



ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED
(A Government of Odisha Undertaking)
VIKASH BHAWAN, NAYAPALLI, BHUBANESHWAR-751012
PHONE NO. 0674- 2394093, 2396309, 2390043 FAX-2396326

Bid Identification No.12/Tender/OBCC/2022-23

NATIONAL COMPETITIVE BIDDING
(WORKS ON TURNKEY BASIS WITH ARCHITECTURAL PLANNING, DESIGN & EXECUTION)

**Integrated Development of Maa Cuttack Chandi Temple, Cuttack on
turnkey basis.**

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PART-1

BIDDING PROCESS

INVITATION FOR BIDS

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NATIONAL COMPETITIVE BIDDING

(WORKS ON TURNKEY BASIS WITH ARCHITECTURAL PLANNING, DESIGN & EXECUTION)

KEY DATES

1.	NAME OF WORK	:	Integrated Development of Maa Cuttack Chandi Temple, Cuttack on Turnkey Basis.
2.	PERIOD OF AVAILABILITY OF BIDDING DOCUMENT	:	From 08.07.2022 to 5.00 P.M. of Dt. 02.08.2022
3.	LAST DATE OF RECEIPT OF PRE-BID QUERY	:	Dt. 15.07.2022 upto 5.00 PM
4.	DATE and TIME OF PRE-BID MEETING	:	16.07.2022, 11.30 AM via VC https://meet.google.com/ysi-cief-yow
5.	ISSUE OF PRE-BID CLARIFICATION	:	Dt. 19.07.2022
6.	LAST DATE AND TIME FOR RECEIPT OF BIDS	:	Dt. 02.08.2022, 5.00 PM
7.	DATE AND TIME OF OPENING OF TECHNICAL BIDS	:	Dt. 03.08.2022, 11:30 AM
8.	DATE AND TIME OF CONCEPT DRAWING PRESENTATION	:	TO BE ANNOUNCED
9.	DATE AND TIME OF OPENING OF FINANCIAL BIDS		TO BE ANNOUNCED
10.	PLACE OF OPENING OF BIDS		Office of the Managing Director, Odisha Bridge & Construction Cooperation Ltd., Vikash Bhavan, 2nd Floor Conference Hall, Nayapalli, Bhubaneshwar-751012.
11.	OFFICER INVITING BIDS		Managing Director, Odisha Bridge & Construction Corporation Ltd., Odisha.

No: 4346

Date: 02/07/2022

File: SMT-1791

NOTICE INVITING TENDER**Bid Identification No.12/Tender/OBCC/2022-23**

- The Managing Director, Odisha Bridge & Construction Corporation Limited, Vikash Bhavan, Odisha, Bhubaneswar on behalf of Governor of Odisha invites bids from eligible bidders for the work mentioned below on turnkey basis at Cuttack.

SL. NO.	NAME OF WORK	CONCERNED NODAL OFFICER	BID SECURITY DECLARATION	Bid Processing fee (ONLY ONLINE BANK TRANSFER(RT GS/NEFT)	TIME FOR COMPLETION
1	2	3	4	5	6
1	Integrated Development of Maa Cuttack Chandi Temple, Cuttack on Turnkey Basis	General Manager, Cuttack-I Division, O.B. & C.C. Ltd.,	In prescribed format	Rs. 50,000/- (Including GST)	12 Calendar months

- The Bid documents will be available in the website: www.tendersodisha.gov.in from 08.07.2022 to 5.00 P.M. of Dt. 02.08.2022 for online bidding.
- The bidder must possess compatible Digital Signature Certificate (DSC) of Class-II or Class-III.
- The Prebid queries from the bidders shall be received online on or before 5.00 P.M of Dt. 15.07.2022 through email ID : md@obcc.in , tender@obcc.in
- The Pre-Bid meeting shall be held on dtd.16.07.2022 through Video call link: <https://meet.google.com/ysi-cief-yow>
- The Prebid Clarification shall be uploaded on e-procurement portal on dt.19.07.2022.
- Bids shall be received only on "online" on or before 5.00 P.M. of Dt. 02.08.2022.
- The Bidders must submit the non-refundable bid processing fee of required amount as stated in the above table at column no.5. Scanned copy of Transaction receipt of the bid processing fee shall have to be uploaded along with the Technical Bid failing which bid shall be summarily rejected.
- The Bid Security Declaration in the prescribed format shall have to be prepared by the bidder and the scanned copy of the same shall have to be uploaded along with the Technical Bid failing which the bid shall be summarily rejected.
- The Concept Design Report (CDR) in Cover-III and the original financial transaction receipts in support of Bid processing Fee and Bid Security declaration in Cover-IV shall have to be submitted on or before 05.00 PM on Dt.05.08.2022 to the Managing Director, OB&CC Ltd. failing which the bid shall not be evaluated and liable for rejection.

11. The Technical Bids received **online** shall be **opened at 11.30 A.M. on Dt.03.08.2022** in the office of the Managing Director, O.B. & C.C.Ltd., Vikash Bhavan, Bhubaneswar, Odisha in the presence of the bidders, who wish to attend. Bidders who participated in the bid can witness the opening of bids after logging on to the site through their DSC. If the office happens to be closed on the scheduled date of opening, the bid will be opened on the next working day at the same time and venue.
12. Bids submitted other than e-procurement platform shall not be considered.
13. Further details can be seen from the e-Procurement portal <https://www.tendersodisha.gov.in>.
14. The authority reserves the right to cancel any or all bids without assigning any reason thereof.
15. The addendum/ corrigendum if any will be posted in the e-procurement portal only.

A handwritten signature in blue ink, appearing to read "EIC-cum-Managing Director".

EIC-cum-Managing Director

CC to:-

1. The Principal Secretary to Government of Odisha, Works Department, Bhubaneswar.
2. The OSD to Chief Secretary, Odisha
3. Engineer-in-Chief (Civil), Odisha, Bhubaneswar
4. The Chief Engineer, Buildings/Chief Engineer (DPI & ROADS) Bhubaneswar.
5. Chief Manager (Technical), State e-Procurement Cell, Odisha, Bhubaneswar
6. President, Maa Cuttack Chandi Temple Trust, Cuttack
7. The GM, Cuttack-I Division, OB&CC Ltd.,
8. NIC Office, Bhubaneswar
9. Manager (Finance), OB&CC Ltd., Head Office, Bhubaneswar

For information.

**SECTION 1:
INSTRUCTION TO BIDDERS
(ITB)**

A. GENERAL INSTRUCTIONS

1. Scope of Bid:

- 1.1 The Employer [As mentioned in Bid Data Sheet at the end of Section-1] invites bids for the works namely [As mentioned in Bid Data Sheet at the end of Section-1] with design and execution (as defined in this document and referred to as “the works”).
- 1.2 The successful bidder shall be expected to complete the works by the intended completion date specified in the Contract.
- 1.3 Throughout these bidding documents, the terms 'bid' and 'tender' and their derivatives (bidder, tenderer, bid/ tender, bidding/ tendering, etc.) are synonymous. Contractor means the selected bidder for the work.

2. Source of Funds:

The expenditure on this project shall be met from the budget of Govt. of Odisha.

3. Eligible Bidders:

- 3.1 This Invitation for Bids is open to all bidders registered with the Government of Odisha or other State Governments / Government of India / MES / Railways for execution of Civil works in general and Road, Bridge & Building work in particular. Bidders are advised to note the minimum qualification criteria specified in the “Instruction to Bidders” to qualify for the award of contract.
- 3.2 All bidders shall provide in Section 2, Forms of Bid and Qualification Information.
- 3.3 Bidders shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

4. Qualification of the Bidder:

- 4.1 All bidders shall provide Forms of Bid and Qualification Information under Section 2, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary. The proposed methodology should include programme of construction backed with equipment planning and deployment duly supported with broad calculations and quality – assurance procedures proposed to be adopted justifying their capability of execution and completion of work as per technical specifications, within stipulated period of completion.
- 4.2 If the Employer has not undertaken prequalification of potential bidders, all bidders shall include the following information and documents with their bids in Section 2:
 - (a) Copies of original documents defining the constitution or legal status, place of registration, and principal place of business, written power of attorney of the signatory of the Bid to commit the Bidder;
 - (b) Financial Turnover of the bidder from construction works during last five financial years ending 31.03.2022.[As mentioned in Bid Data Sheet at the end of Section-1]
 - (c) Experience in similar works [As mentioned in Bid Data Sheet at the end of Section-1] and size for each of the last five financial years preceding the NIT, and details of works under way or contractually committed and clients who may be contacted for further information on those contracts;
 - (d) Major items of construction equipment proposed to carry out the Contract;

- (e) Qualifications and experience of key site management and technical personnel proposed for the Contract;
 - (f) Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five financial years;
 - (g) Evidence of adequacy of working capital for this contract [access to line (s) of credit and availability of other financial resources];
 - (h) Authority to seek references from the Bidder's bankers;
 - (i) Information regarding any litigation, arbitration, debarment, termination, notice for recession of contract, abandonment of work, etc. resulting from contracts executed or under execution by the bidder within the last five years of bid submission due date of this tender. The information shall include the name of the employer with contact details, description of work, agreement no., status and matter of dispute and/or issues, contact details of employer;
 - (j) Proposals for subcontracting components of the works amounting to more than[As mentioned in Bid Data Sheet at the end of Section-1] percent of the Bid Price (for each, the qualifications and experience of the identified sub-contractor in the relevant field should be annexed); and
 - (k) The proposed methodology and program of construction, backed with equipment planning and deployment, duly supported with broad calculations and quality control procedures proposed to be adopted, justifying their capability of execution and completion of the work as per technical specifications within the stipulated period of completion as per milestones as mentioned in the Contract data. .[As mentioned in Bid Data Sheet at the end of Section-1]
 - (l) Deleted
 - (m) Deleted
 - (n) Deleted
 - (o) Deleted
- 4.3 Bids from Joint ventures/association of firms:[As mentioned in Bid Data Sheet at the end of Section-1].
- 4.4 A. To qualify for award of contract, each bidder in its name should have in the last five financial years immediately preceding the financial year in which the bids are received:-
- (a) Achieved a minimum annual financial turnover¹ from civil construction works of[As mentioned in Bid Data Sheet at the end of Section-1].
 - (b) Satisfactorily completed, as a prime Bidder, at least one similar work / any major civil construction work of value not less than.....[As mentioned in Bid Data Sheet at the end of Section-1]. Bidder should submit completion certificate for Central / State Government projects. For private sector projects, completion certificate with TDS shall be submitted.
 - (c) Deleted

¹ Financial turnover from construction works and cost of completed works of previous financial years shall be given weightage of 10% (ten percent) per year based on rupee value to bring them to the price level up to the year of bid invitation.

(d) Bidders must furnish their bid, a detailed construction planning and methodology supported with layout and necessary drawings and detailed calculations to allow the employer to review their proposals

4.4. B. Each bidder should further demonstrate:

(a) Availability (either owned or leased) of the following key and critical equipment for this work:

Sl. No.	List of plants and equipment [As mentioned in Bid Data Sheet at the end of Section-1].	Requirement ² [As mentioned in Bid Data Sheet at the end of Section-1].
1.		
2.		

(b) The bidders should, however, undertake their own studies and furnish with their bid, a detailed construction planning and methodology supported with layout and necessary drawings and detail calculations to allow the employer to review their proposals. The numbers, types and capacities of each plant/equipment shall be shown in the proposals along with the cycle time for each operation for the given production capacity to match the requirements.

(c) Liquid assets and / or availability of fund based credit facilities/ overdraft facilities of not less than the amount of Rs..[As mentioned in Bid Data Sheet at the end of Section-1] crores (*Credit lines / Letter of Credit / Certificate from banks for meeting the fund requirements, etc*). Usually the equivalent of the estimated cash flow for three months in peak construction period.

4.5 Sub-contractors' experience and resources shall not be taken into account in determining the bidder's compliance with the qualifying criteria. [Clarified in Bid Data Sheet at the end of Section-1]

4.6 Bidders who meet the minimum qualification criteria will be qualified only if their available bid capacity is more than the total bid value. The available bid capacity will be calculated as under:

$$\text{Assessed Available Bid Capacity} = (\mathbf{A} \times \mathbf{N} \times 2) - \mathbf{B}$$

Where:

A = Maximum value of civil engineering works executed in any one financial year during the last five financial years (updated to bid invitation year[As mentioned in Bid Data Sheet at the end of Section-1] price level) taking into account the completed as well as works in progress.

N = Number of years prescribed for completion for which the bid has been invited

² Based on the preliminary studies carried out by the department, an indicative list of major equipment and their quantity to attain the completion of works are shown in the Bid Data Sheet.

B = Value (updated to the price level on the financial year in which bids are received) of existing commitments and on-going works³ to be completed during the next[As mentioned in Bid Data Sheet at the end of Section-1]

- 4.7 Even though the bidders meet the above qualifying criteria, they are subject to be disqualified if they have:
- (a) Made any misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirements; and/or
 - (b) Record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.; and / or
 - (c) Participated in the previous bidding for the same work and had quoted unreasonably high bid prices and could not furnish rational justification to the employer.

5. One Bid per Bidder:

E-Procurement procedure accepts only one bid from one bidder. Refer e-Procurement procedure as annexed.

6. Cost of Bidding:

The bidder shall bear all costs associated with the preparation and submission of his Bid, and the Employer will in no case be responsible and liable for those costs.

7. Site visit:

The Bidder, at the Bidder's own responsibility and risk is encouraged to visit and examine the Site of Works and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the Bidder's own expense.

³ *The statements showing the value of existing commitments and on-going works as well as the stipulated period of completion remaining for each of the works listed should be countersigned by the Engineer-in-charge, not below the rank of an Executive Engineer or equivalent or certified by registered Chartered Accountant.*

B. BIDDING DOCUMENTS

8. Content of Bidding Documents:

- 8.1 The set of bidding documents comprises the documents listed below, and addenda issued in accordance with Clause 10:

Section	Particulars	Volume No.
	Invitation for Bids	I
1	Instructions to Bidders	
2	Form of bid, Qualification Information, and other forms	
3	Conditions of Contract	
4	Contract data	
5	Technical Specifications	
6	Securities and other forms	
7	Conceptual and Indicative Drawings	
8	Terms of Reference, Design Brief & Scope of Work	
9	Payment Schedule	IV
10	Documents to be furnished by bidder	
		V

- 8.2. The Bidder shall download the above listed documents and shall submit his bid after preparing the same in compliance to Section-2 (refer clause 12).
- 8.3. The bidder shall be expected to examine carefully all instructions, conditions of contract, contract data, forms, terms, technical specifications, annexures and drawings in the Bid Document. Failure to comply with the requirements of Bid Documents shall be at the bidder's own risk. Pursuant to Clause 26 hereof, bids, which are not substantially responsive to the requirements of the Bid Documents, shall be rejected.

9. Clarification of Bidding Documents:

- 9.1 A prospective bidder requiring any clarification of the bidding documents may notify the Employer in writing or by cable (hereinafter "cable" includes telex, facsimile and e-mail) at the Employer's address indicated in the invitation to bid. The Employer will respond to any request for clarification, which he received earlier than 15 days prior to the deadline for submission of bids. Copies of the Employer's response will be posted in e-procurement portal, including a description of the enquiry but without identifying its source.

9.2 Pre-bid meeting:

- 9.2.1 The bidder or his official representative is invited to attend a pre-bid meeting which shall be held through video conferencing As mentioned in Bid Data Sheet at the end of Section-1].
- 9.2.2 The purpose of this meeting will be to clarify issues and to answer questions on any matter that may be raised at this stage.

- 9.2.3 The bidder is requested to submit any questions in writing to reach the Employer not later than the date as mentioned in the Bid Data Sheet
- 9.2.4 Minutes of the meeting/ response to queries, including the text of the questions raised (without identifying the source of enquiry) and the responses given will be uploaded in the e-procurement portal. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid meeting/ queries shall be made by the Employer exclusively through the issue of an addendum/ corrigendum pursuant to Clause 10 and not through the minutes of the pre-bid meeting.
- 9.2.5 Deleted

10. Amendment of Bidding Documents:

- 10.1 Before the deadline for submission of bids, the Employer may modify the bidding documents by issuing addendum/ corrigendum.
- 10.2 Any addendum/ corrigendum thus issued shall be part of the bidding documents and shall be posted in e-procurement portal.
- 10.3 To give prospective bidders reasonable time [As mentioned in Bid Data Sheet at the end of Section-1] in which to take an addendum into account in preparing their bids, the Employer shall extend as necessary the deadline for submission of bids, in accordance with Sub-Clause 20.2 below.
- 10.4 The addendum/ corrigendum shall also be available in official website[As mentioned in Bid Data Sheet at the end of Section-1].

C. PREPARATION OF BIDS

11. Language of the Bid:

All documents relating to the bid shall be in the English language.

12. Documents comprising the Bid:

12.1 The bid to be submitted by the bidder shall be in two separate parts (refer Clause 8.1):

Cover-I: Shall be named "***Technical Bid***" and shall comprise (*to be submitted online only*): -

- (i) Technical Bid (in the format indicated at Section 2);
- (ii) Scanned copy of Bid Security Declaration in the form specified in Section 2 & Scanned copy of Transaction receipt of the Bid Processing Fee.
- (iii) Qualification Information and supporting documents as specified in Section -2
- (iv) Certificates, undertakings, affidavits as specified in Section 2,
- (v) Undertaking that the bid shall remain valid for the period specified in Clause 15.1 of Bid Data Sheet

Cover-II: Shall be named "***Financial Bid***" and shall comprise (*to be submitted online only*)

- (i) The Lump sum Price Bid

Cover-III (both in online as well as original hardcopy):

The Bidder shall furnish the Design Basis Report (DBR) in Cover-III as indicated in this Annexure. The intent of this DBR is to present the salient features of technical considerations and scope of work envisaged by the bidder for the project, based on which the bidder has made its financial offer.

The bidder shall make sure that the DBR should cover sections on Architectural, civil, structural, electrical, public health engineering, HVAC, fire protection system, elevator systems and other monitoring and control systems, landscaping aspects For Details Please refer Annexure-III to ITB. DBR to be given weightage in 20 marks in Technical Evaluation.

Cover-IV (both in online as well as original hardcopy):

Bidder shall furnish other documents

- (i) Transaction receipt of Bid Processing Fee
- (ii) Bid Security Declaration.

13. Bid Price:

13.1 The contract shall be for the whole work as described in Sub-Clause 1.1, based on the Lump Sum Price Bid submitted by the Bidder.

- 13.2 The bidder shall fill the total bid price as **Lump Sum Price** (both in figures and words) for execution of work on Lumpsum / Turnkey basis including all items of works as specified in the Bid document.
- 13.3 The prices tendered shall except in so far as it is otherwise, provided under the contract, include all constructional plant, labour, supervision, materials, erection maintenance, insurance, profit, taxes and duties except GST & other levies together with all general risks, liabilities and obligations set out or implied in the contract.
- 13.4 The lump sum bid price quoted by the bidder shall be fixed for the duration of the Contract and shall not be subject to adjustment on any account.

14. Currencies of Bid and Payment:

The currency of bid and payment shall be quoted by the bidder entirely in Indian Rupees. All payments shall be made in Indian Rupees.

15. Bid Validity:

- 15.1 Bids shall remain valid for a period [As mentioned in Bid Data Sheet at the end of Section-1] after the due date for bid submission specified in Clause 20. A bid valid for a shorter period shall be rejected by the Employer as non-responsive. In case of discrepancy in bid validity period between that given in the undertaking pursuant to Clause 12.1 (v) and the Form of Bid submitted by the bidder, the latter shall be deemed to stand corrected in accordance with the former and the bidder has to provide for any additional security that is required.
- 15.2 In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the bidders and the bidder may extend the period of validity for a specified additional period. The request and the bidders' responses shall be made in writing or by cable / e-mail. A bidder may refuse the request without forfeiting his bid security. A bidder agreeing to the request will not be required or permitted to modify his bid but will be required to extend the validity of his bid security for a period of the extension, and in compliance with Clause 16 in all respects.

16. Bid Security:

- 16.1 As per **FD OM No 8943 Dated 18.03.2021 revised FD OM 8484 Dated 05.04.2022**, instead of Bid Security Amount the bidder shall submit a Bid Security Declaration along with his technical bid in the format available in section-2 of this document failing which the bid shall be summarily rejected.

Penal/ Legal actions under Bid Security Declarations shall be undertaken for all actions wherein bid security is not adhered to by the bidder.

17. Alternative Proposals by Bidders:

Bidders shall submit offers as per his own estimate based on his own design & drawing but complying with the requirements of the bidding documents, including the basic technical design parameters and as per regulations of concerned Urban Development Authority, OECBC, specifications relevant to MoRT&H, IRC, IS Codes & NBC.

Conditional offer or alternative offers will not be considered further in the process of tender evaluation.

18. Format and Signing of Bid: Refer e-Procurement procedure as annexed.

D. SUBMISSION OF BIDS

Online submission as per Govt. of Odisha e-Procurement Procedure annexed

19. Sealing and Marking of Bids – Refer e-procurement procedure as annexed in Annexure-I to ITB for Cover-I and Cover-II of the bid (Clause-12.1).

20. Deadline for Submission of the Bids

20.1 Bid shall be received on or before [As mentioned in 20.1 of Bid Data Sheet at the end of Section-1] as notified in IFB.

20.2 The Employer may extend the deadline for submission of bids by issuing an amendment in accordance with Clause 10, in which case all rights and obligations of the Employer and the bidders previously subject to the original deadline will then be subject to the new deadline.

21. Late Bids:

Not applicable as per e-Procurement procedure. Employer will not be responsible for non-submission of bids due to technical glitch (like slow net speed, crash of portal) in e-procurement portal.

22. Modification and Withdrawal of Bids: Refer e-Procurement procedure as annexed.

E. BID OPENING AND EVALUATION

23. Bid Opening:

- 23.1 All the bids received shall be opened in the Office of the Employer on [As mentioned in Bid Data Sheet at the end of Section-1] in the presence of the Bidders or their representatives who choose to attend. In the event of the specified date of Bid opening being declared a holiday, the Bids will be opened at the appointed time and location on the next working day. Refer e-Procurement procedure as annexed
- 23.2 The Employer shall prepare minutes of the Bid opening.

24. Process to be Confidential:

Information relating to the examination, clarification, evaluation, and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process until the award is successful and Bidder has been announced. Any effort by a Bidder to influence the Employer's processing of Bids or award decisions may result in the rejection of his Bid.

25. Clarification of Financial Bids:

- 25.1 To assist in the examination, evaluation, and comparison of Bids, the Employer may, at his discretion, ask the lowest evaluated responsive bidder for clarification of his-Bid, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable/e-mail, but no change in the price or substance of the Bid shall be sought, offered, or permitted.
- 25.2 Subject to Sub-Clause 24.1, no Bidder shall contact the Employer on any matter relating to his bid from the time of the bid opening to the time the contract is awarded. If the Bidder wishes to bring additional information to the notice of the Employer, it should do so writing.
- 25.3 Any effort by the Bidder to influence the Employer in the Employer's bid evaluation, bid comparison or contract award decisions may result in the rejection of the Bidders' bid.

26. Examination of Bids and Determination of Responsiveness:

- 26.1 During the detailed evaluation of "Technical Bids", the Employer will determine whether each Bid
- (a) Meets the eligibility criteria defined in Clause 3 and 4;
 - (b) Is accompanied by the required Bid Securities Declaration and;
 - (c) Is substantially responsive to the requirements of the Bidding documents.
 - (d) Is fulfilling the requirements of IFB.
 - (e) Is substantially responsive in accordance with the procedure as per **Annexure-II** and substantially responsive to the requirements of the Bidding documents. After Prequalification Evaluation (Phase-I), Technical Evaluation(Phase-II) and Power Point Presentation(Phase-III) the Bidder enters into Financial Evaluation. During the Financial evaluation of the "Financial Bid" of the lowest evaluated bidder, the responsiveness of the bids will be further determined with respect to the remaining bid conditions, i.e. priced bill of quantities, technical specifications, and drawings.

26.2 A substantially responsive “Financial Bid” is one which conforms to all the terms, conditions, and specifications of the Bidding documents, without material deviation or reservation. A material deviation or reservation is one (a) which affects in any substantial way the scope, quality, or performance of the works; (b) which limits in any substantial way, inconsistent with Bidding documents, the Employer’s rights or the Bidder’s obligations under the Contract; or (c) whose rectification would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.

26.3 If a “Financial Bid” is not substantially responsive, it will be rejected by the Employer and may not subsequently be made responsive by correction or withdrawal of the non-conforming deviation or reservation.

27. Correction of Errors - Not applicable as per e-procurement procedure.

28. Evaluations and Comparison of Financial Bids

28.1. The Employer will evaluate and compare only the Bids determined to be substantially responsive in accordance with the procedure as per **Annexure-II**.

28.2. The Employer reserves the right to accept or reject any variation arising out of change in scope of work. Such variations, which are in excess of the requirements of the Bidding documents, shall not be taken into account in Bid evaluation.

F. AWARD OF CONTRACT

29. Award Criteria:

- 29.1 Subject to Clause 30, the Employer will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding documents and who has offered the lowest evaluated Bid price, provided that such Bidder has been determined to be
- (a) eligible in accordance with the provisions of Clause 3 and
 - (b) qualified in accordance with the provisions of Clause 4.

- 29.2 In no case, the contract shall be awarded to any bidder whose available bid capacity is less than the evaluated bid price, even if the said bid is the lowest evaluated bid. The contract will in such cases be awarded to the next lowest bidder at his evaluated bid price.

30. Employer's Right to accept any Bid and to reject any or all Bids:

- 30.1 Notwithstanding Clause 29, the Employer reserves the right to accept or reject any Bid and to cancel the Bidding process and reject all Bids at any time prior to the award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for the Employer's action.

- 30.2 The Employer reserves the right to reject any Application and/ or Bid if:

- (a) at any time, a material misrepresentation is made or uncovered, or
- (b) The Bidder does not provide, within the time specified by the Employer, the supplemental information sought by the Employer for evaluation of the Bid.

- 30.3 In case it is found during the evaluation or at any time before signing of the Agreement or after its execution and during the period of subsistence thereof, including the Defects Liability Period, that one or more of the bid conditions have not been met by the Bidder , or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Contractor either by issue of the LOA or entering into the Agreement , and if the Bidder has already been issued the LOA or has entered into the Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by the Employer to the Bidder , without the Employer being liable in any manner whatsoever to the Bidder and without prejudice to any other right or remedy which the Employer may have under this RFP, the Bidding Documents, the Agreement or under applicable law.

- 30.4 The Employer reserves the right to verify all statements, information and documents submitted by the Bidder in response to the tender document. Any such verification or lack of such verification by the Employer shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Employer thereunder

31. Notification of Award and Signing of Agreement:

- 31.1 The Bidder whose Bid has been accepted will be notified of the award by the Employer prior to expiration of the Bid validity period by cable, telex, facsimile or e-mail confirmed by registered letter. This letter (hereinafter and in the Conditions of Contract called the "***Letter of Acceptance (LoA)***") will state the sum that the Employer will pay the Bidder in consideration of the design and execution the

works on a turnkey basis by the Bidder as prescribed by the Contract (hereinafter and by the Contract called the "***Contract Price***").

- 31.2 The notification of award will constitute the formation of the Contract, subject only to the furnishing of a performance security in accordance with the provisions of Clause 32.
- 31.3 The Contract will incorporate all agreements between the Employer and the successful Bidder. The detail work programme and milestone wise activity shall be finalized during contract negotiation with the successful bidder within 14 days after issue of ***Letter of Acceptance***. The agreed work programme / milestone shall form part of the contract agreement. Within 21 days of receipt of ***Letter of Acceptance***, the successful Bidder will sign the Agreement and deliver it to the Employer. The agreement will be signed by the Employer and sent to the successful Bidder, within 28 days following the notification of award along with the Letter of Acceptance
- 31.4 Upon the furnishing by the successful Bidder of the Performance Security, the Employer will promptly notify the other Bidders that their Bids have been unsuccessful.
- 31.5 In the event of non-payment of the performance security by the L1 bidder, the successful bidders in sequence (L2, L3) may be asked for negotiation for execution of the work with the bid price quoted by the L1 bidder.

32 Performance Security: Modified as per FD OM No.8952 Dated 18-03-2021 revised FD OM No.8475 dated 05.04.2022

- 32.1 Within 21 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a **Performance Security** [valid for a period as stipulated in Cl. 48 of Conditions of Contract & in the contract data] in any of the forms given below for an amount **equivalent to 3 (three) % of the Contract price**:
 - a bank guarantee issued by any bank indicated in Bid data sheet **payable at par by its branch at Bhubaneswar** in the form given in Section 6; or
 - a deposit receipt of any Bank Schedule Bank (list indicated in Bid Data Sheet) / Post Office Savings Bank Account / National Savings Certificate / Post Office Time Deposit Account duly pledged in favour of the [As mentioned in Bid Data Sheet at the end of Section-1].
- 32.2 Deleted
- 32.3 Failure of the successful Bidder to comply with the requirements of Sub-Clause 32.1 shall constitute sufficient grounds for cancellation of the award and suitable action under provision of Bid Security Declaration or suspension from further bidding for a period of three years from bid due date.
33. **Advance Payment and Security** - The Employer shall make advance payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a Bank acceptable to the Employer in amounts and currencies equal to **110 (hundred & ten) %** of the advance payment.

34. Corrupt or Fraudulent Practices:

- 34.1 It is required that the bidders / contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, it is:
 - (a) Defined, for the purposes of this provision, the terms set forth below as follows:

- (i) “Corrupt practice” means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution and
 - (ii) “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Government of the benefits of free and open competition.
- 34.2 The Employer will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question and will declare the firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract, if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.
- 34.3 Furthermore, Bidders shall be aware of the provision stated in sub-clause 23.2 and sub-clause 54.2 of the Conditions of Contract.

Procedure to participate in online bidding- e-procurement

(Refer clause-19 of ITB)

- 1. PARTICIPATING IN THE BID IN THE E-PROCUREMENT PORTAL:** The Contractor/Bidder intending to participate in the bid is required to register in the Portal using his /her active personal/ official e-mail ID as his Login ID and attach his/her valid Digital Signature Certificate (DSC) to his/her unique Login ID. The DSC used must be of appropriate class (Class II or Class III) issued from a registered Certifying Authority such as n-Code, Sify, TCS, MTNL etc. He/ She has to submit the relevant information as asked for about the firm/ contractor. The portal registration of the bidder/ firm is to be authenticated by the State Procurement Cell after verification of original valid certificates/ documents such as (i) PAN and (II) Registration Certificate (RC)/ GST Registration Certificate and GSTIN (for procurement of goods) of the concerned bidder. The time period of validity in the portal is at par with validity of RC/ GST Registration Certificate and GSTIN. Any change of information by the bidder is to be re-authenticated by the State Procurement Cell. After successful authentication bidder can participated in the online bidding process.

Contractor not registered with Government of Odisha, can participate in the e-procurement after necessary enrolment in the portal but have to subsequently register themselves with the appropriate registering authority of the State Government before award of the work as per prevalent registration norms of the State.

- 1.1 To log on to the portal the Contractor/Bidder is required to type his/her username and password. The system will again ask to select the DSC and confirm it with the password of DSC. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique ID, password and DSC combination and authenticates the login process for use of portal.
- 1.2 The tender documents uploaded by the Tender Inviting Officer in the website <https://tendersodisha.gov.in> will appear at the "Active Tenders" Section of the homepage. Only a small notification will be published in the newspaper specifying the work details along with mention of the specific website for details. The publication of the tender will be for specific period of time till the last date of submission of bids as mentioned in the 'Invitation for Bid' after which the same will be removed from the list of Active tenders. Any bidder can view or download the bid documents from the web site.
- 1.3 Contractor exempted from payment of EMD will be able to participate in the tender directly by uploading documentary evidences towards his eligibility for such exemption.
- 1.4 The software application has the provision of payment of cost of tender document through payment gateways of authorized bankers by directly debiting the account of the bidders.
- 1.5 Furnishing scanned copy of such documents is mandatory along with the tender documents otherwise his/her bid shall be declared as non-responsive and thus liable for rejection. It is mandatory that the DSC issued in the name of the authorized signatory is used in the portal.
- 1.6 In the case of any failure, malfunction, or breakdown of the electronic system used during the e-procurement process, the tender inviting officer shall not accept any responsibility for failures or breakdowns other than in those systems strictly within their own control.
- 1.7 Any third party/company/person under a service contract for operation of e-procurement system

in the State or his/their subsidiaries or their parent companies shall be ineligible to participate in the procurement processes that are undertaken through the e-procurement system irrespective of who operates the system.

- 1.8 For submission of Bids through the E-Procurement Portal, the bidder shall upload the scanned copy/copies of document in prescribed format wherever warranted in support of eligibility criteria and qualification information. The online bidder shall have to produce the original documents in support of the scanned copies and statements uploaded in the portal before the specified date as per DTCN.
- 1.9 Each bidder shall submit only one bid for one package. A bid is said to be complete if accompanied by cost of bid document and appropriate bid security. The system shall consider only the last bid submitted through the E-Procurement portal.
- 1.10 The bidder may ask question related to tender online in the e-procurement portal using his/her DSC, provided the questions are raised within the period of seeking clarification as mentioned in tender call notice/Bid. The Officer inviting the Bid/ Procurement Officer-Publisher will clarify quarries related to the tender.
- 1.11 The details of drawings and documents pertaining to the works available with the officer inviting the Bid as well as in the office of the Superintending Engineer and Executive Engineer as mentioned in the Contract Data will be open for inspection by the bidders. The bidder is required to download all the documents for preparation of his bid. It is not necessary for the part of the Bidder to up-load other Bid documents (after signing) while up-loading his bid. He is required to up load documents related to his eligibility criteria and qualification information and Bill of Quantities duly filled in. It is assumed that while participating in the bid, the bidder has referred all the drawings and documents. Seeking any revision of rates or backing out of the bid claiming for not having referred to any or all documents provided in the Bid by the Officer Inviting the Bid will be construed as plea to disrupt the bidding process and in such cases the bid security shall be forfeited.
- 1.12 Any addendum / corrigendum/ cancellation of tender shall be published in the website <https://tendersodisha.gov.in> , notice board and through paper publication and such notice shall form part of the bidding documents.
- 1.13 The system generates a mail to those bidders who have already uploaded their tenders and those bidders if they wish can modify their tenders. The bidders are required to which the website till last date and time of bid submission for any addendum/ corrigendum/ cancellation thereof. Tender inviting authority is not responsible for communication failure of system generated mail. All the volumes/documents shall be uploaded / provided in the portal by the Officer inviting the bid. The bidder shall carefully go through the document and prepare the required documents and up load the scanned documents in Portable Document Format to the portal in the designated locations of Technical Bid. He will fill up the rates of items or percentage in the BoQ downloaded for the work in designated Cell and up loads the same in designated locations of Financial Bid. Bidders are to submit only the original BoQ uploaded by publisher after entering the relevant fields without any alteration/deletion/modification. Multiple BoQ submission shall lead to cancellation of bid. In case of item rate tender, bidders shall fill in their rates other than Zero value in the specified cells. In the percentage rate tender, the bidder quoting Zero value is valid and will be taken as Schedule of Rates. Submission of document shall be effected by using DSC of appropriate class.

2. PAYMENT OF EMD/ BID SECURITY AND COST OF BID DOCUMENTS:

2.1 Deleted.

2.2 Deleted.

2.3 Deleted

2.4 Deleted

2.5 Deleted

2.6 The bidder has to sign a Bid security declaration accepting that if the bidder withdraw or modify its bid during the period of validity i.e. not less than 120 (one hundred twenty) days from the bid due date or if the bidder is awarded the contract and fail to sign the contract or to submit a performance security before the deadline defined in the Bid data sheet, the bidder will be suspended for participation in the tendering process for the works of OB&CC Ltd. and works under Government of Odisha for a period of three years from the bid due date of this work. The Bid security declaration shall be submitted as per the format at Section-2 (Format for Bid Security Declaration).

3. FORMAT AND SIGNING OF BID: (Logging to the Portal)-The Contractor/ Bidder is required to type his/her Login ID and Password. The system will again ask to select the DSC and confirm it with the password of DSC as a second stage authentication. For each login, a user's DSC will be validated against its date of validity and also against the Certificate Revocation List (CRL) of respective CAs stored in system database. The system checks the unique Login ID, Password and DSC combination and authenticates the login process for use of portal.

The bidder can download the tender of his choice and save it in his system and undertake the necessary preparatory work off-line and upload the completed tender at his convenience within the final date and time of submission. The bidder shall only submit single copy of the required documents and Price Bid in the portal. In the Financial bid, the bidder can not leave any figure blank. He has to only write the figures, the words will be self generated. The Bidders are advised to up load the completed Bid document well ahead of the last date & time of receipt to avoid any last moment problem of power failures etc.

1.1 The Bidder shall go through the Bid carefully and list the documents those are asked for submission. He shall prepare all documents including Declaration form, price bid etc and store in the system.

1.2 The bidder shall log on to the portal with his DSC and move to the desired tender for up loading the documents in appropriate place one by one simultaneously checking the documents. Once the Bidder makes sure that all the documents have been up-loaded in appropriate place he clicks the submit button to submit the bid to the portal.

1.3 The bids once submitted can not be retrieved or corrected. Tender cannot be pre-opened and cannot be submitted after due date and time. Therefore only after satisfying that all the documents have been uploaded, the Bidder should activate submit button.

1.4 In the e-procurement process each processes are time stamped. The system can identify each individual who has entered in to the portal for any bid and the time of entering in to the portal.

1.5 The Bidder should ensure clarity of the document up loaded by him to the portal especially the scanned documents by taking out sample printing. Non-submission of legible documents may

render the bid non-responsive. However, the Officer inviting the Bid if so desires can ask for legible copies or original copies for verification within a stipulated period provided such document in no way alters the Bidder's price bid. If the Bidder fails to submit the original documents within the stipulated date, his bid security shall be forfeited.

4. SUBMISSION OF BIDS:-

- 4.1 The bidder shall carefully go through the tender and prepare the required documents. The bid shall have a Technical Bid and a Financial Bid. The Technical bid generally consists of GSTIN, PAN, Registration Certificate, Affidavits, Profit Loss statement, List of similar nature of works, work in hand , list of machineries and any other information required by OIT. The Financial Bid shall consist of the Bill of Quantities (BOQ) and any other price related information/ undertaking including rebates.
- 4.2 Bidders are to submit only the original BOQ (in .xls format) uploaded by Procurement Officer Publisher (Officer Inviting Tender) after entering the relevant fields without any alteration/ deletion/ modification. Multiple BOQ submission by bidder shall lead to cancellation of bid. In case of items rate tender , bidders shall fill in their rates other than zero value in the specified cells without keeping it blank. In the percentage rate tender the bidder quoting zero percentage is valid and will be taken at par with the estimated rate of the work put to tender.
- 4.3 The bidder shall upload the scanned copy/ copies of document in support of eligibility criteria and qualification information in prescribed format in Portable Document Format (PDF) to the portal in the designated locations of Technical Bid.
- 4.4 The bidder shall write his name in the space provided in the specified location in the Protected Bill of Quantities (BOQ) published by the Officer Inviting Tender. The bidder shall type rates in figure only in the rate column of respective items(s) without any blank cell in the rate column in case of item rate tender and type percentage excess or less up to two decimal place only in case of percentage rate tender.
- 4.5 The bidder shall log to the portal with his/ her DSC and move to the desired tender for uploading the documents in appropriate place one by one simultaneously checking the documents.
- 4.6 Bids cannot be submitted after due date and time. The bids once submitted can not be viewed, retrieved or corrected. The Bidder should ensure correctness of the Bid prior to uploading and take print out of the system generated summery of submission to confirm successful uploading of bid. The bids can not be opened even by the OIT or the Procurement Officer Publisher/ opener before the due date and time of opening.
- 4.7 Each process in the e-procurement is time stamped and the system can detect the time of log in of each user including the Bidder.
- 4.8 The Bidder should ensure clarity/ legibility of the document uploaded by him to the portal.
- 4.9 The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/ tender.
- 4.10 The bidder should check the system generated confirmation statement on the status of the submission.
- 4.11 The bidder should upload sufficiently ahead of the bid closure time to avoid traffic rush and failure in the network.

4.12 The Tender Inviting Officer is not responsible for any failure, malfunction or breakdown of the electronic system used during the e-procurement process.

4.13 The Bidder is required to upload documents related to his eligibility criteria and qualification information and Bill of Quantity duly filled in. It is not necessary for the part of the bidder to upload the drawing and the other Bid documents (after signing) while uploading his bid. It is assumed that the bidder has referred all the drawings and documents uploaded by the Officer Inviting the Bid.

4.14 The Bidder will not be able to submit his bid after expiry of the date and time of submission of bid (server time). The date and time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer Inviting the Bid.

4.15 The ‘Online bidder’ shall digitally sign on all statements/documents, certificates uploaded by him, owning responsibility for their correctness/authenticity as per IT ACT 2000. If any of the information furnished by the bidder is found to be false/fabricated/bogus, his EMD/BID Security shall stand forfeited and his registration in the portal shall be blocked and the bidder is liable to be blacklisted.

5. SECURITY OF BID SUBMISSION:

5.1 All bid data uploaded by the Bidder to the portal will be encrypted by the DSC of the opener(s). The system shall require all the mandatory forms and fields filled up by the contractor during the process of submission of the bid/tender.

5.2 The Bid shall be received in encrypted format by the system which can only be decrypted/opened by the authorized openers only on or after the due date and time.

6. DEADLINE FOR SUBMISSION OF THE BIDS :

6.1 The online bidding will remain active till the last date and time of the bid submission. Once the date and time (Server date and time) is over, the bidder will not be able to submit the bid. The date & time of bid submission shall remain unaltered even if the specified date for the submission of bids declared as a holiday for the Officer inviting the Bid.

7. RESUBMISSION AND WITHDRAWAL OF BIDS :

7.1 Resubmission of bid by the Bidders for any number of times before the final date and time of submission is allowed.

7.2 Resubmission of bid shall require uploading of all documents including price bid afresh.

7.3 If the bidder fails to submit his modified bids within the pre-defined time of receipt, the system shall consider only the last bid submitted.

8. LATE BIDS :

8.1 The system shall reject submission of any bid through portal after closure of the receipt time. For all purpose the server time displayed in the e-procurement portal shall be the time to be followed by the bidder and concerned officers.

9. MODIFICATION AND WITHDRAWAL OF BIDS :

9.1 In the E-Procurement Portal, it is allowed to modify the bid any number of times before the final

date and time of submission. The bidder shall have to log on to the system and resubmit the documents as asked for by the system including the price bid. In doing so, the bids already submitted by the bidder will be removed automatically from the system and the latest bid only will be admitted. But the bidder should avoid modification of bid at the last moment to avoid system failure or malfunction of internet or traffic jam or power failure. If the bidder fails to submit his modified bids within the designated time of receipt, the bid already in the system shall be taken for evaluation.

- 9.2 In the E-Procurement Portal, withdrawal of bid is allowed. But in such case he has to write a letter with appropriate reasons for his withdrawal addressed to the Officer inviting the bid and upload the scanned document to portal in the respective bid before the closure date and time of receipt of the bid. The system shall not allow any withdrawal after expiry of the closure time of the bid.

10. OPENING OF THE BID:

- 10.1 Bid opening date is specified during tender creation or can be extended with corrigendum. This date is available in IFB, tender document as well as the home page of portal. Bid opening can be done by the authorized users which are defined during the tender publication / approval stage. The bids are encrypted using their public keys and can be decrypted only on or after the Bid Opening due date and time. The bid openers private key will be required to open the bids and all the openers have to log on to the portal during that time.
 - 10.1.1 The bidders who participated in the online bidding can witness opening of the bid from any system logging on to the portal with the DSC away from opening place. Contractors are not required to be present during the bid opening at the opening location if they so desire.
 - 10.1.2 Each activity is date and time stamped with user details. For time stamping, server time is taken as the reference.
- 10.2 In the event of the specified date of bid opening being declared a holiday for the Officer inviting the Bid/Engineer-in-Charge, the bids will be opened at the appointed time on the next working day.
- 10.3 In case bids are invited for more than one package, the order for opening of the “Bid” shall be that in which they appear in the “Invitation for Bid”.
- 10.4 The Bid openers; who have been pre-defined shall log on to the portal with their respective DSC. Unless all the Officers who have been declared as Opening officers, log on the portal with their DSC the Tender cannot be opened.
- 10.5 In case of non-responsive tender the officer Inviting tender should complete the e-Procurement process by uploading the official letter for cancellation/ re-tender.

11. EVALUATION OF BIDS:-

- 11.1 All the opened bids shall be downloaded and printed for taking up evaluation. The officer authorized to open the tender shall sign and number on each page of the documents downloaded and furnish a certificate that “the documents as available in the portal containing..... nos. of pages”.
- 11.2 After opening of technical bid, the bidder may be asked in writing / online (in their registered e-mail ID) to clarify on the uploaded documents provided in the Technical Bid, if necessary, with respect to any doubts or illegible documents required for Technical Evaluation. The Officer

Inviting Tender may ask for any other document of historical nature during Technical Evaluation of the tender. Provided in all such cases, furnishing of any document in no way alters the bidders price bid. Non submission of legible documents may render the bid non-responsive. The authority inviting bid may reserve the right to accept any additional document.

11.3 The bidders will respond in not more than 7 days of issue of the clarification letter, failing which the bid of the bidder will be evaluated on its own merit

11.4 Immediately, on receipt of these clarifications, the Evaluating Officers; predefined in the system for the bid, will finalize the list of responsive bidders. They will log on to the site with their DSC and record their comments on the Technical evaluation page in the system. The Officer Inviting the Bid if also the accepting authority, shall log on to the system with his digital signature and check the technical evaluation. He can either accept or pass on to the evaluating officers for re-evaluation. Upon acceptance of technical evaluation by the Accepting authority in the system, the system shall automatically generate letter to all the responsive bidders and the system shall forward the letter to all the responsive bidder that their technical bid has been evaluated responsive with respect to the data/information furnished by him and the letter shall also intimate him the date & time of opening of financial bid. The system shall also inform the non-responsive bidders in their e-mail ID that their bid has been found non-responsive.

11.5 The Technical evaluation of all the bids shall be carried out up as per the information furnished by the Bidders. But evaluation of the bid does not exonerate the bidders from checking their original documents and if at a later date the bidder is found to have misled the evaluation through wrong information, action as per relevant clause of DTCN shall be taken against the bidder/contractor.

11.6 The Procurement officer-Evaluators will evaluate bid and finalized list of responsive bidders.

11.7 Opening of price bid and evaluation of lowest bidder is subject to satisfaction of other qualification information.

11.8 The financial bids of the technically responsive bidders shall be opened on the due date of opening. The Procurement Officer-Openers shall log on to the system in sequence and open the financial bids.

11.9 The Financial Bid will be opened on the notified date & time in the presence of bidders or their authorised representative who wish to be present.

11.10 At the time of opening of “Financial Bid”, the names of the bidders whose technical bids were found responsive will be announced and the bids of only those bidders will be opened. The remaining bids will be rejected.

11.11 The responsive bidders’ name, the bid prices, the item wise rates, the total amount of each item in case the item rate tender and percentage above or less in case of percentage rate tenders will be announced. any discounts and withdrawals, and such other details as the officer inviting the tender may consider appropriate, will be announced by him or his authorized representatives at the time of opening.

11.12 Rebate/discount offer if any uploaded to the system shall be declared and recorded first.

11.13 The Financial bid of the bidders shall be opened one by one by the designated officers. The system shall auto-generate the Comparative statement.

11.14 The Bidder can witness the principal activities and view the documents/summary reports for

that particular work by logging on to the portal with his DSC from anywhere.

11.15 Procurement Officer-Openers shall sign on each page of the download BOQ and the Comparative Statement and furnish a certificate to that respect.

11.16 System provides an option to Procurement Officer Publisher for reconsidering the rejected bid with the approval of concern Chief Engineer/ Head of Department.

12. CLARIFICATION AND NEGOTIATION OF BIDS:

12.1 For examination, evaluation, and comparison of bids, the officer inviting the bid may, at his discretion, ask the lowest bidder for clarification of his rates including reduction of rate on negotiation and breakdowns of unit rates.

12.2 On opening of the price bid the system shall arrange the financial bids in order of their value (L1 first, followed by L2, L3) for subsequent evaluation. The evaluation status (Sheet) will be visible to all the participating bidders after opening on their respective logins. Each activity is recorded in the system with date and time stamping.

13. NOTIFICATION OF AWARD AND SIGNING OF AGREEMENT:

13.1 In the E-Procurement Portal, the system shall generate the template of award letter and the Officer Inviting the Bid shall mention the amount of Performance Security and additional security required to be furnished in the letter and intimate the bidders in his e-mail ID.

13.2 The Employer/ Engineer-in-Charge shall notify acceptance of the work prior to expiry of the validity period by cable, telex or facsimile or e-mail confirmed by registered letter. This letter of Acceptance will state the sum that the Engineer-in-Charge will pay the contractor in consideration of execution and completion of the works by the contractor as prescribed by the contract and the amount of performance security and Additional Performance Security required to be furnished. The issue of the letter of Acceptance shall be treated as closure of the Bid process and commencement of the contract.

13.3 The Contractor after furnishing the required acceptable Performance Security and Additional Performance Security, "Letter of Proceed" or "Work Order" shall be issued by the Engineer-in-Charge with copy thereof to the Procurement Officer-Publisher. The Procurement Officer-Publisher shall upload the summery and declare the process as complete.

13.4 If the L1 bidder does not turn up for agreement after finalisation of the tender then he shall be debarred from participation in bidding for three years and action will be taken to blacklist the contractor. In that case, the L2 bidder, if fulfills other required criteria would be called for drawing agreement for execution of work subject to condition that the L2 bidder negotiates at par with the quoted by the L1 bidder, otherwise the tender will be cancelled.

14. BLOCKING OF PORTAL REGISTRATION

14.1 If the registration Certificate of the contractor is cancelled/ suspended by the registering authority/ blacklisted by the competent authority his portal registration shall be blocked automatically on receipt of information to that effect.

14.2 The portal registration blocked in the ground mentioned in the above Para- 11.1 shall be unblocked automatically in receipt of revocation order of cancellation/ suspension/ blacklisting from the concerned authority.

- 14.3 The Officer Inviting Tender shall make due inquiry and issue show cause notice to the concerned contractor who in turn shall furnish his reply, if any, within a fortnight from the date of issue of show cause notice. Thereafter the Officer Inviting Tender is required to issue an intimation to the defaulting bidder about his unsatisfactory reply and recommend to the Chief Manager (Tech) for blocking of portal registration within 10 days of intimation to the defaulting bidder regarding his unsatisfactory reply with intimation to the Registering Authority and concerned Chief Engineer/ Heads of Office if any of the following provisions are violated.
- 14.4 Fails to furnish original Technical Documents before the designated officer within the stipulated date and time.
- 14.5 Backs out from the bid on any day after the last date of receipt of tender till expiry of the bid validity period (including till the extended bid validity period)
- 14.6 Fails to execute the agreement within the stipulated date.
- 14.7 If any of the information furnished by the bidder is found to be false/ fabricated/ bogus.
- 14.8 Accordingly the officer Inviting Tender shall recommended to the Chief Manager (Tech) State Procurement Cell, Odisha for blocking of portal registration of bidder and simultaneously action shall also be initiated by OFFICER INVITING TENDER for blacklisting as per Appendix-XXXIV of OPWD code Volume-II.
- 14.9 The minimum period of blocking of Portal Registration shall in no case be less than 180 days.

1. EVALUATION CRITERIA (Clause-26.1 of ITB)

1.1 INTRODUCTION

Evaluation Criteria contains the broad criteria based on which the applicants shall be evaluated.

1.2 EVALUATION OF TECHNICAL BID (To be submitted in Cover-I)

Technical Bid will be evaluated based on financial standing, technical and organizational capability, experience and track record of the bidder. The bidder is required to submit all the necessary details including certificates from the client agencies in support of their qualification information.

CRITERIA FOR EVALUATION OF THE BIDDER FOR ELIGIBILITY

Sl. No	Attributes	Maximum Marks	Evaluation
(a)	Financial strength (i) Minimum annual financial Construction Turnover 4.4 A (a) of the BID DATA SHEET	20 marks	60% marks for minimum eligibility criteria. 100% marks for twice the minimum eligibility criteria or more; in between (i) & (ii) – on pro-rata basis.
	(ii) Liquid Asset as per clause-4.4 B (c) of the BID DATA SHEET	5 marks	60% marks for minimum eligibility criteria. 100% marks for twice the minimum eligibility criteria or more; in between (i) & (ii) – on pro-rata basis.
(b)	Experience in similar project works Refer clause 4.4 A.(b) of the BID DATA SHEET	20 marks	60% marks for minimum eligibility criteria 100% marks for twice the minimum eligibility criteria or more; in between (i) & (ii) – on pro-rata basis.
(c)	DBR Design Basis Report should be as per Section – 8 and Annexure-III to ITB	20 Marks	Drawings: 3 Marks Specification of Works:3 Marks Mechanical:2 Marks Electrical :2 Marks Plumbing:2 Marks Work Programme:4 Marks Approach & Methodology:4 Marks
(d)	Personnel and Establishment Refer clause 4.2 (e) of ITB	25 Marks	

Sl. No	Attributes	Maximum Marks	Evaluation
i.	Project Manager 1 No.	5	Min. Graduation in Civil Engineering with atleast 7 years of experience in Similar Construction / Supervision as Project Manager
ii.	Landscape Architect 1 No.	5	Post Graduation in Architecture with atleast 5 years of experience in Experience in Similar Project Design / Supervision/Landscaping
iii.	Structural Engineer 1 No.	5	Post Graduation in Civil Engg (Structural) with atleast 5 years of experience in Structural Design/Supervision.
iv.	Building Engineer 1 No.	5	Graduation in Civil Engineering with atleast 5 years of experience in Building Design/ Supervision / Construction Works
v.	Conservation Architect 1 No.	5	Post Graduation in Conservation Architecture with atleast 5 years of experience in similar heritage project / supervision.
(e)	Plant & Equipment Refer clause 4.4 B (a) of ITB	(10 Marks)	
1.	Cement Concrete batch mix plant (15-30 Cum/Hr) – 1 No.	2 Marks	
2.	Truck mounted transit mixer - 2 Nos.	1 Mark	
3.	Excavator (min. 20 T) – 1 Nos.	1 Mark	
4.	Mobile Crane – pick and carry (10-12 T.) – 1 Nos.	1 Mark	
5.	Complete steel staging and shuttering materials for 2,000 Sq.m.	Minimum 1,000 Sqm. –0.5 Mark Maximum - 1 mark	
6.	Tipper- 25 T capacity – 4 Nos.	Minimum 2 Nos – 0.5 Mark Maximum 4 Nos or more-1 Marks	
7.	Material Hoist (15 m) – 2 Nos.	1 mark	
8.	D G Set 125 KVA – 2 Nos.	1 Mark	
9.	Static concrete pump – 1 Nos.	1 Mark	
	Total	10 Marks	

The bidders qualifying the initial criteria as set out will be evaluated for following criteria by scoring method based on details furnished by them.

S. No.	Criteria	Maximum Marks	Minimum to be scored
a	Financial Strength	25	12.5
b	Experience in Similar Nature of work during last 5 years	20	10
c	DBR	20	10
d	Personnel and Establishment	25	12.5
e	Plant & Equipment	10	05
	Total Marks	100	60

- 1.2.1** The bidders who qualify as per Clause 1 above, securing minimum marks in each category as stated in above table with overall minimum of **60 marks out of 100** only will be asked to make a technical presentation regarding the contents of Cover-III (DBR), before a Committee on the scheduled date and time (to be intimated to the qualified bidders by post / E-mail).

1.3 CRITERIA FOR EVALUATION OF THE BIDDER FOR TECHNICAL PRESENTATION

(Submitted in Cover – III)

Presentation will be for 30 minutes inclusive of Questions and Answer session. The bidder will be required to give presentations in form of walkthrough / rendered 3D images of project components envisaged by him.

Sl.No	Parameters	Maximum Marks
1	Planning: Overall Planning should take into consideration the following a. Bidder's understanding of the Concept plan apart from the DBR provided in the RFP b. Innovation in Preliminary detailing of the entire project and site plan c. Use of new Technology d. Use of different types of material	40
2	Approach & Methodology for timely completion of the project and to overcome challenges, if any	40
3	Organizational strength & Team Competencies	20

- 1.3.1 The Bidder shall score minimum 60% marks in each category of the above table and 70% in total to qualify for financial proposal opening.
- 1.3.2 Evaluation of the bid will be based on qualification of bidder in the criteria as mentioned in Sl.1.2 and 1.3 above, taken together.
- 1.3.3 The results of evaluation of technical bid and technical presentation shall be published in the e-Procurement portal.

ANNEXURE-III TO ITB
DESIGN BASIS REPORT (DBR)

The Bidder shall furnish the **Design Basis Report (DBR)** in Cover-III for the as indicated in this Annexure. The intent of this DBR is to present the salient features of technical considerations and scope of work envisaged by the bidder for the project, based on which the bidder has made its financial offer. The bidder shall make sure that the DBR should cover sections on Architectural, civil, structural, electrical, public health engineering, HVAC (if any), fire protection system, elevator systems and other monitoring and control systems, landscaping aspects. The individual report shall contain, but not limited to, the following:

Drawings:

- i Site plan and layout drawings
- ii Rendered 3D images of the Area exterior , Landscape,Roads, Pavement
- iii Conceptual drawings of buildings with details of all floors
- iv Sections & Elevation of the building, master plan with key elements anf levels

Design Approach:

- i Floor-wise building design of different buildings with details of civil and structural considerations and services
- ii Area Statement with detail break-up of site as well as buildingd
- iii Design considerations vis-à-vis +Statutory Compliances
- iv Material details and makes proposed for different architectural, structural and non-structural members, electrical, ELV items, HVAC (if any), PHE, Fire Protection System, elevator and all other systems
- v Details of Landscaping plan including O&M
- vi GRIHA Rating & Sustainability
- vii Assumptions and Exclusions
- viii Circulation of pedestrian and vehicular traffic

Work Programme:

- i Detailed construction planning
- ii Technology proposed e.g. Primavera / MS Projects for monitoring construction
- iii Equipment planning

Quality Plan:

- i Quality management mechanism proposed to be adopted
- ii Methodology of execution of the project
- iii Process control mechanisms

BID DATA SHEET

Clause No.	Item	Description / Clarification
A. GENERAL INSTRUCTIONS		
1.1	Scope of Bid	<p>Employer: The Managing Director, Odisha Bridge & Construction Corporation Ltd, State of Odisha</p> <p>Address:</p> <p>Vikash Bhavan, Nayapalli, Bhubaneswar-751012</p> <p>Phone No. 0674-239-4093/6309/0043</p> <p>Fax: 0674-2396326</p> <p>Email: md@obcc.in</p> <p>Official website : https://tendersodisha.gov.in</p>
1.1	Scope of Bid	“Integrated Development of Maa Cuttack Chandi Temple, Cuttack on turnkey basis”
2	Source of Funds	The expenditure on this project shall be met from State Budget, Government of Odisha.
3.1	Eligible Bidders	<p>Only Reputed Indian firms [<i>It is meant for the Indian Firm having reputation in the specific area of operation for which tender is being invited</i>] are allowed to apply for this Project.</p> <p>Class of Contractor:</p> <p>Super Class (Government of Odisha Registration) or equivalent of other State Governments / Government of India / MES / Railways for execution of Civil works in general and Road, Bridge & Building work in particular.</p> <p>In case of successful bidders being not registered in Super Class under Government of Odisha, shall have to be registered as Super Class Contractor under Odisha PWD within 3 months time from execution of agreement failing which no payment shall be released till registration process is completed.</p>
4.2 (b)	Qualification of the Bidder	Financial Construction Turnover from Civil Construction Works shall only be considered , as mentioned in Cl. 4.4. A (a) of Bid Data
4.2 (c)	Qualification of the Bidder	<p>Experience of successful completion of works / substantial completion of works (<i>90% of the value of the contract to be considered as substantial completion</i>) as referred in Bid Data Sheet Cl. 4.4.A(b).</p> <p><i>Similar Works shall mean any Infrastructure Development project.</i></p> <p>The bidder must furnish the list of such works in the proforma stated</p>

		in Cl. 1.3.1. in Section 2 (Qualification Information).
4.2 (j)	Sub-Contracting	<p>Subcontracting components of the works shall be limited to 30% of the Contract Price. Maximum number of Sub-Contractors allowed is TWO.</p> <p>Work Experience, Equipment and Personnel of these specified Sub-Contractors shall NOT be considered while evaluating the proposal of the Bidder under Cl. 4.4.</p> <p>The total limit of Sub-Contracting under the Contract is specified in Clause 7 of Conditions of Contract in Section 3 read with Contract Data in Section 4.</p>
4.2 (k)	Methodology and Programme	Bidder shall provide these details in the Cover - III as mentioned in Cl.12.1 of this Section-I.
4.3	Bids from Joint ventures	Bids from Joint ventures / Consortiums / Association of Parties are not acceptable.
4.4. A (a)	Minimum Annual Financial Construction Turnover	<ul style="list-style-type: none"> i. Shall have an annual minimum turnover of Rs. 56 Crores in Civil Construction works certified by chartered accountant during any year in the last five financial years ending 31.03.2021. { <i>Please note that stand-alone financial figures of the Applicant only shall be considered for evaluation</i> } Financial turnover of previous financial years shall be given weightage of 10% (ten percent) per year based on rupee value to bring them to the price level up to the year of bid invitation.⁴ ii. The Firm should demonstrate making profit during the last three financial years, ending on 31.03.2021. iii. Should have valid PAN and GSTIN
4.4. A (b)	Experience in similar project* works	<p>Experience of successful completion of Work:</p> <p>(a) Satisfying any one of the following criteria for Similar Works⁵ during last 5 years prior to the bid invitation date. Cost of completed works of previous financial years shall be given weightage of 10% (ten percent) per year based on</p>

⁴ Bid invitation year 2022-23, Updation Factors:

<i>Year Before</i>	<i>Updation factor</i>
One	1.10
Two	1.21
Three	1.33
Four	1.46
Five	1.61

⁵ *Similar Works shall mean any Infrastructure Development Project*

		<p>rupee value to bring them to the price level up to the year of bid invitation.⁶</p> <p>One Similar Work of minimum Rs. 22 Crores; or</p> <p>Two Similar Works of minimum Rs. 17 Crores each; or</p> <p>Three Similar Works of minimum Rs. 11 Crores each</p> <p><i>Please note that:-</i></p> <ul style="list-style-type: none"> (i) <i>Experience of holding companies, associate companies, subsidiaries, and sister concerns shall not be considered for evaluation.</i> (ii) <i>All work orders / completion certificates submitted should be in the name of the Applicant (or Sub-contractor) as allowed as per the provisions of this IFB)</i> (iii) <i>For private sector projects, completion certificate with TDS shall be submitted.</i>
4.4. A (c)	Minimum Quantities	Not applicable
4.4 A (d)	Construction, Planning and Methodology	Bidder shall provide these details in the Cover - III as mentioned in Cl.12.1 of this Section-I.
4.4B. (a)	Equipment	<p>Cement Concrete batch mix plant (15-30 Cum/Hr) – 1 No.</p> <p>Truck mounted transit mixer - 2 Nos.</p> <p>Excavator (min. 20 T) – 1 Nos.</p> <p>Mobile Crane – pick and carry (10-12 T.) – 1 Nos.</p> <p>Complete steel staging and shuttering materials for 2000 Sq.m.</p> <p>Tipper- 25 T capacity – 4 Nos.</p> <p>Material Hoist (15 m) – 2 Nos.</p> <p>D G Set 125 KVA – 2 Nos.</p>

⁶ Bid invitation year 2022-23, Updation Factors:

<i>Year Before</i>	<i>Updation factor</i>
One	1.10
Two	1.21
Three	1.33
Four	1.46
Five	1.61

		Static concrete pump – 1 Nos.
4.4. B. (a)	Non-Availability of Equipment	In case of non-availability of any of the plants and equipment the bidders should submit a lease letter/commitment letter from the rightful owner.
4.4. B. (c)	Liquid Assets	Liquid assets or availability of fund based credit facilities/ over draft facility of not less than the amount of Rs. 9 crores .
4.5	Sub-contractors' experience and resources:	Please replace the existing paragraph 4.5 as below: Sub-contractors' experience and resources shall be considered in determining the bidder's compliance with the qualifying criteria.
4.6	Bid Invitation Year	2022-23
4.6	Period of Project	12 Months [N = 1 Year]

B. BIDDING DOCUMENTS

9.2	Pre-Bid Meeting	<p>Pre-bid meeting shall be held through video conferencing via link https://meet.google.com/ysi-cief-yow</p> <p>The bidder shall submit the queries through email md@obcc.in or tender@obcc.in on or before 5.00 PM of 15.07.2022</p> <p>Responses to the queries, including the text of the questions raised (without disclosing the source of enquiry) will be uploaded in the official website. Any modification of the bidding documents listed in Sub-Clause 8.1 which may become necessary as a result of the pre-bid queries shall be made by the Employer exclusively through the issue of an Addendum/ Corrigendum pursuant to Clause 10.</p> <p>Clarifications to the above will be uploaded on the tender portal of govt of Odisha https://tendersodisha.gov.in</p>
10.2	Amendment of Bidding Documents	Any addendum / corrigendum/ cancellation of tender shall be published in the website https://tendersodisha.gov.in only and such notice shall form part of the bidding documents. ⁷
10.3	Amendment of Bidding Documents	Employer shall extend as necessary the deadline for submission of bids by a suitable time period
10.4	Amendment of Bidding Documents	Addendum/ corrigendum shall also be available in the Official website.

⁷ The above provisions of Amendment of Bidding Documents supercede the provisions of Cl. No.1.8, Annexure-I to ITB.

C. PREPARATION OF BIDS		
12.1	Documents Comprising the Bid	<p>In addition to online submission of Cover-I and Cover-II, the bidder shall also submit online the soft copies (pdf format) of Cover III & Cover IV</p> <p>Cover-IV: The Bidder shall furnish the following documents in a sealed Cover superscribed - “Bid Security Declaration And Bid Processing Fee document”.</p> <ul style="list-style-type: none"> i. Original Bid <ul style="list-style-type: none"> i. Original Bid Security Declaration form duly filled in and (as mentioned in Clause 16.) ii. Non-refundable Bid Processing Fee remitted through online mode
13.2	Bid Price	<p>Replace the contents of the Clause with the following.</p> <p><i>The bidder shall fill the total bid price in figures online as Lump Sum Price.</i></p> <p>The total bid price shall be excluding GST on Works Contract. GST on Works Contract shall be paid by the Employer extra as applicable.</p>
15.1	Bid Validity	Bids shall remain valid for a period of 120 days after the due date for bid submission
16.1	Bid Security	<p>The paragraph is replaced with the following:</p> <p>The bidder has to sign a Bid security declaration accepting that if the bidder withdraw or modify its bid during the period of validity i. e. not less than 120 (one hundred twenty) days from the bid due date or if the bidder is awarded the contract and fail to sign the contract or to submit a performance security before the deadline defined in the Bid data , the bidder will be suspended for participation in the tendering process for the works of OB&CC Ltd and works under Government of Odisha for a period of three year from the bid due date of this work. The Bid securitydeclaration shall be submitted as per the format at section-2 (Format for Bid Security Declaration).</p> <p><u>Bid Processing Fee:</u></p> <p>The Bidder shall furnish a non-refundable Bid Processing Fee amounting to Rs.50,000/- (amount inclusive of GST) in shape of Demand Draft drawn / online in favour of the Managing Director, OB & CC Ltd, Payable at Bhubaneswar as per e-procurement portal of Govt. of Odisha</p>
18.2 18.3	Format and Signing of Bid	Deleted as submission of bids is through online using DSC

D. SUBMISSION OF BIDS		
19	Sealing and Marking of Bids	<p>In addition to online submission of Cover-I and Cover-II, the bidder shall also submit online the soft copies (pdf format) of the documents to be furnished in Cover –III (both online and offline) and</p> <p>Cover-IV: (both online and offline) The Bidder shall furnish the following documents in a sealed Cover superscribed : as Bid security declaration and Bid processing fee document.</p> <p>(i) Original Bid Security Declaration form duly filled in and (as mentioned in Clause 16.)</p> <p>(ii) Non-refundable Bid Processing Fee remitted through online mode</p> <p>The hard copies of Cover-III & Cover-IV shall be addressed to the Employer in the address provided in the Clause-1.1 of the ITB, bear the name and identification number provided in of IFB and superscripted “COVER-.....(NOT TO BE OPENED BEFOREHours[TIME] on/.... [DATE])”.</p>
20.1	Bid Submission	<p>In addition to online submission of Cover-I and Cover-II, the bidder shall also submit online the soft copies (pdf format) of the documents to be furnished in Cover –III.</p> <p>Time and date of online submission is on or before 5:00 PM on 02.08.2022.</p> <p>For Cover-III &IV (hard copy), time and date of offline submission is on or before 5:00 PM of 05.08.2022 in the office of the Employer.</p> <p>The sealed covers (Cover-III & Cover-IV) sent through post / courier /in person, must physically reach the Employer by the stipulated date and time. <i>The Employer shall bear no liability for any delay or loss or damage of the above documents during transit and in such event the bid shall stand rejected summarily and no request in any form from any Bidder shall be entertained on this ground.</i></p>
E. BID OPENING & EVALUATION		
23.1	Bid Opening	All the bids received shall be opened in the Office of the Managing Director, Odisha Bridge & Construction Corporation Ltd, Vikash Bhawan, Nayapalli, Bhubaneswar-751012 on 03.08.2022 at 11:30 am.
26.1 (b)	Bid Security and Bid Processing Fee	<p>Read the Sub-Clause as:</p> <p>(b) Is accompanied by the required bid processing fee & Bid Security Declaration;</p>
26.1 (c)	Substantial Responsiveness	Read the Sub-Clause as:

	(Technical Evaluation)	<p>(c) Is substantially responsive to the requirements of the bidding documents and qualified in the evaluation procedure set-forth in Annexure – II to ITB. (Eligibility and Technical Presentation)</p> <p>If there is a discrepancy between the information provided in the soft copy submitted in online mode and the hard copies submitted by the Bidder relating to Cover -I and II, the information provided in online mode shall prevail and the bidders qualification shall be evaluated accordingly.</p>												
26.1 (e)	Financial Evaluation (Negotiation)	<p>Read the Sub-Clause as:</p> <p>(e) The “Financial Bids” of the responsive bidders shall be opened online. During detail evaluation of the “Financial Bid” of the lowest evaluated bidder, the responsiveness of the bid will be further examined and if required, the bidder shall be asked to clarify its offer through further negotiation.</p>												
F. AWARD OF CONTRACT														
31.3	Notification of Award & Signing of Agreement	<p>The following is added below the paragraph:</p> <p>The Bidder shall submit a detail resource based work program using standard software (Primavera/MS Projects) and a ‘S’ Curve showing monthly cash flow forecast for the Works, within 14 days of issue of the Letter of Acceptance of tender which shall form part of the contract.</p> <p>The Project Completion Schedule must contain the Project Mile Stones mentioned in Cl. 45.1 of Contract Data.</p>												
32.1	Performance Security	<p>The Bidder shall furnish, Performance Security for this particular work in the form of Bank Guarantee from any Public Sector Bank of India, Payable by its branch at Bhubaneswar in favour of the Managing Director, OB & CC Ltd, Payable at Bhubaneswar.</p> <p>Being a Turn-Key Assignment, no additional Performance Security shall be required to be deposited by the selected bidder.</p> <p>List of Banks</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center; padding: 5px;"><u>Public Sector Banks</u></th> <th style="text-align: center; padding: 5px;"><u>Private Sector Banks</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">1. Canara Bank,</td> <td style="text-align: center; padding: 5px;">11.ICICI Bank</td> </tr> <tr> <td style="text-align: center; padding: 5px;">2.Punjab National Bank,</td> <td style="text-align: center; padding: 5px;">12. Axis Bank Ltd</td> </tr> <tr> <td style="text-align: center; padding: 5px;">3. State Bank India,</td> <td style="text-align: center; padding: 5px;">13. HDFC Bank</td> </tr> <tr> <td style="text-align: center; padding: 5px;">4. Union Bank of India,</td> <td style="text-align: center; padding: 5px;">14. Bandhan Bank</td> </tr> <tr> <td style="text-align: center; padding: 5px;">5.Bank of India,</td> <td style="text-align: center; padding: 5px;"><u>RRBs and OSCB</u></td> </tr> </tbody> </table>	<u>Public Sector Banks</u>	<u>Private Sector Banks</u>	1. Canara Bank,	11.ICICI Bank	2.Punjab National Bank,	12. Axis Bank Ltd	3. State Bank India,	13. HDFC Bank	4. Union Bank of India,	14. Bandhan Bank	5.Bank of India,	<u>RRBs and OSCB</u>
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		<p>6. Bank of Baroda, 7. UCO Bank 8. Indian Bank 9. Indian Overseas Bank 10. Central Bank of India</p>	<p>15. Utkal Grameen Bank 16. Odisha Gramya Bank 17. Odisha State Co-operative Bank.</p>	
33	Advance Payment and Security	<p>The paragraph is replaced as under:</p> <p>The Employer shall make advance payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a Bank acceptable to the Employer in amounts and currencies equal to 110 (hundred ten) % the advance payment.</p> <p>The advance shall carry 10% (Ten) interest.</p>		

SECTION 2:
Forms of Bid

TABLE OF FORMS:

- **CONTRACTOR'S BID**
- **QUALIFICATION INFORMATION**
- **BANK CERTIFICATE**
- **AFFIDAVIT**
- **BID SECURING DECLARATION**
- **CV FORMAT**
- **LETTER OF ACCEPTANCE**
- **NOTICE TO PROCEED WITH THE WORK**
- **AGREEMENT FORM**

CONTRACTOR'S BID

[This is a mandatory form to be submitted by the bidder on their letter-head, failing which the bid is liable for rejection]

Description of the Works: INTEGRATED DEVELOPMENT OF MAA CUTTACK CHANDI TEMPLE,CUTTACK ON TURNKEY BASIS.

To:

The EIC-cum- Managing Director,
Odisha Bridge & Construction Corporation Ltd.
Vikas Bhavan, Nayapalli
Bhubaneswar-751012

Gentlemen,

Having examined the bidding documents including addendum/ corrigendum, I / we offer to execute the Works described above in accordance with the conditions of contract, specifications, accepted tendered drawing, and Payment schedule accompanying this Bid for the Contract Price as tendered in our price bid document separately.

This Bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any Bid you receive.

We undertake that, in competing for (and if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We hereby confirm that this Bid complies with the Bid Validity and Bid Security required by the Bidding documents.

We attach herewith our current income-tax clearance certificate.

Yours faithfully,

Authorized Signature:

Name & Title of Signatory:

Name of Bidder :

Address:

Email-id:

Contact No:

Stamp:

QUALIFICATION INFORMATION

[This is a mandatory form to be submitted by the bidder on their letter-head, failing which the bid is liable for rejection]

The information to be filled in by the Bidder in the following pages will be used for purposes of qualification as provided for in Clause 4 of the Instructions to Bidders. This information will not be incorporated in the Contract.

1. Information of the Bidder

1.1 Constitution or legal status of Bidder *as per ITB Clause 4.2 (a)*

[Attach copy]

Place of registration: _____

Principal place of business: _____

Power of attorney of signatory of Bid

[Attach]

1.2 Financial Turnover of the bidder during the last five financial years duly certified by the registered chartered accountant. *(in Rs. Crores) as per ITB Clause 4.2 (b)*

1.3.1 Work performed as prime contractor (in the same name) on project works over the last five financial years. **

Project Name@ of the Employer*	Name of work	Description of work	Contract No.	Value of contract (In Rs. Crores)	Date of issue of work order	Stipulated period of completion	Actual date of completion*	Remarks explaining reasons for delay and work completed
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

**Attach certificate (s) from the Engineer(s)-in-Charge*

@*The item of work for which data is requested should tally with that specified in ITB clause 4.2(c) read with Bid Data Sheet.*

** *Immediately preceding the financial year in which bids are received.*

1.4 Information on Bid Capacity (works for which bids have been submitted and works which are yet to be completed) as on the date of this bid.

(A) Existing commitments and on-going works:

Description of Work	Place & State	Contract No. & Date	Name and Address of Employer	Value of Contract (In Rs. Crores)	Stipulated period of completion	Value of works* remaining to be completed (In Rs. Crores)	Anticipated date of completion
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

(B) Works for which bids already submitted:

Description of Work	Place & State	Name and Address of Employer	Estimated value of works (In Rs Crores)	Stipulated period of completion	Date when decision is expected.	Remarks if any
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<hr/>						

* *Attach certificate(s) from the Engineer(s)-in-Charge.*

- 1.5 The following items of Contractor's Equipment are essential for carrying out the Works. The Bidder should list all the information requested below. Refer also to Sub Clause 4.2(d) read with 4.4 (B) of the Instructions to Bidders.

Item of Equipment	Requirement	Availability Proposals		Age/Condition	Remarks (From whom to be purchased)
	No.	Nos./Capacity	Owned/Leased/ to be procured		

- 1.6 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to 4.2(e) read with annexure of instructions to Bidders and Sub Clause 9.1 of the Conditions of Contract.

Position	Name	Qualifications	Years of experience (general)	Years of experience in the proposed position
Project Manager etc.				
<hr/>				

- 1.7 Proposed subcontracts and firms involved. [Refer ITB Clause 4.2 (j)]

Sections of the works	Value of Sub-contract	Sub-contractor (name and address)	Experience in similar work
<hr/>			

- 1.8 Financial reports for the last five financial years: balance sheets, profit and loss statements, auditors' reports (in case of companies/corporation), etc. List them below and attach copies. [Refer ITB Clause 4.2 (f)]

- 1.9 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List them below and attach copies of support documents [*sample format attached*]. [Refer ITB Clause 4.2 (g)]

- 1.10. Name, address, and telephone, telex, and fax numbers of the Bidders' Bankers who may provide references if contacted by the Employer. [Refer ITB Clause 4.2 (h)]

- 1.11 Information on litigation, arbitration, debarment, termination, notice for recession of contract, abandonment of work history in which the Bidder is involved. [Refer ITB Clause 4.2 (i)]

Employer Name and Contact	Description of Work	Agreement No.	Status & matter of dispute and/or issues
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1.12 Statement of compliance under the requirements of Sub Clause 3.2 of the instructions to Bidders.

1.13 The Bidder MUST SUBMIT THE DRAWINGS, DESIGN BRIEF REPORT, WORK PROGRAMME & QUALITY PLAN IN COVER-III as necessary for the works [As per the provisions of ITB Clause 4.1, 4.2 (k) and 4.4 A (d)].

1.14 The Bidder shall furnish the Bid Security in shape of Bank Guarantee & Non-refundable Bid Processing Fee in shape of Demand Draft (as mentioned in Clause 16.1) in Cover-IV:

1.15 Affidavit by the bidder duly signed by the Notary Public

Authorized Signature:

Name & Title of Signatory:

Name of Bidder :

Stamp:

BANK CERTIFICATE

[To be issued by bidder's bank on bank's letter-head and submitted by the bidder]

This is to certify that M/s. is a reputed company with a good financial standing.

If the contract for the work, namely "*[insert name of the work]*" on turn-key basis involving design and execution of works is awarded to the above firm, we shall be able to provide overdraft/cash credit facilities to the extent of Rs. to meet their working capital requirements for executing the above contract.

Name of Bank:

Name of Senior Bank Manager:

Address of the Bank:

e-mail id:

AFFIDAVIT

[To be submitted by the bidder in a non-judicial stamp paper duly signed by the Notary Public]

1. I, the undersigned, do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s..... have abandoned any work on building in India nor any contract awarded to us by the State of Odisha for such works have been rescinded, during last five years prior to the date of this bid.
3. The undersigned hereby authorize(s) and request(s) any bank, person, firm or corporation to furnish pertinent information deemed necessary and requested by the Department to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understand and agrees that further qualifying information may be requested and agrees to furnish any such information at the request of the Department/ project implementing agency.

Authorized Signature:

Name & Title of Signatory:

Name of Bidder :

Stamp:

BID SECURITY DECLARATION

(Refer Clauses -16 of section 1)

[To be submitted by the bidder on a non-judicial stamp paper duly signed by the Notary Public]

I hereby submit a declaration that the bid submitted for (*Name of works*) by the undersigned, on behalf of the bidder, (*Name of the bidder*) shall not be withdrawn or modified during the period of validity i.e. not less than **120 (one hundred twenty)** days from the bid due date.

I, on behalf of the bidder, (*Name of the Bidder*), also accept the fact that in case the bid is withdrawn or modified during the period of its validity or if we fail to sign the contract in case the work is awarded to us or we fail to submit a performance security before the deadline defined in clause of the ITB , then (*Name of the bidder*) will be suspended from participation in the tendering process for the works of OB&CC Ltd and all works under Government of Odisha for a period of three year from the bid due date of this work.

Authorized Signature:

Name & Title of Signatory:

Name of Bidder :

Stamp:

CV FORMAT

Position Title	
Name of Expert:	

Employment and Education record relevant to the assignment:

Total Years of Experience	Relevant years of Experience	Education Qualification with Name of the Institution and year of passing	Name of the Project with duration and activities performed relevant to the Assignment.		
			Name of project	Duration	Brief description of project and nature of responsibility

Note: Bidders are requested to submit the Personnel and Establishment information in above CV format only and shall attach certificates of all the Educational Qualifications and other training if required failing which the proposal is liable to be rejected.

LETTER OF ACCEPTANCE

[To be issued to successful bidder on Letter-head of OBCC]

[date]

To: _____ [name and address of the Contractor] _____

Dear Sir(s)

This is to notify you that your Bid dated _____ for execution of the work "**Integrated Development of Maa Cuttack Chandi Temple on Turnkey Basis vide Bid Identification No. 12/Tender/OBCC/2022-23**" involving design and execution of works for the Contract Price of Rupees _____ (_____) [amount in words and figures], as corrected and modified¹ in accordance with the Instructions to Bidders¹ is hereby accepted by our Agency.

We note that as per bid, you do not intend to subcontract any component of work

(Or)

We note that as per bid, you propose to employ _____ as sub-contractor for executing _____

(Delete whichever is not applicable)

You are requested to furnish the detail Work Programme and milestone wise activity as per Para 31.3 of ITB to complete the contract negotiation within 14 days of this Letter of Award. Further, you are hereby requested to furnish Performance Security in the form detailed in Para 32.1 of ITB for an amount of Rs..... within 21 days of the receipt of this Letter of Acceptance and sign the contract failing which action as stated in Para 31.5 and Para 32.3 of ITB will be taken.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

¹ Delete "corrected and" or "and modified" if only one of these actions applies. Delete "as corrected and modified in accordance with the Instructions to Bidders" if corrections or modifications have not been effected.

NOTICE TO PROCEED WITH THE WORK

[To be issued on Letter-head of OBCC]

_____ (date)

To

_____ (name and address of the Contractor)

Dear Sirs:

Pursuant to your furnishing the requisite security as stipulated in ITB clause 32.1 and signing of the contract agreement for the work "Integrated Development of Maa Cuttack Chandi Temple on Turnkey Basis." involving design and execution of works @ a Bid Price of Rs. _____, you are hereby instructed to proceed with the execution of the said works in accordance with the contract documents.

Yours faithfully,

Authorized Signature

Name and Title of Signatory

Name of Agency

AGREEMENT FORM

[To be executed on stamp paper of appropriate value]

Agreement

This agreement, made the _____ day of _____ 2021 between

_____ [name and address of Employer]

(hereinafter called "the Employer") of the one part and _____

_____ [name and address of contractor]

(hereinafter called "the Contractor") of the other part.

Whereas the Employer is desirous that the Contractor "[insert name of the work], [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 contract price of Rs.....

NOW THIS AGREEMENT WITNESSETH as follows:

1. In this Agreement, words and expression shall have the same meanings 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 the 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 read and construed as part of this Agreement, viz.:
 - i) Letter of Acceptance
 - ii) Notice to proceed with the works
 - iii) Contractor's Bid
 - iv) Contract Data
 - v) Conditions of contract (including Special Conditions of Contract)
 - vi) Specifications
 - vii) Drawings
 - viii) Bill of Quantities (Optional)
 - ix) Payment Schedule and
 - x) Any other document listed in the Contract Data as forming part of the contract.

In witness whereof the parties thereto 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 _____

**SECTION 3:
CONDITIONS OF CONTRACT**

Conditions of Contract

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CONDITIONS OF CONTRACT

A. GENERAL

1. Definitions

- 1.1. Terms, which are defined in the Contract Data and not defined in the Conditions of Contract shall keep their defined meanings. Capital initials are used to identify defined terms.
 - 1.1.1 **Bill of Quantities** means the priced and completed Bill of Quantities;
 - 1.1.2 **Compensation Events** are those defined in Clause 41 hereunder;
 - 1.1.3 The **Completion Date** is the date of completion of the Works as certified by the Engineer in accordance with clause 50;
 - 1.1.4 The **Contract** is the contract between the Employer and the Contractor to execute, complete and maintain the Works. It consists of the documents listed in Clause 2.3 below.
 - 1.1.5 The **Contract Data** defines the documents and other information, which comprise the Contract;
 - 1.1.6 The **Contractor** is a person or corporate body whose Bid to carry out the Works has been accepted by the Employer [obligations of the Contractor mentioned in the Contract Data].;
 - 1.1.7 The **Contractor's Bid** is the completed Bidding document submitted by the Contractor to the Employer and includes Technical and Financial bids;
 - 1.1.8 The **Contract Price** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract;
 - 1.1.9 **Days** are calendar days; months are calendar months;
 - 1.1.10 **A Defect** is any part of the Works not completed in accordance with the Contract;
 - 1.1.11 The **Defects Liability Period** is the period named in the Contract Data and calculated from the Completion Date;
 - 1.1.12 The **Employer** is the party who will employ the Contractor to carry out the Works; [As mentioned in the Contract Data].
 - 1.1.13 The **Engineer** is the person named in the Contract Data (or any other competent person appointed and notified to the contractor to act in replacement of the Engineer) who is responsible for supervising the Contractor's work, administering the Contract, certifying payments due to the Contractor, issuing and valuing Variations to the Contract, recommending extensions of time, and valuing the Compensation Events;
 - 1.1.14 **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works;
 - 1.1.15 **Initial Contract Price** is the Contract Price listed in the Employer's Letter of Acceptance;
 - 1.1.16 **Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is specified in the Contract Data. The Intended Completion Date may be revised only by the Employer by issuing an extension of time;
 - 1.1.17 **Materials** are all supplies, including consumables, used by the contractor for incorporation in the Works;
 - 1.1.18 **Plant** is any integral part of the Works, which is to have a mechanical, electrical, electronic or chemical or biological function;

- 1.1.19 The **Site** is the area defined as such in the Contract Data;
- 1.1.20 **Site Investigation Reports** are those, which were included in the Bidding documents and are factual interpretative reports about the surface and sub-surface conditions at the site;
- 1.1.21 **Specification** means the Specification of the works included in the Contract and any modification or addition made or approved by the Employer;
- 1.1.22 The **Start Date / Date of Commencement** is given in. the Contract Data. It is the date when the Contractor shall commence execution of the works. It does not necessarily coincide with any of the Site Possession Dates;
- 1.1.23 A **Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site;
- 1.1.24 **Temporary Works** are works designed, constructed, installed, and removed by the Contractor, which are needed for construction or installation of the Works;
- 1.1.25 A **Variation or Change in Scope** is an instruction given by the Employer, which varies and change the scope of Works;
- 1.1.26 **Works** are what the Contract requires the Contractor to construct, install, and turn over to the Employer, as defined in the Contract Data;
- 1.1.27 Year may be understood as financial year;
- 1.1.28 “**Approved Make**” means makes of items as specified in the “List of Approved Makes/Approved Manufacturers” in Section 8 of this RFP. However, a higher or equivalent make can be utilized after obtaining prior approval of “Engineer-In-Charge” in writing.

2. Interpretation

- 2.1. In interpreting the Conditions of Contract, singular also means plural, male also means female or neuter, and the other way around. Headings have no significance. Words have their general meaning under the language of the Contract unless specifically defined. The Employer will provide instructions clarifying queries about the Conditions of Contract.
- 2.2. If sectional completion is specified in the Contract Data, references in the Conditions of Contract to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion date for the whole of the Works).
- 2.3. The documents forming the Contract shall be interpreted in the following order of priority:
 - (a) Agreement
 - (b) Letter of Acceptance, notice to proceed with the works
 - (c) Contractor's Bid
 - (d) Contract Data
 - (e) Conditions of Contract including Special Conditions of Contract
 - (f) Specifications
 - (g) Drawings
 - (h) Bill of quantities (optional) and
 - (i) Any other document listed in the Contract Data as forming part of the Contract.

3. Languages and Law

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

4. Engineer's Decisions:

Except where otherwise specifically stated, the Engineer will decide contractual matters between the Employer and the Contractor in the role representing the Employer as per the provision of the contract.

5. Delegation:

The Engineer may delegate any of his duties and responsibilities to other people after notifying the Contractor and may cancel any delegation after notifying the Contractor.

6. Communications:

Communications between parties which are referred to in the conditions are effective only when in writing. A notice shall be effective only when it is delivered (in terms of Indian Contract Act).

7. Sub-contracting:

The Contractor may sub-contract any portion of work, up to a limit specified in Contract Data, with the approval of the Engineer but may not assign the Contract without the approval of the Employer in writing. Sub-contracting does not alter the Contractor's obligations.

8. Other Contractors:

The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and the Employer between the dates given in the Schedule of other Contractors. The Contractor shall as refer to in the Contract Data, also provide facilities and services for them as described in the Schedule. The employer may modify the schedule of other contractors and shall notify the contractor of any such modification.

9. Personnel:

- 9.1. The Contractor shall employ the key personnel named in the Schedule of Key Personnel as referred to in the Contract Data besides those as listed at section-8 and Section-9 to carry out the functions stated in the Schedule or other personnel approved by the Engineer. The Engineer will approve any proposed replacement of key personnel only if their qualifications, abilities, and relevant experience are substantially equal to or better than those of the personnel listed in the Schedule.
- 9.2. If the Engineer asks the Contractor to remove a person who is a member of the Contractor's staff or his work force stating the reasons the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.

10. Employer's and Contractor's Risks:

The Employer carries the risks which this Contract states are Employer's risks, and the Contractor carries the risks which this Contract states are Contractor's risks.

11. Employer's Risks:

The Employer is responsible for the excepted risks which are in so far as they directly affect the execution of the Works in India, the risks of war, hostilities, invasion, act of foreign enemies, rebellion, revolution, insurrection or military or usurped power, civil war, riot commotion or disorder (unless restricted to the Contractor's employees), and contamination from any nuclear fuel or nuclear waste or radioactive toxic explosive.

12. Contractor's Risks:

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

13. Insurance:

- 13.1 The Contractor shall provide, in the joint names of the Employer and the Contractor, insurance cover **for the period as stated below against the events and** in the amounts and deductibles stated in the Contract Data for the following events, which are due to the Contractor's risks:
- A) **From the starting date to the end of defect liability period:**
- (a) Loss of or damage to the works
- B) **From the start date till completion of the work as per agreement:**
- (a) Loss of or damage to plant, materials and equipment,
- (b) Loss of or damage of property (except the works, plant, materials and equipment) in connection with the contract, and
- (c) Personal injury or death.
- 13.2 If all the items as listed at Cl.13.1(B) can be combined / grouped under one insurance cover like Contractor's, All Risks (CAR) Policy **covering all-natural calamities as per local conditions.**
- 13.3 Prior to seven days before the start date, the Contractor shall furnish to the Engineer notarized true copies of the certificates of insurance, copies of insurance polices and premia payment receipts in respect of such insurance for the Employer's approval. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 13.4 If the contractor does not provide any of the policies and certificates required, the Employer may affect the insurance which the contractor should have provided and recover the premiums the Employer has paid from payments otherwise due to the contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.5 Alterations to the terms of insurance shall not be made without the approval of the Employer.
- 13.6 Both parties shall comply with any conditions of the insurance policies.

14. Site Investigation Reports:

- 14.1 The Contractor, in preparing the Bid, may rely on any site Investigation Reports referred to in the Contract Data, which are indicative and not exhaustive. The Employer shall provide all available details to the Contractor (Bidder) for his information, if requested by him at least one week prior to the bid submission date. The bidder shall be responsible for interpreting all such data. After award of work, the Contractor shall carryout detail survey and investigation for preparation of detail designs as per the scope of work and time period stipulated at Section-8.
- To the extent which was practicable (taking account of cost and time), the Contractor (Bidder) shall be deemed to have obtained all necessary information as to risks, contingencies and other circumstances which may influence or affect the Tender or Works. To the same extent, the Contractor (Bidder) shall be deemed to have inspected and examined the Site, its surroundings, the above data and other available information, and to have been satisfied before submitting the Tender as to all relevant matters, including (without limitation):
- (a) the form and nature of the Site, including sub-surface conditions,
- (b) the climatic conditions,
- (c) the extent and nature of the work and Goods necessary for the execution and completion of the Works and the remedying of any defects,
- (d) the Laws, procedures and labour practices of the Country, and
- (e) the Contractor's requirements for access, accommodation, facilities, personnel, power, transport, water and other services.
- (f) availability of required materials

15. Queries about the Contract Data:

- 15.1 The Employer will clarify queries on the Contract Data if any during the Pre-bid references.

16. Contractor to Construct the Works:

16.1 The Contractor shall construct and install the Works in accordance with the approved specification and drawings. All designs, drawings and specifications to be furnished by the contractor shall be approved by the Employer before execution in accordance with Cl. 18.

17. The Works to be completed by the Intended Completion Date:

The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the programme submitted by the Contractor, as updated with the approval of the Engineer, and complete them by the Intended Completion Date.

18. Approval by the Engineer:

18.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Engineer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for design of Temporary Works.

18.3 The Engineer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval to the design, drawings and specifications of all components of the building and all allied infrastructure works, except those for the temporary works as stated at Cl. 18.1, from any National Institute of Repute / State Govt. Engineering College of repute in Odisha at its own cost. Such approved documents need to be furnished to the Employer within the stipulated date as mentioned in the contract data and at Section-8

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer / Engineer before their use.

19. Safety:

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries:

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

21. Possession of the Site:

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site:

22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions:

23.1 The Contractor shall carry out all instructions of the Engineer pertaining to works, which comply with the applicable laws where the Site is located.

23.2 The Contractor shall permit the Employer to inspect the Contractor's accounts and records relating to the performance of the Contractor and to have them audited by auditors appointed by the Employer, if so required by the Employer.

24. Disputes:

That for the purpose of jurisdiction in the event of disputes if any of the Contract would be deemed to have been entered in to within the State of Odisha and it is agreed that neither party to the Contract will be competent to bring a suit in regard to the matter by this Contract at any place outside the State of Odisha.

25. Procedure for Settlement of Disputes:

25.1 In case of Dispute or difference arising between the Employer and the contractor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996.

25.2 Dispute Resolution: Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in clause 25.4

25.3 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all no privileged records, information and data pertaining to any Dispute.

25.4 Conciliation: In the event of any Dispute between the Parties, either Party may call upon the Authority's Engineer, or such other person as the Parties may mutually agree upon (the "Conciliator") to mediate and assist the Parties in arriving at an amicable settlement thereof. Failing mediation by the Conciliator or without the intervention of the Conciliator, either Party may require such Dispute to be referred to the Chairman of the Authority and the Chairman of the Board of Directors of the Contractor for amicable settlement, and upon such reference, the said persons shall meet no later than 7 (seven) business days from the date of reference to discuss and attempt to amicably resolve the Dispute. If such meeting does not take place within the 30 (thirty) business day period or the Dispute is not amicably settled within 30 (thirty) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing referred to in Clause 25.2 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 25.4 but before resorting to such arbitration, the parties agree to explore conciliation by the Conciliation Committees of Independent Experts set up by the Authority in accordance with the procedure decided by the panel of such experts and notified by the Authority on its website including its subsequent amendments. In the event of the conciliation proceedings being successful, the parties to the dispute would sign the written settlement agreement and the conciliators would authenticate the same. Such settlement agreement would then be binding on the parties in terms of Section 73 of the Arbitration Act. In case of failure of the conciliation process even at the level of the Conciliation Committee, either party may refer the Dispute to arbitration in accordance with the provisions of Clause 25.4.

25.5 Arbitration:

- i. Any dispute which remains unresolved between the parties through the mechanisms available/ prescribed in the Agreement, irrespective of any claim value, which has not been agreed upon/ reached settlement by the parties, will be referred to the Arbitral Tribunal as per the Arbitration and Conciliation Act.
- ii. The Arbitral Tribunal shall make a reasoned award (the "Award"). Any Award made in any arbitration held pursuant to this Article 25 shall be final and binding on the Parties as from the

- date it is made, and the Contractor and the Authority agree and undertake to carry out such Award without delay.
- iii. The Contractor and the Authority agree that an Award may be enforced against the Contractor and/or the Authority, as the case may be, and their respective assets wherever situated.
 - iv. This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder. Further, the parties unconditionally acknowledge and agree that notwithstanding any dispute between them, each Party shall proceed with the performance of its respective obligations, pending resolution of Dispute in accordance with this Article.
 - v. In the event the party against whom the Award has been granted challenges the Award for any reason in a court of law, it shall make an interim payment to the other party for an amount equal to 75% of the Award, pending final settlement of the dispute. The aforesaid amount shall be paid forthwith upon furnishing an irrevocable Bank Guarantee for a sum equal to 120% of the aforesaid amount. Upon final settlement of the dispute the aforesaid interim payment shall be adjusted and any balance amount due to be paid or returned, as the case may be, shall be paid or returned with interest calculated at the rate of 10 % per annum from the date of interim payment to the date of final settlement of such balance.
- 25.6 **Adjudication by Regulatory Authority, Tribunal or Commission :** In the event of constitution of a statutory regulatory authority, tribunal or commission, as the case may be, with powers to adjudicate upon disputes between the Contractor and the Authority, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 25.4, be adjudicated upon by such regulatory authority, tribunal or commission in accordance with the Applicable Law and all references to Dispute Resolution Procedure shall be construed accordingly. For the avoidance of doubt, the Parties hereto agree that the adjudication hereunder shall not be final and binding until an appeal against such adjudication has been decided by an appellate tribunal or court of competent jurisdiction, as the case may be, or no such appeal has been preferred within the time specified in the Applicable Law.

26. Replacement of Adjudicator: Not applicable

B. TIME CONTROL

27. Programme:

- 27.1 Within **14 days of issue of letter of award**, the successful bidder shall submit to the Employer detail work programme for approval showing the general methods, arrangements, order and timing for all the activities in the Works along with monthly cash flow forecast. The agreed work programme / milestones during such contract negotiation shall form part of the agreement.
- 27.2 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 work including any changes to the sequence of the activities.
- 27.3 The contractor shall submit to the Employer, 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.
- 27.4 The Employer's approval of the Programme shall not alter the Contractor's obligations. The Contractor may revise the Programme and submit it to the Employer again at any time. A revised Programme is to show the effect of Variations and Compensation Events.
- 27.5 Contractor has to facilitate themselves to update the project reporting in client PMIS portal.

28. Extension of the Intended Completion Date:

- 28.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the intended Completion Date without the Contractor taking steps to accelerate the remaining work and which would cause the Contractor to incur additional cost.
- 28.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 35 days of the Contractor asking the Engineer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.
- 28.3 The Engineer shall within 14 days of receiving full justification from the contractor for extension of Intended Completion Date refer to the Employer his recommendation. The Employer shall in not more than 21 days communicate to the Engineer the Employer's decision.

29. Delays Ordered by the Engineer:

The Engineer may instruct the Contractor to delay the start or progress of any activity within the Works.

30. Management Meetings:

- 30.1 Either the Engineer or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 30.2 The Engineer shall record the business of management meetings and is to provide copies of his record to those attending the meeting and to the Employer. The responsibility of the parties for

actions to be taken is to be decided by the Engineer either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

31. Early Warning:

- 31.1 The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the work resulting delay in the execution. The Engineer may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Completion Date.
- 31.2 The Contractor shall cooperate with the Engineer in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Engineer.

C. QUALITY CONTROL

32. Identifying Defects:

The Engineer shall check the Contractor's work regularly and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Engineer may instruct the Contractor to search for defects and to uncover and test any work that the Engineer considers may have a Defect

33. Tests:

If the Engineer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

34. Correction of Defects:

- 34.1 The Engineer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 34.2 Every time notice of a Defect is given; the Contractor shall correct the notified Defect within the length of time specified by the Engineer's notice.

35. Uncorrected Defects:

If the Contractor has not corrected a Defect within the time specified in the Engineer's notice, the Engineer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

D. COST CONTROL

36. Changes in the Quantities: (OPTIONAL)

37. Change of Scope (Variations) and Procedure for change of Scope:

37.1 The Employer may, require the Contractor to make modifications/alterations to the construction works before the issue of the completion certificate either by giving an instruction or by requesting the contractor to submit a proposal for change of scope involving additional cost or reduction in cost. Any such change of scope shall be made and valued in accordance with the provisions of this contract and the contractor, in that event, will have no further claim on the ground that had it been known / disclosed earlier he would have made such charges in other connected work in their design, construction which would have saved him some cost and given him other consequential benefits.

37.2 Change in scope may include;

- (a) Change in specifications of any item of works
- (b) omission/ deletion of any item of work from the scope of work
- (c) any additional work (such as addition of extra plinth area) which are not included in the scope of work including any additional test on completion

37.3 In the event of the Employer determining that a change of scope is necessary, it shall issue notice to the contractor a notice specifying in reasonable detail the works contemplated there under (“Change in scope notice”)

37.4 Upon receipt of change in scope notice, the contractor shall with due diligence, provide to the Employer through the Engineer within seven days time such information as is necessary together with documentation in support of;

- (a) the impact, if any, which the change in scope is likely to have on the completion of the work
- (b) the options for implementing the proposed change of scope and the effect, if any, each on the cost and time thereof m including the following details;
 - i. break down of quantities, unit rates and cost for different items of work
 - ii. proposed design for the change of scope
 - iii. proposed modifications, if any, to the construction period with updated work programmes (all Variations shall be included in updated programmes produced by the Contractor).

37.5 Any change in scope shall be calculated on the basis of the following priority:

1. Odisha State CSR
2. CPWD rate
3. MoSRTTH rate
4. Delhi Schedule Rate

37.6 The total value of all change of scope of work shall not exceed 10% of total contract price for the construction work.

38. Payments for Change of Scope (Variations):

38.1 The Employer shall assess the change in scope proposal and Contractor's quotation and upon reaching an agreement; the Employer shall issue the Change of Scope Order requiring the contractor to proceed with the performance thereof.

- 38.2 If the Contractor's quotation is unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.
- 38.3 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event, subject to condition that such variation shall not exceed 10% of the total contract price for the contract work.
- 38.4 The Contractor shall not be entitled to additional payment for costs, which could have been avoided by giving early warning.

38.5 Deleted

39. Payment Certificates:

- 39.1 The Contractor shall submit to the Engineer statements of the value of the work completed.
- 39.2 The Engineer shall check the Contractor's statement within 14 days and certify the amount to be paid to the Contractor as per contract payment schedule after taking into account any credit or - debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 47.3 of the Contract Data (Secured Advance).
- 39.3 The value of work executed shall be determined by the Engineer.
- 39.4 The value of work executed shall comprise the value of the quantities of the items as per the milestone and work programme attached to the contract.
- 39.5 The value of work executed shall include the valuation of Change in Scope (Variation) and Compensation Events, if any.
- 39.6 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.

40. Payments:

Payments shall be adjusted for deductions for retention, other recoveries in terms of the contract and taxes at source, as applicable under the law. The Engineer shall pay the Contractor the amounts as per the payment schedule attached to the contract.

41. Compensation Events:

- 41.1.1 The following are Compensation Events unless they are caused by the Contractor:
 - (a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.
 - (b) Other contractors, public authorities of utilities or the Employer does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- 41.2 If a Compensation Event would prevent the work being completed before the Intended Completion Date, the Intended Completion Date shall be extended. The Contractor will react competently and promptly to the event and shall submit information demonstrating the effect of the Compensation Event and the required extended time period for completion.
- 41.3 The Engineer shall examine the information furnished by the Contractor and shall recommend to the Employer by how much time the Intended Completion Date shall be extended. The Employer shall decide / sanction the required extension of time due to such compensation event.

41.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Engineer.

42. Tax:

42.1 The rates quoted by the Contractor shall be deemed to be exclusive of the GST and inclusive of Royalty, Income Tax, Labour CESS and all other statutory taxes that the Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

43. Currencies:

All payments shall be made-in Indian Rupees.

44. Retention:

44.1 The Employer shall retain from each payment due to the Contractor the proportion stated in the Contract Data until Completion of the whole of the works or settlement of final payment.

44.2 On completion of the whole of the works half the total amount retained is repaid to the contractor and half when the Defects Liability Period has passed and the Engineer has certified that all defects notified by the Engineer to the contractor before the end of the period have been corrected.

45. Liquidated Damages:

45.1 The Contractor shall pay liquidated damages to the Employer at the rate per week stated in the Contract Data for each week that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the contract data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not relieve the contractor from his / her / their obligation to complete the works or from any other duties, obligations or responsibilities which he / she / they may have under the contract.

45.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Engineer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate.

45.3 If the contractor fails to comply with the time for completion as stipulated in the tender, then the contractor shall pay to the employer the relevant sum stated in the Contract Data as Liquidated damages for such default and not as penalty for every week or part of week which shall elapse between relevant time for completion and the date stated in the taking over certificate of the whole of the works on the relevant section, subject to the limit stated in the contract data.

The employer may, without prejudice to any other method of recovery deduct the amount of such damages from any money due or to become due to the contractor. The payment or deduction of such damages shall not relieve the contractor from his obligation to complete the works or from any other of his obligations and liabilities under the contract.

45.4 If, before the Time for Completion of the whole of the Works or, if applicable, any Section, a Taking - Over Certificate has been issued for any part of the Works or of a Section, the liquidated damages for delay in completion of the remainder of the Works or of that Section shall, for any period of delay after the date stated in such Taking-Over Certificate, and in the absence of alternative provisions in the Contract, be reduced in the proportion which the value of the part so certified bears to the value of the whole of the Works or Section, as applicable. The provisions of this Sub-Clause shall only apply to the rate of liquidated damages and shall not affect the limit thereof.

46. Bonus Payment:

- 46.1 The procedure for payment of bonus (incentive) shall be as per the latest amendment to Para 3.5.5 of OPWD code.
- 46.2 If the contractor achieves completion of the whole of the works prior to the Intended Completion Date prescribed in Contract Data the Employer shall pay to the contractor a sum stated in Contract Data as bonus (incentive) for every completed month which shall elapse between the date of completion of all items of works as stipulated in the Contract and the time prescribed in Clause 17.
- 46.3 For the purpose of calculating bonus payments, the time given in the Bid for completion of the whole of the works is fixed and unless otherwise agreed, no adjustments of the time by reason of granting an extension of time pursuant to Clause 28 or any other clause of these conditions will be allowed. Any period falling short of a complete month shall be ignored for the purpose of computing the period relevant for the payment of bonus.

47. Advance Payment:

- 47.1 The Engineer shall make advance payment to the Contractor for mobilization and cash flow support of the amounts stated in the Contract Data by the date stated in the Contract Data, only against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a Bank acceptable to the Engineer in amounts and currencies equal to 110% of the advance payment.
- 47.2 An interest @ 10% per annum shall be charged on the advance payment.
- 47.3 The Advance Payment shall not be released until the basic design & architectural drawings is finalized and establishment of camp at work site is completed.
- 47.4 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. The contractor shall ensure that the Bank Guarantee remain enforceable until the advance payment has been fully repaid and accordingly renew it, from time to time, until the advance payment has been fully repaid.
- 47.5 If the terms of guarantee specify its expiry date, and the advance payment has not been re-paid by the date then 28 days prior to the expiry date, the contractor shall extend the validity of the guarantee until the advance payment has been fully repaid.
- 47.6 The advance payment shall be repaid through percentage deductions from the interim payments as follows:
 - (a) Deductions shall commence from the 1st interim payment.
 - (b) Deductions shall be made in proportions of the advance payment until such time as the advance payment has been repaid: provided that the advance payment shall be completely repaid prior to the time when 90 percent of the accepted contract amount has been repaid.
- 47.7 If the advance payment has not been repaid prior to the issue of the Taking over Certificate for the work or prior to termination under Section – 3 Clause -54 of (termination by employer), the balance advance is payable by the contractor to the employer.

48. Securities:

The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer and denominated in Indian Rupees. The Performance Security shall remain valid up to the period as defined in the Contract Data.

49. Cost of Repairs:

Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions including the situation as stipulated at Cl. 12.

E. FINISHING THE CONTRACT

50. Completion:

50.1 The Contractor shall request the Engineer to issue a Certificate of Completion of the Works and the Engineer will do so upon deciding that the Work is completed.

51. Taking Over:

51.1 The Employer shall take over the Site and the Works within seven days of the Engineer issuing a certificate of Completion.

52. Final Account:

52.1 The Contractor shall supply to the Engineer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Engineer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Engineer shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and issue a payment certificate, within 56 days of receiving the Contractor's revised account.

53. Operating and Maintenance Manuals:

53.1 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

53.2 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Engineer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

54. Termination:

54.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

54.2 Fundamental breaches of Contract include, but shall not be limited to the following:

- (a) the Contractor stops work for 28 days when no stoppage of work is shown on the current Programme and the stoppage has not been authorized by the Engineer;
- (b) the Contractor is made bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
- (c) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
- (d) the Contractor does not maintain a security which is required;
- (e) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and
- (f) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this paragraph: "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. "Fraudulent practice" means a misrepresentation of facts in order

to influence a procurement process or the execution of a contract to the detriment of the Borrower and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition."

- 54.3 When either party to the Contract gives notice of a breach of contract to the Engineer for a cause other than those listed under Sub Clause 54.2 above, the Engineer shall decide whether the breach is fundamental or not.
- 54.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 54.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site, as soon as reasonably possible.

55. Payment upon Termination:

- 55.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor, the difference shall be a debt payable to the Employer.
- 55.2 If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, 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. No extra cost will be paid by the employer for expenditure towards 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.

56. Property:

- 56.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

57. Release from Performance:

- 57.1 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either the Employer or the Contractor, the Engineer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made.

F. SPECIAL CONDITIONS OF CONTRACT

1. LABOUR:

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.

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 labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

2. COMPLIANCE WITH LABOUR REGULATIONS:

During continuance of the contract, the Contractor and his sub contractors shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour 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 below. 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 there 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/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct 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.

SALIENT FEATURES OF SOME MAJOR LABOUR LAWS APPLICABLE TO ESTABLISHMENTS ENGAGED IN BUILDING AND OTHER CONSTRUCTION WORK.

- 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 5 years service or more or on death the rate of 15 days wages for every completed year of service. The Act is applicable to all establishments employing 10 or more employees.
- c) Employees P.F. and Miscellaneous Provision Act 1952: - The Act Provides for monthly contributions by the employer plus workers @ 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 20 or more contract labour.
- f) The Code on Wages, 2019: This code consolidates the Laws relating to Wages and Bonus and matters connected therewith or incidental thereto.
- g) 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.
- h) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing 100 or more workmen (employment size reduced by some of the States and Central Government to 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and get the same 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.
- j) 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 regulation of employment of children in all other occupations and processes. Employment of Child Labour is prohibited in Building and Construction Industry.
- k) Inter-State Migrant workmen's (Regulation of Employment & Conditions of Service) Act 1979: - The Act is applicable to an establishment which employs 5 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, travelling expenses from home upto the establishment and back, etc.
- l) 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 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.
- m) Factories Act 1948: -The Act lays down the procedure for approval at 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 10 persons or more with aid of power or 20 or more persons without the aid of power engaged in manufacturing process.

3. SUB-CONTRACTING (GCC Clause 7):

Please add the following as Clause 7.2:

The contractor shall not be required to obtain any consent from the employer for:

- a) the Sub-contracting of any part of the works for which the sub-contractor is named in the contract;
- b) the provision of labour; and
- c) the purchase of materials which are in accordance with the standards specified in the Contract.
- d) Beyond this if the contractor proposes sub-contracting any part of the work during execution of works, because of some unforeseen circumstances to enable him to complete the work as per terms of the contract, the Engineer / Employer will consider the following before according approval:
 - The contractor shall not sub-contract the whole of the works.
 - The contractor shall not sub-contract any part of the work without prior consent of the Engineer. Any such consent shall not relieve the contractor from any liability or obligations under the contract and he shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents or workmen as fully as if they were the acts, defaults or neglects of the contractor, his agents or workmen.
 - The Engineer should satisfy whether (a) the circumstances warrant such sub-contracting; and (b) the sub-contractors so proposed for the work possess the experience, qualification and equipment necessary for the job proposed to be entrusted to them in proportion to the quantum of work to be sub-contracted.
 - If payments are proposed to be made directly to that sub-contractor, this should be subject to specific authorization by the prime contractor so that this arrangement does not alter the contractor's liability or obligations under the contract.

Note : All bidders are expected to indicate clearly in the bid, if they propose sub-contracting elements of the works along with proposed value of such works [as mentioned in Contract Data]. For each such proposal the qualification and the experience of the identified sub-contractor in the relevant field should be furnished along with the bid to enable the employer to satisfy himself about their qualifications before agreeing for such sub-contracting and include it in the contract.

In view of the above, normally no additional sub-contracting should arise during execution of the contract.

4. PROTECTION OF ENVIRONMENT:

Add the following as Conditions of Contract Clause 16.2:

The Contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or other resulting from pollution, noise or other causes arising as a consequence of his methods of operation.

During continuance of the contract, the Contractor and his sub-contractors shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, by-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority. The contractor shall also abide by the requirements as per Attachment-X of the Bid Document.

Salient features of some of the major laws that are applicable are given below:

The Water (Prevention and Control of Pollution) Act, 1974: This provides for the prevention and control of water pollution and the maintaining and restoring of wholesomeness of water. ‘Pollution’ means such contamination of water or such alteration of the physical, chemical or biological properties of water or such discharge of any sewage or trade effluent or of any other liquid, gaseous or solid substance into water (whether directly or indirectly) as may, or is likely to, create a nuisance or render such water harmful or injurious to public health or safety, or to domestic, commercial, industrial, agricultural or other legitimate uses, or to the life and health or animals or plants or of aquatic organisms.

The Air (Prevention and Control of Pollution) Act, 1981: This provides for prevention, control and abatement of air pollution. ‘Air Pollution’ means the presence in the atmosphere of any ‘air pollutant’, which means any solid, liquid or gaseous substance (including noise) present in the atmosphere in such concentration as may be or tend to be injurious to human beings or other living creatures or plants or property or environment.

The Environment (Protection) Act, 1986: This provides for the protection and improvement of environment and for matters connected therewith, and the prevention of hazards to human beings, other living creatures, plants and property. ‘Environment’ includes water, air and land and the inter-relationship which exists among and between water, air and land, and human being, other living creatures, plants, micro-organism and property.

The Public Liability Insurance Act, 1991: This provides for public liability insurance for the purpose of providing immediate relief to the persons affected by accident occurring while handling hazardous substances and for matters connected herewith or incidental thereto. Hazardous substance means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act 1986, and exceeding such quantity as may be specified by notification by the Central Government.

ENVIRONMENTAL MITIGATION MEASURES DURING CONSTRUCTION

	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
			Implementation	Supervision
1.	Removal of Trees	Trees will be removed from the corridor of impact (or, site) before the commencement of construction with prior clearance from the Forest Department.	Contractor	Department
2.	Generation of Debris	Debris generated due to the dismantling of the existing pavement structure shall be suitably reused in the proposed construction, subject to the suitability of the material and the approval of the Engineer. Unutilisable debris material shall be suitably disposed off by the contractor, either for the filling up of borrow areas created for the project or at pre-designated dump locations.	Contractor	Department.
3.	Loss of Topsoil	(a) The topsoil from all areas of cutting and all areas to be permanently covered shall be stripped to a specified depth of 150 mm and stored in stockpiles (maximum slope 1:2, and maximum height 2m). To retain soil and to allow percolation of water, the edges of the stockpile shall be protected by slit fencing (b) Stockpiles will not be surcharged or otherwise loaded and multiple handling will be kept to a minimum to ensure that no compaction will occur. It shall be ensured by the contractor that the topsoil will not be unnecessarily trafficked either before stripping or when in stockpiles. (c) Such stockpiled topsoil will be returned to cover the disturbed area and cut slopes. Residual topsoil will be distributed on adjoining/proximate barren/rocky areas as identified by the Engineer in a layer of thickness of 75 – 150 mm. Top soil shall also be utilized for redevelopment of borrow areas, landscaping along slopes, medians, incidental spaces etc.	Contractor	Department.
4.	Borrowing of Earth	The borrowing shall not be carried out in cultivable lands, unless agreed upon by the Engineer. Borrowing of earth shall be carried out as per the IRC Guidelines.	Contractor	Department.
5.	Degradation of Borrow Areas	The location, shape and size of the designated borrow areas shall be as approved by the Engineer and in accordance to the IRC recommended practice for borrow pits for road embankments. Borrow pits shall be re-developed, spoils shall be dumped with an overlayer of stockpiled topsoil. Redevelopment of borrow areas shall be taken up in accordance with the plans approved by the Engineer.	Contractor	Department.

	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
			Implementation	Supervision
6.	Soil Erosion	Along sections abutting water bodies, stone pitching needs to be carried out for slopes between 1:4 and 1:2 Gabion structures/ Grass turfing shall be provided for slopes steeper than 1 vertical to 2 horizontal. The work shall consist of measures as per design or as directed by the Engineer to control soil erosion, sedimentation and water pollution, through use of berms, dikes, sediment basins, fiber mats, mulches, grasses, slope drains and other devices.	Contractor	Department.
7.	Construction Wastes & their disposal	Spoil from excavation of riverbed shall be managed and disposed off as directed by the Engineer. No new disposal site shall be created as part of the project, which is not redeveloped. All waste material shall be completely disposed as desired and the site shall be fully cleaned before handing over.	Contractor	Department.
8.	Quarry Operations	The Contractor shall open and use quarries, as per the Odisha Mining Rules. Alternatively the Contractor shall acquire the required material from quarries licensed by the OSPCB and having an approved redevelopment plan.	Contractor	Department.
	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
9.	Loss of Water Bodies	<p>a. Filling of surface water bodies shall be compensated by digging an equal volume of soil for water storage. Such dug-up soil shall be used for spreading as topsoil.</p> <p>b. Wherever earthwork is undertaken, the banks shall be protected by means as designed or as approved by the Engineer. Construction shall be carried out in a manner so that the side slopes are no steeper than 1:4, otherwise slope protection work shall be provided, as approved by the Engineer and as per item 6 of these specifications. For drains carrying run-off from the highways entering, into surface water bodies/channels, with a fall exceeding 1.5 m cascading or sedimentation traps shall be provided.</p>	Contractor	Department.
10.	Loss of Other Water Sources	The replacement shall be ready prior to demolition / dismantling of the existing source. Any damage to the existing sources of water (hand pump, tube well etc.) shall be made good by the Contractor at his expense.	Contractor	Department.
11.	Flooding	In addition to the design requirements, the contractor shall take all desired measures as directed by the Engineer to prevent temporary or permanent flooding of the site or any adjacent area.	Contractor	Department.
12.	Alteration of	<p>a. In sections along water courses, and close to</p>	Contractor	Department.

	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
			Implementation	Supervision
	Drainage	<p>cross-drainage channels, earth, stone or any other construction materials or appendage shall be properly disposed off so as not to block the flow of water.</p> <p>b. All necessary measures shall be taken to prevent earthwork, stonework, materials and appendage as well as the method of operation from impending cross-drainage at rivers, streams, water canals and existing and existing irrigation and drainage systems.</p>		
13.	Contamination from Construction Wastes, fuel and Lubricants	At construction vehicle parking locations and at fuel/lubricant storage sites, oil and grease traps shall be provided. Fuel storage shall be in proper bunded areas. The discharge standards promulgated under the Environmental Protection Act, 1986 shall be strictly adhered to.	Contractor	Department.
14.	Sanitation and Waste disposal in construction camps	Construction labourers' camps shall be located at least 200 m away from the nearest habitation and as approved by the Engineer. The sewage system for a construction labourers' camp shall be designed, built and as per the Factories Act, 1948 and the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.	Contractor	Department.
15.	Generation of Dust	All vehicles delivering materials to the site shall be covered to avoid spillage of materials. Clearance shall be effected by manual sweeping and removal of debris, or, if so directed by the Engineer, by mechanical sweeping and cleaning equipment, an all dust, mud and other debris shall be removed completely.	Contractor	Department.
16.	Emision from Hot-Mix Plants and Batching Plants.	Hot mix plants and batching plants shall be located sufficiently away from habitation, agricultural operations or industrial establishments. Where possible such plants will be located at least 1000 m downwind from the nearest habitation. The exhaust gases, and operation of the plants shall comply with the requirements of the relevant current emission control rules (as per OSPCB).	Contractor	Department.
	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
17.	Emission and noise from Vehicles & Equipment	All vehicles, equipment and machinery used for construction shall conform to the relevant Bureau of Indian Standard (BIS) norms. All vehicles, equipment and machinery used for construction shall be regularly maintained to ensure that pollution emission levels comply with the relevant requirements of OSPCB.	Contractor	Department.

	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
			Implementation	Supervision
18.	Pollution from Crusher	All crushers used in construction shall conform to relevant dust emission control rules. Clearance for siting shall be obtained from the OSPCB. Alternatively, only crushers already licensed by the OSPCB shall be used.	Contractor	Department.
19.	Loss, Damage or Disruption of/to Fauna.	All works are to be carried out in such a fashion that the damage and disruption to fauna is minimum. Construction workers shall be instructed to protect natural resources and fauna, including wild animals and aquatic life. Hunting and unauthorized fishing are prohibited.	Contractor	Department.
20.	Chance-found important Flora/Fauna.	If a rare/endangered/threatened flora/fauna species is spotted, the contractor shall make all arrangements to intimate the Forest/Wildlife authorities without delay, and measures will be taken for its conservation. Work would be suspended, until the relevant authorities are consulted, unless specifically directly by the Engineer.	Contractor	Department.
21.	Traffic Control and Safety	The Contractor shall take all necessary measures for the safety of traffic during construction and provide, erect and maintain such barricades, including signs, markings, flags, lights and flagmen as may be required by the Engineer for the information and protection of traffic approaching or passing through the section of the road under improvement.	Contractor	Department.
22.	Risk from Construction Operations	The contractor is required to comply with all the precautions as required for the safety of the workmen as per the international Labour Organisation (ILO) Convention No. 62 as far as those are applicable to this contract. The contractor shall also comply with the national Building Code for this purpose.	Contractor	Department.
23.	Potable Water and Hygiene	Potable water supply will be provided, at every workplace, as per the Factory Rules of Odisha. All requirements as per standards set by the Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 shall be fulfilled.	Contractor	Department.
24.	Protection of Cultural Heritage / Property	All the necessary and adequate care shall be taken to minimize impact on cultural properties (which includes cultural sites and remains, places of worship, graveyards, monuments and any other important properties/sites/remains notified under the Ancient Sites and Remains Act)	Contractor	Department.
25.	Chance found Archaeological property	All fossils, coins, articles of value of antiquity and structures and other remains or things of geological or archaeological interest discovered on the site shall be the property of the Government. The contractor	Contractor	Department.

	Environmental Impact/Issue	Mitigation / Management Measures	Responsibility	
			Implementation	Supervision
		shall all work within 100 m in all directions from the site. The Engineer shall seek direction from the Archaeological Society of India (ASI) before instructing the Contractor to recommence work on the site.		
26.	Risk from explosives	Except as may be provided in the contract or ordered or authorized by the Engineer, the contractor shall not use explosives. Where the use of explosives is so provided or ordered or authorized, the contractor shall comply with the requirements of the explosives Act. First aid and medical care shall be provided, as per the factory Rules of Odisha.	Contractor	Department.

**SECTION 4:
CONTRACT DATA**

Contract Data

Items marked "N/A" do not apply in this contract.

Clause Reference	Conditions	Data
1.1.5& 2.3	Contract Data (Documents also to form part of the Contract)	<ul style="list-style-type: none"> i. The Schedule of Operating and Maintenance Manuals (Date to be Notified) [Cl. No.53] ii. The Schedule of Other Contractors (To be Notified later) [Cl. No.8] iii. The Schedule of Key Personnel [Cl No.9] iv. The Methodology and Program of construction [Cl No.27] v. The Schedule of Key and Critical equipment to be deployed on the work as per agreed program of construction [Cl No.27] vi. Site Investigation reports [Cl No.14] vii. Notice inviting bid including all corrigendum's / addendum / additional conditions / specifications / drawings etc. if any issued at the time of invitation of bid and acceptance thereof. viii. Bid document. ix. Performance security
1.1.6	Contractor	<p>Contractor's obligations shall be, but not limited to the following:</p> <ul style="list-style-type: none"> I. The Contractor shall design, execute and complete the Works in accordance with the Contract and with the Engineer's instructions, and shall remedy any defects in the Works. II. The Contractor shall provide the Plant and Contractor's Documents specified in the Contract, and all Contractor's Personnel, Goods, consumables and other things and services, whether of a temporary or permanent nature, required in and for this design, execution, completion and remedying of defects. III. The Contractor shall be responsible for the adequacy, stability and safety of all Site operations and of all methods of construction. Except to the extent specified in the Contract, the Contractor <ul style="list-style-type: none"> a) shall be responsible for all Contractor's Documents, Temporary Works, and such design of each item of Plant and Materials as is required

Clause Reference	Conditions	Data
		<p>for the item to be in accordance with the Contract, and</p> <p>b) shall also be responsible for the design or specification of the Permanent Works.</p> <p>IV. The Contractor shall, whenever required by the Engineer, submit details of the arrangements and methods which the Contractor proposes to adopt for the execution of the Works. No significant alteration to these arrangements and methods shall be made without this having previously been notified to the Engineer.</p> <p>V. Notwithstanding any previous test or certification, the Engineer may instruct the Contractor to:</p> <ul style="list-style-type: none"> a) remove from the Site and replace any Plant or Materials which is not in accordance with the Contract, b) remove and re-execute any other work which is not in accordance with the Contract, and c) execute any work which is urgently required for the safety of the Works, whether because of an accident, unforeseeable event or otherwise. <p>VI. The Contractor shall comply with the instruction within a reasonable time, which shall be the time (if any) specified in the instruction, or immediately if urgency is specified under sub-paragraph (c).</p> <p>VII. If the Contractor fails to comply with the instruction, the Employer shall be entitled to employ and pay other persons to carry out the work. Except to the extent that the Contractor would have been entitled to payment for the work, the Contractor shall pay to the Employer all costs arising from this failure.</p> <p>Contractor's Care for Works:</p> <p>I. The Contractor shall take full responsibility for care of the Works and Goods from the Commencement Date until the Taking-Over Certificate is issued for the Works, when responsibility for the care of the Works shall pass to the Employer. If a Taking-Over Certificate is issued for any Section or part of the Works, responsibility for the care of the Section or part shall then pass to the Employer.</p> <p>II. After responsibility has accordingly passed to the Employer, the Contractor shall take responsibility for the care of any</p>

Clause Reference	Conditions	Data
		<p>work which is outstanding on the date stated in a Taking-Over Certificate, until this outstanding work has been completed.</p> <p>III. If any loss or damage happens to the Works, Goods or Contractor's Documents during the period when the Contractor is responsible for their care, the Contractor shall rectify the loss or damage at the Contractor's risk and cost, so that the Works, Goods and Contractor's Documents conform with the Contract.</p> <p>IV. The Contractor shall be liable for any loss or damage caused by any actions performed by the Contractor after a Taking-Over Certificate has been issued. The Contractor shall also be liable for any loss or damage which occurs after a Taking-Over Certificate has been issued and which arose from a previous event for which the Contractor was liable.</p>
1.1.11	Defects Liability Period	<p>1. Civil Works: The Defects Liability Period is 5 (Five) Years from the date notified in the Completion certificate of the work.</p> <p>I. In order that the Works and Contractor's Documents, and each Section, shall be in the condition required by the Contract (fair wear and tear excepted) by the expiry date of the relevant Defects Liability Period or as soon as practicable thereafter, the Contractor shall:</p> <ul style="list-style-type: none"> a) complete any work which is outstanding on the date stated in a Taking-Over Certificate, within such reasonable time as is instructed by the Engineer, and b) execute all work required to remedy defects or damage, as may be notified by (or on behalf of) the Employer on or before the expiry date of the Defects Liability Period for the Works or Section (as the case may be). <p>II. If a defect appears or damage occurs, the Contractor shall be notified accordingly, by (or on behalf of) the Employer.</p> <p>III. All work referred to as completion of outstanding work and remedying defects shall be executed at the risk and cost of the Contractor, if and to the extent that the work is attributable to:</p> <ul style="list-style-type: none"> a) any design for which the Contractor is responsible, b) plant, materials or workmanship not being in accordance with the Contract, or

Clause Reference	Conditions	Data
		<p>c) failure by the Contractor to comply with any other obligation.</p> <p>2. Land Scaping Works: The period of Operation and Maintenance (O&M) shall be 1 years from the date of issuance of project completion certificate by the Employer. The payment during the O&M period shall be released as per the payment schedule at section-9. Separate provision of payment during O&M period is included in the payment schedule.</p> <p>Before issuance of project completion certificate, the maintenance of the plants, shrubs, trees, landscaped area to maintain the desired level of maintenance shall be the responsibility of the contractor.</p>
1.1.12	Employer's name and address	<p>The Managing Director, Odisha Bridge & Construction Corporation Ltd, Vikash Bhavan, Nayapalli, Bhubaneswar-751012, Odisha. Email id: md@obcc.in Phone number: 0674-, 2394093, 2396309, 2390043 FAX - 2396326</p>
	Name of the Authorised Representative	<p>Sr. Chief General Manager Odisha Bridge & Construction Corporation Ltd: He/she shall act as representative of the Employer for all purposes.</p>
1.1.13	Engineer's name and address	<p>General Manager, Cuttack Division I Odisha Bridge & Construction Corporation Ltd,</p>
1.1.16	Intended Completion Date	12 (twelve) months from the date of commencement
1.1.19	Site	<p>The Site is located at Cuttack, Odisha.</p> <p>Details of the Site: As provided in Section 7 and Section 8</p>
1.1.22	Start Date / Date of Commencement	Date of issue of notice to proceed with the work (To be notified later).
1.1.26	Works	<p>Work Details:</p> <p>Government of Odisha has decided to develop the temple area of Maa Cuttack Chandi along with diversion of roads, external</p>

Clause Reference	Conditions	Data
		<p>drainage, Landscaping works. Therefore, Govt. of Odisha through Works Department decided to take up the following work.</p> <p>“Integrated Development of Maa Cuttack Chandi Temple, Cuttack on Turnkey Basis”</p> <p>The work shall be executed in a Turnkey Contract, where the Contractor assumes single sole responsibility for on time project delivery, to a specified performance level inclusive of the design and construction of the project components, in return for a payment on a fixed price. Details of these works have been provided in Section-8, Concept drawings at Section-7 and Technical Specifications at Section-5.</p> <p>The rates and prices quoted by the bidder shall remain fixed for the duration of the contract and shall not be subject to any price adjustment.</p>
2.2	Sectional Completion	N/A.
3	Language & Law	The language of the Contract documents is English. The law, which applies to the Contract, is the laws of Union of India.
7	Sub-Contracting	<p>Subcontracting components of the works shall be limited to 30 % of the Contract Price. Maximum number of Sub-Contractors allowed is TWO.</p> <p><i>However, if any sub-contractor is proposed after award of contract, the qualification of the said Sub-Contractor shall be checked with respect to his technical and financial capability by the Engineer on proportionate to the criteria set forth in the bidding document.</i></p>
13.1 & 13.2	Insurance	<p>The Contractor shall provide the following policies within 28 days from the date of commencement.</p> <ul style="list-style-type: none"> a) Workmen compensation Policy. b) Contractor's All Risks (CAR).
14	Site Investigation Reports	All reports are indicative and not exhaustive.
18.4	Stipulated Datelines for Approvals	As mentioned in Section 8
21	Possession of the Site	<p>The Site Possession Date shall be as following:</p> <ul style="list-style-type: none"> a) 60% of Site on the date of issuance of Notice to proceed with the Work;

Clause Reference	Conditions	Data
		<p>b) 85% of Site within 3 months of the date of issuance of Notice to proceed with the Work;</p> <p>c) Balance portion of the Site shall be handed over during execution of the Project.</p>
24 & 25	Disputes	<p>The procedure for arbitration will be as follows:</p> <ol style="list-style-type: none"> 1. Dispute Resolution <ol style="list-style-type: none"> i. That for the purpose of jurisdiction in the event of disputes if any of the Contract would be deemed to have been entered into within the State of Odisha and it is agreed that neither party to the Contract will be competent to bring a suit in regard to the matter by this Contract at any place outside Cuttack in the State of Odisha. ii. Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "Dispute") shall, in the first instance, be attempted to be resolved amicably in accordance with the conciliation procedure set forth in Sub-Clause 2 below. iii. The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non-privileged records, information and data pertaining to any Dispute. 2. Conciliation <p>In the event of any Dispute between the Parties, either Party may call upon the Engineer, or such other person as the Parties may mutually agree upon (the "Conciliator") to mediate and assist the Parties in arriving at an amicable settlement thereof. Failing mediation by the Conciliator or without the intervention of the Conciliator, either Party may require such Dispute to be referred to the Managing Director of the Employer and the Chairman of the Board of Directors of the Contractor for amicable settlement, and upon such reference, the said persons shall meet no later than 7 (seven) business</p>

Clause Reference	Conditions	Data
		<p>days from the date of reference to discuss and attempt to amicably resolve the Dispute.</p> <p>If such meeting does not take place within the 7 (seven) business day period or the Dispute is not amicably settled within 15 (fifteen) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 30 (thirty) days of the notice in writing referred to in Sub Clause 1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Sub Clause 3 below but before resorting to such arbitration, the parties agree to explore conciliation by the Conciliation Committees of Independent Experts set up by the Employer in accordance with the procedure decided by the panel of such experts and notified by the Authority on its website including its subsequent amendments.</p> <p>In the event of the conciliation proceedings being successful, the parties to the dispute would sign the written settlement agreement and the conciliators would authenticate the same. Such settlement agreement would then be binding on the parties in terms of Section 73 of the Arbitration Act. In case of failure of the conciliation process even at the level of the Conciliation Committee, either party may refer the Dispute to arbitration in accordance with the provisions of Sub Clause 3.</p> <p>3. Arbitration</p> <ul style="list-style-type: none"> i. Any Dispute which is not resolved amicably by conciliation, as provided in Sub Clause 2, shall be finally settled by arbitration in accordance with the rules of Arbitration and Reconciliation Act-1996. ii. The Arbitrators shall make a reasoned award (the "Award"). Any Award made in any arbitration held pursuant to this Article 26 shall be final and binding on the Parties as from the date it is made, and the Contractor and the Authority agree and undertake to carry out such Award without delay. iii. The Contractor and the Employer agree that an Award may be enforced against the Contractor and/or the Employer, as the case may be, and their respective assets wherever situated. iv. This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings

Clause Reference	Conditions	Data
		<p>hereunder. Further, the parties unconditionally acknowledge and agree that notwithstanding any dispute between them, each Party shall proceed with the performance of its respective obligations, pending resolution of Dispute in accordance with this Article.</p> <p>v. In the event the Party against whom the Award has been granted challenges the Award for any reason in a court of law, it shall make an interim payment to the other Party for an amount equal to 75% (seventy-five per cent) of the Award, pending final settlement of the Dispute. The aforesaid amount shall be paid forthwith upon furnishing an irrevocable Bank Guarantee for a sum equal to 120 % (one hundred and twenty per cent) of the aforesaid amount. Upon final settlement of the Dispute, the aforesaid interim payment shall be adjusted and any balance amount due to be paid or returned, as the case may be, shall be paid or returned with interest calculated at the rate of 10% (ten per cent) per annum from the date of interim payment to the date of final settlement of such balance.</p> <p>4. Adjudication by Regulatory Authority, Tribunal or Commission</p> <p>In the event of constitution of a statutory regulatory authority, tribunal or commission, as the case may be, with powers to adjudicate upon disputes between the Contractor and the Authority, all Disputes arising after such constitution shall, instead of reference to arbitration under Sub Clause 3 above, be adjudicated upon by such regulatory authority, tribunal or commission in accordance with the Applicable Law and all references to Dispute Resolution Procedure shall be construed accordingly. For the avoidance of doubt, the Parties hereto agree that the adjudication hereunder shall not be final and binding until an appeal against such adjudication has been decided by an appellate tribunal or court of competent jurisdiction, as the case may be, or no such appeal has been preferred within the time specified in the Applicable Law.</p>
27.1	Programme	<p>The Contractor shall submit a detail resource-based work program using standard software (Primavera/MS Projects) and a 'S' Curve showing monthly cash flow forecast for the Works, within 14 days of issue of the Letter of Acceptance of tender which shall form part of the contract.</p>

Clause Reference	Conditions	Data
27.2& 27.3	Update of the Programme	<p>The period between Program updates shall be 60 days. The amount to be withheld for late submission of an updated Program shall be 1% of the Contract Amount to be released upon submission of the next Work Programme.</p>
31.1	Early Warning	<p>The following is added after the paragraph:</p> <p>If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance.</p> <p>If the Contractor fails to give notice of a claim within such period of 28 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim.</p>
34 & 35	Defects Liability Period	<p>For Defects Liability Period Refer Cl. 1.1.11.</p> <p>The period for remedying Defects by the Contractor is 30 days from the date of Notice given by the Engineer, failing which the Employer shall make good the same at the cost and risk of the Contractor.</p>
37.1	Change of Scope	<p>The Change of Scope may also include work(s) under exigency which will facilitate smooth completion of the project and may not be directly related to the scope of works under this Contract.</p>
37.5	Change of Scope	<p>The existing Clause is replaced as below:</p> <p>The contractor's quotation for change of scope shall be determined by the Engineer as below.</p> <ul style="list-style-type: none"> a) For works where Schedule of Rates (SOR) of State's Public Works Department are available the same shall be applicable for determination of costs. b) For item of works not included in Schedule of Rates as mentioned in sub-para (a) above, the cost of same shall be derived on the basis of MORTH Standard Data Book / CPWD Analysis / DSR or the prevailing market rates whichever is less. c) For item of works, rates of which could not be derived based on MORTH's Standard Data Book, CPWD Analysis shall be

Clause Reference	Conditions	Data
		<p>adopted.</p> <p>d) For item of works, rates of which could not be derived based on CPWD Analysis, the prevailing market rates shall be worked out. The rates so arrived shall be approved by the Engineer which is binding on the Contractor.</p> <p>e) Any change in scope shall be calculated on the basis of the following priority:</p> <ul style="list-style-type: none"> i. Odisha State CSR ii. CPWD rate iii. MoRTH rate iv. Delhi Schedule Rate v. Lowest Market rate to be approved by a committee
37.6	Change of Scope	The total value of all change of scope of work shall not exceed 10 % of total contract price for the construction work.
39.2	Payment Certificates	<p>The Clause 39.2 of Section 3 is replaced as below:</p> <p>The Engineer shall check the Contractor's statement within 05 days and certify the amount to be paid to the Contractor as per contract payment schedule after taking into account any credit or - debit for the month in question in respect of materials for the works in the relevant amounts and under conditions set forth in sub-clause 47.3 of the Contract Data (Secured Advance).</p>
40	Payments	<p>(i) The Employer shall make interim payments to the Contractor as certified by the Engineer on completion of a stage, in accordance with the proportion of the Contract Price assigned to each item and its stage in Payment Schedule</p> <p>(ii) The Contractor shall base its claim for interim payment for the stages completed till the end of the month for which the payment is claimed, valued in accordance with Clause (i) above supported with necessary particulars and documents in accordance with this Agreement.</p> <p>(iii) Any reduction in the Contract Price arising out of Change of Scope or the works withdrawn shall not affect the amounts payable for the items or stage payments thereof which are not affected by such Change of Scope or withdrawal.</p> <p>(iv) For Stage Payment Statement, the Contractor shall submit a statement (the "Stage Payment Statement"), in 3 (three) copies, by the 7th (seventh) day of the month to the Engineer in the form set forth in section 6, showing the amount calculated to which the</p>

Clause Reference	Conditions	Data
		<p>Contractor considers himself entitled for completed stage(s) of the Works. The Stage Payment Statement shall be accompanied with the progress reports and any other supporting documents.</p> <p>(v) Within 5 days of receipt of the Stage Payment Statement from the Contractor, the Engineer shall broadly determine the amount due to the Contractor and recommend the release of 80 percent of the amount so determined as part payment against the Stage Payment Statement, pending issue of the Interim Payment Certificate by the Engineer.</p> <p>(vi) (1) Within 3 days of the receipt of recommendation of the Engineer, the Employer shall make electronic payment directly to the Contractor's bank account.</p> <p>(2) Within 21 days of the receipt of the Stage Payment Statement referred to in Clause (v) above, the Engineer shall determine and shall deliver to the Employer and the Contractor an IPC certifying the amount due and payable to the Contractor, after adjusting the payments already released to the Contractor against the said statement. For the avoidance of doubt, the Parties agree that the IPC shall specify all the amounts that have been deducted from the Stage Payment Statement and the reasons therefor.</p> <p>(3) In cases where there is a difference of opinion as to the value of any stage, the Engineer's view shall prevail, and interim payments shall be made to the Contractor on this basis; provided that the foregoing shall be without prejudice to the Contractor's right to raise a Dispute.</p> <p>(4) The Engineer may, for reasons to be recorded, withhold from payment: (a) the estimated value of work or obligation that the Contractor has failed to perform in accordance with this Agreement and the Engineer had notified the Contractor; and (b) the estimated cost of rectification of work done being not in accordance with this Agreement.</p> <p>Payment by the Employer shall not be deemed to indicate the Employer's acceptance, approval, consent, or satisfaction with the work done.</p>
42	Tax	<p>The rates quoted by the Contractor shall be deemed to be inclusive the Royalty, Income Tax, Labour CESS and all other statutory taxes that the Contractor will have to pay for the performance of this Contract but excluding GST on Works Contract. GST on Works Contract shall be paid by the Employer as applicable. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.</p>

Clause Reference	Conditions	Data
43	Currency	The currency of the Contract is Indian Rupees
44.1	Retention Money	<p>Retention money - 10 % of gross value of each running bill is to be deducted after gross payment exceeds 10% of the Contract Amount and shall continue upto 60% of the Contract Amount. The limit of retention money shall be 5% of the Contract Amount.</p> <p>However, the Contractor may furnish Bank Guarantee(s) for an amount equal to 5% of the Contract Amount, in which case no deduction for Retention Money shall be made. The Bank Guarantee(s) amounting to 5% of Contract Amount must remain valid at-least up to completion of Works and the Bank Guarantee(s) amounting to at-least 2.5% of Contract Amount must remain valid up to 28 days beyond the defect liability period.</p>
45.1	Liquidated Damages	<ol style="list-style-type: none"> 1. Project Completion Schedule During Construction period, the Contractor shall comply with the requirements set forth for each of the Project Milestones and the Scheduled Completion Date. Within 15 (fifteen) days of the date of each Project Milestone, the Contractor shall notify the Engineer of such compliance along with necessary particulars thereof. 2. Project Milestone-I Project Milestone-I shall occur on the date falling on the [35% of the Scheduled/ Extended Construction Period] day from the Commencement Date and the Contractor shall have gross certified payment for an amount not less than 20% (twenty per cent) of the Contract Price. 3. Project Milestone-II Project Milestone-II shall occur on the date falling on the [70% of the Scheduled / Extended Construction Period] day from the Commencement Date and the Contractor shall have gross certified payment for an amount not less than 60% (Sixty per cent) of the Contract Price. 4. Project Milestone-III Project Milestone-II shall occur on the date falling on the [100% of the Scheduled / Extended Construction Period] day from the Commencement Date and the Contractor shall have gross certified payment for an amount not less than 100% (Hundred per cent) of the Contract Price. <p>The liquidated damages@ 0.05% of the balance work against the targeted achievement against the Milestone or completion per day subject to a maximum of 10% (ten percent) of the Contract Price,</p>

Clause Reference	Conditions	Data
		<p>beyond which the Contract shall be deemed to be terminated.</p> <p>Provided further that in the event the Project Work is completed within or before the Scheduled Completion Date including any Time Extension, applicable for that work, the Damages paid under this Clause shall be refunded by the Employer to the Contractor, but without any interest thereon.</p>
46	Bonus Payment	<p>The Contractor shall be eligible for bonus payment as per the provisions of OPWD Code as on the date of signing of contract.</p>
47	Advance payment	<p>Advance Payment may be made upon request from the Contractor with the following conditions satisfied.</p> <p>(i) Maximum 10% (ten percent) of the contract amount for mobilization; and</p> <p>(ii) 90% of the Paid Invoice amount subject to cumulatively maximum upto 35% of the Contract Amount as Secured Advance for non-perishable items of the Project.</p> <p>All advance payments shall be made against irrevocable bank guarantee(s) amounting to 110% of the Advance payment, from any Bank listed in Bid data sheet, payable at par by its branch at Bhubaneswar.</p>
47.2	Interest on Advance payment	10 (ten) %
48	Performance Security	<p>Within 21 days of receipt of the Letter of Acceptance, the successful Bidder shall deliver to the Employer a Performance Security in any of the forms given below for an amount equivalent to 3 (three) % of the Contract price, Public Sector Bank of India, counter guaranteed by its branch at Bhubaneswar.</p> <p>The guarantee shall be valid until 28 days from the date of expiry of the Defect Liability Period.</p>
53 & 53.1	Operating and Maintenance Manual	<p>As built drawings duly approved by the Engineer, operating and maintenance manuals of various fittings, machines, equipment and /or installations along with their warranties as provided by the OEMs are required by the Employer and the Contractor shall supply them within 30 days of handing over of the project, failing which 1% of the Contract amount shall be withhold by the Employer.</p> <p><i>If the documents are not submitted within 60 days of handing over of the project, the above withhold amount shall be forfeited by the Employer.</i></p>
54.2	Termination	The following is added after sub-para (f) [54.2]

Clause Reference	Conditions	Data
		<p>The Contractor has contravened Sub-clause 7 and Clause 9 of GCC.</p> <p>The Contractor does not adhere to the agreed construction program (Clause 27 of Conditions of Contract (CC) and also fails to take satisfactory remedial action as per agreements reached in the management meetings (Clause 30 of CC) for a period of 60 days.</p>
55.1	Value of work not completed.	The percentage to apply to the value of the work not completed representing the Employer's additional cost for completing the Works shall be 20 %.
56.1	Property	Contractor's Default shall mean provisions under Cl. 54.2 (a), Cl. 54.2. (c) and Cl. 54.2.(e).

SECTION – 5:
TECHNICAL SPECIFICATIONS

- Clause 5.1 The Technical specifications contained herein shall be read in conjunction with other documents of bid.
- Clause 5.2 The technical specification in accordance with which the entire work described thereafter shall be carried out and completed by the Contractor, shall comprise the following:
- Part I: General Technical Specifications
- Part II: Supplementary Technical Specifications
- PART I: GENERAL TECHNICAL SPECIFICATIONS**
- Clause 5.2.1 *The construction work shall be executed in high temperature and humidity conditions with average annual rainfall of 1377.99 mm as per IMD data, and the maximum cyclonic wind speed to be taken as per IS 875:2015. The site is situated in the Seismic Zone-III. The design wind speed to be as per IS 875: 2015.*
- Other provisions, stipulations, guidelines, and rules laid down in the National Building Code, 2016 shall be adopted for all structural, functional, legal, regulatory, obligatory, safety requirements for the buildings and the building services including plumbing and solid waste management with a view to deliver an integrated facility for the intended purpose. In NBC whenever “recommended” word is used, it is to be treated as a “mandatory” provision.
- The following specifications shall be followed in this project.
- (i) CPWD Specifications (Civil) Vol-I & II (including all supplementary specifications)
 - (ii) CPWD Specifications (Electrical) for HVAC, Electrical Works (Internal & External), Fire Detection & Alarm System, Gas based Fire Extinguisher System, D.G. Sets, Lifts & Escalators.
 - (iii) CPWD Specifications for Horticulture & Landscaping.
 - (iv) All relevant IS Codes for materials, testing and relevant BIS Codes of practices (IS 456: 2000, IS 800: 2007 and such other codes of practices)
 - (v) MoRT&H Specifications for Road and Bridges (Fifth revision) for road work (Approach Road) and other relevant IRC codes.
- Clause 5.2.2 **PART II: SUPPLEMENTARY TECHNICAL SPECIFICATIONS.**
- Any other provisions/ material / testing suggested by the bidder (or Contractor) for the building/ building services not covered under Clause 5.2.1 above, shall be governed by the relevant Technical Specification prevalent as good practice in the industry and shall be adopted after approval by the Engineer.
- In case of any dispute arising out of the interpretations of the above, the decision of the Engineer shall be final and binding on the Contractor.
- Clause 5.2.3 When an Amended/ Modified/ added Clause supercedes a Clause or part thereof in the said specifications, then any reference to the superceded Clause shall be deemed to refer to the Amended/Modified/ Added Clause shall always prevail.
- Clause 5.2.4 In case of discrepancies between dimensions/quantities as specified in Section 8 and the drawings in Section 7, the dimensions given in the drawing shall prevail.

**SECTION 6:
SECURITIES AND OTHER FORMS**

PERFORMANCE BANK GUARANTEE

To

[name of Employer]

[address of Employer]

WHEREAS _____ [name and address of Contractor] (hereafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee:

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of _____ [amount of guarantee]* _____ (in words), such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between your 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 also be operable at our..... Branch at Bhubaneswar, 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.

The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of Odisha Bridge & Construction Corporation Ltd details of which is as under:

Sl No.	Particulars	Details
1	Name of Beneficiary	OB&CC Ltd.
2	Name of Bank	Union Bank of India
3	Account No	127511100001024
4	IFSC Code	UBIN0812757

This guarantee shall be valid until 28 days from the date of expiry of the Defect Liability Period.

Signature and Seal of the guarantor _____

Name of Bank _____

Address _____

Date _____

* An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

BANK GUARANTEE FOR ADVANCE PAYMENT

To

_____ [name of Employer]
[address of Employer]
[name of Contract]

Gentlemen :

In accordance with the provisions of the Conditions of Contract, sub-clause 47.1 ("Advance Payment") 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 or 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, in 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 also be operable at our..... Branch at Bhubaneswar, 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.

The guarantor/bank hereby confirms that it is on the SFMS (Structural Finance Messaging System) platform & shall invariably send an advice of this Bank Guarantee to the designated bank of Odisha Bridge & Construction Corporation Ltd details of which is as under:

SI No.	Particulars	Details
1	Name of Beneficiary	OB&CC Ltd.
2	Name of Bank	Union Bank of India
3	Account No	127511100001024
4	IFSC Code	UBIN0812757

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.

COMPLETION CERTIFICATE

- 1** I... (Name of the Engineer), acting as the Engineer, under and in accordance with the Agreement dated (the “Agreement”), for (Name of the Work) through (Name of Contractor), hereby certify that the Tests in accordance with Contract Agreement have been successfully undertaken to determine compliance of the Project with the provisions of the Agreement, and I am satisfied that the Project can be safely and reliably placed in service of the Users thereof.
- 2** It is certified that, in terms of the aforesaid Agreement, all works forming part of Project have been completed, and the Project is hereby declared fit for entry into operation on this the day of 20....., Scheduled Completed Date for which was the..... day of... 20.....

SIGNED, SEALED AND DELIVERED

For and on behalf of the Engineer by:

(Signature)

(Name)

(Designation) (Address)

TAKING OVER CERTIFICATE

I, (Name and designation of the Employer's Representative) under and in accordance with the Agreement dated (the "Agreement"), for (Name of the "Project") through (Name of Contractor), hereby certify that the Tests on completion of Defect Liability Period in accordance with the Agreement have been successfully undertaken to determine compliance of the Project with the provisions of the Agreement and I hereby certify that the Employer has taken over the Project from the Contractor on this day.....

SIGNED, SEALED AND DELIVERED

(Signature)

(Name and designation of Authority's Representative)

(Address)

SECTION 7:

CONCEPTUAL AND INDICATIVE DRAWINGS

SL. NO.	SHEET NO.	DRAWING NAME
1	DF/OBCC/MCCT/ARC-1	PROPOSED MASTER PLAN
2	DF/OBCC/MCCT/ARC-2	DETAILED PLAN OF GARBHAGRIHA & JAGAMOHANA
3	DF/OBCC/MCCT/ARC-3	DETAILED PLAN OF NORTH, EAST, WEST & SOUTH DWARAS, SHIVA TEMPLE, BATAMANGALA TEMPLE & 3 TYPICAL TEMPLESC (LAKSHMI-NARAYAN, HANUMAN & SUN)
4	DF/OBCC/MCCT/ARC-4	DETAILED PLAN OF MUNDAN MANDAP & YAGYA MANDAP
5	DF/OBCC/MCCT/ARC-5	DETAILED PLAN OF CHANDI PATHA
6	DF/OBCC/MCCT/ARC-6	DETAILED PLAN OF PROPOSED KITCHEN & STORE
7	DF/OBCC/MCCT/ARC-7	DETAILED PLAN OF PRASAD SEVAN, INFORMATION COUNTER & PRIEST ROOMS
8	DF/OBCC/MCCT/ARC-8	DETAILED PLAN OF BOUNDARY WALL, STONE SEATING & DEEPA STAND
9	DF/OBCC/MCCT/ARC-9	DETAILED PLAN OF SHOPPING COMPLEX BLOCK
10	DF/OBCC/MCCT/ARC-10	DETAILED FURNITURE PLAN FOR INDIVIDUAL BLOCK
11	DF/OBCC/MCCT/ARC-11	TOPOGRAPHICAL SURVEY MAP
12	DF/OBCC/MCCT/ELEC-1	ELECTRICAL LAYOUT PLAN
14	DF/OBCC/MCCT/ARC-14	LANDSCAPE DRAWING
15	DF/OBCC/MCCT/DR-1	DRAINAGE PLAN
16	DF/OBCC/MCCT/ARC-16 A to D	SIGNAGE PLAN
17	DF/OBCC/MCCT/SW-1	SEWERAGE PLAN
18	DF/OBCC/MCCT/CCTV-1	Location of CCTV & PA System

The indicative 3D rendered drawings & tender drawings may be downloaded in AutoCAD and PDF formats from the link:

1. Drawing Link:

https://drive.google.com/drive/folders/1gLEwM-NlpTrLl0OLqxum_g_Zu6YFMVE?usp=sharing

2. Rendered Images Link:

<https://drive.google.com/drive/folders/1GhXGrYQ3KY0qxiogPf8qJSSNIR5pdgqu?usp=sharing>

SECTION 8:
TERMS OF REFERENCE, DESIGN BRIEF &
SCOPE OF WORK

GENERAL INFORMATION

The Kataka Chandi Temple is an ancient temple dedicated to the Goddess Chandi, the presiding deity of Cuttack, Odisha, India. The temple is located nearby the banks of the Mahanadi River. It is famous for the annual Durga Puja and Kali Puja festivals. The Durga Puja festivities are prominent in Maa Katak Chandi temple which takes place for 16 days starting from dark fortnight of Ashwin Krishna Ashtami. The goddess popularly called as Maa Katak Chandi, sits and rules on the heart of the ancient city.

Here in Cuttack, the residents strongly believe Maa Katak Chandi as The Living Goddess. The temple of Maa Katak Chandi, the presiding deity of the city is visited by hundreds of devotees every day. The image of the deity is older than the temple. It is believed that she was the family deity of Gajapati Empire in the medieval age, due to Islamic invaders' attacks she was buried while the kings migrated to Puri.

It is proposed to comprehensively develop the temple precinct and area around it to provide unique experience to the visitors and pilgrims by creating ambience of spirituality. Infrastructure up gradation of the temple precinct and tourist amenities.

Maa Cuttack Chandi is the presiding deity of Cuttack city and is visited by thousands of devotees every day from all over Odisha and also from the nearby states. Maa Cuttack Chandi Plan is an integrated development plan towards reviving and enhancing the cultural heritage value of the inner core of Cuttack city through urban design interventions and infrastructure upgradation.

Maa Cuttack Chandi temple is the symbolic representation to all other temples/ complexes in the silver city of Cuttack. The main objective of the project is to address various issues around temple vicinity such as heavy vehicular traffic, lack of open space, lack of pilgrim amenities, water logging and unplanned growth. With an intent to develop Maa Cuttack Chandi Temple complex into a major pilgrim centre and tourist attraction, Govt. of Odisha proposes an integrated development plan under the scheme of “Integrated Development of Heritage, Monuments and Tourist Destination”.

Over the decades, the area has undergone huge urbanization leading to haphazard development of modern structures, congested roads, heavy vehicular traffic driving to degradation of the historic fabric of Cuttack Chandi temple complex. The historic precinct is a major tourist attraction, apart from locals, who visit the temple every day there is an inflow of large number of tourist/pilgrims during Dusshera every year from across the country, who indirectly contribute to deterioration of the historic fabric and are left heartbroken by seeing the dominance of urbanization.

In view of the above issues, the Odisha State Government has prepared a “**Integrated development of Cuttack Chandi temple complex**”, with an overarching goal to achieve the following objectives:

- i. Revive and preserve the heritage value and grandeur of Cuttack Chandi temple complex and its surroundings
- ii. Enhance the cultural heritage, continuous traditions, and a complete timeline of Kalinga architectural developments through strategic interventions
- iii. Protect and strengthen the linkages between the area's natural and built-in heritage assets.

iv.Highlight the experiential value of the place for both the tourists and residents.

With the vision to "Enhance pilgrim facilities, create visitor experience & restore its former glory", this special precinct's Redevelopment plans shall ensure the revival of the glorious past of the Cuttack Chandi Mandir through enhanced area wide interventions and technological innovations wherever possible taking the existing constraints into consideration.

The proposed interventions aim to revive and preserve the heritage value and grandeur of Maa Cuttack Chandi temple and its surroundings with providing improved quality of life of the area's local residents. All innovations are proposed to be minimally visible and designed at increasing the quality of life of the local residents of the area.

The Scope of work includes master planning of the Cuttack Chandi temple complex along with the renovation and beautification of the temple complex & development of several public amenities and conveniences. This involves detail architectural design with detail specification of the temple and its ancillary facilities including parking, public toilets, vending zones which can attract tourists in large numbers to visit the place.

The tender focusses on Development of Maa Chandi temple complex including development of pilgrim amenities, religious facilities, parking areas & vending zones covering an approximate area of 2.29 acres of land in and around.

Total Area for Development of Temple Complex – 5934 sqm / 1.4 acre

Total Area for Shopping complex with vehicular parking- 3363 sqm/ 0.8 acre

This scope of work in the bud document is divided into the following four (4) Components mentioned below:

- A. Redevelopment of Cuttack Chandi Temple Precinct
- B. Amenities For Pilgrims & Priest Facility block
- C. Rehabilitation of existing shops & Festival Parking
- D. Provision of Services & Infrastructure

The above 4 components have been further divided into various sub-components that have been detailed as part of "Project Details" later in this section.

a. General Requirements

- i. All archaeologically significant structures to be identified in consultation with Employer and other stakeholders and care must be taken to not harm those in any manner.
- ii. The buildings shall be fire safety compliant and facilities in the development area shall include Security surveillance System, First Aid facility and other required services.
- iii. Power Load calculation to be done by the tenderer but the quantity mentioned in the project details is the minimum requirement, keeping in view the load requirement and reliability of power. Supply shall be taken as 11 KV or as available from the grid based on the assessed load.
- iv. DG sets shall cater to the facilities being created with minimum indicative DG load 63 KVA

- v. All statutory compliances are in the scope of The Contractor/developer & shall be deemed to include in bid documents. The contractor is obliged to include all such compliances in their technical & financial submissions in the course of bidding & execution. The contractor is responsible to identify the competent authorities, submit necessary documents, obtain approval of drawings, environmental clearance (if any) and all other statutory clearances from the competent authorities as may be required for the project in consultation with the Employer at their own cost that may be reimbursed on submission of original invoices.
- vi. Fees deposited for all statutory approvals by the contractor shall be reimbursed by the employer *on submission of bill and original copy of the payment confirmation issued to the contractor from the respective authority/agency.*
- vii. The Contractor shall obtain approval from the Employer for their choice and appointment of any National Institute of Repute/ Odisha State Institute of Repute at its own cost for review of the design and drawings of all components of the buildings, except those for the temporary works. Such approved documents need to be furnished to the Employer within the stipulated deadlines as mentioned in the contract data. The Employer reserves the right to dictate the mode of selection of such agency/institute and the contractor shall be obliged to follow the same.
- viii. The contractor shall have to submit the necessary drawings/documents and obtain the approval of the Employer as per mutually agreed schedule before execution.
- ix. The agency should develop its own detailed design without changing the design intent and scope of work of the conceptual design given in the tender. All value addition to refine the functional aspects are to be undertaken at no additional cost by the selected contractor.
- x. All reinforcement steel and structural steel shall be procured from primary producers of steel as per approved manufacturers list, complying with all relevant codal provisions.
- xi. The Fire safety requirement shall be as per accepted statutory norms and obtaining NOC and clearance certificate from the relevant authority is the responsibility of the Contractor.
- xii. Service areas for placing HT/LT panels, pump houses, service block, transformer, DG set etc., shall be provided.
- xiii. Khandolite stones, laterite stone, Kota stone & finishing materials shall be procured only after physical verification and approval by employer.
- xiv. All laterite masonry joints shall have lime mixed with surki flush pointing in consultation with Engineer in-charge.
- xv. All mix designs to be done with necessary chemical admixtures in consultation with Engineer-in-charge
- xvi. Minimum grade of concrete shall conform to IS 456 strictly.
- xvii. The contractor on submission of bid shall be deemed to have read and understood the terms, conditions, scope, and specifications mentioned under this section in detail.
- xviii. Water supply points to be provided near all landscaped areas in consultation with Engineer in-charge.
- xix. It shall be binding on the contractor to complete all civil, mechanical, electrical, PH and other works in all respects to the satisfaction of the employer.

b. Special Conditions

(i) Look & feel of the project

The Contractor shall study the drawings, visualizations, specifications, material finishes indicated in the contract document and understand all parameters of the design including the architectural look & feel and design intent. Any water tank over the proposed buildings shall be designed to maintain the look and feel of the surrounding area. All civil works and architectural inputs for the same shall be in the scope of the contractor. The contractor shall consult the design team of the employer and proceed according to the instructions received from the employer.

The contractor is bound to maintain and deliver the core and shell of the building as per the design intent.

The final elevation, look and feel of all building shall merge with each other.

(ii) Construction Documents

The Contractor shall provide multiple options of the design of necessary element of the Work for the Employers Representative to review along with Employer / OBCC and shall proceed further only after its approval and sign off. And related Construction activities shall not commence prior to approval of the same. Any minor modification or alteration to one design shall not be construed as *option of the design*.

The drawings issued along with the tender are based on the applicable statutory regulations and guidelines. In due course of time OBCC shall issue the drawings approved by the statutory authorities for "commencement of works at site", and these shall become the basis for preparation of the GFC drawings by the contractor. All development works shall confirm to, shall be designed and constructed / executed in compliance with the applicable statutory regulations and guidelines and comments received from the concerned statutory agencies.

(iii) Approval Drawings / Documents for Subsequent Approvals

Contractor shall prepare and submit drawings, documents, calculations, certificates, etc, as may be necessary by the statutory authorities, at the relevant stages. The contractor shall prepare and modify the GFC drawings based on the drawings approved by the statutory authorities.

(iv) Construction Drawings / Documents Approval Process

Contractor shall submit required no. of sets of drawings for approval of Employer's Representative.

Each of the submission should clearly identify the Work, purpose of the submission, document number etc. as approved in the procedure referred above. Upon review of the said submission Employers Representative shall review and revert with relevant codes for revision, approval, conditional approval, etc.

Although Work may proceed on receipt of a drawing with conditional approval, Contractor must resolve the comments indicated, resubmit and obtain final approval before release for shipment or completion of the affected Work.

Employer/ Employer's Representative and Consultant/OBCC's review and permission to proceed does not constitute acceptance or approval of submittals including, but not limited to, design details, calculations, analyses, test methods, construction methods, plans, certificates or materials developed or selected by Contractor and does not relieve the Contractor from full compliance with the Contract requirements.

(v) Technical Standards and Regulations

Contractor shall refer and implement all relevant and all applicable codes, technical standards, regulations, as amended, required for performance of Work covered under this Bid document. Also, all the conditions of statutory approval already taken by the Employer need to be complied during construction stage and for future approval required, if any.

(vi) Adoption of GRIHA

~~The contractor should have one Green Building Consultant (GRIHA/ IGBC/LEED) on board/ Associate to ensure the building design (architectural, electrical, HVAC, Lighting (indoor & outdoor), Plumbing, Landscaping etc.) and material specifications in compliance with Green Building (GRIHA/IGBC/LEED/ECBC) Guidelines. The contractor shall onboard a Green Building Specialist (1 nos.) at the beginning of design stage to ensure that the proposed designs are in accordance with GRIHA guidelines.~~

~~The minimum qualification of the Green Building Consultant shall be as follows:~~

- ~~• Graduation in Architecture~~
- ~~• PG in Environmental Planning/ Energy Systems/ Sustainable Development or Equivalent~~
- ~~• Experience in Green Building/ECBC/Environmental Planning should be more than 5 years~~
- ~~• Green Building Certification – GRIHA Professional/ IGBC Accredited Professionals (AP)/ LEED Accredited Professionals (AP)~~
- ~~• Must have completed minimum 2 nos. green building projects~~

(vii) Samples

Submission of samples shall not be limited to the above, and the Employer/ Employer's Representative and Consultant/PgMC reserves the right to demand any sample of materials, as deemed necessary.

Where samples are required, they shall be submitted by and at the expense of Contractor allowing at least fourteen (14) calendar days for review by Employer/ Employer's Representative and Consultant/PgMC unless otherwise shown on the Contract Schedule. The materials represented by such samples shall not be manufactured, delivered to the Site or incorporated into the Work without Employer/ Employer's Representative and Consultant/PgMC review.

Each sample shall bear a label showing Contractor's name, Work name, Contract number, name of the item, manufacturer's name, brand name, model number, supplier's name, and reference to the appropriate drawing number, technical specification section and paragraph number, all as applicable.

Samples, which have been reviewed, may at Employer's option, are returned to Contractor for incorporation into the Work.

(viii) Supply of Khondalite Stones

If the Khondalite stones are supplied by the employer, then the basic cost of stones shall be recovered at the rate of **Rs.22,968.20 per cum** from the bill of the contractor. The cost of loading, unloading, transport to the site from the OMC quarries and finishing of the stones to the required sizes, shapes and ornamentations as required shall be borne by the contractor.

c. Design Intent

The design considerations suggested are indicative and minimal. The agency shall improve upon them and provide the best possible technology and materials to get the state-of-the-art output.

- i. Expose conditions, wind speed and seismic zone area to be considered upon relevant IS Codes. Flood and rain fall intensity are to be considered based on meteorological data & flood data
- ii. Indicative Soil Classification (As per Soil Exploration Report). The agency needs to consider the dewatering aspect (if required), which shall critically affect the structural design, construction, and waterproofing of the structures as well as the construction time.
- iii. General provisions, stipulations, guidelines, and rules laid down in the National Building Code 2016 and other relevant codes as applicable, shall be adopted for all structural, waterproofing, fire, functional, legal, regulatory, obligatory, safety requirements for the buildings and the building services including plumbing and solid waste management with a view to deliver an integrated facility for the intended purpose, considering the design parameters well.
- iv. All the amenities, facilities, and provisions regarding the scope of work shall be provided as per the norms and guidelines of National Building Code-2016 (NBC) norms. In addition, other statutory provisions of the NBC shall be applicable for Fire and life safety of the building and amenities for differently abled persons.
- v. Prepare detailed designs and drawings for architectural floor plans, elevations, sections and detailing thereof drawings for structural works, fire and life safety and building services such as electrical works, MEP, Lifts, Information & Communication Enabled ELV/PA Installations, plumbing services, landscaping, signage and outer display structures/ installations as per scope, following the latest BIS/IRC codes for materials, design and construction, relevant CPWD/OPWD Specifications & NBC.

Note : In the absence of any definite provision in the technical specifications contained herein, reference may be made to the latest CPWD, MORTH, IRC, CPCB, NBC and IS codes, in that order. Wherever these are silent, the construction and completion of the works shall conform to sound engineering practice and in case of any dispute arising out of the interpretation of the above, the decision of the Engineer-in- Charge shall be final and binding on the Contractor.

- vi. Toilet requirement of WC, Urinal, Wash basins, drinking water facilities shall be based on the applicable standards.
- vii. It shall be the mandatory for the contractor to use excavated earth from the site in the project area itself, wherever required.
- viii. Furniture numbers as indicated in the drawings shall be minimum. It shall be in the scope of the contractor to accommodate furniture as per norms & standards wherever applicable.
- ix. Requirements and stipulations of relevant Planning and Building Standards Regulations must be adhered to. Buildings/Campus must be designed to achieve **minimum GRIHA 3 Star rating**.

d. Project Details

The project shall be executed on a **Lump Sum Turnkey Basis**, scope consisting of the survey, planning & design (architectural, structural, landscaping, and non-structural), execution, completion, obtaining required statutory clearances and handing over of the project to the Employer. As mentioned earlier, the scope of this tender is development of 4 components in the vicinity of Maa Cuttack Chandi temple complex to improve the experience of visitors and locals alike. The 4 Components have been further divided into the sub-components.

COMPONENT -1: Redevelopment of Cuttack Chandi Temple Precinct

- a) Garbhagriha Inner structure cladding.
- b) Jagamohan
- c) Shiva Temple
- d) Hanuman Temple
- e) Laxmi Narayan Temple
- f) Sun Temple
- g) South Entrance (Dakhina Dwara)
- h) North Entrance (Uttara Dwara)
- i) East Entrance (Purba Dwara)
- j) West Entrance (Paschima Dwara)
- k) Yagyan Mandap
- l) Chandi Patha
- m) Kitchen & Store
- n) Paved Parikrama Path
- o) Bata Mangala Temple

COMPONENT -2: Amenities for Pilgrims

- a) Priest Facility Block
- b) Mundan Block
- c) Prasad Sevan Block
- d) Information Counter
- e) Arrival Plaza
- f) Hand wash & foot wash
- g) Shoe stand & cloak room
- h) Police outpost
- i) Interpretation Centre
- j) Temple office
- k) Public toilet Block (Male & Female)

COMPONENT -3: Rehabilitation of Existing Shops & Festival Parking's

1. Approach Road & Parking
2. Compound wall
3. Shops (20 Nos.)

4. Dormitory – (2 Nos. with Capacity- 10 persons each)
5. Kitchen
6. Dinning- 1 Nos with Capacity of 45 persons
7. Toilet – Common toilets as per Statutory guidelines
8. Storage
9. Drinking water Facility
10. Conference Hall – (1 Nos with capacity- 21 persons)
11. Temple Office
12. Rooms- 6 nos with attached toilets & Dressing room.
13. Vehicular Parking

COMPONENT -4: External Services & Infrastructure

1. Sit outs & Stone Benches
2. Furniture's & Fittings
3. Drainage & Sewerage.
4. Signage
5. Horticulture
6. Pindi, sitting benches & dustbin
7. Internal & external PH Works
8. New Transformer 500 KVA
9. DG 63KVA
10. Lighting Arrestors
11. IP Surveillance & PA System
12. Fire Fighting
13. Air Conditioning

The above sub-components have been discussed in the following paragraphs for understanding of the prospective bidders. The bidders are advised to go through the scope in detail bearing in mind the following:

- i. The scope of sub-components or works are minimum and indicative in nature. It is expected that the bidder shall undertake due diligence on their part by referring to the scope herein, the associated drawings given in Section 7
- ii. In case of disparity between the scope mentioned hereunder and the drawings given in Section-7, the details as indicated in the section -8 shall supersede, unless explicitly mentioned otherwise.
- iii. The contractor is obliged to strictly follow the details of the project as given in the bid document along with the description of the key items with minimum & indicative quantities. Any deviation shall only be undertaken after thorough discussion & written approval of employer

A. TEMPLE PRECINCT REDEVELOPMENT

This is composed of development the main temple complex along with the small peripheral temples, pathways, steps, landscape, lighting etc. linking to the main temple complex sited in the core city with the following components:

1. Redevelopment of Cuttack Chandi Temple Precinct:

- a) **Renovation of Main Maa Chandi Temple:** The renovation of Maa Cuttack Chandi Temple shall be in two parts. The first part concerns with the renovation of the internal space which includes the Garbhagriha and the Parikrama. The second part includes the renovation of the external façade and the shikhara of the temple.

i. Renovation of Garbhagriha

It shall be in the scope of the contractor to ascertain the height till which the existing cladding in the Garbhagriha exists in consultation with Engineer-in-charge.

The existing Garbhagriha shall be kept intact with a proposal for externally cladding with 1ft of Khandolite Stone from the base till the top keeping the similar architecture of Pidha Deula style of existing temple. It is proposed that the height of the external stone temple would increase to the height by 5-6 ft from the existing temple. It is also proposed to clad the existing temple internally with 4" Khandolite stone.

The inner walls of Garbhagriha shall have cladding of 50mm thick Khandolite stone. Khandolite ornamental works shall also be done in the inner walls. Flooring works shall be done with dressed Khandolite stone for an area of 25 sqm. The walls shall be treated with water repellent coating as per technical specifications.

ii. Renovation of External Façade of the Temple

The foundation and plinth of the temple shall be made of Khandolite Stone. A 300 mm wall shall be made around existing temple.

- b) **Development of temples in the temple complex areas (Shiva Temple, hanuman temple, Lakshmi Narayan temple, Sun Temple)**

It is proposed to develop four nos. of temples dedicated to various deities in the temple complex. The temples shall be developed in typical Kalinga style of temple architecture. The entire superstructure, and flooring of all the temples shall be done with Khondalite Stone of sizes 250mm, 380mm, 450mm and 900mm thickness. The foundations and plinth beams shall be cast in RCC and the exposed foundation above the plinth beam shall be made of Khandolite stone.

It shall be in the scope of the contractor to develop four separate temples of dimensions as given as follows:

Sl. No.	Name of Temple	Length of Temple	Width of Temple	Height of Temple
1.	Shiva Temple	3.048m	3.048m	4.6m above FFL
2.	Hanuman Temple	2.133m	2.133m	3.2m above FFL
3.	Lakshmi-Narayan Temple	2.133m	2.133m	3.2m above FFL
4.	Sun (Surya) Temple	2.133m	2.133m	3.2m above FFL

The flooring of the temples shall be done by Khandolite Stone of 300mm thickness. While the minimum stonework for flooring for Shiva Temple shall be 16 sqm, for the other three temples the same shall be 6.25 sqm each. All temples to be developed with external / internal lighting, external / internal PHE works, landscape, etc. with parking provisions as per Statutory standards.

- c) **Construction of Kitchen & Store:** The proposed new kitchen & store in the temple complex may be referred in the proposed master plan with a minimum area of 33 sqm. The height of the kitchen store shall have 4.95mtr from Finish Ground level. The clear height shall be from finished floor level is 3.6mtr. The contractor shall provide a temporary kitchen enclose in consultation with relevant stake holders till the duration of new construction of the kitchen. For construction of Kitchen an alternate arrangement for Kitchen & store shall be done by the contractor in consultation with Employer-in-Charge. The kitchen shall be cladded with Khandolite stone with raft foundation and three layers of RCC roof cladded with Khandolite stone. The architecture shall follow the similar pattern of current existing kitchen with storage & utility area on both the sides and the cooking area in between for easier accessibility.
- d) **Bata Mangala mandir:** The temples shall be done by Khandolite Stone of minimum 300mm thickness. The minimum BUA for Bata mangala temple is 35.4 sqm with an height of 8.2 mtr from finished ground level. The foundation of the temple and the plinth beam shall be casted in RCC and the exposed foundation above the plinth beam to be constructed with Khandolite Stone. The temple to be developed with external / internal lighting, external / internal PHE works, landscape, etc. with parking provisions as per Statutory standards.
- e) **Construction of New Entrances: The four important Dwaras (Dakhina Dwara, Uttara Dwara, Paschima Dwara, Purba Dwara)** shall be constructed with Khandolite Stone. The Paschima, Uttara & Purva Dwaras are identical in nature with an area 20.25 sqm and an height of 6.7mtr from finished ground level. However, for the Dakshina Dwara area shall be 9.36 sqm and height of 4.57 mtr from finished ground level. All Dwaras to be developed with external / internal lighting, external / internal PHE works, landscape, etc. with parking provisions as per Statutory standards.
- f) **Paving with Khondalite**

B. GENERAL BEAUTIFICATION & PUBLIC AMENITIES

Arrival Plaza & Temple Complex

Development of the Arrival Plaza to be constructed with granite coble stone 100mm & paver blocks of 80 mm thick, exterior parking with 80 mm thick paver block for accommodating 13 nos. of 4 wheelers parking, external / internal lighting, external / internal PHE works, landscape, etc.

Hand wash & foot wash shall be designed for an area of 22.3 sqm which shall have running water facilities for handwash & foot wash for the convenience of pilgrims. with walls having Khandolite stone shall have marble flooring of thickness 20 mm thick with a foot pool & 4 hand wash basins with inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

A toilet blocks shall be provided of BUA 44.3 sqm with clear height of 3m from finished floor level for male & female. It shall have 5 urinals, 5 WC, 6 basins and 1 Indian pan each. It shall have a separate toilet for physically disabled each as per the standard guidelines & statutory norms. The flooring shall be done with ceramic tiles of size 1ft x 1ft and walls of 2ft x 2ft with inclined slope roofing with Mangalore roofing tiles. The buildings shall have all relevant electrical fittings & painting works.

Existing kitchen to be renovated and 2 numbers of stores to be provided as per indicated in the drawings with a minimum BUA of 33 sqm. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in

veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

Temple complex parikrama area to have Khandilte stone paving of 250mm thick as indicated in the drawing.Dwg.no: DF/OBCC/MCCT/ARC-1.

Mundan Block: The Mundan block shall be designed for an area of BUA with 15 sqm with clear height of 3.6 mtr & 4.9 mtr height from FGL. The Mundan Block shall have ornamental stone Khandolite cladding as mentioned in the minimum detail specification. The Indicative drawings to be referred from drawing No:- DF/OBCC/MCCT/ARC - 4

Information Centre

The shops (6 nos) of total area 35 sqm with height of 5.16 mtr from finished ground level, shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda & shops, inclined slope roofing with Mangalore roofing tiles. all shops shall have M.S rolling shutter with all relevant electrical fittings & painting works

A shoe stand and cloak room has been proposed near to the plaza area with a BUA 31.77 sqm with height of 5.16 mtr from finished ground level. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have M.S/Alluminium rolling shutter with all relevant electrical fittings & painting works.

A kitchen of minimum BUA of 13 sqm with a height of 5.16 mtr from finished ground level with required storage areas. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

Dipa Shop: A minimum of 6.51 sqm area of Dipa shop to be provided with height of 5.16 mtr from finished ground level with required storage areas. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

Shops: A minimum of 5.63 sqm area of shop to be provided with height of 5.16 mtr from finished ground level with required storage areas. There are 6 nos. of shops to be provided within the information centre. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

Drinking Water Facility: A minimum of 4.25 sqm area of drinking water facility to be provided with height of 5.16 mtr from finished ground level. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works. There shall be minimum of

Interpretation Centre: A minimum of 33 sqm area to be provided with height of 5.16 mtr from finished ground level. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

Ticket Counter: A minimum of 7.22 sqm area for ticket counter to be provided with height of 5.16mtr from FGL with required storage areas. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

Temple office: The proposed building consists for temple trust & Sevayats with BUA of 81 sqm and height of 5.16 mtr from finished ground level. The flooring shall be with kota stone of thickness 20mm and ornamental Khondalite cladding on columns with wooden doors and windows. A toilet has been provided within the temple office with wall tiles and floor tiles and 1 WC and 1 wash basin. The building shall have sloped roof with Mangalore tiles.

A Police outpost of 15.39 sqm with a building height of 5.16 m from FGL with kota stone flooring (20mm thick) with UPVC windows and wooden doors complete with all electrical and painting works. The building shall have sloped roof with Mangalore tiles.

Control Panel Room of minimum of 5 sqm with a building height of 3.2 m with Kota stone flooring (20mm thick) with UPVC windows and wooden doors complete with all electrical and painting works. The building shall have sloped roof with Mangalore tiles.

Corridors: The corridors to have minimum width of 2m clear as should comply all statutory guidelines & Norms. The clear height of rooms to be defined as per standard statutory guidelines & Norms.

1. Prasad Sevan

The Prasad Sevan block to be designed for BUA of minimum 300sqm with clear height of 5.16 mtr from FGL. The pantry area to be provided with a minimum area of 21.3 sqm and height of 5.16mtr from FGL. It shall have ornamental Khandolite cladding in the columns, 20 mm Kota stone in veranda, inclined slope roofing with Mangalore roofing tiles. The building shall have all relevant electrical fittings & painting works.

SL.No.	Rooms	Minimum Area (sqm)
1	Prasad Sevan Room-01	84 sqm
2	Prasad Sevan Room-02	44 sqm
3	Kitchen/ Pantry	21 sqm

2. Priest Facility Block:

The priest facility block is as per the requirement & consultation from the sevayats. The Priest Facility block to be provided with minimum area of 266 sqm with an height of 4.95mtr from the FGL. This priest facility block consists of the following rooms with the minimum indicative areas as mentioned below.

SL.No.	Rooms	Minimum Area (sqm)
1	Office Room	10.31
2	Strong Room (Jewellery Storage Room)	10.31
3	Storeroom	21.56
4	Priest Room (6 numbers)	10.31 each
5	President Room with attached Toilets	14.75

The building to have a height of minimum 4.85 mtr from the Finished Ground Level. The toilets & all sanitary equipment's to be provided as per standard norms & statutory guidelines occupancy calculation.

3. DEVELOPMENT OF PARKING LOT:

Parking is provided near the arrival plaza. The parking area of minimum 650sqm designed with a capacity of 13 ECS paver block flooring of 80mm thickness over 250 mm GSB grade II and 250mm WMM with precast kerbstone of M25 grade, exterior/internal lighting, landscape etc. The size of the car parking bays to be demarcated as per the standard guidelines. The pavement markings shall be done with all ancillary facilities in order to support the pilgrims coming to the destinations. parking to be marked with thermoplastic paint coating for markings.

4. Shopping Complex:

The market complex is proposed in an area Infront of Cuttack Chandi temple complex with an site area of 3363 sqm. The minimum BUA is 1566 sqm with height of 11.7 mtr. from Finished ground Level. The On the ground floor, 20 numbers of shops with Aluminium rolling shutters to be provided. Shops to have minimum area of 15 sqm for the shopping complex. The first floor consists of Dinning areas with a capacity of 45 person with an arrangement for ticket keeper. The dining area to be attached with kitchen with sufficient storage spaces and with proper ventilation. The kitchen area to be minimum of 31 sqm. Provision for minimum of two lifts to be made of 10 passengers for the shopping complex building.

The flooring on the ground floor shall be done with vitrified tiles. All corridors and steps and staircase would be laid with 20mm thick granite flooring. In the toilet, the flooring shall be done with ceramic tiles of size 1ft x 1ft and walls of 2ft x 2ft. SS railing shall be provided in the staircase & across the corridor. Provisions for 6 water ATM (2 nos in each floor) to be provided in the whole building. Complete with all necessary electrical and painting works. Toilets to be provided as per standard guidelines & norms along with a disabled toilet.

The Compound wall to be as per the detail specification with an entrance gate and a security cabin of Minimum BUA of 8sqm.

Sl.No.	Rooms	Minimum Area (sqm)
1	Shops (20 Nos.)	15 (each)

2	Kitchen	10
3	Dinning	95
4	Store	21.5
5	Toilets (Male & Female)	15 each/As per standards & occupancy calculation*
6	Disabled toilets	5.4/ as per standards*
7	Executive office with Lobby & toilet	23.22sqm
8	Conference Room with lobby & toilet	47 sqm
9	Temple Office	47 sqm
10	Rooms (6 Nos.)	138 sqm
11	Dormitory (2 Nos.)	94 sqm

* Whichever is higher

Control Panel Room of minimum of 5 sqm with a building height of 3.2 m with Kota stone flooring (20mm thick) with UPVC windows and wooden doors complete with all electrical and painting works. The building shall have sloped roof with Mangalore tiles.

Remaining common areas to be designed as per standard statutory Guidelines.

All buildings to be designed in compliance with the statutory norms & guidelines as per the requirement. Building Heights to be as per NBC guidelines.

C. SERVICES & AMENITIES

D-1 Signage: There are three (3) types of signages identified in the master plan to be installed within the project area. The following typology of the signages shall be provided by the contractor:

- location-based signage
- wayfinding signage
- informational & story signage
- Cultural markers

Location based signage: Cast iron piped structure with sandstone base and iron brackets with SS Steel panel with retro-reflective boards

Way finding signage: Cast iron piped structure with sandstone base and iron brackets with SS Steel panel with retro-reflective boards

Information and Story Signage: Digital printing series (super high efficiency reflective sheeting) with alphabets/numerical/ pictorials digitally printed and laminated in matt finish. The base pedestal is Kani Pista, with three

mouldings with 4:5:6 proportion. Concrete structure with text etched and painted on top. Sandstone cladding at the base text. Language: Odia and English. Text height: Heading - 10 mm Supporting text - 8 mm as per drawings & direction of engineer in charge.

Cultural Markers: Cultural markers shall be made of stone of dimension 600 x 600 x 1800 mm with CNC etching and carving designs fixed over MS support structure made up of 150 X150 mm MS pipes with weather proof paint and primer fixed on the sub structure inclusive of all necessary hardwares to make structure stable as per site with complete base work and foundation and research, scriptwriting, proofreading and copywriting of all the content in 3 language (Oriya , Hindi & English)with designing the and developing the infographics of all the graphical representation, illustration, theoretical and textual content placement of provided content along with development of print ready files for the fabrication and production as/design/drawing with complete work as per site engineer-in-charge.

D-2 Landscape:

The Landscaping is a composition of both softscape and hardscape to result in harmony of the Site components and surrounding as well as convenience of the users. The proposed Masterplan comprises both soft cape and hardscape to allow different activities. This will ensure proper access to the amenities and facilities are provided in the area, while at the same time having appropriate mechanisms in place to reduce the runoff, which was earlier overburdening the drainage systems around the temple. Landscaping, including location of trees and shrubs would be governed by the landscape plan prepared by the contractor in consultation with Engineer-in-charge and duly approved by the employer.

- Indigenous trees like Neem, Karanja, Akashmalli, Amla, Mango, Kochila , Champa (white,red, pink) , Baul , Ashoka ,Arjun, Bahunia, Peepal/ Banyan Tree shall be planted.
- Indigenous shrubs like Aparajita , aswagandha , dhannantari , ganga siuli , kamini,mandar, Tagara (Pinwheel Flower), sadabihari , Jasmine, Tulsi shall be planted.
- Key varieties of trees/plants/shrubs, the minimum quantities of which are to be planted are mentioned in the minimum & indicative quantities.
- The period of maintenance will be 1 year after handing over of the project.
- Necessary water supply points shall be provided in each landscaped area.

D-3 Pindi, sitting benches & dustbin: It is proposed to construct pindis around trees for seating. Such trees shall be identified by the contractor in consultation with the Engineer-in-charge. The dimension of such pindis shall be governed by site condition and instructions of the Engineer-in-charge. Sandstone benches shall also be provided as instructed by Engineer-in-charge.

D-4-Compound wall

Compound wall on all sides of the development area has been proposed to ensure safety in the premises. The compound wall has been designed to ensure that the development within can be viewed without hindrance. There are two types of compound wall proposed - one enclosing the inside temple complex which will be of 6 ft high

Khandolite stone wall with coping design on top and another enclosing the entire temple complex similarly enclosing the shopping complex plot which will be brick along with grills.

D-5-Furnitures & Fittings:

It shall be within the scope of the contractor to plan, procure and install furniture as per indicative drawings. The contractor shall refer the furniture drawings to understand the general idea of furniture setting. However, the final arrangement of furniture shall be done by the contractor as per applicable norms and standards. All necessary drawings for placement of furniture, relevant cross sections must be submitted to the employer for review. Only after due approval from the employer, the furniture shall be arranged in consultation with the Engineer-incharge.

D-5 Internal & External PHE works:

External Water Supply

The water supply for the complex is proposed to be collected from PHD /WATCO for the temple premises and its utility.

The scope includes planning, designing and construction of providing and laying Water supply main DI pipes branch and distribution lines including chambers and fittings/specials such as Tees, Bends, collars, Unions, tappers, caps, Sluice Valves, Gate Valves, scour valves, non-return valves, air-relief valves, thrust blocks etc. complete and as per direction of Engineer-In charge, complete in all respects.

- The water supply network should cater to the needs of supplying water from UG sumps to OHT (from various locations) to individual buildings by DI head main and CPV/UPVC.
- All buildings are to be connected with the OHT facility by water supply lines on trenches by CPVC/UPVC so that water supply could be made to the building along with fittings, gun metal gate valves, gun metal non return valves, masonry chambers for valves, including excavation, providing sand around and refilling after laying etc.
- The scope also includes providing and laying water supply (from OHT) main, branch and distribution lines including chambers and fittings/specials such as Tees, Bends, collars, Unions, tappers, caps, Sluice Valves, Gate Valves, scour valves, non-return valves, air-relief valves, thrust blocks etc. complete for use for horticultural purpose and to fill artificial pond created in the campus and as per direction of Engineer-In charge.
- Planning, designing and construction of RCC Under Ground Sumps/ RCC overhead tanks of adequate capacity as per norms of NBC, with necessary partitions for domestic & fire fighting etc. including preparation of preliminary & detailed working drawings, structural analysis & design, planning, designing & execution of all services including providing and laying DI pipes of required diameter up to overhead tank etc. by incorporating stipulated specifications and integrating all services with external development works all complete as per directions of Engineer.
- Planning, designing and construction of Drinking water facility for public usage and its waste water collection should be made as per norms of NBC/CEPHO. By incorporating stipulated specifications and integrating all services with external development works all complete as per directions of Engineer.

Water is tapped from the pipe trench provided around the temple at designated points. The scope of work shall deem to include, but not limited to indicative details as described below, in complete respect with full functionality, compliances to the specification and drawings.

Design, supplying, installing, testing & commissioning of Water supply system (including all Civil & construction work) for the following duty having the drinking water filtration facility of 0.2 KLH having MMF , GAC ,MF and UF for water purification for drinking purpose and all as detailed out below, the water then pumped and carried with DI pipes 100 MM Dia to the spouting positions of the Sacred areas and hand and foot wash areas as per the detailed drawings, :The quality standards as laid below for the water before drinking

facility to be built as per CPHEEO codes & manual for water supply and sanitation system, Drinking facility water quality.

- Water Treatment Plant -Source PHD
- Daily average flow – 1 cum/day
- pH - Neutral
- Iron- Nil/ less than 0.2 mg/l
- S. Solids – less than 2 Mg/L
- Coliform – Nil/
- Water Treatment Plant – to ESR Storage tank Discharge standard
- PH - neutral
- S. Solids - Less than 5 Mg/L
- Oxygen –More than 6 mg/l
- Coliform of all type –Nil as per PHD standards, the piping arrangements to be done such way that no quality deviations on the water fed to the OHTs than of the source supply of PHD/WATCO.
- All the rates quoted by the contractor shall be complete finished work including cost of all labour, material, scaffolding, finishing as required with tools, plants, lead, lift, taxes, tollage, octroi, royalties etc. except those specially excluded in the description of the individual items. All works shall be executed as per drawings, specification and instructions of Project head and shall include the supply and installation at site of all the equipment, ancillary materials as specified and all such items what-so-ever which may be required to fulfil the intent and purpose as laid down in the specification and/ or the drawings. All materials shall be as per ISI specification and with IS certification marked wherever applicable. The material shall be duly approved by Engineer In-charge/ Architect before incorporation in the actual work.

Sewerage System

The scope includes planning, designing and construction of providing and laying sewer lines with NP2/3 (as per codal requirements) pipes of spigot and socket ends including Manholes of required size, shape and depth complete and as per direction of Engineer-Incharge. The contractor shall plan, design, prepare the drawings for Sewerage system and get the same approved from Engineer before execution the competent authority. The sewerage lines of individual building shall be considered in buildings upto and including first manhole.

Waste & wastewater from kitchen & dining (if any) shall not be directly discharged in the sewerage system as constructed by JICA in the city, the connecting piping from the complex be made with non return drainage flap of MOC SS-316 material to each connecting points of the JICA drain.. For garbage, a separate storage bin shall be provided and all codal provisions of SWD should be followed. For pre-treatment of wastewater Gully Trap, screen chamber, Grit Chamber shall be designed and constructed.

This item is operated from the first manhole to the JICA Sewage canal including construction of gully trap, grit chamber, and screen chamber etc. making connection from and to the manholes wherever required, all complete .all connecting points will have non return flap of SS 316 material.

For surface run-off and wastewater disposal, a system is to be designed as per the CPHEEO guidelines, complete in all respects. It is proposed to have underground surface drain through NP-3 Hume pipe and RCC cover4ed drains complete with collection chambers with perforation cover slabs within the temple premises. The Surface drain along with the main connecting road is proposed to be RCC covered drain with cover slab perforated at intervals as per the design requirement. The drain along the main Road and within the temple complex is to be constructed in line with the existing drain size and slope with additional quantity water to be discharged from the developed complex in it at points demarcated in the drawing to the main drain. The present invert slope of the main drain and the complex is adequate to discharge the water from the complex to the drain by gravity.

The water from the Foot washing area is planned to be recycled and reused for foot washing and the excess dirty water shall be disposed into the city drainage network.

Rainwater Harvesting

The scope of work for Rainwater harvesting will include planning, designing, supplying, installation, testing & commissioning of Roof Top Rainwater harvesting system for all buildings in the project area along with the infiltration chambers filled with media and silting chamber finally to recharge-pits as referred in the drawings and the details. Ground water recharge would be done by the process derived by CGWA/NBC/CPWD/latest CDA bye Law. The swallow surface recharging provisions are made with slotted pipes and infiltration chamber made during transit of water to the recharging pits. The provisions are made for the excess water to be drained to the nearby lake zone area. PVC/HDPE /NP2 pipes, valves, shutter gates, flanges, compartmentalization of recharge pits of the area wise has been designed. The system is to be designed in accordance to the codes in compliance to IS code/CPHEEO/CGWA/CPWD norms and specifications published & gazette 2018, CDA local body by laws and govt authority. Statutory clearances wherever required will have to be taken by the contractor.

All the rates quoted by the contractor shall be complete finished work including cost of all labour, material, scaffolding, finishing as required with tools, plants, lead, lift, taxes, GST, any other statutory tax, royalties etc. except those specially excluded in the description of the individual items.

All works shall be executed as per drawings, specification and instructions of Project head and shall include the supply and installation at site of all the equipment, ancillary materials as specified and all such items what-so-ever which may be required to fulfil the intent and purpose as laid down in the specification and/ or the drawings. All materials shall be as per ISI specification and with IS certification marked wherever applicable. The material shall be duly approved by Engineer In-charge/ Architect before incorporation in the actual work.

Transfer of sewage to JICA Drainage Plan (presently working in Cuttack)

It is proposed to have pre collection system designed as per the total wastewater generated during normal and festive seasons from the temple complex before discharge to JICA main drain. The disposal of the system to JICA sewage canal will have the non-return flap system.

The system comprises of grit filtration finally to be discharged to the JICA drain as detailed out in the drawings. RCC-M25/35 structural SS/UPVC/PVC/NP2 pipes, valves, shutter gates, flanges, compartmentalization of different treatment systems shall be outlaid as per the required design. The system must to be designed in accordance to the codes in compliance to NBC/IS code/CPHEEO manual for hydraulics and process design /CPCB norms published & also the gazette 2020 to discharge to water body , local body by laws and govt authority. Statutory clearances wherever required will have to be taken by the firm. Details as per the drawings enclosed.

All the rates quoted by the contractor shall be complete finished work including cost of all labour, material, scaffolding, finishing as required with tools, plants, lead, lift, taxes, GST, octroi, royalties etc. except those specially excluded in the description of the individual items.

All works shall be executed as per drawings, specification and instructions of Project head and shall include the supply and installation at site of all the equipment, ancillary materials as specified and all such items what-so-ever which may be required to fulfil the intent and purpose as laid down in the specification and/ or the drawings. All materials shall be as per ISI specification and with IS certification marked wherever applicable. The material shall be duly approved by Engineer In-charge/ Architect before incorporation in the actual work.

D-6 External electrical works:

Façade Illumination

Facade lighting helps in highlighting the main architectural features of the Temple. It adds an artistic feel to the exteriors with shadows. Lightings like Linear Wash Light, Spot Light etc. can be used to achieve the same. it is proposed to provide warm white illumination as facade lighting in the form of light simulation which has been designed by lighting technologies. Context sensitive lighting is proposed within the project area. The landscape lighting restricts the use of up lighters or reflective lighting of any kind in the project area. The illumination within the project area is achieved through streetlights along the pathways to ensure that there are no dark spots along the main path of movement. Ambient lighting is achieved through use post top lighting and bracket lights along the movement direction. Bollard lighting is restricted due to the public nature of the project.

The scope of work shall deem to include, but not limited to indicative details as described below, in complete respect with full functionality, compliances to the specification, drawing.

a. External Illumination work

- **Streetlights:** Context sensitive lighting is proposed within the project area. The design of the light pole is a derivation of the form of the temple and provides the required heritage looks and design language. The streetlights would be 6000mm long with 114mm dia cast iron pole with double arm bracket, LED 45-watt post top light 105 numbers and must comply with all necessary statutory requirements and approvals. There would be a minimum requirement of 14 nos. of 6 mtr high with 70 watt LED streetlights.
- **Solar Light:** Solar Lights of 40W LED All in one integrated solar streetlight are installed, which executes a compact and aesthetic look as well act as an environment friendly alternative for the site and must comply with all necessary statutory requirements and approvals. Minimum 12 nos. of such lights are required to be installed.
- **Step Lights:** LED 12 Watt or above (255mm x 90mm x 76mm or above), wall recessed/step lights, IP 65 protection is proposed where Luminaire is made of pressure die cast aluminium alloy with non-corrosive SS fasteners
- **Linear Profile Lighting:** LED linear lighting allowed for continuous light lines without any dark spots (previously left where one fluorescent tube finished and another started). Since the introduction of the LED into linear lighting the product type has grown from strength to strength with aesthetical and performance advances being constantly driven by ever-increasing demand. It is proposed to install 36nos. 12watt Bollards, 78 nos. 12-Watt LED step light fittings etc.

With respect to laying of cables in the project area, a PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of maximum thickness of 25 sq.mm direct in ground would be installed for approximately 14, 964 metres. Around 160 metre of PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 120 sq.mm direct in ground would also be required to be installed. Additionally, around 2400 metres of PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of size not exceeding 25 sq.mm direct in ground in the existing RCC/HUME/STONEWARE/METAL pipe as per requirement should also be installed.

All illumination work to satisfy relevant statutory requirements of NBC 2016 and other relevant specifications.

All illumination work to satisfy relevant statutory requirements of NBC 2016 and other relevant specifications.

Refer for indicative electrical layouts for key buildings: Drwg no: DF/OBCC/MCCT/ELEC - 1

Transformer

Supply, installation, testing and commissioning of **11/0.433 KV,500 KVA** complete Substation Works & equipment which includes HT Panels, Oil type transformers including standby, LT Panel, HT cables, APFC (Automatic Power Factor Correction) Panels, Distribution Panels, Active Harmonic filters, TVSS (Transient Voltage Suppression System), SPD (Surge Protection Device), Fire Emergency Panels, lighting protection to the temple & building, other related works like LT cabling from sub-station to buildings, chemical earthing complete as required. Statutory clearances wherever required will have to be taken by the contractor.

Refer to the Master Plan for proposed location of transformer in drawing no. DF/OBCC/MCCT/ELEC-1

Refer Detailed Description of Key Items with Minimum Indicative Quantities for details.

DG Set

It is proposed to install 1 set of 63 KVA Radiator cooled Silent D.G. set comprised of Diesel Engine, coupled with Alternator mounted on a common base frame along with other standard accessories i.e., residential silencer, batteries with leads, fuel tank, AVM pads with static Battery charger, with Acoustic Enclosure.

Supplying and fixing of Exhaust extension with 150MM DIA MS Pipe with wall Support including Horizontal Support with MS Steel, SS Below, Thermal Insulation of 50MM Rockwool, Chicken mess, Aluminium Sheet and painting etc.

Unloading, Shifting, Installation& commissioning with civil foundation, 4 nos earthing, 6 core 2.5sqmm copper FRLS PVC control cable with AMP Panel, statutory (Electrical) approval, standard testing as per PCB rule.

Refer Detailed Description of Key Items with Minimum Indicative Quantities for details.

IP Surveillance

Planning, designing, supply, installation, testing and commissioning of complete IP based CCTV security system including various types of IP based CCTV Outdoor Type Bullet Camera with 1/2.7" 4MP progressive CMOS, 1080P high definition , 2.8-12 mm MF cameras and 3-10 mm VF cameras with internal SD card 128GB, server-based recording, Cat 6 cabling & related accessories CCTV with independent ofc backbone, PoE Switch and having storage for 30 days at 25 FPS, multi-screen display system, hardware and Video Management System software support etc. as required to be installed at the entry and exit points, Parking areas, vending space, and other common areas as required including CCTV control room, required UG cabling, recording system and monitor/ monitors in the control room (Inside and outside area).

Outdoor Multi-Sensor Dome Camera 4MP & 4MP PTZ network camera with high dynamic range of 120dB, Ir distance of 50m, motorized zoom lens, video compression and IK 10 vandal resistant cameras would be installed within the project area.

PA System

Planning, designing, supply, installation, testing, and commissioning of complete of Digital based voice communication system with specified number of PRI lines and IP (as per design and requirements) extensions, complete with IP telephone instruments with operator console facility with CAT 6A cabling (if needed separately) with associated accessories as required.

Lightening Arrestor

In order to safeguard the buildings in the event of lightning during inclement weather, arrangements would be made to install requisite numbers of Lightning Arrestors. It is proposed to install 8mm aluminium rods in roof conduction holders on parapets of buildings, vertical air terminals, copper/SS conductors of appropriate dia and low carbon copper coated earth. It is proposed to provide conditional lightning arrestor for temple and shopping

complex plot. An early steamer emission type lighting arrestor for the entire area which will cover the span of 80 meters.

Fire Fighting

Planning, designing, supplying, installation, testing & commissioning of Fire fighting System, comprising of electric driven main pump for wet-riser and sprinkler, Diesel engine pump, Jockey pump for wet-riser and sprinkler, Terrace Pump, Fire Boost Pump, MS pipe, valves, flanges, hydrant, down-comer system, Hose reel, Portable Fire Extinguishers, compartmentalization as and where required.

It is proposed to install 4 sets of Microprocessor based 1 Loop Main Fire Alarm Control Panel with LCD display, Integral System Power Supply Unit including Battery Charger with mounting chassis & lockable type Hinged Door complete with Sealed Lead Acid maintenance free Battery Backup. Additionally one set of Microprocessor based 2 Loop Main Fire Alarm Control Panel with LCD display, Integral System Power Supply Unit including Battery Charger with mounting chassis & lockable type Hinged Door complete with Sealed Lead Acid maintenance free Battery Backup is to be also installed.

It is also proposed to install 395 nos. of smoke detectors at prescribed locations as per approved drawings would be installed for firefighting. Additionally, 14 nos. of hooters at prescribed locations are also to be installed for warning in case of fire incidents.

A minimum of 12 nos. ISI marked (IS:2878) Fire Extinguisher, Carbon-di-oxide type capacity 4.5 Kg., 42 nos. ABC (Powder Type) 6 Kg. Capacity Fire Extinguisher, MS Cylinders ISI marked TAC approved, an external Fire hydrant with MS pipes conforming to IS 1239 Pt – I of varying lengths, 12 nos. of M.S. Fire Double Door Hose Box fabricated out of M.S. sheet among others have been proposed as part of the fire fighting. A suitable Control panel for fire pumps has also been proposed.

All installations must comply to IS code/NBC 2016, local body by laws and local fire authority. Statutory clearances wherever required will have to be taken by the contractor.

Fire Alarm System (FAS)

Planning, designing (as per CPWD specification, agreement condition & NBC & IS codes), supplying, installation, testing & commissioning of Automatic Intelligent Addressable Fire alarm system/ manual Fire alarm system comprising of fire alarm panel, Smoke detector, Heat detectors, Hooters, Manual call points, Response indicators, monitor module, control module, fire survival cables etc.

It shall be as per NBC 2016, CPWD specifications and Local bylaws and as per approval of Local Fire Service authorities. The work shall also include planning, designing, preparing drawings and getting the drawings approved from the Engineer In-charge and Fire Service Authorities by the contractor and its subsequent execution. Scope of work also includes integration of Automatic Intelligent Addressable Fire alarm system/ manual Fire alarm system provided in the building as per NBC 2016 requirements to the main control room located inside the building. Statutory clearances wherever required will have to be taken by the contractor. All materials shall be as per ISI specification and with IS certification marked wherever applicable. The material shall be duly approved by Engineer In-charge/ Architect before incorporation in the actual work.

HVAC System

It is proposed a VRF type air conditioning system for the project in three parts - 8 HP has been proposed for the priest block , 20 HP has been proposed for the Prasad Sevan and information counter block together where as the 1st floor and 2nd floor of the shopping complex has been proposed for a 2 nos . 22 HP system. the ambient room temperature is considered to be 44 deg c whereas the inside room temperature is considered to be 22 deg c. we have taken cassette type indoor units in Prasad Sevan, interpretation centre, dinning, conference, temple office and dormitories respectively.

Garbage Disposal

For collection of garbage generated in the developed area, 5 nos. each of Plastic Waste bin Rectangular along with fabricated MS stand, Plastic Waste bin without Wheel with Push type Top load along with fabricated MS stand and Plastic Waste bin without Wheel with Swing lid type Top load along with fabricated MS stand would be strategically located in the entire site for the convenience of the visitors.

For biodegradable garbage disposal at the site, it is proposed to install 2 nos. of Micro composting Unit electromechanical fully automatic food waste composting machine of capacity of 100 Kgs each for biodegradable solid waste generated from the temple complex along with digester pits constructed with it. The composter would comprise of drive pump and nutrient dosing system for biocides for composting piping, DI/PVC/HDPE /NP2 pipes, valves, SS – 316 shutter gates, flanges, compartmentalization of digestion chamber. The operation of the system will be in sequence as one working and one standby method is adopted.

The digested compost will be utilized as and where required for the horticultural purposes. The excess liquid generated from the system will be pumped out from the chamber and will also be utilized with horticulture areas in compliance to IS code/CPHEEO/MOEF &CC 2016, local body by laws and govt authority. Statutory clearances wherever required will have to be taken by the contractor.

It is proposed to install minimum 2 sets of organic solid waste composter of 100 kg capacity each with facility for special type of bacterial compound dose for decomposition of organic waste.

The digested compost will be utilized as and where required for the horticultural purposes. The excess liquid generated from the system will be pumped out from the chamber and will also be utilized with horticulture areas in compliance to IS code/CPHEEO/MOEF &CC 2016, local body by laws and govt authority. Statutory clearances wherever required will have to be taken by the contractor.

Landscaping & Horticulture

The Landscaping is a composition of both softscape and hardscape to result in harmony of the Site components and surrounding as well as convenience of the users. The proposed Master plan comprises both softscape and hardscape to allow different activities. This will ensure proper access to the amenities and facilities are provided in the area, while at the same time having appropriate mechanisms in place to reduce the runoff, which was earlier over burdening the drainage systems around the temple. There are three areas for landscaping :-

1. Priest facility block area central area which would consist of few shrubs - HIBISCUS ROSA-SINENSIS along with its back peripheral wall side to have - MICHELIA CHAMPACA
2. The area nearby to the proposed new toilet will be planted with - MICHELIA CHAMPACA
3. The arrival plaza parking area in front of the temple shall have - DELONIX REGIA

4. The shopping complex plot shall contain the following plants which would be planted all over the parking area as well as the front peripheral side and the boundary wall. - MIMUSOPS ELENGI, PLUMERIA ALBA and shrubs - ALAMANDA CATHARITICA

For details on types and numbers of plants and trees, please refer to the Key Items with Minimum Indicative Quantities for details.

Refer Detailed Description of Key Items with Minimum Indicative Quantities for details.

D. Mandatory Requirements

i. Waterproofing:

- a. All concrete work in wet areas & all roofs to be treated with crystalline waterproofing.
- b. All basements concrete works should primarily have membrane water proofing of appropriate type in addition to crystalline waterproofing.
- c. The SOP for Waterproofing shall be a part of the Scope of Work (Section-8) of the RFP.

ii. Anti-termite:

The Contractor must take special care in performing anti-termite treatment since the construction site/ project location is prone to termite infestation.

(i) Chemicals

The chemicals used for the soil treatment shall be any one or combination of the following with the concentration shown against each aqueous emulsion:

Chemicals concentration: Imidacloprid 30.50 SC (by weight)

The quantity of all chemicals will be as per CPWD Specifications or as per manufacturer's specifications.

(ii) Treatment of column pits, wall trenches and basement excavations

The bottom surface and sides (up to a height of 30 cm from the bottom) of the excavations made for column pits and trenches shall be treated with the chemical emulsion mentioned above at 5 litres/ sq. meter of surface area.

(iii) Treatment to Backfill Earth

After the column foundations and wall foundations come up, the backfill in immediate contact with the foundation structure shall be treated with the chemical emulsion at the rate of 15 litres/ Sq.m of the vertical surface of the sub-structure for each side. The earth is usually returned in layers and the treatment shall be carried out in similar stages. The chemical emulsion shall be directed towards the concrete or masonry surfaces of the columns and walls so that the earth in contact with these surfaces is well treated with the chemical.

(iv) Treatment for R.C.C Framed Structures

The treatment described above applies essentially to masonry foundations where there are voids in the joints through which termites can seek entry into the superstructure. Hence the foundations require to be completely enveloped by a chemical barrier. In the case of RCC framed structures with columns and plinth beams, the concrete mix is rich and dense (being I:2:4 or richer), it is

unnecessary to start the treatment from the bottom excavations for columns, plinth beams and basement walls. The treatment shall start at depth of 50cm below ground level. From this depth, the backfill around the columns, beams and RCC basement walls shall be treated at the rate of IS-liters/ Sq.m. of the vertical surface. The other details of the treatment shall be as laid down above.

(v) **Treatment of Top Surface of Plinth Filling**

After the earth filling is completed in the plinth area and before the dry rubble packing or sub grade is laid, the entire surface of the filled earth shall be treated with the chemical emulsion at the rate of 5 litres per Sq.m. Light rodding may be carried out in the soil surface to facilitate absorption of the emulsion.

(vi) **Treatment at Junction of Walls and Floor**

Special care shall be taken to establish continuity of the vertical chemical barrier on inner wall surface from the ground level up to the level of the filled earth surface. To achieve this, a small channel 3 x 3 cm shall be made at all the junctions of wall and columns with floor (before laying the sub grade) and rod holes made in the channel up to the ground level 15 cm apart and the rod moved backward and forward to break up the earth and chemical emulsion poured along the channel at the rate of 15 litre/Sq.m of the area of the vertical surface of the wall surface of the sub-structure so as to soak the soil right to the bottom. The soil should be tamped back into place after this operation.

(vii) **Treatment to Soil along External Perimeter of Building**

Finally, the earth around the external perimeter of the building up to a depth of 30cm shall be treated at the rate of 4.5 litres per running meter of plinth wall. To facilitate this treatment, solid M.S. rods should be driven into the soil as close as possible to plinth wall at intervals of 15 cm and up to a depth of 30 cm and the rods moved backwards and forwards in a direction parallel to the wall to break up the earth so that the chemical emulsion mixes intimately with soil.

(viii) **Treatment of Soil Surrounding Pipes, Wastes and Conduits**

When pipes, wastes and conduits enter the soil inside the area of the foundation, the soil surrounding the point of entry must be loosened around each such pipe waste or conduit for a distance of 15 cm and up to a depth of 7.5 cm before the treatment is commenced. When they enter the soil external to the foundations, they shall be similarly treated unless they stand clear of the walls of the building by about 7.5 cm for a distance of over 30 cm.

(ix) **Termite Proof Course or DPC (PCC) in Plinth**

Where there is the provision of a damp-proof course in the construction, it is located just below the level of the filled earth. Although this acts as an effective barrier impervious to termite entry the PCC surface should be treated at 5 litres per sqm immediately after the course is laid and the concrete is green.

Where there is no provision for a DPC, the top surface of the masonry course just below the level of plinth filling mentioned above should be soaked with the chemical emulsion at the rate of 5 litres per Sq.m. of the surface. The application should be carried out slowly to enable the masonry surface to absorb the emulsion.

(x) Anti-Termite Treatment at Points of Contact of Woodwork

Refer to CPWD Specification

iii. Landscaping

The bidder shall have to provide landscaping in all possible locations, and not limited to the areas shown in the plan only.

- a. Landscaping of the entire area where hard constructions are not done
- b. General plantation (Trees to be planted should be as per specifications and be healthy). Number of trees will be decided as per detailed design of the landscape designer within the area mentioned.
- c. Bidder shall provide the landscape plan and shall be implemented after due approval from employer.
- d. Beautification works: Pathways, steps, plazas, lobby approach ramps, terraces to be beautified in consultation with Engineer in charge.
- e. The bidder shall maintain the landscaping during the entire construction period till handing over (excluding DLP) and the contractor will be responsible for the maintenance of all landscaping and horticulture elements free of cost until 1(one) year beyond date of handover.
- f. Types and number of trees may be referred in the Description of Key Items with Minimum & Indicative Quantities.

E. TIMELINE OF SUBMISSION

This period includes time-period for all types of survey & investigation, soil exploration and laboratory testing, detail design, the draft and final design reports, drawings, technical specifications, methodology as required for the work and all other associated reports and documents.

The time period for the design stage is 120 days from the date of commencement.

Schedule for Submission

The reports/documents must be submitted as per the following schedule:

Sl.No	Description	Schedule for Submission
1.	Submission of Inception Report of Review of applicable statutory approvals, identification of relevant authority, NOC required from relevant authorities.	15 days from the date commencement
2.	Details of all Survey including laboratory test reports for construction materials and design mixes	60 days from the date commencement
3.	Submission of draft architectural drawings with detail Engineering Designs and technical specifications & methodology.	45 days from the date commencement
4.	Final architectural drawings with detail Engineering Designs and technical specifications & methodology; to be submitted in three phases.	60 days from the date of submission/ approval of draft phases drawings
5.	Quality Management Manual & Environment, Health and Safety Manual	30 days from the date of commencement
6.	Monthly Progress Reports along with updated abstract of changes during construction	10 th day of succeeding month
7.	As Built Drawings	As provided in Contract Data
8.	Consolidated Booklet Containing all Approvals, Clearances, NOCs in connection with the project	With as-built drawings
9.	Inventory with Warranties and User Manuals	With as-built drawings

F. SERVICES TO BE PROVIDED BY EMPLOYER

The Employer will provide the following data to the Bidder on request if available.

- Indicative Sub-soil report.
- Soil bore log and test result.
- Site plan & indicative topographical survey

- Any other relevant secondary data, to the extent available in a comprehensive manner.
- Identification of all relevant stakeholders & statutory agencies to be undertaken by contractor. Contractor will conduct relevant survey, prepare all drawings, documents, presentations and will ensure to get all statutory approvals from competent authority.

The Employer will not provide office accommodation, vehicles, survey or any other equipment to the Contractor. The Bidder shall make his own arrangement for their office staff for each of the field supervision teams including furniture, equipment, operation and maintenance, vehicles, and equipment.

G. SECRECY

The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have noticed that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the bid. The contract is confidential and must be strictly confined to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and for the purpose of the bid.

All documents, copies thereof & extracts therefrom furnished to the contractor or submitted by the Contractor shall be returned to the Employer on the completion of the work / works or on earlier determination of the contract. All the drawings, designs and documents of this project shall be the property of the Employer and shall not be reproduced by the Contractor either full or by part, for any purpose whatsoever may be, without written permission of the Employer, any time afterwards, once the As Built submission is over and complete. The Bidder may retain a copy of such documents but shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Client.

H. APPENDICES

1. Appendix- I: SCOPE OF BUILDING WORKS

The bidder shall submit his Design Basis Report covering all aspects as given below or more with specific details and not generically.

a. General:

The project shall be executed on Lump Sum Turnkey basis. General scope of the work of the project shall include but not limited to the following:

1. The contractor shall undertake, at its own cost, the Soil testing & Geo-technical study, Total Station Survey of the project area and additional area as may be required and GPRS Survey with approval of the Engineer In-charge. The contractor shall, at its own cost, procure Rainwater data for the last 25 years for analysis. Wind Load data, HFL study of the River Mahanadi shall also be procured by the contractor at its own cost. The contractor shall also perform all necessary tests before and during construction with

approval of the Engineer- In charge and submit necessary reports to the employer for review and approval within a time so as to not delay the progress of the project. The contractor must also take into account seismic load, wind load etc. while developing structural and MEPF designs conforming to all statutory norms and standards after getting approval for the architectural design from the employer.

2. For Development of architectural drawings including preparation of architectural brief, design concept, concept for services etc ,It may be noted that the concept plans forming part of the Bid documents shall be of this basis. This would also include high resolution renderings as may be required and walkthroughs with voice over (bi-lingual) and suitable sub-titles.
3. Carrying out field surveys and detailed engineering design, and development of drawings considering the architectural design and construction documents, structural engineering, electrical engineering, heating ventilation and air conditioning plans, communication and networking plan, fire detection and protection plan, landscape design both horizontally and vertically exterior and interior.
4. Preparation of services plans to include all details of plans, elevations, and sections with details of electrical works, ventilation, water supply, and drainage & sewage disposal system.
5. Carrying out Geotechnical Investigations and Sub-Soil Exploration at each proposed built structures and conduct all relevant laboratory and field tests on soil and rock samples. Soil bores duly indicating the classification of soils within a bore log chart and soil test reports are to be conducted in Govt. of Odisha approved soil testing laboratory on undisturbed and disturbed samples for all the geo-technical parameters.
6. Preparation of Key map (at relevant scale) showing the location of the buildings investigated and rejected and the important structures, in the vicinity. The reference to the position of the benchmark, location of the trial pits or bore-holes giving identification number for each bore connected to the datum and location of all nullahs, buildings.
7. Procurement, installation, testing and commissioning of requisite equipment as per specifications provided. Samples of all materials required for testing is included in the cost of work. Expenditure for all mandatory tests and those to be conducted as per direction of Engineer In-charge shall be borne by the contractor. All testing in house or through external laboratory shall be completely borne by the contractor including cost of transportation of samples to the testing locations or laboratories.
8. Contactor shall establish an advanced in-house laboratory with adequate facility for carrying out all routine field tests required during execution of work at their own expense.
9. The approved manufacturers of various finishing items, fittings/ fixtures/ equipment/ components/ accessories have been mentioned in the List of Approved Manufacturers later in the section. The Contractor shall get the samples of these items approved by the Employer before their use/ utilization in the works. A higher or equivalent make can be utilized after obtaining prior approval of "Engineer-In-Charge" in writing.
10. Covid-19 requirement should be adhered to all designs, execution wherever applicable. The price quoted by the contractor shall deem to include all expenses towards material, labour, transportation, machinery, camp arrangements or all other conditions as required by the guidelines issued by the Government.

b. Green Building Practice

1. The contractor shall ensure that adequate measures are taken for the prevention of erosion of the topsoil during the construction phase.
2. The Contractor shall arrange to work so as to minimize site disturbance such as soil pollution due to spilling and use staging and spill prevention and control plan to restrict the spilling of the contaminating material on site.
3. The contractor shall not carry out any work which results in the blockage of natural drainage.
4. The contractor shall ensure that existing grades of soil shall be maintained around existing vegetation and lowering or raising the levels around the vegetation is not allowed unless specifically directed by the Engineer
5. Contractor shall reduce pollution and land development impacts from automobiles use during construction. The Contractor shall not do overloading of trucks which is unlawful and when loose materials like stone dust, excavated earth, sand etc. are moved, must ensure proper covering.
6. All building materials responsible for pollution shall be brought at site from sources covered by tarpaulin and shall take all precautionary measure to ensure that no dust particles are permitted to pollute the air quality. The contractor shall ensure that air pollution due to dust/generators is kept to a minimum, preventing any adverse effects on the workers and other people in and around the site.
7. The Contractor shall identify roads on-site that would be used for vehicular traffic and upgrade the vehicular roads if they are used for hauling materials for the project.
8. **Good Practices** to be followed by Contractor are as follows:
It shall be in the scope of the contractor to undertake and or ensure the following during the execution stage:
 - (i) Demonstrate that the project team implements tree preservation measures at site. (Protect or Transplant or Replant in 1:3 ratio).
 - (ii) Ensure that 90% of fertile topsoil from disturbed area (including building footprint vehicular pathways and material storage areas) is preserved.
 - (iii) Adopt following construction management measures at site.
 - a) Provide 3 m high continuous barricading along the site boundary.
 - b) Provide wheel washing facility/gravel bed at all vehicular entrances and exits of the site.
 - c) Ensure diesel generator sets are in compliance with CPCB norms and have an exhaust with stack height of at least 2 m from the top of the generator with a cap.
 - d) Implement a spill prevention plan for storage of diesel, admixtures, curing compounds, bitumen, and other hazardous material.
 - e) Ensure that fine aggregate, excavated earth, and other construction material with a tendency to get airborne are covered or are sprinkled regularly with non-potable STP water.
 - f) Ensure sprinkling of water on unpaved pathways on the site with non-potable water in order to mitigate air pollution.
 - g) Limit the speed of vehicular movement on site to 10 km/h.
 - h) Ensure that vehicles carrying waste materials out of the site are covered.
 - i) Ensure that the soil erosion channels are constructed, and they are connected to a sedimentation tank in order to reduce movement of soil outside the site.

- j) Adopt staging during construction on site.
 - k) Adopt following strategies to manage water during construction. such as-
 - o Using gunny bags for curing and using ponding for curing
 - o Monitoring to avoid leaks and water wastage
 - o Use of additives to reduce water requirements during curing
 - o Use of treated wastewater/captured storm water
 - l) Ensure compliance with the requirements of NBC 2016 & ECBC-2017 wherever applicable for all of the following:
 - o Provision of necessary safety equipment and safety measures for construction workers.
 - o Provision of clean drinking water, hygienic working and living conditions, and sanitation facilities for the workers.
 - (iv) Ensure that all interior wall and ceiling finishes such as primers, paints, putty, etc. have low VOC content and are lead free.
 - (v) Ensure that all adhesives and sealants used have low VOC content and that interior composite wood products do not have urea-formaldehyde as a bonding resin.
 - (vi) All the insulation used in building envelope and HVAC systems are CFCs and HCFCs free.
 - (vii) All the refrigerant in the HVAC and refrigeration equipment should be CFCs and HCFCs free.
 - (viii) The fire suppression systems and fire extinguishers installed in the building are free of Halon.
 - (ix) All the insulation used in the building envelope and for HVAC systems; refrigerant used in the HVAC systems and refrigeration equipment are HFC free.
 - (x) Adopt water efficient irrigation systems that saves water loss due to run-off, deep percolation and evaporation; (i.e Drip irrigation, Moisture control sensor etc.).
 - (xi) Rainwater harvesting (tanks, ponds, rooftop rainwater harvesting) to rebuild local water aquifers wherever feasible and/or storage of harvested water for meeting the water requirement during the scarcity days.
- (xii) Ensure that the project meets water quality norms as per the CPCB rules and BIS.
- (xiii) Ensure that dedicated segregated and hygienic storage spaces are provided within the project site before treatment/recycling.
- (xiv) Provide infrastructure (multi-coloured waste bins/different refuse chutes to store e-waste, biomedical waste, organic waste, plastic waste, paper waste, and other inorganic solid waste) for building occupants to ensure segregation of waste at the source.
- (xv) Use of water efficient plumbing fixtures, sensors, auto-control valves, and pressure reducing devices can result insignificant reduction in water consumption in a building. Once the type and number of fixtures and faucets have been decided as per NBC standards based on building

typology, select the fixtures and faucets of low-flow rates (based on technology options available in the market).

c. Project Management, Clearances & Certification

The Contractor shall obtain approval to the design, drawings, and specifications of all components of the building, from any institute of repute at its own cost with prior approval of the employer. The Employer shall give clearance for construction on all sketches, drawings, reports and recommendations and other matters and proposals submitted for approval by the Contractor in such reasonable time as not to delay or disrupt the performance of the Contractor's services.

1. Planning of the project activities including work breakdown structure and their timelines thereof, in MS Projects/ Primavera and submit the same to the authority for progress monitoring throughout the span of the project.
2. Project Management to ensure completion of Project as per the specified timelines
3. Obtaining NOC from Development Authority/ Municipality, PHEO, Fire authority, Environmental Clearance from SPCB (if applicable), and any other statutory approval required for the project.
4. Compliance with Environmental and Energy efficiency norms and obtaining at least 3-star GRIHA rating.
5. Handing over of the facilities after fulfilling all obligations of the Contractor and confirming to Employer's requirement
6. Taking up the works listed for Defects Liability Period and closing the project.
7. Submission of Daily Labour Report and Weekly / Monthly Labour Payment Report.
8. Take all precautionary measures to adhere to Government prescribed norms to prevent spread of Corona virus Covid-19.

d. Scope of Work

The minimum development area obligation is 2.26 acres. The scope of work for the project is about construction of the buildings and other facilities and installation of all services to realise the concept plan with fully functional services and with a view to provide the intended facilities to the users. Scope of civil work shall comprise, but not limited to the following. Specifications for all the works have been provided in Section-8.

1. Construction of the building and installation of all services keeping in view the mandatory requirements of the Employer.
2. Separate loading and unloading facilities should be provided for vending spaces.
3. Overhead tank, underground sump, Fire fighting sump and storage tank for rainwater of adequate capacity to be provided

4. Water proofing of foundation, roof, toilets, underground sump and exposed surfaces to be done under the supervision of expert agencies.
5. Anti-termite treatment shall be done as per specifications.
6. Storm Water Drains: Providing and laying precast/ cast in situ RCC storm water drain with perforated removable/fixed covers including necessary culverts etc. complete and as per direction of Engineer.

e. Scope for WS & SI Work

The scope of WS & SI work (Water Supply & Sanitary Installations) for the project is about providing all fittings and fixtures to make it fully functional with regard to supply, storage, distribution of water and collection and treatment of effluent from the toilets and other areas of the building including recycling and reuse of water. Scope of work shall comprise, but not limited to the following. Specifications to be followed for the works have been provided in Section-5, and in addition, manufacturer's specification shall also be adhered to for the brands approved for the project.

- a. W.C. Pan with flushing system: Wall mounted EWC at about 50% locations, and Floor Mounted IWC at the balance locations
- b. Urinals: Stall type urinals shall be used
- c. Wash basin: Under Counter wash basin of suitable size and shape. Wash basin counter shall be finished with 18mm thick granite on top and facia of RCC slab
- d. Mirror: Full length equal to wash basin counter of 600 mm height mirror
- e. Terrace Tank: RCC Tank of approved dimensions

f. Water Supply Network:

- i. The scope includes planning, designing and construction of providing and laying Water supply main, branch and distribution lines including chambers and fittings/specials such as Tees, Bends, collars, Unions, tappers, caps, Sluice Valves, Gate Valves, scour valves, non-return valves, air-relief valves, thrust blocks etc. complete and as per direction of Engineer.
- ii. The water supply network should cater to the needs of supplying water from UG sumps (from various locations) to individual buildings.
- iii. All buildings are to be connected with OHT by water supply lines by HDPE so that water supply should be made to the building along with fittings, gun metal gate valves, gun metal non return valves, masonry chambers for valves, including excavation, providing sand around and refilling after laying etc.
- iv. Planning, designing and construction of RCC Under Ground Sumps of adequate capacity as per norms of NBC, with necessary partitions for domestic & firefighting etc. including preparation of preliminary & detailed working drawings, structural analysis & design, planning, designing & execution of all services including providing and laying DI pipes of required diameter up to overhead tank etc. by incorporating stipulated specifications and integrating all services with external development works all complete as per directions of Engineer.
- v. Borewell: Adequate numbers of bore wells for alternate water supply shall be provided in consultation with Engineer In-charge.

f. Scope for Electrical Work

- i. All works will be carried out as per provisions but not limited to CPWD Specifications, NBC 2016, IE Rules, IS Codes as amended up to the date of tender. In case for any part of the work specification is not available in the aforesaid mentioned documents then part of the work will be carried out in accordance with sound engineering practice and as per directions of Engineer.
- ii. The Contractor shall be responsible and liable for proper and complete execution of the Electrical work ensuring coordination of Civil, WS& SI and Electrical work. The lump-sum rate quoted by the Contractor shall be applicable for the conditions & specifications and scope all complete.
- iii. In case the Contractor does not have in house facility to do the E&M work, he shall submit Name(s) of the proposed Sub- contractor (for each of the E&M works) within one month of award of work or 15 days before start of work whichever is earlier. The Contractor shall submit MOU between the one who is awarded the work and the associated eligible electrical contractor.
- iv. In event of the concerned E&M agency not performing satisfactorily or failure of associate/sub-contractor to complete the E&M work, the Contractor on the written direction of the Employer, shall remove the Associate/sub-contractor deployed on the work and shall submit name of new associate who fulfils the conditions to execute the leftover work without any loss of time or variation in cost to the Employer in this regard. No change of Electrical Contractor will be allowed without prior approval of the Engineer.
- v. Scope of work covers planning, designing, supply, installation, testing, commissioning and ensuring performance of all Electrical & Mechanical services for external ambiance lighting, internal requirement, façade highlighting etc. till end of Defects Liability Period. The work shall be executed as per scope & specifications of E & M works given hereafter in respective head / part of the scheme or sub-head. If any services/work required to make the building / scheme habitable & functional, including the statutory compliance, is not specifically mentioned in the scope of services, the same is deemed to be included within the scope of this tender and nothing extra shall be paid on this account.
- vi. The scope of work covers the preparation of layout plans, drawings for E & M schemes, inventories of fittings, fixtures, equipment, and approval of the same from the Engineer, before commencement of work. The scope of work shall deem to include, but not limited to, the systems as described below in complete respect with full functionality, compliances to the specifications, drawings.
 - a) **Internal and external Electrical Installations:** Planning, designing, capacity calculations with load details, Complete design details, supply, installation, testing and commissioning of complete Internal and External Electrical Works which includes copper wiring in steel conduit, LED luminaries and lighting controls, fans, modular switches, sockets, DBs, MCBs, RCCBs, tap off boxes, UPS, Wire mesh cable tray for parking area and Floor Raceways for shopping and meditation area, PIR Sensors, Chemical earthing, lightening arrestor, cable TV wiring in steel conduit, networking wiring (CAT6) in raceway, wall mounted patch panels for networking system, wiring for centralized intercom system, call bell system, street light, compound light and landscape lights, contour & fascia light etc. complete as required.

- b) **Sub-Station:** Planning, designing, capacity calculations with load details, Complete design details, supply, installation, testing and commissioning of complete Substation Works & equipment which includes HT Panels, Oil / Dry type transformers including standby, LT Panel, HT cables, APFC (Automatic Power Factor Correction) Panels, Distribution Panels, Active Harmonic filters, TVSS (Transient Voltage Suppression System), SPD (Surge Protection Device), Fire Emergency Panels, other related works like LT cabling from sub-station to buildings, sandwich type bus- trunking, chemical earthing complete as required. Statutory clearances wherever required will have to be taken by the firm.
- c) **DG Set :** Planning, designing, capacity calculations with load details, Complete design details, Supplying, installation, testing and commissioning of Silent Type DG Sets, AMF Panel, Bus Ducting/ Cables from DG Sets to Essential Panel, Synchronizing Panel where required, DG Set enclosure room sound insulation/ventilation/smoke exhaust as required, chemical Earthing of DG Set system, control cabling, Fuel tank/piping, DG set Exhaust piping/ Exhaust Chimney as per CPCB norms, Civil works connected with DG Sets including Foundation as required.
- d) **IP based CCTV and Security System:** Planning, designing, supply, installation, testing and commissioning of complete IP based CCTV security system including various types of IP based CCTV motorized VF camera having 50mtr IR, internal SD card 128GB, server based recording, Cat6 cabling & related accessories CCTV with independent ofc backbone, PoE Switch and having storage for 30 days at 25 FPS, Parking areas, vending space, and other common areas as required including CCTV control room, required UG cabling, recording system and monitor/ monitors in the control room (Inside and outside area).
- e) **UPS System:** Supplying, installation, testing and commissioning of online single phase UPS System with 60 minutes back up including batteries, interconnecting cables, battery racks etc for the required load (to be placed in Multiple units' floor wise) redundant, with unity power factor, for emergency lighting & passenger management system.

g. Scope for Landscaping work

With respect to the scope of the contractor for landscaping and horticultural works, the following must be taken up:

- (i) Planning, procuring, planting and maintenance of all varieties of tree/shrubs/grass etc. as detailed as part of this document for the period specified in this document.
- (ii) Supplying and Installation of Tree Root Guard of non- around the tree pits prior to tree planting
- (iii) Complete maintenance of the entire garden features having as per yardstick in the garden area i.e. lawn trees, shrubs, herbs, edge, flower beds, foliage, creepers etc. including hoeing, weeding, pruning, replacement of plants, gap filling, watering, mowing of lawn, grass cutting by lawnmower and brush cutter, removal of garden waste, applying insecticide, pesticide & fertilizers (whenever required) top dressing of lawn with good earth and manure and maintenance of other garden related

works as directed by officer in-charge. 13% of total cost of landscaping work shall be withheld for a period of 1 year from the date of handover. The contractor will be responsible for the maintenance of all landscaping and horticulture elements free of cost until 1 year beyond date of handover.

h. Additional requirements

- i. All the drawings should have a checklist stating that it follows IS codes (code name to be specified), NBC 2016, CPWD specifications. Also, the contractor has to provide any data and detail asked by Engineer to finalize and accept the scheme, drawings etc., which shall be provided on the established standard/guidelines/codes etc.
- ii. Clearances to be taken by the firm from the Employer before start of work. The above schemes of all the E&M works shall have to meet all the requirements of local bodies/ Fire Services / Electrical Authority/ NBC norms as applicable & also meet the technical specifications of various relevant CPWD specifications for electrical & mechanical services.
- iii. The contractor must make own arrangements for storage of sundry materials and erection equipment. No separate storage accommodation shall be provided by the Employer. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the client Employer. Care shall be taken by the contractor while handling and installing the various equipment and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.
- iv. All equipment shall have warranty as provided by OEM from the date of taking over/ installation, against unsatisfactory performance and/or break down due to defective design, workmanship or material. The equipment or components, or any part thereof, so found defective during warranty period shall be forthwith repaired or replaced free of cost, to the satisfaction of the Engineer. In case, it is felt by the Employer that undue delay is being caused by the contractor in doing this, the same will be got done by the Employer at the risk and cost of the contractor. The decision of the Engineer in this regard shall be final & binding on the contractor.

I. LIST OF APPROVED MANUFACTURERS*

1. CIVIL WORKS	
CEMENT	ULTRATECH/ DALMIA/ ACC/ RAMCO/JSW/KONARK/NOVOCO/AMBUJA/EMAMI/JK CEMENT/LAFARGE/BIRLA
STEEL/REINFORCEMENT	TMT VIZAG/TATA TISCON/ SAIL VIZAG/ JINDAL/ SHYAM/ RINL
VITRIFIED TILES	JOHNSON/ KAJARIA/ SOMANY/ NITCO/ NEXION/ RAK/ ASIAN/ RESTILE
CERAMIC TILES	SOMANY/ KAJARIA/JOHNSON/RESTILE/ASIAN/ RAK/ RESTILE
CEMENT CONCRETE TILES	ULTRA/EUROCON/ ZICO
WATER PROOFING/ CHEMICAL ADMIXURE	SIKA/FOSCROC/PIDILIT/ DR. FIXIT
PAINTS	ASIAN/NEROLAC/ICI DULUX
GLASS	MODIFLOAT/ASAHI/SAINT GOBAIN/ AGC
PLASTER OF PARIS/PUTTY	BIRLA/JK
ALUMINIUM SECTIONS	JINDAL/ INDAL
ADHESIVE	FEVICOL/ PIDILITE/ DR. FIXIT
FLUSH DOOR	GREEN/ MAYUR/ CENTURY
BLOCK BOARD & PLYWOOD	GREEN/ MAYUR/ CENTURY
LAMINATES	GREEN/ MAYUR/ CENTURY/ MERINO/ ROYALE TOUCH/ GREENLAM
LOCKS	GODREJ/ DOORSET/ HAFELLE/ HETTICH
HARDWARES	DORMA/ HAFELLE/ HETTICH/ GODREJ
CEMENT CONCRETE PIPES	INDIAN/ HUME PIPE/ MM METAL & CO
DOOR CLOSER	DORMA/ HAFELLE/ HARDWYN/ GODREJ
PVC DOORS	RAJASHREE/ KRISHNA
ALUMINIUM WINDOW	DOMAL/ TECHNAL/ REKLAD/ GUTMANN/ SAPA/ FENESTA/ SCHUCO/ REYNAERS/ ALUCO
UPVC DOORS & WINDOWS	NCL WINTECH/ KOMMERLING/ TORFENSTER/ FENESTA
STEEL SECTION	TATA/ JINDAL/ SAIL
PAVER BLOCK	TUFFSTONE/ EARTH PAVER/ ZICO
TOILET PARTITION	MERINO/ GREEN/ SYNTEX
GALVANISED REINFORCED CONCRETE (GRC) ROOF TILE	UNISTONE/MONIER
MODIFIED CLAYSTONE	PHOMI/ VANJOIN
NFC BOARD	INDOWUD/ RELIANCE REL WOOD
ROOF SHINGLES	SAINT GOBAIN/ TECHNONICOL
WOOD POLYMER COMPOSITE	SHUBHWOOD/ NEWTECH
POLYCARBONATE SHEET	GE LEXAN/ POLYGAL
2. WATER SUPPLY & SANITATION WORKS	
VITREOUS SANITARY WARE	HINDWARE/ PARRYWARE/ JAQUAR/ KOHLER/ ROCA/ GROHE
PVC/CERAMIC CISTERN	HINDWARE/ PARRYWARE/ JAQUAR
BIB COCK & CP FITTINGS	HINDWARE/ PARRYWARE/ JAQUAR /KOHLER/ ROCA/ GROHE
CPVC PIPES & FITTINGS	AJAYA/ ASTRAL/ HINDWARE/ ASHIRBAD/ SUPREME
UPVC PIPES	SUPREME/ ORIPLAST/ PRINCE/ ASTRAL/ ASHIRWAD/ HINDWARE
GI PIPES	TATA/ JINDAL/ BST

CI PIPES	KIRLOSKER/ VENUS/ SUSHILA
SWR PIPES	HIND/ ORISSA/ SUPREME/ PRINCE
OVERHEAD TANK	SYNTEX/ SUPREME
MIRRORS	MODIGUARD/ SAINT GOBAIN/ ASAHI
FERRULES	LEADER/ HIMSON
GATE VALVE/ CHECK VALVE	LEADER/ KIRTI/ ANUPAMA/ NETA/ ZOLOTTO
GI PIPE FITTINGS	KS BRAND/ JINDAL/ KIRTI/ CR/UNIK/ R BRAND
BRASS FITTINGS	SHAKTI/ ANUPAM/ LUSTER
NAHANI TRAP	SILK/ SUSHILA
SINK	NIRALI/ AJANTA
PVC PIPES	ORIPLAST/ NEELPLAST/ SUPREME
PUMPS	KIRLOSKER/ LUBI/ CROMPTON CREAMES/ TEXIMO/ SUGUNA
BALL COCKS	KINGSTON/ ARK/ LUSTER
DUSTBIN	SYNTEX/ NEELKAMAL/ OTTO/ ARISTO
GARDEN SPRINKLER	JAIN IRRIGATION/ DEWDROP/ RUNGTA

3. ELECTRICAL WORKS

POINT WIRING	MODULAR
PVC CONDUIT PIPE	AKG/ POLYCAP/ PRECISION/ AVONPLAST/ VIP/ UNIVERSAL /PANASONIC /ANCHOR
M.S. CONDUIT PIPE	BEC/ SUPREME/ KALINGA/ PRECISION/ BHARAT/ GUPTHA/ BEC/PANASONIC /ANCHOR
WIRE	FINOLEX/ HAVELLS/ ANCHOR/ L&T/ KEI/ PANASONIC
SWITCHES & SOCKETS	LEGRAND/ CRABTREE/ NORTHWEST/ CLIPSAL-SCHNEIDER/ LEGRAND/ ANCHOR/ PANASONIC
CEILING ROSE & BRACKET HOLDER	ANCHOR/ CONA
MCCB, MCB, RCCB, RCBO	LEGRAND/ HAVELLS/ L&T/ ABB/ SIEMENS/PANASONIC/ ANCHOR
BDB	LEGRAND/ L&T/ HAVELLS/ ABB/ SIEMENS/ HEGAR
LT DISTRIBUTION BOARD (FABRICATED)	HENSEL/ VEEESS/ TECHNOCRAT/ EAST COAST/ POWER PROFESSIONAL OR ANY OTHER REPUTED PANEL MANUFACTURING UNIT/PANASONIC/ ANCHOR
INSTRUMENT viz VOLTMETER etc.	AE/ IMP/ MECO/ L&T/ LEGRAND
SWITCH GEARS	LEGRAND/ SIEMENS/ L&T/ HAVELLS/ ABB/ ANCHOR/ PANASONIC
SELECTOR SWITCH	KAYCEE/ SALTZER
INDICATING LAMP	SIEMENS/ L&T/ ABB/ LEGRAND/ BINAY
ENERGY METERS	GEC/ SECURE/ L&T/ HPL/ VISIONTECH
CTS & PTS	AE/ KAPPA/ EASTERN SWITCHGEAR
KITKATS EXTENSION TYPE	ANCHOR/ HAVELLS/ BPC/ ABB/ PANASONIC
METAL CLAD PLUG SOCKET	LEGRAND/ HAVELLS/ L&T/ ABB/ ANCHOR/ PANASONIC
PVC INSULATED CABLES & ARMoured CABLE	NICCO/ POLYCAP/ HAVELLS/ GLOSTER/ KEI/ PANASONIC /ANCHOR
CABLE LUGS	DOWELLS/ ISMAL/ CLIPON
CABLE JOINTING KITS	M SEAL
FAÇADE LIGHTING	LIGHTING TECHNOLOGY/ PHILIPS/ HAVELLS/ BAJAJ/ PANASONIC
FITTING & FIXTURES	PHILIPS/ HAVELLS/ WIPRO/ BAJAJ/ PANASONIC/ SIEMENS/ EVEREADY/ LIGHTING TECHNOLOGY OR EQUIVALENT

CEILING FANS & EXHAUST FANS	CROMPTON/ BAJAJ/ HAVELLS/ USHA/ ORIENT/ PANASONIC/ KHAITAN /ANCHOR
ADHESIVE & INSULATING TAPES	STEEL GRIP
ELECTRIC MOTOR	CROMPTON/ BHARAT BIJLEE/ KIRLOSKER
TRANSFORMER	ALFA/ BEE/ HITECH POWER/ POWERLINK
LIGHTENING ARRESTER	ABB/ ERICO/ OBO/ OBLUM
EARTHING	ABB/ ERICO/ OBO
CCTV	BOSCH/ AXIS/ PELCO/ HONEYWELL/ PANASONIC/MATRIX
CAT 6 CABLE	TYCO-AMP/ SCHNEIDER/ DIGISOL/ FINOLEX/ CISCO/ JUNIPER/ VALRACK/ PANDUIT /ANCHOR
PA SYSTEM	BOSCH/ ELECTROVOICE/ MEYER/ JBL/ SAMSUNG/ SOUND/ GRANSTREAM/ BOSCH/ HARMAN/ BOSE
SOLAR STREET LIGHT	K-LITE/ PHILIPS/ HAVELLS/ WIPRO/ BAJAJ/ LIGMAN/ SIMES/ UNILAMP /PANASONIC/ HOMDEC
STREETLIGHT	K-LITE/ PHILIPS/ HAVELLS/ WIPRO/ BAJAJ/ LIGMAN/ SIMES/ UNILAMP /PANASONIC/ PHILIPS/ HOMDEC/ CROMPTON
POST TOP LANTERN	K-LIT/ LIGMAN/ SIMES/ UNILAMP /PANASONIC/ HAVELLS/HOMDEC/CROPMPTON/ PHILIPS/ BAJAJ
BOLLARD	K-LIT/ LIGMAN/ SIMES/ UNILAMP /PANASONIC/ HOMDEC/CROPMPTON/ PHILIPS/ BAJAJ
EPBX	AVAYA/ NEC/ GRANSTREAM
RECEIVER PHONE	GRANDSTREAM/ ASTTECS/ NEC/ PANASONIC
LIFTS/ ESCALATOR	MITSUBISHI/ THYSENCRUP/ SCHINDLER/ KONE/ OTIS
DG SET	KIRLOSKER/ CUMINS/ STERLING/ ASHOK LEYLAND/ JACKSON/ MAHIINDRA-

4. MECHANICAL WORKS

SS EFFLUENT NON-CLOG PUMPS	NOCHHI/ GRUNDFOS/ KSB/ MAXFLOW/ KIRLOSKER
AGITATOR FOR FIXED SURFACE AERATOR	AMITRON/ SACED/ PARAMOUNT/ ENVIRAD
REDUCTION GEAR BOX	RADICON/ POWER BUILD/ ESSENPRO
AERATOR	VOLTAS/ AMITRON/ PARAMOUNT/ HE/ ENVIRAD
AIR BLOWER	USHA/ KAY/ EVEREST
FILTER PRESS	US NMP FILTER
CENTRIFUGAL PUMPS	KIRLOSKER BROS. LTD./KSB/ JOHNSON
MMF FILTER	PENTAIR/ SMWS
MPV VALVES	PRAHAR/ MIDAS
CI PIPES & FITTINGS	RIF/ SRIF
GI/ MS PIPES	TATA/ JINDAL/ BST
GI FITTINGS	R BRAND/ UNIK/ KS
RCC HUME PIPES	INDIAN HUME PIPES CO
PRESSED STEEL DOORS/ WINDOW FRAME	SM WS/ TIL
STANDARD ROLLED	AGEW/ AHMEDABAD STEEL CRAFT
PVC WATER STOPS	SUPREME/ MARUTI
PP BALL VALVE	SUPREME/ JYOTI PLASTIC/ VISHAL/ POLY VALVES
HDPE PIPES & FITTINGS	PIL/ HASTI/ KWH/ ORIPLAST/ SUPREME/ GEBERIT
FLAME ARRESTOR	HGE
LEVEL SWITCHES	MMP/ LEVCON/ CHEMTROL/ RICH SYSTEMS
PRESSURE GUAGE	H GURU/ GLUCK/ BELLS/ FIEBEG

CI BUTTERFLY/ GLOBE VALVE	AUDCO/ KSB/ LEADER/ BDK/ KIRLOSKER/ INTRALVALVE/ ZOLOTTO/ NETA
CI SLUICE/ CHECK VALVE	AUDCO/ LEADER/ BDK/ KIRLOSKER
CI PIPES & FITTINGS	RIF/ SRIF/ ZOLOTTO/ NETA
SW PIPES	PERFECT/ BURN
STP WORK	SM WATER SOLUTION/ PENTAIR/ BURN/ THERMAX
5. FIRE FIGHTING ITEMS	
HOSE REEL	As per IS 636 Type A
SS NOZZLE	As per IS 903 & 2871
MS PIPE, FITTINGS & FABRICATION	JINDAL/ TATA, as per IS 1239 & as per IS 2825
GM VALVES/ NRVs	AS PER IS 5131/ DANFOSS/ ZOLOTTO
HYDRANT VALVES	NEW AGE/ EVERSAFE/ IS 5309
FIRE ALARMS	AGNI/ STARLITE/ GSP/ AKSHAR TECHNOLOGIES/ BOSCH/ HONEYWELL/ EDWARDS
PANEL	AGNI/ STARLITE/ GSP/ BOSCH/ HONEYWELL/ EDWARD
FIRE HOSE	NEW AGE/ EVERSAFE
SPRINKLER	NEW AGE/ EVERSAFE
COLOUR	BERGER/ LUXOL
SMOKE DETECTOR	NOTIFIER/ SEIMENS/ EDWARD/ BOSCH/ HONEYWELL

*Any product for which the approved make is not given in the above list may be used with due approval from the employer.

J. DESCRIPTION OF KEY ITEMS WITH MINIMUM & INDICATIVE QUANTITIES

Sl. No:	Particular / Item	Quantity	Unit
	Garbhagriha		
1.	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	18.14	CUM
2.	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	27.22	CUM
3.	Providing stone flooring/paving in Parikrama using machine dressed Khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	4.80	CUM
4.	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	97.73	SQM
5.	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	48.00	SQM
6.	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	48.00	SQM
Jagamohana			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P	30.36	CUM

	required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.		
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	91.09	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	182.17	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	10.80	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	354.12	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	256.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	256.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	76.68	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	25.56	CUM

10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	32.47	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	12.63	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	36.75	CUM
13	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	8.40	CUM
14	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	7.69	CUM
15	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	60.47	CUM
16	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of	32.04	SQM

	water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.		
17	Providing and applying 2 coats of 1mm thick elastomeric cementitious waterproofing coating Brushbond RFX of Fosroc Chemicals Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836. with Adhesion to concrete : >1N/mm ² for waterproofing structures like roof slabs, sunken slabs, chajjas, tunnels, water tank etc. after proper surface preparation and soaking the surface with water prior to application complete as specified and directed by the Department at all levels.	32.04	SQM
18	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	51.12	CUM
Shiva Temple			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	12.33	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	37.00	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	74.01	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	4.80	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	126.32	SQM

6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	120.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	120.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	56.73	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	18.91	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	16.22	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	7.78	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	21.60	CUM
13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	21.60	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and	37.82	CUM

	running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.		
Hanuman Temple, Laksmi Narayan Temple & Sun Temple			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	6.75	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	20.25	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	40.50	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	1.88	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	83.47	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	54.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	54.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil	25.83	CUM

	including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.		
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	8.61	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	7.27	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	3.52	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	8.00	CUM
13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	8.00	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	17.22	CUM
South Entrance			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbeling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P	11.69	CUM

	required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.		
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	35.08	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	70.16	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	4.72	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	78.00	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	90.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	90.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	22.28	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	7.43	CUM

10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	5.23	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	5.43	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	7.20	CUM
13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	7.20	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	14.85	CUM
West Entrance			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	13.83	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	41.48	CUM

3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	82.95	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	21.33	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	282.25	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	40.50	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	13.50	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	19.24	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	7.25	CUM

12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	14.40	CUM
13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	14.40	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	27.00	CUM
East Entrance			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	13.83	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	41.48	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	82.95	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed Khandolite stone with epoxy adhesive carefully by archaeological manner as	21.33	CUM

	per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.		
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	282.25	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	40.50	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	13.50	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	19.24	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	7.25	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	14.40	CUM

13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	14.40	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	27.00	CUM
North Entrance			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	13.83	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	41.48	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	82.95	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	21.33	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	282.25	SQM

6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	40.50	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	13.50	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	19.24	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	7.25	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	14.40	CUM
13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	14.40	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and	27.00	CUM

	running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.		
Yajna Mandap			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	7.29	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	21.87	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	43.74	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	4.80	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	90.74	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	120.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	120.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil	19.72	CUM

	including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.		
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	6.57	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	15.45	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	5.37	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	4.48	CUM
13	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	1.11	CUM
14	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	4.90	CUM

15	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	3.98	CUM
16	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	19.86	CUM
17	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.	26.55	SQM
18	Providing and applying 2 coats of 1mm thick elastomeric cementitious waterproofing coating Brushbond RFX of Fosroc Chemicals Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836. with Adhesion to concrete :>1N/mm ² for waterproofing structures like roof slabs, sunken slabs, chajjas, tunnels, water tank etc. after proper surface preparation and soaking the surface with water prior to application complete as specified and directed by the Department at all levels.	26.55	SQM
19	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	13.15	CUM
Chandi Patha			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	13.45	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work	40.34	CUM

	including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.		
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	80.68	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	24.30	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	393.40	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	220.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	220.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	105.30	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	35.10	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	34.83	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P	22.68	CUM

	etc. as required for the work complete and as per direction of Engineer-in-charge.		
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	49.57	CUM
13	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	4.54	CUM
14	R.C.C. work of M-30 for roof beam & column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	15.70	CUM
15	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	42.02	CUM
16	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	126.95	CUM
17	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two	141.52	SQM

	parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.		
18	Providing and applying 2 coats of 1mm thick elastomeric cementitious waterproofing coating Brushbond RFX of Fosroc Chemicals Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836. with Adhesion to concrete : >1N/mm ² for waterproofing structures like roof slabs, sunken slabs, chajjas, tunnels, water tank etc. after proper surface preparation and soaking the surface with water prior to application complete as specified and directed by the Department at all levels.	141.52	SQM
19	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	70.20	CUM
Construction of Kitchen & Store			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	44.31	CUM
2	Earthwork in excavation beyond 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rock etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, designing including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	3.58	CUM
3	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	15.96	CUM
4	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	30.60	CUM
5	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size downgraded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	10.26	CUM
6	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance,	9.36	CUM

	royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
7	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	3.00	CUM
8	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	9.64	CUM
9	R.C.C. work of M-30 for lintel having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	1.11	CUM
10	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	11.58	CUM
11	R.C.C. work of M-30 for chajja having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of	4.13	SQM

	Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
12	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	31.37	QTL
13	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	7.87	CUM
14	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	23.65	CUM
15	Providing and laying Khandolite stone ornamental/ decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	15.77	CUM
16	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	7.63	CUM
17	Providing 30cmx45cm/30cmx60cm size special plain/printed series edge cut ceramic wall tiles of premium grade of approved make having thickness 6.5mm to 6.7mm conforming to IS 13753 of approved make & shade in Dadoes over 12mm thick cement plaster 1:3 (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the tiles including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour curing sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.	16.89	SQM
18	Providing granite flooring of approved quality and size in staircase floors, kitchen platform including edge moulding and groove cutting etc in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in	1.93	SQM

	proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the marble tile if required watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.		
19	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear toughened +12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		
	Providing and fixing two track two panel sliding window made of frame 45mm x 37.5 mm and sash 28 mm x 68 mm. for doors outer frame will be 92 mm x 38 mm and sash will be 34.5 mm x 75 mm both having wall thickness of 1.2 mm to 1.4 mm as per approved drawing/design. Window/door should have single glazing bead of appropriate dimension for 6mmT +12mm gap +6mm T clear toughened Glass or as per approved given specification.	6.08	SQM
20	Supplying, fitting and fixing of M.S window grills (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	130.73	KG
21	Providing and fixing in position well dressed, naturally seasoned sal wood rebated frames of size 125mmx63mm to doors including two coats of hot bitumen applied to rear of frame in contact with masonry or concrete surface fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	0.35	CUM
22	Supplying, fitting and fixing in position 38 mm thick decorative Teak wood shutter 38mm style and 22mm to 25mm thick panel well seasoned and well dressed fitted and fixed to sal wood choukaths in all floors at all heights including providing ornamental design as per approved drawing with necessary beadings, cutting grooves in choukaths and for lapping portion of shutter where necessary, including fitting and fixing of Godrej make Mortice lock having model no 9168, Godrej make Door closure heavy duty type having model no 8340, 125mm brass hinges, handle, tower bolt, stopper including cost of all materials, labour, transportation, loading & unloading etc. complete as per specification and direction of Engineer -in-charge.	9.72	SQM
23	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified	94.07	SQM

	ratio including watering, curing, cost, conveyance, royalties of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.		
24	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	36.62	SQM
25	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	36.56	SQM
26	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	110.91	SQM
27	Finishing inside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	75.13	SQM
28	Finishing outside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	92.08	SQM
29	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, coveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.	75.13	SQM
30	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	92.08	SQM
31	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, coveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	2.73	SQM
32	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	322.01	SQM
33	Providing cleaning of surface with mechanical process upto dustless means cheeping, grinding, air blowing & application of two coats of Sika Topseal	94.07	SQM

	109hi with Sika fab-1 @2.2kg/sqm. Mixing with mechanical process @1:4 side wall surface to protect against leakage & seepage finally covered with a cement mortar (1:4). Proper penetration points with Sikagard 694 fi (moisture resistance epoxy putty). All the treatment should be done with an authorized applicator of manufacture and submit a warranty for 10years to complete.		
34	Providing melamine polish over wood work of approved quality including cost of all materials, labours, T&P etc complete as per direction of Engineer-in-charge.	21.87	SQM
35	Providing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)	34.26	SQM
36	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	31.93	CUM
Paving of Parikrama with khandolite stone			
1	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	330.00	CUM
2	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	550.00	CUM
3	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	2200.00	SQM
Other Paved area with paver block			
1	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	75.00	CUM
2	Rolling & compacting to sub grade or formation loosening by cutting earth for 15cm below the sub grade including watering and compacting in layers by PRR, cost & conveyance of required quantity of water, cost of all labour sundries, T & P etc. required for the work to complete in all respect as per specification and direction of Engineer-in-charge.	150.00	CUM

3	Construction of granular sub-base by providing Close graded Granular subbase Grading-IV material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc complete as per direction of Engineer-in-charge.	150.00	CUM
4	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, laying in uniform layers with paver in subbase/base course on well prepared surface and compacting with vibratory roller to achieve the desired density as per Clause 406 of MoSRT&H Specifications for Road & Bridge works	150.00	CUM
5	Supplying and laying of M30 grade heavy duty factory made hydraulically pressed and machine vibrated free cast interlocking pavers of 80mm thick, coral shaped preparation of sub base with 50mm sand and levelling, laying of interlocking paver block with sand binding and final compaction with plate vibrator finishing the surface including cutting of blocks at the edges with all labour and materials etc complete as per direction of Engineer-in-charge.	1000.00	SQM
Filling and levelling			
1	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	3450.00	CUM
Compound wall with Khandolite stone			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	310.84	CUM
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	103.61	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	163.24	CUM
4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	46.91	CUM
5	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting	54.09	CUM

	concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
6	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	21.75	CUM
7	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	25.65	CUM
8	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	155.36	CUM
9	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	27.19	CUM
10	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including	119.63	CUM

	hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.		
11	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	29.00	CUM
12	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	325.50	SQM
13	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	325.50	SQM
14	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	1305.00	SQM
15	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	207.23	CUM

External Stone Cladding of Maa Chandi Temple

1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	21.93	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	65.80	CUM

3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	131.59	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	6.08	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	193.42	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	280.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	280.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	19.44	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	6.48	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	3.24	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	3.24	CUM

12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	10.80	CUM
13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	10.80	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	12.96	CUM
Bata Mangala Temple			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	12.82	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	38.45	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	76.89	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as	10.80	CUM

	per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.		
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	275.92	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	224.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and levelling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	99.63	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	33.21	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	34.76	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	14.92	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	48.00	CUM

13	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	48.00	CUM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	66.42	CUM

AMENITIES FOR PILIGRMS

Priest Facility Block

1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	131.11	CUM
2	Earthwork in excavation beyond 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rock etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, designing including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	21.93	CUM
3	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	51.01	CUM
4	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	114.79	CUM
5	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	34.37	CUM
6	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting	29.07	CUM

	concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
7	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	10.28	CUM
8	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	25.86	CUM
9	R.C.C. work of M-30 for lintel having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	0.70	CUM
10	R.C.C. work of M-30 for slope roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	26.25	CUM
11	R.C.C. work of M-30 for chajja having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth	3.75	SQM

	providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
12	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	76.47	QTL
13	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	17.85	CUM
14	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	44.85	CUM
15	Providing and laying Khandolite stone ornamental/ decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	19.22	CUM
16	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	33.38	CUM
17	Providing 60cmx60cm/40cmx40cm size special plain/printed series ceramic floor tiles of premium grade of approved make having thickness 7mm to 8mm, conforming to IS 13755 for ceramic tile flooring of approved quality, colour and size in floors, treads on steps and landings in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient, grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the ceramic tile if required , watering and curing for 21 days, including cost, conveyance, loading, unloading,	4.31	SQM

	royalties of all materials, cost of all labour, sundries, T&P required for the work, complete in all respect as directed by the Engineer-in-charge.		
18	Providing 30cmx45cm/30cmx60cm size special plain/printed series edge cut ceramic wall tiles of premium grade of approved make having thickness 6.5mm to 6.7mm conforming to IS 13753 of approved make & shade in Dadoes over 12mm thick cement plaster 1:3 (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the tiles including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour curing sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.	21.59	SQM
19	Providing granite flooring of approved quality and size in staircase floors, kitchen platform including edge moulding and groove cutting etc in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the marble tile if required watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.	0.88	SQM
20	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear toughened + 12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		
	Providing and fixing two track two panel sliding window made of frame 45mm x 37.5 mm and sash 28 mm x 68 mm. for doors outer frame will be 92 mm x 38 mm and sash will be 34.5 mm x 75 mm both having wall thickness of 1.2 mm to 1.4 mm as per approved drawing/design. Window/door should have single glazing bead of appropriate dimension for 6mmT +12mm gap +6mm T clear toughened Glass or as per approved given specification.	16.20	SQM
21	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear toughened + 12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		

	Fix Ventilator made of frame 45 mm x 50.5 mm and mullion (if required) 48 mm x 61mm both having wall thickness 1.2 mm to 1.4 mm and single glazing bead of appropriate dimension for 4mm pin head louvers glass in case of louver ventilator and arrangement for exhaust fan of 300mm dia.	0.54	SQM
22	Supplying, fitting and fixing of M.S window grills (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	360.24	KG
23	Providing and fixing in position well dressed, naturally seasoned sal wood rebated frames of size 125mmx63mm to doors including two coats of hot bitumen applied to rear of frame in contact with masonry or concrete surface fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	0.61	CUM
24	Supplying, fitting and fixing in position 38 mm thick decorative Teak wood shutter 38mm style and 22mm to 25mm thick panel well seasoned and well dressed fitted and fixed to sal wood choukaths in all floors at all heights including providing ornamental design as per approved drawing with necessary beadings, cutting grooves in choukaths and for lapping portion of shutter where necessary, including fitting and fixing of Godrej make Mortice lock having model no 9168, Godrej make Door closure heavy duty type having model no 8340, 125mm brass hinges, handle, tower bolt, stopper including cost of all materials, labour transportation, loading & unloading etc. complete as per specification and direction of Engineer -in-charge.	17.64	SQM
25	Providing and fixing in position WPC frames of following approved size to doors fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge. 75mm x 50 mm	5.55	SQM
26	Providing and fixing in position 28mm thick WPC shutters of approved size to WPC door frames with hinges, handles, tower bolt etc complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	1.80	SQM
27	Providing 20mm. average thick grading plaster with cement mortar of mix (1:4) in all floors at all height with portland slag cement on top of roof slab after chipping and chiseling the same and cleaning the entire surface with wire brush, finished smooth to proper slope and gradient with watering and curing etc. complete including cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	207.00	SQM
28	Providing & laying RP Mangalore roof tiles including ridge (as per approved pattern 20mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:1 mixed with 2% integral water proofing compound laid over a bed of 20mm thick cement mortar 1:4 and finished neat complete as per direction of Engineer-in-charge.	207.00	SQM
29	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P	108.51	SQM

	and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.		
30	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, conveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	55.71	SQM
31	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	216.06	SQM
32	Finishing inside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	196.17	SQM
33	Finishing outside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	162.52	SQM
34	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, conveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.	196.17	SQM
35	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	369.52	SQM
36	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, conveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	8.37	SQM
37	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	269.92	SQM
38	Providing cleaning of surface with mechanical process upto dustless means cheeping, grinding, air blowing & application of two coats of Sika Topseal 109hi with Sika fab-1 @2.2kg/sqm. Mixing with mechanical process @1:4 side wall surface to protect against leakage & seepage finally covered with a cement mortar (1:4). Proper penetration points with Sikagard 694 fi (moisture resistance epoxy putty).All the treatment should be done with an authorized applicator of manufacture and submit a warranty for 10years to complete.	207.00	SQM
39	Providing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier	136.11	SQM

	in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)		
40	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	102.03	CUM
Mundan Block			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	7.29	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	21.87	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	43.74	CUM
4	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	4.80	CUM
5	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	90.74	SQM
6	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for	120.00	SQM

	structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.		
7	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	120.00	SQM
8	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	19.72	CUM
9	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	6.57	CUM
10	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	15.45	CUM
11	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	5.37	CUM
12	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	4.48	CUM
13	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	1.11	CUM
14	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with	4.90	CUM

	I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
15	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	3.98	CUM
16	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	19.86	CUM
17	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties of all materials, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.	26.55	SQM
18	Providing and applying 2 coats of 1mm thick elastomeric cementitious waterproofing coating Brushbond RFX of Fosroc Chemicals Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836. with Adhesion to concrete : >1N/mm ² for waterproofing structures like roof slabs, sunken slabs, chajjas, tunnels, water tank etc. after proper surface preparation and soaking the surface with water prior to application complete as specified and directed by the Department at all levels.	26.55	SQM
19	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	13.15	CUM
Prasad Sevan			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design	131.11	CUM

	including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.		
2	Earthwork in excavation beyond 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rock etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, designing including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	21.93	CUM
3	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	51.01	CUM
4	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	114.79	CUM
5	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	34.37	CUM
6	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	29.07	CUM
7	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	10.28	CUM
8	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing,	25.86	CUM

	design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
9	R.C.C. work of M-30 for lintel having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	0.70	CUM
10	R.C.C. work of M-30 for slope roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	26.25	CUM
11	R.C.C. work of M-30 for chajja having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	3.75	SQM
12	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	76.47	QTL
13	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	17.85	CUM
14	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from	44.85	CUM

	approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.		
15	Providing and laying Khandolite stone ornamental/ decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splays cutting, circular moulding and similar such type of works with all necessary projections, champering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	19.22	CUM
16	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	33.38	CUM
17	Providing 60cmx60cm/40cmx40cm size special plain/printed series ceramic floor tiles of premium grade of approved make having thickness 7mm to 8mm, conforming to IS 13755 for ceramic tile flooring of approved quality, colour and size in floors, treads on steps and landings in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient, grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the ceramic tile if required , watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work, complete in all respect as directed by the Engineer-in-charge.	4.31	SQM
18	Providing 30cmx45cm/30cmx60cm size special plain/printed series edge cut ceramic wall tiles of premium grade of approved make having thickness 6.5mm to 6.7mm conforming to IS 13753 of approved make & shade in Dadoes over 12mm thick cement plaster 1:3 (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the tiles including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour curing sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.	21.59	SQM
19	Providing granite flooring of approved quality and size in staircase floors, kitchen platform including edge moulding and groove cutting etc in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the marble tile if required watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.	0.88	SQM
20	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for		

	transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear toughened + 12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		
	Providing and fixing two track two panel sliding window made of frame 45mm x 37.5 mm and sash 28 mm x 68 mm. for doors outer frame will be 92 mm x 38 mm and sash will be 34.5 mm x 75 mm both having wall thickness of 1.2 mm to 1.4 mm as per approved drawing/design. Window/door should have single glazing bead of appropriate dimension for 6mmT +12mm gap +6mm T clear toughened Glass or as per approved given specification.	16.20	SQM
21	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear toughened + 12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		
	Fix Ventilator made of frame 45 mm x 50.5 mm and mullion (if required) 48 mm x 61mm both having wall thickness 1.2 mm to 1.4 mm and single glazing bead of appropriate dimension for 4mm pin head louvers glass in case of louver ventilator and arranhement for exhaust fan of 300mm dia.	0.54	SQM
22	Supplying, fitting and fixing of M.S window grills (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	360.24	KG
23	Providing and fixing in position well dressed, naturally seasoned sal wood rebated frames of size 125mmx63mm to doors including two coats of hot bitumen applied to rear of frame in contact with masonry or concrete surface fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	0.61	CUM
24	Supplying, fitting and fixing in position 38 mm thick decorative Teak wood shutter 38mm style and 22mm to 25mm thick panel well seasoned and well dressed fitted and fixed to sal wood choukaths in all floors at all heights including providing ornamental design as per approved drawing with necessary beadings, cutting grooves in choukaths and for lapping portion of shutter where necessary, including fitting and fixing of Godrej make Mortice lock having model no 9168, Godrej make Door closure heavy duty type having model no 8340, 125mm brass hinges, handle, tower bolt, stopper including cost of all materials, labour transportation, loading &	17.64	SQM

	unloading etc. complete as per specification and direction of Engineer -in-charge.		
25	Providing and fixing in position WPC frames of following approved size to doors fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge. 75mm x 50 mm	5.55	SQM
26	Providing and fixing in position 28mm thick WPC shutters of approved size to WPC door frames with hinges, handles, tower bolt etc complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	1.80	SQM
27	Providing 20mm. average thick grading plaster with cement mortar of mix (1:4) in all floors at all height with portland slag cement on top of roof slab after chipping and chiseling the same and cleaning the entire surface with wire brush, finished smooth to proper slope and gradient with watering and curing etc. complete including cost, coveyannce, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	207.00	SQM
28	Providing & laying RP Mangalore roof tiles including ridge (as per approved pattern 20mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:1 mixed with 2% integral water proofing compound laid over a bed of 20mm thick cement mortar 1:4 and finished neat complete as per direction of Engineer-in-charge.	207.00	SQM
29	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	108.51	SQM
30	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	55.71	SQM
31	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	216.06	SQM
32	Finishing inside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	196.17	SQM
33	Finishing outside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	162.52	SQM
34	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, coveyance, loading and unloading of all materials, cost of all labour,	196.17	SQM

	sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.		
35	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	369.52	SQM
36	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, conveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	8.37	SQM
37	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	269.92	SQM
38	Providing cleaning of surface with mechanical process upto dustless means cheeping, grinding, air blowing & application of two coats of Sika Topseal 109hi with Sika fab-1 @2.2kg/sqm. Mixing with mechanical process @1:4 side wall surface to protect against leakage & seepage finally covered with a cement mortar (1:4). Proper penetration points with Sikagard 694 fi (moisture resistance epoxy putty).All the treatment should be done with an authorized applicator of manufacture and submit a warranty for 10years to complete.	207.00	SQM
39	Providing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)	136.11	SQM
40	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	102.03	CUM

Information Counter

1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	131.11	CUM
2	Earthwork in excavation beyond 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rock etc but not requiring blasting with initial leads and lifts including	21.93	CUM

	dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, designing including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.		
3	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	51.01	CUM
4	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	114.79	CUM
5	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	34.37	CUM
6	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	29.07	CUM
7	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	10.28	CUM
8	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	25.86	CUM
9	R.C.C. work of M-30 for lintel having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality &	0.70	CUM

	from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
10	R.C.C. work of M-30 for slope roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	26.25	CUM
11	R.C.C. work of M-30 for chajja having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	3.75	SQM
12	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	76.47	QTL
13	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	17.85	CUM
14	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work	44.85	CUM

	including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.		
15	Providing and laying Khandolite stone ornamental/ decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	19.22	CUM
16	Providing stone flooring/paving in Parikrama using machine dressed khandolite stone with epoxy adhesive carefully by archaeological manner as per the drawing and design including cost, conveyance, loading and unloading, royalties of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	33.38	CUM
17	Providing 60cmx60cm/40cmx40cm size special plain/printed series ceramic floor tiles of premium grade of approved make having thickness 7mm to 8mm, conforming to IS 13755 for ceramic tile flooring of approved quality, colour and size in floors, treads on steps and landings in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient, grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the ceramic tile if required , watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work, complete in all respect as directed by the Engineer-in-charge.	4.31	SQM
18	Providing 30cmx45cm/30cmx60cm size special plain/printed series edge cut ceramic wall tiles of premium grade of approved make having thickness 6.5mm to 6.7mm conforming to IS 13753 of approved make & shade in Dadoes over 12mm thick cement plaster 1:3 (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the tiles including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour curing sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.	21.59	SQM
19	Providing granite flooring of approved quality and size in staircase floors, kitchen platform including edge moulding and groove cutting etc in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the marble tile if required watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.	0.88	SQM
20	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear		

	toughened + 12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		
	Providing and fixing two track two panel sliding window made of frame 45mm x 37.5 mm and sash 28 mm x 68 mm. for doors outer frame will be 92 mm x 38 mm and sash will be 34.5 mm x 75 mm both having wall thickness of 1.2 mm to 1.4 mm as per approved drawing/design. Window/door should have single glazing bead of appropriate dimension for 6mmT +12mm gap +6mm T clear toughened Glass or as per approved given specification.	16.20	SQM
21	Providing and Fixing white/diamond gray finish system aluminum doors & windows make: Fenesta, Schuco, Reynaers, Aluko. Company must have own fabrication facilities & control the entire cycle from fabrication to Installation to post Sales Service. Aluminum profile frame should be powder coated of 65-90 micron, using vertical coating process from a QUALICOAT certified facility and profile must be undergo sublimation process for transferring wood grain patterns on it. Windows & doors profile must be of high grade 6063 T6 and gauge should be vary from 1.2 mm to 4.5 mm as per the design & system requirement. All hardware fitted must be of Non-SS, except handles to be of zinc/Al. alloy casted with powder coated. Glass should be of make: Saint-Gobain/ Modiguard/ASAHI with 6 mm clear toughened + 12mm gap +6 mm clear toughened or as per approved given specification with weather seal (EPDM/TPE). Window/Door provider should have it's presence PAN India and having experience of minimum 12 Years of any type of window & doors in India.		
	Fix Ventilator made of frame 45 mm x 50.5 mm and mullion (if required) 48 mm x 61mm both having wall thickness 1.2 mm to 1.4 mm and single glazing bead of appropriate dimension for 4mm pin head louvers glass in case of louver ventilator and arrangement for exhaust fan of 300mm dia.	0.54	SQM
22	Supplying, fitting and fixing of M.S window grills (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	360.24	KG
23	Providing and fixing in position well dressed, naturally seasoned sal wood rebated frames of size 125mmx63mm to doors including two coats of hot bitumen applied to rear of frame in contact with masonry or concrete surface fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	0.61	CUM
24	Supplying, fitting and fixing in position 38 mm thick decorative Teak wood shutter 38mm style and 22mm to 25mm thick panel well seasoned and well dressed fitted and fixed to sal wood choukaths in all floors at all heights including providing ornamental design as per approved drawing with necessary beadings, cutting grooves in choukaths and for lapping portion of shutter where necessary, including fitting and fixing of Godrej make Mortice lock having model no 9168, Godrej make Door closure heavy duty type having model no 8340, 125mm brass hinges, handle, tower bolt, stopper including cost of all materials, labour transportation, loading & unloading etc. complete as per specification and direction of Engineer -in-charge.	17.64	SQM
25	Providing and fixing in position WPC frames of following approved size to doors fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P	5.55	SQM

	including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge. 75mm x 50 mm		
26	Providing and fixing in position 28mm thick WPC shutters of approved size to WPC door frames with hinges, handles, tower bolt etc complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	1.80	SQM
27	Providing 20mm. average thick grading plaster with cement mortar of mix (1:4) in all floors at all height with portland slag cement on top of roof slab after chipping and chiseling the same and cleaning the entire surface with wire brush, finished smooth to proper slope and gradient with watering and curing etc. complete including cost, coveyannce, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	207.00	SQM
28	Providing & laying RP Mangalore roof tiles including ridge (as per approved pattern 20mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:1 mixed with 2% integral water proofing compound laid over a bed of 20mm thick cement mortar 1:4 and finished neat complete as per direction of Engineer-in-charge.	207.00	SQM
29	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	108.51	SQM
30	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	55.71	SQM
31	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	216.06	SQM
32	Finishing inside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	196.17	SQM
33	Finishing outside wall surface with powder wall putty of approved make and finished smooth and even surface to receive painting including cost of scaffolding staging charges with cost of all materials, labour T & P etc complete as per direction of Engineer-in-charge.	162.52	SQM
34	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, coveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.	196.17	SQM
35	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost	369.52	SQM

	of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.		
36	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, conveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	8.37	SQM
37	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	269.92	SQM
38	Providing cleaning of surface with mechanical process upto dustless means cheeping, grinding, air blowing & application of two coats of Sika Topseal 109hi with Sika fab-1 @2.2kg/sqm. Mixing with mechanical process @1:4 side wall surface to protect against leakage & seepage finally covered with a cement mortar (1:4). Proper penetration points with Sikagard 694 fi (moisture resistance epoxy putty).All the treatment should be done with an authorized applicator of manufacture and submit a warranty for 10years to complete.	207.00	SQM
39	Providing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)	136.11	SQM
40	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	102.03	CUM

Arrival Plaza cum Parking with cobble stone

1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	237.60	CUM
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	79.20	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	235.20	CUM

4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	27.20	CUM
5	Rolling & compacting to sub grade or formation loosening by cutting earth for 15cm below the sub grade including watering and compacting in layers by PRR, cost & conveyance of required quantity of water, cost of all labour sundries, T & P etc. required for the work to complete in all respect as per specification and direction of Engineer-in-charge.	234.00	CUM
6	Construction of granular sub-base by providing Close graded Granular subbase Grading-IV material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc complete as per direction of Engineer-in-charge.	234.00	CUM
7	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, laying in uniform layers with paver in subbase/base course on well prepared surface and compacting with vibratory roller to achieve the desired density as per Clause 406 of MoSRT&H Specifications for Road & Bridge works	234.00	CUM
8	Supplying and laying of M30 grade heavy duty factory made hydraulically pressed and machine vibrated free cast interlocking pavers of 80mm thick, coral shaped preparation of sub base with 50mm sand and leveling, laying of interlocking paver block with sand binding and final compaction with plate vibrator finishing the surface including cutting of blocks at the edges with all labour and materials etc complete as per direction of Engineer-in-chrg.	650.00	SQM
9	Supplying and laying full bed square granite cobbles of approved make and colour in approved pattern of 100mm x 100mm size having 80mm avg. thick over a 25-35mm bed of cement mortar of proportion 1:6 (1 cement : 6 sharp sand). The subbase for cobble stone should be prepared by spreading and compacting crushed stone or gravel in uniform layers not exceeding 100mm thick with proper gradient for drainage. Borders should be installed first to insure proper design layout and all the half stones should be removed to install continuous mat. Stones should be cut using a stone splitter if required. There should be a joint of 12mm thick and it should be free of leaves & debris. After laying the stones it should be compacted using a vibrating plate and compacting the bottom of the stone at least 3/8" into the subbase. After installation complete the dirt and debris should be clean off with an air blower and the top surface should be gently sweep for excess mortar off with the squeegee. Item includes cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries , T&P required for the work etc. complete in all respect as per manufacturers specification and direction of Engineer-in-charge.	910.00	SQM
10	Providing and laying at or near ground level factory made kerb stone of M-30 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse 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).	40.00	MTR
11	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including	18.00	SQM

	sand papering and making the surface smooth with cost, conveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.		
12	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	158.40	CUM
Compound Wall			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	310.84	CUM
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	103.61	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	163.24	CUM
4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	46.91	CUM
5	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	54.09	CUM
6	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S.	21.75	CUM

	rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
7	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	25.65	CUM
8	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	155.36	CUM
9	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbeling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	27.19	CUM
10	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbeling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	119.63	CUM
11	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbeling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	29.00	CUM
12	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all	325.50	SQM

	materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.		
13	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	325.50	SQM
14	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	1305.00	SQM
15	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	207.23	CUM
Landscaping & Horticulture			
1	Reclamation of works like cleaning of total area, cleaning of unwanted shrubs, stumps uprooting rank, vegetation, unwanted grass, wood, twigs, breaking clods, tilling of area, dumping of above materials at required spots, lifting of the above materials from the garden area of the premises to outside by mechanical means including loading & unloading charges as per the instruction of Engineer-in-charges.	1000.00	SQM
2	Supply of good quality garden soil preferably red alluvial /sandy loam with texture neither too coarse nor too fine with a fair degree of water retaining capacity sufficiently porous for microbial activity, containing adequate humus with a Ph range from 6.5 to 7.5 should be free from any undesirable inorganic materials like wastages of construction, roots and bushes of wild plants, polythene, garbage etc., to be collected after duly screened including cost, conveyance, royalty and other charges with labour and T & P charges for loading, unloading and stacking at site in the separate heaps of (1.5 x 1.5x 0.5) cum or its multiples taken into 1(one) cum for measurement and payment purposes and completed in all respect for the park.	150.00	CUM
3	Lifting & spreading of good soil uniformly over the surface area as per landscape design /advice of the site Engineer-in-charge.	150.00	CUM
4	Supply of cow dung manure, well decomposed, garbage free, one Tractor load including loading, unloading and delivery at site.	25.00	CUM
5	Lifting & spreading of manure uniformly as per the direction of site in-charge.	25.00	CUM
6	Hoeing of soil & manure spreaded area over an area of approx. 1500 sqmtr. For smooth mixing in the upper Surface & leveling, dressing for grassing the area as per the instruction of Officer in-charge	1000.00	SQM
7	Supply of Bermuda bent grass / Zoicia japonica / shade loving grass well grown disease free, carpet formed, 2" thickness about for an area of 1000 sqm. in 1:5 i.e., 600 sqm. Including loading and unloading and delivery at site including cost of all materials, transportation, maintainance for 3 years etc complete as per direction of Engineer-in-charge.	450.00	SQM
8	Supply of Broad Leaf grass well grown disease free, carpet formed, 2" thickness about for an area of 1000 sqm. in 1:5 i.e., 600 sqm. Including loading and unloading and delivery at site including cost of all materials, transportation, maintenance for 3 years etc complete as per direction of Engineer-in-charge.	150.00	SQM
9	Dibbling of Broad leaf grass including watering, rolling, As per the instruction of Officer-in charge for 1500 sqmtr.	1000.00	SQM

10	Planting of Nerium Olander 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
11	Planting of Murya Exotica 4' ht. ornamental plants,well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
12	Planting of Bouganvilliea 3 ½' ht. ornamental plants,well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
13	Planting of Ixora Coccinea 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
14	Planting of Gardenia Grandiflora 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
15	Planting of Tecoma Stans 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
16	Planting of Almonda Cathritica 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
17	Planting of Jasminum species 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	20.00	NOS
18	Planting of Musanda species 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
19	Planting of Croton species 4 ' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
20	Planting of Mini Tagar 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
21	Planting of Tarata dwarf 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
22	Planting of Varigated Tagar 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
23	Planting of Hena 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
24	Planting of Musanda red 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
25	Planting of Fox tail palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
26	Planting of Arica palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
27	Planting of Phoneix 3' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting	5.00	NOS

	of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.		
28	Planting of Furcaria Watsonai 2' ht ornamental decorative specimen plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	10.00	NOS
29	Planting of Juniper 3' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	10.00	NOS
30	Planting of Fish tail palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
31	Planting of Pichadia palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
32	Providing Circular Cement Concrete pots of top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 7 nos (3 nos horizontal & 4 nos vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows & height, all complete as per direction of Officer-in-charge.	50.00	NOS
33	Supply of hedge and edge plant, healthy disease free in poly bag/ container including transportation and delivery at sites. Planting of Duranta Goldiana/ Duranta Varigataed (Poly) 8" ht. i.e.,7 nos. per meter @ Rs. 10/- Per Plant (7 nos.x 4 line x area x Rs.10/-) Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge with maintainance for 3 years.	1400.00	NOS
34	Providing and fixing overhead type sprinkler system with self closing valve type 25mm X 20mm with self closing spring made up of alluminium alloy and brass fittings including cost of all materials, labour, T & P etc complete as per direction of Engineer-in-charge.	2.00	NOS
35	Supplying all materials, labour, T&P and fixing standard sized Bib cock of Jaquar Cat. No.-FLR-5037N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS
36	Supplying all materials , labours and tools and plants for fitting and fixing of 20mm dia CPVC pipes of 100% lead free and conforming to ASTM F442 Specific-2 CPVC(Make-ASTRAL/ASHIRBAD /Equivalent) with good quality including fittings and laying as per the site requirement etc., all complete including testing as per the direction and specification of Engineer-in-charge.	60.00	RM

PROPOSAL FOR REHABILITATION OF EXISTING SHOPS & FESTIVAL PARKING

Approach Road & Parking			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including	415.88	CUM

	dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.		
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	138.63	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	330.75	CUM
4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	30.75	CUM
5	Brick work in foundation and plinth with flyash bricks of size 25x12x8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm ² immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbeling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty of all materials, labour, T&P etc. and as per direction of Engineer in charge.	59.06	CUM
6	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, conveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	315.00	SQM
7	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	315.00	SQM
8	Rolling & compacting to sub grade or formation loosening by cutting earth for 15cm below the sub grade including watering and compacting in layers by PRR, cost & conveyance of required quantity of water, cost of all labour sundries, T & P etc. required for the work to complete in all respect as per specification and direction of Engineer-in-charge.	300.00	CUM
9	Construction of granular sub-base by providing Close graded Granular subbase Grading-IV material as per table 400-1, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density complete as per Clause 401 of MoSRT&H Specifications for Road & Bridge works (5th Revision) etc complete as per direction of Engineer-in-charge.	300.00	CUM
10	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the material with water at OMC in mechanical mix plant, carriage of mixed material by tipper to site, laying in uniform layers with paver in subbase/base course on well prepared	300.00	CUM

	surface and compacting with vibratory roller to achieve the desired density as per Clause 406 of MoSRT&H Specifications for Road & Bridge works		
11	Supplying and laying of M30 grade heavy duty factory made hydraulically pressed and machine vibrated free cast interlocking pavers of 80mm thick, coral shaped preparation of sub base with 50mm sand and leveling, laying of interlocking paver block with sand binding and final compaction with plate vibrator finishing the surface including cutting of blocks at the edges with all labour and materials etc complete as per direction of Engineer-in-charge.	2000.00	SQM
12	Providing and laying at or near ground level factory made kerb stone of M-30 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not be 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).	500.00	MTR
13	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, conveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	225.00	SQM
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	277.25	CUM
Compound Wall			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	276.37	CUM
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	92.12	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	152.72	CUM
4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	42.86	CUM
5	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality &	48.31	CUM

	from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
6	R.C.C. work of M-30 for plinth beam having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	18.93	CUM
7	R.C.C. work of M-30 for beam and column having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	33.75	CUM
8	R.C.C. work of M-30 for lintel having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	0.27	CUM
9	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	2.51	CUM
10	R.C.C. work of M-30 for chajja having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth	1.71	CUM

	providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
11	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	162.25	CUM
12	Brick work in foundation and plinth with flyash bricks of size 25x12x8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm ² immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty of all materials, labour, T&P etc. and as per direction of Engineer in charge.	32.44	CUM
13	Brick work in superstructure with flyash bricks of size 25x12x8cm in cement mortar (1:6) with best quality bricks having crushing strength not less than 75 Kg/cm ² immersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty of all materials, labour, T&P etc. and as per direction of Engineer in charge.	58.51	CUM
14	Brick work in superstructure with flyash bricks of size 25x12x8cm in cement mortar (1:4) with best quality bricks having crushing strength not less than 75 Kg/cm ² imersing the bricks in water for not less than 6 hours before use (the bricks shall be free from cracks, well shaped, uniform in size and shall produce a clear metallic ringing sound when struck) includes molding, chamfering, corbelling .complete as per drawing, design and specification, watering and curing for 7days including cost, conveyance, royalty of all materials, labour, T&P etc. and as per direction of Engineer in charge.	1.12	CUM
15	Providing 60cmx60cm/40cmx40cm size special plain/printed series ceramic floor tiles of premium grade of approved make having thickness 7mm to 8mm, conforming to IS 13755 for ceramic tile flooring of approved quality, colour and size in floors, treads on steps and landings in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient, grouted with neat white cement slurry jointing the tile with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the ceramic tile if required , watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work, complete in all respect as directed by the Engineer-in-charge.	3.24	CUM
16	Providing 30cmx45cm/30cmx60cm size special plain/printed series edge cut ceramic wall tiles of premium grade of approved make having thickness 6.5mm to 6.7mm conforming to IS 13753 of approved make & shade in Dadoes over 12mm thick cement plaster 1:3 (1 Cement: 3 Coarse sand) finished with modular pointing in white cement & pigment to match the shade of the tiles including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour curing sundries and T & P etc. required for	12.45	CUM

	the work etc. complete as per specification and direction of Engineer-in-charge.		
17	Providing kota stone flooring using kota stone of approved quality, colour and size of 25mm minimum thick in floors, treads on steps and landings in all floors at all height on 20mm thick bed of cement mortar of mix (1:4) laid in proper slope and gradient with screened and washed sharp sand for mortar and grouted with neat white cement slurry jointing the kota stone with neat white cement slurry mixed with required quantities of pigments of approved marks to match the shades of the kota stone, if required , watering and curing for 21 days, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work including rubbing mechanically and wax polishing etc. complete in all respect as per specification and direction of Engineer-in-charge.	10.63	CUM
18	Supplying, fitting and fixing in position, 25mm minimum thick kota stone of approved quality and size in dadoes in all floors at all heights and riser of steps on 12mmm thick cement plaster (1:3) using screened and washed sharp sand for mortar with grouted with neat cement slurry and jointed with neat cement slurry mixed with required shade of pigments to match the shade of the tiles including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, curing-sundries and T&P, etc. required for the work complete as per specification and direction of Engineer-in-charge.	1.08	CUM
19	Providing and fixing two track two panel sliding window made of frame 45mm x 37.5 mm and sash 28 mm x 68 mm. for doors outer frame will be 92 mm x 38 mm and sash will be 34.5 mm x 75 mm both having wall thickness of 1.2 mm to 1.4 mm as per approved drawing/design. Window/window should have single glazing bead of appropriate dimension for 6mmT +12mm gap +6mm T clear toughened Glass or as per approved given specification.	5.40	SQM
20	Supplying, fitting and fixing of M.S window grills (as per I.S. specification and as per approved drawings) in proper position in all floors and at all height including making holes to brick walls/ R.C.C structure/wood work etc. and making good to the damaged walls/ structures with cement concrete (1:2:4) with black hard crusher broken granite stone chips of 12mm to 20mm size (20mm size not to exceeds 25%) including watering and curing etc. complete in all respect as directed by the Engineer in charge.	4039.04	KG
21	Providing and fixing in position WPC frames of following approved size to doors fixed with MS hold fast of 35x5mm embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge		
a	125 x 65 mm	5.40	MTR
b	75 x 50 mm	4.95	MTR
22	Supplying fitting and fixing in position 32mm thick flush door with teak wood beading and 1mm thick sunmica to both side pasted with adhesive including fixing of fixtures like Godrej make Mortice lock having model no 4492, Godrej make Door closure having model no 5959, 100mm hinges Godrej model no 4365, stopper including cost of all materials, labour, transportation, loading & unloading etc. complete as per specification and direction of Engineer -in-charge.	2.52	SQM
23	Providing and fixing in position 28mm thick WPC shutters of approved size to WPC door frames with hinges, handles, tower bolt etc complete with all materials, labours, T & P including cost, conveyance, loading, sundries required for the work etc. complete in all respect as directed by the Engineer-in-charge	1.58	SQM
24	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing,	710.88	SQM

	rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.		
25	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to inside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, coveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	56.48	SQM
26	Providing 6mm thick plaster in C.M. (1:4) over ceiling, chajja, loft, staircase, column, beams and walls after removing the false if necessary and close deep chipping including rounding of the corners, recess and roughening concrete surface where necessary, watering and curing, finished smooth over R.C.C. surface, including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. complete as per direction of the Engineer-in-charge.	52.11	SQM
27	Providing and painting internal surface two coats with plastic emulsion paint over a coat of water based primer of approved quality and approved shade in all floors at all height by making the surface of wall smooth including cost, coveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by the Engineer in charge.	44.03	SQM
28	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	712.59	SQM
29	Providing and painting two coats with synthetic enamel paint over a coat of zinc oxide primer of approved quality and approved shade confirming to ISI on steel work to give an even shade in all floors at all height including sand papering and making the surface smooth with cost, coveyance, loading and unloading of all materials, cost of all labour, sundries, T&P, scaffolding etc. required for the work and complete in all respect as directed by Engineer-in-charge.	112.72	SQM
30	Providing 25mm thick grading concrete in C.C. (1:2:2) laid in proper slope over terrace roof slab by using two part of sand, one part of cement and two parts of 6mm size black hard crusher broken granite chips with addition of water proofing compound of approved quality to be mixed with specified ratio including watering, curing, cost, conveyance, royalties, cost of all labour, T&P etc. complete as required for the finished item of work as directed by the Engineer-in-charge.	20.05	CUM
31	Providing and injecting chemical emulsion for pre - constructional antitermite treatment as per IS specification and creating a chemical barrier in bottom and sides of foundation trenches, top-surface of plinth filing junction of walls and floors along with external perimeter of the building expansion joints surrounding the pipes and cables etc. complete using approved quality of chemical emulsion of requisite quantity prescribed by the manufacturer as directed by the Engineer-in-charge including cost of all materials and labour etc. complete. (Measurement should be taken as per plinth area and indemnity bond for warranty for 10 years to be furnished)	20.65	CUM
32	Providing and Applying Sika Top seal 109 Hi (Elastic, Liquid applied crack bridging, 2 pack acrylic cementious waterproofing coating system)with Sika fab-1 two coats after surface preparation means seal all the honey combs, pot holes, joint gaps etc. with SikaMicroconcrete A, then cleaning the surface up to dust less & water sprinkling to make the surface to SSD condition before first application of Sika Top Seal 109 Hi and laying Sika Fab-1 (Glass Fiber Cloth) over the 1st coat on streaky condition and final	20.05	CUM

	coating on above coated and fixed Fab -1 on dry condition. To complete in all respect with materials.		
33	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	184.25	CUM
Landscaping & Horticulture			
1	Reclamation of works like cleaning of total area, cleaning of unwanted shrubs, stumps uprooting rank, vegetation, unwanted grass, wood, twigs, breaking clods, tilling of area, dumping of above materials at required spots, lifting of the above materials from the garden area of the premises to outside by mechanical means including loading & unloading charges as per the instruction of Officer-in-charges.	1000.00	SQM
2	Supply of good quality garden soil preferably red alluvial /sandy loam with texture neither too coarse nor too fine with a fair degree of water retaining capacity sufficiently porous for microbial activity, containing adequate humus with a Ph range from 6.5 to 7.5 should be free from any undesirable inorganic materials like wastages of construction, roots and bushes of wild plants, polythene, garbage etc., to be collected after duly screened including cost, conveyance, royalty and other charges with labour and T & P charges for loading, unloading and stacking at site in the separate heaps of (1.5 x 1.5 x 0.5) cum or its multiples taken into 1(one) cum for measurement and payment purposes and completed in all respect for the park.	150.00	CUM
3	Lifting & spreading of good soil uniformly over the surface area as per landscape design /advice of the site in-charge.	150.00	CUM
4	Supply of cow dung manure, well decomposed, garbage free, one Tractor load including loading, unloading and delivery at site.	25.00	CUM
5	Lifting & Spreading of manure uniformly as per the direction of site in-charge.	25.00	CUM
6	Hoeing of soil & manure spreaded area over an area of approx. 1500 sqmtr. For smooth mixing in the upper Surface & leveling, dressing for grassing the area as per the instruction of Officer in-charge	1000.00	SQM
7	Supply of Bermuda bent grass / Zoicia japonica / shade loving grass well grown disease free, carpet formed, 2" thickness about for an area of 1000 sqm. in 1:5 i.e., 600 sqm. Including loading and unloading and delivery at site including cost of all materials, transportation, maintainance for 3 years etc complete as per direction of Engineer-in-charge.	450.00	SQM
8	Supply of Broad Leaf grass well grown disease free, carpet formed, 2" thickness about for an area of 1000 sqm. in 1:5 i.e., 600 sqm. Including loading and unloading and delivery at site including cost of all materials, transportation, maintainance for 3 years etc complete as per direction of Engineer-in-charge.	150.00	SQM
9	Dibbling of Broad leaf grass including watering, rolling, As per the instruction of Officer-in charge for 1500 sqmtr.	1000.00	SQM
10	Planting of Nerium Olander 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
11	Planting of Murya Exotica 4' ht. ornamental plants,well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
12	Planting of Bouganvilliea 3 ½' ht. ornamental plants,well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
13	Planting of Ixora Coccinea 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS

14	Planting of Gardenia Grandiflora 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
15	Planting of Tecoma Stans 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
16	Planting of Almonda Cathritica 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
17	Planting of Jasminum species 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	20.00	NOS
18	Planting of Musanda species 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
19	Planting of Croton species 4 ' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
20	Planting of Mini Tagar 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
21	Planting of Tarata dwarf 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
22	Planting of Varigated Tagar 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
23	Planting of Hena 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
24	Planting of Musanda red 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
25	Planting of Fox tail palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
26	Planting of Arica palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
27	Planting of Phoneix 3' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
28	Planting of Furcaria Watsonai 2' ht ornamental decorative specimen plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	10.00	NOS
29	Planting of Juniper 3' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	10.00	NOS

30	Planting of Fish tail palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
31	Planting of Pichadie palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintainance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
32	Providing Circular Cement Concrete pots of top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 7 nos (3 nos horizontal & 4 nos vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows & height, all complete as per direction of Officer-in-charge.	50.00	NOS
33	Supply of hedge and edge plant, healthy disease free in poly bag/ container including transportation and delivery at sites. Planting of Duranta Goldiana/ Duranta Varigataed (Poly) 8" ht. i.e.,7 nos. per meter @ Rs. 10/- Per Plant (7 nos.x 4 line x area x Rs.10/-) Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge with maintainance for 3 years.	1400.00	NOS
34	Providing and fixing overhead type sprinkler system with self closing valve type 25mm X 20mm with self closing spring made up of alluminium alloy and brass fittings including cost of all materials, labour, T & P etc complete as per direction of Engineer-in-charge.	2.00	NOS
35	Supplying all materials, labour, T&P and fixing standard sized Bib cock of Jaquar Cat. No.-FLR-5037N or equivalent type of approved make etc complete including cutting the wall and making good the damages, including cost of all materials complete as per PH specification and direction of Engineering-in-charge.	1.00	NOS
36	Supplying all materials , labours and tools and plants for fitting and fixing of 20mm dia CPVC pipes of 100% lead free and conforming to ASTM F442 Specific-2 CPVC(Make-ASTRAL/ASHIRBAD /Equivalent) with good quality including fittings and laying as per the site requirement etc., all complete including testing as per the direction and specification of Engineer-in-charge.	60.00	RM

EXTERNAL INFRASTRUCTURE

Sit outs & Stone Benches			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring, shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.	17.47	CUM
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	5.82	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding	3.88	CUM

	150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.		
4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	3.88	CUM
5	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	11.15	CUM
6	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	6.99	CUM
7	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	4.66	CUM
8	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	161.31	SQM
9	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	11.64	CUM
External Drainage System			
1	Earthwork in excavation upto 1.50mtr depth of foundation trenches for columns, basement, tie beams, walls and steps in following types of soil including moorum, hard stony earth, earth mixed with boulders, Laterite rocks etc but not requiring blasting with initial leads and lifts including dressing and leveling the bed sides up to required depth and depositing the excavated materials at places away from the work site with T&P for shoring,	293.75	CUM

	shuttering, dewatering if required etc. complete as per the drawing, design including cost of all labour, T&P etc. as required for the work complete as directed by the Engineer-in-charge.		
2	Filling foundation trenches and plinth with excavated earth including laying the earth in layers not exceeding 23.5cm (9") thick ramming and watering with all leads and lifts including cost of all labour, T&P etc. complete as directed by the Engineer-in-charge.	97.92	CUM
3	Supplying and filling the Foundation & Plinth with clean coarse river sand of approved quality from approved quarry, laying in layers not exceeding 150mm thick, watering and ramming including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete as per direction of the Engineer-in-charge.	26.00	CUM
4	Providing & laying cement concrete of prop. (1:3:6) in foundation bed and floors using 40mm nominal size down graded, screened, washed hard black crusher broken granite metal of approved quality & from approved quarry including laying in the layers not exceeding 100 mm thick, hoisting, lowering, laying, watering and curing etc. complete to the required levels including cost, conveyance, royalty of all materials, cost of all labour, T&P etc. as required for the work complete and as per direction of Engineer-in-charge.	26.00	CUM
5	Providing and laying plain cement concrete of (1:2:4) for kerb wall using 12 mm. Size black hard crusher broken granite stone chips and screened and washed sharp sand for mortar of approved quality from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels laid in layers not exceeding 15 cm thick in each layer including cost, conveyance, loading, unloading, royalties of all materials and cost of all labours, sundries, T & P required for the work etc complete as per the instruction of the Engineer-in-Charge.	16.88	CUM
6	R.C.C. work of M-30 for foundation having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	21.88	CUM
7	R.C.C. work of M-30 for wall having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.	42.75	CUM
8	R.C.C. work of M-30 for roof slab having minimum compressive strength of 300kg./cm ² in 15cm cubes at 28 days and in accordance with I.S. 456 and I.S. 516 using crusher broken hard black granite chips of approved quality & from approved quarry including hoisting, lowering, laying and compacting concrete with vibrator, watering and curing for 28 days, cost of rigid and smooth centering & shuttering and finishing to exposed surface smooth providing, grooves or beads wherever necessary including cost, conveyance, royalties of all materials and cost of all labour, T&P etc. as required for the work complete in all respects as per drawing, design and direction of	21.88	CUM

	Engineer-in-charge but excluding cost of M.S. rod/Tor steel and binding wires and labour charges for bending, binding and tying the grills.		
9	Providing & fixing TOR Fe-500 D grade reinforcement bars of approved makes as per DTCN for RCC work of required diameter with straightening, cutting, bending, binding welding and joining (if necessary) and tying the grills and placing in position as required for R.C.C. work and providing fan hooks, hoisting, lowering and laying including cost, conveyance of tor steel and binding wires of 18 to 20 gauge and labour required for the work for bending, binding and tying the grills in all heights as per the drawing, design and direction of Engineer-in-charge. (Linear measurements will be taken & quantity will be calculated on standard weight. Weight of binding wire will not be considered for measurement.)	84.31	CUM
10	Providing 12mm. thick cement plaster in all floors at all height with cement mortar of mix (1:6) finished smooth to outside smooth surface of brick masonry walls after racking out the joints including watering and curing, rounding of corners etc. complete with cost, conveyance, loading and unloading, royalties of all materials and cost of all labours, sundries, T&P and scaffolding required for the work etc. complete in all respect as desired by the Engineer in charge.	150.00	SQM
11	Painting to external surface of building with two coats of weather coat over a coat of water based primer of approved shade and quality of approved design, after cleaning by watering & removing the dirts etc. to the surface to be painted including watering, curing, cost, conveyance of all materials, cost of all labour, brushes, T&P etc. and necessary scaffolding work complete as directed by the Engineer-in-charge.	150.00	SQM
12	Providing 12mm. thick cement plaster with cement mortar of mix (1:4) in all floors with Portland slag cement (PSC) and with screened and washed sharp sand for mortar with neat cement punning finished smooth to brick/RCC walls after racking out the joints including watering and curing complete with cost, conveyance, loading and unloading, royalties of all materials, cost of all labour, sundries, T&P, scaffolding required for the work etc. complete in all respect as per the direction of Engineer-in-Charge.	412.50	SQM
13	Supplying all materials, labour, T&P and necessary materials towards laying of 600mm dia RCC NP2 Hume pipe push tight joint type (including cost of RCC Hume pipe) over PCC bed with plastic rope without damage to the pipe with all convenience the materials to site etc all complete as per direction of Engineer-in-charge.	50.00	MTR
14	Supplying all labour, T&P for the Carriage of excavated earth by mechanical means of transport within 5.00 K.M. lead including hire and running charges of vehicles, labour charges for loading and unloading as required for the work etc. complete as per the direction of the Engineer-in-charge.	195.83	CUM
Signages, Garbage Disposal, Water ATM, Dipa stand			
1	Painting runway/taxi track/apron marking with adequate nos of coats to give uniform finish with road marking paint of superior make as approved by the Engineer-in-charge, i/c cleaning the surface of ail dirt, scales, oil, grease and other foreign material etc. and lining out complete.	500.00	SQM
2	Providing and applying 2.5 mm thick road marking strips (retroreflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	300.00	SQM
3	Providing and fixing Glow studs of size 100x20 mm made of heavy duty body shall be moulded ASA (Acrylic styrene Acryloretite) or HIP (High impact polystyrene) or ABS having electronically welded micro- prismatic lens with abrasion resistant coating as approved by Engineer in charge. The glow stud shall support a load of 13635 kg tested in accordance with ASTM	100.00	NOS

	D4280. The slope of retro- reflective surface shall be 35 (+/-5) degrees to base .The reflective panels on both sides with at least 12 cm of reflective area up each side. The luminance intensity should be as per the specification and shall be tested as described in ASTM I: 809 as recommended in BS: 873 part 4 : 1973. The studs shall be fixed to the Road surface using the adhesive conforming to IS, as per procedure recommended by the manufacturer complete and as per direction of Engineer-in-charge		
4	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bi-lingual), symbols and borders etc. as per IRC ; 67:2001		
a	Mandatory/ Regulatory sign boards of 900 mm diametre with support length of 3750 mm	5.00	NOS
b	Cautionary /warning sign boards of equilateral triangular shape having each side of 900 mm with support length of 3650 mm	5.00	NOS
5	Providing Retro-reflective regulatory sign board of size 900 mm dia meter made out of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro -reflective sheeting as approved by Engineer-in-charge . Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4 mm. The boards will be fixed to 1 No. 50x50 mm square post made of M.S. angle 50x50x4 mm, 4 m long welded to the frame with adequate anti-theft arrangement .Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	10.00	NOS
6	Providing and fixing post delineators made of ABS round body fitted with 2 nos 100 mm dia high reflective reflectors and mounted on MS pipe of 65 mm dia duly powder coated anti-rust and anti theft steel to be installed as per direction of Engineer-in-charge.	50.00	NOS
7	Water ATM with Aquagard	8.00	SET
8	Garbage Disposal	20.00	SET
9	Dipa Stand	3.00	SET
Landscaping & Horticulture			
1	Reclamation of works like cleaning of total area, cleaning of unwanted shrubs, stumps uprooting rank, vegetation, unwanted grass, wood, twigs, breaking clods, tilling of area, dumping of above materials at required spots, lifting of the above materials from the garden area of the premises to outside by mechanical means including loading & unloading charges as per the instruction of Officer-in-charges.	1000.00	SQM
2	Supply of good quality garden soil preferably red alluvial /sandy loam with texture neither too coarse nor too fine with a fair degree of water retaining capacity sufficiently porous for microbial activity, containing adequate humus with a Ph range from 6.5 to 7.5 should be free from any undesirable inorganic materials like wastages of construction, roots and bushes of wild plants, polythene, garbage etc., to be collected after duly screened including cost, conveyance, royalty and other charges with labour and T & P charges for loading, unloading and stacking at site in the separate heaps of (1.5 x 1.5x 0.5) cum or its multiples taken into 1(one) cum for measurement and payment purposes and completed in all respect for the park.	150.00	CUM
3	Lifting & spreading of good soil uniformly over the surface area as per landscape design /advice of the site in-charge.	150.00	CUM
4	Supply of cow dung manure, well decomposed, garbage free, one Tractor load including loading, unloading and delivery at site.	25.00	CUM

5	Lifting & spreading of manure uniformly as per the direction of site in-charge.	25.00	CUM
6	Hoeing of soil & manure spreaded area over an area of approx. 1500 sqmtr. For smooth mixing in the upper Surface & leveling, dressing for grassing the area as per the instruction of Officer in-charge	1000.00	SQM
7	Supply of Bermuda bent grass / Zoicia japonica / shade loving grass well grown disease free, carpet formed, 2" thickness about for an area of 1000 sqm. in 1:5 i.e., 600 sqm. Including loading and unloading and delivery at site including cost of all materials, transportation, maintainance for 3 years etc complete as per direction of Engineer-in-charge.	450.00	SQM
8	Supply of Broad Leaf grass well grown disease free, carpet formed, 2" thickness about for an area of 1000 sqm. in 1:5 i.e., 600 sqm. Including loading and unloading and delivery at site including cost of all materials, transportation, maintainance for 3 years etc complete as per direction of Engineer-in-charge.	150.00	SQM
9	Dibbling of Broad leaf grass including watering, rolling, As per the instruction of Officer-in charge for 1500 sqmtr.	1000.00	SQM
10	Planting of Nerium Olander 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
11	Planting of Murya Exotica 4' ht. ornamental plants,well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
12	Planting of Bouganvillia 3 ½' ht. ornamental plants,well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
13	Planting of Ixora Coccinea 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
14	Planting of Gardenia Grandiflora 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
15	Planting of Tecoma Stans 2 ½' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
16	Planting of Almonda Cathritica 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
17	Planting of Jasminum species 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	20.00	NOS
18	Planting of Musanda species 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
19	Planting of Croton species 4 ' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites wih maintainance for 3 years.	10.00	NOS
20	Planting of Mini Tagar 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
21	Planting of Tarata dwarf 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
22	Planting of Varigated Tagar 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS
23	Planting of Hena 2' ht. well grown healthy plant species as per specified height all saplings are of healthy grown well canopy, disease free etc. including transport and delivery at site wih maintainance for 3 years.	20.00	NOS

24	Planting of Musanda red 3' ht. ornamental plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years.	10.00	NOS
25	Planting of Fox tail palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
26	Planting of Arica palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
27	Planting of Phoenix 3' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
28	Planting of Furcaria Watsonai 2' ht ornamental decorative specimen plants, well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	10.00	NOS
29	Planting of Juniper 3' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	10.00	NOS
30	Planting of Fish tail palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
31	Planting of Pichadia palm 7' ht ornamental decorative specimen plants well established healthy disease free in poly bag/ big container including transportation and delivery at sites with maintenance for 3 years. Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge.	5.00	NOS
32	Providing Circular Cement Concrete pots of top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 6 mm nominal size), reinforced with 7 nos (3 nos horizontal & 4 nos vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed surface, curing for specified period and stacking in required rows & height, all complete as per direction of Officer-in-charge.	50.00	NOS
33	Supply of hedge and edge plant, healthy disease free in poly bag/ container including transportation and delivery at sites. Planting of Duranta Goldiana/ Duranta Varigataed (Poly) 8" ht. i.e., 7 nos. per meter @ Rs. 10/- Per Plant (7 nos.x 4 line x area x Rs.10/-) Planting of each plant at specified location by application of fertilizer and pesticide as required as per instruction of Officer in-charge with maintenance for 3 years.	1400.00	NOS
34	Providing and fixing overhead type sprinkler system with self closing valve type 25mm X 20mm with self closing spring made up of aluminium alloy and brass fittings including cost of all materials, labour, T & P etc complete as per direction of Engineer-in-charge.	2.00	NOS
35	Supplying all materials, labour, T&P and fixing standard sized Bib cock of Jaquar Cat. No.-FLR-5037N or equivalent type of approved make etc complete including cutting the wall and making good the damages,	1.00	NOS

	including cost of all materials complete as per PH specification and direction of Engineering-in-charge.		
36	Supplying all materials , labours and tools and plants for fitting and fixing of 20mm dia CPVC pipes of 100% lead free and conforming to ASTM F442 Specific-2 CPVC(Make-ASTRAL/ASHIRBAD /Equivalent) with good quality including fittings and laying as per the site requirement etc., all complete including testing as per the direction and specification of Engineer-in-charge.	60.00	RM
Khandolite Stone Cladding at Toilet			
1	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in foundation and plinth with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	1.48	CUM
2	Providing and laying Khandolite stone masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	4.45	CUM
3	Providing and laying Khandolite stone ornamental/decorative masonry in cement mortar of mix (1:4) with Portland slag cement (PSC) and epoxy adhesive in superstructure with screened and washed sharp sand for mortar of approved quality from approved quarry including providing key stones in regular intervals for each layer including splay cutting, circular moulding and similar such type of works with all necessary projections, chamfering and corbelling, watering and curing etc. with all cost, conveyance, royalties, loading & unloading of all materials and cost of all labour, sundries, T & P required for the work including hoisting, lowering, dewatering if required etc. complete in all respect as directed by Engineer-in charge.	8.90	CUM
4	Providing and applying Exterior Colourless silicone water repellent coating of Nitocote SN522 evenly by spraying or brushing. Ensure an even coat over the entire surface. Porous surface should be well saturated with a two coat application Complete as per the manufacturer's specification. Nitocote SN522 penetrates into concrete for a minimum depth of penetration of 2mm & complies with BS 6477-92 Class A and Class B as silicone - based water repellent.	90.59	SQM
5	Provision for erection (fitting & fixing) of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.	115.20	SQM
6	Provision for removal of MS structural scaffolding all around the monument to safeguard the structure and making platform for structural conservation work carefully including cost, conveyance, loading and unloading of all	115.20	SQM

	materials and cost of all labour, sundries, T&P required for the work etc. complete in all respect as directed by the Engineer in charge.		
Interior Furnishing and furniture			
1	Providing and fixing in position false ceiling Gypsum board ceiling as per the pattern and design at two levels with tray pattern and cornice to have diffused lighting arrangement made from 12.5mm tk Fire line Gypsum board fixed with main G.I frame channels all along the wall shall be provided. The frame work to be suspended with G.I flats or adjustable M.S rod from intermediate channels using nuts and bolts as recommended using rawls plugs 12.5 mm dia bolts and soft cleat 27mmx37mmx25mm. Arrangements are to be made to accommodate light fixtures, curtain rails by forming recessed channels which shall be done with jointing compound and paper tape .Ceiling to be leveled and free from cracks . Items to be completed in all respect to the architect's approval .Openings to be made in the ceiling as per architect 's approval to accommodate lighting fixtures. Opening in the ceiling are to be tied with perimeter channel complete with the cost of all labour and material i/c painting with acrylic emulsion painting of two coats with primer coat .	647.78	SQM
2	Providing & Fixing of Armstrong Mineral Fibre Acoustical Suspended Ceiling System with DuneSupreme (Bevelled Tegular) Edge Tiles With Armstrong 15mmExposed GRID. The tiles should have Humidity Resistance (RH) of 99%, NRC 0.5, Light Reflectance ≥85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Colour White, Fire Performance UK Class 0 / Class 1 (BS 476 pt - 6 &7) in module size of 600 x 600 x 16mm , suitable for Green Building application, with Recycled content of 44%. The tile shall be laid on Armstrong Silhouette profile grid system with 15mm white flanges incorporating a 6mm central reveal in white/black colour and with a web height of 45mm and a load carrying capacity of minimum 15.68Kgs/M2 & minimum pull out strength of 100 Kgs.. Silhouette, Main Runners & Cross Tees to have mitred ends & "birdsmouth" notches to provide mitred cruciform junctions. The T Sections have a Galvanizing of 90 grams per M2 and need to be installed with Suspension system of Armstrong make. The Tile & Grid system used together should carry a 30 year warranty.To comprise main runner spaced at 1200mm centres securely fixed to the structural soffit using Armstrong suspension system (specifications below) at 1200mm maximum centre. The First/Last Armstrong suspension system at the end of each main runner should not be greater than 450mm from the adjacent wall. Flush fitting 1200mm long cross tees to be interlocked between main runners at 600mm centre to form 1200 x 600 mm module. Cut cross tees longer than 600mm require independent support. 600 x 600mm module to be formed by fitting 600mm long flush fitting cross tees centrally between the 1200 mm cross tees.Perimeter trim to be Armstrong wall angles of size 3000x19x19mm, secured to walls at 450 mm maximum centres.	280.80	SQM
3	Providing and fixing in position False ceiling Calsium Silicate board and a ceiling as per the pattern and design made from 12mm tk Calsium Silicate board fixed with main G.I frame channels all along the wall shall be provided. The frame work to be suspended with G.I flats or adjustable M.S rod from intermediate channels using nuts and bolts as recommended using rawls plugs 12.5 mm dia bolts and soft cleat 27mmx37mmx25mm. Arrangements are to be madeto accommodate light fixtures, curtain rails by forming recessed channels which shall be done with jointing compound and paper tape .Ceiling to be levelled and free from cracks . Items to be completed in all respect to the architect's approval .Openings to be made in the ceiling as per architect 's approval .to accommodate lighting fixtures.Opening in the ceiling are to be tied withperimeter channel complete with the cost of all labour and material i/c painting with acrylic emulsion painting of two coats with primer	164.29	SQM

	coat and hardware as per drawing and specification and direction of Engineer-in-charge or consultant.		
4	Providing partition of full height partly Glazed partition for in other area as per drawing with Aluminium frame 50x25 mm with 1.5mm thickness intermediates, verticals and horizontal (600mmx600mm) as shown in drawing and shall be fixed to floor, ceiling, walls etc. with suitable size of screws, plugs including making good to damages, with the cost of applying a coat of primer to exposed faces of the timber and fixing 6 mm thk .BWR ply both sides of approved make and quality confirming to IS 710 over the frame work with screws at adequate intervals and fixing 1.0 mm thk Laminate both sides on ply (suede finish) with adhesive and 12mm thick glass with 3mm film etching to be fixed with Dorma patch fittings at glazed portion including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work, complete in all respect as per specification and direction of Engineer-in-charge. (Payment will be made as per height below the false ceiling)	14.73	SQM
5	Providing partition of low height (1200mm) partition as per drawing with Aluminium frame 50x25 mm with 1.5mm thickness intermediates, verticals and horizontal (600mmx600mm) as shown in drawing, and shall be fixed to floor ceiling, walls etc. with suitable size of screws, plugs including making good to all damages, with the cost of applying one coat of primer to exposed faces of the timber and fixing 6mm thk. water proof ply over the frame work on both sides with screws at adequate intervals and fixing 1.0mm thick laminates over it on both sides of approved colour and make to partition ,paneling as per drawing and fixing with suitable adhesive and 12mm thick glass with 3mm film etching to be fixed with Dorma patch fittings, including cost, conveyance, loading, unloading, royalties of all materials, cost of all labour, sundries, T&P required for the work, complete in all respect as per specification and direction of EIC.	5.04	SQM
6	Providing and putting in position column/ wall paneling as per approved drawing made out of 12mm thick BWR ply over framing with 1mm thick approved colour laminate including cost of all materials, labours, T&P etc required for the work complete in all respect as per the direction of the engineer-in-charge.	62.37	SQM
7	Providing, fitting & fixing of premoulded decorative corner beading of GRC. Having cross sectional dimension 112x80mm and fixing the same by providing PVC plug, screw, cornice adhesive, fevicol etc complete in all respect as per direction of Engineer-in-charge.	286.80	MTR
8	Providing and fixing Roller blinds of MAC/VISTA brand as per the approved shade and design alongwith all the accessories including cost, conveyance, loading, unloading of all materials, cost of all labour sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.	42.08	SQM
9	Supplying fitting and fixing in position wallpaper of dreamz / flow / icon of Marshall or equivalent make as per approved pattern and size to the internal surface of wall or partition including cost, conveyance, loading, unloading of all materials, cost of all labour sundries and T & P etc. required for the work etc. complete as per specification and direction of Engineer-in-charge.		
A	Customise wall paper	51.62	SQM
B	Printed wall paper	34.41	SQM
10	Paintings	50.00	NOS
11	Supplying of storage made out of 18mm perlam with two side panel, one bottom panel & a back panel (9mm). It should have two no of openable shutters .The shutter should be fixed on to the cabinet by auto shut hinges.All exposed edges be mechanically edge bended with PVC edge binding tape (REHAU/ Dolkan) & hot melt glue. It should have knockdown arrangement for fitting. All booring has to be done on CNC for precession of fitting .All hardware fittings will be of Hettich/Ebco/Hafele make. It should be provided with plinth adjusters on the bottom	143.54	SQM

12	Supplying of credenza made out of 18mm perlam with two side panel, one bottom panel & a back panel (9mm). It should have two drawer on top & two no of openable shutters on the bottom . It should be a 25 mm thick edgebanding top.The shutter should be fixed on to the cabinet by auto shut hinges.All exposed edges be mechanically edge bended with PVC edge binding tape (REHAU/ Dolkan) & hot melt glue. It should have knockdown arrangement for fitting. All booring has to be done on CNC for precession of fitting .All hardware fittings will be of Hettich/Ebco/Hafele make. It should be provided with plinth adjusters on the bottom.	2.05	MTR
13	Supplying of pantry unit made out of 18mm solid ply. It should have two no of openable shutters. The shutter should be fixed on to the cabinet by auto shut hinges. The top will be moulded granite top.It should be provided with steel sink of size 22" X 18"All exposed edges be mechanically edge bended with PVC edge binding tape (REHAU/ Dolkan) & hot melt glue. It should have knockdown arrangement for fitting. All booring has to be done on CNC for precession of fitting .All hardware fittings will be of Hettich/Ebco/Hafele make. It should be provided with plinth adjusters on the bottom.	2.00	NOS
FURNITURE			
14	Supplying and placing of Single Seater Sofa, Wooden Frame, SS Pipe Leg, Size in mm - 820(L) X 790(D) X 750(H) Henely Pure leather	12.00	NOS
15	Supplying and placing of Two Seater Sofa, Wooden Frame, SS Pipe Leg, Size in mm - 1330(L) X 790(D) X 750(H) Henely Pure leather	1.00	NOS
16	Supplying and fixing of center table of Cliff or Equivalent. Toughened Glass, 12mm Thick, Chrome Plated Pipe Frame 600x600mm	7.00	NOS
17	Supply of table should be made out of 25mm thick exterior Grade MDF board with approve shade of laminate hot pressed on to it with D3 grade glue. The table should have two nos of leg 18mm that continues upto the floor and the leg should be connect by a modesty panel of 18mm thickness. All esposed edges should be edgebanded mechincally with PVC (Rehau/Dolkan) edgebanding tape and hotmelt glue.It should have knowndown arragement of fitting. All hardwares should be of Hettich/Ebco/ Hafele make. The table should be provided with inbuilt storage of size- 380X450 at left or right as per orientation. All boring should be in CNC precision.		
a	T1-6' 0" x 3' 0"	1.00	NOS
b	T2-5' 0" x 2' 6"	5.00	NOS
c	T3-5' 0" x 1' 8"	7.00	NOS
d	T4-6' 0" x 3' 0" (dining)	8.00	NOS
18	Supply of Conference table should be made out of 25mm thick exterior Grade MDF board with approve shade of laminate hot pressed on to it with D3 grade glue. The table should have legs 18mm that continues upto the floor and the leg should be connected by a modesty panel of 18mm thickness. All esposed edges should be edgebanded mechanically with PVC (Rehau/Dolkan) edgebanding tape and hotmelt glue.It should have knowndown arragement of fitting. All hardwares should be of Hettich/Ebco/ Hafele make. All boring should be in CNC precision. Conference Table T5- 23' 0" x 7' 0"/3' 0"	14.40	MTR
19	TV Panel with Ledge-1350x200x1050mm	6.00	NOS
20	King size Bed with Head board-2030x1850x325mm. Unit made out of Plywood with 1mm approved shade laminates. The Head Board, Foot Board and Side Panel of the bed will be 25mm thickness. The mattress rest areas will be 12mm Plywood. All hardware fittings will be Hettich and Ebco.	6.00	NOS
21	Single Bed with Head board-1030x1850x325mm. Unit made out of Plywood with 1mm approved shade laminates. The Head Board, Foot Board and Side Panel of the bed will be 25mm thickness. The mattress rest areas will be 12mm Plywood. All hardware fittings will be Hettich and Ebco.	17.00	NOS
22	Bed side Table-400x400x450mm. Unit made out of Plywood with 1mm approved shade laminates. The cabinet panel thickness will be 18mm and	29.00	NOS

	back panel is 6mm. The PVC base plinths are provided at the bottom. The whole furniture is knock down. All hardware fittings will be Hettich		
23	Table with fixed storage-1350x600x750mm.The table top made out of 25mm Post lamination with plywood having two side 18mm panels continuing up to the floor connected by a 18mm thick modesty panel	6.00	NOS
24	Wardrobe with Mirror Unit-1500x600x2100mm.Unit made out of Plywood with 1mm approved shade laminates with two side panels. The back panel is 8mm. It should have multiple shutters according to the length. The shutter should be fixed on to the cabinet by auto	18.90	SQM
25	Curtain fabric, Mattress posture 6'-6"x3'-0"x8", Bedsheet (90"x108"), Pilow cover (17"x27"), Hand towel (16"x26"), Bath towel (27"x54"), Floor mat (20"x30"), Duvet (106"x94"), Duvet cover (109"x57")	6.00	SET
26	Curtain fabric, Mattress posture 6'-6"x3'-0"x8", Bedsheet (50"x108"), Pilow cover (17"x27"), Hand towel (16"x26"), Bath towel (27"x54"), Floor mat (20"x30"), Duvet (106"x54"), Duvet cover (109"x57")	17.00	SET
27	Luggage Rack with 2 layer Batton-1200x450x400mm	6.00	NOS
28	Chairs		
a	Supplying and placing of Chairman's Chair Very High Back Pure Leather, Chrome Finished Fixed Arms, 4 Position Locking, Anti Shock-Synchro Tilt Mech, Die-Cast Aluminium Pedestal, Bk Ht Adj, Black (L01), Camel Colour (L02)	1.00	NOS
b	Supplying and placing of MD/GM's Chair High Back HB & MB-KTS Mech 4 Position Locking, Soft touch PU Arms, Chrome-Plated arms & Pedestal, Adj Backrest, Conf HB & MB-Fixed arms, Fixed Backrest, Black Leatherette, Voila Fabric (V01 - V17)	4.00	NOS
c	Supplying and placing of GMC's Chair Mid Back HB & MB-KTS Mech 4 Position Locking, Soft touch PU Arms, Chrome-Plated arms & Pedestal, Adj Backrest, Conf HB & MB-Fixed arms, Fixed Backrest, Black Leatherette, Voila Fabric (V01 - V17)	5.00	NOS
d	Supplying and placing of meeting's Chair Mid Back W/O Seat Slide KTS Mech 4 Position Locking, Die Cast polished aluminium Pedestal, Chrome-plating element in PU-up-down adj arms & Ht. Adj Backrest Leatherette:- 13R (Black) Only	20.00	NOS
e	Supplying and placing of discussion's Chair High Back W/O Seat Slide KTS Mech 4 Position Locking, Die Cast polished aluminium Pedestal, Chrome-plating element in PU-up-down adj arms & Ht. Adj Backrest Leatherette:- 13R (Black) Only	21.00	NOS
f	Supplying and placing of work station's Chair VENTILLO (Company - 1120) FU9Y01TX151SXXXX - High Back CTS Mechanism, Upright position locking, Mesh Back, Fixed arms, Nylon Pedestal Black Mesh, Seat in V01 To V17	51.00	NOS
g	Supplying and placing of Conference Chair KAREENA NXT (Company - 1130) FU9P02TC13RSXXXX - Mid Back Conference HB & MB-KTS Mech 4 Position Locking, Soft touch PU Arms, Chrome-Plated arms & Pedestal, Adj Backrest, Conf HB & MB-Fixed arms, Fixed Backrest, Black Leatherette, Voila Fabric (V01 - V17)	6.00	NOS
h	Supplying and placing of Visitor's Chair SEDENA (Company - 1130) FUSE12XXL01SXXXX - Visitor, Pure Leather, Chrome Finished Fixed Arms, 4 Position Locking, Anti Shock-Synchro Tilt Mech, Die-Cast Aluminium Pedestal, Bk Ht Adj, Black (L01), Camel Colour (L02)	2.00	NOS
i	Supplying and placing of Visitor's Chair KAREENA NXT (Company - 1130) FU9P12TX13RSXXXX - Visitor, HB & MB-KTS Mech 4 Position Locking, Soft touch PU Arms, Chrome-Plated arms & Pedestal, Adj Backrest, Conf HB & MB-Fixed arms, Fixed Backrest, Black Leatherette, Voila Fabric (V01 - V17)	8.00	NOS
ELECTRICAL			
FAÇADE ILLUMINATION			
1	Supply of LED Spot Light (15-20)w Surface Mounted Fixture with body made of Pressure Die Cast Aluminum Alloy housing with Heat Resistant	143.0	NOS

	Toughened Glass Cover and PMMA Secondary Lens. The Driver should have inbuilt Protection against Short Circuit, Miswiring, Over Voltage and Surge Protection of upto 20kV, CCT - 3000k, PF>.95. CRI>80.Operating Voltage Between (140-270)V. Avg Life of 50,000 Burning Hours @L70.		
2	Supply of LED Spot Light (10-12)w Surface Mounted Fixture with body made of Pressure Die Cast Aluminum Alloy housing with Heat Resistant Toughened Glass Cover and PMMA Secondary Lens. The Driver should have inbuilt Protection against Short Circuit, Miswiring, Over Voltage and Surge Protection of upto 20kV, CCT - 3000K, PF>.95.CRI>80 Operating Voltage Between (140-270)V. Avg Life of 50,000 Burning Hours @L70.	4.0	NOS
3	Supply of LED 600mm Linear Wall washer (15-20)w With Body made of Extruded Aluminum Housing and Toughened Glass Front Cover . Encapsulated Isolated Driver with Inbuilt Protection against Short Circuit, Miswiring, Over Voltage and Surge Protection of upto 20kV, CCT - 3000K, PF>.95.CRI>80 Operating Voltage Between (140-270)V. Avg Life of 50,000 Burning Hours @L70.	14.0	NOS
4	Supply of LED 1200mm Linear Wall washer (40-45)w With Body made of Extruded Aluminum Housing and Toughened Glass Front Cover . Encapsulated Isolated Driver with Inbuilt Protection against Short Circuit, Miswiring, Over Voltage and Surge Protection of upto 20kV, CCT - 3000K, PF>.95.CRI>80. Operating Voltage Between (140-270)V. Avg Life of 50,000 Burning Hours @L70.	48.0	NOS
5	Supply of LED 1800mm Linear Wall washer (40-45)w With Body made of Extruded Aluminum Housing and Toughened Glass Front Cover . Encapsulated Isolated Driver with Inbuilt Protection against Short Circuit, Miswiring, Over Voltage and Surge Protection of upto 20kV, CCT - 3000K, PF>.95.CRI>80. Operating Voltage Between (140-270)V. Avg Life of 50,000 Burning Hours @L70.	6.0	NOS

ILLUMINATION TEMPLE COMPLEX

	Feeder Panel with timer		
1	Supplying, fixing, testing & commissioning the wall mounted, vermin proof, dust proof, outdoor type, double door with IP-55 protection, access from the front and shall have a lock in outer door, this lock shall be flushed with main door.	1.0	SET
	Incoming: 1 no 63A 3P+NL MCCB (25 KA) type isolator followed by 1 No 70-A 3P AC3 duty power contactor with Bypass Toggle switch & timer		
	Bus bars: 4 Nos.20x3mm E C Strips		
	Outgoing: 4 Nos 40-A, 4P MCB 'C' (10kA)		
	4 nos 40 Amp 2P MCB 'C' (10 KA)		
	Complete duly factory wired as per SLD		
	Cable & wires		
	Junction Box		
2	Supply, installation and testing of Cable Junction Boxes IP 66/69 "weather proof", for outdoor installation (with knockouts for cable entry - Black colour) for cable size 10-16sqmm and box size 155mm x 210mm x 92mm	10.0	SET
	Cable Laying		
3	Supply of following size of XLPE insulated & PVC sheathed Armoured Aluminium power cables ISI marked complete as per the direction of Engineer-in-charge.		
a	4 core x 16 sqmm A2XFY	60.00	MTR
b	4 core x 10 sqmm A2XWY	500.00	MTR
c	2 core x 6 sqmm A2XWY	500.00	MTR
d	2 core 2.5 sqmm flexible coper cable	295.00	MTR
4	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required complete as per the direction of Engineer-in-charge.		
a	Upto 35 sq. mm	800.00	MTR

5	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.		
j	EARTHING		
6	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required. Details of cost for one Set	2.0	SET
7	Providing and fixing of 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10.0	MTR
8	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	40.0	MTR
9	Supplying and fixing of following dia ISI marked HDPE pipe with material grade PE-80 in ground/recess including excavation the earthl and making good the same in case of recessed conduit as required. 40mm OD PN-8, 3 mm thick		
10	Supply & laying of medium grade IS:1239 standard GI pipe of following dia for Road Cross as per direction of Engineer-in-charge. 40mm	760.0	MTR
	Fittings & Fixtures	40.0	MTR
11	Supply, delivery, installation and testing of 12w LED Bollard 200mm dia 750mm long for uniform illumination for pathways with required size of cc foundation as per direction of Engineer-in-charge. Luminaire made of extruded aluminium alloy (grade 6063) with die-cast aluminium components and non corrosive SS fasteners. Reflector system made of die-cast / spun aluminium. Non yellowing UV stabilized polycarbonate clear / translucent diffuser. Silicone gasket Cast Iron / aluminium mounting plate with an anchorage unit made out of hot dip galvanised steel for extra guarantee against corrosion. Luminaire can be aligned on the mounting plate around 360°. Cable entries for through-wiring of mains supply cable. Protection class IP54 / IP65 Integral power supply Earth connection Safety class I CE-Conformity mark BIS - Conformity mark Suitable for operation on 240V, 50Hz single phase ac supply.	14.0	NOS
12	Supply, delivery, installation and testing of LED 12 watt or above (255mm x 90mm x 76mm or above), wall recessed/step lights, IP 65 protection as per direction of Engineer-in-charge. Luminaire made of pressure die cast aluminium alloy with non corrosive SS fasteners. Non yellowing UV stabilized translucent / semi-translucent / clear acrylic diffuser. Silicone gasket. Industrial plastic installation housing for preparing the recess opening in the wall / stairs. Cable entries for through-wiring of mains supply cable. Integral power supply. Earth connection Safety class I Protection class IP65 CE-Conformity mark BIS - Conformity mark	78.0	NOS

	Suitable for operation on 240V, 50Hz single phase ac supply.		
13	Supply, delivery, installation and testing of 4000mm long Cast Aluminium / Cast Iron ornamental Poles, Corrosion and UV Ray Resistant Coating with LED 45 watt post top light and foundation bolt and all fixing accessories with required size of rcc foundation as per direction of Engineer-in-charge.	59.0	NOS
	The control gear tray is prewired with MCB, terminal connectors for loop-in / loop-out arrangement.		
	Built-in control box with service door including lock and safety chain (except 200 x 50).		
	Can be Integrated with LED Modules.		
	Earth connection		
	Safety class I		
	CE-Conformity mark		
	BIS - Conformity mark		
14	Supply, installation and commissioning of 40W LED All in one intigrated solar street lights with two day back up, Corrosion and UV Ray Resistant Coating having compact, aesthetic, ecofriendly & modernlook in extruded aluminium construction with high efficiency monocrystalline silicon photo voltaic panel, high efficiency SMD LED 5700K having secondary lens optics for street lighting distribution, high performance lithium battery, MPPT charger controller and inteligent controll module/sensor with higher reliability, long service life. The cost including installation with RCC foundation and all accessories. The pole should have following specification	8.0	NOS
	Built-in control box with service door and safety rope.		
	Door is contoured to the shape of the pole with silicone rubber gasket.		
	The foundation bolt holes in the base plate are designed to be elongated for fine adjustments / alignment of the pole during installation.		
	Base plate made of steel grade E250 & foundation bolt of grade 4.6		
	Earth connection		
	Safety class I		
	CE-Conformity mark		
	BIS - Conformity mark		
ILLUMINATION YATRI NIWAS/SHOPING			
	Feeder Panel with timer		
1	Supplying, fixing, testing & commissioning the wall mounted, vermin proof, dust proof, outdoor type, double door with IP-55 protection, access from the front and shall have a lock in outer door, this lock shall be flushed with main door.	1.0	SET
	Incoming: 1 no 63A 3P+NL MCCB (25 KA) type isolator followed by 1 No 70-A 3P AC3 duty power contactor with Bypass Toggle switch & timer		
	Bus bars: 4 Nos.20x3mm E C Strips		
	Outgoing: 4 Nos 40-A, 4P MCB 'C' (10kA)		
	4 nos 40 Amp 2P MCB 'C' (10 KA)		
	Complete duly factory wired as per SLD		
	Cable & wires		
	Junction Box		
2	Supply, installation and testing of Cable Junction Boxes IP 66/69 "weather proof", for outdoor installation (with knockouts for cable entry - Black colour) for cable size 10-16sqmm and box size 155mm x 210mm x 92mm (Hensel make or equivalent)	6.0	SET
	Cable Laying		
3	Supply of following size of XLPE insulated & PVC sheathed Armoured Aluminium power cables ISI marked complete as per the direction of Engineer-in-charge.		
a	4 core x 16 sqmm A2XFY	60.00	MTR
b	4 core x 10 sqmm A2XWY	350.00	MTR

c	2 core x 6 sqmm A2XWY	250.00	MTR
d	2 core 2.5 sqmm flexible coper cable	230.00	MTR
4	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required complete as per the direction of Engineer-in-charge.		
a	Upto 35 sq. mm	450.00	MTR
5	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.		
j	EARTHING		
6	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required. Details of cost for one Set	2.0	SET
7	Providing and fixing of 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10.0	MTR
8	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	40.0	MTR
9	Supplying and fixing of following dia ISI marked HDPE pipe with material grade PE-80 in ground/recess including excavation the earthl and making good the same in case of recessed conduit as required.		
	40mm OD PN-8, 3 mm thick	420.0	MTR
10	Supply & laying of medium grade IS:1239 standard GI pipe of following dia for Road Cross as per direction of Engineer-in-charge.		
	40mm	30.0	MTR
	Fittings & Fixtures		
11	Supply, delivery, installation and testing of 12w LED Bollard 200mm dia 750mm long for uniform illumination for pathways with required size of cc foundation as per direction of Engineer-in-charge.	22.0	NOS
	Luminaire made of extruded aluminium alloy (grade 6063) with die-cast aluminium components and non corrosive SS fasteners.		
	Reflector system made of die-cast / spun aluminium.		
	Non yellowing UV stabilized polycarbonate clear / translucent diffuser.		
	Silicone gasket		
	Cast Iron / aluminium mounting plate with an anchorage unit made out of hot dip galvanised steel for extra guarantee against corrosion. Luminaire can be aligned on the mounting plate around 360°.		
	Cable entries for through-wiring of mains supply cable.		
	Protection class IP54 / IP65		
	Integral power supply		
	Earth connection		
	Safety class I		
	CE-Conformity mark		
	BIS - Conformity mark		
	Suitable for operation on 240V, 50Hz single phase ac supply.		
12	Supply, delivery, installation and testing of 4000mm long Cast Aluminium / Cast Iron ornamental Poles, Corrosion and UV Ray Resistant Coating with LED 45 watt post top light and foundation bolt and all fixing accessories with required size of rcc foundation as per direction of Engineer-in-charge.	46.0	NOS
	The control gear tray is prewired with MCB, terminal connectors for loop-in / loop-out arrangement.		
	Built-in control box with service door including lock and safety chain (except 200 x 50).		
	Can be Integrated with LED Modules.		
	Earth connection		

	Safety class I		
	CE-Conformity mark		
	BIS - Conformity mark		
13	Supply, installation and commissioning of 40W LED All in one integrated solar street lights with two day back up of Cast Aluminium / Cast Iron ornamental poles, Corrosion and UV Ray Resistant Coating having compact, aesthetic, ecofriendly & modern look in extruded aluminium construction with high efficiency monocrystalline silicon photo voltaic panel, high efficiency SMD LED 5700K having secondary lens optics for street lighting distribution, high performance lithium battery, MPPT charger controller and intelligent control module/sensor with higher reliability, long service life. The cost including installation with RCC foundation and all accessories. The pole should have following specification Built-in control box with service door and safety rope. Door is contoured to the shape of the pole with silicone rubber gasket. The foundation bolt holes in the base plate are designed to be elongated for fine adjustments / alignment of the pole during installation. Base plate made of steel grade E250 & foundation bolt of grade 4.6 Earth connection Safety class I CE-Conformity mark BIS - Conformity mark	4.0	NOS
	ILLUMINATION EXTERNAL ROAD		
	Feeder Panel with timer		
1	Supplying, fixing, testing & commissioning the wall mounted, vermin proof, dust proof, outdoor type, double door with IP-55 protection, access from the front and shall have a lock in outer door, this lock shall be flushed with main door. Incoming: 1 no 63A 3P+NL MCCB (25 KA) type isolator followed by 1 No 70-A 3P AC3 duty power contactor with Bypass Toggle switch & timer Bus bars: 4 Nos.20x3mm E C Strips Outgoing: 4 Nos 40-A, 4P MCB 'C' (10kA) 4 nos 40 Amp 2P MCB 'C' (10 KA) Complete duly factory wired as per SLD Cable & wires Cable Laying	1.0	SET
2	Supply of following size of XLPE insulated & PVC sheathed Armoured Aluminium power cables ISI marked complete as per the direction of Engineer-in-charge.		
a	4 core x 16 sqmm A2XFY	40.00	MTR
b	4 core x 10 sqmm A2XWY	200.00	MTR
c	2 core 2.5 sqmm flexible copper cable	98.00	MTR
3	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required complete as per the direction of Engineer-in-charge.		
a	Upto 35 sq. mm	220.00	MTR
4	Supplying and fixing cable route marker with 10 cm X 10 cm X 5 mm thick G.I. plate with inscription there on, bolted /welded to 35 mm X 35 mm X 6 mm angle iron, 60 cm long and fixing the same in ground as required.		
j	EARTHING		
5	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required. Details of cost for one Set	2.0	SET

6	Providing and fixing of 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10.0	MTR
7	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	20.0	MTR
8	Supplying and fixing of following dia ISI marked HDPE pipe with material grade PE-80 in ground/recess including excavation the earthl and making good the same in case of recessed conduit as required.		
	40mm OD PN-8, 3 mm thick	200.0	MTR
9	Supply & laying of medium grade IS:1239 standard GI pipe of following dia for Road Cross as per direction of Engineer-in-charge.		
	40mm	20.0	MTR
	Fittings & Fixtures		
10	Supply, delivery, installation and testing of 6000mm long cast iron ornamental pole with single arm bracket, LED 70 watt light and foundation bolt and all fixing accessories with required size of rcc foundation as per direction of Engineer-in-charge	14.00	NOS
	Built-in control box with cast aluminium service door and safety rope.		
	Die cast aluminium door is contoured to the shape of the pole with silicone rubber gasket.		
	The control gear tray is prewired with MCB, terminal connectors for loop-in / loop-out arrangement.		
	The foundation bolt holes in the base plate are designed to be elongated for fine adjustments / alignment of the pole during installation.		
	Base plate made of steel grade E250 & foundation bolt of grade 4.6		
	Earth connection		
	Safety class I		
	CE-Conformity mark		
	BIS - Conformity mark		

PA & CCTV

A	PA Paging System		
1	SITC of SIP IP Horn Speaker with Built-in 30W amplifier IP67 rating, with PoE 802.3af enabled (Power-over-Ethernet) ,48K OPUS,G711U,G711A GSM MP3Audio Codec, Support RTP Multicast .	10.0	Nos
2	SITC of SIP IP Wall Speaker with Built-in 15W amplifier, IP55 rating with PoE 802.3af enabled (Power-over-Ethernet) ,48K OPUS,G711U,G711A GSM MP3Audio Codec, Support RTP Multicast.	25.0	Nos
3	SITC of SIP Paging server with bell scheduler for multicast output, DTMF control of zone selection, SIP RFC 3261 compatible Line-in connection for background music multicasting, Line-out connection to support analog amplifiers with PoE 802.3af enabled (Power-over-Ethernet).	1.0	Nos
4	SITC of SIP Multicast VoIP Microphone for Multicast transmit, with PoE 802.3af enabled (Power-over-Ethernet), G711 codec, web-based configuration and firmware upload with autoprovision support.	2.0	Nos
5	SITC of (1000 W Amplifier) The Digital 2x 500W Class D, high efficiency amplifier shall be an EN54-16 compliant and certified system device in a 2 RU, 19" cabinet The amplifier shall be permanently monitored by the system controller.Rated load impedance (output power)-100 V 20 Ω (500 W),70 V 10 Ω (500 W),Rated output power, 1 kHz, THD ≤ 1% 2 x 500 W, Rated input voltage +6 dBu,Max. RMS voltage swing, 1 kHz, THD ≤ 1%, without load-100 V 110 V 70 V 78 V aspects.2x 500 Watt Class D amplifier,4 channel input on RJ45 connector, amp link in and out.	1.0	Nos
6	SITC of IP PBX System support up to 500 users and minimum 50 concurrent calls, integrated 1 PSTN trunk FXO ports through External Gateway, 1 analog telephone FXS ports with lifeline capability and up to 50 SIP trunk accounts, Gigabit network ports with Integrates PoE, USB, SD card, Supports up to a 5-level IVR (Interactive Voice Response), Supports any SIP video endpoint that uses the H.264, H.263 or H.263+ codecs.	1.0	Nos

7	SITC of IP Based PoE Phone, 2 SIP accounts, 2 line keys, 3-way conferencing, 3 XML programmable context-sensitive soft keys, Dual-switched 10/100 mbps ports, integrated PoE, HD audio on speakerphone and handset.	50.0	Nos
B	CCTV Surveillance System		
1	SITC of 4MP Dome/Bullet IR Network Camera (1/3" CMOS sensor, Mini. Pixel of 2688*1520 or higher video quality, frame rate of Up to 25fps, Ultra 265, H.265, H.264 & MJPEG video compression, 2.8mm Fixed lens, physical ICR filter of both day and night, 30mtr IR Distance, 120dB WDR , 3Streams Supported, WDR , 3D-DNR for noise reduction, BLC, ICR, EXIR, Audio In and Out, Alarm in and Out. IPv4/IPv6 network supported, IP67, IK10 rated for weatherproofing, ONVIF ver 2.2 or higher, PoE IEEE 802.3af (UL, FCC, CE, BIS certified.) with accessories as required.	70.0	Nos
2	SITC of 4MP Motorised Varifocal Bullet IR Network Camera (1/3" CMOS sensor, Mini. Pixel of 2688*1520 or higher video quality, frame rate of Up to 25fps, Ultra 265, H.265, H.264 & MJPEG video compression, 2.8-12mm Fixed lens, physical ICR filter of both day and night, 50mtr IR Distance, 120dB WDR , 3Streams Supported, WDR , 3D-DNR for noise reduction, BLC, ICR, EXIR, Audio In and Out, Alarm in and Out. IPv4/IPv6 network supported, IP67, IK10 rated for weatherproofing, ONVIF ver 2.2 or higher, PoE IEEE 802.3af (UL, FCC, CE, BIS certified.) with accessories as required.	30.0	Nos
3	SITC of 4MP IP PTZ Network Camera 1/2.8" CMOS, ICR, 1920x1080:30fps, Ultra 265/H.264/MJPEG, Triple streams, DC12V, Micro SD card slot up to 256gb, -40-65 °C, IP66, 25x optical zoom(5.2~ 125mm), IR range: up to 150m, IR anti-reflection window IP66 rated for weather proofing, ONVIF, POE IEEE 802.3af (UL, FCC, CE, BIS certified).	4.0	Nos
4	SITC of 64Ch Network Video Recorder, Support Ultra H.265/H.265/H.264 video formats Supports mainstream cameras of ONVIF conformance(Profile S, Profile G, Profile T and RTSP protocols. Support 2-ch HDMI, 1-ch VGA. HDMI1 and HDMI2 up to 4K (3840x2160) resolution Up to 12 Megapixels resolution recording. Support RAID 0, 1, 5, 6, 10, 8 SATA HDDs, Up to 10TB for each HDD. Support cloud upgrade.	3.0	Nos
5	8TB Surveillance Hardisk.	24.0	Nos
6	SITC of 65" UHD (3,840 x 2,160) TV with 300 nits brightness, 10W+10W Audio Output, Crestron Connected®, NTP sync timer, BEACON, Embedded CM (contents manager), Soft AP, WiFi , Screen Share (Miracast), DIAL, Bluetooth Audio Playback, Hotel Mode , Welcome Screen (Splash Image), Insert Image, One Channel Map, IP Channel Manager, External Speaker Out , Remote jack pack, Moving Picture Playback, Auto Off / Sleep Timer, Smart Energy Saving, Motion Eye Care, USB Cloning, WOL, Interface : Set Side - HDMI In 3, USB 1, CI Slot, RF In, Digital Audio Out (Optical), RS-232C, RJ45 , External Speaker Out, Power Consumption(Typ.)-145 W, with 3years Warranty. Make: Samsung/ LG /SONY	3.0	Nos
C	Network Connectivity for PA & Sureveillance System		
1	SITC of 24 Port 1000Mbps SFP Layer 3 Switch includes 16 Gigabit Combo ports, 8 Gigabit SFP additional 4 x 1G/10G SFP+ ports, 2 x 20G stacking ports. Supports Dual Hotswappable Power Supplies. (Default Shipped with Single Power Supply) . Supports OSPF v2/v3, BGP4+, VRRP.	1.0	Nos
2	SITC of Industrial Ethernet, managed PoE switch with 8 Giga PoE ports, 2 Gigabit SFP ports.(support IEEE802.3at, Power Budget 240Watts).	5.0	Nos
3	SITC of 8 Port 10/100/1000Mbps POE Layer 2 switch with 2 Gigabit SFP Ports, POE Budget 124Watts.	15.0	Nos
4	SITC of Cat6 23 AWG Outdoor Double Jacketing Cable through existing conduit.	6000.0	Mtrs
5	SITC of 6 Core Single Mode(OS2) Unitube Armoured Optic Fiber Cable in existing conduits.	2000.0	Mtrs

6	SITC of 24 Port Rack Mount Draw Type LIU loaded with SM SC Adaptors and Pigtails including core splicing and connnectrisation.	2.0	Nos
7	SITC of 6 Port Rack Mount Draw Type LIU loaded with SM SC Adaptors and Pigtails including core splicing and connnectrisation.	10.0	Nos
8	SITC of 1000BASE-LX/LH SFP transceiver module, MMF/SMF, 1310nm.	20.0	Nos
9	SITC of Fiber Optic Single Mode OS2 SC-LC, Duplex Patch Cords, 3mtr length.	20.0	Nos
10	SITC of 9U/500D UL Listed wall mount Rack loaded with one no 6Skt 5AMP power distribution unit,1no Cable manager, Two nos 90CFM FANs and one pkt H/W screw.	1.0	Nos
11	SITC of 6U/500D UL Listed wall mount Rack loaded with one no 6Skt 5AMP power distribution unit,1no Cable manager, Two nos 90CFM FANs and one pkt H/W screw.	10.0	Nos
12	SITC of 24U 600/650D UL Listed Floor mount Rack with Front glass door with Cam lock, Rear mesh door with Cam lock and 3inch Castor Wheel included with 1 no 6/16 Amp Indian-Standard - 06 Socket - Single Pole / Screw Mountable / 16 Amp MCB / Alternating Current - 16 Amp 3 Pin Plug with Power Cable 2.5 sq.mm 3 meter Length, 4nos 1U Metal Cable manager with Plastic cable loops, 2nos CFM FAN set, 1no Monitor Tray - Ventilation - 495W - 375D and H/W screw920sets).	1.0	Nos
13	SITC of 600VA Line Interactive UPS.	10.0	Nos
14	SITC of 1KVA /.9kw Online Rack mountable UPS with inbuilt battery.	1.0	Nos
TV & PROJECTOR			
1	Supply, installation and commissioning of 5400 Ansilumen Projector, 8' x 6' motorized screen, 20 Mtr HDMI cable and mounting accessories.	1	SET
2	Supply, installation and commissioning of 24 x 7 commercial Display 43" IPS,LED, Resolution-1,920 x 1,080p Full HD Information Display, 300nits, DCR-500000:1, CR- 1100:1, with IR, RJ-45, HDMI, RGB, USB ports.	1	NO
3	Supply, installation and commissioning of domestic32" IPS,LED Display.	6	NO
TRANSFORMER INSTALLATION			
	TRANSFORMER INSTALLATION WORK		
	Cable Laying		
1	Supply of following size of PVC Armoured cables ISI marked.		
a	3&1/2 core x 300 sqmm A2XFY	20.00	MTR
b	3&1/2 core x 400 sqmm A2XFY	10.00	MTR
2	Laying of one number of PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of size exceeding 120 sq.mm but not exceeding 400 sq.mm direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning protective covering and refilling the trench etc. as required.	20.00	MTR
	Cable termination:		
3	Supplying and making end termination with brass compression gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum cable of 1.1 KV as required.		
a	3&1/2 core x 300 sqmm A2XFY	2.00	EA
b	3&1/2 core x 400 sqmm A2XFY	2.00	EA
	Cable Trench & Hume Pipe:		
4	Construction of cable trench of following size complete, base foundation with C.C 1:3:6, 250mm brick walls, filling the inside area with sand, removable RCC slab for chambers with C.C 1:2:4 on the top, wall and top plastering etc complete as per the approved drawing		
a	[1000mm(W) x 1000mm(D)]	10.0	MTR
b	[600mm(W) x 1000mm(D)]	60.0	MTR
5	Providing and laying Non Pressure NP-3 class (Medium duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete		

a	300mm dia	20.0	MTR
b	450mm dia	20.0	MTR
6	Supplying all materials,labours,T&P for constructing inspection chamber of following size with cement concrete (1:3:6) on bed with hard granite metal size 40mm and flyash brickwork in cement mortar (1:4) in foundation and plinth, 100mm thick RCC M20 cover slab with supplying fitting and fixing of medium duty SFRC manhole cover, moulding and shaping the channel and benching with cement concrete (1:2:4) using 12mm size hg chips,12mm thick cement plaster in cement mortar (1:3) with punning to inside, cement plaster in CM (1:3) to outside the chamber including centring, shuttering, providing required quantity of MS rods and binding wires for reinforcement, bending, binding, tying the grills and placing in the proper position and drawing and design and PH specification including cost, conveyance, royalty, taxes etc for all materials as per the drawing, design and direction of Engineer-in-charge.		
a	450mm x 450mm x 600mm	2.0	NOS
a	600mm x 600mm x 750mm	2.0	NOS
	DP Structure		
7	Supply & fixing CT meter sheet steel enclosures made out of 16 gauge CRCA sheet ,double door with lock, neopraene gasket all around, two numbers earth lugs including painting ,padlock arrangement. Class 0.5 with O/P burden of 30VA	1.0	NOS
8	Supplying and erection of 150X 150 RS joist pole of 11m long. (30.6 kg /mtr).	673.2	KG
9	Supply installation and commissioning of 400Amp 11kv on load isolated air brake switch with braking capacity of 10kA complete with following accessories. Knife blade switches both Male/Female. Operating GI pipe with handle & rotating mechanism. Pad locking arrangement with pad lock. Scope also includes interconnecting AB switch OH line with 30sqmm AAC conductor & interconnection to pin insulator/HG fuse set by suitable Cu flexible strip .Spring earth of the handle ,earthing of switch etc.	1.0	SET
10	Supply installation and commissioning of 11kV home gap fuse set on the double pole structure. The 11KV HG fuse set to be complete with 11KV insulators Cu horn gaps etc. The scope also includes interconnecting the HG fuse with transformer with "0" SWG HDB Cu conductor. (11KV, 400Amp, 3Pole)	1.0	SET
11	Supply installation and commissioning of 11KV lighting arrester including interconnection by 30sqmm AAC conductor & clamp(12KV, 5KA)	4.0	SET
12	Supply and fixing of substation bracket inj complete set. With 100x50x6 mm for MS channel, 75x40x6mm MS channel for AB switch and HG fuse, 50x50x5mm MS angle for Transformer (140Kg) including painting.	250.0	KG
13	Supply installation and commissioning of 11KV Disc Insulator 90 KN (B & S type)	12.0	NOS
14	Supply & fixing of 11 KV Disc hard ware fittings (in pairs)	6.0	SET
15	Supply installation and commissioning of HT Stay set with complete accessories like Anchor rods, insulators, bow eye bolts and stay wires. Scope inclusive of supply of stay clamps.	2.0	SET
16	Supply of materials and installation of pipe earth electrode made out of 40mm dia class B G.I. pipe of 3.0 metre long with arrangements for fitting/ termination of G.I. flat / wire with G. I. nut bolts & washers including cost of charcoal, salt, foreign soil, water pouring arrangements, brick masonry enclosure on top with removable RCC cover complete with labour for excavation of pit in all kinds of soil & rock as required and as per direction of Engineer-in-charge.	4.0	NOS
17	Supply of materials and installation of chemical earthing size of chemical earth bar 3 mtr, size of earth pit 3' X 2' X 9' chemical compound to be used 50 kg. There is an arrangements for termination of copper strip of earth continuity conductor including cost of water pouring arrangements, brick masonry enclosure on top with removable cast iron cover complete with	2.0	NOS

	labour for excavation of pit in all kinds of soil & rock as required and as per direction of Engineer-in-charge.		
18	Supplying and laying 25 mm x 5 mm copper strip on surface or in recess for connection etc as required.	15.0	MTR
19	Supplying and laying 25 mm x 5mm G.I. strip on surface or in recess for connection etc as required.	30.0	MTR
20	Supply & fixing of GI nuts, bolts & washer of assoarted size for above work.	50.0	KG
21	Supply installation and commissioning of 500 KVA, 11/0.4KV (Coper wonded) Transformer with tap changer, BIS Energy level-II with necessary hardware including unloading from truck, leading to the pole/plinth location and EMR test etc as required.	1.0	NOS
22	Supply & providing of 11K GI pin & pin insulators	3.0	NOS
23	Providing and binding with aluminium binding wire for all type binding for transformer installation work.	5.0	KG
24	Supplying and painting with Aluminium Paint where ever required for transmission line.	5.0	LTR
25	Supplying and painting with Black paint where ever required for transmission line.	2.0	LTR
26	Supplying and painting with Redoxide paint where ever required for transmission line.	5.0	LTR
27	Supply installation and commissioning Panel Board for 500KVA Transformer (1 no of 800A 70 ka thermal magnetic MCCB, MFM with required CT, busbar etc.)	1.0	SET
28	Supply installation and commissioning LT Busing cover in the LT site of the transformer	4.0	NOS
29	Supply and construct with all material for Boundary wall for fencing and anti climbing with M.S. Gate 5'-0" x 8'-0".Sand & Gravel spreading over the entire area.	1.0	JOB
30	Supply and construct with all material for plinth of size 5'-0"x5'-0"x6'-0". 11 KV Single Circuit line	1.0	JOB
31	Supplying and erection of 150X 150 RS joist pole of 11m long. (30.6 kg /mtr). 4 nos	1337.6	KG
32	Supply & fixing of (100 x 50 x 6)mm M.S Channel	60.0	KG
33	Supply & fixing of 11 KV 'V' cross arm (10.2 Kg/Each)- 6 No	4.0	NOS
34	Supply & fixing of 11 KV top chanel. 1.3kg each.	4.0	NOS
35	Supply & fixing of back clamp for cross arm	4.0	NOS
36	Supply & providing of 11K GI pin & pin insulators	15.0	SET
37	Supply installation and commissioning of 11KV Disc Insulator 90 KN (B & S type)	16.0	NOS
38	Supply & fixing of 11 KV Disc hard ware fittings (in pairs)	8.0	SET
39	Supply installation and commissioning of HT Stay set with complete accessories like Anchor rods, insulators, bow eye bolts and stay wires. Scope inclusive of supply of stay clamps.	2.0	NOS
40	Supply & installation of coil earthing	4.0	NOS
41	Supply & fixing of assoarted nuts, bolts & washer for above work.	25.0	KG
42	Providing and binding with aluminium binding wire for all type binding for transformer installation work.	5.0	KG
43	Supply & stringing with 100mm ² insulated AAA Conductor.	0.60	KM
44	Supplying and painting with Aluminium Paint where ever required for transmission line.	5.0	LTR
45	Supplying and painting with Black paint where ever required for transmission line.	2.0	LTR
46	Supplying and painting with Redoxide paint where ever required for transmission line.	5.0	LTR
	Garding		
47	Supply & fixing of (75 x 40 x 6)mm M.S Channel	32.5	KG

48	Supply & fixing of No 8 G.I wire	30.0	KG
49	Supply & fixing of eye hook	80.0	NOS
	SAFETY EQUIPMENT'S & OTHER:		
50	Supply and hanging of Shock Treatment Chart duly Laminated.	1.0	NOS
51	Supply & Laying of 8 mm Thick Rubber Mat (1mtr x 2mtr), ISI mark of 1100 V Grade.	1.0	NOS
52	Supply and Installation of 4 Nos. Fire Buckets on a Mild Steel Stand complete as per specification and requirement of Fire Safety Provisions.	1.0	SET
53	Supply and Installation of 4.5 Kgs. Capacity CO2 type Fire Extinguisher complete as required.	4.0	NOS
54	Providing and fixing bi-lingual Danger HT notice board of 250mmx200mm as specified below, made of mild steel at least 2mm thick & vitreous enamelled signal red color on both sides as background & with inscriptions in enamelled vitreous white color on front side for lettering as required.	8.0	NOS
55	Supply of First Aid box with all required accessories.	1.0	SET

DG INSTALLATION

1	Supply of 63 KVA, 415 Volts (3-Phase) DG Set comprising of Cummins make engine model ----- developing 81 BHP and 63 KVA Stamford make alternator mounted on a common base , complete with: Fuel tank Battery and leads AMF control panel Residential silencer First fill of lube oil and coolant AVM pads Acoustic Enclosure PC 1.1	1.00	SET
2	Unloading, Shifting, Installation & commissioning with civil foundation, 4 nos earthing, 6 core 2.5sqmm copper FRLS PVC control cable, statutory (Electrical) approval, standard testing, silencer extension as per PCB rule.	1.00	SET
3	Supply, laying & testing of following size of PVC insulated, PVC sheathed, round armoured aluminium conductor power cable of 1100 volt grade laid on surface of wall / column / existing RCC / stone ware / masonry cable trench / cable tray / through G.I. pipe / hume pipe as the case may be, including cost of saddles / clamps / markers etc but excluding the cost of G. I. pipe / hume pipe complete with making good the damages caused and returning the balance unused cables to stores as required and as per direction of Engineer-in-charge.		
a	3.5 core 35 sq.mm XLPE	60.00	MTR
4	Supplying and fixing of Exhaust extension of 150MM DIA MS Pipe with wall Support including Horizontal Support with MS Steel, SS Below, Thermal Insulation of 50MM Rockwool, Chicken mess, Aluminium Sheet and painting etc.	4.00	MTR
5	Supplying and fixing of Exhaust extension of 150MM DIA MS Pipe with MS fabricated structure Support including Horizontal Support with MS Steel, SS Below, Thermal Insulation of 50MM Rockwool, Chicken mess, Aluminium Sheet and painting etc.	8.00	MTR

LIGHTNING ARRESTOR

A	CONVENTIONAL TYPE LIGHTNING ARRESTOR		
1	Supply, installation and commissioning of 8 mm aluminum round conductor complete as specified in drawing & Meets the requirements of DIN EN 50164-2 (VDE 0185 part 202) & VDE 0185-305 (IS/IEC 62305) , RD 8 ALU. Included Cross connector and Expansion piece.	50.00	MTR
	Supply, installation and commissioning of roof conductor holder for parapet- Polyamide Conductor holder: With M8 female thread or diameter		

	7mm, M8 Screw to connect the conductor holder. Weather and temperature resistant from -35 to +90 degree Celsius tested. Conductor holder @ 1 meter distance 177 30 M8.		
	Supply, installation and commissioning of polyamide roof cable holder for flat roof: DIN 48829 Form B1. Closed form with bottom. Filling weight 1Kg (frost-resistant concrete). Sleeve from polyethylene, black @ 1 meter distance. 165 MBG-8-10 (5218700)		
2	Supply, installation and commissioning of vertical air terminal with accessories: Providing of Air terminals as per IS-IEC -62305 part-3 16mm rod tapered to 10 mm aluminium rod : Meets the technical specification according to DIN EN 50164-2 (VDE 0815 part 202). Meets the requirement of VDE0185/305(IS/IEC 62305) 3Mtr Airterminal: semi-hard (E-AlMgSiO5 corresponds to DIN 48801) Suitable for high wind load. OBO Type No. 101 VL3000 (5401 98 9). Accessories : System consist of Fang Fix with base and clamp, on the top air terminal is erected. OBO Type No. F-FIX 16 (5403 20 0). Fang fix clamp made of SS, lightning tested for 100 KA 10/350 micro sec waveform. 16 KG stone of 365 mm diameter, high level of stability. Quick and easy mounting of interception rod using anchors. Concrete, frost-resistant, can be stacked.OBO Type No. F-FIX S16 (5403 22 7)	4.00	NOS
3	Supply, installation and commissioning of 10 mm dia solid, round conductor with 250 micron copper coating for using as Air-terminal and structural down conductors in case of structurally utilized concrete columns especially for highly corrosive areas, (i.e., projects / building near sea-shore). The conductors being copper coated can be connected with all accessories such as Cu (Copper), and SS (Stainless steel).	10.00	MTR
4	Supply, installation and commissioning of UL Listed & CPRI tested maintenance free, Low carbon copper coated earth rod of 3 metre electrode having diameter of 25 mm with copper coating thickness of 250micron tested as per IEC 62561-2 & is provided with universal clamp made of SS to connect rod with flat conductor. Earth conductivity enhancing compound shall be of 50 kg/pit tested as per IEC 62561-7, TCLP tested. The above arrangements shall be provided with heavy duty earth chamber of 5000kg load bearing capacity to ensure the safety of earthing system.	4.00	SET
B EARLY STREAMER EMISSION TYPE LIGHTNING ARRESTOR			
1	Supply of Active Lightening arrestor of Class A for building protection .It shall work on early streamer Emission principle & shall be made of stain less steel with a ΔT of 60 micro sec(79 mtr radius) A non reset table type counter (FLASH COUNTER) shall also be supplied to count the number of lighting occurrences.	1.00	SET
2	Supply of mounting plate for mast of 3 mtr with guy wire & base plate	1.00	SET
3	Supply of flash counter for the above device	1.00	SET
4	Supply of all materials, installation & testing of Copper safe earth electrode (chemical earthing) with earthing electrode of 3 metre long 50mm diameter hot dip galvanised pipe confirming IS:3043 including cost of 50kg chemical filling compound, masonry enclosure, C I cover, labour charges for excavation of pit in all kinds of soil complete as required.	1.00	SET
5	Supply of materials and laying under ground / floor through prelaid GI pipe and fixing to the wall supported on porcelain base insulators at an interval not exceeding 500mm including making connection to plate earthing and required brazing at joints with 70 sqmm copper cables for earthing of Lightening Arrestor as required complete as per direction of Engineer-in-charge.	40.0	MTR
6	Installation of Class A device on the top of building. The device shall be installed at a height of about 3 mtrs from the roof top of the building using a GI mast. The device shall be connected to the earth pit using copper tape of 25 mm x 3 mm or better. This copper tape shall be run firmly along the side of the mast with the help of spacers. It shall also be ensured that this down conductor shall not touch the building throughout. The down conductor shall	1.00	SET

	be connected to the earth electrode using Exothermic welding. A counter shall be installed at an appropriate place to count the number of occurrences. All the accessories like spacers, welding materiaetc required for the installation shall be arranged by the ABB or equivalent only.		
FIRE FIGHTING			
A	FIRE PUMP ROOM EQUIPMENT		
1	SITC of electrical Motor driven Main pump of horizontal centrifugal end suction backpull out type with gland packing and capable to deliver 2280 LPM at 70 MT. HEAD, with speed of 2900 RPM and complete set shall mounted on common base frame.	1.00	Nos.
2	SITC of electrical motor driven Jockey pump of horizontal centrifugal end suction back pull out type with gland packing and capable to deliver 180 LPM at 70 MT HEAD ,with speed of 2900RPM and complete set shall mounted on common base frame.	1.00	Nos.
3	SITC of Diesel Driven pump of horizontal centrifugal end suction backpull out type with gland packing and capable to deliver 2280 LPM at 70 MT. HEAD, with speed of 2900 RPM and complete set shall mounted on common base frame.	1.00	Nos.
4	Control Panel for Fire pumps.		
	Fabricating & Supply, installing, testing and commissioning of compartmentalised common control panel for Electrical motor driven pumps, Diesel engine driven pumps.	1.00	No.
5	1100 V GRADE POWER / CONTROL CABLES		
	SITC of FRLS steel armoured, aluminium , 1100v grade power cables with glands		
a	35 Sqmm X 3.5 Core	10.00	Mtrs.
b	10 Sqmm X 3.5 Core	10.00	Mtrs.
c	2.5 Sqmm X 12 Core	10.00	Mtrs.
d	1.5 Sqmm X 12 Core	10.00	Mtrs.
6	Supplying,installing, testing and commissioning of Above Ground M.S. Pipes confirming to Medium grade with painting, suitable type of supports		
a	200mm nominal dia	6.00	Rmt
b	150mm nominal dia	12.00	Rmt
c	80mm nominal dia	12.00	Rmt
7	SITC of C.I. Non-Return valves as per IS:5312 with required flanges, nuts, bolts and gaskets etc. (PN- 1.6)- ISI.		
a	150 mm nominal dia	2.00	Nos.
b	80 mm nominal dia	1.00	Nos.
8	SITC of CI Butterfly Valve as per BS 5155 (PN 16) slim seal standard lever operated type with required flanges, nuts, bolts etc. complete.ISI		
a	150mm nominal dia	2.00	Nos.
b	80mm nominal dia	1.00	Nos.
9	SITC of C.I.flanged Foot valve with suitable flanges, nuts, bolts, gaskets etc. complete.ISI		
a	150mm dia.	2.00	Nos.
b	80mm dia.	1.00	No.
10	SITC of Pressure switches of suitable range for pumpsets with ball valves.	3.00	Nos.
11	SITC of Pressure gauges of suitable range for pumpsets with ball valves.	4.00	Nos.
12	SITC of Air release valveof suitable range for pumpsets with ball valves.	1.00	Nos.
13	SITC of Structural steel support like ms angle,channel, anchor fastner,nut bolt,universal clamp etc to make the system complete.	100.00	Kgs.
B	INTERNAL HYDRANT SYSTEM		

14	Supplying,installing, testing and commissioning of internal M.S. Pipes confirming to medium grade as per IS : 1239 with MS Bend , Flange,Structural Support And Two coat of painting Complete.		
a	100mm nominal dia	48.00	Rmt
b	80mm nominal dia	6.00	Rmt
15	SITC of SS. Single headed hydrant valve as per IS 5290.63 MM dia instanionous outlet complete with blank cap.	3.00	Nos.
16	SITC of 15 M long, 63mm dia RRL hose with 2 nos.instataneuos S.S. couplings and Hoses shall be stored in side the hose cabinet.	6.00	Nos.
17	SITC of 1 no. S.S. short branch pipe with nozzle.	3.00	Nos.
18	SITC of Hose reel drum of swinging type with 19mm dia Rubber braided hose of 30M. length with Gate valve and Shut off nozzle, complete.	3.00	Nos.
19	SITC of M.S. Double Hose cabinet fabricated out of M.S. sheet with glass fronted (4mm thick glass with rubber beeding) door and cabinet shall be powder coated of approved colour both inside and out side.	3.00	Nos.
20	SITC of Gun metal chrome finished Ball valves with fittings of screwed end type.		
a	25mm dia.	4.00	Nos.
21	SITC of CI Butterfly Valve as per BS 5155 (PN 16) slim seal standared lever operated type with required flanges, nuts, bolts etc. complete.ISI		
a	100mm nominal dia	1.00	Nos.
22	SITC of Air release valveof suitable range for pumpsets with ball valves.	1.00	Nos.
23	SITC of Structural steel support like ms angle,channel, anchor fastner,nut bolt,universal clamp etc to make the system complete.	100.00	Kgs.
C	EXTERNAL HYDRANT SYSTEM :		
24	Supplying,installing, testing and commissioning of External M.S. Pipes confirming to medium grade as per IS : 1239 with MS Bend , Flange,Structural Support And Two coat of painting Complete.		
a	150 mm nominal dia	180.00	Rmt
b	80 mm nominal dia	6.00	Rmt
25	SITC of SS. Single headed hydrant valve as per IS 5290.63 MM dia instanionous outlet complete with blank cap.	6.00	Nos.
26	SITC of 15 Mtr. long, 63mm dia RRL hose with instataneuos S.S. couplings and Hoses shall be stored in side the hose cabinet.	12.00	Nos.
27	SITC of 1 no. S.S. short branch pipe with nozzle.	6.00	Nos.
28	SITC of M.S. Double Hose cabinet fabricated out of M.S. sheet with glass fronted (4mm thick glass with rubber beeding) door and cabinet shall be powder coated of approved colour both inside and out side.	6.00	Nos.
29	SITC of SS. 4 Way fire brigade inlet with matching flange , nut bolt , gasket & all accessories.	1.00	Nos.
30	SITC of C.I. Non-Return valves as per IS:5312 with required flanges, nuts, bolts and gaskets etc. (PN- 1.6)- ISI.		
a	150 mm nominal dia	1.00	Nos.
31	SITC of CI Butterfly Valve as per BS 5155 (PN 16) slim seal standared lever operated type with required flanges, nuts, bolts etc. complete.ISI		
a	150mm nominal dia	2.00	Nos.
32	SITC of Structural steel support like ms angle,channel, anchor fastner,nut bolt,universal clamp etc to make the system complete.	100.00	Kgs.
D	SPRINKLER SYSTEM		

33	Supplying,installing, testing and commissioning of M.S. Pipes confirming to medium grade as per IS : 1239 with MS Bend , Flange,Structural Support And Two coat of painting Complete.		
a	150 mm nominal dia	48.00	Rmt
b	80 mm nominal dia	240.00	Rmt
d	50 mm nominal dia	270.00	Rmt
e	40 mm nominal dia	60.00	Rmt
f	25mm nominal dia	270.00	Rmt
34	Supplying, Installing, testing and commissioning Wafer type CI butterfly valves (PN 1.6) as per BS 5155 (ISI)		
a	80 mm dia.	3.00	Nos.
35	Supplying, Installing, testing and commissioning Ball valve of size 50 MM dia with all accessories.	2.00	Nos.
36	Supplying, installing, testing and commissioning of Sprinklers with 15mm screwed end connection .		
a	Pendent type	180.00	Nos.
37	Air Release Valve.	1.00	Nos.
38	SITC of Structural steel support like ms angle,channel, anchor fastner,nut bolt,universal clamp etc to make the system complete.	200.00	Kgs.
E	Automatic Fire Alarm & Detection System		
39	Supply,Installation, testing and commissioning of 2 Loop Main Fire Alarm Control Panel with LCD display, Integral System Power Supply Unit including Battery Charger with 12 volt , 7A Battery in all respects, mounting chassis & lockable type Hinged Door.	1.00	Nos.
40	Supply, Installation, testing and commissioning of Smoke Detector With base , mounting box and all other required accessories and as required .	120.00	Nos.
41	Supply, Installation, testing and commissioning of Sounder / Hooter complete with base , mounting box and all other required accessories and as required .	3.00	Nos.
42	Supply,Installation, testing and commissioning of Manual Call Point with inbuilt isolator module ,test key complete with base , mounting box, and all other required accessories and as required.	3.00	Nos.
43	Supply, Installation, Testing and commissioning of 2 X 1.5 sq mm multi strand white sheath PVC insulated armoured copper cable(FRLSH) to be laid in side 20 mm PVC conduits along with TEES, Bends, saddles and other fittings as required to make the system complete.	1500.00	Mtrs.
F	Portable Chemical Fire Extinguishers.		
44	Providing and Installation of ISI marked (IS:2878) Fire Extinguisher, Carbon-di-oxide type capacity 4.5 Kg. Flat base including valve, discharge hose of not less than 10 mm dia, 1M long and wall suspension bracketcomplete in all respects including initial refill with CO2 gas conforming to IS:307-1966 filled.	8.00	Each
45	Providing and Installation of ABC dry chemical type fire extinguisher capacity 6 k.g. with discharge hose pipe and wall mounting bracket and all needed accessories complete.	30.00	Each
AIR CONDITIONING			
1	SITC of Full Inverter VRF System with Modular type outdoor units (Top Discharge) , all scroll DC Inverter compressors for Cooling & Heating applications along with different types of indoors compatible with VRF ODUs with R 410 A . All inverter capacity controlling compressors shall be suitable for 3 Phase, 50 Hz.. The outdoor fins should be with corrosion resistant chemical coating at factory only alongwith hydrophilic coating to shield it from Salt, Sand & other elements brought in by the air. The manufacturer must be OEM of its compressor, which is fitted in the VRF		

	outdoor unit. It can work upto 53 Degree Celsius. All proposed outdoor unit should have minimum COP of 3.4 at 100% load condition for Cooling in standard AHRI test conditions (Ambient DBT-35 Deg C, Inside DBT 27 Def C/WBT 19 Deg C). Proposed outddor unit system should not have any deration in cooling capacity upto 39 Degree C ambient temepetrue.		
i	Capacity: 8 HP	1.00	Nos.
ii	Capacity: 20 HP	1.00	Nos.
iii	Capacity: 22 HP	2.00	Nos.
2	SITC of The Indoor units suitable for operation on 220V-240V, Single Phase, 50 Hz AC electric supply and shall have shall have electronic control valves to control refrigerant flow with washable Filters, BLDC motors.		
i)	0.75 TR - Hi Wall Unit	8.00	Nos.
ii)	1.5 TR - Hi Wall Unit	2.00	Nos.
iii)	2.0 TR - Hi Wall Unit	6.00	Nos.
iv)	2.0 TR - 4Way Cassette AC	4.00	Nos.
iv)	2.5 TR - 4Way Cassette AC	4.00	Nos.
v)	3.0 TR - 4Way Cassette AC	6.00	Nos.
vi)	4.5 TR - 4Way Cassette AC	1.00	Nos.
3	Cassette Pannel	16.00	Nos.
4	Wireless Remote	32.00	Nos.
5	Supply of Y-Banches/ ODU Connector	29.00	Nos.
	SUB TOTAL FOR EQUIPMENT		
	ANCILLARY ITEM		
1	SITC of the Cu. refrigerant pipes with 19mm/13mm with nitrile rubber tube insulation of following sizes		
	Gas line with 19mm thick insulation		
i	41.3mm	5.00	Mtr
ii	34.9mm	25.00	Mtr
iii	28.58mm	10.00	Mtr
iv	22.2mm	25.00	Mtr
v	19.05mm	15.00	Mtr
vi	15.88mm	130.00	Mtr
vii	12.7mm	40.00	Mtr
	Liquid line with 13mm thick insulation		
i	19.05mm	20.00	Mtr
ii	15.88mm	15.00	Mtr
iii	12.7mm	10.00	Mtr
iv	9.52mm	170.00	Mtr
v	6.4 mm	40.00	Mtr
7	Control & Transmission Wiring		
	Supply Installation Testing and Commission of Control wiring of 2 core x 1.5 sqmm copper in suitable conduits between indoor and outdoor units.	450.00	Mtr
8	Supply Installation Testing and Commission of PVC drain pipe with 6mm thick nitrile tube insulation.		
i)	25mm	30.00	Rmt
ii)	32mm	130.00	Rmt
iii)	40mm	20.00	Rmt
9	Commissioning of VRV systems including topping R410A gas as per site requirements	50.00	Kgs
10	Supply & Installation of Galvanised Stainless Steel Slotted Tray for copper piping for the safety of nitrile insulations over copper pipe.		
	50mmx300mm X 50mm	30.00	RMT
11	Supplying & fixing of powder coated paint on Cable tray and exposed items	1.00	Lot

SECTION -9

1. Payment Schedule for INTEGRATED DEVELOPMENT OF CUTTACK CHANDI TEMPLE AT CUTTACK

PAYMENT SCHEDULE			
SL. NO.	DESCRIPTION		%
1	DESIGN STAGE		
	1.1	On approval of Inception Report, detail survey and draft architectural drawing & QMP	0.500%
	1.2	On approval of Site development plan and architectural drawing	0.500%
	1.3	On approval of MEP	0.500%
	1.4	On approval of final Architectural drawing showing electrical and sanitary layout plan and detail structural design and interior design/decoration	0.500%
Total for Design Stage			2.000%
2	CONSTRUCTION STAGE		
2.1	CUTTACK CHANDI TEMPLE COMPLEX		
	2.1.1	On Completion of Garbhagruha Inner Structure cladding including flooring, Exterior Colourless silicone water repellent coating and MS structural scaffolding complete as per Scope	0.789%
	2.1.2	On Completion of Jagamohana including Excavation, Khandolite work, MS structural scaffolding, RCC work etc complete as per Scope	5.303%
	2.1.3	On Completion of Shiva Temple including Excavation, Khandolite work , MS structural scaffolding, RCC work etc complete as per Scope	2.145%
	2.1.4	On Completion of Hanuman Temple including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	1.152%
	2.1.5	On Completion of Lakshmi Narayan Temple including Excavation, Khandolite work , MS structural scaffolding, RCC work etc complete as per Scope	1.152%
	2.1.6	On Completion of Sun Temple including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	1.152%
	2.1.7	On Completion of South Entrance including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	1.975%
	2.1.8	On Completion of West Entrance including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	2.535%
	2.1.9	On Completion of East Entrance including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	2.535%
	2.1.10	On Completion of North Entrance including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	2.535%
	2.1.11	On Completion of Yajna Mandap including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	1.326%
	2.1.12	On Completion of Chandi Patha including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	3.032%
	2.1.13	On Completion of Construction of Kichen & Store including Excavation, RCC, Flooring,Doors and windows, Plastering etc. complete as per Scope	1.048%
	2.1.14	On Completion of Paving of Parikrama with khandolite stone with concrete Bed and Exterior Colourless silicone water repellent coating etc. complete as per scope	5.862%
	2.1.15	On Completion of other Paved area with paver block including sand filling, Subgrade preparation, GSB,WMM and Paver Block laying of specific thickness etc. complete as per Scope	0.372%

	2.1.16	On Completion of Filling and levelling with sand including compaction etc. complete as per scope	0.292%
	2.1.17	On completion of Compound wall with Khandolite stone including Excavation, PCC, RCC Work, Khandolite work etc complete as per Scope	3.050%
	2.1.18	On Completion of External Stone Cladding of Maa Chandi Temple including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	3.666%
	2.1.19	On Completion of Bata Mangala Temple including Excavation, Khandolite work , MS structural scaffolding, RCC work etc complete as per Scope	2.412%
	2.1.20	On completion of Sculptures/Images complete as per scope	4.618%
	2.1.21	On Completion of Illumination/Solar Illumination work	1.522%
	2.1.22	On Completion of Facade Illumination work	1.636%
2.2	AMENITIES FOR PILIGRMS		
	2.2.1	On completion of Priest Facility Block including Excavation, RCC, Flooring, Doors and windows, Plastering etc. complete as per Scope	4.671%
	2.2.2	On completion of Mundan Block including Excavation, Khandolite work ,MS structural scaffolding, RCC work etc complete as per Scope	1.457%
	2.2.3	On completion of Prasad Sevan including Excavation, RCC, Flooring, Doors and windows, Plastering etc. complete as per Scope	5.268%
	2.2.4	On completion of Information Counter including Excavation, RCC, Flooring, Doors and windows, Plastering etc. complete as per Scope	5.268%
	2.2.5	On Completion of Handwash and Footwash as per drawing and scope of work	0.194%
	2.2.6	On completion of Arrival Plaza cum Parking including excavation, sand filling, Subgrade preparation, GSB, WMM, Paver Block Laying, Cobble stone Laying and kerb stone etc. complete as per scope	1.239%
	2.2.7	On completion of Compound wall with Khandolite stone including Excavation, PCC, RCC Work, Khandolite work etc complete as per Scope	0.763%
	2.2.8	On completion of Landscaping & Horticulture work complete as per scope	0.033%
2.3	REHABILITATION OF EXISTING SHOPS & FESTIVAL PARKING		
	2.3.1	On completion of Approach Road & Parking including excavation, filling, Brick Foundation, sand filling, Subgrade preparation, GSB,WMM and Paver Block laying of specific thickness etc. complete as per Scope	0.992%
	2.3.2	On completion of Security Cabin and Compound Wall including excavation work, RCC work, Brick Work, Finishing including doors and windows, Plastering for Security Cabin and complete compound wall etc. complete as per scope	0.950%
	2.3.3	On completion of Landscaping & Horticulture including Reclamation work, Earthwork, levelling, plantation etc. complete as per scope	0.109%
	2.3.4	On Completion of Illumination/Solar Illumination work complete as per scope	1.044%
2.4	EXTERNAL INFRASTRUCTURE		
	2.4.1	On completion of Sit outs & Stone Benches complete as per scope	0.322%
	2.4.2	On completion of Drainage/Sewerage complete as per scope	0.513%
	2.4.3	On completion of Signages/Garbage Disposal/Water ATM/Dipa stand complete as per scope	0.378%
	2.4.4	On completion of Landscaping & Horticulture work complete as per scope	0.027%
	2.4.5	On completion of Illumination/Solar Illumination complete as per scope	0.421%
2.5	SHOPPING COMPLEX AS PER OPWD PLINTH AREA RATE 2017		
	Shopping Complex		0.000%
	2.5.1	On completion of Construction of Shopping complex foundation upto plinth level	2.519%
	2.5.2	On completion of First Floor complete in all respect as per scope	2.048%
	2.5.3	On completion of Secod Floor complete in all respect as per scope	2.351%

	2.5.4	On completion of Terrace complete in all respect as per scope	1.145%
	2.5.5	On Completion of Plumbing and Electrical Works complete as per scope	2.822%
	2.5.6	On completion of flooring work complete as per Scope	0.3973%
	2.5.7	On Completion of RP Mangalore roof tile & painting Complete in all respect as per scope	0.103%
	2.5.8	On Completion of Rain water harvesting complete in all respect as per scope	0.539%
	Toilet Block		0.000%
	2.5.12	On Completion of Construction of Toilet block single storied foundation upto plinth level	0.177%
	2.5.13	On completion of Roof complete in all respect as per scope	0.031%
	2.5.14	On Completion of Plumbing and Electrical Works complete as per scope	0.073%
	2.5.16	On completion of flooring work complete as per Scope	0.011%
	2.5.17	On completion of wall tile in skirting complete as per Scope	0.011%
	2.5.18	On Completion of RP Mangalore roof tile & painting Complete in all respect as per scope	0.007%
	2.5.19	On Completion of Khandolite Stone Cladding at Toilet complete as per Scope	0.254%
	2.5.20	On Completion of Interior Furnishing and furniture complete as per scope	3.265%
2.6	EXTERNAL ELECTRICAL WORKS		
	2.6.1	On Supply and Installation of Transformer for Electrification including civil work complete as per scope	0.814%
	2.6.2	On Supply and Installation of DG including civil work complete as per scope	0.240%
	2.6.3	Lightning Arrestor	0.077%
	2.6.4	Supply and installation of IP Surveillance & PA system complete as per scope	1.651%
	2.6.5	Supply and installation of Fire Fighting system complete as per scope	0.960%
	2.6.6	Supply and installation of Air Conditioning system complete as per scope	1.040%
	2.6.7	Supply and installation of Lift (8 passenger) complete as per scope	0.621%
	2.6.8	Supply and installation of TV & Projector complete as per scope	0.083%
	Total for Construction Stage		95.000%
3	ACCEPTANCE STAGE		
	3.1	Final approval from competent authority viz. concerned development authority, testing, commissioning with approval from authority like fire officer and completion of all items as per approval.	2.500%
	3.2	On submission of as - built drawings and other documents as mentioned in Contract Data	0.500%
	Total for Acceptance Stage		3.000%
	GRAND TOTAL		100.000%

2. Payment may be made on prorated basis on request of the contractor for each individual item in commensurate with progress by the Employer as per Section-5 & Section-8 of RFP. However, in no case, the total cost of payment shall exceed the Lump Sum Contract Value for which the agreement is signed except change in scope, compensation, or bonus etc. as admissible as per the contract.

SECTION –10

DOCUMENTS TO BE FURNISHED BY BIDDER

1. Documents as specified in Section 1, must be submitted by the Bidder in the Formats mentioned in Section 2 along with the BID.
2. Any other document, if asked by Employer for clarification during evaluation, shall be submitted by the bidder.

CHECKLIST OF DOCUMENTS TO BE SUBMITTED IN TECHNICAL BID

	Criteria	Document to be submitted	Submitted (Yes/No)
1	Bid Processing Fees	NEFT / RTGS details	
2	EMD/ Bid Security - Exempted. Bid Security Declaration to be provided	Bid Security Declaration Form as per Section II	
3	Written power of attorney of the signatory of the Bid to commit the Bidder	Copy of power of attorney	
4	Whether Indian firms (Y/N)	Certificate of Incorporation	
5	Class of Contractor - Super Class (Government of Odisha Registration) or equivalent of other State Governments / Government of India / MES / Railways for execution of Civil works in general and Road, Bridge & Building work in particular	Relevant Certificate	
6	Constitution or legal status of Bidder	Incorporation Certificate, Partnership Deed, Trade License, MoA, AoA	
7	Place of registration	Qualification Information	
8	Principal place of business	Qualification Information	
9	Major items of construction equipment proposed to carry out the Contract	Invoices of equipment / Lease agreement/Letter of Commitment	
10	Qualifications and experience of key site management and technical personnel proposed for the Contract	Detailed CV	
11	Reports on the financial standing of the Bidder, such as profit and loss statements and auditor's reports for the past five financial years	CA Certificate along with Audited Financial report for the relevant Financial Years	
12	Evidence of adequacy of working capital for this contract [access to line (s) of credit and availability of other financial resources]; Liquid assets and / or availability of credit facilities	Banker's certificate	
13	Authority to seek references from the Bidder's bankers	Bankers Details	
14	Information regarding any litigation or arbitration resulting from contracts executed by the bidder in the last five years or currently under execution	List of Litigation, if any	
15	Methodology & Programme.	To be submitted in Cover-III as DBR	
16	Bids from Joint venture - Bids from Joint ventures / Consortiums / Association of Parties are not acceptable	To be mentioned	
17	Annual minimum turnover	Turnover from Civil Construction works certified by chartered accountant	
18	The Firm should demonstrate making profit	CA/ Statutory auditor certificate	

	Criteria	Document to be submitted	Submitted (Yes/No)
19	Should have valid PAN and GSTIN	Scan copy of valid PAN and GSTIN	
20	Experience of successful completion of works / substantial completion of works (90% of the value of the contract to be considered as substantial completion) as referred in Bid Data Sheet Cl. 4.4.A(b).	Completion Certificate from Competent Authority mentioning all the details as per Bid Data Sheet/TDS Certificate for Pvt Sector Project	
21	Bid Validity Undertaking	Undertaking	
22	Affidavit	Affidavit by the bidder duly signed by the Notary Public and as specified in Section 2,	
23	Design Basis Report	As mentioned in the RFP	