind of specific test if required. The contractor needs to make arrangements for Factory Inspection at his own cost for Luminaires, Brackets. INSPECTION WILL BE CARRIED OUT AT MANUFACTURER PREMISISONLY. It will not be permitted at vendor's place.

30. The contractor may have to do only manual excavation on site. The payment for same shall be as per BOQ / UADD SOR / Other SOR

31. If any heritage structure / Article etc. is encountered / found at site during Excavation, then the work must be stopped by the contractor till its solution/ Decision. No compensation shall be given to contractor for delay caused due to stopping of work except

Annexure - Y

(See ContractData, Point No 13.1)

PROCESS PARAMETERS -			
Sr. No.	**MIS Report**	**Frequency of Submission**	**Submission Date**
1	Quarterly Plan	Quarterly	7th of every quarter ad as and when required.
2	Construction Schedule for next Quarter	Quarterly	7th of every quarter
3	Plan vs Achievement Report - Turnover (WD Status)	Weekly	
4	Daily Progress Report/Daily Labour Report / Including Gender segregated Labour report.	Daily	-
5	Material Identification/Tracker	Process	-
6	Monthly Dia-wise Steel & Cement requirement	Monthly	1st of every month
7	Drawing Register	Process	-
8	Fortnightly Labour Report	Fortnightly	7th / 22nd
9	Sub-Contractor employed Details	Process	-
10	Material Stock Report	Monthly	7th of every month
11	Hinderance Register Copy	Monthly	7th of every month

SECTION 5

Bill of Quantities

PREAMBLE TO BILL OF QUANTITIES (BOQ)

Name of Work: Development Works at Gadkalika Mata Mandir and Precinct at Ujjain

1. The Bill of Quantities (BOQ) forms part of the Tender Documents for the work of *"Development Works at Gadkalika Mata Mandir and Precinct at Ujjain"*. The quantities indicated in the BOQ are based on the approved drawings, master plan, and detailed estimates prepared for the project.
2. The **Probable Amount of Contract (PAC)** has been derived from detailed estimates prepared primarily on the basis of the **Schedule of Rates of Madhya Pradesh Public Works Department (MP PWD SOR–2024)** along with amendments issued from time to time. Certain specialized or non-scheduled items not covered under the SOR have been included in the estimates based on prevailing market rates, standard analysis of rates, or approved quotations.
3. The tender is invited on the basis of **percentage tender premium** over the PAC. The bidder shall quote a **single percentage premium (above/below/at par)** on the PAC in the prescribed format. The quoted premium shall be deemed to apply uniformly to all items of work included in the BOQ, including SOR and non-SOR items, unless otherwise specified in the tender documents.
4. This contract shall be an **Item Rate / Admeasurement Contract**, and the quantities mentioned in the BOQ are **indicative only**. The actual quantities executed at site may vary depending upon site conditions, detailed drawings, and instructions issued by the Engineer-in-Charge. Payment shall be made based on the **actual quantities of work executed and measured** at site in accordance with the relevant specifications and contract conditions.
5. The contractor shall submit **Running Account (RA) Bills on a monthly basis**, based on the measured quantities of work executed during the billing period. Payments shall be processed after verification of measurements and certification by the Engineer-in-Charge in accordance with the provisions of the contract.
6. The bidder shall carefully examine the drawings, specifications, site conditions, and BOQ before quoting the tender premium. The quoted premium shall be deemed to include **all costs necessary for complete execution of the works**, including but not limited to:
    - Establishment and maintenance of site office and site infrastructure

- Mobilization and demobilization of manpower, machinery, and equipment
- Temporary works, barricading, safety measures, and traffic management
- Surveys, setting out, and site investigations required during execution
- Quality control measures, testing of materials and works at approved laboratories, third party inspections
- Preparation of mock-ups, samples, and trial panels for approval
- Documentation, drawings, and coordination with consultants
- All incidental and miscellaneous expenses required for proper completion of the works.

7. No separate payment shall be made for the above activities, and the cost of such incidental, testing, mock-up, survey, investigation, and establishment-related works shall be **deemed to be included in the quoted tender premium**.
8. The contractor shall execute the works in accordance with the approved drawings, technical specifications, applicable codes and standards, and instructions issued by the Engineer-in-Charge from time to time. All works shall be completed in a workmanlike manner to the satisfaction of the Engineer-in-Charge.
9. Basalt Stone Construction/Restoration: The Main Temple structure is proposed to be constructed/restored using Basalt stone elements in accordance with the approved architectural concept and drawings. The Contractor shall be responsible for sourcing suitable basalt stone from approved quarries, cutting, dressing, carving, transportation, handling, and precise erection of large monolithic stone members required for the temple structure and associated architectural components. Preparation of detailed shop drawings, installation methodology, mock-ups, samples, and all related activities necessary for proper execution of monolithic basalt construction shall be included in the Contractor's scope. All costs associated with these works shall be deemed to be included in the quoted tender premium, and no separate payment shall be admissible.
10. The contractor shall also take into account the operational requirements of the temple premises and the need for safe movement of pilgrims during execution. The quoted premium shall therefore include provisions for appropriate construction planning, phasing, safety arrangements, and protection of existing structures and utilities.
11. The BOQ shall be read in conjunction with the **Conditions of Contract, Technical Specifications, Drawings, and other Tender Documents**, all of which shall form part of the Contract Agreement.

ABSTRACT OF COST

Name of Work: Development Works at Gadkalika Mata Mandir and Precinct at Ujjain

SNo	Description	Amount (In Rupees)
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
Grand Total (excluding GST)		
Total Amount in Words: Rupees ……..……... ……...……		

DETAILED BILL OF QUANTITIES

Attached Separately.

SECTION 6

AGREEMENT FORM

AGREEMENT

This agreement, made on the _____ day of _____ between: _____ (name and address of Employer) (hereinafter called "the Employer) and_____ (name and address of contractor) hereinafter called "the Contractor' of the other part.

Whereas the Employer is desirous that the Contractor execute _____(name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such Works and the remedying of any defects therein, at a cost of Rs.....

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same meaning as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.
2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.
3. The Employer hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying the defects wherein Contract Price or such other Sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
   - i. Letter of Acceptance
   - ii. Contractor's Bid
   - iii. Condition of Contract: General and Special -
   - iv. Contract Data
   - v. - Bid Data
   - vi. Drawings
   - vii. Bill of Quantities and
   - viii. Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed where of the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of _____ was hereunto affixed in the presence of:

Signed, Sealed and Delivered by the said _____ in the presence of:

Binding Signature of Employer _____

Binding Signature of Contractor _____

UJJAIN SMART CITY LIMITED , UJJAIN

Shree Gadkalika Mata Shakti Peeth Mandir Ujjain

A B S T R A C T SUMMARY

S.No.	NAME OF ITEM	AMOUNT
A	**Civil & Plumbing Works**	
1	MANDIR FAÇADE	2,60,55,887
2	ADMIN BLOCK	77,92,288
3	ANNASHETRA	71,36,209
4	SHOPS	1,03,06,667
5	PUBLIC TOILET	34,52,668
6	SHAKTI DWAR- ENTRY GATE	67,55,242
7	GARDAN	33,18,207
8	BOUNDARY WALL	31,54,746
9	PLAZA	26,56,016
10	STEP-WELL	55,22,858
11	YAGYA SHALA & PLAZA SHED	1,55,17,841
12	OHT	17,39,635
	Total A	**9,34,08,264**
B	**Servicess**	
1	Internal Electrical Work	67,55,270
2	External Electrical Work	2,08,47,317
3	Façade Lighting	44,88,010
4	ICT Work	37,72,486
5	HVAC Work	5,52,410
6	Fire Fighting Work	2,31,630
7	PA System	13,61,030
	Total B	**3,80,08,153**
	Total Project Amount Excluding GST C= (A+B)	**13,14,16,417**

Mandir Façade & CONSERVATION

NO	SOR No.	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	15.1	Demolishing lime concrete manually/by mechanical means and disposal of material within 50 metres lead as per direction of Engineer-in-Charge. SOR 15.1	CUM	202.00	150.00	30,300.00
2	15.2.1	Demolishing cement concrete manually/by mechanical means including disposal of material within 50 metres lead as per direction of Engineer-in Charge. Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix). SOR 15.2.1	CUM	578.00	160.00	92,480.00
3	15.11.2	Dismantling tile/ Kota stone/ Marble / Granite work in floors/walls and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles above 25 mm and upto 40 mm. SOR 15.11.2	sqm	26.00	761.00	19,786.00
4	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in- Charge. SOR 15.3	CUM	844.00	150.00	1,26,600.00
5	15.6.3	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres leadas per direction of Engineer-in-Charge. In cement mortar.	CUM	487.00	240.00	1,16,880.00
6	15.64	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved	Cum	121.00	1461.00	1,76,781.00
7	2.1	Surface dressing of the ground including removing vegetation and in - equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. in all kinds of soil. SOR 2.1	SQM	803.00	100.00	80,300.00
8	INTACH SOR JAN. 2016 2.1	Removing of old sulphated lime wash/white or colour wash in multiple applications without causing damage to the below stone/brick/plastered surface. Scrubbing (not by scraping which leaves surfaces scarred and scratched) with bristle brushes and hot water (Care to be taken if the surface is weak one it will break down). Hot water should be used if the limewash has an oil or tallow binder. Gentle cleaning with air abrasive tools can be used if the wall surface is not very week.The final clean will almost invariably have to be carried out by hand scrubbing and rinsed with clean water on completion. The work should be done under supervision of a trained conservator.	Sqm	420.01	2613.88	10,97,860.97
9	INTACH SOR JAN. 2016 2.2	Removal of rust, existing coatings, mill scale, dirt, oil, grease, and other contaminants from steel sections/stone surface using Micro sand with the help of pressure pump (Sand Blasting)	Sqm	278.94	2613.88	7,29,107.85
10	MPPWD Jan.-2024, 2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	Cum	147	255.00	37,485.00
11	MPPWD Jan.-2024, 4.1.2.1	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	Cum	331	380.00	1,25,780.00
12	MPPWD Jan.-2024, 2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete. Note: - Maximum thickness of this layer shall be 20 cm.	Cum	672.00	105.00	70,560.00
13	MPPWD Jan.-2024, 4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate.M-15 - Grade concrete	Cum	4403.00	135.00	5,94,405.00

14	NSR Approved in Pedestrian Bridge Project	Providing & fixing of 40 mm thickness Basalt Stone Shot Blasted as per given design and patern including preparing the surface and levelling in the desired line, laid in 20mm thickness 1:2 cement mortor bed including cement float, machine cutting dressing, levelling, jointing, filling joint with matching colour cement slury/cement mortor (1:2) inclusive of pointing the joint (Joints thickness 3mm) fixed over surface /concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineer -in - charge.	Sqm	3891.00	661.00	25,71,951.00
15	NSOR approved in MRIDA	Wall art work (2D/3D Painting) - Providing and painting 2D/3D Painting including all material and labour complete as per Engineer-In-Charge	Sqm	1224.00	300.00	3,67,200.00
16	MPPWD Jan.-2024, 14.58.2	40 mm thick stone flooring over 20 mm (average)thick base of cement mortar 1:5 (1 cement : 5 sand) including pointing with cement mortar 1:2 (1 cement : 2 sand) with an admixture of pigment to match the shade of stone. Red sand stone / White sand stone) stone to be supplied by the department.	Sqm	207.00	350.00	72,450.00
17	NSR	Stone cladding work in red sand stone, Best Quality Stone, as approved by Engineer-incharge and consultant, with specific design and as per drawings upto any height,with necessary scaffolding / centering etc. as provided in tender document and as per requirement of items and measurement from site. Stone Carving depth 15mm to 30 mm varies as per design including sunk and moulding works.Other moulding, grooves, cornices, sculpture, etc. work as per drawings, backing filled with grout of cement mortar 1:3(1 cement : 3 sand) minimum 12mm thick, including pointing in white cement mortar 1:2 (1 cement : 2 marble dust) with an admixture of pigment matching the stone shade, to be secured to backing by means of Stainless Steel cramps/anchor/fastner of required size and shape anchoring stone wall linning to the backing or securing adjacent stone in stone wall linning in cement mortar 1:2(1 cement : 2 sand) including making necessary chases in stone and holes in wall/RCC where ever required including epoxy (Araldite etc.) wherever required All fixing work should be executed as per instructions of engineer in charge and consultant and the traditional pattern of fixing the stone work.For protection of stone, from weatheric action coat of protection layer shall be apply on whole stone surface area, Stone work should have coated in two or more coat of clear lacquar coat of pidilite / K2 / Nippon make. The process of coating should be as followed: (i) cleaning of stone (ii) rubbing and polishing of stone (iii) first coat of clear lacquar and after drying of this coat ,second or more coat of clear lacquar shall be applied. All this coating of clear lacquar shall be done with spray paint machine. All work shall be done in satisfactory manner and as per instruction of engineer in charge and consultant.				
18	a	Stone thickness 70 mm , design as per attached drawings. **For Wall**	Sqm	7671.00	550.00	42,19,050.00
19	b	**COLUMN WORK,** stone thickness 100mm to 150 mm ,	CUM	126098.00	30.00	37,82,940.00
20	c	**FASCIA WORK**, stone thickness 100 mm to 300 mm , .	CUM	126098.00	25.00	31,52,450.00
21	d	**BRACKET** (Average thickness of stone 200mm, 450X450	CUM	126098.00	15.00	18,91,470.00
22	MPPWD Jan.-2024, 7.38.1	Providing and fixing dry stone cladding upto 10 metre height with 30mm thick gang saw cut stone with (machine cut edges) of uniform colour and size upto 1mx1m, fixed to structural steel frame work and/ or with the help of cramps, pins etc. And sealing the joints with approved weather sealant as per Architectural drawing and direction of Engineerin- charge. (The steel frame work, stainless steel cramps and pins. shall be paid for separately.)	Sqm	1639.00	1750.00	28,68,250.00
23	MPPWD Jan.-2024, 7.39	Providing and fixing structural steel frame (for dry stone cladding with 30 mm thick gang saw cut with machine cut edges sand stone) on walls at all heights using M.S. square/rectangular tube in the required pattern as per architectural drawing including cost of cutting, bending, welding etc. The frame work shall be supported in wall with the help of MS brackets/lugs of angle iron/ flats etc. which shall be welded to the frame and embedded in brick wall with cement concrete block 1:2:4 (1 cement: 2 sand: 4 graded stone aggregate 20mm nominal size) of size 300x200x300mm including cost of necessary centering and shuttering and with approved expansion hold fasteners on CC/RCC surface including drilling necessary holes. Approved cramps/ pins etc. shall be welded to the frame work to support stone cladding the steel work will be given a priming coat of Zinc primer as approved by Engineer-incharge and painted with two or more coats of epoxy paint (Shop drawings shall be submitted by the contractor to the Engineer-in-charge for approval before execution).The frame work shall be fixed in true horizontal and vertical lines/ planes. (Only structural steel frame work shall be measured for the purpose of payment, stainless steel clamps shall be paid for separately and nothing extra shall be paid.)	Kg	138.00	650.00	89,700.00
24	MPPWD Jan.-2024, 7.40	Providing and fixing adjustable stainless steel clamps of approved quality and of required shape and size adjustable with stainless steel nuts bolts and washer (total weight not less than 260 gms) for dry stone cladding fixed on frame work at suitable location including making necessary recesses in stone slab, drilling required holes etc. complete as per direction of the Engineer-in-Charge.	each	208.00	700.00	1,45,600.00

25	MPPWD Jan.-2024, 7.31.1	Providing and fixing stone jali 40mm thick throughout in cement mortar 1:3 (1cement :3 sand) including pointing in white cement mortar 1:2 (1white cement: 2stone dust) with an admixture of pigment , matching the stone shade, jali slab without any chamfers etc.	Sqm	5797.00	600.00	34,78,200.00
26	MPPWD Jan.-2024, 22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying a) After surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) Laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) Third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around.	Sqm	338.00	350.00	1,18,300.00
					TOTAL	**2,60,55,887**

Building - ADMIN BLOCK						
NO	**SOR NO.**	**PARTICULARS OF ITEM**	**UNIT**	**RATE**	**QTY.**	**AMOUNT**
1	2.1.1	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m. All kinds of soil.	100 SQM	803.00	225.00	1,80,675.00
2	2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	147.00	145.80	21,432.60
3	2.25.2	Extra for every additional lift of 1.5 m or part thereof in excavation. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	30.00	72.90	2,187.00
4	4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate. M-15 - Grade concrete	CUM	4403.00	3.84	16,907.52
5	5.27.1	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design. Upto plinth All works upto plinth level.	CUM	6100.00	52.77	3,21,909.20
6	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum)	Cum	110.00	52.77	5,804.92
7	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : 4.3.1 Foundations, footings, bases for columns.	SQM	169.00	10.80	1,825.20
8		Centering and shuttering including strutting, propping etc. and removal of form for :	SQM	190.60	95.40	18,183.24
9	5.9.2.1	Centering and shuttering including strutting, propping etc. and removal of form for : Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc. Upto plinth level	SQM	219.00	190.54	41,728.26
10	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding ire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:-1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge.2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) Thermo-Mechanically Treated bars.(TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	7124.22	5,69,937.60
11	2.24	Filling available excavated earth Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	CUM	95.00	118.95	11,300.25
12	2.27.2	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:-maximum thickness of this layer to be provided shall be 30cm)	CUM	331.00	120.00	39,720.00
13	2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.SOR IT NO 2.26	CUM	672.00	24.00	16,128.00

14	2.32	Preconstruction antitermite treatment to the building under construction by providing. sqm 136.00 Stage 1: Treating the bottom and the sides (upto 30 cm height of the excavated trench @ 5 liters per sqm of the surface area. Stage 2: After masonry/RCC work, the backfill in the immediate contact with the foundation structure treatment @ 7.5 liters per sqm. Of the vertical surface of the substructure for each side. Stage 3: surface treatment by spreading emulsion over the plinth area before laying the base concrete under floors @ 5.0 litres/Sqm. Stage 4: Pumping the emulsion in plinth masonry on filling side at floor junction @ 7.5 litres/Sqm. Stage 5: Pumping the emulsion from outer side of the plinth below ground around the masonry @ 5.0 litres/Sqm as per I.S. 8944 Emulsion. (1 Chlorpyrifos: 19 water) with five years service guarantee (Measurements to be taken for plinth area). Note – Treatment should start when foundation trenches and pits are ready to take bed concrete or leveling course in foundations. Lying of bed concrete should start when the chemical emulsion has been absorbed by the soil and the surface is reasonably dry. Treatment should not be carried out when it is raining or when soil is wet with rain or subsoil water. This also applies to fill up soil within the plinth area before laying the subgrade for flooring. to fill up soil within the plinth area before laying the subgrade for flooring.	CUM	136.00	1500.00	2,04,000.00
15	5.27	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design.. 5.27.2 Above plinth upto floor 5 All works above plinth level and upto floor five level	CUM	6581.00	46.52	3,06,148.12
16	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum)	Cum	110.00	46.52	5,117.20
17	5.9.21	Centering and shuttering including strutting, propping etc. and removal of form for 5.9.21 Lintels, beams, columns, girders, bressumers and cantilevers with waterproof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B&R works and from Additional Project Director in case of PIU works)	Sqm	521.20	185.85	96,865.02
18	5.9.20	Centering and shuttering including strutting, propping etc. and removal of form for :Suspende5.9.20 d floors, roofs, landings,alconies and Access platform. With water proof ply 12 mm thick. (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works) (sor item no. 5.9.20)	SQM	575.35	120.00	69,042.00
19	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete. (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers.3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786.	KG	80.00	6512.80	5,21,024.00
20	6.7.2.2	Brick work with fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, in super structure above plinth level up to floor two level in :Having 75 kg / cm2average compressive strength 6.7.2.2 CM 1:6 Cement mortar 1:6 (1 cement : 6 sand) aor i no 6.7.2.2	CUM	5049.00	33.20	1,67,624.28
21	13.1.2	12 mm cement plaster of mix : 13.1.2 1:6 (1 cement : 6 sand)	Sqm	160.00	453.75	72,600.48
22	13.2.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1cement :6 sand) SOR IT NO	Sqm	168.00	264.00	44,352.00

23	13.81	Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base.	SQM	324.00	264.00	85,536.00
24	13.27.1	Providing and fixing mesh in vertical and horizontal junction of RCC and brick/AAC work including scaffolding and all lead and lift etc. complete G.I. chicken mesh as per ISI specification and in the required width with 50mm long Bombay nails before plastering upt 10 meter height.	Sqm	62.00	717.75	44,500.69
25	10.12.5.1	Providing and fixing pressed steel door frames made of 1.6 mm thick steel profile conforming to IS: 4351 manufactured from commercial mild steel sheet including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed mild steel welded or rigidly fixed together by mechanical means, including 2.5mm thick M.S. pressed butt hinges, with mortar guards, lock strike-plate and shock absorbers as specified filling the frame with Cement Concrete 1:3:6 at site before fixing (cost of concrete to be paid separately) fixing with adjustable lugs (200 mm long & 1.0 mm thick) and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-incharge: 10.12.5 Profile C of 1.25mm thick single rebate of size 100mmx50mm 10.12.5.1 Fixing with adjustable lugs with split end tail to each jamb.	RM	385.00	15.60	6,006.00
26	9.18.1	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I)decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutter.35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	Sqm	2823.00	6.30	17,784.90
27	9.21	Extra for lipping Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured)	Sqm	401.00	31.50	12,631.50
28	13.41)	Providing and applying white cement based putty of average thickness 1 mm, of approved brand over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. Note : Putty shall be applied only on the internal walls, for application on the exterior walls prior permission of APD/Chief Engineer will be required.	Sqm	74.00	453.75	33,577.72
29	13.51	Finishing walls with textured exterior paint of required shade New work (Two or more coats applied @ 3.28 ltr/10 Sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 Sqm. SOR13.51	Sqm	132.00	396.00	52,272.00
30	13.94	Exposed Concrete is composed of a mix natural and mix elements portland cement, hardest earthen material, special additives, natural grains and special polymers to create external beauty, aesthetic value and heritage effects of concrete. thickness 4mm to 6mm.(payment for providing grooves shall be made separately) First coat:- Base coat Apply of Cementous ready mix coarse dark grey color material for making of groove, applied on smooth plaster surface with the thickness of 0.75mm to 1.5mm by trowel Second coat:-Apply of Cementous ready mix fine material, applied on plaster surface with the thickness of 2mm to 3mm by trowel. with or with out groves as per requirement and with 6mm groves (if grooves requires) with masking top of dark grey colour as per approved sample, for the complete satisfaction of architect/Engineer in charge. Third coat :- Protective clear top coat sealer (water based) applied by roller/sponge. SOR 13.94	Sqm	1586.00	396.00	6,28,056.00
31	13.93	Indian ethnic art painting such as tribal Art Pithora or warli/Gond or Bhil Painting on any wall surface (interior or exterior) by using textured/smooth exterior/interior paint of approved brand or Manufacturer including preparation of surface and cost of all material labour and scaffolding etc. complete as per direction of Engineer-in-charge.	Sqm	1988.00	396.00	7,87,248.00
32	13.49	Wall painting by any mechanical or manual means with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre. of approved brand and manufacture, including applying additional coats wherever required to achieve even shade.	Sqm	90.00	680.63	61,256.66

33	13.52	Finishing walls by any mechanical or manual means with Acrylic Smooth exterior paint (Economy Exterior) of required shade including all scaffolding. New work (Two or more coat applied @1.67ltr/10sqm over and including one coat undiluted exterior waterproofing coating @ 2.39 litre/10 sqm with crack bridging ability of upto 0.5mm on horizontal surfaces with an elongation of 150% and water proofing of upto 3 bars on vertical surface.	Sqm	138.00	396.00	54,648.00
34	13.81	Roto wall finishing Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR 13.81	Sqm	324.00	150.00	48,600.00
35	13.65	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture		77.00	13.23	1,018.71
36	9.197.4	Providing and fixing factory made UPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of UPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), appropriate dimension of UPVC extruded glazing beads and UPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profileof frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately) Three track three panels sliding window with fly proof S.S wire mesh (Two nos. glazed & one no. wire mesh panels) made of frame 116 x 45 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/double glazing bead of appropriate dimension. (Area of window above 1.75 sqm)	Sqm	6371.00	13.23	84,288.33
37	9.124.2	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 12 mm mild steel U beading.	Sqm	1370.00	13.23	18,125.10
38	9.169.1	Providing and fixing made UPVC white colour casement/ casement cum fixed glazed door comprising of UPVC multi chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made fromroll forming process of required length(shape & size according to UPVC profile),UPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws,etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of wateretc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes andsilicon sealent shall be paid separately). Note: - For UPVC frame, sash and mullion extruede profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made.Casement door with 3D hinges made of (big series) frame 67 x 64 mm & sash 67 x 110 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.00 sqm)	Sqm	7085.00	0.75	5,313.75

39	21.9	Filling the gap in between aluminium frame and adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.Upto 5mm depth and 5 mm width	mtr	53.00	26.46	1,402.38
40	11.80.2.3	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in flooring laid on 20mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shade etc.. (c) Size 600X600 mm thickness 11-12mm (to be used heavy duty indoor areas of non residencial buildings only such as schools, hostels, libraries hospitals, institutions, offices etc.)	Sqm	1546.00	104.82	1,62,052.96
41	11.81.2.2	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in skirting, riser laid on 12mm thick cement mortar 1:4 (1cement : 4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shades etc. (b) Size 600X600mm thickness 9-10mm	Sqm	1329.00	10.48	13,930.68
42	11.5	Providing and fixing Ceramic glazed wall tiles 300x450 mm or more (having thickness 6 to 7 mm) of 1st quality conforming to IS: 15622 of approved make in all Colours& shades, except burgundy, bottle green, black laid on 12mm thick bed of Cement Mortar 1:3 (1 Cement: 3 sand)preprad same day when mortar is still green jointed with grey cement slurry @3.3 kg per Sqm including pointing the joints with white cement and matching pigments etc., complete.	Sqm	776.00	19.97	15,492.84
43	11.49	Providing and laying Ceramic glazed floor tiles 300x300 mm or more (having thickness 6 to 7mm) of 1st quality conforming to IS : 15622 of approved make in any colours and shade laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 sand) including pointing the joints with white cement and matching pigment etc., complete.	Sqm	670.00	4.80	3,216.00
44	10.14.2	Steel work in built up M.S. tubular section (round, square or rectangular hollow tubes etc.) trusses/frame work etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washersetc. complete.	kg	123.00	198.45	24,409.35
45	9.22.1	Extra for providing vision panel not exceeding 0.1 Sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :	Sqm	157.00	22.68	3,560.76
46	9.48	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size	Each	95.00	10	950.00
47	9.84	Providing and fixing bright finished brass 100 mm mortise latch and lock ISI marked with six levers and a pair of anodized (anodic coating not less than grade AC 10 as per IS : 1868) aluminum lever handles with necessary screws etc. complete (Best make of approved quality).	Each	820.00	10	8,200.00
48	11.22.1	Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement : 4sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish wherever required etc. complete at all levels. samples approved by Engineer-in-charge. Raj Nagar plain/ White Marble/ Udaipur Green Marble/ Zebra black	Sqm	1797.00	10.50	18,868.50
49	11.40.2	Providing edge moulding to 18mm thick marble stone counters, Vanities, window sills etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work.	RM	269.00	78.00	20,982.00

50	12.59.2	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 gsm/Sqm, both side inclusive)consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet, spaced at 1200mm centerto center and cross"T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross"T" of length 600mm and size24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smokedetectors etc.Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 x mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications drawings and as directed by Engineer-in-charge. GI Metal Ceiling Lay in perforated microlook edge global white color tiles of size 595x595 mm and 0.5mm thick with 8mm drop; made of GI sheet having galvanizing of 100 gms/Sqm (both sides inclusive) and 20% perforation area with 1.8mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.	Sqm	1553.00	97.50	1,51,417.50
51	21.3.2	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) : With float glass panes of 5.0 mm thickness (weight not less than 12.50 kg/sqm)	Sqm	948.00	13.23	12,542.04
52	9.74.1	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :125 mm 125x64x2.50 mm	EACH	76.00	20	1,520.00
53	22.14.1	Grading roof for receiving water proofing treatment with 22.14.1 C.C. 1:2:4 Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	cum	6569.00	6.00	39,414.00
54	22.14.2	Grading roof for receiving water proofing treatment with 1:3 Cement mortar 1:3 (1 cement : 3 sand)	cum	9308.00	6.00	55,848.00
55	21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action hydraulic floor spring type fixing arrangementand making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-Charge (Door handle, lock and stopper etc.to be paid separately)	Sqm	4958.00	50.00	2,47,900.00
56	21.22	Providing and fixing 12 mm thick toughened glass including all connectors and fixing accessories all complete for partitions, cubicals etc. As per direction of Engineer-in-Charge.	Sqm	2554.00	50.00	1,27,700.00
57	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar usingbroken bricks/brick bats 25 mm to 115mmsize with 50% of cement mortar 1:5 (1 cement : 5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge over 20 mm thick layer of cement mortar of mix 1:5(1 cement :5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement: 4 sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer in Charge: (with 5 years service guarantee With average thickness of 120mm and minimum thickness at kburra as 65 mm	Sqm	885.00	50.00	44,250.00

58	22.14.1	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	Sqm	6569.00	65.00	4,26,985.00
59	9.6.7.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick: Float glass panes 5 mm thick glass pane (weight not less than 12.5 kg/sqm)	Sqm	1046.00	50.00	52,300.00
60	12.58.2.3	Providing and fixing false ceiling at all height including providing andfixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mmcentre to centre, one flange fixed tothe ceiling with dash fastener 12.5 mmdia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle 12.5 mm thick tapered edge gypsum board Gypsum moisture resistant board.	Sqm	920.00	60.00	55,200.00
61	9.76	Providing and fixing Stainless steel hanging type floor door stopper with necessary screws, etc. complete.	Nos	103.00	10.00	1,030.00
62	9.66	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete :				-
63	9.66.1	250mm 250*10mm	Nos	148.00	10	1,480.00
64	9.66.2	200mm 200*10mm	Nos	93.00	10	930.00
65	9.66.3	150mm 150*10mm	Nos	71.00	10	710.00
66	9.66.4	100mm 100*10mm	Nos	50.00	10	500.00
67	9.69.1	Providing and fixing ISI marked stainless steel handles with necessary screws etc. complete : 125 mm	Nos	60.00	20.00	1,200.00
68	9.85	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Nos	475.00	20.00	9,500.00
69	9.83	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).	Nos	539.00	20.00	10,780.00
70	9.124.2	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 12 mm mild steel U beading.	Sqm	1370.00	50.00	68,500.00
71	21.2	Providing and fixing 50 micron thick Frosted heat /light control film to window/door glazing with complete accessories as per direction of Engineer-in-charge of approved brand and make.	Sqm	518.00	50.00	25,900.00
72	21.4.2	Add extra for providing and fixing froasted glass instead of float glass. With glass panes of 5 mm thickness (weight not less than 12.5 kg/sqm).	Sqm	262.00	50.00	13,100.00
73	21.1.1.3	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion. Polyester Powder coated aluminium (minimum thickness of plyester coating 50 micron)	kg	426.00	50.00	21,300.00

74	9.197.2	Providing and fixing factory made UPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of UPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), appropriate dimension of UPVC extruded glazing beads and UPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profileof frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately) Note: - For UPVC frame, sash and mullion extruede profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension (Area of window upto 1.75 sqm).	Sqm	6880.00	20.00	1,37,600.00
75	10.23.2	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer. E.R.W tubes	kg	132.00	50.00	6,600.00
76	9.134.1	Providing and Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding qualityconforming to IS : 2046 Type S including cost of adhesive of approved quality. 1.5 mm thick.	Sqm	851.00	50.00	42,550.00
77	9.171.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid decorative type flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice .husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm2, modulus of elasticity 850 N/mm2 and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant. WPC to be laminated with PVC foil of minimum 14 microns thick of approved design pasted with hot melt adhesive on both faces of shutter and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-InCharge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately). 35 mm thick WPC (Wood Polymer Composite) solid decorative type flush door shutter.	Sqm	4417.00	50.00	2,20,850.00
78	10.25	Providing and fixing stainless steel (Grade 304) railing made of Hollowtubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer- in-charge. (For payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	582.00	50.00	29,100.00
79	12.62.5	4 mm thick High Pressure Steam Cured non asbestos, pre-painted, self embossed, designer cement boardType B, Category 3 conforming to IS 14862:2000 of approved texture, design patterns.	Sqm	403.00	50.00	20,150.00
80		Providing and fixing glass panes/ steel sheet/ fibre sheet with putty and glazing clips in steel doors, windows, clerestory windows all complete.				-
81	10.27.2	With 5.50 mm thick glass panes.	Sqm	403.00	873.00	3,51,819.00
82	10.27.5	With 1mm thick Galvanised steel sheet i/c 10x10x1.6mm box beading.	Sqm	403.00	936.00	3,77,208.00
83	10.2	Structural steel work using M.S. flats, angles, channels I-section, H-section etc. riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	103.00	100.00	10,300.00

84	11.29.1.1	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). Area of slab over 0.50 sqm Fine grained granite dark	Sqm	2919.00	50.00	1,45,950.00
85	11.53	Providing and laying Antiskid floor tiles of any sizes, 12 mm thickness with water absorption less than 0.08% and conforming to IS:15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement with matching pigments etc., complete.	Sqm	880.00	50.00	44,000.00
86	17.2.1	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required : 17.2.1 W.C. pan with ISI marked white solid plastic seat and lid	each	3036.00	1	3,036.00
87	17.11.4	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass wa ste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : .17.11.4 White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap.White Vitreous China Flat back wash basin size 550x400mm with single 15 mm C.P. brass pillar tap.	each	1664.00	1.00	1,664.00
88	18.49	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	ltr	7.00	1000.00	7,000.00
89	17.58	Providing and fixing on wall face unplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.for soil and wast pipes Single socketed pipes for working pressure of 4 kg./cm2				-
90	17.58.	175 mm diameter (minimum wall thickness 3.2mm)	rm	136.00	50.00	6,800.00
91	17.58.2	110 mm diameter (minimum wall thickness 3.2mm)	rm	238.00	50.00	11,900.00
92	17.59	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for nplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion..				-
93	17.59.1	Coupler 75MM	each	117.00	5.00	585.00
94	17.59.1	Coupler 110mm	each	154.00	5.00	770.00
95	17.59.2	Pushfit coupler 75mm	each	140.00	5.00	700.00
96	17.59.2	Pushfit coupler 110mm	each	195.00	5.00	975.00
97		Single tee with door 75x75x75 mm	each	219.00	5.00	1,095.00
98		Single tee with door 110x110x110 mm	each	346.00	5.00	1,730.00
99	17.59.3	Bend 87.5° 75 mm bend	each	117.00	5.00	585.00
100	17.59.3	Bend 87.5° 110 mm bend	each	172.00	5.00	860.00
101	17.59.4	Single tee without door 75mm	each	201.00	5.00	1,005.00
102	17.59.4	Single tee without door 110mm	each	266.00	5.00	1,330.00
103	18.31.1	Providing and fixing C.p brass bib cock of approved quality : 15 mm nominal bore 0.40kg	each	840.00	4.00	3,360.00
104	18.14.1	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 15 mm nominal bore	each	316.00	1.00	316.00
105	18.35.	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15 mm nominal bore	each	714.00	1.00	714.00
106	18.37.	Providing and fixing C.P. brass pillar cock approved quality and make conforming to IS:specification. 15 mm nominal bore 125 mm long foam flow.	each	1188.00	2.00	2,376.00
107	17.61.1	Providing and fixing uPVC trap of self cleaning design complet. Including cost of cutting and making good the wall and floors. 1100 mm inlet and 75 mm outlet	each	517.00	30.00	15,510.00
108	18.13.2	Providing and fixing CPVC gate valve with knob of approved quality. 32 mm nominal bore	each	500.00	3.00	1,500.00
109		Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Internal work - Exposed on wall\				-
110	18.6.1.2	20 mm nominal outer dia .Pipes.	rm	153.00	25.00	3,825.00

111	18.6.1.3	25 mm nominal outer dia .Pipes.	rm	177.00	25.00	4,425.00
112	18.6.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc.				-
113	18.6.2.2	20 mm nominal outer dia .Pipes.	rm	234.00	6.00	1,404.00
114	18.6.2.3	25 mm nominal outer dia .Pipes.	rm	288.00	9.00	2,592.00
115	18.6.2.4	32 mm nominal outer dia .Pipes.	rm	360.00	12.00	4,320.00
116	17.6.1	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	EACH	2754.00	1.00	2,754.00
117		Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :17.14.2.1 Depth 200mm 610x510 mm bowl depth 200 mm.	EACH	4583.00	1.00	4,583.00
					Total :-	**77,92,288.25**

Building - Annashetra

NO	SOR No.	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.1.1	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m. All kinds of soil.	100 SQM	803.00	150.00	1,20,450.00
2	2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	147.00	145.80	21,432.60
3	2.25.2	Extra for every additional lift of 1.5 m or part thereof in excavation. (No extra lift is payable if work is done by mechanical means) 2.25.1 Soil All kinds of soil	CUM	30	72.90	2,187.00
4	4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate.	CUM	4403.00	3.84	16,907.52
5	5.27.1	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design. Upto plinth All works upto plinth level.	CUM	6100.00	46.17	2,81,649.20
6	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR	Cum	110.00	46.17	5,078.92
7	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : Foundations, footings, bases for columns.	SQM	169.00	7.20	1,216.80
8	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for :	SQM	190.60	63.60	12,122.16
9	5.9.2	Centering and shuttering including strutting, propping etc. and removal of form for : Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc. Upto plinth level	SQM	219.00	148.54	32,530.26
10	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding ire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:-1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge.2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) Thermo-Mechanically Treated bars.(TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	6233	4,98,657.60
11	2.24	Filling available excavated earth Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. cum	CUM	95.00	118.95	11,300.25
12	2.27.2	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	CUM	331.00	90.00	29,790.00
13	2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.SOR IT NO 2.26	CUM	672.00	18.00	12,096.00

14	2.32	Preconstruction antitermite treatment to the building under construction by providing. sqm 136.00 Stage 1: Treating the bottom and the sides (upto 30 cm height of the excavated trench @ 5 liters per sqm of the surface area. Stage 2: After masonry/RCC work, the backfill in the immediate contact with the foundation structure treatment @ 7.5 liters per sqm. Of the vertical surface of the substructure for each side. Stage 3: surface treatment by spreading emulsion over the plinth area before laying the base concrete under floors @ 5.0 litres/Sqm. Stage 4: Pumping the emulsion in plinth masonry on filling side at floor junction @ 7.5 litres/Sqm. Stage 5: Pumping the emulsion from outer side of the plinth below ground around the masonry @ 5.0 litres/Sqm as per I.S. 8944 Emulsion. (1 Chlorpyrifos: 19 water) with five years service guarantee (Measurements to be taken for plinth area). Note – Treatment should start when foundation trenches and pits are ready to take bed concrete or leveling course in foundations. Lying of bed concrete should start when the chemical emulsion has been absorbed by the soil and the surface is reasonably dry. Treatment should not be carried out when it is raining or when soil is wet with rain or subsoil water. This also applies to fill up soil within the plinth area before laying the subgrade for flooring. to fill up soil within the plinth area before laying the subgrade for flooring. SOR	CUM	136.00	150.00	20,400.00
15	5.27	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design.. 5.27.2 Above plinth upto floor 5 All works above plinth level and upto floor five level	CUM	6581	36.81	2,42,246.61
16	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR 5.28.1	Cum	110.00	36.81	4,049.10
17	5.9.21	Centering and shuttering including strutting, propping etc. and removal of form for 5.9.21 Lintels, beams, columns, girders, bressumers and cantilevers with waterproof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B&R works and from Additional Project Director in case of PIU works)	Sqm	521.20	158.40	82,558.08
18	5.9.20	Centering and shuttering including strutting, propping etc. and removal of form for :Suspende5.9.20 d floors, roofs, landings,alconies and Access platform. With water proof ply 12 mm thick. (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works) (sor item no. 5.9.20)	Sqm	575.35	90	51,781.50
19	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete. (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers.3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) 5.16.6 Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786	KG	80	5153.4	4,12,272.00
20	6.7.2.2	Brick work with fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, in super structure above plinth level up to floor two level in :Having 75 kg / cm2average compressive strength 6.7.2.2 CM 1:6 Cement mortar 1:6 (1 cement : 6 sand) aor i no	CUM	5049	33.1995	1,67,624.28
21	13.1.2	12 mm cement plaster of mix : 1:6 (1 cement : 6 sand)	Sqm	160	453.753	72,600.48
22	13.2.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1cement :6 sand) SOR IT NO	Sqm	168	264	44,352.00

23	13.81	Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR IT NO 13.81	SQM	324	139.2	45,100.80
24	13.27.1	Providing and fixing mesh in vertical and horizontal junction of RCC and brick/AAC work including scaffolding and all lead and lift etc. complete G.I. chicken mesh as per ISI specification and in the required width with 50mm long Bombay nails before plastering upt 10 meter height. SOR ITEM No 13.27.1	Sqm	62	717.753	44,500.69
25	10.12.5.1	Providing and fixing pressed steel door frames made of 1.6 mm thick steel profile conforming to IS: 4351 manufactured from commercial mild steel sheet including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed mild steel welded or rigidly fixed together by mechanical means, including 2.5mm thick M.S. pressed butt hinges, with mortar guards, lock strike-plate and shock absorbers as specified filling the frame with Cement Concrete 1:3:6 at site before fixing (cost of concrete to be paid separately) fixing with adjustable lugs (200 mm long & 1.0 mm thick) and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-incharge: 10.12.5 Profile C of 1.25mm thick single rebate of size 100mmx50mm 10.12.5.1 Fixing with adjustable lugs with split end tail to each jamb. SOR 10.12.5.1	RM	385	15.6	6,006.00
26	9.18.1	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I)decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutter.35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	Sqm	2823	6.3	17,784.90
27	9.21	Extra for lipping Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured)	Sqm	401	31.5	12,631.50
28	13.41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. Note : Putty shall be applied only on the internal walls, for application on the exterior walls prior permission of APD/Chief Engineer will be required.	Sqm	74	453.753	33,577.72
29	13.51	Finishing walls with textured exterior paint of required shade New work (Two or more coats applied @ 3.28 ltr/10 Sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 Sqm. SOR13.51	Sqm	132	396	52,272.00
30	13.94	Exposed Concrete is composed of a mix natural and mix elements portland cement, hardest earthen material, special additives, natural grains and special polymers to create external beauty, aesthetic value and heritage effects of concrete. thickness 4mm to 6mm.(payment for providing grooves shall be made separately) First coat:- Base coat Apply of Cementous ready mix coarse dark grey color material for making of groove, applied on smooth plaster surface with the thickness of 0.75mm to 1.5mm by trowel Second coat:-Apply of Cementous ready mix fine material, applied on plaster surface with the thickness of 2mm to 3mm by trowel. with or with out groves as per requirement and with 6mm groves (if grooves requires) with masking top of dark grey colour as per approved sample, for the complete satisfaction of architect/Engineer in charge. Third coat :- Protective clear top coat sealer (water based) applied by roller/sponge. SOR 13.94	Sqm	1586	396	6,28,056.00
31	13.93	Indian ethnic art painting such as tribal Art Pithora or warli/Gond or Bhil Painting on any wall surface (interior or exterior) by using textured/smooth exterior/interior paint of approved brand or Manufacturer including preparation of surface and cost of all material labour and scaffolding etc. complete as per direction of Engineer-in-charge. SOR 13.93	Sqm	1988	396	7,87,248.00

32	13.49	Wall painting by any mechanical or manual means with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre. of approved brand and manufacture, including applying additional coats wherever required to achieve even shade. SOR 13.49	Sqm	90	680.6295	61,256.66
33	13.52	Finishing walls by any mechanical or manual means with Acrylic Smooth exterior paint (Economy Exterior) of required shade including all scaffolding. New work (Two or more coat applied @1.67ltr/10sqm over and including one coat undiluted exterior waterproofing coating @ 2.39 litre/10 sqm with crack bridging ability of upto 0.5mm on horizontal surfaces with an elongation of 150% and water proofing of upto 3 bars on vertical surface SOR 13.52	Sqm	138	396	54,648.00
34	13.81	Roto wall finishing Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR 13.81	Sqm	324	150	48,600.00
35	13.65	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Sqm	77	13.23	1,018.71
36		Providing and fixing factory made UPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of UPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), appropriate dimension of UPVC extruded glazing beads and UPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profileof frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of Three track three panels sliding window with fly proof S.S wire mesh (Two nos. glazed & one no. wire mesh panels) made of frame 116 x 45 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/double glazing bead of appropriate dimension. (Area of window above 1.75 sqm)	Sqm	6371	13.23	84,288.33
37	9.124.2	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 12 mm mild steel U beading. With 12 mm mild steel U beading.	Sqm	1370	13.23	18,125.10

38	9.169.1	Providing and fixing made UPVC white colour casement/ casement cum fixed glazed door comprising of UPVC multi chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made fromroll forming process of required length(shape & size according to UPVC profile),UPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws,etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of wateretc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes andsilicon sealent shall be paid separately). Note: - For UPVC frame, sash and mullion extruede profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Casement door with 3D hinges made of (big series) frame 67 x 64 mm & sash 67 x 110 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.00 sqm)	Sqm	7085	0.75	5,313.75
39	21.9	Filling the gap in between aluminium frame and adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.Upto 5mm depth and 5 mm width	mtr	53	26.46	1,402.38
40	11.80.2.3	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in flooring laid on 20mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shade etc.. (c) Size 600X600 mm thickness 11-12mm (to be used heavy duty indoor areas of non residencial buildings only such as schools, hostels, libraries hospitals, institutions, offices etc.)	Sqm	1546	104.8208	1,62,052.96
41	11.81.2.2	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in skirting, riser laid on 12mm thick cement mortar 1:4 (1cement : 4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shades etc. (b) Size 600X600mm thickness 9-10mm	Sqm	1329	10.48208	13,930.68
42	11.5	Providing and fixing Ceramic glazed wall tiles 300x450 mm or more (having thickness 6 to 7 mm) of 1st quality conforming to IS: 15622 of approved make in all Colours& shades, except burgundy, bottle green, black laid on 12mm thick bed of Cement Mortar 1:3 (1 Cement: 3 sand)preprad same day when mortar is still green jointed with grey cement slurry @3.3 kg per Sqm including pointing the joints with white cement and matching pigments etc., complete.	Sqm	776	19.965	15,492.84
43	11.49	Providing and laying Ceramic glazed floor tiles 300x300 mm or more (having thickness 6 to 7mm) of 1st quality conforming to IS : 15622 of approved make in any colours and shade laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 sand) including pointing the joints with white cement and matching pigment etc., complete. SOR 11.49	Sqm	670	4.8	3,216.00
44	10.14.2	Steel work in built up M.S. tubular section (round, square or rectangular hollow tubes etc.) trusses/frame work etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washersetc. complete.	kg	123	198.45	24,409.35
45	9.22	Extra for providing vision panel not exceeding 0.1 Sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :	Sqm	157	22.68	3,560.76
46	9.48	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size) (9.48)	Each	95	10	950.00

47	9.84	Providing and fixing bright finished brass 100 mm mortise latch and lock ISI marked with six levers and a pair of anodized (anodic coating not less than grade AC 10 as per IS : 1868) aluminum lever handles with necessary screws etc. complete (Best make of approved quality).	Each	820	10	8,200.00
48	11.22.1	Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement : 4sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish wherever required etc. complete at all levels. samples approved by Engineer-in-charge. Raj Nagar plain/ White Marble/ Udaipur Green Marble/ Zebra black	Sqm	1797	6	10,782.00
49	11.40.2	Providing edge moulding to 18mm thick marble stone counters, Vanities, window sills etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work. SOR ITEM No 11.40.2	RM	269	42	11,298.00
50	12.59.2	Providing and fixing tiled false ceiling of approved materials of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 gsm/Sqm, both side inclusive)consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet, spaced at 1200mm centerto center and cross"T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross"T" of length 600mm and size24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smokedetectors etc.Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 x mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications drawings and as directed by Engineer-in-charge. GI Metal Ceiling Lay in perforated microlook edge global white color tiles of size 595x595 mm and 0.5mm thick with 8mm drop; made of GI sheet having galvanizing of 100 gms/Sqm (both sides inclusive) and 20% perforation area with 1.8mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.	Sqm	1553	112.5	1,74,712.50
51	21.3.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) : With float glass panes of 5.0 mm thickness (weight not less than 12.50 kg/sqm) SOR ITEM No 21.3.2	Sqm	948	6.75	6,399.00
52	9.74.1	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete : 125 mm 125x64x2.50 mm	EACH	76	20	1,520.00
53	22.14.1	Grading roof for receiving water proofing treatment with 22.14.1 C.C. 1:2:4 Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	cum	6569	4.5	29,560.50
54	22.14.2	CM 1:3 Cement mortar 1:3 (1 cement : 3 sand)	cum	9308	4.5	41,886.00
55	21.18	Providing and fixing 12 mm thick frameless toughened glass door shutter of approved brand and manufacture, including providing and fixing top & bottom pivot & double action hydraulic floor spring type fixing arrangementand making necessary holes etc. for fixing required door fittings, all complete as per direction of Engineer-in-Charge (Door handle, lock and stopper etc.to be paid separately) SOR 21.18	Sqm	4958	50	2,47,900.00
56	21.22	Providing and fixing 12 mm thick toughened glass including all connectors and fixing accessories all complete for partitions, cubicals etc. As per direction of Engineer-in-Charge. SOR 21.22	Sqm	2554	50	1,27,700.00

57	22.7	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment. b) Laying brick bats with mortar usingbroken bricks/brick bats 25 mm to 115mmsize with 50% of cement mortar 1:5 (1 cement : 5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge over 20 mm thick layer of cement mortar of mix 1:5(1 cement :5 sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs. c) After two days of proper curing applying a second coat of cement slurry using 2.75kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement: 4 sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by the Engineer in Charge: (with 5 years service guarantee With average thickness of 120mm and minimum thickness at khurra as 65 mm. SOR	Sqm	885	50	44,250.00
58	22.14.1	Grading roof for water proofing treatment with Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size) SOR 22.14.1	Sqm	6569	65	4,26,985.00
59	9.6.7.2	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick: Float glass panes 5 mm thick glass pane (weight not less than 12.5 kg/sqm) SOR 9.6.7.2	Sqm	1046	50	52,300.00
60	12.58.2.3	Providing and fixing false ceiling at all height including providing andfixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mmcentre to centre, one flange fixed tothe ceiling with dash fastener 12.5 mmdia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle 12.5 mm thick tapered edge gypsum board Gypsum moisture resistant board. SOR 12.58.2.3	Sqm	920	60	55,200.00
61	9.76	Providing and fixing Stainless steel hanging type floor door stopper with necessary screws, etc. complete. SOR 9.76	Nos	103	10	1,030.00
62	9.66.1	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete 250mm 250*10mm	Nos	148	10	1,480.00
63	9.66.2	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete 200mm 200*10mm	Nos	93	10	930.00
64	9.66.3	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete 150mm 150*10mm	Nos	71	10	710.00
65	9.66.4	Providing and fixing ISI marked stainless steel tower bolt black finish, (Barrel type) with necessary screws etc. complete 100mm 100*10mm	Nos	50	10	500.00
66	9.69.1	Providing and fixing ISI marked stainless steel handles with necessary screws etc. complete : 125 mm SOR 9.69.1	Nos	60	20	1,200.00
67	9.85	Providing and fixing bright finished brass 100 mm mortice latch with one dead bolt and a pair of lever handles with necessary screws etc. complete (best make of approved quality). SOR 9.85	Nos	475	20	9,500.00
68	9.83	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality). SOR 9.83	Nos	539	20	10,780.00
69	9.124.2	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 12 mm mild steel U beading. SOR 9.124.2	Sqm	1370	50	68,500.00
70	21.20	Providing and fixing 50 micron thick Frosted heat /light control film to window/door glazing with complete accessories as per direction of Engineer-in-charge of approved brand and make. SOR 21.20	Sqm	518	50	25,900.00
71	21.4.2	Add extra for providing and fixing froasted glass instead of float glass. With glass panes of 5 mm thickness (weight not less than 12.5 kg/sqm). SOR 21.4.2	Sqm	262	50	13,100.00

72	21.1.1.3	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion. Polyester Powder coated aluminium (minimum thickness of plyester coating 50 micron) SOR 21.1.1.3	kg	426	50	21,300.00
73	9.197.2	Providing and fixing factory made UPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of UPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), appropriate dimension of UPVC extruded glazing beads and UPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profileof frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately) Note: - For UPVC frame, sash and mullion extruede profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Three track three panels sliding window with fly proof SS wire mesh (Two nos. glazed & one no. wire mesh panels) made of frame 92 x 44 mm & sash 32 x 60 mm both having wall thickness of 1.9 ± 0.2 mm and single glazing bead of appropriate dimension (Area of window upto 1.75 sqm). SOR 9.197.2	Sqm	6880	20	1,37,600.00
74	10.23.2	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying a priming coat of approved steel primer. E.R.W tubes SOR 10.23.2	kg	132	50	6,600.00
75	9.134.1	Providing and Fixing decorative high pressure laminated sheet of plain / wood grain in gloss / matt / suede finish with high density protective surface layer and reverse side of adhesive bonding qualityconforming to IS : 2046 Type S including cost of adhesive of approved quality. 1.5 mm thick. SOR 9.134.1	Sqm	851	50	42,550.00
76	9.171.2	Providing and fixing factory made single extruded WPC (Wood Polymer Composite) solid decorative type flush door shutter of required size comprising of virgin polymer of K value 58-60 (Suspension Grade), calcium carbonate and natural fibers (wood powder/ rice .husk/wheat husk) and non toxic additives (maximum toxicity index of 12 for 100 gms) having minimum density of 650 kg/cum and screw withdrawal strength of 1800 N (Face) & 900 N (Edge), minimum compressive strength 50 N/mm2, modulus of elasticity 850 N/mm2 and resistance to spread of flame of Class A category with property of being termite/borer proof, water/moisture proof and fire retardant. WPC to be laminated with PVC foil of minimum 14 microns thick of approved design pasted with hot melt adhesive on both faces of shutter and fixing with stainless steel butt hinges of required size with necessary full body threaded star headed counter sunk S.S screws, all as per direction of Engineer-InCharge. (Note: stainless steel butt hinges and necessary S.S screws shall be paid separately). 35 mm thick WPC (Wood Polymer Composite) solid decorative type flush door shutter. SOR 9.171.2	Sqm	4417	50	2,20,850.00

77	10.25	Providing and fixing stainless steel (Grade 304) railing made of Hollowtubes, channels, plates etc. including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete i/c fixing the railing with necessary accessories and stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer- in-charge. (For payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.). SOR 10.25	Kg	582	50	29,100.00
78	12.62.5	4 mm thick High Pressure Steam Cured non asbestos, pre-painted, self embossed, designer cement boardType B, Category 3 conforming to IS 14862:2000 of approved texture, design patterns. SOR 12.62.5	Sqm	403	50	20,150.00
79	10.27.2	Providing and fixing glass panes/ steel sheet/ fibre sheet with putty and glazing clips in steel doors, windows, clerestory windows all complete. With 5.50 mm thick glass panes. SOR 10.27.2	Sqm	403	873	3,51,819.00
80	10.27.5	Providing and fixing glass panes/ steel sheet/ fibre sheet with putty and glazing clips in steel doors, windows, clerestory windows all complete. With 1mm thick Galvanised steel sheet i/c 10x10x1.6mm box beading. SOR 10.27.5	Sqm	403	936	3,77,208.00
81	10.2	Structural steel work using M.S. flats, angles, channels I-section, H-section etc. riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. SOR 10.2	Kg	103	100	10,300.00
82	11.29.1.1	Granite work gang saw cut (polished and machine cut) of thickness 18mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade: (To be secured to the backing by means of cramps, which shall be paid for separately). Area of slab over 0.50 sqm Fine grained granite dark SOR 11.29.1.1	Sqm	2919	50	1,45,950.00
83	11.53	Providing and laying Antiskid floor tiles of any sizes, 12 mm thickness with water absorption less than 0.08% and conforming to IS:15622 of approved make in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 sand) including grouting the joints with white cement with matching pigments etc., complete. SOR 11.53	Sqm	880	50	44,000.00
84	17.2.1	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required : 17.2.1 W.C. pan with ISI marked white solid plastic seat and lid	each	3036	1	3,036.00
85	7.11.4	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass wa ste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : .17.11.4 White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap. White Vitreous China Flat back wash basin size 550x400mm with single 15 mm C.P. brass pillar tap.	each	1664	1	1,664.00
86	18.49	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	ltr	7	1000	7,000.00
87	17.58.1	Providing and fixing on wall face unplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.for soil and wast pipes Single socketed pipes for working pressure of 4 kg./cm2 75 mm diameter (minimum wall thickness 3.2mm)	rm	136	50	6,800.00
88	17.58.2	Providing and fixing on wall face unplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.for soil and wast pipes Single socketed pipes for working pressure of 4 kg./cm2 110 mm diameter (minimum wall thickness 3.2mm)	rm	238	50	11,900.00
89	.17.59	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for nplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS :5382 leaving 10 mm gap for thermal expansion.				-
90	17.59.1	Coupler 75MM	each	117	5	585.00
91	17.59.1	Coupler 110mm	each	154	5	770.00
92	17.59.2	Pushfit coupler 75mm	each	140	5	700.00

93	17.59.2	Pushfit coupler 110mm	each	195	5	975.00
94		Single tee with door 75x75x75 mm	each	219	5	1,095.00
95		Single tee with door 110x110x110 mm	each	346	5	1,730.00
96	17.59.3	Bend 87.5° 75 mm bend	each	117	5	585.00
97	17.59.3	Bend 87.5° 110 mm bend	each	172	5	860.00
98	17.59.4	Single tee without door 75mm	each	201	5	1,005.00
99	17.59.4	Single tee without door 110mm	each	266	5	1,330.00
100	18.31.1	Providing and fixing C.p brass bib cock of approved quality : 15 mm nominal bore 0.40kg	each	840	4	3,360.00
101	18.14.1	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 15 mm nominal bore	each	316	1	316.00
102	18.35.	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15 mm nominal bore	each	714	1	714.00
103	18.37	Providing and fixing C.P. brass pillar cock approved quality and make conforming to IS:specification. 15 mm nominal bore 125 mm long foam flow.	each	1188	2	2,376.00
104	17.61.1	Providing and fixing uPVC trap of self cleaning design complet. Including cost of cutting and making good the wall and floors. 17.61.1100 mm inlet and 75 mm outlet	each	517	30	15,510.00
105	18.13.2	Providing and fixing CPVC gate valve with knob of approved quality. 32 mm nominal bore	each	500	3	1,500.00
106	18.6.1.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. 20 mm nominal outer dia .Pipes.	rm	153	25	3,825.00
107	18.6.1.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. 25 mm nominal outer dia .Pipes.	rm	177	25	4,425.00
108	18.6.2.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc. 20 mm nominal outer dia .Pipes.	rm	234	6	1,404.00
109	18.6.2.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc. 25 mm nominal outer dia .Pipes.	rm	288	9	2,592.00
110	18.6.2.4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc. 32 mm nominal outer dia .Pipes.	rm	360	12	4,320.00
111	17.6.1	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required : One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	EACH	2754	1	2,754.00
112	17.14.2.1	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required : Depth 200mm 610x510 mm bowl depth 200 mm.	EACH	4583	1	4,583.00

Total :-	**71,36,209.48**

Building - Shops

NO	SOR NO	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.1.1	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m. All kinds of soil.	100 SQM	803.00	2.55	2,047.65
2	2.7.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	147.00	340.20	50,009.40
3	2.25.2	Extra for every additional lift of 1.5 m or part thereof in excavation. (No extra lift is payable if work is done by mechanical means) 2.25.1 Soil All kinds of soil	CUM	30.00	170.10	5,103.00
4	4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate. M-15 - Grade concrete	CUM	4403.00	11.34	49,930.02
5	5.27.1	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design. Upto plinth All works upto plinth level.	CUM	6100.00	130.18	7,94,082.75
6	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR	Cum	110.00	130.18	14,319.53
7	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : Foundations, footings, bases for columns.	SQM	169.00	25.20	4,258.80
	5.9.1	5.9.1 Foundations, footings, bases of columns, etc. for concrete up to plinth level.	SQM	190.60	222.60	42,427.56
9	5.9.2	Centering and shuttering including strutting, propping etc. and removal of form for : Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc. Upto plinth level	SQM	219.00	575.75	1,26,089.25
10	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding ire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:-1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge.2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification") Thermo-Mechanically Treated bars.(TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	17573.96	14,05,917.00
11	2.24	Filling available excavated earth Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. cum	CUM	95.00	275.17	26,141.15
12	2.27.2	Supplying and filling in plinth under floors including watering ramming	CUM	331.00	150.00	49,650.00
13	2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.SOR IT NO 2.26	CUM	672.00	30.00	20,160.00

1	5.27.2	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design.. Above plinth upto floor 5 All works above plinth level and upto floor five level	CUM	6581.00	70.88	4,66,461.28
2	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR 5.28.1	Cum	110.00	70.88	7,796.80
3	5.9.21	Centering and shuttering including strutting, propping etc. and removal of form for 5.9.21 Lintels, beams, columns, girders, bressumers and cantilevers with waterproof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B&R works and from Additional Project Director in case of PIU works)	Sqm	521.20	180.60	94,128.72
4	5.9.21	Centering and shuttering including strutting, propping etc. and removal of form for Lintels, beams, columns etc with ply Lintels, beams, columns, girders, bressumers and cantilevers with waterproof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B&R works and from Additional Project Director in case of PIU works)	Sqm	521.20	378.40	1,97,222.08
5	5.9.20	Centering and shuttering including strutting, propping etc. and removal of form for :Suspende5.9.20 d floors, roofs, landings,alconies and Access platform. With water proof ply 12 mm thick. (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works) (sor item no. 5.9.20)	CUM	575.35	150.00	86,302.50
6	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete. (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers.3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	9923.20	7,93,856.00
7	6.7.2.2	Brick work with fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, in super structure above plinth level up to floor two level in :Having 75 kg / cm2average compressive strength 6.7.2.2 CM 1:6 Cement mortar 1:6 (1 cement : 6 sand) aor i no 6.7.2.2	CUM	5049.00	121.30	6,12,433.60
8	6.17	Extra for M.S. bars in half brick masonry Extra for providing and placing in position 2 Nos. 8mm dia. M.S. bars at every third course of in half brick masonry	Sqm	127.00	121.30	15,404.85
9	13.1.2	12 mm cement plaster of mix : 13.1.2 1:6 (1 cement : 6 sand)	Sqm	160.00	997.47	1,59,594.40
10	13.2.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1cement :6 sand) SOR IT NO 13.2.2	Sqm	168.00	612.00	1,02,816.00
11	13.27.1	Providing and fixing mesh in vertical and horizontal junction of RCC and brick/AAC work including scaffolding and all lead and lift etc. complete G.I. chicken mesh as per ISI specification and in the required width with 50mm long Bombay nails before plastering upt 10 meter height. SOR ITEM No 13.27.1	Sqm	62.00	612.00	37,944.00

12	10.12.5.1	Providing and fixing pressed steel door frames made of 1.6 mm thick steel profile conforming to IS: 4351 manufactured from commercial mild steel sheet including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed mild steel welded or rigidly fixed together by mechanical means, including 2.5mm thick M.S. pressed butt hinges, with mortar guards, lock strike-plate and shock absorbers as specified filling the frame with Cement Concrete 1:3:6 at site before fixing (cost of concrete to be paid separately) fixing with adjustable lugs (200 mm long & 1.0 mm thick) and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-incharge: 10.12.5 Profile C of 1.25mm thick single rebate of size 100mmx50mm 10.12.5.1 Fixing with adjustable lugs with split end tail to each jamb. SOR 10.12.5.1	RM	385.00	52.00	20,020.00
13	9.18.1	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I)decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutter.35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	Sqm	2823.00	21.00	59,283.00
14	9.21	Extra for lipping Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured)	Sqm	401.00	210.00	84,210.00
15	13.41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. Note : Putty shall be applied only on the internal walls, for application on the exterior walls prior permission of APD/Chief Engineer will be required.	Sqm	74.00	991.75	73,389.50
16	13.51	Finishing walls with textured exterior paint of required shade New work (Two or more coats applied @ 3.28 ltr/10 Sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 Sqm. SOR13.51	Sqm	132.00	918.00	1,21,176.00
16	13.94	Exposed Concrete is composed of a mix natural and mix elements portland cement, hardest earthen material, special additives, natural grains and special polymers to create external beauty, aesthetic value and heritage effects of concrete. thickness 4mm to 6mm.(payment for providing grooves shall be made separately) First coat:- Base coat Apply of Cementous ready mix coarse dark grey color material for making of groove, applied on smooth plaster surface with the thickness of 0.75mm to 1.5mm by trowel Second coat:-Apply of Cementous ready mix fine material, applied on plaster surface with the thickness of 2mm to 3mm by trowel. with or with out groves as per requirement and with 6mm groves (if grooves requires) with masking top of dark grey colour as per approved sample, for the complete satisfaction of architect/Engineer in charge. Third coat :- Protective clear top coat sealer (water based) applied by roller/sponge. SOR 13.94	Sqm	1586.00	918.00	14,55,948.00
16	13.93	Indian ethnic art painting such as tribal Art Pithora or warli/Gond or Bhil Painting on any wall surface (interior or exterior) by using textured/smooth exterior/interior paint of approved brand or Manufacturer including preparation of surface and cost of all material labour and scaffolding etc. complete as per direction of Engineer-in-charge. SOR 13.93	Sqm	1988.00	918.00	18,24,984.00
16	13.49	Wall painting by any mechanical or manual means with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre. of approved brand and manufacture, including applying additional coats wherever required to achieve even shade. SOR 13.49	Sqm	90.00	1487.63	1,33,886.25
16	13.52	Finishing walls by any mechanical or manual means with Acrylic Smooth exterior paint (Economy Exterior) of required shade including all scaffolding. New work (Two or more coat applied @1.67ltr/10sqm over and including one coat undiluted exterior waterproofing coating @ 2.39 litre/10 sqm with crack bridging ability of upto 0.5mm on horizontal surfaces with an elongation of 150% and water proofing of upto 3 bars on vertical surface SOR 13.52				-

16	13.81	Roto wall finishing Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR 13.81	Sqm	324.00	150.00	48,600.00
17	11.80.2.3	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in flooring laid on 20mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shade etc.. (c) Size 600X600 mm thickness 11-12mm (to be used heavy duty indoor areas of non residencial buildings only such as schools, hostels, libraries hospitals, institutions, offices etc.) SOR Item No. 11.80.2.3	Sqm	1546.00	176.10	2,72,250.60
18	11.81.2.2	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in skirting, riser laid on 12mm thick cement mortar 1:4 (1cement : 4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shades etc. (b) Size 600X600mm thickness 9-10mm SOR Item No. 11.81.2.2	Sqm	1329.00	17.61	23,403.69
21	11.29.2.1	Providing and laying gang saw cut 18 mm thick, mirror polished premoulded (wherever required) and pre polished machine cut granite stonework in flooring of required size shape of approved shade, color and texture in flooring laid over 20 mm thick base of cement mortar 1:4 (1 Cement: 4 sand) including grouting the joints with white cement mixed with matching pigments epoxy touch ups etc. complete as per direction of Engineer-in-Charge. : Area of slab upto 0.50 sqm Granite (fine grained) Fine grained granite dark Black/dark Red/ White or equivalent with self design/ pattern/crystals of other colors of glitte	Sqm	2705.00	153.75	4,15,893.75
29	9.74.1	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete : 125 mm 125x64x2.50 mm	EACH	76.00	8	608.00
30	22.14.1	Grading roof for receiving water proofing treatment with 22.14.1 C.C. 1:2:4 Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	cum	6569.00	7.50	49,267.50
31	22.14.2	CM 1:3 Cement mortar 1:3 (1 cement : 3 sand)	cum	9308.00	7.50	69,810.00
33		Supplying and fixing rolling shutters of approved make, made of required size M.S. laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete including the cost of providing and fixing necessary 27.5cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to I.S. 4454- part-1 and M.S. top cover of required thickness for rolling shutters. 80x1.25mm M.S. laths with 1.25 mm thick top cover.	SQM	2200.0	216.0	4,75,200.00
34	10.9	Providing and fixing ball bearing for rolling shutters.	EACH	366.0	40.0	14,640.00
					Total	**1,03,06,666.62**

Public Toilet & Utility

NO	SOR NO.	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.1.1	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m. All kinds of soil.	100 SQM	803.00	40.00	32,120.00
2	2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	147.00	58.32	8,573.04
3	2.25.2	Extra for every additional lift of 1.5 m or part thereof in excavation. (No extra lift is payable if work is done by mechanical means) 2.25.1 Soil All kinds of soil	CUM	30.00	29.16	874.80
4	4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate. 4.1.2.1 M-15 M-15 - Grade concrete	CUM	4403.00	1.54	6,763.01
5	5.27	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design. 5.27.1 Upto plinth All works upto plinth level.	CUM	6100.00	33.55	2,04,679.40
6	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR 5.28.1	Cum	110.00	33.55	3,690.94
7	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : 4.3.1 Foundations, footings, bases for columns.	SQM	169.00	4.32	730.08
8	5.9.1	Foundations, footings, bases of columns, etc. for concrete up to plinth level.	SQM	190.60	38.16	7,273.30
9	:5.9.2	Centering and shuttering including strutting, propping etc. and removal of form for Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc. Upto plinth level	SQM	219.00	138.50	30,331.50
10	SOR IT NO 5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding ire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:-1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge.2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) Thermo-Mechanically Treated bars.(TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	4529.79	3,62,383.20
11	sor it no 2.24	Filling available excavated earth Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. cum	CUM	95.00	47.58	4,520.10
12	SOR IT NO 2.27.2	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	CUM	331.00	100.00	33,100.00
13	SOR IT NO 2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.SOR IT NO 2.26	CUM	672.00	20.00	13,440.00
14	sor ino 5.27	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design.. 5.27.2 Above plinth upto floor 5 All works above plinth level and upto floor five level	CUM	6581.00	27.54	1,81,240.74

15	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR 5.28.1	Cum	110.00	29.60	3,256.44
16	5.9.21	Centering and shuttering including strutting, propping etc. and removal of form for Lintels, beams, columns, girders, bressumers and cantilevers with waterproof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B&R works and from Additional Project Director in case of PIU works)	Sqm	521.20	97.00	50,556.40
17	5.9.20	Centering and shuttering including strutting, propping etc. and removal of form for :Suspende5.9.20 d floors, roofs, landings,alconies and Access platform. With water proof ply 12 mm thick. (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works) (sor item no. 5.9.20)	SQM	575.35	100.00	57,535.00
18	.5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete. (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers.3.Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification") 5.16.6 Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786 SOR it.no.5.16.6	KG	80.00	3855.60	3,08,448.00
19	6.7.2.2	Brick work with fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, in super structure above plinth level up to floor two level in :Having 75 kg / cm2average compressive strength 6.7.2.2 CM 1:6 Cement mortar 1:6 (1 cement : 6 sand) aor i no 6.7.2.2	CUM	5049.00	27.57	1,39,175.69
20	13.1.2	12 mm cement plaster of mix : 1:6 (1 cement : 6 sand)	Sqm	160.00	421.11	67,377.44
21	13.2.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:6 (1cement :6 sand) SOR IT NO 13.2.2	Sqm	168.00	120.00	20,160.00
22	13.81	Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR IT NO 13.81	SQM	324.00	120.00	38,880.00
23	13.27.1	Providing and fixing mesh in vertical and horizontal junction of RCC and brick/AAC work including scaffolding and all lead and lift etc. complete G.I. chicken mesh as per ISI specification and in the required width with 50mm long Bombay nails before plastering upt 10 meter height. SOR ITEM No 13.27.1	Sqm	62.00	120.00	7,440.00
24	10.12.5.1	Providing and fixing pressed steel door frames made of 1.6 mm thick steel profile conforming to IS: 4351 manufactured from commercial mild steel sheet including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25mm, or base ties of 1.60 mm pressed mild steel welded or rigidly fixed together by mechanical means, including 2.5mm thick M.S. pressed butt hinges, with mortar guards, lock strike-plate and shock absorbers as specified filling the frame with Cement Concrete 1:3:6 at site before fixing (cost of concrete to be paid separately) fixing with adjustable lugs (200 mm long & 1.0 mm thick) and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer-incharge: 10.12.5 Profile C of 1.25mm thick single rebate of size 100mmx50mm 10.12.5.1 Fixing with adjustable lugs with split end tail to each jamb. SOR 10.12.5.1	RM	385.00	51.00	19,635.00
25	9.18.1	Providing and fixing ISI marked flush door shutters conforming to IS: 2202 (Part I)decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutter.35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	Sqm	2823.00	18.90	53,354.70
26	9.21	Extra for lipping Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured)	Sqm	401.00	24.00	9,624.00
27	13.41	Providing and applying white cement based putty of average thickness 1 mm, of approved brand over the plastered wall surface to prepare the surface even and smooth i/c all cost of material, labour and scaffold etc in all position complete. Note : Putty shall be applied only on the internal walls, for application on the exterior walls prior permission of APD/Chief Engineer will be required.	Sqm	74.00	341.49	25,270.26

28	13.51	Finishing walls with textured exterior paint of required shade New work (Two or more coats applied @ 3.28 ltr/10 Sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 Sqm. SOR13.51 15 MM PLASTER	Sqm	132.00	180.00	23,760.00
29	13.94	Exposed Concrete is composed of a mix natural and mix elements portland cement, hardest earthen material, special additives, natural grains and special polymers to create external beauty, aesthetic value and heritage effects of concrete. thickness 4mm to 6mm.(payment for providing grooves shall be made separately) First coat:- Base coat Apply of Cementous ready mix coarse dark grey color material for making of groove, applied on smooth plaster surface with the thickness of 0.75mm to 1.5mm by trowel Second coat:-Apply of Cementous ready mix fine material, applied on plaster surface with the thickness of 2mm to 3mm by trowel. with or with out groves as per requirement and with 6mm groves (if grooves requires) with masking top of dark grey colour as per approved sample, for the complete satisfaction of architect/Engineer in charge. Third coat :- Protective clear top coat sealer (water based) applied by roller/sponge. SOR	Sqm	1586.00	180.00	2,85,480.00
30	13.49	Wall painting by any mechanical or manual means with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre. of approved brand and manufacture, including applying additional coats wherever required to achieve even shade. SOR 13.49	Sqm	90.00	150.00	13,500.00
31	13.52	Finishing walls by any mechanical or manual means with Acrylic Smooth exterior paint (Economy Exterior) of required shade including all scaffolding. New work (Two or more coat applied @1.67ltr/10sqm over and including one coat undiluted exterior waterproofing coating @ 2.39 litre/10 sqm with crack bridging ability of upto 0.5mm on horizontal surfaces with an elongation of 150% and water proofing of upto 3 bars on vertical surface SOR 13.52	Sqm	138.00	180.00	24,840.00
32	13.81	Roto wall finishing Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR 13.81	Sqm	324.00	150.00	48,600.00
33	13.65	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture		77.00	2.70	207.90
34		Providing and fixing factory made UPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of UPVC multi-chambered frame with in built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to UPVC profile), appropriate dimension of UPVC extruded glazing beads and UPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profileof frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of Three track three panels sliding window with fly proof S.S wire mesh (Two nos. glazed & one no. wire mesh panels) made of frame 116 x 45 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead/double glazing bead of appropriate dimension. (Area of window above 1.75 sqm)	Sqm	6371.00	2.70	17,201.70
35	9.124.2	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete. With 12 mm mild steel U beading. SOR ITEM No 9.124.2	Sqm	1370.00	2.70	3,699.00

36	SOR IT NO 9.169.1	Providing and fixing made UPVC white colour casement/ casement cum fixed glazed door comprising of UPVC multi chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made fromroll forming process of required length(shape & size according to UPVC profile),UPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws,etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of wateretc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes andsilicon sealent shall be paid separately). Note: - For UPVC frame, sash and mullion extruede profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Casement door with 3D hinges made of (big series) frame 67 x 64 mm & sash 67 x 110 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.00 sqm)	Sqm	7085.00	4.50	31,882.50
37	(SOR I/21.9)	Filling the gap in between aluminium frame and adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.Upto 5mm depth and 5 mm width	mtr	53.00	5.40	286.20
38	11.80.2.3	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in flooring laid on 20mm thick cement mortar 1:4(1cement :4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shade etc.. (c) Size 600X600 mm thickness 11-12mm (to be used heavy duty indoor areas of non residencial buildings only such as schools, hostels, libraries hospitals, institutions, offices etc.) SOR Item No. 11.80.2.3	Sqm	1546.00	35.00	54,110.00
39	11.81.2.2	Providing and laying vitrified floor-tiles Full Body Design Homogenous Body matt/rustic finish in different size with water absorption less than 0.05% and conforming to IS:15622 of approved make in all colours& shades, 1st quality/ premium quality in skirting, riser laid on 12mm thick cement mortar 1:4 (1cement : 4sand) including grouting the joints with white cement and matching pigments etc. complete In dark colour and shades etc. (b) Size 600X600mm thickness 9-10mm SOR Item No. 11.81.2.2	Sqm	1329.00	3.50	4,651.50
40	11.50	Providing and fixing Ceramic glazed wall tiles 300x450 mm or more (having thickness 6 to 7 mm) of 1st quality conforming to IS: 15622 of approved make in all Colours& shades, except burgundy, bottle green, black laid on 12mm thick bed of Cement Mortar 1:3 (1 Cement: 3 sand)preprad same day when mortar is still green jointed with grey cement slurry @3.3 kg per Sqm including pointing the joints with white cement and matching pigments etc., complete. SOR 11.50	Sqm	776.00	86.40	67,046.40
41	11.49	Providing and laying Ceramic glazed floor tiles 300x300 mm or more (having thickness 6 to 7mm) of 1st quality conforming to IS : 15622 of approved make in any colours and shade laid on 20 mm thick Cement Mortar 1:4 (1 Cement : 4 sand) including pointing the joints with white cement and matching pigment etc., complete. SOR 11.49	Sqm	670.00	21.00	14,070.00
42	sor ino 10.14.2	Steel work in built up M.S. tubular section (round, square or rectangular hollow tubes etc.) trusses/frame work etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washersetc. complete.	kg	123.00	40.50	4,981.50
43	9.22	Extra for providing vision panel not exceeding 0.1 Sqm in all type of flush doors (cost of glass excluded) (overall area of door shutter to be measured) :	Sqm	157.00	2.70	423.90
44	9.48	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 sand : 6 graded stone aggregate 20mm nominal size) (9.48)	Each	95.00	10	950.00
45	9.84	Providing and fixing bright finished brass 100 mm mortise latch and lock ISI marked with six levers and a pair of anodized (anodic coating not less than grade AC 10 as per IS : 1868) aluminum lever handles with necessary screws etc. complete (Best make of approved quality).	Each	820.00	20	16,400.00

46	11.29.2.1	Providing and laying gang saw cut 18 mm thick, mirror polished premoulded (wherever required) and pre polished machine cut granite stonework in flooring of required size shape of approved shade, color and texture in flooring laid over 20 mm thick base of cement mortar 1:4 (1 Cement: 4 sand) including grouting the joints with white cement mixed with matching pigments epoxy touch ups etc. complete as per direction of Engineer-in-Charge. : Area of slab upto 0.50 sqm Granite (fine grained) Fine grained granite dark Black/dark Red/ White or equivalent with self design/ pattern/crystals of other colors of glitte	Sqm	2705.00	38.18	1,03,263.38
47	11.22.1	Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1cement : 4sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish wherever required etc. complete at all levels. samples approved by Engineer-in-charge. Raj Nagar plain/ White Marble/ Udaipur Green Marble/ Zebra black SOR Item No.11.22.1	Sqm	1797.00	10.50	18,868.50
48	11.64.1	Providing and fixing stone slab table rubbed on both faces edges rounded and polished of size as required and 1.8 cm thick fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement: 2 sand: 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in- charge and finished smooth. White Agaria Marble Stone. SOR ITEM No 11.64.1	Sqm	3046.00	6.75	20,560.50
49	21.3.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item) : With float glass panes of 5.0 mm thickness (weight not less than 12.50 kg/sqm) SOR ITEM No 21.3.2	Sqm	948.00	2.70	2,559.60
50	9.74.1	Providing and fixing IS : 12817 marked stainless steel butt hinges (heavy weight) with stainless steel screws etc. complete :	EACH	76.00	40	3,040.00
51	22.14.1	Grading roof for receiving water proofing treatment with 22.14.1 C.C. 1:2:4 Cement concrete 1:2:4 (1 cement : 2 sand : 4 graded stone aggregate 20 mm nominal size)	cum	6569.00	5.00	32,845.00
52	22.14.2	22.14.2 CM 1:3 Cement mortar 1:3 (1 cement : 3 sand)	cum	9308.00	5.00	46,540.00
53	17.2.1	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required : 17.2.1 W.C. pan with ISI marked white solid plastic seat and lid	each	3036.00	8	24,288.00
54	17.11.4	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass wa ste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require : .17.11.4 White Vitreous China Flat back wash basin size 450x300 mm with single 15 mm C.P. brass pillar tap.	each	1664.00	6.00	9,984.00
55	18.49	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	ltr	7.00	10000.00	70,000.00
56	17.58.1	Providing and fixing on wall face unplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.for soil and wast pipes Single socketed pipes for working pressure of 4 kg./cm2 75 mm diameter (minimum wall thickness 3.2mm)	rm	136.00	200.00	27,200.00
57	17.58.2	Providing and fixing on wall face unplasticised Rigid PVC Rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.for soil and wast pipes Single socketed pipes for working pressure of 4 kg./cm2 110 mm diameter (minimum wall thickness 3.2mm)	rm	238.00	200.00	47,600.00
58	17.59.1	Coupler 75MM	each	117.00	20.00	2,340.00
59	17.59.1	Coupler 110mm	each	154.00	20.00	3,080.00
60	17.59.2	Pushfit coupler 75mm	each	140.00	20.00	2,800.00
61	17.59.2	pushfit coupler 110mm	each	195.00	20.00	3,900.00
62		Single tee with door 75x75x75 mm	each	219.00	20.00	4,380.00
63		Single tee with door 110x110x110 mm	each	346.00	20.00	6,920.00
64		Bend 87.5° 75 mm bend	each	117.00	20.00	2,340.00
65		Bend 87.5° 110 mm bend	each	172.00	20.00	3,440.00
66	17.59.4	Single tee without door 75mm	each	201.00	20.00	4,020.00
67	17.59.4	Single tee without door 110mm	each	266.00	20.00	5,320.00
68	18.31.1	Providing and fixing C.p brass bib cock of approved quality : 15 mm nominal bore 0.40kg	each	840.00	20.00	16,800.00
69	18.14.1	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete : 15 mm nominal bore	each	316.00	5.00	1,580.00
70	18.35.	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 15 mm nominal bore	each	714.00	10.00	7,140.00

71	18.37	Providing and fixing C.P. brass pillar cock approved quality and make conforming to IS:specification. 15 mm nominal bore 125 mm long foam flow.	each	1188.00	10.00	11,880.00
72	17.61.1	Providing and fixing uPVC trap of self cleaning design complet. Including cost of cutting and making good the wall and floors. 17.61.1100 mm inlet and 75 mm outlet	each	517.00	80.00	41,360.00
73	18.13.2	Providing and fixing CPVC gate valve with knob of approved quality.18.13 32 mm nominal bore	each	500.00	5.00	2,500.00
74	18.6.1.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. 20 mm nominal outer dia .Pipes.	rm	153.00	500.00	76,500.00
75	18.6.1.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. 25 mm nominal outer dia .Pipes.	rm	177.00	500.00	88,500.00
76	18.6.2.2	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc. 20 mm nominal outer dia .Pipes.	rm	234.00	120.00	28,080.00
77	18.6.2.3	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc. 25 mm nominal outer dia .Pipes.	rm	288.00	150.00	43,200.00
78	18.6.2.4	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing.This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of jointscomplete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the walls etc. 32 mm nominal outer dia .Pipes.	rm	360.00	180.00	64,800.00
79	17.6.1	Providing and fixing white vitreous china flat back or wall corner type lipped front urinal basin of 430x260x350mm and 340x410x265mm sizes respectively with automatic flushing cistern with standard flush pipe and C.P. brass spreaders with brass unions and G.I clamps complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required :sor ino 17.6.1 One urinal basin with 5 litre white P.V.C. automatic flushing cistern.	EACH	2754.00	5.00	13,770.00
80	17.14.2.1	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :17.14.2.1 Depth 200mm 610x510 mm bowl depth 200 mm.	EACH	4583.00	1.00	4,583.00
81	2.1	Surface dressing of the ground including removing vegetation and in-equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m. in all kinds of soil. SOR Item No. 2.1	Sqm	8.03	15.00	120.45
82	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil SOR Item No. 2.6	Cum	147.00	29.44	4,327.31
83	4.1.2.2	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level :With 40mm nominal size graded stone aggregate.Nominal Mix -1 Cement : 3 sand : 6 graded stone aggregate (M 10)SOR ITEM NO 4.1.2.2	Cum	3808.0	1.77	6,725.88
84		Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-25 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design.All works above plinth level and upto floor five level.	Cum	6100.00	15.26	93,092.10
85	5.9.1	Centering and shuttering including strutting, propping etc. andremoval of form work for :Foundations, footings, bases for columns. SOR It. No. 5.9.1	Sqm	190.60	3.05	581.75

86	5.9.2.2	Centering and shuttering in cluding strutting, propping etc. and removal of form for: Walls (any thickness) including attached pilasters butteresses, plinth beams and string courses etcAbove plinth upto 3.6 m height from plinth level SOR Item No. 5.9.2.2	Sqm	330.00	102.00	33,660.00
87	5.9.20	Suspended floors with ply Suspended floors, roofs, landings, balconies and Access platform. With water proof ply 12 mm thick. (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works) SOR I. NO. 5.9.20	Sqm	575.35	15.00	8,630.25
88	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification") Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786 SOR Item No. 5.16.6	kg	80.00	1755.02	1,40,401.20
89	2.24	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. SOR Item No. 2.24	Cum	95.00	12.41	1,178.97
90	13.5.2	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix 1:4 1:4 (1 cement : 4 sand)	Sqm	220.00	66.20	14,564.00
91	5.11	Providing, hoisting and fixing up to floor two level precast reinforced cement concrete in lintels, manhole cover, shelves and like including setting in cement mortar 1:3 (1 cement : 3 sand), cost of required centering, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement with M 15 –Grade Concrete. SOR It. No. 5.11	Cum	7830.00	0.11	880.88
					Total :-	**34,52,668.39**

Shakti Dwar Main Gate

NO	SOR NO	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	147.00	76.80	11,289.60
2	SOR IT NO 4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate. 4.1.2.1 M-15 M-15 - Grade concrete	CUM	4403.00	4.33	19,073.80
3	5.27.1	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design. Upto plinth All works upto plinth level.	CUM	6100.00	53.74	3,27,838.40
4	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR 5.28.1	Cum	110.00	53.74	5,911.84
5	SOR IT NO 4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : 4.3.1 Foundations, footings, bases for columns.	SQM	169.00	3.04	513.76
6	(SOR I/5.9 P/66)	Centering and shuttering including strutting, propping etc. and removal of form for :	SQM	190.60	110.72	21,103.23
7	5.9.2	Centering and shuttering including strutting, propping etc. and removal of form for : Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc. Upto plinth level	SQM	219.00	37.44	8,199.36
8	SOR IT NO 5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding ire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:-1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge.2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) Thermo-Mechanically Treated bars.(TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	7255.44	5,80,435.20
9	sor it no 2.24	Filling available excavated earth Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. cum	CUM	95.00	46.55	4,422.06

10	SOR IT NO 2.27.2	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	CUM	331.00	14.40	4,766.40
11	SOR IT NO 2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.SOR IT NO 2.26	CUM	672.00	2.88	1,935.36
12	sor ino 5.27	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design.. 5.27.2 Above plinth upto floor 5 All works above plinth level and upto floor five level	CUM	6581.00	117.42	7,72,741.02
13	SOR IT NO 5.9.21	Centering and shuttering including strutting, propping etc. and removal of form for 5.9.21 Lintels, beams, columns, girders, bressumers and cantilevers with waterproof ply 12 mm thick (item to be executed with prior permission of S.E. in case of B&R works and from Additional Project Director in case of PIU works)	Sqm	521.20	602.00	3,13,762.40
14	**(sor item no. 5.9.20)**	Centering and shuttering including strutting, propping etc. and removal of form for :Suspende5.9.20 d floors, roofs, landings,alconies and Access platform. With water proof ply 12 mm thick. (item to be executed with prior permission of S.E. in case of B & R works and from Additional Project Director in case of PIU works)	Sqm	575.35	250.00	1,43,837.50
15	**SOR it.no.5.16.6**	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete. (Note:- 1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge. 2. No extra payment shall be done for overlaps and/or couplers.3.Couplers shall be conforming to IS code on “Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification”) 5.16.6 Thermo-Mechanically Treated bars. (TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	15264.60	12,21,168.00
16	SOR IT NO 7.21.3.1	Stone work (machine cut edges) for wall lining etc. (veneer work) up to 10 meter height backing filled with a grout of 12mm thick cement mortar 1:3 (1 cement : 3 sand) including pointing in white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment matching the stone shade : (To be secured to the backing by means of clamps which shall be paid for separately): White sand stone - exposed face fine dressed with rough backing 70 mm thick.	Sqm	1327.00	158.40	2,10,196.80
17	SOR IT NO 7.12.2.2	Stone work plain ashlar masonry in domes, in super structure upto floor two level in cement mortar 1:3 (1 cement: 3 sand) including centering, shuttering and pointing with white cement mortar 1:2 (1 white cement: 2 marble dust) with an admixture of pigment matching the sand stone shade. Both face dressed. White sand stone.	Cum	39770.00	8.10	3,22,137.00

18	SOR IT NO 27.4	Providing and fixing Stainless steel plate 304 grade of 1.50mm thick, including writing with Embossing of letters of required size including fixing at required placed with studs, screws and rawl plugs etc. compete as per direction of Engineer- in-Charge.	Sqm	13652.00	100.00	13,65,200.00
19	SOR IT NO 8.7.1	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel (ACP) Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including: a) Structural analysis and design and preparation of shopdrawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metalic colour of approved shades.The aluminium composite panel cladding sheet shall be coil coated, with kynar 500 based PVDF / fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washersto arrest the wind load movement, fasteners, SS 316Pins and anchor bolts of approved make in SS 316, Nylonseparators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material and labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the 4 mm thick alumminium composite pannel material consisting of 3 mm thick FR grade mineral core sandwiched between two alumminium sheets (each 0.5mm thick) SOR 8.7.1	Sqm	3800.00	100.00	3,80,000.00
20	SOR IT NO 7.31.1	Providing and fixing stone jali 40mm thick throughout in cement mortar 1:3 (1cement :3 sand) including pointing in whitecement mortar 1:2 (1white cement: 2stone dust) with an admixture of pigment , matching the stone shade, jali slab without any chamfers etc. Red sand stone. SOR 7.31.1	Sqm	5797.00	112.50	6,52,162.50
21	(SOR I/13.94)	Exposed Concrete is composed of a mix natural and mix elements portland cement, hardest earthen material, special additives, natural grains and special polymers to create external beauty, aesthetic value and heritage effects of concrete. thickness 4mm to 6mm.(payment for providing grooves shall be made separately) First coat:- Base coat Apply of Cementous ready mix coarse dark grey color material for making of groove, applied on smooth plaster surface with the thickness of 0.75mm to 1.5mm by trowel Second coat:-Apply of Cementous ready mix fine material, applied on plaster surface with the thickness of 2mm to 3mm by trowel. with or with out groves as per requirement and with 6mm groves (if grooves requires) with masking top of dark grey colour as per approved sample, for the complete satisfaction of architect/Engineer in charge. Third coat :- Protective clear top coat sealer (water based) applied by roller/sponge. SOR 13.94	Sqm	1586.00	75.00	1,18,950.00
22	(SOR I/13.93)	Indian ethnic art painting such as tribal Art Pithora or warli/Gond or Bhil Painting on any wall surface (interior or exterior) by using textured/smooth exterior/interior paint of approved brand or Manufacturer including preparation of surface and cost of all material labour and scaffolding etc. complete as per direction of Engineer-in-charge. SOR 13.93	Sqm	1988.00	75.00	1,49,100.00

23	(SOR I/13.81)	Roto wall finishing Providing and Applying Roto Wall finishing system being a dispersion of inorganic fillers, calcite, pure silica, quartz and broad spectrum fungicides stabilized by an acrylic co-polymer, to be applied by means of customized trowels (one for incorporating material on base and spreading and other for finishing) in single coat with a coating thickness of 2.0-2-2.5mm on a cured smooth level plaster without keying, by the approved applicator of manufacturer, of the approved shade as per directions for usage all inclusive including primer coat on the base. SOR 13.81	Sqm	324.00	150.00	48,600.00
24	(SOR I/13.95)	Applying two coats of sealer (special silicate water based water repellent protector) with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed to dry for 8 to 12 hrs on exterior stone façade and stone jali.At an approximate coverage of 50 to 70 Sq.f./Ltr. SOR 13.95	Sqm	230.00	237.60	54,648.00
25	(SOR I/13.95)	Applying two coats of sealer (special silicate water based water repellent protector) with spray gun and allowing sufficient drying time for 1st coat and 2nd coat is allowed to dry for 8 to 12 hrs on exterior stone façade and stone jali.At an approximate coverage of 50 to 70 Sq.f./Ltr. SOR 13.95	Sqm	230.00	75.00	17,250.00
					TOTAL :	**67,55,242**

GARDAN AREA

S. No.	SOR I.	Particular	Unit	Quantity	Rate	Amount
1	28.2	Supplying and stacking of good earth specific useful for plantation at site including royalty if any and carriage (earth measured in stacks will be reduced by 20% for payment)	CUM	240	511.00	1,22,640.00
2	28.3	Supplying and stacking sludge at site including royalty and carriage (sludge measured in stacks will be reduced by 8% for payment)	CUM	220.80	643.00	1,41,974.40
3	28.4	Supplying and stacking at site dump manure from approved source, including carriage(manure measured in stacks will be reduced by 8% for payment) :	CUM	220.80	734.00	1,62,067.20
4	28.9	Mixing earth and sludge or manure in the required proportion specified or directed by the Engineer-in-charge.	CUM	300.00	11.00	3,300.00
5	28.10.6	Providing and Laying Mexican/Zyosia carpet grass Turf with earth 50mm to 60mm thickness on existing ground prepared with proper level and ramming with tools wooden (Durmuth) and then rolling the surface with light roller make the surface smoothen and light watering with sprinkler and maintenance for 30 days or more till the grass establishes properly, as per direction of Engineer-in-Charge.	SQM	1500.00	310.00	4,65,000.00
6	28.14.2	Digging holes in ordinary soil and refilling thesame with the excavated earth mixed withmanure or sludge in the ratio of 2:1 by volume(2 parts of stacked volume of earth afterreduction by 20% : 1 part of stacked volume ofmanure after reduction by 8%) flooding withwater, dressing including removal of rubbishand surplus earth, if any with all leads and lifts(cost of manure, sludge or extra good earth ifneeded to be paid for separately) : Holes 60 cm dia, and 60 cm deep. each 68.00	EACH	75.00	61.00	4,575.00
7	28.15	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture mannuring and pesticide etc. complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of engineer in charge complete in all respect (B.C. Mixture paid separately).				-
8	28.15.3	Alpinia Verigated, Alternanthera species,Aspyragus Myerri, Aspyragus Springenii,Aspidistra, Canna (regular, Dwarf), Chlorodendron Inermii, Chlorophytum (Green), Chlorophytum verigated, Coffea Chinensis, Dianella Verigated, Durranta (Goldiana, Green, Verigated), Euphorbia Milli hybrid, Ipomea (Golden leaves), Iresine herbstii, Juniper Prostata, Juniper Africana,Ophiopogon plant, Ophiopogon jaburan,Portulacaria Afra (jade Plant), Schefflera Green, Schefflera verigated, Setcreasea Purpurea, Syngonium (Butterfly) species, Syngonium miniature, Syngonium Dwarf, Syngonium variegated, Tradescantia, Wadelia Trilobata, Zebrina Tradescantia, Pendanas,Spider Lily Black, Spider Lily verigated,Aclypha (Red, Green,Mini), Lantana (Red,Yellow, Purple, White, verigated	EACH	75.00	50.00	3,750.00
9	23.15.4	Any of one from Alyssum, Anemone,Antirrhinium Hybrid, Aster Hybrid, Begonia and its different varieties,alendula,Carnation,Coleus, Daisy, Dianthus, Fressia, Gazania, Impatiens,Kalanchoe, Marigold Inca, Missam branthemum, Nemasia, Nasturitium,Ornamental Kale, Pansy Hybrid Sakata, Petunia Hybrids such as Bravo, Star and Picotee, Salvia, Stock, Stock, Verbena	EACH	75.00	42.00	3,150.00
10	28.15.5	Any of one from Celosia, Caladium Hybrid,Cockscomb, Cosmos, Gaillardia, Gomphorena,Kochchea, Portulacca, Sunflower Hybrid,Sunflower Single, Tapiocca Variegat	EACH	75.00	42.00	3,150.00

11	28.16	Half brick circular tree guard in bricks, internal diameter 1.25 metre and height 1.2 metre above ground and 0 .20 m below ground, bottom two courses laid dry and top three courses in cement mortar 1:6 (1 cement : 6 sand) and the intermediate courses being in dry honey comb masonry as per design complete:	EACH	75.00	800.00	60,000.00
12	28.22	Providing and fixing M. S. tree guard 50 cm square in plan, height 1.40 metre above ground level and 0.50 metre below ground level. The vertical members shall consist of four nos. of angle iron of size 25x25x5 mm 1.9 long, one at Each corner and 8 nos. flat iron of size 25x5 mm 1.4 long. The vertical members shall be welded to 4 nos. 25x6 mm M. S. flats placed horizontally around the vertical member of the cage. One name plate of 1 mm thick M.S. sheet of size 250x100 mm shall be welded to the tree guard near the middle height and lettered PWD/ any other approved name. The tree guard shall be fixed to the ground bymaking suitable holes and by embedding four corners leg in the ground, including refilling the earth, compaction etc. complete. The tree guard shall be painted with two coats of paint of approved brand and manufacture over a coat of primer, complete in all respect.	EACH	75.00	2245.00	1,68,375.00
13	28.35	Providing and fixing of 3 seater stone bench made of 75mm thick stone slab finished by different numbers of ambry stone and two coats of 124 no sealer coat to prevent from weather including fixing on a pedestal (cost of pedestal to be paid separately)etc. complete as per direction of engineer in charge. Size: length 1500mm, width 600mm, legs height 500 mm,back support height 500mm.	EACH	30.00	9700.00	2,91,000.00
14	28.17.1	Edging with bricks laid dry length wise, including required excavation, refilling, consolidating with hand packing and spreading surplus earth neatly within a lead of 50 m: Common burnt clay modular bricks	RM	400.00	31.00	12,400.00
15	28.37	Providing and fixing of stone table made of 75mm thick stone slab finished by different numbers of ambry stone and two coats of 124 no sealer coat to prevent from weather including fixing on a pedestal (cost of pedestal to be paid separately)etc. complete as per direction of engineer in charge. Size: length 1000mm, width 600mm, legs height 750 mm.	EACH	25	7900.00	1,97,500.00
16	26.19	Quartzoid bulb type sprinklers Providing, fixing testing and commissioning of 15mm sizequartzoid bulb type sprinklers, set to operate at 68/79 degree Centigrade. Pendent type/upright type/side wall type with required accessories complete as directed by Engineer-in- Charge.	EACH	25.00	477.00	11,925.00
17	26.20	Control valve of cast iron body Providing, fixing, testing and commissioning of installation controlvalve of Cast iron body and brass/bronze working parts comprising of water motor alarm, bronze seatclapper, and clapper arm, hydraulically driven mechanical going bell to sound continuous alarm when the Wet riser/Sprinkler system activates, pressure gauges, emergency, releases, strainer, pressure switch,cock valve complete with drain valve and bypass, test control box, ballvalves, MS pipe of required sizeflanges, orifice plate, gasket etc. of size 150 mm dia and obtaining NOC from local bodies etc required.	EACH	2.00	42500.00	85,000.00

18	11.72.3	Providing and laying factory made coloured chamfered edge Cement Concre te paver blocks of required strength, thicknessand size/shape, made by table vibratory method using PU mould, laid in required colour and pattern over 50mm thick compacted bed of stone dust, compacting and proper embedding/laying of inter locking paver blocks into the bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, fmishing and sweeping extra sand including locking edges with M 15 cement concrete in footpath, parks, lawns, drive ways or light traffic parking etc. complete as per manufacturer's specifications and direction of Engineerin- Charge. 60mm thick C.C. paver block of M-35 grade with approved colour, design and pattern. SOR 11.72.3		600.00	605.00	3,63,000.00
19	11.73	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in- Charge).		200.00	6097.00	12,19,400.00
					TOTAL	**33,18,206.60**

BOUNDARY WALL

NO	SOR NO	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in over areas (exceeding 30cm in depth 1.50m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth,lead upto 50m and lift upto 1.5 m, disposal earth to be levelled and neatly dressed (no etra lift is payable if work is done by mechnical means) SOR P. 22 I. 2.6	cum	147.00	19.44	2,857.68
2	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : Upto plinth: Foundations, footings, bases for columns, plinth beams, curtain walls, columns below plinth. SOR 4.3.1	Sqm	169.00	2.40	405.60
3	4.1.2.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : M 7.5 SOR P. 45 I. 4.1.2.3	Cum	3474.00	1.20	4,168.80
4	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for : sor p 66 i/5.9.1 Foundations, footings, bases of columns, etc. for mass concrete up to plinth level. SOR I.No. 5.9.1	Sqm	190.60	10.72	2,043.23
5	5.9.2	Walls (any thickness) including attached pilasters butteresses, plinth beams and string courses etc.up to plinth level. SOR I.No. 5.9.2	sqm	219.00	6.00	1,314.00
6	5.1.1	Providing and laying in position specified grade of reinforced cement concrete (with 20mm nominal size graded stone aggregate) excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : M 20 Grade concrete SOR I.No. 5.1.1	Cum	6153.00	3.59	22,076.96
7	5.9.6	Centering and shuttering in cluding strutting, propping etc. and removal of form for: Columns, P i l l a rs, Piers, Abutments, Posts and Struts. SOR I. No. 5.9.6	Sqm	471.20	10.20	4,806.24
8	5.2.1	Reinforced cement concrete work (with 20mm nominal size graded stone aggregate) in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, posts and struts etc. above plinth level and up to floor two level excluding cost of centering, shuttering, finishing and reinforcement : SOR I. No. 5.2.1	cum	6231.00	0.36	2,243.16
9	5.3.1	Reinforced cement concrete work (with 20 mm nominal size graded stone aggregate) in beams, suspended floors, roofs having slope of any degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral staircases above plinth level and upto floor two level excluding the cost of centering, shuttering, finishing and reinforcement in concrete grade. SOR 5.3.1	Kg	80.00	424.80	33,984.00
11	2.24	Filling availabel excavated earth (excluding rock) in trenches plinth sides of fundations etc.in layers not exceeding 20 cm in Depth.consolidating each deposited layer by ramming and watering lead up to 50 m and lift upto 1.5m SOR I. NO. 2.24	M3	95.00	14.65	1,391.94
12	6.7.2.2	Brick work with fly ash lime bricks (FALG Bricks) conforming to IS:12894-2002, in super structure above plinth level up to floor II level in :6.7.2 having 75 kg / cm2 average compressive strength SOR IT NO 6.7.2.2	Cum	5049.00	2.76	13,935.24

13	13.2.2	15 mm cement plaster on the rough side of single or half brick wall of mix : 13.2.2 1:6 (1 cement: 6 sand) SOR I.No. 13.2.2	Sqm	168.00	47.00	7,896.00
14	13.51	Finishing walls by only mechanical or manual means with textured exterior paint of required shade: New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm. SOR I.No. 13.51	Sqm	132.00	47.00	6,204.00
15	13.27.1	Providing and fixing chicken mesh as per ISI specification and in the required width with 50mm long Bombay nails on vertical and horizontal junctions of RCC and brick wall including scaffolding and all lead and lift etc. complete before plastering upt 10 meter height. SOR I. No. 13.27.1	Sqm	62.00	2.28	141.36
16	13.2	Forming groove of uniform size in the top layer of washed stone grit plaster as per approved pattern using wooden battens, nailed to the under layer including removal of wooden battens, repair to the edges of panels and finishing the groove complete as per specifications and direction of the Engineer-in-charge :13.20 .1 20 mm wide and 15 mm deep groove. SOR I. NO. 13.20	RM	24.00	27.60	662.40
18	10.29.2	Angle iron post and strut of required size including bottom to be split and bent at right angle in opposite direction for 10 cm length and drilling holes upto 10 mm dia. etc. complete. (cost of earth work in excavation and concrete work in foundation to be paid separately) SOR I. No. 10.29.2	KG	67.00	12.80	857.60
19	10.32	Fencing with barbed G.I. wire angle iron post placed fitted to at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on one side only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per 100 m (minimum) between the two posts fitted and fixed with G.I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately):- Payment to be made per metre cost of total length of barbed wire used. SOR 10.32	M	17.00	10.00	170.00
					Total For 10 m	**1,05,158.22**
					Total For 1 meter Length	**10,515.82**
					Total For 300 meter Length	**31,54,746.48**

PLAZA AREA- ROAD WORK

NO	SOR NO	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	Cum	147.00	765.00	1,12,455.00
2	2.27.1	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete. With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	Cum	393.00	25.50	10,021.50
3	4.1	Granular Sub-base with Well Graded Material (CBR>30 or more) (Table:- 400-1 & Table 400-2) Construction of granular sub-base by providing well graded material like natural sand crushed gravel or crushed stone having CBR >30, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator or plant mix method at OMC, and compacting with vibratory rollers of 80 to 100 kN static weight to achieve the desired density, complete as per Clause 401 of Specification.	Cum	934.00	8.50	7,939.00
4	6.4	Cement Concrete Pavement Construction of un-reinforced, dowel jointed, plain cement concrete pavement M-30 grade concrete over a prepared sub base with cement , coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, admixtures as approved, curing compound, finishing to lines and grades as per drawing as per IRC 15 2011 and as per relevant clauses of section 602 of specifications complete but excluding cost of steel in dowel bar and tie rods etc.	Cum	5685.00	17.00	96,645.00
5	6.12	add extra in item no. 63 & 6.7 above the cost of steel in dowel bar and tie bar rod etc required as per design 12 dia tor rods	MT	68297.00	10.00	6,82,970.00
6	RUIDP 2023	Flooring with Cobble stone of approx. Size 125x125x75 mm (thick) laid on 25 mm average thick cement mortar 1:3 (1 cement : 3 Coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the stone, laid in approved pattern complete in all respect as per direction of Engineer-in-charge.	Sqm	1822.00	1020.00	18,58,440.00
					Total Cost Of Parking	**26,56,015.50**

CONSERVATION OF STELL WELL

Sr. No.	SOR No.	Description of Items	Unit	Qty	Rate in Rs	Amount
1	INTACH SOR JAN. 2016 1.1	Clearance of debris around the heritage building by excavation upto depth 1.50mtr to 2.00 mtr carefully without damaging the buried architectural parts of the building and collect all the intact parts at proper place for reuse at the time of restoration work as per direction of Engineer incharge.				
		All kinds of soil	Cum	50.00	433.31	21,665.70
2	INTACH SOR JAN. 2016 1.2	Add extra for sorting lifting & stacking charges for architectural parts up to 50m lead.	Cum	50.00	369.66	18,482.85
3	INTACH SOR JAN. 2016 2.1	Removing of old sulphated lime wash/white or colour wash in multiple applications without causing damage to the below stone/brick/plastered surface. Scrubbing (not by scraping which leaves surfaces scarred and scratched) with bristle brushes and hot water (Care to be taken if the surface is weak one it will break down). Hot water should be used if the limewash has an oil or tallow binder. Gentle cleaning with air abrasive tools can be used if the wall surface is not very week.The final clean will almost invariably have to be carried out by hand scrubbing and rinsed with clean water on completion. The work should be done under supervision of a trained conservator.	Sqm	100.00	420.01	42,001.20
4	INTACH SOR JAN. 2016 2.2	Removal of rust, existing coatings, mill scale, dirt, oil, grease, and other contaminants from steel sections/stone surface using Micro sand with the help of pressure pump (Sand Blasting)	Sqm	150.00	278.94	41,840.55
5	INTACH SOR JAN. 2016 2.5	Manually removal of vegetation (major trees, climbing plants, creepers) from walls, columns, arches, floor etc in a skilled and careful manner, using appropriate tools and means and without causing any damage to the adjoining parts, including carrying and stacking the dismantled materials including lift/lower upto 11mtrs and lead upto 50 mtrs as directed by the engineer or architect in charge. The exposed surfaces will be coated with a paste made from ammonium sulphamate crystals or with "Tree killer" available in market. In this condition the root system may be left to absorb and die. Large sections of dead wood must not be left within the core. As they decay they will remove support and create voids and weaknesses in the wall. Pull off a well-established mat of vegetation must be resisted. Tamping, grouting, pointing and resetting of brick / stones especially on wall top, must all be anticipated as remedial work.	Sqm	800.00	971.24	7,76,988.00
6	INTACH SOR JAN. 2016 3	Construct two tanks at ground level. One for slaking of lime and other for storage of slaked lime. Slake the lime in the tank mixing it with water. Water should be sufficiently more and above the lime. Mix and stir with wooden solid pole for three days under the supervision of conservation Architect. Sieve the sand passing through 4.75mm sieve set. Take one part of slaked lime in a container and 3 parts of sieved sand in the same size container Place these materials in a lime mortar miller Grind the mix for a 12 to 15 minutes Remove the mix from the miller and stack it in a storage tank for maturity period of 4 to 5 days.				-
		A good aggregate for a Lime Mortar should be with angular grains and free of contaminats such as salt and oranic matter. The aggregates should be well graded sand typically has grain sizes between 4mm and 0.125mm, with the largest proportion of grains at the mid-point sieve fractions.				-
7	INTACH SOR JAN. 2016 3.2	Lime mortar 1:1:1 (1 Slaked lime:1 surkhi:1 fine sand)	Cum	200.00	6488.13	12,97,625.40
8	INTACH SOR JAN. 2016 4.1	Providing and laying lime concrete in footings and bases excluding cost of centring and shuttering				-
9	INTACH SOR JAN. 2016 4.1.3	With graded stone aggregate 20mm nominal size and mortar comprising of 1 Slaked lime :3 surkhi : 6 coarse sand	Cum	4.39	9220.16	40,450.68
		Coursed Rubble Masonry (CRM)				-
10	INTACH SOR JAN. 2016 6.3	Coursed rubble masonry in first sort with hard stones in foundation and plinth including levelling with lime concete upto plinth level with lime mortar 1:1:1(1Lime: 1Surkhi:1course sand)	Cum	35.00	5515.25	1,93,033.58
11	INTACH SOR JAN. 2016 6.5	Coursed rubble masonry with hard stone (first or second sort) in superstructure above plinth level and upto two floor level				-
12	INTACH SOR JAN. 2016 6.5.1	Masonry work (first sort) , in lime mortar 1:1:1 (1 lime : 1surkhi:1 coarse sand)	Cum	30.00	6251.98	1,87,559.28

13	INTACH SOR JAN. 2016 7.3	Kota stone slabs 25 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick lime mortar 1:1:1 (1 lime: 1surkhi:1coarse sand) and jointed with lime slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	Sqm	75.00	1184.79	88,859.03
14	INTACH SOR JAN. 2016 8.7	Providing and Making Gola (batta) in lime concrete using 50% lime surkhi / sand mortar 1:2 with 12mm brick aggregate, along joints of wall and terrace finished with lime surkhi mortar 1:2 plaster with gur, gugal, methi etc as per traditional practice in concave /approved shape of (size 75mmx75mm)	Sqm	1200.00	231.78	2,78,132.40
15	INTACH SOR JAN. 2016 8.11	Replacing sand stone slabs in roofing, laid in lime mortar 1:3 (1 lime :34 coarse sand), including necessary repairs and lime pointing with same mortar complete, including disposal of rubbish to dumping ground within 50 metres of lead :				-
	8.11.1	Red/ white sand stone slabs 30 to 50 mm thick	Sqm	300.00	869.18	2,60,755.20
	8.11.2	Granite /Marble stone slabs	Sqm	250.00	2940.80	7,35,201.00
16	INTACH SOR JAN. 2016	**Preparation of Lime Plaster -** Mix lime mortar to the lime water which is to be applied with natural additives like jaggery, soapnut, bhel fruit, etc depends upon the region				-
		Preparation of surface -Wet the surface. Remove all the dust particles .Apply lime plaster up to required thickness . Rework on the plaster to				-
17	INTACH SOR JAN. 2016 9.1	Lime plaster 1:2 (1 Slaked lime : 2 Coarse sand)				-
		Lime Pointing				-
18	INTACH SOR JAN. 2016 9.12	Recessed lime pointing 1:1:1 (1 Slaked lime:1 surkhi:1 fine sand)				-
19	INTACH SOR JAN. 2016 9.12.1	In stonework	Sqm	200.00	204.54	40,908.60
20	INTACH SOR JAN. 2016 9.13	Flush / Ruled/Struck or Weatheredd lime pointing 1:1:1 (1 Slaked lime:1 surkhi:1 fine sand)				-
21	INTACH SOR JAN. 2016 9.13.1	In stonework		200.00	272.53	54,505.80
22	INTACH SOR JAN. 2016 11.1	Repairing of .5mm to 5 mm wide open joints / cracks in all types of sand stone masonry work including scrapping of loose jointing material from cracks. The inner side to be filled/pointed with polymer mixed lime mortar with wooden trowel and fixing grouting nipple from outer side as directed by Architect. Then apply polymer based lime mortar by injection grouting through 5mm diameter nozzle through the pre fix nipple up to total thickness of existing stone wall and removing the PVC nipple pipe, lime moratr of mix lime & sand 1:1 mix with polymer using katha or other additives to achieve require matching colour and including cost of all materials, labour, machinery, equipment, curing and cleaning the site as directed.	M	500.00	64.99	32,494.50
23	INTACH SOR JAN. 2016 11.2	Providing and fixing chicken wire mesh (6mm x 6mm) of 24 gauge 200 mm wide along the joints of brick work with hooks/nails etc. complete so as to receiving the plastering work over chicken mesh as per the direction of Engineer-in-charge.	sqm	500.00	1068.80	5,34,402.00
24	INTACH SOR JAN. 2016 11.3	Steel-rod stitching incracked stone patties, beam,and lintels.Providing and fixing stainless steel rods of 90cms length of which 15cm on either side and cold bending at 90degrees. The stainless steel clamps to be fixed perpendicular to the crack by drilling in stone and fixing with cement and aradite mixture in such a way that the entire length of the rod is in complete contact of the stone and the bent ends are fully inserted in the cracked stone. Use 316 grade stainless steel charge per hole.steel rod charges are counted per kg.Holes with 6mm, 8mm, 10mm or 12mm dia.as per requirement of position.	No	2500.00	183.14	4,57,852.50
25	INTACH SOR JAN. 2016 11.5	Propping with steel to support the leaned structure (roof and wall) using pipes, channels, angles, girders , wooden wages to prevent further leaning/ collapse	Sqm	300.00	953.15	2,85,946.20
26	INTACH SOR JAN. 2016 14.1	Removing existing water proofing treatment followed by crack repairs and surface cleaning and laying APP (Atactic Polypropylene Polymer) water proofing treatment with bituminous primer over existing terracing with following specifications:				-
27	INTACH SOR JAN. 2016 14.1.1	Removing the present treatment of waterproofing System (if any) given on the terraces and reach the sound surface below the present waterproofing system and cleaning the surface to reach the sound surface, remove all loose material with the help of tools and tackles from the surface and as well as from the hair line cracks & wide cracks if any.	Sqm	350.00	115.30	40,354.65

28	INTACH SOR JAN. 2016 14.1.2	Surface Repair: In case of pot holes/cracks, the same shall be repaired with epoxy grouting system, Epoxy Mortar or Latex.	Sqm	100.00	338.81	33,880.50
29	INTACH SOR JAN. 2016 14.1.3	Starting at low point from the roof, unroll the APP membrane 3mm (Non Woven Polyester of 160 gsm) (50 kgs)(1 Mtr X 10 Mtr) roll once the priming coat is dried. Align the roll correctly and RE- roll it half in alignment befor torching. Avoid shifting of the membrane while torching. Use gas burner to heats substrate and underside to softening points. When the embossing disappears, roll forward and press firmly against substrate to bond from the Lowe end toward and press firmly against substrate to bond from the lower end towards the higher end. Ensure sufficient bleed on side and end over laps. Once the half of the roll is torched properly to the substraste, unroll the balance roll and repeat the process.	Sqm	100.00	383.34	38,333.70
30	INTACH SOR JAN. 2016 14.2	Providing protective coating of water repellent siloxane (transparent in color) through brush or spray untill complete impregnation over completely cleaned and dried stone or plastered surface to reduce the absorption of water.	Sqm	100.00	215.85	21,584.70
	TOTAL					**55,22,858.01**

Shed - Yagya Shala & Plaza

NO	SOR NO	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	CUM	147.00	291.60	42,865.20
2	4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate. 4.1.2.1 M-15 M-15 - Grade concrete	CUM	4403.00	13.50	59,440.50
3	5.27.1	Providing and laying in position machine batched, machine mixed cement concrete (BMC) of M-20 grade for reinforced cement concrete work using cement content as per approved mix design including use of admixtures in recommended proportions as per IS 9103 to accelerate/retard setting, improve workability of concrete without impairing strength and durability as per direction of Engineer-in charge and pumping of concrete to site of laying and finishing but excluding the cost of centering, shuttering, and reinforcement. (Note: - Minimum cement content is 330 kg/cum) and no extra payment for extra cement used as per mix design. Upto plinth All works upto plinth level.	CUM	6100.00	278.28	16,97,508.00
4	5.28.1	Extra for providing richer mixes of BMC/RMC design mix as per item no 5.27&5.30 up to plinth level and at all floor levels. (No extra payment for using extra cement as per requirement of mix design.) Providing M-25 grade concrete instead of M- 20 grade. (Note : minimum cement content is @ 330 kg/cum) SOR 5.28.1	Cum	110.00	278.28	30,610.80
5						-
6	4.3.1	Centering and shuttering including strutting, propping etc. and removal of form work for : 4.3.1 Foundations, footings, bases for columns.	SQM	169.00	31.20	5,272.80
7	5.9.1	Foundations, footings, bases of columns, etc. for concrete up to plinth level.	SQM	190.60	316.80	60,382.08
8	5.9.2	Centering and shuttering including strutting, propping etc. and removal of form for : Walls (any thickness) in cluding attached pilasters butter esses, plinth beams and string courses etc. Upto plinth level	SQM	219.00	676.00	1,48,044.00
9	5.16.6	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding ire all wastages and overlaps, couplers (overlaps shall be provided as per requirement of IS 13920 for ductile detaling IS 456 RCC Design & SP 34 Reinforcement detailing) etc. complete . (Note:-1. Spacer bars (chairs) shall be paid separately as shown in the drawing and as per direction of engineer in charge.2. No extra payment shall be done for overlaps and/or couplers. 3.Couplers shall be conforming to IS code on "Reinforcement Couplers for Mechanical Splices of Bars for Concrete Reinforcement - Specification") Thermo-Mechanically Treated bars.(TMT/TMX) FE 500 or more conforming to IS 1786	KG	80.00	37567.80	30,05,424.00
10	2.24	Filling available excavated earth (excluding hard rock/Ordinary rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m. cum	CUM	95.00	203.82	19,362.90

11	2.27.2	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	CUM	331.00	1575.00	5,21,325.00
12	2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete Note: - Maximum thickness of this layer shall be 20 cm.SOR IT NO 2.26	CUM	672.00	315.00	2,11,680.00
13	10.14.1	Steel work in built up M.S. tubular section (round, square or rectangular hollow tubes etc.) trusses/frame work etc. including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded type tubes SOR 10.14.1	Kg	117.00	12543.85	14,67,630.45
14	22.20	Providing and laying APP (Atactic Polypropylene Polymer) modified prefabricated five layer 3mm thick water proofing membrane, black finished reinforced with non-woven polyester matt consisting of a coat of bitumen primer for bitumen membrane @ 0.40 ltr/sqm. by the same membrane manufacture of density at 25°C, 0.87-0.89 kg/ltr and viscosity 70-160 cps. Over the primer coat the layer of membrane shall be laid using Butane Torch and sealing all joints etc., and preparing the surface complete. The vital physical and chemical parameters of the membrane shall be as under: Joint strength in longitudinal and transverse direction at 23°C as 650/450N/5cm. Tear strength in longitudinal and transverse direction as 300/250N. Softening point of membrane not less than 150°C. Cold flexibility shall be upto -2°C when tested in accordance with ASTM, D - 5147. The laying of membrane shall be got done through the authorised applicator of the manufacturer of membrane: (with 5 years service guarantee)	Sqm	510.00	2125.00	10,83,750.00
15	12.41	Providing and fixing in position roof tile under lay using 12mm thick(minimum) Moisture/fire Resistance heavy duty fibre cement board(High Pressure Steam Cured) Type A,Category 4 conforming to IS 14862:2000, fixed on Steel frame work of 610mmx610mm or 610mmx1220mm grid by counter sunk stainless screw @ 300mm C/C all complete as per the drawings. The boards are to be fixed on the frame work in staggered manner keeping a uniform gap of 2mm.Finally, the roof tile like Shingles/Mangalorian Tiles etc may be laid on the board substrate by sealing the joints properly with filler material or sealant to ensure no leakage through joints. All completeas per drawings, specification and as per direction of Engineer-in-Charge. Note - MS Section structure and roof tile like Shingles/Mangalorian Tiles etc cost will be paid seprately.	Sqm	1503.00	2125.00	31,93,875.00
16	Non SOR	Providing and applying of 2.7mm per layer -total thickness 5.4mm of High Definition, Laminated Asphalt based roofing shingles (having 50 yrs. product warranty and wt of 12.00 kg per sqm) with the help of torch-on method etc all complete as per specs.	Sqm	1350.00	2125.00	28,68,750.00
17	Non SOR	Providing and covering the entire ridges with SBS bitumen modified of Technonicol , high end, factory made ridge called HIP and Ridge with the help of nailing method	Rm	550.00	440.00	2,42,000.00

18	13.65	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade: Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture. SOR 13.65	sqm	80.00	174.00	13,920.00
19	11.29.1	Providing and laying gang saw cut 18 mm thick, mirror polished premoulded (wherever required) and pre polished machine cut granite stonework in flooring of required size shape of approved shade, color and texture in flooring laid over 20 mm thick base of cement mortar 1:4 (1 Cement: 4 sand) including grouting the joints with white cement mixed with matching pigments epoxy touch ups etc. complete as per direction of Engineer-in-Charge. : 11.29.2 SArea of slab upto 0.50 sqm 11.29.2.1 Granite (fine grained) Fine grained granite dark Black/dark Red/ White or equivalent with self design/ pattern/crystals of other colors of glitte	Sqm	2705.00	150.00	4,05,750.00
20	11.36	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and mirror polishing complete with base of cement mortar 1 : 4 (1 cement : 4 sand) having thickness of slab 25 mm (Area of slab to be over 0.25 sqm) Note: - Deduction shall be made for not mirror polishing according to item no 11.43	Sqm	1174.00	375.00	4,40,250.00
					TOTAL	**1,55,17,841**

Beautification of OHT

NO	SOR No.	PARTICULARS OF ITEM	UNIT	RATE	QTY.	AMOUNT
3	MPPWD Jan.-2024, 2.7.1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including dressing of sides and ramming of bottom disposal of excavated earth, lead up to 50m and lift up to 1.5m, disposed earth to be levelled and neatly dressed. (No extra lift is payable if work is done by mechanical means) All kinds of soil	Cum	147	150.00	22,050.00
4	MPPWD Jan.-2024, 4.1.2.1	Supplying and filling in plinth under floors including watering ramming consolidating in layers not exceeding 20cm in depth and dressing complete.With hard muram having CBR >12 % at under floors including watering, ramming and compacting (minimum compaction 95% of MDD) in layers not exceeding 20cm in thickness and dressing complete. (Note:- maximum thickness of this layer to be provided shall be 30cm)	Cum	331	110.00	36,410.00
5	MPPWD Jan.-2024, 2.26	Supplying and filling in plinth with crusher stone dust / coarse sand under floors including, watering, ramming and compacting in layers not exceeding 20cm in depth and dressing complete. Note: - Maximum thickness of this layer shall be 20 cm.	Cum	672.00	85.00	57,120.00
6	MPPWD Jan.-2024, 4.1.2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : With 40mm nominal size graded stone aggregate.With 40 mm metal With 40mm nominal size graded stone aggregate.M-15 - Grade concrete	Cum	4403.00	65.00	2,86,195.00
7	NSR Approved in Pedestrian Bridge Project	Providing & fixing of 40 mm thickness Basalt Stone Shot Blasted as per given design and patern including preparing the surface and levelling in the desired line, laid in 20mm thickness 1:2 cement mortor bed including cement float, machine cutting dressing, levelling, jointing, filling joint with matching colour cement slury/cement mortor (1:2) inclusive of pointing the joint (Joints thickness 3mm) fixed over surface /concrete bed or as shown on the drawing, curing, finishing, champhored edges wherever necessary etc complete as directed by Engineer -in -charge	Sqm	3891.00	135.00	5,25,285.00
8	NSOR approved in MRIDA	Wall art work (2D/3D Painting) - Providing and painting 2D/3D Painting including all material and labour complete as per Engineer-In-Charge	Sqm	1224.00	155.00	1,89,720.00
9	MPPWD Jan.-2024, 14.58.2	40 mm thick stone flooring over 20 mm (average)thick base of cement mortar 1:5 (1 cement : 5 sand) including pointing with cement mortar 1:2 (1 cement : 2 sand) with an admixture of pigment to match the shade of stone. Red sand stone / White sand stone) stone to be supplied by the department.	Sqm	207.00	135.00	27,945.00
10	MPPWD Jan.-2024, 7.31.1	Providing and fixing stone jali 40mm thick throughout in cement mortar 1:3 (1cement :3 sand) including pointing in white cement mortar 1:2 (1white cement: 2stone dust) with an admixture of pigment , matching the stone shade, jali slab without any chamfers etc.	Sqm	5797.00	100.00	5,79,700.00

11	MPPWD Jan.-2024, 22.6	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying a) After surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. b) Laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. c) Third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30cm on parapet wall and tucked into groove in parapet all around.	Sqm	338.00	45.00	15,210.00
TOTAL						**17,39,635**

Internal Electrical Work

Item No.	Sub Item No.	Item Name	Description of Item	Unit	Rate (in Rs.)	Qty.	Amount
4.1		**Point wiring concealed rigid P.V.C. conduit**	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5sq. mm. PVC insulated FRLS copper earth continuity conductor of green colour inside conduit, screwless connector for joints etc. as required as per specification for :-		Using modular accessories		
	4.1.1	**Light/fan points primary**	**Light point/fan points.**				
	4.1.1.1	Short	Primary short point	Each	451.00	50	22550
	4.1.1.2	Medium	Primary medium point	Each	830.00	50	41500
	4.1.1.3	Long	Primary long point	Each	1300.00	30	39000
	4.1.2	**Looping point secondary**	**(Light point/fan points) looping point**				0
	4.1.2.1	Short	Secondary short point	Each	226.00	50	11300
	4.1.2.2	Medium	Secondary medium point	Each	415.00	30	12450
	4.1.2.3	Long	Secondary long point	Each	650.00	20	13000
	4.1.3	**Socket 6A sep. board**	**3 Pin 6 Amp socket outlet on separate board**				0
	4.1.3.1	Short	Short point	Each	574.00	30	17220
	4.1.3.2	Medium	Medium point	Each	990.00	20	19800
	4.1.3.3	Long	Long point	Each	1515.00	15	22725
	4.1.4	**Call bell point**	**Call bell/buzzer points**				0
	4.1.4.1	Short	Short point	Each	455.00	5	2275
	4.1.4.2	Medium	Medium point	Each	797.00	5	3985
	4.1.4.3	Long	Long point	Each	1183.00	5	5915
	4.1.5	**Twin control point**	**Twin control light points**				0
	4.1.5.1	Short	Short point	Each	531.00	5	2655
	4.1.5.2	Medium	Medium point	Each	948.00	10	9480
	4.1.5.3	Long	Long point	Each	1453.00	20	29060
4.2		**Socket same board 6A**	Point wiring (excluding metallic switch box & sheet but including switches, sockets) for 3 pin 6 Amp. socket outlet point with 1.5sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board.	Each	265.00	20	5300
4.3		**Circuit wiring 2.5Sq. mm**	Wiring for circuit wiring with PVC insulated cable FRLS with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) of ISI marked suitable size etc. as required as per specification				
	4.3.2	4 Wire	4x2.5 Sq.mm.	Metre	224.00	100	22400

9.1		**Power point wiring concealed rigid P.V.C. conduit**	Point wiring (excluding metallic switch box & sheet) for 3 Pin 16 Amp. socket outlet point with 4sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size etc. with 20/16 Amp. F.T. switch & socket/S.S. combined 20/16/6 Amp. of ISI marked and 4sq. mm. PVC insulated FRLS copper earth continuity conductor of green colour inside conduit, screwless connector for joints as per specification for :-		Using modular accessories		
	9.1.1	**Power point**	**On separate board**				
	9.1.1.1	Short	Short point	Each	985.00	20	19700
	9.1.1.2	Medium	Medium point	Each	1749.00	15	26235
	9.1.1.3	Long	Long point	Each	2612.00	20	52240
	9.1.1.4	Ex. long-I	Extra long-I	Each	3648.00	20	72960
	9.1.1.5	Ex. long-II	Extra long-II	Each	4771.00	20	95420
	9.1.1.6	Ex. long-III	Extra long-III	Each	5986.00	30	179580
9.2		**Same board**	Same board switch & socket 16 Amp./S.S. combined 20/16/6 Amp	Each	437.00	20	8740
15.1		**Surface PVC conduit MMS**	Supplying and fixing PVC conduit as required confirming to IS 9537 (Part-3), ISI marked along with accessories on surface etc. as required.				
	15.1.2	25 mm. MMS	PVC conduit 25 mm. (MMS)	Metre	67.00	500	33500
	15.1.3	32 mm. MMS	PVC conduit 32 mm. (MMS)	Metre	102.00	750	76500
16.1		**Concealed PVC conduit HMS**	Supply and fixing PVC conduits required confirming to IS 9537 (Part-3), ISI marked along with the accessories in concealed system etc. as required.				
	16.1.2	25 mm. HMS	PVC. conduit 25 mm (HMS)	Metre	74.00	250	18500
	16.1.3	32 mm. HMS	PVC. conduit 32 mm (HMS)	Metre	115.00	250	28750
17.1		**PVC casing and capping (double fold)**	Supplying and fixing PVC casing and capping (double fold) ISI marked along with accessories on surface etc. as required				

	17.1.2	25 mm x 12mm	PVC casing and capping (double fold) 25 mm x 12mm	Metre	34.00	150	5100
	17.1.3	32 mm x 12mm	PVC casing and capping (double fold) 32 mm x 12mm	Metre	39.00	100	3900
18.2		**Modular G.I. metal box (concealed)**	Supplying and fixing of approved make modular type G.I. metal box 1.2mm minimum thick and depth 50mm for single row boxes and 60mm depth for two/three row boxes earth terminal stud with nut and washer with modular base and cover plate including fixing in concealed etc. as required for:-				
	18.2.1	G.I box 1 Or 2 module	1Or 2 Module metal box	Each	182.00	15	2730
	18.2.2	G.I box 3 module	3 Module metal box	Each	216.00	20	4320
	18.2.3	G.I box 4 module	4 Module metal box	Each	244.00	20	4880
	18.2.4	G.I box 6 module	6 Module metal box	Each	309.00	20	6180
	18.2.5	G.I box 8/9 module	8/9 Module metal box	Each	373.00	15	5595
	18.2.6	G.I box 12 module	12 Module metal box	Each	502.00	20	10040
23.1		**Sub mains in recessed/concealed rigid PVC conduit (HMS)**	Wiring for sub-mains with PVC insulated cable FRLS with copper multi strand conductor ISI marked in recessed/concealed rigid PVC conduit (HMS) ISI marked of suitable size (conduit included) including 2mm thick accessories, connection etc, as required as per specification. (Refer General Notes for Classification of Conduit Wiring Point No.10)				
	23.1.4	**4 Wire**	**4 Wire sub main**				
	23.1.4.2	4.0 sq. mm. cable	4.0 sq. mm. cable	Metre	295.00	500	147500
	23.1.4.3	6.0 sq. mm. cable	6.0 sq. mm. cable	Metre	398.00	750	298500
25.6		**Automatic transfer switches (ATS)**	Supply of ISI Marked **AutomaticTransfer Switches (ATS)** confirming to IEC : 60947-1 & IEC : 60947-6-1 with automatic inbuilt time delay 4 pole, 415 V with two earthing terminals if required.				
	25.6.10	315A (with enclosure)	315 Amp (with enclosure)	Each	69992.00	1	69992
27.3		**MCCB 3Ph & N, 4Pole, 50Hz, 415V (thermal - magnetic release)**	Supplying of ISI marked and approved make of moulded case circuit breaker (MCCB) suitable for 3 phase & N, **4 pole**, 50 Hz, 415 Volts, (Ics=100%Icu) AC supply **with thermal-magnetic release** having respective breaking capacity (KA) at 415 Volts cited against their range standard conforming to IS/IEC 60947-2				

	27.3.1	MCCB 63 to 100A, 25kA, 4P	MCCB 25kA current rating - **63 to100Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	9781.00	3	29343
	27.3.2	MCCB 125A, 25kA, 4P	MCCB 25kA current rating - **125Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	11593.00	4	46372
	27.3.5	MCCB 160A, 36kA, 4P	MCCB 36kA current rating - **160 Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	18923.00	3	56769
	27.3.6	MCCB 200A, 36kA, 4P	MCCB 36kA current rating - **200Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	21950.00	2	43900
	27.3.7	MCCB 250A, 36kA, 4P	MCCB 36kA current rating - **250Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	27693.00	1	27693
	27.3.8	MCCB 315A, 36kA, 4P	MCCB 36kA current rating - **315Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	30528.00	1	30528
	27.3.9	MCCB 400A, 36kA, 4P	MCCB 36kA current rating - **400Amp** & adjustable overload setting 80% -100% of In, adjustable short circuit setting 6-10 In 4 Pole	Each	31907.00	1	31907
27.8		**MCB 'C' Series, 240/415V, 50 Cycle, 10kA/15kA**	Supply of ISI marked and accepted standard of miniature circuit breaker (MCB) of **'C' series** with short circuit indication, suitable for 240/415 Volts,50 Cycle, 10 kA/15 kA Value AC supply conforming to IS : 8828 : 1996, IEC : 60898 :2002 & 60947-2 but without enclosures :-				
	27.8.1	**Single pole**	**Single pole**				
	27.8.1.1	MCB SP 0.5A to 5A, 10kA	MCB SP 0.5Amp to 5Amp 10kA rating	Each	439.00	100	43900
	27.8.1.2	MCB SP 6A to 32A, 10kA	MCB SP 6Amp to 32Amp 10kA rating	Each	263.00	150	39450
	27.8.1.3	MCB SP 40A, 10kA	MCB SP For 40Amp 10kA rating	Each	611.00	30	18330
	27.8.2	**Double Pole**	**Double pole**				
	27.8.2.2	MCB DP 6A to 32A, 10kA	MCB DP 6Amp to 32Amp 10kA rating	Each	887.00	8	7096

	27.8.2.4	MCB DP 50A to 63A, 10kA	MCB DP 50Amp to 63Amp 10kA rating	Each	1478.00	8	11824
	27.8.4	**Four pole**	**Four pole**				
	27.8.4.2	MCB FP 6A to 32A, 10kA	MCB FP 6Amp to 32Amp 10kA rating	Each	1965.00	20	39300
	27.8.4.3	MCB FP 40A, 10kA	MCB FP For 40Amp 10kA rating	Each	2714.00	10	27140
	27.8.4.4	MCB FP 50A to 63A, 10kA	MCB FP 50Amp to 63 Amp 10kA rating	Each	2795.00	15	41925
	27.8.4.5	MCB FP 80A, 15kA	MCB FP 80Amp 15kA rating	Each	10806.00	20	216120
	27.8.4.6	MCB FP 100A, 15kA	MCB FP 100Amp 15kA rating	Each	11264.00	15	168960
	27.8.4.7	MCB FP 125A, 15kA	MCB FP 125Amp 15kA rating	Each	12724.00	10	127240
27.11		**SPN MCB DB**	Supply of approved make powder coated sheet steel encloser SPN MCB DB inclusive of busbar, neutral bar, earth bar, connection copper wire not less than 16 sq.mm & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator)-				
	27.11.2	4 Way single door	4 Way single door	Each	1097.00	5	5485
	27.11.4	6 Way double door	6 Way double door IP 43 protection	Each	1846.00	5	9230
	27.11.5	8 Way double door	8 Way double door IP 43 protection	Each	2127.00	5	10635
	27.11.6	12 Way double door	12 Way double door IP 43 protection	Each	2738.00	4	10952
	27.11.7	16 Way double door	16 Way double door IP 43 protection	Each	3415.00	4	13660
27.12		**TPN MCB DB double door**	Supplying of approved make TPN MCB DB metal double door IP 43 protection with provision for FP MCB/ Isolator/ RCCB/ RCBO as incomer and SP MCBs as outgoing inclusive of busbar, neutral bar, earth bar, connection copper wire not less than 16 sq.mm & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator):				
	27.12.2	4 Way (8+12)	4 Way (8+12)	Each	4444.00	5	22220
	27.12.3	6 Way (8+18)	6 Way (8+18)	Each	5526.00	5	27630
	27.12.4	8 Way (8+24)	8 Way (8+24)	Each	6716.00	5	33580
	27.12.5	12 Way (8+36)	12 Way (8+36)	Each	9519.00	2	19038

27.13		**Vertical TPN MCB DB double door**	Supplying of approved make vertical TPN MCB DB metal double door IP 43 protection with provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP/TP MCBs as outgoing inclusive of busbar, neutral bar, earth bar, & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator)				
	27.13.2	6 Way (8+18)	6 Way (8+18)	Each	15436.00	3	46308
	27.13.3	8 Way (8+24)	8 Way (8+24)	Each	17263.00	3	51789
	27.13.4	12 Way (8+36)	12 Way (8+36)	Each	23179.00	3	69537
27.21		**RCBOs**	Supplying and installing of RCBOs (Residual current circuit breaker with overload and short circuit protection) ISI marked complete as per I.S. standard conforming to IEC:61009-1 & IS:12640-2, 240/415V 50 Hz with 10 kA short circuit withstand capacity for earth leakage, overload & short circuit protection including connection in existing enclosure in approved manner as per specification.				0
	27.21.2	**FP (8 Module)**	**FP (8module)**				0
	27.21.2.6	4 Pole 25A-32A, 100A/300mA	4 pole 25-32Amp, 100/300mA sensitivity	Each	6476.00	5	32380
	27.21.2.7	4 Pole 40A, 100/300mA	4 pole 40Amp, 100/300mA sensitivity	Each	7180.00	5	35900
	27.21.2.8	4 Pole 63A, 100/300mA	4 pole 63Amp, 100/300mA sensitivity	Each	7926.00	5	39630
28.4		**Fixing of MCB/MCCB/ Isolator, (labour only)**	Fixing of MCB/MCCB/Isolator in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete (labour only)				
	28.4.1	MCB/Isolator SP/DP	MCB/Isolator SP/DP	Each	22.00	250	5500
	28.4.2	MCB/MCCB Isolator TP/TPN/FP	MCB/MCCB Isolator TP/TPN/FP	Each	28.00	120	3360
28.5		**Labour charges**	Labour charges for fixing sheet steel enclosure, **MCB DB surface mounting type**, as per accepted practice on **25x5mm** flat iron clamp duly embedded in wall, cable connection etc. complete.				
		For Item	For item no :-				

	28.5.1	Item SOR no.	27.11.1 to.27.11.4	Each	517.00	145	74965
	28.5.2	Item SOR no.	27.11.5 & 27.12.1 to 27.12.2	Each	545.00	120	65400
	28.5.3	Item SOR no.	27.12.3 to 27.12.4 & 27.13.1	Each	572.00	80	45760
28.6		**Labour charges**	Labour charges for fixing sheet steel enclosures, **MCB DB surface mounting type**, as per accepted practice on **25x25x 5 mm** angle iron clamp, including supplying and fixing of clamp duly embedded in wall, cable connection etc. complete :-				
		For Item	For item no :-				
	28.6.1	Item SOR no.	27.11.6 & 27.11.7; 27.12.5 ; 27.13.2 to 27.13.4 & 27.14.1 to 27.14.4 ; 27.15.1 to 27.15.4	Each	414.00	50	20700
28.8		**Labour charges**	Labour charges for fixing sheet steel enclosures, **MCB/MCCBDB flush mounting type**, as per accepted practice, duly embedded and end plate completely flushed in wall, cable connection etc. complete :-				
		For item	For item no :-				
	28.8.1	Item SOR no.	27.11.1 to 27.11.7 ; 27.12.1 to 27.12.3 & 27.13.1	Each	268.00	20	5360
	28.8.2	Item SOR no.	27.12.4 & 27.12.5 ; 27.13.2 to 27.13.4 ; 27.14.1 to 27.14.4 & 27.15.1 to 27.15.4	Each	297.00	20	5940
	28.8.3	Item SOR no.	27.16.1 & 27.16.2 ; 27.16.5 & 27.16.6	Each	2788.00	15	41820
	28.8.4	Item SOR no.	27.16.3 & 27.16.4 ; 27.16.7 to 27.16.9, 27.16.12, 27.16.13	Each	3527.00	15	52905
	28.8.5	Item SOR no.	27.16.10 to 27.16.11	Each	3532.00	20	70640
29.3		**Call bell**	Supply and fixing as per specification call bell/buzzer of approved make with necessary materials complete.				
	29.3.4	Multi sound bell	Multi sound bell	Each	205.00	5	1025
	29.3.5	Remote/cordless bell	Remote/cordless bell	Each	969.00	10	9690
29.15		**Danger board**	Supply and fixing as per specification caution/danger board of approved make with necessary material complete.				
	29.15.1	200 X 150 mm, For MV/LT	Small size 200 X 150 mm for MV/LT	Each	97.00	30	2910

	29.15.2	250 X 200 mm, For	Large size 250 X 200 mm for	Each	155.00	20	3100
29.25		**Modular electronic fan regulator**	Supply and fixing of approved make step type modular electronic fan regulator including connection etc. as required on existing board				0
	29.25.2	2 Module	100 Watt(2 module)	Each	484.00	50	24200
29.27		**LT panel**	Supply, fixing, testing & commissioning wall/floor mounted LT panel primer coated with powder coated paint & provided with required gasket for dust/vermin proof with degree of protection IP42 suitable for 415Volt 3 phase, 50 Hz, 4 wire system fabricated out of CRCA sheet upto 2 mm thick (1.6 mm for doors) duly compartmentalized for incomer, bus section, outgoings, cable alleys & CT, PT Ampere Metre, Volt Metre, selector switches, frequency Metre, phase indicating lamp, Energy Metre complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs, ACB, panel mounted changeover switch/SFUs, etc. as required but excluding cost of busbar strips, Ampere Metre, Volt Metre, selector switch as per approved design & specification	Kg	397.00	500	198500
29.28		**LT panel accessories**	Supply and fixing of LT panel accessories of approved make in existing LT panel including connections etc. as required as per specification.				
	29.28.1	Digital Ampere Metre	Digital Ampere Metre with CTs with selector switch	P.SET	2125.00	3	6375
	29.28.2	Digital Volt Metre	Digital Volt Metre with selector switch & HRC fuse	P.SET	2398.00	3	7194
	29.28.3	Frequency Metre	Frequency Metre	Each	1435.00	3	4305
	29.28.4	Multifunction Meter	Multifunction Meter	Each	2587.00	3	7761
	29.28.5	Copper bus bar strips	Copper bus bar strips with PVC sleeves	Kg	788.00	50	39400
	29.28.6	Aluminium bus bar strips	Aluminium bus bar strips with PVC sleeves	Kg	284.00	150	42600

	29.28.7	LED lamp indicator	LED lamp indicator	Each	255.00	15	3825
29.29		**Capacitor Duty Contactor**	Supplying and fixing of capacitor duty contactor of approved make in existing power factor/LT panel including connections etc.as required as per specification.				
	29.29.5	For 12.5 kVAR	For 12.5 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	1831.00	2	3662
	29.29.6	For 15 kVAR	For 15 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	2512.00	2	5024
	29.29.7	For 20 kVAR	For 20 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	2948.00	2	5896
	29.29.8	For 25 kVAR	For 25 KVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	3261.00	2	6522
	29.29.9	For 30 kVAR	For 30 kVAR 440V,3Ph,50Hz, Aux contact-1NO	Each	4353.00	2	8706
29.30		**APFC relay**	Supplying and fixing of APFC relay 1A/5 A site selectable, measurement of individual current and voltage harmonic (THD), capacitor failure indication, In-built temperature sensor of approved make in existing power factor Panel including connections etc. as required as per specification as mentioned below :				
	29.30.1	8 Step relay	8 Step APFC relay (144 x144mm)	Each	13351.00	1	13351
	29.30.2	12 Step relay	Automatic power factor relay 12 Steps 230V 144 x 144mm	Each	17505.00	1	17505
29.31		**CT**	Supplying and fixing of CT 1A/5A as per site selectable busbar dimension of approved make in existing main panel for power factor Panel including connections etc. as required as per specification.	Each	1664.00	1	1664
29.32		**Analog time switch for automatic ON - OFF street light**	Supplying and fixing of analog time switch for automatic ON - OFF street light of approved make in existing LT panel including connections etc. as required as per specification	Each	2689.00	3	8067

30.1		**Electric ceiling fan**	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS :374/2019 with upto date amendments.				
	30.1.2	1200 mm sweep	Ceiling Fan (ISI marked)-1200 mm Sweep, with minimum air delivery 210 m^3/min and service value ≥ 4.00 as per BEE..	Each	2292.00	50	114600
30.2		**Wall mounting fan**	Supplying, erection and testing of approved make wall mounting fan oscillating type with base, blades, guard, speed regulator etc. AC 230-250 volts with connections and including raw bolt/anchor hole fastener etc. complete finished and as required.				
	30.2.1	300 mm	300 mm sweep	Each	2478.00	10	24780
	30.2.2	400 mm	400 mm sweep	Each	2810.00	10	28100
30.3		**Cabin fan**	Supplying, erection and testing of approved make cabin fan oscillating type with base, blades, guard, speed regulator etc. AC 230-250 volts with connections and including raw bolt/anchor hole fastener etc. complete finished and as required.				
	30.3.1	300 mm	300 mm sweep	Each	2479.00	5	12395
30.6		**Exhaust fan heavy duty**	Supplying, erecting and testing of approved make exhaust fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/anchor hole fasteners etc. complete finished and as required.				
	30.6.1	300 mm	300mm sweep RPM 900 / 1400	Each	2571.00	20	51420
	30.6.3	450 mm	450mm sweep RPM 900 / 1400	Each	4259.00	10	42590

30.13		**Down rod for ceiling fan**	Supply and fixing M.S. down rod 14 SWG (2mm) thick for ceiling fan including threading, painting, making holes etc. as required complete. Note: For new works difference of installed & standard down rod length shall be paid.	Metre	114.00	50	5700
31.3		**LED tube rod fixture**	Supply and fixing Led tube rod comprising of LED tube with non- integral/integral driver, upto 6500K color temp having 40000 burning hrs life with minimum @ L 70, system lumen output should be minimum with system efficacy> 100 lm/Watt. LED driver PF> 0.95 & THD < 20%. The colour rendering index of LED light should be more than 70. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.				
	31.3.3	Tube light LED 1 X 18W	Tube light LED 1 X 18Watt, Integral i/c batten aluminium body, PC diffuser.	Each	713.00	20	14260
31.4		**LED Panel (recessed mounting)**	Supply and fixing of recessed 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 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 wire, testing etc. to complete the job.				
	31.4.1	2' X 2', 36W, 3000-6500k	LED luminiare 2' X 2', 36Watt, color temp 3000-6500k as required.	Each	3103.00	30	93090

31.5		**LED light (surface mounting)**	Supply and fixing 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 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 wire, testing etc. to complete the job.				
	31.5.1	2' X 2', 36W, 3000-6500k	LED luminiare 2' X 2', 36Watt, color temp 3000-6500k as required.	Each	4384.00	30	131520
31.6		**LED down lighter (recessed mounting)**	Supply and fixing recessed mounting LED down lighter, 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 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 pressure die cast aluminium/CRCA powder coated frame with glare free diffused polycarbonate cover. Submission LM 79- 08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job..				
	31.6.5	14/15W	14/15 Watt, color temp 3000-6500k as required.	Each	1150.00	30	34500

31.7		**LED down lighter (surface mounting)**	Supply and fixing 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. 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, IEC61347i/c connection wire, testing etc. to complete the job..				
	31.7.4	14/15W	14/15 Watt, color temp 3000-6500k as required.	Each	1400.00	40	56000
31.17		**LED strip**	Supplying, fixing & testing of approved make flexible LED strip comprising of 60 LED per meter W/O driver for direct mounting complete with all accessories including connection lead, fixing, connection as required. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.				
	31.17.2	72/75W	Flexible LED strip 72Watt/75Watt - 5 M indoor light W/O driver IP 20 - 33	Each	1859.00	100	185900
	31.17.4	72/75W	Flexible LED strip 72Watt/75Watt - 5 M outdoor light W/O driver IP65	Each	2805.00	150	420750
31.18		**Power supply for LED strip**	Supplying, fixing & testing of approved make Power supply for LED strip				
	31.18.6	72/75W	Power supply 72Watt/75Watt for LED strip IP65	Each	3905.00	100	390500
31.20		**Integral step/skirt LED light**	Supply, fixing and testing of approved make integral step/skirt LED light suitable for 3 module box and plate including fixing on wall as required, with necessary material to complete the job. Guarantee as per tender agreement condition.	Each	676.00	20	13520

35.1		**Dismantling of point/circuit wiring accessories**	Dismantling of existing light/fan/ bell/socket out let point on separate board/wiring and circuit with insulated wire in casing/conduit/ batten complete with fitting and accessories	Per point	16.00	50	800
35.2		**Making the site clear of the dismantled installation**	Making the site clear of the dismantled installation by refilling the hole with cement mortar & finished with paint gitties and replacing to match the colour& wall ceiling.	Per point	27.00	50	1350
35.3		**Dismantling of existing socket**	Dismantling of existing socket outlet point on same board in any system of wiring	Per point	8.00	50	400
35.4		**Dismantling the existing armoured/unarmoured cable**	Dismantling the existing armoured/unarmoured cable or 2/3/4 wires of submain, main, in any system of wiring including recoiling.	Metre	8.00	50	400
35.5		**Dismantling of existing underground cable**	Dismantling of existing underground cable safely with its accessories and refilling the trench to ground level including recoiling of dismantled cable.	Metre	29.00	500	14500
35.6		**Dismantling of boards or angle/flat and making site clear**	Dismantling of D.F. board, D.P. switch, T.P. & T.P.N. switch or D.B. of any size complete with board or angle/flat iron frame and making site clear including the refilling hole & repainting to match colour of wall.	Each	30.00	100	3000
35.7		**Dismantling of boards/switches**	Dismantling of D.F. board, D.P. switch, T.P. & T.P.N. switch or D.B. of any size only	Each	10.00	100	1000
35.8		**Dismantling of fans**	Dismantling the existing ceiling/exhaust/cabin fan with complete accessories and making the site clear.	Each	37.00	50	1850
37.1		**With G.I. earth pipe**	Earthing with G.I. earth pipe 4.5 metre long and 40 mm dia with masonry encloser in cement mortar, cover plate having locking arrangement on the top etc. (but without charcoal or coke and salt) complete as required	Each	3312.00	20	66240
37.2		**Add extra for using salt and charcoal/coke for pipe earth electrode**	Add extra for using salt and charcoal/coke for pipe earth electrode as required including excavation & refilling				0

	37.2.1	Excavation	Excavation 4.5 m by manual labour	Each	1942.00	10	19420
	37.2.2	Excavation	Excavation by making hole with auger	Each	1622.00	10	16220
37.3		**Earthing with G.I. earth plate 600x600x6 mm**	Earthing with G.I. earth plate 600mm X 600mm X 6mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	Each	7487.00	20	149740
37.4		**Earthing with copper earth plate 600x600x3 mm**	Earthing with copper earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	Each	16341.00	5	81705
37.5		**Add extra for using salt and charcoal/ coke for G.I /copper plate (murrum)**	Add extra for using salt and charcoal/coke for G.I. plate or copper plate earth electrode as required including excavation and refilling the pit in all type of soil, murrum	Each	1655.00	45	74475
	37.5.1	Add extra for using salt and charcoal/coke for G.I/copper plate (black soil)	Add extra for using salt and charcoal/coke for G.I. plate or copper plate earth electrode as required including excavation in hard rock and refilling the pit with black soil.	Each	2783.00	45	125235
37.6		**GI wire conductor earth electrode**	Supply and laying 4.0mm (8 SWG) dia. G.I. wire at 0.5 metre below ground level as conductor earth electrode including jointing etc. as required.	Metre	21.00	1500	31500
37.7		**Cu wire conductor earth electrode**	Supply and laying 4mm dia. copper wire at 0.5 metre below ground level as conductor earth electrode including soldering etc. as required.	Metre	114.00	500	57000
37.8		**G.I. wire conductor earth electrode**	Supply and laying 4.87mm 6 SWG G.I. wire at 0.5 metre below ground level as conductor earth electrode including jointing etc. as required.	Metre	25.00	800	20000
37.10		**25x6 mm G.I. strip**	Supply and laying 25mm X 6mm G.I. strip at 0.5 metre below ground level/surface as strip earth electrode including jointing etc. as required.	Metre	147.00	1200	176400

37.11		**25x5 mm Cu strip**	Providing and fixing 25mm X 5mm copper strip in 40 mm dia G.I. Pipe from earth electrode as required	Metre	1490.00	150	223500
37.21		**Lightning conductor**	**Lightning conductor**				
	37.21.1	**18mm dia 500mm long bright nickel plated copper tube**	Providing and fixing of **lightning conductor** finial made of 18mm dia 500mm long bright nickel plated **copper tube** tapered having single prong at top with bright nickel plated brass base M10 for connection and intersection of flat or round conductor including holes, clamp complete as required.	Each	3947.00	5	19735
37.24		**Riveting/sweating and soldering**	Riveting/sweating and soldering of copper/G.I. Tape (with another copper/G.I. Tape, base of finial or any other metallic object) as required	Each	107.00	5	535
37.25		**Cu. tape 20x3 mm (for horizontal runs)**	Providing and fixing copper tape 20mm X 3mm thick on parapet and surface of wall of lightning conductor as required (for horizontal runs)	Metre	567.00	500	283500
37.29		**Fixing cu./G.I. tape 20x3 mm (for horizontal runs)**	Fixing of copper/G.I. tape 20mm X 3mm thick on parapet and surface of wall for lightning conductor as required (for horizontal runs)	Metre	23.00	500	11500
37.30		**Fixing cu./G.I. tape 20x3 mm (for vertical runs)**	Fixing of copper/G.I. tape 20mm X 3mm thick on parapet and surface of wall for lightning conductor as required (for vertical runs)	Metre	27.00	500	13500
37.31		**Testing joint 20x3 mm cu. strip**	Providing and fixing "Testing Joint" made by 20mm X 3mm thick copper strip 125mm long with 4 Nos of tinned Brass bolts, Nut, check nuts and spring washers etc. complete as required.	Each	525.00	50	26250
37.42		**Polycarbonate heavy duty pit cover**	Supply and installation of polycarbonate heavy duty pit cover tested for 5000Kg SWL for earth electrode at ground level size 300x300x155 mm with lockable lid.	Each	1501.00	10	15010
				Total Amount			6755270

External Electrical Work							
Item No.	**Sub Item No.**	**Item Name**	**Description of Item**	**Unit**	**Rate (in Rs)**	**Qty.**	**Amount**
41.1		**XLPE insulated power cable, al. conductor**	Supply of XLPE insulated power cable (conforming IS-7098 Part-I) 1100 Volt grade, 1 core/2 core/3½ core/4 core ISI marked with alu. stranded /solid conductor				
	41.1.8	**3½ core armoured**	**3½ core armoured**				
	41.1.8.1	25 sq. mm	25 sq. mm	Metre	231.00	350	80850
	41.1.8.3	50 sq. mm	50 sq. mm	Metre	373.00	250	93250
	41.1.8.4	70 sq. mm	70 sq. mm	Metre	500.00	350	175000
	41.1.8.6	120 sq. mm.	120 sq. mm.	Metre	780.00	350	273000
	41.1.8.7	150 sq. mm.	150 sq. mm.	Metre	904.00	600	542400
	41.1.8.10	300 sq. mm.	300 sq. mm.	Metre	1792.00	500	896000
	41.1.10	**4 core armoured**	**4 core armoured**				
	41.1.10.1	6 sq. mm.	6 sq. mm.	Metre	151.00	1000	151000
	41.1.10.2	10 sq. mm.	10 sq. mm.	Metre	181.00	1000	181000
	41.1.10.3	16 sq. mm.	16 sq. mm.	Metre	218.00	500	109000
41.3		**High-tension XLPE cable, 3 core armoured al. conductor**	Supply of approved high-tension XLPE cable (conforming IS-7098/II/85) as per ISI standard 3 core armoured with alu. solid/stranded conductor ISI marked as required				
	41.3.1	**3 core XLPE cable 11 Kv grade**	**3 core XLPE cable 11 Kv grade**				
	41.3.1.8	300 sq. mm.	300 sq. mm.	Metre	2470.00	350	864500
41.5		**Gland**	**Brass compression gland**				
	41.5.1	**Gland for P.V.C. insulated armoured cable**	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, rubber ring complete erected with cable and lead connection etc. as per specification complete.				
	41.5.1.1	22 mm	Gland size 22mm suitable for cable 2,3,3½ & 4 x upto 6 sq. mm	Each	79.00	25	1975
	41.5.1.3	28 mm	Gland size 28mm for 3/4 x 16 sq. mm	Each	138.00	15	2070
	41.5.1.4	32 mm	Gland size 32 mm for 2/3, 3½, 4 x 25 sq. mm OR 2/3, 3½ x 35 sq. mm or 2/3/3½ x 50 sq. mm.	Each	158.00	20	3160
	41.5.1.5	38 mm	Gland size 38 mm 3½ x 70 sq. mm, 3x95 sq. mm	Each	219.00	20	4380
	41.5.1.7	50 mm	Gland size 50 mm ,3½ x 150 sq. mm,3 x 185 sq. mm	Each	290.00	20	5800
	41.5.1.8	57 mm	Gland size 57 mm, 3 x 225 sq. mm, 3 ½ x 185 sq. mm	Each	440.00	20	8800
	41.5.1.9	70 mm	Gland size 70 mm, 3 x 240 sq. mm, 3½ x 300 sq. mm	Each	605.00	20	12100
41.6		**Ferrules**	Supplying and fixing ferrules as per IS - specification suitable for following size of cable for circuit identification including connection as required complete				
		For conductor size-	For conductor size-				
	41.6.1	2.5-6.00 sq. mm	2.5 to 6.00 sq. mm	Each	3.00	150	450
	41.6.2	10.00 sq. mm	10.00 sq. mm	Each	4.00	150	600
	41.6.3	16.00 sq. mm	16.00 sq. mm	Each	4.00	50	200
41.7		**Crimping type alum. lugs**	Supplying and fixing crimping type alum. lugs as per I.S.S. specification suitable for following size of cable with alu./copper solid/stranded conductor evenly crimped with high/pressure tool and connected to switch gear/bus/M.C.C.B./M.C.B. etc. as required complete.				
		For conductor size-	For conductor size-				
	41.7.1	6 -16 sq. mm	6mm to 16 sq. mm	Each	8.00	200	1600
	41.7.2	25 sq. mm	25 sq. mm	Each	14.00	200	2800
	41.7.3	35 sq. mm	35 sq. mm	Each	22.00	150	3300
	41.7.4	50 sq. mm	50 sq. mm	Each	22.00	150	3300
	41.7.5	70 sq. mm	70 sq. mm	Each	35.00	50	1750
	41.7.7	120 sq. mm.	120 sq. mm.	Each	58.00	150	8700
	41.7.8	150 sq. mm.	150 sq. mm.	Each	66.00	100	6600
	41.7.11	300 sq. mm.	300 sq. mm.	Each	138.00	100	13800
41.8		**Pin terminal lugs**	Supplying & fixing pin terminal lugs as per ISS specification suitable for cable evenly cramped with high pressure tool & connection to switch gear terminal as required complete.				
	41.8.1	**Aluminum lugs pin type**	**Aluminum lugs pin type**				
	41.8.1.1	Upto 16 sq. mm conductor	Upto 16 sq. mm conductor size	Each	19.00	80	1520
	41.8.1.2	Upto 25 sq. mm conductor	Upto 25 sq. mm conductor size	Each	22.00	50	1100
	41.8.1.3	35 sq. mm conductor	35 sq. mm conductor size	Each	26.00	50	1300
41.10		**Cable end termination with heat shrinkable jointing kit**	Providing & Making cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 33 KV/11 KV 3 core XLPE alum. conductor cable as required as per specification and as per accepted standard including connection testing complete.				
	41.10.1	**11 KV XLPE, 3 core**	**Heat shrinkable joint, kit 11 KV XLPE, 3 core**				
	41.10.1.1	**11 KV XLPE cable O.D. termination**	**Heat shrinkable Jointing kit 11 KV XLPE cable O.D. termination**				
	41.10.1.1.	3 x 240-400 sq. mm.	3 x 240-400 sq. mm.	Each	11389.00	4	45556

	41.10.1.2	**11 KV XLPE cable I.D. termination**	**Heat shrinkable jointing kit 11 KV XLPE cable I.D. termination**				
	41.10.1.2.	3 x 240-400 sq. mm.	3 x 240-400 sq. mm.	Each	9470.00	4	37880
	41.10.1.3	**11 KV XLPE cable straight joint**	**Heat shrinkable jointing kit 11 KV XLPE cable straight joint**				
	41.10.1.3.	3 x 240-300 sq. mm.	3 x 240-300 sq. mm.	Each	23710.00	4	94840
41.11		**Cable straight joint/end termination with heat shrinkable jointing kit**	Supply and making cable straight joint/end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for 1.1 KV XLPE/HD alum. conductor cable as required as per specification and as per accepted standard including connection testing complete for (I.D../O.D.) termination.				
	41.11.1	**1.1 KV XLPE/HD cable end termination jointing kit**	**Heat shrinkable jointing kit 1.1 KV XLPE/HD cable end termination jointing kit (I.D./O.D.)**				
	41.11.1.4	225-300 sq. mm. 1 core	225-300 sq. mm. 1 core	Each	991.00	5	4955
	41.11.2	**1.1 KV XLPE/HD cable straight through jointing kit**	**Heat shrinkable jointing kit 1.1 KV XLPE/HD cable straight through jointing kit (I.D./O.D.)**				
	41.11.2.4	225-300 sq. mm. 1 core	225-300 sq. mm. 1 core	Each	1073.00	5	5365
	41.11.3	**1.1 KV XLPE/HD cable I.D./O.D. end termination**	**Heat shrinkable Jointing kit 1.1 KV XLPE/HD cable I.D./O.D. end termination**				
	41.11.3.4	185-300 sq. mm. 3½/4 core	185-300 sq. mm. 3½/4 core	Each	6329.00	5	31645
	41.11.4	**1.1 KV XLPE/HD cable straight through jointing kit**	**Heat shrinkable jointing kit 1.1 KV XLPE/HD cable straight through jointing kit (I.D../O.D.)**				
	41.11.4.5	300-400 sq. mm. 3½/4core	300-400 sq. mm. 3½/4core	Each	6496.00	5	32480
41.12		**G.I. pipe for protection of underground cable**	Supplying & installing G.I. pipe for protection of underground cable fixed on wall/support/in trench/fixed between two rigid existing support of wall/beam for erection of ceiling Fan/down rod for stiff pendent for light luminaries /fan/protective for earthing, lightening conductor down strip/overhead service line/for submersible cable or centrifugal pump for water supply with necessary iron clamp coupler, bend, tee, elbow, nuts and bolts etc. complete in an approved manner as required to complete excluding cost of excavation/dismantling & other finished masonry Item complete.				
	41.12.1	**For 'B' class pipe**	**For 'B' class pipe ISI marked (IS-1161-68)**				
	41.12.1.6	50.00mm	50.00mm	Metre	550.00	250	137500
	41.12.1.9	100.00mm	100.00mm	Metre	1256.00	250	314000
41.14		**Double wall corrugated pipes (DWC) of HDPE**	Supplying and installing double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid underground with necessary material and at required depth upto 90cm. below road/ground surface, excluding excavation, back filling with excavated material, ramming and making the surface good.				
	41.14.1	50.00mm outside dia.	50.00mm outside dia.	Metre	133.00	2000	266000
	41.14.4	110.00mm outside dia.	110.00mm outside dia.	Metre	252.00	1000	252000
	41.14.7	210.00mm outside dia.	210.00mm outside dia.	Metre	532.00	700	372400
41.15		**Cable laying**	**Cable laying**				
	41.15.7	Laying, 1:1 KV grade of size not exceeding 25 sq. mm in the existing item	Laying of one number armoured / unarmoured power cable 1:1 KV grade of size not exceeding 25 sq. mm in the existing RCC hume/stone ware/G.I. pipe/ DWC Pipe/ surface in existing trench as required.	Metre	28.00	2850	79800
	41.15.8	Laying, 1.1 KV grade of size exceeding 25 sq. mm but not exceeding 120 sq. mm. in the existing item	Laying of one number armoured / unarmoured power cable 1.1 KV grade of size exceeding 25 sq. mm but not exceeding 120 sq. mm. in the existing RCC Hume /Stone ware/G.I. Pipe/ DWC Pipe/ surface in existing trench as required.	Metre	35.00	950	33250
	41.15.9	Laying, 1.1 KV grade of size exceeding 120 sq. mm but not exceeding 400 sq. mm. in the existing item	Laying of one number armoured / unarmoured power cable 1.1 KV grade of size exceeding 120 sq. mm but not exceeding 400 sq. mm. in the existing RCC Hume /Stone ware/G.I. Pipe/ DWC Pipe/ surface in existing trench as required.	Metre	54.00	1100	59400
	41.15.25	Laying, 1.1KV but not exceeding 11KV of size not exceeding 300 sq. mm	Laying of one number 3 core H.T armoured/unarmoured power cable of grade exceeding 1.1KV but not exceeding 11KV of size not exceeding 300 sq. mm in the existing RCC/hume/stoneware/G.I. pipe/ DWC Pipe/surface in existing trench as required.	Metre	50.00	1000	50000
41.16		**Excavation of the trenches in hard rock**	Excavation of the trenches in hard rock not exceeding 1.5 metre in width and lift upto 1.5 metre including getting out the excavated metal and disposal of surplus excavated soil/metal as directed within the lead of 50 metre (without blasting)	Cu. Mtr.	691.00	150	103650
41.21		**Laying, cable cover/flag stone over**	Laying of cement concrete or approved type of cable cover/flag stone over L.T./H.T. cable & refill trench as per specification.	Metre	16.00	25	400
4.23		**Cable route marker round/square**	Supply &fixing cable route marker round/square size 100mm, 5mm. thick, G.I. Plate duly bolted/welded on 35mm x 35mm x 5mm angle iron 60cm long including excavation, grouting in cement concrete 1:2:4 (1cement and 2 coarse sand: 4 graded stone aggregate 20mm nominal size) foundation of size 20cm x 20cm x 30cm duly embedded in ground 30cm depth or as required.	Each	299.00	25	7475

41.24		**Cable tray**	Supply and erection of hot dip G.I. cable tray perforation not more than 17.5% for specific dimensions along with tees, bends. The cable tray shall be hang from ceiling/ fixed to wall with necessary angle/flat iron/hanging rod, for ceiling suspensions, clamp, anchor fastener, nuts, bolts, washers, not more than 1.0 mtr. apart complete as per specification to complete the job. The tray shall be as follows :-				0
	41.24.2	150x50x1.6mm thick	150 x 50 x 1.6mm thick	Metre	699.00	100	69900
	41.24.3	300x50x1.6mm thick	300 x 50 x 1.6mm thick	Metre	1027.00	100	102700
37.1		**With G.I. earth pipe**	Earthing with G.I. earth pipe 4.5 metre long and 40 mm dia with masonry encloser in cement mortar, cover plate having locking arrangement on the top etc. (but without charcoal or coke and salt) complete as required	Each	3312.00	20	66240
37.2		**Add extra for using salt and charcoal/coke for pipe earth electrode**	Add extra for using salt and charcoal/coke for pipe earth electrode as required including excavation & refilling				
	37.2.1	Excavation	Excavation 4.5 m by manual labour	Each	1942.00	10	19420
	37.2.2	Excavation	Excavation by making hole with auger	Each	1622.00	10	16220
37.3		**Earthing with G.I. earth plate 600x600x6 mm**	Earthing with G.I. earth plate 600mm X 600mm X 6mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	Each	7487.00	20	149740
37.4		**Earthing with copper earth plate 600x600x3 mm**	Earthing with copper earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 metre long etc. (but without charcoal or coke and salt) complete as required	Each	16341.00	20	326820
37.5		**Add extra for using salt and charcoal/ coke for G.I /copper plate (murrum)**	Add extra for using salt and charcoal/coke for G.I. plate or copper plate earth electrode as required including excavation and refilling the pit in all type of soil, murrum	Each	1655.00	40	66200
	37.5.1	Add extra for using salt and charcoal/coke for G.I/copper plate (black soil)	Add extra for using salt and charcoal/coke for G.I. plate or copper plate earth electrode as required including excavation in hard rock and refilling the pit with black soil.	Each	2783.00	40	111320
37.6		**GI wire conductor earth electrode**	Supply and laying 4.0mm (8 SWG) dia. G.I. wire at 0.5 metre below ground level as conductor earth electrode including jointing etc. as required.	Metre	21.00	500	10500
37.7		**Cu wire conductor earth electrode**	Supply and laying 4mm dia. copper wire at 0.5 metre below ground level as conductor earth electrode including soldering etc. as required.	Metre	114.00	250	28500
37.10		**25x6 mm G.I. strip**	Supply and laying 25mm X 6mm G.I. strip at 0.5 metre below ground level/surface as strip earth electrode including jointing etc. as required.	Metre	147.00	500	73500

37.11		**25x5 mm Cu strip**	Providing and fixing 25mm X 5mm copper strip in 40 mm dia G.I. Pipe from earth electrode as required	Metre	1490.00	150	223500
37.18		**Loop earthing**	Providing and fixing 4.87mm (6 SWG) dia. G.I. wire on surface or in recessed for loop earthing as required	Metre	30.00	60	1800
31.11		**Post top lantern LED fitting**	Supply and fixing integral post top lantern LED fitting comprises of copper dust finish cast aluminium spigot and spun aluminium canopy fixed with opal polycarbonate, pipe arrangement for vertical mounting, open construction driver and accessories are wired upto terminal block. 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 with efficacy>100lm/Watt. LED driver PF > 0.95 & surge protection 10KV. The colour rendering index of LED light should be more than 70. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.				
	31.11.1	40W	40 Watt LED, color temp 3000-6500k as required.	Each	7768.00	25	194200
31.13		**Street light with high power LED system**	Supply and fixing street light 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 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), IEC60598, IEC61347 i/c connection wire, testing etc. to complete the job.				
	31.13.5	150W	150Watt, color temp 3000-6500k as required.	Each	22936.00	30	688080
31.14		**LED flood light**	Supplying and fixing 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 & 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), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.				
	31.14.6	150W	150Watt, color temp 3000-6500k as required.	Each	21572.00	30	647160

31.16		**Bollard**	Supply, fixing & testing of approved make of LED integral type bollard cylindrical/square shape housing cast aluminium dome shape top cover fixed with cylindrical shape acrylic cover having base plate with holes for direct mounting complete with all accessories including preparation of foundation, fixing, connection etc. as required. LED of 1 to 3 Watt each assembled on single MCPCB, system lumens output with efficacy>90 lm/W. luminaire having color temp upto 6500K & 50000 burning hrs. 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. IP65 protection. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.				
	31.16.1	8-10W cylindrical shape	Bollard LED 8-10 Watt cylindrical shape height > 700mm, color temp 3000-6000k	Each	4614.00	30	138420
42.95		**12.5 meter high mast lighting**	Providing and erection on existing foundation12.5 meter high mast lighting system suitable to install 6 No. 2 x 400 w M.H/S.V/LED flood light fitting and control gear with integral Power tool, weight 340 kg. comprising of 2 section of hot dipped galvanized materials as per BSEN ISO 1461 thickness 3 mm, dia 100mm & 360mm for top and bottom respectively, stress fitting arrangement on site with 350mm overlap dynamic loading to withstand max wind pressure as per -IS 875 part III, parameters for structural & foundation design must be taken from wind tunnel test. Lightning protection of GI single spike 800mm at top and at base inside compartment with double internal lock with adequate size of MCB erected on PVC board complete with base plate of 25mm thick 520mm dia. and foundation bolts having 4 nos. bolts of 24mm dia, 750mm long (EN8 grade), Anchor plate 445 PCD, including accessories viz. (1) Lantern carriage of 50 NB ERW class-B, MS pipe covered with PVC sleeve suitable to carry 250kg. load and upto 6 fittings symmetrically. (2) Trailing copper cable 5x2.5 sq.mm, EPR insulated PCP sheathed. (3) Double drum/350kg winch having gear 53:1, oil bath (SAE90/140) arrangement. (4) 2 nos. stainless steel wire ropes 5mm dia (7/19) breaking load capacity 1450 kg.x 2. (5) Integral power tool 3-phase, 0.75 HP 2m/min single speed. (6) Feeder pillar fabricated out of 14 SWG CRCA sheet and comprise of incoming MCB 32 A TPN switch, HRC fuses, single dial timer, suitable size of contactors for lighting and power tool, 2 nos. outgoing, reversing switch for motor. (7) Foundation drawing, test certificate and guarantee certificate shall be provided by manufacturer. (without fixture and lamp)	Each	205322.00	1	205322
							0
42.98		**Octagonal poles**	Providing and erection of hot dipped galvanized octagonal poles in single section made from 3mm thick sheet having lockable weather proof flush door junction box, suitable size & type of foundation bolts 4 nos. 'J' type (EN8 grade) complete, erected in an approved manner on provided foundation.				0
	42.98.7	9 meter	9 meter height, 155 X 70mm A/F, 250x250x16mm base plate having weight 87 kg ± 3%, 4 nos. X 24 x 750mm bolt having weight 12 kg ± 3%.	Each	15447.00	15	231705
42.99		**Bakelite sheet MCBSP & stud type 4 way epoxy connector for decorative /octagonal pole box.**	Providing and fixing of bakelite sheet 10mm thick, one MCB 6Amp-32Amp SP & 16sq.mm stud type 4 way epoxy connector for decorative designer poles /octagonal pole box.	Each	323.00	50	16150
42.101		**Sword canopy type single arm GI bracket**	Providing and fixing of sword canopy type single arm GI bracket upto 2 meter Long for 90mm A/F top octagonal pole	Each	2071.00	20	41420
42.103		**Sword canopy type double arm GI bracket**	Providing and fixing of sword canopy type double arm GI bracket upto 2 meter Long for 90mm A/F top octagonal pole	Each	3496.00	10	34960
42.104		**Single arm standard bracket**	Single arm standard bracket				
	42.104.2		Providing and fixing of 1500mm long Single Arm GI Hot Dip Galvanized Bracket with 42.4mm OD and 3.2mm thick Pipe. Canopy pipe should be 500mm with 4 Nos 10mm dia Pinch bolts.	Each	3084.00	20	61680
42.105		**Double arm standard bracket**	Double arm standard bracket				
	42.105.2		Providing and fixing of 1500mm long Double Arm GI Hot Dip Galvanized Bracket with 42.4mm OD and 3.2mm thick Pipe. Canopy pipe should be 500mm with 4 Nos 10mm dia Pinch bolts..	Each	4583.00	20	91660
42.106		**Ring carriage dia**	Providing and fixing of ring carriage dia. not less than 750mm made of 50mm dia. GI pipe Light 'A' class for 70mm A/F top octagonal pole with required clamps, nut, bolt etc as required.	Each	2468.00	5	12340

42.107		**Decorative designer poles**	Providing and erection of black painted galvanized decorative designer poles in different section, top 60mm dia., bottom 140mm dia. with gold colour painted ornamental cast aluminium ring having lockable weather proof flush door junction box in bottom section, base plate dia. 290mm having 4 holes of 22mm dia. complete erected in an approved manner on existing foundation. Suitable size & type of foundation bolts 4 nos. X 16mm X 450mm 'J' type (EN8 grade)				
	42.107.3	5 meter	5 meter height	Each	23654.00	25	591350
42.108		**Casting of open raft shallow footing foundation for 12.5meter high mast**	Designing & casting of open raft shallow footing foundation with M-20 cement concrete suitable for 12.5meter High Mast considering the safe soil bearing capacity at site as 10 T/sqm at 2meter depth including excavation, foundation nut bolts in an approved manner as per manufacturer drawing or Engineer-in- charge.	Each	33771.00	1	33771
42.111		**Foundation for octagonal pole**	Designing and construction of footing foundation for octagonal pole of desired size including excavation in soil/soft rock, base concrete M-7.5 (1:4:8), 15mm thick and pedestal of RCC M-20 (1:1.5:3), required tar steel reinforcement for required size from base concrete, shuttering, curing etc. with existing foundation bolts complete as per specifications in an approved manner as per manufacturer drawing or engineer-in-charge.	Cu. Mt.	6770.00	15	101550
48.1		**DG set, Water cooled**	Supply, installation, testing and commissioning of 'Silent Type' diesel generating set comprising with diesel engine water cooled, Synchronous alternator, AMF control panel single/three phase, acoustic enclosure, battery with charger and related accessories including incoming cable 10 mtr, exhaust pipe 'B' class with insulation as per CPWD specification and CPCB - IV Norms. Note:- 1. Two No Cu plate (600mmx600mmx3mm) earthing and Two No GI plate (600mmx600mmx6mm) earthing with GI/Cu Strip to be done for each installation as per specification and will be separtely paid. 2. Suitable size of PCC/RCC plateform to be made seprately as per requirement and instruction of Enguineer-in-charge.				
	48.1.18	3 Phase, 300/320 KVA, Water cooled	Supply, installation, testing and commissioning of diesel generating set three phase, water cooled with AMF control panel**, 300/320 KVA, 415V**. With electronic governor.	Each	5209096.00	1	5209096
MPEB SOI		MPEB(M0201661)	KV, 630A, 21 KA for 3 sec SF6 insulated, (Two Incomers + Two Outgoing) consisting of 2 nos remote operated motorised load break	Each	1101696	1	1101696
MPEB SOI		MPEB(E0201661)	Supply, installation, testing and commissioning of RMU 11 KV, 630A, 21 KA for 3 sec SF6 insulated, (Two Incomers + Two Outgoing) consisting of 2 nos remote operated motorised load break	Each	100495.5	1	100495.5
			Supply, Installation, Testing and Commissioning 11kV, 315 KVA, Outdoor Package / compact Sub- Station (in compliance IEC 62271-202) shall beconsisting of following :	Each	2700000	1	2700000
			HT SWITCHGEAR				
			11kV 200Amps 21kA for 3 sec. SF6 insulated Copper Busbar Non-Extensible Ring Main Unit (Type CVC) consisting of Two Nos. of remote operated motorised Load Break Switches and One No. of Fixed remotely motorised operated vacuum Circuit Breaker unit with robotically welded having IP67 in SF 6 encapsulated stainless steel enclosure of thickness minimum 2.0. with series trip, self powered microprocessor based 3 Ph numerical over current relay (IDMTL + Inst.) protection..1 no., Protection CT of ratio-25/1A 2.5VA 5P10... 3 nos, gas pressure gauge etc. It should have metering unit complete with CTs, PTs. The SCADA system should communicate all faults,and electrical parameters like voltage, current, KW, Kwar, kwh, kvarh, pf etc.				
			TRANSFORMER				
			Three Phase, 50 Hz, Core type, two winding, 315 KVA 11KV/433V DYn11 cast resin dry type, AN type transformer. The transformer be copper wound and class F insulated. The off ckt tap changer should be +5 % to 5 % in step of 2.5% each. The transformer shall be suitable for operation at full rated power on all tapings without exceeding the applicable temperature rise. It should be possible to operate the transformer satisfactorily, with the loading guide specified in IS-6600. There shall be no limitations imposed by bushings, tap changers, auxiliary equipment to meet this requirement.				
			LT PANEL				
			433V LT Indoor panel with 630 Amps Al. Busbars 100% for Phase and 50% for Neutral , Current Density of AL- 0.8 Amp/sqmm , Fabrication using 1.5/2mm CRCA sheet steel , Ingress protection IP4X , complete with internal wiring consisting of following.				
			INCOMER FROM TRANSFORMER				
	NSR	NSR	630 Amps 433V 4P 50Hz 50KA remote wireless signal based electrically operated Type Moulded Case Circuit Breaker (MCCB) with microprocessor based overcurrent, short circuit Fault & earth fault Release, Digital Load Manager meter having SCADA communication facility and accuracy class 0.5, complete with required CTs and protection.				
			OUTGOINGS				
			250 Amps 433V 3P 50Hz 36KA, TPN Moulded Case Circuit Breaker (MCCB) with microprocessor based release release for over current and magnetic short circuit. Multi function meter of accuracyclass				
			100 Amps 433V 3P 50Hz 36KA, TPN Moulded Case Circuit Breaker (MCCB) with thermal magnetic release for over current and magnetic short circuit. Multi function meter of accuracyclass				
			OUTDOOR ENCLOSURE				

			Outdoor type enclosure having construction of Galvanised Sheet Steel of thickness minimum2mm & . Base plate should be 4mm thick. The Enclosure shall have IP54 degree of protection for HT & LT switchgear compartment & IP23 degree of protection for Transformer compartment. The enclosure exterior shall be Powder coated. Each compartment will be provided with the door and pad locking arrangement. The Compartment illumination lamp with door operated switch shall be provided for each compartment. It should be internal arc test compliaint for 20KA for 1 sec.				
			Interconnection & Earthing				
			Interconnection Between HT switchgear & Transformer using 40x 10 Cu busbar or 1Cx3x95Sq.mm XLPE Single core cable & Interconnection between Transformer & LT switchgear using Al.Busbars. Internal earthing connections by using 50x6mm GI Strips.				
			The entire packaged / compact substation should be equipped with state of art SCADA system which will communicate with central command and control centre of mppkvvcl and smart city Ujjain's control centre and should also communicate event / fault alerts on mobile application. . The SCADA system should have all hardware like RTU, power supply, analog and digital I/O devices, battery, charger, software, modems, antenna, sensors, transducers, control wiring, PC/laptop etc.				
			HT/LT Line Shifting Work as per MPEB SOR	LM	2000000	1	2000000
				Total Amount			20847317

Façade Lighting

Item No.	Sub Item No.	Item Name	Description of Item	Unit	Rate (in Rs)	Qty	Amount
56.1		**Surface wall mounted 9W LED**	Supply and fixing of IP 65, Surface wall mounted 9W LED up/downlighter decorative wall light fixture with anti glare beam angles 24deg - 36 deg as required. Fixture should be Aluminium with light reflectance surface, SS clamps, screws as required. CRI80+ NON DIM with led power supply built in color tolerance: <MacAdam 4 SDCM LED.	Each	14635.00	15	219525
56.2		**Surface/recessed ceiling mounted LED downlighter**	Supply and fixing of surface/recessed ceiling mounted LED downlighter fixture. Fixture should be Aluminium die cast, ADC 12, cable gland, SS clamps, screws as required. Glare quotient to be minimum & black body surface for glare control, should have honeycomb louvers for anti-glare, minimum 100 lm/watt, 8deg-15deg as required. working temperature-20°C +45°C IP Rating IP65 (not for permanent immersion) insulation class III. Choice of three colour temperatures as standard 2700K-5700K and delivers 90CRI for excellent colour rendering, and with binning-free LEDs carefully selected from two-step Macadam's ellipse. Fittings smart shield protected against polarity inversion, Protection class IP 65, safety class III. Safety glass, clear. Reflector made of pure anodised aluminium.				
	56.2.2	30W LED	30W LED Downlighter with honeycomb louvers	Each	26831.00	10	268310
56.3		**Surface/recessed ceiling mounted 15W deep LED**	Supply and fixing of IP65 of surface/recessed ceiling mounted 15W deep LED downlighter fixture. Fixture should be Aluminium die cast, ADC 12, cable gland, SS clamps, screws as required. Glare quotient to be minimum & black body surface for glare control, should have honeycomb louvers for anti-glare, 24deg-48 deg as required. working temperature-20°C +45°C IP rating IP65 (not for permanent immersion) insulation class III. Choice of three colour temperatures as standard 2700K-5700K and delivers 90CRI for excellent colour rendering, and with binning-free LEDs carefully selected from two step Macadam's ellipse. fittings smart shield protected against polarity inversion, Protection class IP 65, safety class III. Safety glass, clear. Reflector made of pure anodised aluminium.	Each	14635.00	15	219525
56.4		**Surface ground mounted 3-6W small LED projector**	Supply and fixing of IP 65 surface ground mounted 3-6W small LED projector fixture with snoot & Honeycomb louver, product fitted with 700ma 8deg-24deg as required. 3000K-4000K CRI80+ NON DIM with led power supply built in color tolerance: <MacAdam 4 SDCM LED mounting AR111 similar optics PC lens. Fixture should be Aluminium die cast, SS clamps, screws as required. The finish should be stainless steel.	Each	12196.00	15	182940
56.5		**Recessed ground mounted deep LED uplighter**	Supply and fixing of recessed ground mounted deep LED uplighter fixture with Honeycomb Louver. protected Uno PATHFINDER IP66 2700K-5500K 8deg-24deg as required. stainless steel body hard anodized aluminium finishes stainless steel & IK rating 08. Installation housing box power supply cables35 cm NS20N PCP 2x0,5 mm2 power supply 24V DC power consumption max 9 Watt lumen output 240-680lm working temperature-20°C +45°C IP rating IP66 (not for permanent immersion) insulation class III Weight upto 500gm. and delivers 90CRI for excellent colour rendering, and with binning-free LEDs carefully selected from two-step Macadam's ellipse. PATHFINDER is smart shield protected against polarity inversion, an integrated super fast diode prevents accidental damage to the luminaire during installation on due to reverse polarity. Smart shield protects against 'hot-plugging'. Fully integrated spike-reduce on protects the constant- current driver and prevents damage to the LED die surface. With housing box included and LED driver in IP66 casing box included.				
	56.5.3	9W recess deep	9W recess deep uplight	Each	17684.00	10	176840
56.6		**Instant outline direct view diffuse**	Supply and fixing of IP66 protected aluminium instant outline direct view diffuse 3000K-5000K with back profile with integrated cable alley for cable management with integrated IP rated cable connectors hidden within profile for additional protection from weather. Cross section of profile Silver anodized surface mounted aluminum profile 25 mm (W) x 20 mm (D) (minimum), with opal semi translucent sealed encapsulation, protection grade IP66, Minimum 85 lm/watt, DC 24 V, CRI>80Ra, standard length 2000 mm. excl. converter and end caps. The support is made of an anodized extruded aluminum frame which makes it possible to first fix SS the wall/ceiling.				
	56.6.3	15W/meter	15W per meter	Meter	7317.00	100	731700
56.8		**Long linear LED uplighter extrusion fixture**	Supply and fixing of recessed/surface ground mounted 3000K-5500K, 10deg-15deg as required 1m long linear LED uplighter extrusion fixture with VISOR & Honeycomb Louver with & IK rating 06, IP 65 cable gland, SS Clamps, screws as required with swivel mounting.				
	56.8.3	30W	30W	Each	29270.00	50	1463500
56.9		**Asymmetric LED step light**	Supply and fixing of decorative recessed wall mounted 6W Asymmetric LED step light 4"x4" 15- 18 deg luminary Aluminium die cast, ADC 12, IP 65 cable gland, SS clamps, screws as required	Each	10976.00	15	164640
56.10		**20W LED with snoot**	Supply and fixing of IP 65 surface ground mounted product fitted with 700ma 20W LED with snoot 8deg-24deg 3000K-4000K CRI80+ nondimmable led power supply built in Color tolerance: <MacAdam 4 SDCM LED similar optics PC lens. Fixture should be IK rating 07, Aluminium die cast, SS clamps, screws as required. The finish should be stainless steel.	Each	21952.00	10	219520
56.11		**Surface wall mounted 6W 4 way grazer**	Supply and fixing IP65 surface wall mounted 6W 4 way grazer 3"x3" LED fixture fitted with 700ma 8deg-15 deg 3000K-4000K . Luminary should be Aluminium die cast, CRI 80+ non-dimmable with led power supply , < 4 Macadam SDCM LED.	Each	17684.00	20	353680
56.12		**Recessed ground mounted deep LED marker fixture**	Supply and fixing of recessed ground mounted deep LED marker fixture with diffused light 3000K 5000K, CRI>80, 45deg-60deg stainless steel 1W- 3W, bodyhard anodized aluminium finish, stainless steel & IK rating 08. working temperature -20°C +45°C IP rating IP66 (not for permanent immersion) insulation class III weight upto 100gm, protected against polarity inversion, fully integrated spike-reduce on protects the constant current driver and prevents damage to the LED die surface, with housing box included and LED driver in IP66 casing box included.	Each	9147.00	20	182940
56.13		**Decorative surface wall mounted LED**	Supply and fixing of decorative surface wall mounted LED 3"X3" fixture fitted with 700ma LED, 10deg-15deg 3000K-4000K . Fixture should be Aluminium die cast, CRI 80+, IP65, non- dimmable led power supply , < 4 Macadam SDCM LED with 10 deg/15 deg optics PMMA.				
	56.13.3	9W LED	9W LED	Each	10976.00	20	219520
56.15		**100W LED pole light**	Supply and fixing of IP 65 surface ground mounted product fitted with 700ma 100W LED pole light with 36deg-60deg 3000K-4000K CRI80+ nondimmable LED power supply built in Color tolerance: <MacAdam 4 SDCM LED similar optics PC lens. Fixture should be IK rating 07, Aluminium die cast, SS clamps, screws as required. pole length as per site requirement.	Each	42685.00	2	85370
				Total Amount			**4488010**

ICT WORK							
Item No.	**Sub Item No.**	**Item Name**	**Description of Item**	**Unit**	**Rate (in Rs)**	**Qty**	**Amount**
38.14		**HDMI connector &braided cord**	Supply, installation testing and commissioning of High-Speed HDMI corrosion-resistant connector & braided cable, Supports Ethernet, 3D, 4K video, computers and other HDMI-enabled devices Black as required to complete the job as mentioned below :-				
	38.14.2	2 Metre, HDMI cord	2 Metre, HDMI cord	each	1801.00	5	9005
	38.14.3	5 Metre, HDMI cord	5 Metre, HDMI cord	each	3825.00	5	19125
	38.14.6	20 Metre, HDMI cord.	20 Metre, HDMI cord.	each	15752.00	5	78760
38.17		**Rack**	Supply, installation testing and commissioning of wall mounting rack, for computer switches/Patch Panel etc complete as mentioned below :-				
	38.17.1	6U cabinet	6U cabinet with min. Dimensions 366X600X600, wall mounting with 6 point 5 Amp. socket power supply strip, and fan, cable manager, tray as per Site requirement	each	9753.00	1	9753
38.18		**Floor mounting rack, base frame**	Supply installation, testing and commissioning of floor mounting rack, base frame, top & bottom, front glass door with perforation, rear vented door, lockable & detachable side panels, 2 pairs 19" rail with depth members. fixed shelf, complete as mentioned below :-				
	38.18.1	22U cabinet	22U cabinet with min. Dimensions 1150X600X600, floor mounting with power supply and fan, tray. Equipment support angle, vertical cable manager, 12 point 5Amp. vertical power strip, earthing continuity kit, castors (1 set of 4 nos.), captive H/W set of 10, fan tray with 4 fan, for computer .	each	47900.00	1	47900
38.19			**CAT6A/OFC Networking (10G Support)**				
	38.19.1	CAT6A Cables					
	38.19.1.2	CAT6A SFTP	Supply, Installation, lying, drawing of 4 Pair CAT6A SFTP Cable having 23AWG condutor, Voltage rating (Vdc): <80, 1-250 MHz: 100 +/- 15 Ohm, 250-500 MHz: 100 +/- 22 Ohm, ETL/UL in existing conduit / wiring system as direction of EIC.	Metre	214.00	1000	214000
	38.19.2	CAT6A Patch Panel					
	38.19.2.1	CAT6 A 24 PORT PATCH PANEL	Supply, Installation, Commissioning of 24 Port Patch Panel loaded with Category-6A I/O shielded Jacks complying as per the ANSI/TIA-568C.2 Patch Panel, 19" Rack Mount, 1U Height, I/O should be Spring-loaded shutter to protects from dust and contaminants, Should be certified by ETL/UL	Each	25901.00	1	25901
	38.19.3	CAT6 A SHIELDED TWISTED PAIR PATCH CORDS	CAT6 A SHIELDED TWISTED PAIR PATCH CORDS				
	38.19.3.1	1 Mtr Patch Cord	SITC of 1 Mtr CAT6 A SHIELDED TWISTED PAIR PATCH CORDS ETL/UL.	Each	709.00	5	3545
	38.19.3.2	2 Mtr Patch Cord	SITC of 2 Mtr CAT6 A SHIELDED TWISTED PAIR PATCH CORDS ETL/UL.	Each	858.00	5	4290
	38.19.3.3	3 Mtr Patch Cord	SITC of 3 Mtr CAT6 A SHIELDED TWISTED PAIR PATCH CORDS ETL/UL.	Each	1063.00	5	5315
	38.19.3.4	5 Mtr Patch Cord	SITC of 5 Mtr CAT6 A SHIELDED TWISTED PAIR PATCH CORDS ETL/UL.	Each	1454.00	5	7270
	38.19.4	CAT6 A Computer Jack					
	38.19.5	Optical fiber cable					
	38.19.5.2	12 Core OS-2 SM Cable	SITC of 12 Core OFC Cable with Armored Uni-Tube, 9/125µm,OS 2 Type, . Complying to ISO/IEC 11801, EN50173, ANSI/TIA 568-C.3, Telcordia GR-20, Uni-tube construction,Water Blocking Thixotropic Gel (Tube) Petroleum Jelly (Interstices) in indoor / outdoor ducts, direct burial and backbone cabling	Metre	148.00	250	37000
	38.19.6	Optical fiber Patch Cord					
	38.19.6.1	1 Mtr OFC Patch Cord	SITC of 1 Mtr OFC SM Patch Cord with 9/125 µm, OS2 , Duplex Zipcord , SC-LC/LC-LC / SC-SC connecctor , 900µ tight buffer, ISO/IEC 1108:2008, ANSI/TIA/ EIA 568.C.3, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-596	Each	2998.00	3	8994
	38.19.6.2	2 Mtr OFC Patch Cord	SITC of 2Mtr OFC SM Patch Cord with 9/125 µm, OS2 , Duplex Zipcord , SC-LC/LC-LC / SC-SC connecctor , 900µ tight buffer, ISO/IEC 1108:2008, ANSI/TIA/ EIA 568.C.3, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-597	Each	3140.00	3	9420
	38.19.6.3	3 Mtr OFC Patch Cord	SITC of 3 Mtr OFC SM Patch Cord with 9/125 µm, OS2 , Duplex Zipcord , SC-LC/LC-LC / SC-SC connecctor , 900µ tight buffer, ISO/IEC 1108:2008, ANSI/TIA/ EIA 568.C.3, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-598	Each	4035.00	3	12105
	38.19.6.4	5 Mtr OFC Patch Cord	SITC of 5 Mtr OFC SM Patch Cord with 9/125 µm, OS2 , Duplex Zipcord , SC-LC/LC-LC / SC-SC connecctor , 900µ tight buffer, ISO/IEC 1108:2008, ANSI/TIA/ EIA 568.C.3, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-599	Each	5016.00	3	15048
	38.19.7	Fiber Termination LIU					
	38.19.7.3	24 Port LIU	SITC, Splicing, Termination of 24 Port Full loaded LIU with SC-LC/LC-LC / SC-SC adopter, Splicing tray, Pigtails, Termination, 1U 19" / ETSI versions available, Slidding Drawer for easy access of back side of connector, Fiber guides, radius controls & secure tie downs provided	Each	38986.00	1	38986

47.3		**UPS (3 phase input & 3 phase output)**	Supply, installation, testing and commissioning of UPS with isolation transformer & battery for backup, having three phases input three phase output. Online double conversion VFI-SS-111 technology, with sinusoidal wave form, architecture (standalone of distributed parallel up to 8 units), having input characteristics i.e. input voltage (380v, 400v, 415v, 3Ph+N+PE), input frequency (45 -65 Hz), input voltage range (Ph - Ph) : (half load 208v - 467v/full load 312v - 467v), total harmonic distortion of input current < 3% (at full linear load), compatibility with diesel generators configurable for synchronization between the input and output frequencies even for high frequency variations, input power factor > 0.99, having output characteristics i.e. output voltage (380v, 400v, 415v, 3Ph+N (adjustable from front panel), efficiency up to 96%, efficiency in ECO mode up to 98.5%, output frequency (nominal) 50 /60 Hz 0.01% free run (adjustable from front panel), crest factor 3 : 1, total harmonic distortion of output voltage < 2 % (at full linear load), output power factor 0.9, output voltage tolerance ± 1%, built in automatic and maintenance bypass, inbuilt isolation transformer, battery type (VRLA - AGM maintenance free). Communication & management i.e. LCD display (touch screen, LED bar status, live synoptic view for real time), communication ports (RS 232, genset, programmable 4 relay contacts, modbus), Audible alarm (acoustic alarms and warnings), Net interface slot (SNMP card (optional)), having emergency power off (EPO) & remote management. Ambient conditions i.e. operating temperature °C (0°C - 40°C), relative humidity % (20% - 95% not condensing), protection index (IP20), noise at 1 m dBA < 55. UPS installation with all required material arrangements as required as per IS specification.				0
	47.3.1	**10 KVA 3Ph**	**10 KVA (3 phase input & 3 phase output)**				
	47.3.1.2	60 min backup	For 60 minute backup, min. 16000 VAH	Each	442808.00	1	442808
54.7		**4MP IP fixed rugged dome cam.**	**4MP IP fixed rugged dome camera**				
	54.7.1	IP rugged dome camera	Supply, installation testing and commissioning of the IP rugged dome camera shall be equipped with a 1/3″ 4 MP progressive scan CMOS imager to capture full HD 1080p (25/30 fps)/2688 × 1520 images, a 2.8 mm fixed lens, and a waterproof (IP66) IK10 impact-resistant camera housing, as a true day/night solution, the camera shall use smart IR technology and provide up to 98 ft (30 m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.08 lux color @ F2.0 (color, 1/3s, 30 IRE),0 lux B/W with IR LEDs on @ F2.0) video compression :- H.265 +, noise reduction: 3DNR,backlight compensation :- True WDR 120 DB, angle of view 104°/87° (H), 57°/48° (V) ,UL listed	Each	19553.00	10	195530
54.8		**4MP IP fixed IR bullet camera**	**4MP IP fixed IR bullet camera**				
	54.8.1	IP bullet camera	Supply, installation testing and commissioning of the IP bullet camera shall be equipped with a 1/3" 4MP progressive scan CMOS imager to capture full HD 1080p (25/30 fps)/2688 × 1520 (20fps) images, a 3.6 mm fixed lens, and a waterproof (IP66) IK10 impact-resistant camera housing, As a true day/night solution, the camera shall use Smart IR technology and provide up to 98 ft (30 m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.08 lux color @ F2.0 (Color, 1/3s, 30 IRE),0 lux B/W with IR LEDs on @ F2.0) video compression :- H.265 +, noise reduction: 3DNR,backlight compensation :- True WDR 120DB, angle of view :-104°/87° (H), 57°/48° (V),UL listed	Each	19309.00	20	386180
54.13		**2 MP IP 25X zoom PTZ camera**	**2 MP IP 25X zoom PTZ camera**				
	54.13.1	2MP IP PTZ camera	Supply, installation testing and commissioning of 2MP IP PTZ camera shall be equipped with a 1/2.8" exmor CMOS imager to capture full HD 1080p (50/60 fps)/ 25x zoom images, 4.8 mm- 120mm, and a waterproof (IP66) IK10 impact- resistant camera housing, as a true day/night solution, the camera shall use Smart IR technology and provide up to 328 ft (100m) of IR illumination. The camera shall accept PoE (802.3af) or 12 V DC power input. min. illumination:-0.08 lux color @ F2.0 (color, 1/3s, 30 IRE),0 lux B/W with IR LEDs on @ F2.0) video compression :- H.265 +, noise reduction: 2D/3D,backlight compensation :- True WDR 120 DB, built-in analytics, including face detection, automatically restores to previous PTZ and lens poSITC ion after power failure preset speed pan: Up to 240°/s, tilt: Up to 200°/s, angle of view H: 59.2° – 2.4° ,UL listed	Each	86237.00	2	172474
54.14		**4MP IP varifocal MFZ dome camera IP67**	**4MP IP varifocal MFZ dome camera IP67**				
	54.14.1	Outdoor WDR IR rugged IP dome cameras	Supply, installation testing and commissioning of outdoor WDR IR rugged IP dome cameras shall be equipped with 1/2.7" or 1/2.8" 2 MP progressive scan imager or 1/3" 4 MP progressive scan imager to capture 1080p resolution at 25/30 fps or 4 MP at 20 fps images, 2.7–12 mm or 7–22 mm, F1.4, motorized focus/zoom len, H.264 and MJPEG codec, triple stream support, 50 m (150') IR distance, depending on scene reflectance, waterproof (IP67) and IK10 vandal resistant camera housing, ONVIF profile S and G compliant , built-in PoE (Power over Ethernet) eliminates, separate power supply and associated wiring, 24 V AC/12 V DC inputs where PoE power is unavailable, supports up to 128 GB micro SDHC (class 10) card for local video storage when network is interrupted. Card not included.	Each	46383.00	10	463830
54.15		**4MP IP varifocal MFZ bullet camera IP67**	**4MP IP varifocal MFZ bullet camera IP67**				

	54.15.1	Outdoor WDR IR rugged IP bullet cameras	Supply, installation testing and commissioning of Outdoor WDR IR rugged IP bullet cameras shall be equipped with : 1/2.7" 2 MP progressive CMOS imager to capture 1080p resolution at 25/30 fps or 4 MP at 20 fps images, 1: 2.7-12 mm, MFZ, F1.4, H.264 and MJPEG codec, triple stream support, 60 m (150') IR distance, depending on scene reflectance, waterproof (IP67) and IK10 vandal resistant camera housing, ONVIF profile S and G compliant,, built-in PoE (Power over Ethernet) eliminates, separate power supply and associated wiring, 24 V AC/12 V DC inputs where PoE power is unavailable, Supports up to 128 GB micro SDHC (class 10) card for local video storage when network is interrupted. Card not included, True WDR: up to 140 dB	Each	49281.00	10	492810
54.21		**16 channel NVR with 2 SATA**	**16 channel NVR with 2 SATA**				
	54.21.1	16 channel NVR with 1080p	Supply, installation testing and commissioning of 16 channel NVR with 1080p real-time live view H.265/H.264MJPEG dual codec decoding up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 2 SATA HDDs up to 16TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications(a flashing light, bell, or siren) complete with UL certification	Each	84721.00	2	169442
54.22		**16 channel NVR with 4 SATA**	**16 channel NVR with 4 SATA**				
	54.22.1	16 channel NVR With 1080p	Supply, installation testing and commissioning of 16 channel NVR with 1080p real-time live view H.265/H.264MJPEG dual codec decoding Up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 4 SATA HDDs up to 32TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications(a flashing light, bell, or siren) complete with UL certification	Each	114098.00	1	114098
54.23		**32 channel NVR with 4 SATA**	**32 channel NVR with 4 SATA**				
	54.23.1	32 channel NVR with 1080p	Supply, installation testing and commissioning of 32 channel NVR with 1080p real-time live view H.265/H.264 MJPEG dual codec decoding Up to 12 MP resolution preview & playback max 320 MBPS incoming bandwidth support 4 SATA HDDs up to 32TB, supports fisheye video de-warping in local and web user interface, supports visual or auditory notifications(a flashing light, bell, or siren) complete with UL certification	Each	140084.00	1	140084
54.27		**8 port PoE switch with 2 SFP ports**	**8 port PoE switch with 2 SFP ports**				
	54.27.1	8 port PoE switch with 2 SFP ports	Supply, installation testing and commissioning of 8 port PoE switch with 2 SFP ports, having security features like port security supports 64 MACs per port, auto surveillance VLAN, loopback detection automatically disables a port when a loop is detected, cable diagnostics allows administrators to determine cable status, UTP cat. 5, cat. 5e (100 m max.), full/half-duplex for 10/100 MBPS, full-duplex for 1000 MBPS, auto MDI/MDIX adjustment for all twisted-pair ports, switching capacity, 40 GBPS, maximum 64 bytes packet forwarding rate, 14.88 MBPS, ports 1 to 8 compliant with 802.3at	Each	23024.00	5	115120
54.28		**24 port PoE switch with 4 SFP ports**	**24 port PoE switch with 4 SFP ports**				
	54.28.1	24 port PoE switch with 4 SFP ports	Supply, installation testing and commissioning of 24 port PoE switch with 4 SFP ports, having security features like port security supports 64 MACs per port, auto surveillance VLAN, loopback detection automatically disables a port when a loop is detected, cable diagnostics allows administrators to determine cable status, UTP Cat. 5, Cat. 5e (100 m max.), full/half-duplex for 10/100 MBPS, full-duplex for 1000 MBPS, auto MDI/MDIX adjustment for all twisted-pair ports, switching capacity, 56 GBPS, maximum 64 bytes packet forwarding rate, 41.7mbps, Ports 1 to 24 compliant with 802.3 at	Each	51329.00	1	51329
54.29		**Workstation with client license**	**Workstation with client license**				
	54.29.1	Work station	The work station shall have the following specifications:- Processor Intel @ i5 750 2.66 GHz with internal memory of 4 GB RAM. Operating system window 7professional 64-bit (WOW 64mode) or window 7 professional 32- bit NVIDIA 1 GB independent graphic card. Resolution support for cameras 2560x1600 display resolution capable and direct X true colour 32 bit. Dual link VDI outputs. Client software shall support Dual monitors each displaying 16 cameras simultaneously. A maximum of 32 cameras viewing per workstation at a time. Programmable to sequence.	Each	231656.00	1	231656
54.30		**Hard disk**	**Hard disk**				
	54.30.1	2 TB	Providing &fixing of 2 TB hard disk	Each	6414.00	2	12828
	54.30.2	4 TB	Providing &fixing of 4 TB hard disk	Each	10825.00	2	21650
57.2		LED TV	Supply, installation, testing & commissioning of L.E.D. Television (4K L.E.D. Display O.S. Webos /Android or equivalent, minimum 50 Hz refresh rate Min. 20 W speaker, Wifi/bluetooth enabled, minimum 2 HDMI & 1USB Port, i/c remote and wall/table top accessories)				
	57.2.2		42"/43"	Each	32365.00	2	64730
15.1		**Surface PVC conduit MMS**	Supplying and fixing PVC conduit as required confirming to IS 9537 (Part-3), ISI marked along with accessories on surface etc. as required.				
	15.1.2	25 mm. MMS	PVC conduit 25 mm. (MMS)	Metre	67.00	1500	100500
	15.1.3	32 mm. MMS	PVC conduit 32 mm. (MMS)	Metre	102.00	500	51000
					Total Amount		**3772486**

HVAC Work							
Item No.	**Sub Item No.**	**Item Name**	**Description of Item**	**Unit**	**Rate (in Rs)**	**Qty.**	**Amount**
46.3		**Suction/ discharge copper pipe line in split AC**	Supply, installation, testing & commissioning of suction/discharge copper pipe line in split air conditioning unit 1.0/1.5 TR/2 TR/3 TR capacity including brazing, nitrile rubber insulation 6/9mm thick class 'O', etc complete as required.				
	46.3.1	Copper tube 1/4"	Copper tube 1/4"	P. Mt	437.00	50	21850
	46.3.2	Copper tube 3/8"	Copper tube 3/8"	P. Mt	550.00	50	27500
	46.3.3	Copper tube 1/2"	Copper tube 1/2"	P. Mt	657.00	50	32850
	46.3.4	Copper tube 5/8"	Copper tube 5/8"	P. Mt	815.00	50	40750
	46.11.2	**SPLIT AC (inverter model, Cooling only)**	**SPLIT AC (inverter model, Cooling only)**				
	46.11.2.4	1.5 TR, 5 star	1.5 TR star rating 5 star	Each	52800.00	2	105600
	46.11.2.6	1.8 /2 TR, 5 star	1.8/2 TR star rating 5 star	Each	67800.00	2	135600
	46.13.3	**AC installation, wall mounted**	AC installation: - Installation of split type wall mounted air conditioner indoor, outdoor unit fitted with rotary compressor, copper condenser and first charge refrigerant R410A, including connection of copper pipe and material supplied with complete unit etc as required. (excluding cost of copper pipe)	Each	1500.00	4	6000
46.31		**Drain piping**	Drain piping :- Providing and fixing of CPVC, 6Kg/cm2 drain water piping with fittings, support and insulated with 6 mm thick closed cell elastomeric nitrile rubber insulation complete as per specification.				
	46.31.2	25 mm dia	25 mm dia ID	Rmt	202.00	80	16160
	46.31.3	32 mm dia	32 mm dia ID	Rmt	297.00	50	14850
46.41		**Control cable**	Controlcable: - Supply and laying, testing & commissioning of following sizes of copper conductor control cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.				
	46.41.4	4Cx4 sq.mm	4Cx 4 sq.mm	Rmt	350.00	250	87500
46.42		**Communication cable**	Controlcable: - Supply and laying, testing & commissioning of following sizes of shielded copper conductor Communication cables on existing tray including fixing clamps & proper connections to equipment etc. complete as required.				

	46.42.1	2Cx1.5 sq.mm	2Cx1.5 sq.mm	Rmt	255.00	250	63750
				Total Amount			**552410**

Fire Fighting Work							
Item No.	**Sub Item No.**	**Item Name**	**Description of Item**	**Unit**	**Rate (in Rs)**	Qty	Amount
	(B)	**HYDRANT SYSTEM**					
	MPPWD 2024 (26.27)	**MPPWD 2024 (26.27)**	**Carbon-di-oxide type fire extinguishers**				
			Providing and fixing of carbon-di- oxide type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube 30 cm long high pressure discharge hose, discharge nozzle, suspension bracket conforming to IS : 15683 finished externally with red enamel paint and fixed to wall with brackets complete with internal charge.				
	26.27.3	26.27.3	Capacity 4.5 kg	each	11351.00	15	170265
	MPPWD 2024 (26.28)	**MPPWD 2024 (26.28)**	**ABC Power type fire extinguishers**				
			Providing and fixing of ABC Power type fire extinguishers consisting of welded M.S. cylindrical body, squeeze lever discharge valve fitted with pressure indicating gauge internal discharge tube 30 cm long high pressure discharge hose, discharge nozzle, suspension bracket. Conforming to IS: 15683 finished externally with red enamel paint fixed to wall with brackets complete with internal charge.				
	26.28.3	26.28.3	Capacity 4.0 kg	each	4091.00	15	61365
				Total Amount			**231630**

PA System							
Item No.	**Sub Item No.**	**Item Name**	**Description of Item**	**Unit**	**Rate (in Rs)**	**Qty**	**Amount**
53.3		Amplifiers	Amplifiers				
	53.3.5	480w power amplifier with 100,70V speaker OP	Supply, installation, testing and commissioning of 480W power amplifier with 100,70V speaker OP, combination XLR/RCA line in line out connectors. Speaker OP short circuit protection.(with require mounting arrangement)	Each	63172.00	1	63172
	53.3.6	1000W power amplifier	Supply, installation, testing and commissioning of 1000W power amplifier with following features:- Rated output wattage - 1000W, amplifier output 100V, 70V and 4-16 ohms transformer isolated speaker outputs, Supply input 0.775 v (0dB) unbalanced, 10k ohms, XLR and phone jack frequency response 50 - 18,000 Hz, +/- 1.5 dB ,S/N ratio> 105 dB	Each	171261.00	1	171261
53.4		Mixer	Mixer				
	53.4.2	12-Channel Mixer	Supply, installation, testing and commissioning of12- Channel Mixer with Low-cost, high-performance Lexicon effects mixers. 8+2 and 12+2 channel frame sizes. Built-in 24 bit Lexicon digital effects processor. 32 FX settings	Each	70125.00	1	70125
	53.4.3	. Multi-Channel Analog Mixing Console	Supply, installation, testing and commissioning of Multi- Channel Analog Mixing Console with 8 mono input channels and 4 stereo input channels. Frequency Response : Mic/Line Input to any output, 20 Hz-20 kHz<1 dB. CMRR Typical @ max gain @ 1 kHz>80 dB	Each	105593.00	1	105593
53.5		Speakers	Speakers				
	53.5.2	20W ceiling speaker with max SPL1M/1W 90dB	Supply, installation, testing and commissioning of 20W ceiling speaker with max SPL1M/1W 90dB. Frequency response of 100Hz-20KHz with a dispersion angle of 120 deg. The speaker should have tapings at 20W/10W (With require mounting arrangement)	Each	13206.00	10	132060
	53.5.5	40W wall mount with max SPL1M/1W 86dB	Supply, installation, testing and commissioning of 40W wall mount with max SPL1M/1W 86dB. Frequency response of 100Hz-20KHz with a dispersion angle of 160 deg. The speaker should have tapings at 40W/20W/10W (with require mounting arrangement)	Each	17361.00	5	86805

	53.5.7	30W horn speaker (IP66-ABS) with max SPL1M/1W 104dB	Supply, installation, testing and commissioning of 30W horn speaker (IP66-ABS) with max SPL1M/1W 104dB. Frequency response of 300Hz-10KHz. The speaker should have tapings at 30/15W.(with require mounting arrangement)	Each	14619.00	20	292380
	53.5.11	2-way Loudspeaker 375W	SPEAKER : Compact 2-way Loudspeaker with 2 x 8" LF with Frequency Range (-10dB) : 53 Hz - 20 kHz, Frequency Response (±3 dB) : 65 Hz – 20 kHz, Coverage Pattern : /26: 120° x 60°/95: 90° x 50°, Impedance 8 ohms, System Power Rating : 375 W / 750 W / 1500 W (Continuous / Program /Peak) (IEC rated). (With require mounting arrangement)	Each	189890.00	1	189890
53.8		HDMI Transmitter	Supply, installation, testing and commissioning of Transmitter : HDMI HDBaseT-Lite Extender with PoH (4K @ 40 mtr.) (HDBaseT Class B) extends an HDMI signal up to 70m from the HDBaseT source using one Cat 5e/6/6a cable. Video :- Input Interfaces : 1 x HDMI Type A Female (Black); Impedance : 100 Ω; Max. Distance : 3 m, Max. Data Rate : 10.2Gbps (3.4Gbps per lane); Max. Pixel Clock : 340 MHz; Compliance : HDMI (3D, Deep Color, 4K), HDCP2.2 Compatible, Consumer Electronics Control (CEC)Audio Input : 1 x HDMI Type A Female	Each	52066.00	1	52066
53.9		HDMI Receiver	Supply, installation, testing and commissioning of Receiver : HDMI HDBaseT-Lite Extender with PoH (4K @ 40 mtr.) (HDBaseT Class B) extends an HDMI signal up to 70m from the HDBaseT source using one Cat 5e/6/6a cable. Video :- Output Interfaces : 1 x HDMI Type A Female (Black); Impedance: 100 Ω; Max. Distance : 3 m, Max. Data Rate : 10.2Gbps (3.4Gbps per lane); Max. Pixel Clock : 340 MHz; Compliance : HDMI (3D, Deep Color, 4K), HDCP2.2 Compatible, Consumer Electronics Control (CEC), Audio Output : 1 x HDMI Type A Female (Black).	Each	52066.00	1	52066
53.10		HDMI Transmitter	Supply, installation, testing and commissioning of Transmitter : HDMI HDBaseT-Lite Extender (4K@100m) (HDBaseT Class A) guarantees the optimum 4K HDMI signal transmission across up to100 m via a single Cat 5e/6/6a. Video :- Input Interfaces : 1 x HDMI Type A Female (Black); Impedance : 100 Ω; Max. Distance : 3 m, Max. Data Rate : 10.2Gbps (3.4Gbps per lane); Max. Pixel Clock : 340 MHz; Compliance : HDMI (3D, Deep Color, 4K), HDCP2.2 Compatible, Consumer Electronics Control (CEC)Audio Input : 1 x HDMI Type A Female	Each	69662.00	1	69662

53.11		HDMI Receiver	Supply, installation, testing and commissioning of Receiver : HDMI HDBaseT-Lite Extender (4K@100m) (HDBaseT Class A) guarantees the optimum 4K HDMI signal transmission across up to100 m via a single Cat 5e/6/6a. Video :- Output Interfaces : 1 x HDMI Type A Female (Black); Impedance: 100 Ω; Max. Distance : 3 m, Max. Data Rate : 10.2Gbps (3.4Gbps per lane); Max. Pixel Clock : 340 MHz; Compliance : HDMI (3D, Deep Color, 4K), HDCP2.2 Compatible, Consumer Electronics Control (CEC), Audio Output : 1 x HDMI Type A Female (Black).	Each	75950.00	1	75950
29.5		AUDIO CABLE	AUDIO CABLES				
	29.5.1	**Speaker wire**	Supply and fixing of PVC insulated copper flexible speaker wire twin FRLS 1100 Volts as per IS:694-1990 of approved make				
	29.5.1.2	Twin core 1.00 sq.mm.	(32/0.2 mm) Twin core 1.00 sq.mm.	Metre	20.00	2500	50000
	29.5.1.3	Twin core 1.50 sq.mm.	(48/0.20 mm) Twin core 1.50 sq.mm.	Metre	58.00	1500	87000
				Total Amount			**1361030**