



GWALIOR
Smart City



Conservation and Adaptive Reuse of a former Birth-
Death-Marriage Registration Office Building into a Tourist
Information Centre (TIC) at
Maharaj Bada, Gwalior

Tender Reference Number: [GSCDCL/041/2018]

Date of Issue: [27 March 2018]

**OFFICE OF THE EXECUTIVE DIRECTOR
GWALIOR SMART CITY DEVELOPMENT CORPORATION LIMITED**

EXECUTIVE DIRECTOR
Gwalior Smart City Development Corporation Limited

Disclaimer

Gwalior has been selected by the Government of India to implement the Smart Cities Mission, a Centrally assisted scheme as per which the Gwalior Smart City Development Corporation Limited (“GSCDCL”), a special purpose vehicle, constituted as per the provisions of the Companies Act, 2013, jointly owned by the Nagar Nigam, Gwalior and the Madhya Pradesh Urban Development Corporation, is responsible for identification and implementation of certain projects approved by the competent authorities pursuant to the implementation of the Mission.

To this effect, one of the projects identified for implementation, and for which approvals have been accorded by the competent authorities, is the **“Conservation and Adaptive Reuse of a former Birth-Death-Marriage Registration Office Building into a Tourist Information Centre (TIC) at Maharaj Bada, Gwalior”**, hereinafter referred to the **“the Project”**.

This tender document, pertaining to the project has been prepared by GSCDCL specifying the terms and conditions which every bidder is expected to familiarize himself or herself with. It shall be assumed that by placing the bid, the bidder is in agreement with such terms and conditions as has been set forth in this document.

Although GSCDCL has made every reasonable effort at ensuring that the information contained within this document is accurate, neither GSCDCL or any of its authorities or agencies nor any of their respective officers’ employees, agents, or advisors give any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in connection or arising out of it.

The purpose of the information provided in this document is to assist the bidder(s) for preparing their proposals. However, this information is not intended to be exhaustive. Interested parties are expected to make their own inquiries to supplement and verify information in this document. The information is provided on the basis that it is non-binding on GSCDCL or any of its authorities or agencies, or any of their respective officers, employees, agents, or advisors. Each bidder is advised to consider this document as per his or her understanding and capacity. The bidders are also advised to do appropriate examination, enquiry and scrutiny of all aspects mentioned in this document before bidding. Bidders may seek professional help of experts on financial, legal, technical, taxation, and any other matters/ sectors appearing in the document or specified work. The bidders are expected to scrutinize this document in detail and bring to notice of GSCDCL any kind of error, misprint, inaccuracy, or omission.

GSCDCL reserves the right not to proceed with the project, to alter the timetable reflected in this document, or to change the process or procedure to be applied. It also reserves the right to decline to discuss the project further with any party submitting a proposal. No reimbursement of cost of any type will be paid to persons, entities, or consortiums submitting a proposal by under or pursuant to this tender document.

[ON NON-JUDICIAL STAMP PAPER OF RUPEES HUNDRED DENOMINATION ISSUED WITHIN THE
STATE OF MADHYA PRADESH, DULY NOTARISED]

{Location, Date}

The Executive Director,
Gwalior Smart City Development Corporation Limited (GSCDCL)
Nagar Nigam Mukhyalaya, City Centre, Gwalior, Madhya Pradesh

Reference: GSCDCL tender document No. [*Insert tender reference number here*] dated [*insert date here*]

Dear Sir/Madam:

Over and above all our earlier confirmations and submissions as per the requirements of the tender document, I/ we hereby declare, confirm and undertake that:

- 1 I/ We have quoted item rate price considering all items as requested by GSCDCL in the tender document and stand committed to deliver to the highest standards and quality as required by GSCDCL to meet the timelines of the project. My/ Our bid submission is in line with the requirements of GSCDCL as stated in the tender document.
- 2 I/ We confirm that we have factored in all costs and expenses for meeting the complete scope and deliverables of the tender document.
- 3 I/ We are completely aware of the service level requirements and timelines specified by GSCDCL and are committed to adhering to the same. I/ We have also clearly taken note of the service level requirements of GSCDCL and expectations from us and wish to confirm that we have taken care of every aspect to meet the same.
- 4 I/We have gone through the bid documents and its terms and conditions and fully understood it. All the terms and conditions are acceptable to me / us.
- 5 I/ We have clearly understood GSCDCL's requirements and wish to confirm that I/ we shall abide by the terms and conditions of the tender document.
- 6 I/ We confirm and understand that all arithmetical totalling errors will be corrected for the purpose of evaluation only and the consideration of that error for payment would be completely according to GSCDCL's discretion. I/ We also confirm and understand that for all other errors which we have made in the bid, GSCDCL, for the purpose of evaluation will take the corrected amount based on the price quoted by me/ us in the price sheets but the payment of such amounts would be completely according to GSCDCL's discretion.
- 7 I/ We confirm that I/ we will provide the best of my/ our resources and the people proposed by me/ us will be dedicated to GSCDCL for the sake of resource continuity. Further, I/ We also confirm that GSCDCL may interview the key resources proposed by me/ us and confirm its acceptability. In any event if a resource is found unfit by GSCDCL I/ we agree to change the same and provide GSCDCL with a replacement within reasonable time so as to not affect the services/ project timelines.
- 8 I/ We confirm and understand that GSCDCL has an aggressive rollout schedule and I/ we will adhere to the rollout schedule at no additional cost/burden to GSCDCL.
- 9 I/ We confirm that all the proposed solution components are compatible and interoperable with each other and the solution will meet the functional and technical requirements of GSCDCL.

- 10 I/ We confirm that the prices and values quoted by me/ us encompass the complete scope of the project and I/ we will ensure that the quality of deliverables for the project is not affected due to any pricing pressures.
- 11 There has been no conviction by a Court of Law or indictment / adverse order by a regulatory authority for a grave offence against me/ us. It is further certified that there is no investigation pending against me/us or the CEO, Directors/ Manager/ key employees of my/ our concern.
- 12 That the decision of GSCDCL will be final and undisputable in accepting a rejection my / our offer.
- 13 That the self-certified information given in the bid document is fully true and authentic.
- 14 That:
- a) Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.
 - b) Information regarding financial qualification and annual turnover is correct.
 - c) Information regarding various physical qualifications is correct.
- 15 No close relative of the undersigned and our firm/company is employed with GSCDCL or any of its affiliates, shareholders or such other agencies that may influence the outcomes of this tender.

Dated this [insert day of the month]the day of [insert month] of the year Two Thousand and Eighteen.

[Signature of the authorized signatory]

[Name of the authorized signatory]

[Designation]

Phone no, *[insert phone number]*

Address: *[insert postal address for correspondence]*

E-mail *[insert e-mail for correspondence]*

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SECTION 1



Gwalior Smart City Development Corporation Limited

NOTICE INVITING TENDER

Tender Reference no. [GSCDCL/041/2018]

Dated [27March 2018]

Gwalior Smart City Development Limited (GSCDCL) invites online **Item Rates** for the following works (estimated as per schedule of rates) from registered contractors and firms of repute, fulfilling eligibility criteria from eligible bidders through www.mpeproc.gov.in for “**Conservation and Adaptive Reuse of a former Birth-Death-Marriage Registration Office Building into a Tourist Information Centre (TIC) at Maharaj Bada, Gwalior**”.

The details are as under:

Sr. No.	Event's Name	Information
1.	Probable Amount of Contract	Rs. 16, 20,000(INR Sixteen Lakh Twenty Thousand Only approx...)
2.	Tender document Fee	Rs 2,000.00 Only (Two <i>Thousand only</i>) payable online only through e-Tendering Payment Gateway
3.	Earnest Money Deposit (EMD)	Rs 32,400.00 (<i>Thirty Two Thousand Four Hundred Only</i>)
4	Last date for sending pre-bid queries	By 03 April, 2018 till 17:30 hours electronically at gscdcltender@gmail.com .
5.	Date, Time & Place of Pre-bid Meeting	04 April, 2018 at 13:00 hrs. Venue: Gwalior Smart City Development Corporation Limited
6.	Last date for Online Purchase of Tender Document	24/04/2018 till 1730 hours.
7.	Last date of Online Submission of Bids	25/04/2018 till 1730 hours.
8.	Date & Time for Opening of Pre-Qualification Proposal	26/04/2018 at 1600 hours.
9.	Date & Time for Opening of Technical Proposal	26/04/2018 at 1610 hours.
10.	Date & Time for Opening of Financial Proposals	27/04/2018 at 1600 hours. Will be intimated later to the technically qualified Bidders
11.	Project Award Criteria	Lowest Bidding

Note: The bidders shall have to submit their bids online and upload the relevant documents as per key schedule (key dates).

1. The bidders intending to participate in this tender are required to get enrolled/ registered on the e-procurement web site <https://www.mpeproc.gov.in/>. Enrolment /registration on the above portal is mandatory.
2. Tender documents can be purchased only online from <https://www.mpeproc.gov.in/> by making online payment as specified above as per key dates. The Bidders shall have to submit their Bids online and upload the relevant documents from as per time schedule (key Dates).
3. At the time of submission of the Bid the eligible bidder shall be required to:
 - a. Pay the cost of Bid Document;
 - b. Deposit the Earnest Money;
 - c. Submit a check list; (As required in Clause 12 of Bid Data Sheet)

- d. Submit an affidavit duly Notarized as per Annexure – B
4. Details can be seen in the Bid Data Sheet
 5. Amendment to NIT, if any, would be published on website only, and not in Newspaper.
 6. Conditional tender will not be accepted and liable to be rejected. GSCDCL reserves the right to accept or reject any or all tender without assigning any reasons thereof.
 7. Since the online bidders are required to sign their bids online using Digital Certificates. Contractors are advised to obtain the same at the earliest.
 8. All details relating to the Bid Document(s) can be viewed and downloaded free of cost from the website mentioned in NIT.
 9. Bid document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card or via internet banking.
 10. ELIGIBILITY FOR BIDDERS:
 - (a) Contractor should have a valid PWD registration (i.e. valid on the date of submission of tender) from Madhya Pradesh or from any other State of India. However, such bidders who are not registered with the Department, but meet the criteria, may submit their bid after having applied for registration with Department, provided that such application should have been made prior to the last date of submission of this tender. However, such bidders must ensure that the Public Works Department accepts their registration prior to the award of the contract. Failure to have successfully registered with the Public Works Department shall result in automatic disqualification of the bid.
 - (b) Failure to sign the contract by the selected bidder, for any reason that cannot be attributed to (i) Force Majeure, and/or (ii) inability of GSCDCL to pursue the course of signing the contract for any reason, and/or (iii) inability of the bidder or GSCDCL to reach a consensus on any contractual issue not already included in this tender document shall result in forfeiture of the earnest money deposit.
 11. Pre-qualification – Prequalification conditions, wherever applicable, are given in the Bid Data Sheet

EXECUTIVE DIRECTOR
Gwalior Smart City Development Corporation Limited,
Gwalior

SECTION 2
INSTRUCTIONS TO BIDDERS (ITB)

A. GENERAL

1. SCOPE OF BID

The detailed scope of work, hereinafter referred to as “Work” is “**Conservation and Adaptive Reuse of a former Birth-Death-Marriage Registration Office Building into a Tourist Information Centre (TIC) at Maharaj Bada, Gwalior**”. The initial period of three years after physical completion of work shall be treated as Defect Liability Period (DLP).

Background

As part of the Gwalior Smart City initiative to manage and promote city’s cultural and tourism affairs, a state of the art **Tourist Information Centre (TIC)** has been proposed to be set up in the Maharaj Bada area of the city. The TIC has been envisaged as a one-stop place for tourism related activities that would serve as an interface for specifically projecting Heritage and Culture of Gwalior City. Besides fulfilling obligatory tourism related services of bookings, information and event managements, the tourist centre is also intended to be the engine of promotion of the city’s tourism and culture by setting up within the facility, an interactive interpretation activity space meant for dissemination of knowledge of natural or cultural heritage of Gwalior.

The project is intended to be carried out as;

Building Conservation Repair Works: A civil tender is to be floated for undertaking the necessary building conservation works.

Project brief

A Heritage Building structure in the Maharaj Bada area has been identified to set up the proposed TIC centre, an important cultural hub of the city. It has been decided to undertake physical conservation of the heritage building structure and put it to adaptive reuse as a Tourist Information Centre.

a. Birth-Death Registration Office Building adjacent to the historic Victoria Market Building at Maharaj Bada

Birth-Death Registration Office building occupies the front or northern portion of an independently standing single-storey heritage structure facing the Maharaj Bada historic Square. The single-storey elongated building also currently houses other facilities-a municipal owned dispensary facility and few other private shops that face towards the main road thoroughfare. The built-up area of the existing building portion that is proposed to be developed is 50 sqm approximately.

Proposed General Works

The various works to be performed as part of the tender primarily include:

- **Civil Conservation Works:** dismantling works, lime plaster, lime concreting, masonry repair and consolidation.
- **New civil works:** Addition of new facilities- addition of brick walls for toilet and storage facilities, steel staircase.
- **Interior Works:** Interior works would include repair and installation of doors and windows, flooring, tile works, lime wash and paint finishes.
- **Electrical Works:** Broadly includes removal and installation of new point-wiring, conduits, distribution and switch boards etc.
- **Sanitary works:** Installation of Sanitary fixtures, water supply etc.

2. GENERAL QUALITY OF WORK:

The work shall proceed as per approved drawings & direction of a competent professional and/or official deputed by the GSCDCL. The work is to be complete in all respects including labour, tools-tackles and materials, technical specifications specified in the Bid Data Sheet/Contract Data. The work shall have to meet high standards of workmanship, as well as meet the statutory requirements for safety and security of workmen.

3. PROCEDURE FOR PARTICIPATION IN E-TENDERING

The procedure for participation in e-tendering is given in the Bid Data Sheet.

4. ONE BID PER BIDDER

4.1 The bidder shall be a single legal entity, viz. (i) a company incorporated as per the provisions of the Companies Act, 2013 or Companies Act, 1956, (ii) a sole proprietorship firm, (iii) a partnership firm constituted as per the provisions of the Partnership Act, 1932, (iv) a Limited Liability Partnership firm constituted as per the provisions of the Limited Liability Partnership Act, 2008, (v) A Cooperative Society constituted under any law within any State of India enacted pursuant to entry 32, list II, Schedule 7 of the Constitution of India, or (vi) a Society registered under Societies Registration Act, 1860 or any analogous law enacted by any State Government pursuant to entry 32, list II, Schedule 7 of the Constitution of India.

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

5. Cost of Bidding

The bidder shall bear all costs associated with the preparation and submission of its bid, and no claim whatsoever for the same shall lie on the GSCDCL.

6. Site Visit and Examination of Site of Works

The bidder is advised to visit and examine the Site of Works and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the bid and entering into a contract for construction of the work. All costs shall have to be borne by the bidder and no claim whatsoever for the same shall lie on the GSCDCL.

B. BID DOCUMENTS

7. CONTENT OF BID DOCUMENTS

The Bid Document comprises of the following documents:

1. NIT with all amendments.
2. Instructions to Bidders, Bid Data Sheet with all the Annexure.
3. Conditions of Contract:
 - i. Part I General Conditions of Contract (GCC) and Contract Data; and
 - ii. Part II Special Conditions of Contract (SCC)
4. Specifications
5. Drawings,
6. Price Proposal Sheet
7. Technical and Financial Bid
8. Letter of Acceptance
9. Agreement and
10. Any other document(s), as specified.

8. The bidder is expected to examine carefully all Instructions, Conditions of Contract, the Contract Data, Bid Data, Terms and Specifications, Bill of Quantities, forms and drawings in the Bid Document. Bidder shall be solely responsible for his failure to do so.

9. Pre-Bid Meeting

- 9.1 Details of venue, date and time shall be as mentioned in the Bid Data Sheet. Any change in the schedule of pre-bid meeting would be communicated on the website only, and intimation to bidders would not be given separately.
- 9.2 Any prospective bidder may raise his queries and/or seek clarifications in writing before or during the pre-bid meeting. The purpose of such meeting is to clarify issues and answer questions on any matter that may be raised at that stage. GSCDCL may, at its option, give such clarifications as are felt necessary.
- 9.3 Minutes of the pre-bid meeting including the list of the questions raised and the responses given together with any response prepared after the meeting will be hosted on the website.
- 9.4 Pursuant to the pre-bid meeting, if GSCDCL deems it necessary to amend the Bid Document, it shall be done by issuing amendment to the online NIT.

10. Amendment of Bid Documents

- 10.1 Before the deadline for submission of bids, GSCDCL may amend or modify the Bid Documents by publication of the same on the website only.
- 10.2 All amendments shall form part of the Bid Document.
- 10.3 GSCDCL may, at its discretion, extend the last date for submission of bids by publication of the same on the website.

C. PREPARATION OF BID

- 11.** The bidders have to prepare their bids online, encrypt their Bid Data in the Bid Forms and submit Bid Seals (Hashes) of all the Covers and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the NIT after signing of the same digitally by its authorized representative.

12. DOCUMENTS COMPRISING THE BID

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

Part 1 – This shall be known as **Cover A** and would apply for all bids. **Cover A** shall contain the following as per details given in the Bid Data Sheet:

- i) Registration number or proof of application for registration and organizational details in format given in the Bid Data sheet.
- ii) Payment of the cost of Bid Document;
- iii) Earnest Money;
- iv) EPF Registration
- v) An affidavit duly notarized.

Part 2 – This shall be known as **Cover B** and required to be submitted only in works where pre-qualification conditions and/or special eligibility conditions are stipulated in the Bid Data Sheet. Online **Cover B** shall contain a self-certified sheet duly supported by documents to demonstrate fulfilment of pre-qualification conditions.

Part 3 – This shall be known as **Cover C** and would apply to all bids. **Cover C** shall contain financial offer in the format prescribed enclosed with the Bid Data Sheet.

13. LANGUAGE

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

14. TECHNICAL PROPOSAL

- 14.1 Only, in case of bids with pre-qualification conditions defined in the Bid data sheet, the Technical Proposal shall comprise of formats and requirements given in the Bid Data Sheet.
- 14.2 All the documents / information enclosed with the technical proposals should be self-attested and certified by the Bidder. The Bidder shall be liable for forfeiture of his Earnest Money

Deposit, if document / information are found false/fake/untrue before and after acceptance of Bid. GSCDCL may at its sole discretion forfeit the performance security/guarantee, security deposit, enlistment deposit and take any other suitable action, as applicable.

15. FINANCIAL BID

- i. The bidder shall have to quote item rates in format referred in Bid Data sheet.
- ii. Item rate offer shall be quoted in figures as well as in words. If any difference in figures and words found, lower of the two shall be taken as valid and correct.
- iii. The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies; and GSCDCL shall not be liable for the same.

16. PERIOD OF VALIDITY OF BIDS

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

17. EARNEST MONEY DEPOSIT (EMD)

- 17.1 The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), of the amount specified in the Bid Data Sheet.
- 17.2 The amount of EMD to be deposited ONLINE/RTGS/NEFT/IMPS in favour of CEO, Gwalior Smart City Development Corporation Limited (GSCDCL).
- 17.3 Bid not accompanied by EMD shall be liable for rejection as non-responsive. No exemption is permitted.
- 17.4 EMD of bidders whose bids are not accepted will be returned within ten working days of the decision on the bid.
- 17.5 EMD of the successful Bidder will be discharged when the Bidder has signed the Agreement and furnished the Bank Guarantee of required value as Performance Security.
- 17.6 Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of its EMD.

D. SUBMISSION OF BID

18. The bidder is required to submit bid online under the digital signature of authorized signatory, and also the physical copy of Cover 'A' and Cover 'B' at the place prescribed in the Bid Data Sheet.

E. OPENING AND EVALUATION OF BID

19. PROCEDURE

- 19.1 **Cover 'A'** shall be opened first online at the time and date notified and its contents shall be checked. In cases where 'A' does not contain all requisite documents, such bid shall be treated as non-responsive, and **Cover B and/or C** of such bid shall not be opened.
- 19.2 Wherever Cover 'B' (Technical Bid) is required to be submitted, the same shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Cover 'B'. Cover 'C' (Financial Bid) of bidders who are not qualified in Technical Bid (Cover 'B') shall not be opened.
- 19.3 Cover 'C' (Financial Bid) of the qualified bidders shall be opened online at the time and date notified. The bidder shall have freedom to witness opening of the Cover 'C'.
- 19.4 After opening Cover 'C' all responsive bids shall be compared to determine the lowest evaluated bid.
- 19.5 GSCDCL reserves the right to accept or reject any bid, and to annul the bidding process and reject all the bids at any time prior to contract award, without incurring any liability. In all such cases reasons shall be recorded.
- 19.6 GSCDCL reserves the right of accepting the bid for the whole work or for a distinct part of it.

20. Confidentiality

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

- 20.2 Any attempt by a bidder to influence the Employer in the evaluation of the bids or contract award decisions may result in the rejection of its bid.

F. AWARD OF CONTRACT

21. Award of Contract

GSCDCL shall notify the successful bidder by issuing a 'Letter of Acceptance' (LOA) that his bid has been accepted.

22. Performance Security

22.1 Prior to signing of the Contract the bidder to whom LOA has been issued shall have to furnish performance security and Additional Performance Security (if applicable) of the amount, form and duration, etc. as specified in the Bid Data Sheet.

22.2 If the Bid, which results in the lowest evaluated Bid price, is seriously unbalanced or front loaded in the opinion of GSCDCL, GSCDCL after evaluation, taking in to consideration the schedule of the estimated contract price may require Additional Performance Security from the successful bidder for such unbalanced Bid price.

22.3 If the lowest evaluated Bid Price is 15% or more below, the prices of probable amount of contract, such Bids will be deemed as unworkable rate. In such cases successful Bidder should submit Additional Performance Security amount which will be equal to the difference between the unworkable rates @ 15% below SOR amount with agreement amount.

23. Signing of Contract Agreement

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

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

23.3 In the event of failure of the successful bidder to submit Performance Security and additional performance security, if any or sign the Contract Agreement, its EMD shall stand forfeited without prejudice to the right of GSCDCL for taking action against the bidder.

24. CORRUPT PRACTICES

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

- i. may reject the bid for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract.
- ii. may debar the bidder if he is being blacklisted by any Department of State Government or Government of India for non-performance/ sub- standard execution or any other reason whatsoever in similar type of works.
- iii. may debar the bidder declaring ineligible, either indefinitely or for a stated period of time, to participate in bids, if it at any time determines that the bidder has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for, or in executing, a contract.

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

- a. **"corrupt practice"** means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
- b. **"fraudulent practice"** means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
- c. **"coercive practice"** means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

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

[End of ITB]

Bid Data Sheet

General

S.No.	Particulars	Data	
1	Office inviting Tender	EXECUTIVE DIRECTOR,GWALIOR SMART CITY DEVELOPMENT CORPORATION LIMITED	
2	NIT No	GSCDCL/041/2018	
3	Date of NIT	27 March, 2018	
4	Bid document download available from date & time	28 March, 2018, 10:30 hrs	To 24 April, 2018 till 17:30 hrs
5	Website link	http://www.mpeproc.gov.in	

For Section 1 - NIT

Clause reference	Particulars	Data
2	Portal fees	shall be reflected on the portal
3	Cost of bid document (in the form of Demand Draft)	Rs. 2,000.00(Rupees Two Thousand only)
	Cost of bid document payable to	<i>Bidders shall be directed to the payment gateway through the portal</i>
	Cost of bid document in favour of	
3	Affidavit	Annexure B
11	Pre-qualifications required	Yes
	If Yes, details	As per Annexure C
2	Key Dates	Annexure A

For Section 2 - ITB

Clause reference	Particulars	Data
1	Name of work	Conservation and Adaptive Reuse of a former Birth-Death-Marriage Registration Office Building into a Tourist Information Centre (TIC) at Maharaj Bada, Gwalior
2	Specifications	Annexure D
3	Procedure for participation in e-tendering	Annexure E
4	Whether Joint-venture is allowed	No
9	Pre bid meeting to be held	Yes
	If Yes, Date, Time & Place	04 April, 2018, 13:00 hrs Place – Office of the Chief Executive Officer, Gwalior Smart City Development Corporation Ltd. Nagar Nigam Mukhyalaya, City Centre, Gwalior
12 (Part 1)	Deleted	
12(Part 2)	Cover-B Technical Proposal	Annexure – G (Format G -1 to G -3)
12 (Part 3)	Cover-C Financial Bid	Annexure – H
16	Period of Validity of Bid	180 Days
17	Earnest Money Deposit	Rs 32,400.00 (<i>Thirty Two Thousand Four Hundred Only</i>)
	Forms of Earnest Money Deposit	Amount of EMD to be deposited only ONLINE/RTGS/NEFT/IMPS (Make payments before 48 Hours)

	EMD valid for a period of	Not less than 180 days from the last date of bid submission
	ONLINE/RTGS/NEFT/IMPS Chief Executive Officer, Gwalior Smart	ONLINE/RTGS/NEFT/IMPS Chief Executive Officer, Gwalior Smart
21	Letter of Acceptance (LoA)	Annexure I
22	Amount of Performance Security	5 % of contract amount
	Additional Performance Security, if any	As per provision of clause 22.2 of ITB
	Performance Security & Additional Performance Security in the format	Annexure J
	Performance Security & Additional Performance Security in favour of	Executive Director, Gwalior Smart City Development Corporation Limited
	Performance security& Additional Performance Security	After Physical Completion Certificate as per clause 35.1, shall be valid up to DLP plus 180 Days

(See clause 7 of Section 1 NIT)

Key Dates

S.No.	Works Department Stage	Bidder's Stage	Start		Expiry		Covers
			Date	Time	Date	Time	
1		Purchase of Tender (Online)	28 March, 2018	1030 Hours	24 March, 2018	1730 Hours	
2	Pre-Bid Meeting		04 April, 2018	1300 Hours			
3		Bid Submission (Online)			25 April, 2018	1730 Hours	
4		Bid Submission (Hard Copy)			NA		
5	Pre-Qualification Proposal Opening		26 April, 2018	1600 Hours			Cover A
6	Technical Proposal Opening		26 April, 2018	1610 Hours			Cover B
7	Financial Bid Opening		To be Intimated Later to Technical Qualified Bidder				Cover C

Note: Original Affidavit shall have to be submitted by the Successful Bidder before agreement. Scan copy of affidavit and all other declaration shall be submitted by the bidder online.

(See clause 3 of Section 1-NIT)

|| AFFIDAVIT ||

(To be contained in Cover A)

(On Non Judicial Stamp Paper of non-judicial stamp paper of appropriate amount)

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

I/we are fully satisfied for the correctness of the certificates/records submitted in support of the following information in bid documents which are being submitted in response to notice inviting e-tender No. _____ for _____ (name of work) dated _____ issued by the Gwalior Smart City Development Corporation Limited.

I/we are fully responsible for the correctness of following self-certified information/ documents and certificates:

1. That the self-certified information given in the bid document is fully true and authentic.
2. That:
 - a. Term deposit receipt deposited as earnest money, demand draft for cost of bid document and other relevant documents provided by the Bank are authentic.
 - b. Information regarding financial qualification and annual turn-over is correct.
 - c. Information regarding various physical qualifications is correct.
3. No close relative of the undersigned and our firm/company is working in the department.

OR

Following close relatives are working in the department:

Name _____ Post _____ Present Posting _____

Signature with Seal of the Deponent (bidder)

I/ We, _____ above deponent do hereby certify that the facts mentioned in above paras 1 to 3 are correct to the best of my knowledge and belief.

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

Signature with Seal of the Deponent (bidder)

(See clause 11 of Section 1 NIT)

PRE-QUALIFICATIONS CRITERIA**The bidder should have:**

Experience of having successfully executed (Successfully executed would mean successful completion and commissioning of the project),

- a) **three** similar works each costing not less than the amount equal to **3.24 Lakh** (20% of the probable amount of contract) during the last 7 financial years; or
- b) **two** similar works each costing not less than the amount equal to **4.86 Lakh** (30% of the probable amount of contract) during the last 7 financial years; or
- c) **one** similar work of aggregate cost not less than the amount equal to **8.10 Lakh** (50% of the probable amount of contract) during the last 7 financial years;

Similar works means the bidder must have successfully executed any **2** of the following characteristics of works:

- I) Conservation works involving restoration/ preservation/ reconstruction/ repair/ retrofitting/ adaptive reuse of heritage buildings which have certain historical or cultural significance duly recognized by statutory or non-statutory competent authorities or custodian agencies such as: any State Archaeology & Museum department/ State Department of culture/ Archaeological survey of India/ intach/ akdn/ or equivalent organisations.
- II) Civil/ retrofitting/ other site development works in revitalization/ redevelopment/ rejuvenation/ regeneration projects at historical sites/ urban historical precincts or areas/ historical monuments/ museums for which the custodian and/or funding agency is municipal bodies/ tourism departments/ development authorities/ state PWD/ CPWD/ or equivalent departments.
- III) Civil/ repair/ retrofitting works in buildings /monuments/ sites majorly involving (above 51% of the total value of item of works of a contract) works in traditional materials like lime mortar, stone masonry in lime mortar, lime concrete, lime plaster, arash work, ashlar stone works, traditionally carved stone works, etc.
- IV) Civil/ building services (mechanical, electrical, plumbing, HVAC) / site development / infrastructural/ landscaping works in historic/ cultural/ tourism sites for which the custodian or implementation agency is any government or quasi-government organisation or PSU

Bidders are required to submit the corresponding Work Order copies & Execution/ Completion Certificates issued by the respective clients. The Certificates should be issued by respective authority (Not below the rank of Executive Engineer) of client. GSCDCL may call for original certificates for verification.

Note: Work execution/Completion Certificate shall include detailed scope of work, actual cost of work completed with date of commencement and date of completion of the work.

Annexure – D

(See clause 2 of Section 2-ITB & clause 10 of GCC)

Specifications

Specifications shall form part of the technical specifications of this work and shall follow specifications as mentioned in the Schedule of Rates.

The provisions of General/Special Conditions of Contract, those specified elsewhere in the bid document, as well as execution drawings and notes, details mentioned in the Bill of Quantities, or other specifications issued in writing by GSCDCL shall form part of the technical specification of this work.

For items not covered under any of the schedule of rates, specifications with correction slips or those specifications are not given in the technical specifications appended or not incorporated in the nomenclature of the individual item, the work shall be done as per latest relevant BIS Codes of Practice or as per approval of Engineer-in-charge.

SPECIFICATIONS FOR BUILDING CONSERVATION WORKS

Guidelines for Conservation Intervention in Historic Building(s) & Site(s)

The following guidelines are mandatory to be followed by the implementing organization for preservation and reuse of the historic buildings:

- a) The conservation work to be undertaken at the Proposed TIC sites are to be as per parameters of nationally and internationally accepted conservation principles.
- b) Historically/ traditionally building techniques are recommended to be followed in execution of the works.
- c) Structural system: Recognizing the decay inherent in the structural system of the historic building, especially where there are visible signs of cracking, deflection or failure, Undertaking stabilization and repair of weakened structural members and systems and replacing structural members only when necessary.
- d) Building exterior feature: Retaining original masonry and mortar without application of any surface treatment.
- e) Re-pointing only those mortar joints where there is evidence of moisture problem, decay and inappropriate intervention.
- f) Duplicating the original mortar in composition, colour and texture.
- g) Duplicating the original mortar in joint size, method of application and joint profile.
- h) Cleaning masonry only when necessary to halt deterioration or remove graffiti and stains and always the gentlest method possible, such as low pressure water and soft natural bristle brushes.
- i) Repairing or replacing, where necessary, deteriorated material with new material that duplicates the original as closely as possible in colour, texture and composition.
- j) Removal of moulds, lichens and algae carefully by mechanical means through the use of nylon brushes only.
- k) Replacing missing significant architectural features such as cornices, brackets, railings and retaining the original with early colour and texture of masonry surface, including early signage, wherever possible.

- l) Retaining and repairing window and door opening, frames, sash, glass, hardware, shutters where they contribute to the character of the building.
- m) Repairing or replacing where necessary, deteriorated architectural features of wood, terracotta, glazed tiles etc.
- n) Discovering the historic paint colours and finishes of the structure and repainting with those colours to illustrate the distinctive character of the property.
- o) Building interior features: Retaining original material, architectural features, hardware, whenever possible, such as stairs, cornices, doors panelling floorings, finishes etc.
- p) Retaining the original plaster, whenever possible.
- q) Consolidating original plaster where it is found that the original plaster is weak and separating from the base. The grout if used should be of the original composition.
- r) Discovering and retaining original paint colours and other decorative motifs or, where necessary, replacing them with colour and decorative motifs based on the original.
- s) Retaining the basic plan of the building, the relationship and size of rooms, corridors and other spaces.
- t) Keeping new additions and adjacent new construction to a minimum, making them compatible in scale, building materials and texture.
- u) Designing new work to be compatible in materials, size, colour and texture with the earlier building and the area.
- v) Protecting architectural details and features that contribute to the character of the building.

Precautions to Be Taken During Execution of Works

- (i) For demolition work, utmost care must be taken to not disturb the surrounding historic fabric or vegetation. Due care must be taken during digging of trenches/ digging of surfaces on/ around the historic fabric to ensure no harm to it in any way.
- (ii) In case lakhori bricks are found in the course of digging of trenches etc. these findings to be brought to the notice of the conservation architect. All loose materials to be recycled, where possible.
- (iii) In case masonry structures or any other findings in stone, brick or metal are found during the course of work, it should be brought to the notice of the conservation architect and project officer since these could be of archaeological value.
- (iv) Due precautions must be taken for making lime mortar and subsequent lying of the plinth protection.
- (v) Utmost care must be taken to prevent water logging around historic buildings (especially around the base of the existing buildings) that may take place at the time of curing the works.
- (vi) Material (whether demolished or for proposed use) to be stacked carefully away from historic built fabric or vegetation.
- (vii) All machinery for transport of material of cranes etc. to be kept and used a safe distance from the

historic fabric so as not to affect the historic buildings because of intense vibrations etc.

- (viii) No trees/ vegetation are to be disturbed unless its removal has been proposed. If any discrepancy between drawings and location of tree is identified and hinders layout of paving, then it shall be brought to the notice of the conservation architect and project officer.

Materials and workmanship

- a) The term “Materials” shall mean all materials, goods and articles of every kind whether raw, processed or manufactured and equipment and plant of every kind to be supplied by the contractor for incorporation in the works.
- b) All materials shall be of the specified quality and should match the original in colour, texture and strength. New material should be of acceptable conservation grade.
- c) Materials shall be transported, handled (stacked where necessary) and stored in such a manner as to prevent deterioration, damage or contamination failing which such damaged materials will be rejected and shall not be used on any part of the works under this contract.
- d) Work shall be performed only by mason skilled and competent in the particular class of work. Wherever possible skilled craftsman must be engaged and traditional methods employed in reconstruction processes. All work should match the standard and quality of the original workmanship of the building.
- e) The building and Art Conservation works should be carried out in a manner complying with the principles of conservation and good conservation practices as accepted nationally and internationally.
- f) The contractor should provide H-frame scaffolding and other special scaffolding that may be required for accessing and working on certain parts of the building without causing any harm to the structures. Special care must be taken while working so that flooring is not damaged. Scaffolding may be propped against the face of the building with suitably padded buffer.
- g) Recycling of the historic material: The historic material should be reused as far as possible. This essentially includes the historic timber members, stone and lakhori bricks. The partially decayed timber members should also be reused after consultation with the client and the principal consultant.
- h) The scaffolding should be metal cup lock system and not take support by burrowing into the historic masonry.
- i) All vehicular movement within the site to move material or man power should move at a minimum distance of 2 meters from the buildings. These paths should be demarcated on the site.

Sampling and testing of materials

- a) The contractor shall submit samples of such materials (before going for bulk supply, bulk supply shall be taken up after obtaining written approval of the said samples) as may be required by the Engineer-In-Charge/Conservation Architect for Quality Assurance and shall carry out the specified tests directed by the Engineer-In-Charge/Conservation Architect at the site or at the supplier's premises or at a laboratory approved by the Engineer-In-Charge/Conservation Architect.
- b) Samples shall be submitted and tests carried out sufficiently early to enable further samples to be submitted and tested if required by the Engineer-In-Charge/Conservation Architect for Quality Assurance.

- c) Final specifications of the building materials, to be used for conservation work, should be based on laboratory tests to ensure that they comply with the original materials. Scientific investigations of the art work materials should be carried out to better inform proposed conservation interventions.
- d) The contractor shall give the Engineer-In-Charge/Conservation Architect seven days notice in writing of the date on which any of the materials will be ready for testing or inspection. The Engineer-In-Charge/Conservation Architect shall attend the test at the appointed place within seven days of the said date on which the materials are expected to be ready for testing or inspection according to the contractor, failing which the test may proceed in his absence unless instructed by the Engineer-In-Charge/Conservation Architect to carry out such a test on a mutually agreed upon date.
- e) The contractor shall in any case submit to the Engineer-In-Charge/Conservation Architect within seven days of every test such number of certified copies (not exceeding six) of the test readings as the Engineer-In-Charge/Conservation Architect may require.
- f) The provisions of this clause shall also apply to materials supplied under any nominated sub-contract.

Standards

- a) The latest specifications, as prepared and published by Public Works Department, Govt. of Madhya Pradesh, shall be construed to be a part of the tender. These shall be followed in respect of all materials, workmanship and various tests to be performed and the acceptance criteria.
- b) In respect of items, where Public Works Department, Govt. of Madhya Pradesh specifications are either not available or do not serve the intent of design, the Central Public Works Department, Govt. of India, Specifications shall govern.
- c) Where Specifications are still not found, the latest provisions of National Building Code of India / Indian Standards (IS) / IRC / MORTH / CPHEEO shall hold good.
- d) The requirement of these specifications shall be fulfilled by the Contractor within his tendered rates. The items quoted shall be deemed to have taken these specifications into account.
- e) At the request of client, the contractor has to provide a certificate stating that the materials supplied comply in all respects with the standard; the contractor shall obtain the certificate and forward it to the Engineer-In Charge/Conservation Architect.
- f) If no standard is indicated, the relevant Indian Standard, if any, shall apply. Indian Standards are published by:

Indian Standards Institution,
Manak Bhavan,
9, Bahadur Shah Zafar Marg,
New Delhi – 110 002.
- g) In case of discrepancy between the Technical Specification and the Standards referred to herein, the Technical Specification shall govern.

Site Clearance

- a) *De-vegetation*: The growth of vegetation in the joints of historic brick buildings is the principle factor

in causing their ruin. Therefore, the plants and trees growing on and close to the structure need to be completely eradicated.

- b) In removing weeds, trees or shrubs, etc. from walls, it is essential that the roots should be completely destroyed, and during the process of raking out, any tendrils found in the joints should be followed up and removed. The stumps can be injected with chemical called Round up or tree killer, arsenic or hot lime slurry shall be poured around the roots.
- c) Joints which have to be raked out in order to destroy the vegetation should, after the earth etc. has been removed, be immediately re-pointed.
- d) The removal of trees from historic masonry is an operation that demands special care. As a rule large trees should be removed in sections in order to prevent injury being done to the masonry. When jungle has to be cleared from around an ancient monument, it should be cut for at least 30 yards on all sides, unless special reasons to the contrary exists, and its roots should be completely eradicated so as to prevent them from sprouting again.
- e) Refilling shall be done by using earth in layers of 200mm. thickness with compaction in pits. Another method which can be employed for the de-vegetation of small saplings is drilling by mechanical or manual means and then extracting the remnants by vacuum suction.

Dismantling and Demolishing

- a) *Dismantling:* The term 'Dismantling' implies carefully separating the parts without damage and removing. This may consist of dismantling one or more parts of the building as specified or shown on the drawings.
- b) *Precautions:* All materials obtained from dismantling or demolition shall be the property of the Government unless otherwise specified and shall be kept in safe custody until they are handed over to the Project Manager/authorized representative.
- c) *Findings on site:* The findings should be brought in to notice of the conservation architect. The constructions details will be reviewed on the basis of the new findings. The contractor should photo document the various findings on site during the course of conservation works. It is important that the contractor adheres to the time plan keeps the conservation architect informed about the various explorations in the building so that the documentation of the findings and relevant changes in the details can be carried.
- d) *Marking and keeping material:* All materials removed in accordance with the items of work shall be marked as they are removed, so as to clearly show where they have been removed from, and shall be kept on the site and protected from damage until they are inspected by the Conservation Architect. Marking of the historic material is essentially important when the roofs of the rooms are opened for conservation works. Each member should be carefully removed, numbered and stacked carefully. A system should be adopted to number the members. The members will be numbered in the following manner: level no/ room no/ member no (to be numbered from north to south or east to west depending upon the spanning system). For example, if the roof is opened in room no. 5 on the ground floor then the members will be numbered as- 01/05/01.
- e) The dismantling shall always be well planned before hand and shall generally be done in reverse order of the one in which the structure was constructed. The operations shall be got approved from the Engineer-In-Charge/Conservation Architect before starting the work.
- f) Due care shall be taken to maintain the safety measures prescribed in IS 4130.
- g) *Care in removal:* All demolition shall be undertaken in a careful manner with minimum disturbance

to prevent any damage to other parts or to the rest of the building.

- h) While removing the incompatible later additions (lime washes, cement plaster, etc.) the contractor shall take all precautions to protect the existing original details (art work, original plaster and original elements). All work on decorative surfaces shall be carried out by Art Conservators only or under their direct supervision. Precautions to safeguard the decorative surfaces/art works shall be carried out prior to commencement of civil dismantling or demolition works on the building. Suitable measures for their protection shall be adopted by the civil works contractor and firm carrying out the art conservation work in consultation with each other.
- i) Protection of historic features and materials: Utmost care must be taken to ensure that the historic fabric of the building is not damaged in the course of demolition works as well as during conservation works. Special care must be taken to protect floor surfaces (lakhori brick floors, marble floors, glazed tiles, stone etc.), decorative features (doors and windows, wall paintings etc.).
- j) Necessary propping, shoring and or under pinning shall be provided to ensure the safety of the adjoining work or property before dismantling and demolishing is taken up and the work shall be carried out in such a way that no damage is caused to the adjoining work or property. Wherever specified, temporary enclosures or partitions and necessary scaffolding with suitable double scaffolding and proper cloth covering shall also be provided, as directed by the Engineer-In-Charge/Conservation Architect.
- k) Necessary precautions shall be taken to keep noise and dust nuisance to the minimum.
- l) All work needs to be done under the direction of Engineer-In-Charge/Conservation Architect. Helmets, goggles, safety belts etc. should be used whenever required and as directed by the Engineer-In-Charge/Conservation Architect.
- m) The demolition work shall be proceeded with in such a way that it causes the least damage and nuisance to the adjoining building and the public.
- n) Dismantling shall be done in a systematic manner. All materials which are likely to be damaged by dropping from a height or by demolishing roofs, masonry etc. shall be carefully removed first. Chisels and cutters may be used carefully as directed. The dismantled articles shall be removed manually or otherwise, lowered to the ground (and not thrown) and then properly stacked as directed by the Engineer-In-Charge/Conservation Architect.
- o) Where existing fixing is done by nails, screws, bolts, rivets, etc., dismantling shall be done by taking out the fixing with proper tools and not by tearing or ripping off.
- p) Any serviceable material, obtained during dismantling or demolition, shall be separated out and stacked properly as directed by the Engineer-In-Charge/Conservation Architect within a lead of 50 meters. All unserviceable materials, rubbish etc. shall be disposed off as directed by the Engineer-In-Charge/Conservation Architect.
- q) The contractor shall maintain/disconnect existing services, whether temporary or permanent, where required by the Engineer-In-Charge/Conservation Architect.
- r) No demolition work should be carried out at night especially when the building or structure to be demolished is in an inhabited area.
- s) Screens shall be placed where necessary to prevent injuries due to falling pieces. Water may be used to reduce dust while tearing down plaster from brick work.

Brick Masonry work

- a) *Materials:* Materials shall comply with the specifications and standards as specified.
- b) *Lime:* This specification lays down the general characteristics of lime to be used for the conservation work. No readymade or factory made lime is to be used for any of the work.

The classification of lime to be used for various purposes is as follows:

Lime for concrete terracing: Class A lime: Hydraulic Lime

Lime for making lime mortar: Class B lime: Feebly hydraulic lime

Lime for making lime plaster: Class C lime: Fat lime

- *Supply and Storage:* The lime to be used for concreting of terrace or Class A lime is to be supplied as hydraulic lime only. The class B and class C shall be supplied as quick lime. Lime supplied as quick lime or lump lime at the site should be in a sealed condition and subsequently stacked in a store or any other place which is dry and under cover well protected from rain. This is necessary because quick lime deteriorates quickly as it attracts moisture and carbon dioxide from atmosphere. For storing it should be piled up and covered with a blanket of lime dust to exclude moist air. Therefore, it should be slaked as soon as possible in a pit called a 'Haudi' specially constructed for this. It should be slaked for at least 10 days prior to its use for making lime mortar and plaster.
 - *Rejection of Lime:* The lump or quick lime having stone pieces, impurities and powdery shall be rejected. The Contractor at his own expense shall remove lime, which has been rejected by the Engineer-In-Charge/Conservation Architect, from the site of work within 3 days.
 - *Lime slaking in tank:* A tank or the 'Haudi' lined with stone or brick and finished with cement large enough to permit, stirring and hoeing shall be prepared (generally tanks suitable for 5 quintals or 10 quintals of quick lime are used in practice). The tank shall be filled to half its depth with water. Quick lime shall be gradually added till it fills the entire bottom to about half the depth of water. (Never add water to lime). While quick lime is being added it shall be constantly stirred and hoed so as to break up the lumps. No part of the lime shall be allowed to expose above water level. As the lime slakes with evolution of heat temperature begins to rise and more lime or water may be added till the required temperature is reached and that temperature should be maintained by the addition of more lime or water till all the lime apparently has slaked, the stirring and hoeing shall be continued during the above process and for some period even after the slaking is apparently over. This whole act has to be done with utmost precaution to the body by covering the eyes with glass goggles and wearing rubber boots.
 - *Maturing:* After the lime has cooled, more water shall be added if required and it shall be left undisturbed for not more than 7 days. The putty shall be allowed to mature but not allowed to dry out till it is used. Therefore, the tank will need to be filled with water to allow the slaked lime to be constantly submerged in water.
- c) *Surkhi:* Surkhi is the powdered burnt bricks, brickbats and is used as an admixture to lime both for making lime mortar and lime plaster. Surkhi shall always be obtained from fully burnt or slightly under burnt, but never from over burnt bricks. Surkhi obtained from burnt loam shall not contain any un-burnt soil. Surkhi shall be perfectly clean, free from an admixture or any foreign. Surkhi shall not contain soluble sulphate more than 0.5% for exposed work and work in damp situations and not more than 1.0% when used for works in dry and internal situations.

Stacking: Surkhi shall be stacked on masonry or wooden platform in regular stacks as of size 2.0M x 2.0M x 0.6M at the places as directed by the Engineer-In-Charge/Conservation Architect and shall be protected from dust, rains and dampness and shall be kept under adequate coverings

provided by the contractor.

- d) *Sand*: Sand used in the making of mortar should be coarse grained, perfectly clean and sharp and preferably of a yellow and variegated colour. It should, if possible, be obtained from local pits. It is absolutely essential that it should possess the above mentioned qualities in order that a successful result may be obtained for the lime mortar. Fine grained, dusty or dirty sand must not be allowed, and each fresh consignment should be carefully inspected in order to see that it corresponds with the sample approved in the first case. Many sands which would otherwise be of good quality contain lumps of foreign matter, or a quantity of dusty particles. Such sand may with the Engineer-In-Charge/Conservation Architect consent, be used after it has been thoroughly washed and sifted.
- e) *Mortar mixes* - lime surkhi mortar and lime surkhi plaster
- *Materials used*: Lime: Lime A, B and C class shall be used in the preparation of mortar and shall conform to lime specification 2.1.1
 - *Surkhi Aggregates*: It shall conform to Surkhi Specification 2.1.2
 - *Sand aggregate in lime mortar*: Shall conform to sand specification
 - *Water*: For all mortars water used shall be free from mud, clay, and acidic, basic or organic impurities and shall be drinkable.
 - *Proportion*: The lime surkhi mortar shall be in conformance to the DSR-2002 specification for lime in 1:1:1 (1 lime putty: 1 surkhi: 1 fine sand).
 - The proportion of mix for mortar shall also depend upon the percentage purity of lime with regard to its CaO content. In case the CaO content of lime is lower, the proportion of lime shall be suitably increased to compensate, for the lower CaO content of the lime used. The lime plaster will be as per Archaeological specification 3.1 (a) in 1:2 (1 lime: 2 surkhi).
 - *Preparation of mortar*: Mortar mill (Lime Chakki) mixing: Slaked lime in the required quantity and fine aggregates in proportions (For lime mortar, 1:1:1 (1 lime putty: 1 surkhi: 1 fine sand) and 1:2 (1 lime: 2 Surkhi) shall be put along with limewater/water in the chakki spreading uniformly all along its circumference and ground with a stone chakki till a mortar of uniform colour and desired consistency is obtained. As grinding is done the mixture shall be continuously raked and turned over and over specially from corners and sides. Mortar is to be ground to the required consistency depending on the mode of grinding i.e. bullock or tractor for 3 hrs and 1 and half hour (at least) respectively. The prepared masala has to be then removed to a rectangular pit that would be used for storing of the masala with enough space to allow the masala to be mixed well for a short duration using feet before delivering it for application.
 - Addition of surkhi or other pozzolonas in the making of mortars gives the mortars the properties of hydraulic mortars i.e. quick setting properties and should be treated like Class A and Class B lime mortars, depending upon the hydraulicity.
 - *Strengthening of the mortar*: The prepared lime mortar should be added with the admixture of lapti ka paani + methi + gulgul ka paani which should be added only after being filtered properly. The filtered admixture will be thoroughly mixed with the lime mortar and then added with rumi mastagi ka paani for extra strengthening of the mortar.
 - *Storage of Mortar*: Lime mortars prepared shall be used up as soon as possible after mixing 2 days for Class B limes from the time of making Putty or first grinding. Mortars from Class C limes can be used for periods longer than 3 days after the making of mortar provided they are protected from drying out. The mortar left over at the end of the working hour should be properly covered with moistened jute bags. When the mortar is used after a gap of two days it should be sprinkled with limewater and mixed well using feet covered with gumboot.
 - *Rejection of Mortar*: Mortar not found in accordance with the specifications above and unsuitable according to field and laboratory tests of lime mortar shall be rejected. The Contractor at his own cost shall remove rejected mortar from the site of work within 3 days.
- f) *Brick conservation*: When modern lime or cement pointing has to be cut out from old joints on building, great care is to be taken such that the edges and surfaces of the brick are not touched

with the chisel. When the cement pointing is hard and compact, a very small chisel is to be used, and the centre of the cement joint is cut out, after which the sides of the joints where the cement adheres, are to be picked off with a steel tool, but without the use of a hammer.

- The construction and repair of damaged traditional brick (lakhori) masonry shall be in accordance with PWD / CPWD specification or as per the traditional practice of the region. Bricks shall be sufficiently wetted before laying to prevent absorption of water from mortar. The wetted bricks shall be kept on a clean wooden platform to avoid earth being smeared on them. Every brick shall be carefully fitted to the adjacent stones so as to form neat and close joints.
 - The joints shall be staggered to avoid cracking. Chips of bricks may be used wherever necessary to avoid thick mortar beds or joints and hollow spaces. The course shall be truly horizontal and the work strictly in plumb. The mortar shall be removed from the brick faces after the work is completed. The joints should be raked 20 mm. deep at the end of each day to provide for key to plaster. Piercing of walls for scaffolding supports shall not be permitted. All brickwork shall be maintained wet for a minimum period of 10 days.
- g) *Filling of cracks:* Cracks can be categorized into minute hairline crack and wide crack especially in plaster. Not much action is needed to put a stop or to treat micro-cracks. On the other hand, the wide cracks are filled with putty of lime and the materials originally used for the preparation of plaster at various places. Filling is done with a painted spatula and sometimes with a dropper. Where the cracks are structural the cracks need to further investigate and the underlying masonry condition assessed to find the cause of the cracks. Often the joints in the stone masonry deteriorated as a result of deteriorating mortar which gives rise to major cracks.
- Cracks in the masonry will need to be stitched and the masonry grouted with hydraulic lime grout in 1:1 (1 lime putty: 1 fine sieved sand) using pressure grouting to strengthen the masonry.
 - The gauged brick masonry work shall be of superior quality and be smoothed by physical / abrasive technique so as to achieve hair line joints.
- h) *Coursed Traditional Brick Masonry* - The construction and repair of damaged traditional lakhori brick masonry shall be in accordance with CPWD specification or as per the traditional practice of the region.
- Bricks shall be sufficiently wetted before laying to prevent absorption of water from mortar. The wetted bricks shall be kept on a clean wooden platform to avoid earth being smeared on them. Every brick shall be carefully fitted to the adjacent stones so as to form neat and close joints. The joints shall be staggered to avoid vertical cracks. Chips of bricks may be used wherever necessary to pin masonry/ avoid thick mortar beds or joints and hollow spaces. The course shall be truly horizontal and the work strictly in plumb. The mortar shall be removed from the brick to faces after the work is completed. The joints should be raked 20 mm. deep at the end of each day provide for key to plaster. Piercing of walls for scaffolding supports shall not be permitted. All brickwork shall be maintained wet for a minimum period of 10 days.

Stone Masonry

- a) *Materials:* Materials shall comply with the specifications and standards as specified. The stone slabs shall be 'matching' in colour, property and as specified in the description of the item.
- b) *Lime:* This specification lays down the general characteristics of lime to be used for the conservation work. No readymade or factory made lime is to be used for any of the work.

The classification of lime to be used for various purposes is as follows:

Lime for concrete terracing: Class A lime: Hydraulic Lime

Lime for making lime mortar: Class B lime: Feebly hydraulic lime

Lime for making lime plaster: Class C lime: Fat lime

- *Supply and Storage:* The lime to be used for concreting of terrace or Class A lime is to be supplied as hydraulic lime only. The class B and class C shall be supplied as quick lime. Lime supplied as quick lime or lump lime at the site should be in a sealed condition and subsequently stacked in a store or any other place which is dry and under cover well protected from rain. This is necessary because quick lime deteriorates quickly as it attracts moisture and carbon dioxide from atmosphere. For storing it should be piled up and covered with a blanket of lime dust to exclude moist air. Therefore, it should be slaked as soon as possible in a pit called a 'Haudi' specially constructed for this. It should be slaked for at least 10 days prior to its use for making lime mortar and plaster.
- *Rejection of Lime:* The lump or quick lime having stone pieces, impurities and powdery shall be rejected. The Contractor at his own expense shall remove lime, which has been rejected by the Engineer-In-Charge/Conservation Architect, from the site of work within 3 days.
- *Lime slaking in tank:* A tank or the 'Haudi' lined with stone or brick and finished with cement large enough to permit, stirring and hoeing shall be prepared (generally tanks suitable for 5 quintals or 10 quintals of quick lime are used in practice). The tank shall be filled to half its depth with water. Quick lime shall be gradually added till it fills the entire bottom to about half the depth of water. (Never add water to lime). While quick lime is being added it shall be constantly stirred and hoed so as to break up the lumps. No part of the lime shall be allowed to expose above water level. As the lime slakes with evolution of heat temperature begins to rise and more lime or water may be added till the required temperature is reached and that temperature should be maintained by the addition of more lime or water till all the lime apparently has slaked, the stirring and hoeing shall be continued during the above process and for some period even after the slaking is apparently over. This whole act has to be done with utmost precaution to the body by covering the eyes with glass goggles and wearing rubber boots.
- *Maturing:* After the lime has cooled, more water shall be added if required and it shall be left undisturbed for not more than 7 days. The putty shall be allowed to mature but not allowed to dry out till it is used. Therefore, the tank will need to be filled with water to allow the slaked lime to be constantly submerged in water.
- c) *Surkhi:* Surkhi is the powdered burnt bricks, brickbats and is used as an admixture to lime both for making lime mortar and lime plaster. Surkhi shall always be obtained from fully burnt or slightly under burnt, but never from over burnt bricks. Surkhi obtained from burntloam shall not contain any un-burnt soil. Surkhi shall be perfectly clean, free from an admixture or any foreign. Surkhi shall not contain soluble sulphate more than 0.5% for exposed work and work in damp situations and not more than 1.0% when used for works in dry and internal situations.
- d) *Stacking:* Surkhi shall be stacked on masonry or wooden platform in regular stacks as of size 2.0M x 2.0M x 0.6M at the places as directed by the Engineer-In-Charge/Conservation Architect and shall be protected from dust, rains and dampness and shall be kept under adequate coverings provided by the contractor.
- e) *Sand:* Sand used in the making of mortar should be coarse grained, perfectly clean and sharp and preferably of a yellow and variegated colour. It should, if possible, be obtained from local pits. It is absolutely essential that it should possess the above mentioned qualities in order that a successful result may be obtained for the lime mortar. Fine grained, dusty or dirty sand must not be allowed, and each fresh consignment should be carefully inspected in order to see that it corresponds with the sample approved in the first case. Many sands which would otherwise be of good quality contain lumps of foreign matter, or a quantity of dusty particles. Such sand may with the Engineer-In-Charge/Conservation Architect consent, be used after it has been thoroughly washed and sifted.
- f) *Mortar mixes - lime surkhi mortar and lime surkhi plaster*

Materials used:

- *Lime:* Lime A, B and C class shall be used in the preparation of mortar and shall, conform to lime specification 2.1.1.
 - *Surkhi Aggregates:* It shall conform to Surkhi Specification 2.1.2.
 - *Sand aggregate in lime mortar:* Shall conform to sand specification.
 - *Water:* For all mortars water used shall be free from mud, clay, and acidic, basic or organic impurities and shall be drinkable.
 - *Proportion:* The lime surkhi mortar shall be in conformance to the DSR-2002 specification for lime in 1:1:1 (1 lime putty: 1 surkhi: 1 fine sand).
 - The proportion of mix for mortar shall also depend upon the percentage purity of lime with regard to its CaO content. In case the CaO content of lime is lower, the proportion of lime shall be suitably increased to compensate, for the lower CaO content of the lime used. The lime plaster will be as per Archaeological specification 3.1 (a) in 1:2 (1 lime: 2 surkhi).
 - *Preparation of mortar:* Mortar mill (Lime Chakki) mixing: Slaked lime in the required quantity and fine aggregates in proportions (For lime mortar, 1:1:1 (1 lime putty: 1 surkhi: 1 fine sand) and 1:2 (1 lime: 2 Surkhi) shall be put along with limewater/water in the chakki spreading uniformly all along its circumference and ground with a stone chakki till a mortar of uniform colour and desired consistency is obtained. As grinding is done the mixture shall be continuously raked and turned over and over specially from corners and sides. Mortar is to be ground to the required consistency depending on the mode of grinding i.e. bullock or tractor for 3 hrs and 1 and half hour (at least) respectively. The prepared masala has to be then removed to a rectangular pit that would be used for storing of the masala with enough space to allow the masala to be mixed well for a short duration using feet before delivering it for application.
 - Addition of surkhi or other pozzolonas in the making of mortars gives the mortars the properties of hydraulic mortars i.e. quick setting properties and should be treated like Class A and Class B lime mortars, depending upon the hydraulicity.
 - *Strengthening of the mortar:* The prepared lime mortar should be added with the admixture of lapti ka paani + methi + gulgul ka paani which should be added only after being filtered properly. The filtered admixture will be thoroughly mixed with the lime mortar and then added with rumi mastagi ka paani for extra strengthening of the mortar.
 - *Storage of Mortar:* Lime mortars prepared shall be used up as soon as possible after mixing 2 days for Class B limes from the time of making Putty or first grinding. Mortars from Class C limes can be used for periods longer than 3 days after the making of mortar provided they are protected from drying out. The mortar left over at the end of the working hour should be properly covered with moistened jute bags. When the mortar is used after a gap of two days it should be sprinkled with limewater and mixed well using feet covered with gumboot.
 - *Rejection of Mortar:* Mortar not found in accordance with the specifications above and unsuitable according to field and laboratory tests of lime mortar shall be rejected. The Contractor at his own cost shall remove rejected mortar from the site of work within 3 days.
- g) *Stone conservation:* When modern lime or cement pointing has to be cut out from old joints on building, great care is to be taken such that the edges and surfaces of the stone are not touched

with the chisel. When the cement pointing is hard and compact, a very small chisel is to be used, and the centre of the cement joint is cut out, after which the sides of the joints where the cement adheres, are to be picked off with a steel tool, but without the use of a hammer.

- The construction and repair of damaged traditional stone masonry shall be in accordance with PWD/ CPWD specification or as per the traditional practice of the region. Stone shall be sufficiently wetted before lying to prevent absorption of water from mortar. The wetted stone shall be kept on a clean wooden platform to avoid earth being smeared on them. Every stone shall be carefully fitted to the adjacent stones so as to form neat and close joints.
 - The joints shall be staggered to avoid cracking. Chips of stones may be used wherever necessary to avoid thick mortar beds or joints and hollow spaces. The course shall be truly horizontal and the work strictly in plumb. The mortar shall be removed from the stone face after the work is completed. The joints should be raked 20 mm. deep at the end of each day to provide for key to plaster. Piercing of walls for scaffolding supports shall not be permitted. All stone work shall be maintained wet for a minimum period of 10 days.
- h) *Filling of cracks:* Cracks can be categorized into minute hairline crack and wide crack especially in plaster. Not much action is needed to put a stop or to treat micro-cracks. On the other hand, the wide cracks are filled with putty of lime and the materials originally used for the preparation of plaster at various places. Filling is done with a painted spatula and sometimes with a dropper. Where the cracks are structural the cracks need to further investigate and the underlying masonry condition assessed to find the cause of the cracks. Often the joints in the stone masonry deteriorated as a result of deteriorating mortar which gives rise to major cracks.
- Cracks in the masonry will need to be stitched and the masonry grouted with hydraulic lime grout in 1:1 (1 lime putty: 1 fine sieved sand) using pressure grouting to strengthen the masonry.
 - The gauged stone masonry work shall be of superior quality and be smoothed by physical /abrasive technique so as to achieve hair line joints.

Flooring work

a. *Lime Concrete Flooring*

Consolidation of the original lime concrete flooring finished with lime punning, with lime concrete [Lime mortar (1 lime: 1 coarse sand: 1 khakha: 1surkhi) with 1 or 1/2 brick aggregate (size should match the aggregate size of the original concrete)] in matching grading, colour and specifications to the original. The loose concrete should be carefully removed and surface should be thoroughly cleaned with nylon brushes and wooden tools to make the surface highly rough (before repair work). The surface of the concrete should be then thoroughly wetted. After repair application of lime mortar/ concrete the surface of floor should be rammed with wooden dambusa and other tools for compression till the surface is tight and compact. Curing must be undertaken for at least 15 days, 1 day after laying the concrete floor.

b. *Compacted Bed of Dry Brick Ballast*

Before the start of work brick aggregate 40 mm nominal size unless specified otherwise, shall be stacked for the entire work The formation for a width equal to that of the area shall be cut to the depth below the proposed finish level, equal to the thickness of the course of brick aggregate (due allowance being made for consolidation) and dress off in level to the finished profile. In case of made up soil, copious water shall be poured so that earth settles down as much as possible and the same rolled up with 3 tonnes or light power roller, as directed by the Engineer-In-Charge/Conservation Architect.

Brick aggregate shall be racked off the stack with the racks so as to leave behind mud and dust. It

shall be spread evenly over the prepared surface to the required depth with a finishing material to avoid segregation. Brick aggregate shall be carefully laid and packed, bigger size being placed at the bottom to 7.5 cm. depth unless specified otherwise. After that the area shall be grouted with fine sand. The bricks aggregate shall be consolidated by dry rolling with 3 tonnes or light weight power roller as directed by the Engineer-In-Charge/Conservation Architect. The measurement of the finished work shall be taken in sqm. Correct to two places of decimal. Length and breadth shall be measured in meter correct to a centimetre.

Finishing work

Lime Surkhi Plaster Work:

- a) *Sequence of work:* Surface Preparation: Surfaces to be plastered shall be thoroughly cleaned of all dust, grease, oil and loose mortar. The entire surface shall then be thoroughly washed with brush and clean water. Joints shall be racked out to depth of 20mm minimum with a hooked tool specially made for the purpose. Care should be taken not to damage masonry edges while racking. All surfaces of concrete, old plaster and stone shall be roughened sufficiently for bond with the plaster. Soft or crumbling stonework and other surfaces shall be dismantled and repaired if required. All surfaces to be plastered shall be thoroughly wetted for 24 hours before commencing plaster and shall be kept damp during the progress of work. At the same time the wall should not be too wet, as plaster is then likely to fall out and will also not be appropriate. It is essential to maintain uniform suction of water by receiving surfaces, which shall be ensured by damping evenly all dry patches before applying plaster. The Engineer-In-Charge/Conservation Architect will inspect and approve all preparatory work before the commencement of plastering work.
- b) *Application & Curing:* The first coat shall be done as per specified in archaeological specification 3.1 (a) and should be in ratio 1:2 (lime: surkhi). The first coat shall be applied to the wall with trowel in thickness 5 to 8mm. This surface shall be racked out, immediately after applying when it wet, by trowel at distances 30mm to 45mm. in jig jag pattern. This shall be done for complete room and should be left for 2-3 days.
- c) Now the surface shall be thoroughly wetted for 24 hours before applying the next coat of surkhi plaster. The thickness for the surkhi plaster 25mm. in ratio 1:2 (lime: surkhi). The surkhi plaster for wall shall be done from the top to bottom and if possible each wall should be done on the same day if to avoid defects or unevenness at the joints. To ensure even thickness and a true surface, about 150mm. x 150mm. of surkhi plaster shall first be applied horizontally and vertically at 2m centres, approximately over the entire surfaces, to serve as gauges.
- d) The surkhi mortar shall be filled between these to gauge with a straight edge wooden piece (plainer or butkada). The plastered surface shall be firmly pressed to uniform plumb and plane. The surface shall be left for 24 hours. The surface shall develop cracks after 24 hours. All plastered surface shall be thoroughly wetted for 24 hours before commencing plaster and shall be kept damp during the progress of work. At the same time the wall should not be too wet, as plaster is then likely to fall out and will not be satisfactory. It is essential to maintain uniform suction of water by receiving surfaces, which shall be ensured by damping evenly all dry patches before applying plaster. The Engineer-In-Charge/Conservation Architect will inspect all preparatory work and process shall not be commenced, until Engineer-In-Charge/Conservation Architect approves all preparatory works.
- e) The surface shall be hammered at the cracks with the help of wet wooden sticks (jaal/ baint wood) made for the purpose. The cracks should seems be mixed. The surface shall be left for 7 days and shall cure during the process.
- f) All corners, angles, junctions, etc. shall be truly vertical, horizontal or carved as the case may be and shall be carefully finished. Rounding or chamfering of corners or junctions wherever required

shall be done without any extra payment. No portion shall be left out initially to be patched up later on. Before applying surkhi, the entire surface of the surkhi plaster should be rechecked with a true straight edge (wooden or aluminium plainer 2.5m long), plumb, string, level, etc.

- g) If any crack appears on surfaces or if any portion found soft or if sound defective due to less lime, improper curing or any other reason, the relevant portion shall be removed and redone as per the instruction of the Engineer-In-Charge/Conservation Architect.
- h) The surface is thoroughly wetted before applying *loi* (final coat). Now the surkhi *loi* shall be applied in thickness 2mm. (ratio 1:2) is applied with the plainer. The surface shall be smoothed by rubbing and pressing.

i) *Surface finish: Removal of lime wash*

- While removal of lime washes from an old surface care should be taken to prevent injury to the underlying surface in particular any inscription, painting or relief beneath. Lime wash can be removed by light brushing with soft brush and water or light sponging in case of painted or delicate surface. In certain cases, scraping using surgical blade and knife may be resorted to by skilled worker under close supervision and instruction of the engineer in consultation with the conservation architect.
- The task of cleaning stucco work or removal of lime wash and dirt from the surface is a specialized and difficult job to be undertaken only under the directions supervision of art conservation expert in consultation with the conservation architect.
- Application of lime wash: Lime wash specification should be as per archaeological specification clause 4.3 in the BSR 2002. Lime-wash is essentially a mixture of slaked lime (calcium hydroxide) in water, these sets slowly by absorbing carbon dioxide from the air. The chemical reaction that occurs produces crystals of calcite (calcium carbonate). Lime wash assists in maintaining the ability of the building to breathe as it is one of the most vapour permeable decorative coatings. If a building is prevented from breathing, water can become trapped in the external walls, resulting in the decay of the masonry and producing ideal conditions for timber rot to commence.
- For colour washes (colour lime washes) care should be taken in selecting water-soluble pigments to ensure that they are not affected by ultra violet light, or by lime. A variety of earth pigments are available and these should be soaked for at least 24 hours before being incorporated into a wash. These are essentially refined earth or clay with a strong natural colour, such as red and yellow ochre. The colour is given by their mineral content and they are, therefore least likely to fade in the sunlight or by chemical reaction with the lime.
- Having slaked the quicklime, the resulting putty should be left for a long period of time (at least 3 months) to ensure that all the quicklime has reacted with the water and the particles of lime have matured. The putty should be sieved to exclude any foreign material, as even the finest and purest naturally occurring limestone will contain some contaminants. Lime wash should be applied as thinly as possible to facilitate carbonation and prevent crazing that can occur when applied more liberally and it is therefore recommended that the putty is diluted with sufficient lime water (that is, water that has been saturated in lime putty) to produce a wash the consistency of milk.
- As a water-based product, lime wash is most suitable for application onto an absorbent background. It will be rather disconcerting to find that, having made what appears to be the appropriate colour in the tub; it dries many shades lighter once it is applied. Therefore, colours need to be dry tested to ensure the correct hue has been achieved.

- When making or applying lime wash, safety goggles and gloves should always be worn. The background should be absorbent; inappropriate old lime wash should be removed carefully using scalpel and blades without causing harm to the underlying plaster surface. When rejuvenating an old lime washed surface, care must be taken to remove any loose or spilled material and the entire surface should be thoroughly washed down using a soft scrubbing brush to ensure that the dust is removed. All surfaces to be lime washed should be pre-wetted with clean cold water and left until the surface is damp but not wet.
- The best results are obtained when the lime wash is almost scrubbed into the surface with a brush that is stiffer than a conventional paint brush, but softer than a scrubbing brush, such as a soft bristle dustpan brush. The application should be with a circular motion, ensuring that the lime wash is worked into the surface and spread as far as possible. The work should be finished with vertical strokes. There is no need to be concerned if the first coat appears only as a thin transparent wetting. A fully opaque surface will appear when the paint has dried completely.
- A lime wash cures by absorbing carbon dioxide from the atmosphere and this process is prolonged during periods of low temperature or high relative humidity. Even though the application has to be kept as thin as possible, it may take several days before it can be safely over coated. It is advisable to leave it for at least five days before further work is carried out.
- It is recommended that a minimum of three coats should be applied for new work.

Procedure for participation in E-Tendering

1. Registration of Bidders on e-Tendering System

All the PWD registered bidders from Madhya Pradesh or any other State of India with relevant experience in Government sponsored or supported building conservation projects are to be registered on the new e-procurement portal <https://www.mpeproc.gov.in>. The user id will be the contractor ID provided to them by MP Online. The password for the new portal has been sent to the bidders registered email ID. For more details may contact M/s Tata consultancy Services Corporate Block, 5th floor, DB city Bhopal-462011, email id: eprochelpdesk@mpsdc.gov.in. Helpdesk phone numbers are available on website.

2. Digital Certificate:

The bids submitted online should be signed electronically with a class III Digital Certificate to establish the identity of the bidder submitting the bid online. The bidders may obtain class III Certificate issued by an approved certifying authority authorized by the Controller of Certifying Authorities, Government of India. A class III digital Certificate is issued upon receipt of the required proofs along with an application. Only upon the receipt of the required documents, a digital certificate can be issued. For details please visit <http://cca.gov.in>.

Note:

- i. It may take up to 7 working days for issuance of class III digital certificate; hence the bidders are advised to obtain the certificate at the earliest. Those bidders who already have valid 7class III digital certificate need not obtain another Digital Certificate for the same.

The bidders may obtain more information and the APPLICATION FORM REQUIRED TO BE SUBMITTED FOR THE ISSUANCE OF DIGITAL CERTIFICATE FROM <http://cca.gov.in>.

- ii Bids can be submitted till bid submission end date. Bidder will require digital signature for the bid submission. The digital certificate issued to the authorized user of a partnership firm/Private limited company/Public Limited Company and user for online bidding will be considered as equivalent to a no-objection certificate/power of attorney to that user.

In case of Partnership firm, majority of the partners have to authorize a specific individual through authority letter signed by majority of partners of the firm.

In case of Private Limited Company, Public Limited Company, the Managing Director may authorize a specific individual through Authority Letter. Alternately a Board resolution may be passed authorizing such individual. Unless the certificate is revoked, it will be assumed to represent adequate authority of the specific individual to bid on behalf of the organization for online bids as per Information Technology Act 2008. This Authorized Representative/ User will be required to obtain a digital certificate. The Digital Signature executed through the use of the responsibility of Management/Partners of the concerned firm to inform the Certifying Authority, if the authorized user changes, and apply for a fresh Digital Certificate for the new Authorized user.

3. Set Up of Bidder's Computer System:

In order for a bidder to operate on the e-tendering System, the Computer system of the bidder is required to be set up for Operating System, Internet Connectivity, Utilities, Fonts, etc. The details are available at <https://www.mpeproc.gov.in>.

4. Key Dates:

The bidders are strictly advised to follow the time schedule (Key dates as mentioned in **Annexure - A**) of the bid of their side for tasks and responsibilities to participate in the bid, as all the stages of each bid are locked before the start time and date and after the end time and date for the relevant stage if the bid as set by the Department.

5. Preparation and Submission of Bids

The bidders have to prepare their online, encrypt their bid data in the Bid forms and submit Bid of all the Covers and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the NIT after signing of the same by the Digital Signature of their authorized representative.

6. Purchase of Bid Document

For purchasing of the bid document, bidders have to pay Service Charge online only which is [as per Bid Data Sheet]. The cost of Bid document is separately mentioned in the detailed NIT. The Bid Document shall be available for purchase to concerned eligible bidders immediately after online release of the bids and up to scheduled time and date as set in the key dates. The payment for the cost of bid document shall be made online through Credit/Debit/Cash Card or via internet banking.

7. Withdrawal, Substitution and Modification of Bids

Bidder can withdraw and modify the bid before submission end date.

Note:

- Bidders are requested to visit our e-tendering website regularly for any clarifications and/or due date extension or corrigendum.
- Bidder must positively complete online e-tendering procedure at www.mpeproc.gov.in
- GSCDCL shall not be responsible in any way for delay/ difficulties/ inaccessibility of the downloading facility from the website for any reason whatsoever.
- In case, due date for submission and opening of tender happens to be a holiday, the due date shall be shifted to the next working day for which no prior intimation will be given
- GSCDCL reserves the right for extension of due date of opening of technical bid.

ORGANIZATIONAL DETAILS
(To be contained in Cover - A)

S.No.	Particulars	Details
1.	Registration No. issued by centralized registration system of Govt. of MP or proof of application for registration	(If applicable, scanned copy of proof of application for registration to be uploaded)
2.	Valid registration of Bidder in appropriate category (B or C) with the Public Works Department, Government of Madhya Pradesh, Central Public Works Department, Government of India	Scanned copy of valid registration; In case of applications under process, copy of acknowledgement receipt of application clearly showing date applied on.
3.	Name of Organization/ Individual/ / Partnership Firm Registered under Partnership Act/ Limited Company (Registered under the Companies Act-1956/ 2013)	
4.	Proof of incorporation or registration	Certificate of incorporation from Registrar of Companies in the State where incorporated, in case of Companies and limited liability partnerships; Registration Certificate/ Certificate of incorporation from Registrar of Firms & Societies or analogous authority in the State where registered, in case of partnership firms, societies, cooperative societies.
5.	Address of Communication	
6.	Telephone Number with STD Code	
7.	Fax Number with STD Code	
8.	PAN No.	
9.	GST No.	
10.	TAN No.	
11.	EPF Registration	
12.	Mobile Number	
13.	E-mail Address for all communications	
	Details of Authorized Representative	
14.	Name	
15.	Designation	
16.	Postal Address with pin code	
17.	Telephone Number with STD Code	
20.	Fax Number with STD Code	
21.	Mobile Number	
22.	E-mail Address	

Note: *In the case of partnership firms, a declaration jointly signed by all partners designating the authorized representative in terms of signing all agreements for and on behalf of the firm as regards the bid submission shall be provided. In the case of companies, limited liability partnerships, copy of board resolution or joint resolution by all partners authorizing signatories of proposals in addition to general power of attorney executed in favour of signatory of the current proposal by such signatories (if applicable) may be provided.*

Signature of Bidder with Seal
Date: _____

(See clause 14 of Section 2 of ITB)

Cover – B, Technical Proposal

Technical Proposal shall comprise the following documents:

S. No.	Particulars	Details to be submitted
1	Experience - Financial and Physical	Annexure – G (Format : G - 1)
2	List of technical personnel for the key positions	Annexure – G (Format : G - 2)
3	List of Key equipment/ machines for construction work	Annexure – G (Format : G - 3)

Note:

1. *Technical Proposal should be uploaded duly page numbered and indexed.*
2. *Technical Proposal uploaded without page numbering and indexing will not be considered.*

(See clause 14 of Section 2 of ITB

FINANCIAL & PHYSICAL EXPERIENCE DETAILS

Bidders to furnish details of minimum requirement for Scope of Work

(See clause 14 of Section 2 of ITB)

LIST OF TECHNICAL PERSONNEL FOR THE KEY POSITIONS

Contractor will have to appoint at least the following key personnel during the execution and entire contract period.

S. No.	Discipline	Minimum Qualification	Required Nos.
1	Project Manager	Seven years of progressive experience in similar works with an appropriate technical qualification in management of civil and/or interior works projects, such as architecture, advanced civil draughtsmanship or civil engineering, preferably with a qualification in construction management from an institution of repute such as NICMAR.	One
2	Quantity Surveyor	Seven years of progressive experience in similar works with an appropriate qualification (certificate, diploma or degree in quantity survey)	One
3	Clerk of works	Diploma in a technical field related to construction, with five years of progressive experience in maintaining material inventory, field survey measurement books.	One

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

S. No.	Discipline	Penalty to be computed on Per Day basis
1	Project manager	Rupees 40,000/- Per Month
2	Quantity Surveyor	Rupees 30,000/- Per Month
3	Clerk of Works	Rupees 30,000/- Per Month

Note: In case the staff is unavailable for a part of the month, the penalty shall be pro-rata.

Annexure – G (Format: G - 3)

(See clause 14 of Section 2 of ITB)

The Contractor shall carryout the construction work in such a way that the requirements of the specifications of each item of work under the project are fully satisfied. For achieving the quality parameters as per the specifications, the contractor shall be required to deploy appropriate machinery and equipment for carrying out the work. In this section, the Bidder is required to demonstrate his capacity with respect to Key equipment and machinery that are required to carry out this work successfully.

LIST OF EQUIPMENTS / MACHINES FOR CONSTRUCTION WORK

Minimum Requirement			Available with the Bidder	
S. No.	Name of Equipment/ Machinery	Quantity	Name of Equipment/ Machinery	Quantity
1	All machines and equipment's required to furnish the job efficiently in stipulated time as stipulated in the Specification of Works	As required in project		

FINANCIAL BID
(TO BE CONTAINED IN COVER C)

TENDER FOR ITEM RATE CONTRACT:

NAME OF WORK: (NAME OF THE WORK AS APPEARING IN THE BID FOR THE WORK)

We do hereby bid for the execution of the above work within the time specified at total ITEM RATE (in figures) (in words) excluding GST based on the rates of each item mentioned in Annexure H-1 bill of quantities. The total rate given therein in all respects are in accordance with the specifications, designs, drawings and instructions in writing in all respects in accordance with such conditions so far as applicable.

We have visited the site of work and are fully aware of all the difficulties and conditions likely to affect carrying out the work. We have fully acquainted ourselves about the conditions in regard to accessibility of site and quarries/kilns, nature and the extent of ground, working conditions including stacking of materials, installation of tools and plant conditions effecting accommodation and movement of labour etc. required for the satisfactory execution of contract.

Should this bid be accepted, we hereby agree to abide by and fulfil all the terms and provisions of the said conditions of contract annexed hereto so far as applicable, or in default thereof to forfeit and pay to the EXECUTIVE DIRECTOR, GWALIOR SMART CITY DEVELOPMENT CORPORATION LIMITED, GWALIOR; Madhya Pradesh or his successors in office the sums of money mentioned in the said conditions.

Note:

- i. Item based rates shall be quoted against Bill of Quantities.
- ii. Rate shall be quoted in figures as well as in words. If any difference in figures and words is found, lower of the two shall be taken as valid and correct rate. If the Bidder is not ready to accept such valid and correct rate and declines to furnish performance security and/or fails to sign the contract its earnest money deposit shall be forfeited.
- iii. It shall be assumed that the quote provided by vendors are accounted for all the items mentioned in BoQ-Annexure-H1
- iv. Bidder is required to submit financial bid exclusive of applicable GST, but inclusive of all duties, taxes, royalties and other levies; and the GSCDCL shall not be liable for the same. The GST shall be paid separately as per applicable Government rules.

Signature of Bidder

Name of Bidder

LETTER OF ACCEPTANCE (LOA)

No. _____

Dated: _____

To,

M/s. _____

(Name and address of the contractor)

Subject: _____

(Name of the work as appearing in the bid for the work)

Dear Sir (s),

Your bid for the work mentioned above has been accepted on behalf of the GSCDCL at your Item rate price against the bill of quantities.

You are requested to submit the following within **15 (Fifteen)** days from the date of issue of this letter:

- a. The performance security/ performance guarantee of Rs. _____ (in figures) (Rupees _____ in words) only (In prescribed Format as per Annexure – J) being 5% of the accepted quoted cost. The performance security shall be in the shape of Term Deposit Receipt/ Bank Guarantee of any nationalized / schedule commercial bank valid up to Contract Period Plus Six months.
- b. The Additional Performance Security/ Additional Performance Guarantee of Rs. _____ (in figures) (Rupees _____ in words) only. (In prescribed Format as per Annexure – J). The Additional Performance Security shall be in the shape of Term Deposit Receipt/ Bank Guarantee of any nationalized / schedule commercial bank valid up to Contract Period Plus Six months.
- c. Duly signed Contract Agreement in Agreement Form as prescribed in Section - 5

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

Signing the contract agreement shall be reckoned as intimation to commencement of work and no separate letter for commencement of work is required.

Therefore, after signing of the agreement, you are directed to contact Engineer-in-charge for taking the possession of site and necessary instructions to start the work.

Yours faithfully,

EXECUTIVE DIRECTOR**Gwalior Smart City Development Corporation Limited**

(See clause 22 of Section 2 of ITB)

PERFORMANCE SECURITY

To

_____ [Name of Employer]

_____ [Address of Employer]

WHEREAS _____ [name and Address of Contractor]

(Hereinafter called "the Contractor") has undertaken, in pursuance of Letter of Acceptance No. _____ Dated _____ to execute _____ [Name of Contract and brief description of Works] (herein after 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 also state that you are no way required to justify the demand raised to us.

We further agree that no change or addition to or other modification of the terms of the Contract of the Works to be performed there under or of any of the Contract documents which may be made between you 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 be valid until 6(Six) months from the date of expiry of the Contract Period.

Signature, Name and Seal of the Guarantor _____

Name of Bank _____

Address _____

Phone No., Fax No., E-mail Address, of Signing Authority _____

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.

SECTION 3**Conditions of Contract
Part – I General Conditions of Contract [GCC]****Table of Clauses of GCC**

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A. General

1. DEFINITIONS

- 1.1 Bill of Quantities:** means the priced and completed Bill of Quantities forming part of the Bid.
- 1.2 CEO:** means Chief Executive Officer of Gwalior Smart City Development Corporation Limited
- 1.3 Completion:** means completion of the work as certified by the Engineer-in-Charge, in accordance with provisions of Contract.
- 1.4 Contract:** means the Contract between GSCDCL and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.
- 1.5 Contract Data Sheet:** means the documents and other information which comprise of the Contract.
- 1.6 Contractor:** means a person or legal entity whose bid to carry out the work has been accepted by the Employer.
- 1.7 Contractor's bid:** means the completed bid document submitted by the Contractor to the Employer.
- 1.8 Contract amount:** means the amount of contract worked out on the basis of accepted bid.
- 1.9 Completion of work:** means completion of the entire contracted work. Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.
- 1.10 Day:** means the calendar day.
- 1.11 Defect:** means any part of the work not completed in accordance with the specifications included in the contract.
- 1.12 Department:** means departments GWALIOR SMART CITY DEVELOPMENT CORPORATION LTD, GWALIOR, M.P.as the case may be.
- 1.13 Drawings:** means drawings including calculations and other information provided or approved by the Engineer-in-Charge.
- 1.14 Employer:** means **GSCDCL** as defined in the Contract Data, who employs the Contractor to carry out the work. The employer may delegate any or all functions to a person or body nominated by him / her for specified functions. The word Employer/Government/Department wherever used denote the Employer
- 1.15 Engineer / Engineer in Charge:** means Engineer of PDMC / Engineer appointed by Gwalior Smart City Development Corporation Ltd.
- 1.16 Competent Authority:** means Chief Executive Officer, Gwalior Smart City Development Corporation Limited or any person authorized by CEO, GSCDCL
- 1.17 GSCDCL:**GWALIOR SMART CITY DEVELOPMENT CORPORATION LTD, GWALIOR, M.P.
- 1.18 Equipment:** means the Contractor's machinery and vehicles brought temporarily to the Site for execution of work.
- 1.19 Government:** means Government of Madhya Pradesh.
- 1.20 In Writing:** means communicated in written form and delivered against receipt.
- 1.21 Material:** means all supplies, including consumables, used by the Contractor for incorporation in the work.
- 1.22 Project Development & Management Consultants ("PDMC"):**means such person or persons appointed by GSCDCL to provide technical assistance in developing and implementing the projects pertaining to the Smart City Scheme.
- 1.23 Schedule of Rates (SOR):**shall mean any combination of:
- a. the Schedule of Rates published by the Urban Administration & Environment (formerly Urban Administration and Development) Department, Government of Madhya Pradesh on 10th May 2012 as amended from time to time;
 - b. the Schedule of Rates published by the Public Works Department, Government of Madhya Pradesh as published on 01 August 2014 and amended from time to time;
 - c. the Schedule of Rates for Delhi, published by the Central Public Works Department, Government of India on 01 July 016 and amended from time to time.

d. Or any other Schedule of Rates in practice by the MP Department of Archaeology for building conservation works carried out on heritage buildings and monuments in the state.

Provided that 'b' will apply or be referred to if and only if a certain item or work and/or material is not indicated in 'a' above and 'c' will apply or be referred to if and only if a certain item or work and/or material is not indicated in either 'a' or 'b' above.

- 1.24 Superintending Engineer:** means an engineer so nominated by Engineer-in-Charge to oversee day to day aspects of the project as the case may be.
- 1.25 Stipulated date of completion:** means the date on which the Contractor is required to complete the work. The stipulated date/ period is specified in the Contract Data.
- 1.26 Specification:** means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.
- 1.27 Start Date:** means the date 14 days after the signing of agreement for the work.
- 1.28 Sub-Contractor:** means a person or corporate body who has a Contract (duly authorized by the Employer) with the Contractor to carry out a part of the construction work under the Contract.
- 1.29 Temporary Work:** means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.
- 1.30 Tender / Bid, Tenderer /Bidder:** are the synonyms and carry the same meaning where ever used.
- 1.31 UD&E:** Urban Development and Environment (Formerly Urban Administration and Development) Department, Government of Madhya Pradesh
- 1.32 Variation:** means any change in the work which is instructed or approved as variation under this contract.
- 1.33 Work:** the expression "work" or "works" where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional.

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations

In the contract, except where the context requires otherwise:

- a. words indicating one gender include all genders;
- b. words indicating the singular also include the plural and vice versa.
- c. provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing;
- d. "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;

2.2 Documents Forming Part of Contract:

1. NIT with all amendments.
2. Instructions to Bidders
3. Conditions of Contract:
 - i. Part I General Conditions of Contract and Contract Data; with all Annexures
 - ii. Part II Special Conditions of Contract.
4. Specifications
5. Drawings
6. Bill of Quantities
7. Technical and Financial Bid
8. Agreement
9. Any other document (s), as specified.

3. Language and Law

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

4. Communications

All certificates, notice or instruction to be given to the Contractor by Employer/Engineer shall be sent on the address or contact details given by the Contractor in [Annexure F of ITB]. The address and contract details for communication with the Employer/Engineer shall be as per the details given in Contract Data Sheet. Communication between parties that are referred to in the conditions shall be in writing. The notice sent by facsimile (fax) or other electronic means (email) shall also be effective on confirmation of the transmission. The notice sent by registered post or speed post shall be effective on delivery or at the expiry of the normal delivery period as undertaken by the postal service. In case of any change in address for communication, the same shall be immediately notified to Engineer-in-Charge

5. Subcontracting

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

- a. The Contractor may subcontract up to 25 percent of the contract price, only with and after the approval of the Employer in writing, but will not assign the Contract. Subcontracting shall not alter the Contractor's obligations.
- b. The following shall not form part of the sub-contracting:
 - i. hiring of labour through a labour contractor,
 - ii. the purchase of Materials to be incorporated in the works,
 - iii. hiring of plant & machinery
- c. The sub-contractor will have to be registered in the **appropriate category** in the centralised registration system for contractors of the GoMP.

6. Personnel

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

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

7. Force Majeure

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

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

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

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

7.2 In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which

force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.

- 7.3** For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of Price adjustment clause.
- 7.4** The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed **twelve months**, the parties to the contract shall be at liberty to foreclose the contract after holding mutual discussions.
- 7.5** A Party affected by an event of Force Majeure shall notify the other Party of such event as soon as possible to the occurrence of such event, providing evidence of the nature and cause of such event, and shall similarly give notice of the restoration of normal conditions as soon as possible.
- 7.6** The Parties shall take all reasonable measures to minimise the consequences of any event of Force Majeure.

8. Contractor's Risks

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

9. Liability for Accidents to Person

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

10. Contractor to Construct the Works

- 10.1** The Contractor shall construct, install, fix, test, and commission the Works in accordance with the Specifications and Drawings as specified in the Contract Data
- 10.2** In the case of any class of work for which there is no such specification as is mentioned in contract Data, such work shall be carried out as per best Engineering practice or as directed by Engineer In Charge. In the event of any disparity between the written specifications and BIS provisions, the provisions in BIS shall prevail.
- 10.3** The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, Machinery, tools implements and generally of all means used for the fulfilment of this contract whether such means may or may not approved of or recommended by the Engineer.

11. Discoveries

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

12. Dispute Resolution System

- 12.1** No dispute can be raised except before the Competent Authority as defined in Contract data in writing giving full description and grounds of Dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- 12.2** No issue of dispute can be raised after 45 days of its occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such disputes.
- 12.3** The **Competent Authority** shall decide the matter within 45 days.

- 12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract data. The **Appellate Authority** shall decide the dispute within 45 days.
- 12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under **Madhya Pradesh Madhyastham Adhikaran Adhiniyam, 1983**.
- 12.6 The contractor shall have to continue execution of the works with due diligence notwithstanding pendency of a dispute before any authority or forum.

B. Time Control

13. Programme

- 13.1 Within the time stated in the Contract Data, the Contractor shall submit to the Engineer for approval a Programme showing the general methods, arrangements, order, and timing for all the activities in the Works.
- 13.2 The programme shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the works for its execution. The contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, along with the Programme
- 13.3 An update of the Programme shall be showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- 13.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations

14. Extension of Time

- 14.1 If the Contractor desires an extension of time for completion of the work on the ground of its having been unavoidably hindered in its execution or on any other grounds, it shall apply, in writing, to the Engineer-in-charge, on account of which it desires such extension. Engineer-in-charge shall forward the aforesaid application to the competent authority as prescribed.
- 14.2 The competent authority shall grant such extension at each such occasion within a period of 30 days of receipt of application from contractor and shall not wait for finality of work. Such extensions shall be granted in accordance with provisions under clause -7 or clause- 15 of this agreement.
- 14.3 In case of the work already in progress, the contractor shall proceed with the execution of the works, including maintenance thereof, pending receipt of the decision of the competent authority as aforesaid with all due diligence.

15. Compensation for delay

- 15.1 The time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.
- 15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.
- 15.3 In the event milestones are laid down in the Contract Data for execution of the works, the Contractor shall have to ensure strict adherence to the same.
- 15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data
- 15.5 In the event of delay in execution of the works as per the timelines mentioned in the contract data the Engineer-in-charge shall retain from the bills of the Contractor amount equal to the liquidated damages to be levied until the Contractor makes such delays good. However, the Engineer-in-charge may accept bankable security in lieu of retaining such amount.

- 15.6 If the Contractor is given extension of time after liquidated damages have been paid, the engineer in charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.
- 15.7 In the event the Contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against liquidated damages levied.

C. Quality Control

17. Tests

- 17.1 The Contractor shall be responsible for:
- a. Carrying out the tests prescribed in specifications shall be got carried out through Laboratories accredited by National Accreditation Board of Laboratories (NABL) by the Engineer-In –Charge at the cost of the Contractor or such testing charges will be borne by the employer and will be recovered/deducted from the payments due to the Contractor.
 - b. For the correctness of the test results, whether performed in his laboratory or elsewhere.
- 17.2 Deleted
- 17.3 Deleted

18. Correction of Defects noticed during the Defect Liability Period

- 18.1 The defect liability period of work in the contract shall be for a period of 3 (Three) year after the completion of the work
- 18.2 The Contractor shall promptly rectify all defects pointed out by the Engineer well before the end of the Defect Liability Period. The Defect Liability Period shall automatically stand extended until the defect is rectified.
- 18.3 If the Contractor has not corrected a Defect pertaining to the Defect Liability Period to the satisfaction of the Engineer, within the time specified by the Engineer, the Engineer will assess the cost of having the Defect corrected, and the cost of correction of the Defect shall be recovered from the Performance Security or any amount due or that may become due to the contractor and other available securities.

D. Cost Control

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

- 19.1 The Engineer-in-charge shall have power to make any alterations, omissions or additions to or substitutions for the original specifications, drawings, designs and instructions, that may appear to him to be necessary during the progress of the work and the Contractor shall carry out the work in accordance with any instructions which may be given to him in writing signed by the Employer, and such alterations, omission, additions or substitutions shall not invalidate the contract and any altered, additional or substituted work, which the Contractor may be directed to do in the manner above specified, as part of the work, shall be carried out by the Contractor on the same conditions in all respects on which it had agreed to do the main work.
- 19.2 The time for the completion of the Work shall be extended in the proportion that the altered, additional or substituted work bears to the original contract work and the certificate of the Engineer –in-charge shall be conclusive as to such proportion.

20. Extra items

- 20.1 All such items which are not in the priced Bills of Quantities (BOQ) shall be treated as extra items.

21. Payments for Variations and / or Extra Quantities

- 21.1 The rates for the additional (Extra Quantities), altered or substituted work/ extra items under this clause shall be worked out in accordance with the following provisions in their respective order: -
- a. The contractor is bound to carry out the additional (Extra quantity), work at the same rates as are specified in the contract for the work.
 - b. If the item is not in the priced BOQ and is included in the Schedule of Rate (SOR) of the department, the rate shall be arrived at by applying the quoted SOR rate.

- c. If the rates of the altered or substituted work are not provided in applicable SOR-such rates will be derived from the rates for a similar class (type) of work as is provided in the contract (priced BOQ) for the work.
- d. If the rates are for the altered, substituted work cannot be determined in the manner specified in the sub clause (c) above, then the rates for such composite work item shall be worked out on the basis of the concerned schedule of rates of SOR.
- e. If the rates of a particular part or parts of the item is not in the schedule of rates and the rates for the altered, or substituted work item cannot be determined in the manner specified in sub clause (b) to (d) above, the rate for such part or parts will be determined by the Competent Authority as defined in the Contract data on the basis of the rate analysis derived out of prevailing market rates when the work was done.
- f. But under no circumstances, the Contractor shall suspend the work on the plea of non-acceptability of rates on items falling under sub clause (a) to (e). In case the Contractor does not accept the rate approved by Engineer-in-charge for a particular item, the Contractor shall continue to carry out the item at the rates determined by the Competent Authority. The decision on the final rates payable shall be arrived at through the dispute settlement procedure.

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

- 22.1 If at any time after the commencement of the work, the Government, for any reason whatsoever, not require the whole or any part of the work as specified in the bid to be carried out, the Engineer-in-charge shall give notice in writing of the fact to the Contractor and withdraw that whole or any part of the work.
- 22.2 The Contractor shall have no claim to any payments or compensation whatsoever, on account of any profit or advantage which he might have derived from the execution of work in full or on account of any loss incurred for idle men and machinery due to any alteration or restriction of work for whatsoever reason.
- 22.3 The Engineer-in-charge may supplement the work by engaging another agency to execute such portion of the work, without prejudice to its rights.

23. No Interest Payable

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

24. Recovery from Contractors

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

- (a) Appropriating, in part or whole of the Performance Security and additional Performance Security, if any; and/or Security deposit and/or any sums payable under the contract to the Contractor.
- (b) If the amount recovered in accordance with (a) above is not sufficient, the balance sum may be recovered from any payment due to the contractor under any other contract/ arrangement of the department, including the securities which become due for release.
- (c) The department shall, further have an additional right to effect recoveries as arrears of land revenue under the M.P. Land revenue Code.

25. Tax

- 25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the Goods & Service Tax, levies, duties, cess, toll, taxes of Central and State Governments, local bodies and authorities.
- 25.2 The liability, if any, on account of quarry fees, royalties, octroi and any other taxes and duties in respect of materials actually consumed on public work, shall be borne by the Contractor.
- 25.3 Any increase in price due to changes in the taxes due to change in legislation or for any other reason shall not be payable to the Contractor.

26. Check Measurements

- 26.1 The Employer reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.
- 26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.

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

27. Termination by Engineer-in-Charge

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

27.2 The Engineer in charge shall be entitled to terminate the contract if the Contractor

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

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

27.4 Notwithstanding the above, the Engineer-in-charge may terminate the contract for convenience by giving notice to the contractor.

28. Payment upon Termination

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

28.2 payment on termination under clause 27.4 above, the Engineer-in-Charge shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the contractor's personnel employed solely on the works, and the contractor's costs of protecting and securing the works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

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

29. Performance Security

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

30. Security Deposit

30.1 Security deposit shall be deducted from each running bill at the rate as specified in the contract data. The total amount of security deposit so deducted shall not exceed the percentage of contract price specified in the Contract data.

30.2 The Security may be replaced by equivalent amount of bank guarantee or fixed deposit receipt assigned to the Employer, with validity up to 6(Six) months beyond the completion of defect Liability PERIOD/ extended Defect Liability.

30.3 The Security deposit shall be refunded on completion of defect liability period.

31. Deleted

32. Deleted

33. Deleted

34. Payment Certificates

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

- (a) The contractor shall submit to the engineer monthly statement of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed as per the Billing Break-up in section 6.
- (b) The Engineer-in-Charge shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- (c) The value of work executed shall be determined, based on the measurements approved by the Engineer in charge.
- (d) The value of work executed shall comprise the value of the quantities of the items in the Billing Breakup given in Section 6.
- (e) The value of work executed shall also include the valuation of variations and compensation events.
- (f) All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
- (g) The Engineer-in-Charge may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- (h) Payment of intermediate certificate shall be regarded as payments by way of advance against the final payment and not as payments for work actually done and completed.
- (i) Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.
- (j) The payment of final bill shall be governed by the provisions of clause 36 of General Conditions of Contract.

E. Finishing the Contract

35. Completion Certificate

35.1 A completion certificate in the prescribed format in Contract data shall be issued by the Engineer-in-charge after physical completion of the work.

35.2 After final payment to the Contractor, a final completion certificate in the prescribed format in the contract data shall be issued by the Engineer-in-charge.

36. Final Account

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

36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 35.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

G. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

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

38.2 The Contractor shall, if required by the Engineer-in-Charge, deliver to the Engineer-in-Charge a return in detail, in such form and at such intervals as the Engineer-in-Charge 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-in-Charge may require.

39. Compliance with Labour Regulations and Construction Safety

39.1 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 in the Contract data. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made 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/byelaws/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-in-Charge 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.

I. The Contractor or its sub-Contractors shall be solely responsible for complying with all statutory provisions relating to manpower engaged by, for, or through them. In the event of any liability on GSCDCL by virtue of its being principal employer due to failure of the Contractor or its sub-Contractors to comply with all applicable labour legislations, the Contractor and its sub-Contractors Bidder shall indemnify and/or reimburse the amount payable by GSCDCL, if any on this account.

II. If any accident, any injury or physical harm to any person is caused during operations within the contract period, the Contractor and its sub-Contractors, as the case may be the Contractor sub56 Contractors shall be solely responsible and shall bear all the cost and consequences' associated with such eventualities. The Contractor and its sub-Contractors also agrees and undertakes to indemnify and keep indemnified GSCDCL, its directors/ employees/ agents and its consultants.

39.2 Construction Safety

The Contractor should be well conversant with technical as well as administrative and legal aspects of safety and judicial pronouncement. The Contractor shall all times take all reasonable precautions and safety measures to maintain safety of personnel and property. The Contractor shall, at its own expenses and throughout the period of the contract ensure appropriate and suitable arrangements for health, safety and hygiene requirements for the surroundings. The State and Central Government prevailing all Statues in this regard must be complied in letter and spirit throughout the period of contract.

40. Audit and Technical examination

Government shall have the right to cause an audit and technical examination of the works and the final bill of the contract including all supporting vouchers, abstract etc. To be made after payment of the final bill and if as a result of such audit and technical examination any sum is found to have been overpaid in respect of any work done by the Contractor under the contract or any work claimed by him to have been done under the contract and found not to, have been executed, the Contractor shall be liable to refund the amount of overpayment and it shall be lawful for government to recover the same from him in the manner prescribed in clause 24 above and if it is found that the contractor

was paid less than what was due to him, under the contract in respect of any work executed by him under it, the amount of such under payment shall be duly paid by government to the Contractor.

41. Death or permanent invalidity of Contractor

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 major labour laws that are applicable to construction industry are given in the contract data. The Contractor shall keep the employer indemnified in case any action is taken against the employer by the competent authority on account of contravention of any of the provisions of any Act or rules made their under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules regulations including amendments, if any, on the part of the Contractor, the Engineer-in-Charge/employer shall have the right to deduct from any money due to the Contractor including his amount of performance of security. The Employer/ Engineer-in-Charge 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.

42. Jurisdiction

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

43. Monthly RA Bills

The payment certificates shall be regulated as per the provisions of clause 34 of the contract.

- 43.1 Upon the signing of agreement the Engineer-in-Charge shall decide the date of submission of monthly statement (RA Bills) as mentioned in clause 34 (a)
- 43.2 The Engineer-in-Charge shall check the Contractor's monthly statement (RA Bills) & certify the amount to be paid to the contractor within 7 days of submission of monthly statement (RA Bills).
- 43.3 The Employer shall ensure the payment to the Contractor as per clause 34 (d), (e), (f) & (g) within 30 days of submission of monthly statement (RA Bills).

[End of GCC]

Contract Data

Clause reference	Particulars	Data
1.14	Employer	GWALIOR SMART CITY DEVELOPMENT CORPORATION LIMITED
1.15	Engineer-in-Charge/ Superintending Engineer	Engineer as notified by Employer and as deputed by the Engineer in Charge
1.25	Stipulated period of completion	3 (Three) months including rainy season
3	Language	English
	Law of Contract	Indian Laws
4	Address & contact details of the Contractor	As per Annexure F
	Address & contact details of the Employer/Engineer-phone, Fax, E-mail.	_____
5	Subcontracting permitted for contract value	Not allowed
6	Technical Personnel to be provided by the contractor – Requirement & Deployment Committed	As per Annexure G (Format 1-3)
	Penalty, if required Technical personnel not employed	As per Annexure G (Format 1 -3)
1.26	Specifications	Annexure D
	Drawings	As per Annexure H-2
1.16	Competent Authority for deciding dispute under Dispute Resolution System	CEO, GSCDCL
	Appellate Authority for deciding dispute under Dispute Resolution System	Collector, Gwalior District / Executive Director (GSCDCL)
13	Period of submission of updated construction program	15 days upon signing the Agreement and every month thereafter
	Amount to be withheld for not submitting construction program in the prescribed period	0.20% of the Contract Amount
14	Competent Authority for granting Time Extension	Appropriate authority within the GSCDCL after scrutiny and recommendation by Chief Executive Officer
13	Milestones laid down for the contract	-
	If Yes, details of milestones	As per Annexure K
	Liquidated Damages	As per Annexure L
18	Defect Liability Period	36 Months after physical completion of work

Clause reference	Particulars	Data
15	Penalty	Penalty shall be recovered from (a)Security deposit as per clause 30 of General conditions of contract and (b)Liquidated damages imposed as per clause 15 or performance security (Guarantee) including additional performance security (Guarantee), if any, as per clause 29 of General conditions of contract, whichever is higher.
29	Performance Guarantee (security) shall be valid up to	6 (Six) months beyond the date of expiry of the Contract Period.
30	Security deposit to be deducted from each running bill	At the rate of 5 %
	Maximum limit of deduction of security deposit	Up to 5 % of Final contract amount, Security Deposit will be returned after successful completion of Defect Liability Period (DLP).

Clause reference	Particulars	Data
35	Completion certificate- After physical completion of the work	As per Annexure – M
	Final Completion Certificate – after final payment on completion of the work	As per Annexure – N
39	39.1 Salient features of some of the major labour laws that are applicable	As per Annexure – O
	39.2 Salient features of some Construction Safety laws that are applicable	As per Annexure – P

DETAILS OF MILESTONES

The time allowed for the carrying out the work, as entered in the tender form shall be strictly observed by the contractor and shall be deemed to be essence of the contract and shall be reckoned immediately from the date of issue of the order to commence the work issued to the Contractor.

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

- 1/8th of the whole work before 1/4th of the whole time allowed under the contract has elapsed,
- 3/8th of the work before 1/2 of such time has elapsed
- 3/4th of the work before 3/4 of such time has elapsed.

COMPENSATION FOR DELAY

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

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

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

The decision of Engineer in Charge will be after scrutiny and recommendation by Chief Executive Officer, GSCDCL shall be final and binding upon both the parties.

(See clause 35 of section 3 -GCC)

Physical Completion Certificate

Name of Work:

Agreement No. _____ Date _____

Amount of Contract Rs _____

Name of Agency: _____

Used Measurement Book No.: _____

Last measurement recorded

a. Page No. & MB No.: _____

b. Date: _____

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

Date of issue

Engineer-in-charge

Final Completion Certificate

Name of Work:

Agreement No. _____ Date: _____

Name of Agency: _____

Used Measurement Book No. _____

Last Measurement recorded

b. Page No. & MB No. _____

c. Date _____

Certified that the above mentioned work was physically completed on _____ (date)

And taken over on _____ (date).

Agreement amount Rs. _____

Final amount paid to contractor Rs. _____

Incumbency of officers for the work

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

Date of Issue

Engineer-in-charge

Salient Features of Some Major Labour Laws Applicable

- (a) Workmen Compensation Act 1923: - The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- (b) Payment of Gratuity Act 1972: - Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days (say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- (c) Employees Provident Funds and Miscellaneous Provision Act 1952: The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%). The benefits payable under the Act are:
 - i. Pension or family pension on retirement or death as the case may be.
 - ii. Deposit linked insurance on the death in harness of the worker.
 - iii. Payment of provident fund 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 it employs the prescribed minimum (say 20) or more contract labour.
- (f) Minimum Wages Act 1948: - The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.
- (g) Payment of Wages Act 1936: - It lays down as to by what date the wages are to be paid, when it will be paid and what deductions can be made from the wages of the workers.
- (h) Equal Remuneration Act 1979: - The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.
- (i) Payment of Bonus Act 1965: - The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus 'within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.
- (j) Industrial Disputes Act 1947: - The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- (k) Industrial Employment (Standing Orders) Act 1946: - It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the designated Authority.
- (l) Trade Unions Act 1926: - The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have been given certain immunities from civil and criminal liabilities.

- (m) Child Labour (Prohibition & Regulation) Act 1986: - The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.
- (n) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: - The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The inter-state migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Travelling expenses from home up to the establishment and back etc.
- (o) Building and Other Construction Workers' Welfare Cess Act, 1996 and the Building and other Construction workers (Regulation of Employment and Conditions of Service Act, 1996 - All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment- is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the-work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.
- (p) Factories Act 1948: - The Act lays down the procedure for approval of plans before setting up a factory, health and safety provisions, welfare provisions, working hours, annual earned leave and rendering information regarding accidents or dangerous occurrences to designated authorities. It is applicable to premises employing the prescribed minimum (say, 10) persons or more with aid of power or another prescribed minimum (say, 20) or more persons without the aid of power engaged in manufacturing process.

CONSTRUCTION SAFETY

- 1) IS: 3696(Part-1, 2) Safety code for scaffolds and ladder
- 2) IS: 3764 Safety code for excavation work
- 3) IS: 7205 Safety code for erecting of structural steel work
- 4) SP: 70-2001 Handbook on Construction Safety Practices

1. On all excavation work, safety precautions for the protection of life and property are essential: While measures to avoid inconveniences to the public are desirable. Such measures and precautions include the erection and maintenance signs (to forewarn public), barricades, bridges, and detours: placing and maintenance of lights both for illumination and also as danger signals, provision of watchmen to exclude unauthorized persons particularly children, from trespassing on the work: and such other precautions as local conditions may dictate.

2. Suitable scaffolds should be provided for workmen for all works that cannot safely be done from the ground, or from solid construction except such short period work as can be done safely from ladders. When a ladder is used, an extra mazdoor shall be engaged for holding the ladder and if the ladder is used for carrying materials as well suitable footholds and hand-hold shall be provided on the ladder and the ladder shall be given an inclination not steeper than $\frac{1}{4}$ to 1($\frac{1}{4}$ horizontal and 1 vertical.)

3. Scaffolding of staging more than 3.6 m (12ft.) above the ground or floor, swung or suspended from an overhead support or erected with stationary support shall have a guard rail properly attached or bolted, braced and otherwise secured at least 90 cm. (3ft.) high above the floor or platform of such scaffolding or staging and extending along the entire length of the outside and ends thereof with only such opening as may be necessary for the delivery of materials. Such scaffolding or staging shall be so fastened as to prevent it from swaying from the building or structure.

4. Working platforms, gangways and stairways should be so constructed that they should not sag unduly or unequally, and if the height of the platform or the gangway or the stairway is more than 3.6m (12ft.) above ground level or floor level, they should be closely boarded, should have adequate width and should be suitably fastened as described in (2) above.

5. Every opening in the floor of a building or in a working platform shall be provided with suitable means to prevent the fall of person or materials by providing suitable fencing or railing whose minimum height shall be 90 cm. (3ft.)

6. Safe means of access shall be provided to all working platforms and other working places. Every ladder shall be securely fixed. No portable single ladder shall be over 9m. (30ft.) in length while the width between side rails in rung ladder shall in no case be less than 29 cm. ($1\frac{1}{2}$ ") for ladder up to and including 3 m. (10 ft.) in length. For longer ladders, this width should be increased at least $\frac{1}{4}$ " for each additional 30 cm. (1 foot) of length. Uniform step spacing of not more than 30 cm shall be kept. Adequate precautions shall be taken to prevent danger from electrical equipment. No materials on any of the sites or work shall be so stacked or placed as to cause danger or inconvenience to any person or the public. The contractor shall provide all necessary fencing and lights to protect the public from accident and shall be bound to bear the expenses of defence of every suit, action or other proceedings at law that may be brought by any person for injury sustained owing to neglect of the above precautions and to pay any damages and cost which may be awarded in any such suit; action or proceedings to any such person or which may, with the consent of the contractor, be paid to compensate any claim by any such person.

7. (a) Excavation and Trenching - All trenches 1.2 m. (4ft.) or more in depth, shall at all times be supplied with at least one ladder for each 30 m. (100 ft.) in length or fraction thereof, Ladder shall extend from bottom of the trench to at least 90 cm. (3ft.) above the surface of the ground. The side of the trenches which are 1.5 m. (5ft.) or more in depth shall be stepped back to give suitable slope or securely held by timber bracing, so as to avoid the danger of sides collapsing. The excavated materials shall not be placed within 1.5 m. (5ft.) of the edges of the trench or half of the depth of the trench whichever is more. Cutting shall be done from top to bottom. Under no circumstances, undermining or undercutting shall be done.

(b) Safety Measures for digging bore holes: -

- (i) If the bore well is successful, it should be safely capped to avoid caving and collapse of the bore well. The failed and the abandoned ones should be completely refilled to avoid caving and collapse;
- (ii) during drilling, sign boards should be erected near the site with the address of the drilling contractor and the Engineer in-charge of the work.

- (iii) Suitable fencing should be erected around the well during the drilling and after the installation of the rig on the point of drilling, flags shall be put 50m all-round the point of drilling to avoid entry of people;
- (iv) After drilling the borewell, a cement platform (0.50m x 0.50m x 1.20m) 0.60m above ground level and 0.60m below ground level should be constructed around the well casing;
- (v) After the completion of the bore well, the contractor should cap the bore well properly by welding steel plate, cover the bore well with the drilled wet soil and fix thorny shrubs over the soil. This should be done even while repairing the pump;
- (vi) After the bore well is drilled the entire site should be brought to the ground level.

8. Demolition - before any demolition work is commenced and also during the progress of the work,

- (i) All roads and open areas adjacent to the work site shall either be closed or suitably protected.
- (ii) No electric cable or apparatus which is liable to be a source of danger or a cable or apparatus used by the operator shall remain electrically charged.
- (iii) All practical steps shall be taken to prevent danger to persons employed from risk of fire or explosion or flooding. No floor, roof or other part of the building shall be so overloaded with debris or materials as to render it unsafe.

9. All necessary personal safety equipment as considered adequate by the Engineer-in-Charge should be kept available for the use of the person employed on the site and maintained in a condition suitable for immediate use, and the contractor should take adequate steps to ensure proper use of equipment by those concerned. The following safety equipment shall invariably be provided: --.

- (i) Workers employed on mixing asphaltic materials, cement and lime mortars shall be provided with protective footwear and protective goggles
- (ii) Those engaged in white washing and mixing or stacking of cement bags or any material which is injurious to the eyes, shall be provided with protective goggles.
- (iii) Those engaged in welding works shall be provided with welder's protective eyeshields.
- (iv) Stone breaker shall be provided with protective goggles and protective clothing and seated at sufficiently safe intervals.
- (v) When workers are employed in sewers and manholes, which are in active use, the contractors shall ensure that the manhole covers are opened and ventilated at least for an hour before the workers are allowed to get into the manholes, and the manholes so opened shall be cordoned off with suitable railing and provided with warning signals or boards to prevent accident to the public. In addition, the contractor shall ensure that the following safety measures are adhered to: -

(a) Entry for workers into the line shall not be allowed except under supervision of the JE or any other higher officer.

(b) At least 5 to 6 manholes upstream and downstream should be kept open for at least 2 to 3 hours before any man is allowed to enter into the manhole for working inside.

(c) Before entry, presence of Toxic gases should be tested by inserting wet lead acetate paper which changes colour in the presence of such gases and gives indication of their presence.

(d) Presence of Oxygen should be verified by lowering a detector lamp into the manhole. In case, no Oxygen is found inside the sewer line, workers should be sent only with Oxygen kit.

(e) Safety belt with rope should be provided to the workers. While working inside the manholes, such rope should be handled by two men standing outside to enable him to be pulled out during emergency.

(f) The area should be barricaded or cordoned off by suitable means to avoid mishaps of any kind. Proper warning signs should be displayed for the safety of the public whenever cleaning works are undertaken during night or day.

(g) No smoking or open flames shall be allowed near the blocked manhole being cleaned.

(h) The malba obtained on account of cleaning of blocked manholes and sewer lines should be immediately removed to avoid accidents on account of slippery nature of the malba.

(i) Workers should not be allowed to work inside the manhole continuously. He should be given rest intermittently. The Engineer-in-Charge may decide the time up to which a worker may be allowed to work continuously inside the manhole.

(j) Gas masks with Oxygen Cylinder should be kept at site for use in emergency.

(k) Air-blowers should be used for flow of fresh air through the manholes. Whenever called for, portable air blowers are recommended for ventilating the manholes. The Motors for these shall be vapour proof and of totally enclosed type. Non sparking gas engines also could be used but they should be placed at least 2 meters away from the opening and on the leeward side protected from wind so that they will not be a source of friction on any inflammable gas that might be present.

(l) The workers engaged for cleaning the manholes/sewers should be properly trained and equipped to operate the manhole works.

(m) The workers shall be provided with Gumboots or non-sparking shoes, bump helmets and gloves, non-sparking tools, safety lights and gas masks and portable air blowers (when necessary). They must be supplied with barrier cream for anointing the limbs before working inside the sewer lines.

(n) Workmen descending a manhole shall try each ladder stop or rung carefully before putting his full weight on it to guard against insecure fastening due to corrosion of the rung fixed to manhole well.

(o) If a man has received a physical injury, he should be brought out of the sewer immediately and Adequate medical aid should be provided to him.

(p) The extent to which these precautions are to be taken depend on individual situation but the decision of the Engineer-in-Charge regarding the steps to be taken in this regard in an individual case will be final.

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

(a) No paint containing lead or lead products shall be used except in the form of paste or readymade paint.

(b) Suitable face masks should be supplied for use by the workers when paint is applied in the form of spray or a surface having lead paint is dry rubbed and scrapped.

(c) Overall shall be supplied by the contractors to the workmen and adequate facilities shall be provided to enable the working painters to wash during and on the cessation of work.

10. An additional clause of Safety Code

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

(i) White lead, sulphate of lead or product containing these pigment, shall not be used in painting operation except in the form of pastes or paint ready for use.

(ii) Measures shall be taken, wherever required in order to prevent danger arising from the application of a paint in the form of spray.

(iii) Measures shall be taken, wherever practicable, to prevent danger arising out of from dust caused by dry rubbing down and scraping.

(iv) Adequate facilities shall be provided to enable working painters to wash during and on cessation of work.

(v) Overall shall be worn by working painters during the whole of working period.

(vi) Suitable arrangement shall be made to prevent clothing put off during working hours being spoiled by painting materials.

(vii) Cases of lead poisoning and suspected lead poisoning shall be notified and shall be subsequently verified by medical man appointed by competent authority.

(viii) The employer may require, when necessary medical examination of workers. (ix) Instructions with regard to special hygienic precautions to be taken in the painting trade shall be distributed to working painters.

11. When the work is done near any place where there is risk of drowning, all necessary equipment should be provided and kept ready for use and all necessary steps taken for prompt rescue of any person in danger and adequate provision, should be made for prompt first aid treatment of all injuries likely to be obtained during the course of the work.

12. Use of hoisting machines and tackle including their attachments, anchorage and supports shall conform to the following standards or conditions: -

(i) (a) These shall be of good mechanical construction, sound materials and adequate strength and free from patent defects and shall be kept repaired and in good working order.

(b) Every rope used in hoisting or lowering materials or as a means of suspension shall be of durable quality and adequate strength, and free from patent defects.

(ii) Every crane driver or hoisting appliance operator, shall be properly qualified and no person under the age of 21 years should be in charge of any hoisting machine including any scaffolding winch or give signals to operator.

(iii) In case of every hoisting machine and of every chain ring hook, shackle swivel and pulley block used in hoisting or as means of suspension, the safe working load shall be ascertained by adequate means. Every hoisting machine and all gear referred to above shall be plainly marked with the safe working load. In case of a hoisting machine having a variable safe working load each safe working load and the condition under which it is applicable shall be clearly indicated. No part of any machine or any gear referred to above in this paragraph shall be loaded beyond the safe working load except for the purpose of testing.

(iv) In case of departmental machines, the safe working load shall be notified by the Electrical Engineer-in-Charge. As regards contractor's machines the contractors shall notify the safe working load of the machine to the Engineer-in-Charge whenever he brings any machinery to site of work and get it verified by the Electrical Engineer concerned.

13. Motors, gearing, transmission, electric wiring and other dangerous parts of hoisting appliances should be provided with efficient safeguards. Hoisting appliances should be provided with such means as will reduce to the minimum the risk of accidental descent of the load. Adequate precautions should be taken to reduce to the minimum the risk of any part of a suspended load becoming accidentally displaced. When workers are employed on electrical installations which are already energized, insulating mats, wearing apparel, such as gloves, sleeves and boots as may be necessary should be provided. The worker should not wear any rings, watches and carry keys or other materials which are good conductors of electricity.

14. All scaffolds, ladders and other safety devices mentioned or described herein shall be maintained in safe condition and no scaffold, ladder or equipment shall be altered or removed while it is in use. Adequate washing facilities should be provided at or near places of work.

15. To ensure effective enforcement of the rules and regulations relating to safety precautions the arrangements made by the contractor shall be open to inspection by the Engineer-in-Charge or their representatives.

16. Notwithstanding the above clauses from (1) to (14), there is nothing in these to exempt the contractor from the operations of any other Act or Rule in force in the Republic of India.

Section 3

Conditions of Contract

Part-II Special Conditions of Contract [SCC]

1. GENERAL:

The special conditions are supplementary conditions to the TENDER and shall form the part of the contract.

- 1.1 It shall be the responsibility of Contractor to co-ordinate with traffic authority, Railways, MPRDC, M.P. Electricity Board, Telephone authority, various authorities including Public Health Engineering, Water resource Department for obtaining necessary permissions regarding crossing of road/railway tracks, shift of various types of public utilities like existing pipe line, sewer line, cable etc. as may be required for the due fulfilment of the obligations under this contract. GWALIOR SMART CITY DEVELOPMENT CORPORATION LIMITED shall deposit all charges including charges for Electric Connection, Crossing of Railway and Road way etc. as may be necessary for seeking required permissions from different authorities but it shall be the primary responsibility of the Contractor to pursue with various authorities and obtain the permissions at the earliest. If as a result of excavation of trenches the underground services such as water main electric telephones cable, sewer lines become naked and unsupported it shall be the responsibility of the Contractor to make suitable and necessary arrangement as per direction of the Engineer-in-Charge for their protection and no extra payment on this account will be made to the Contractor. Any damages caused to the above mentioned underground services due to negligence of the Contractor or otherwise the same shall be made good by the Contractor at his own cost.

2.0 Accuracy of Lines, Levels and Grades

- 2.1 The various works shall be done true to line, level and grade. The periodical checking of these by the Engineer or Engineer's representative shall not absolve the Contractor of his responsibility regarding the accuracy. In case of any deviation or discrepancy in line, level or grade at the meeting faces, the contractor shall make good the discrepancy at his own cost and without any compensation for the additional work, if any involved. Whenever such a discrepancy is found to arise at the junction of works being carried out by different Contractors the responsibility to set right their respective discrepancies shall be fixed by the Engineer-in-Charge whose decision shall be final and binding on the Contractors concerned. Engineer-in-Charge shall further have the unquestioned right if need be to rectify the discrepancies and recover the cost from the Contractor or Contractors according to proportions as he may consider reasonable.

- 2.2 The details of location and the nearest permanent bench marks.
Reference Grid Marks shall be obtained by the Contractor in writing from the Engineer-in-Charge. Temporary bench mark for day to day use shall be fixed with reference to above permanent bench marks with double levelling. The Grid Co-ordinates and its references may be obtained from the Engineer-in-Charge.

3.0 Arrangements of Water and Electric Power

Arrangement for water and electric power required by the Contractor for the works shall be made by him at his own cost. Employer will however recommend to the State Electricity Board for giving the connection and power to the Contractor. However, the Employer will bear no responsibility in this respect.

4.0 Measures for Prevention of Fire

- 4.1 The Contractor shall not set fire to any standing Jungle, trees, brush wood or grass without a written permission from the Engineer-in-Charge.
- 4.2 When such permission is given and also in all cases when destroying out of dug trees, brush wood, grass etc. by fire, the Contractor shall take necessary measures to prevent such fire spreading to or otherwise damaging surrounding property.
- 4.3 Any damage caused by the spreading of such fire, whether in or beyond limits of the Employer's property, the amount of the damage shall be recovered by the Engineer-in-Charge from the Contractor's Bills as damages or deducted by any other duly authorized officer from any sums that May be due or become due from the Employer to the Contractor under the contractor otherwise.
- 4.4 The Contractor shall bear the expenses of defending any action or law proceedings that may be brought by any person by injury sustained owing to neglect of precautions to prevent the spread of fire and shall pay any damage and cost that may be awarded in consequence.

5.0 Site Order Book

A site order book shall be kept at the Employer's office regarding the site of the work. As far as possible all orders regarding the works are to be entered in this book. All entries therein shall be signed by the Engineer-in-Charge on his representative and the Contractor or its authorized representative. In important cases the Engineer-in-Charge will countersign the entries which have been made. The site order book shall not be removed from the work site except with written permission of the Engineer-in-Charge and the Contractor or his representative shall be bound to take note of all instructions and directions meant for the Contractor as entered in the site order book without having to be called on separately to note them. The Engineer-in-Charge shall submit periodically copies of the remarks in the site order book to the Employer for record and to the Contractor for submitting compliance report.

6.0 Foundations Depth/Levels.

The drawings indicate the general foundation levels to be adopted for the different conditions of the structures. During execution these levels may be modified to suit the site conditions. The Contractor shall not be liable to any compensation for any minor delays on this account. However, this may be considered for granting suitable extension in the completion period if necessitated by such events.

7.0 Approach Road

Necessary approach roads for various constructions of components of the work shall be satisfactorily constructed and maintained by the Contractor at its own cost.

8.0 Regulation and Bye-Laws

The Contractor shall conform to the regulations, bye laws or any other statutory rules made by any local authorities or by the Government and shall protect and indemnify the Employer against any claims or liability arising from or based on the violations of any such laws, ordinance, regulations, orders and decrees etc.

9.0 Contractor to use Excavated Hard Rock

All useful materials like hard rock etc. excavated by the Contractor at site shall be the property of Employer and shall be issued to the Contractor at the issue rate as decided by Engineer-in-Charge at prevailing market rate. It shall be binding on the Contractor to use it as rubble, metal aggregate etc. after breaking into the required size for concrete work and as directed by the Engineer.

10.0 Income Tax

During the course of contract period, deductions of Income Tax shall be made at the prevailing rate of Department of Income Tax Government of India and as revised from time to time as per the advice of Income Tax authorities.

11.0 Supply and Arrangement of Materials

- (1) The Contractor shall make his own arrangement for supply of materials including cement and steel. The Contractor shall be responsible for all transportation and storage of the materials at site and shall bear all the related costs. The Engineer-in-Charge shall be entitled at any time to inspect or examine all such materials. The contractor shall provide reasonable assistance for such inspection or examination as may be required.
- (2) The Contractor shall keep an accurate record of use of materials like cement and steel used in the works in a manner prescribed by the Engineers.

12.0 Cement

- (a) The Contractor shall stock his requirement so as to ensure utilization of cement within 60 days but in no case later than 90 days Cement older than the period aforesaid shall not be used on any work except with the written permission of the Engineer-in-Charge, and after satisfactorily passing such test as he may specify. The Contractor shall forthwith remove from the work such cement that Engineer-in-Charge has not allowed. The final disposal of such cement shall comply with the rules in force at the time and as the Engineer-in-Charge may approve
- (b) Large stocks of cement shall not be kept at the works but only sufficient quantities shall be kept to assure continuity of the work. The Contractor shall provide and maintain efficient water proof storage sheds for cement on the site of work. It shall be stacked on the platform 30 cm above the floor level and shall be covered with tarpaulin or any other impervious covering materials in order to protect the cement bags from moisture. The cement shall be neatly stacked in an orderly manner so as to allow an easy access and count. The arrangement of storage and utilization shall be such as to ensure the utilization of cement in the order of its arrival at the stores and the Contractor shall maintain satisfactory records which would at any time show the date of receipt and proposed utilization of cement laying in the stores at site.

- (c) The Engineer-in-Charge shall at all times have access to the stores at sites of the Contractor. He shall have authority to check and examine the method of storage, record accounting and security provided by the Contractor. The Contractor shall comply with instructions that may be issued by the Engineer in this connection. The Contractor shall further at all times satisfy the Engineer-in-Charge on demand and by the production of records and books or submission of returns and proforma or by other proofs that may be demanded that the cement brought from the approved manufacturer with date of receipt & consumption etc. The Contractor shall at all times keep his records up to date to enable the Engineer-in-Charge to apply such checks as he may desire to impose.

The Contractor shall provide a double locking arrangement to the store the key of one of the locks being with the Engineer-in-Charge or his representative at site. The Engineer-in-Charge or his authorized agent will have the authority to verify the stocks and check the consumption in any manner he thinks proper.

13.0 Special Condition Regarding Conditional TENDER

The BIDDER will have to give an undertaking with the instrument of Earnest Money to the effect that there are no conditions in the TENDER and if any conditions are found the same shall be ignored.

If such an under taking is not found with the Earnest Money, the TENDER will not be opened and not taken into consideration. However, in case the Contractor gives such an undertaking at the time of opening of TENDER the same may be considered.

14.0 Design and Drawings

- (1) The detailed project report made available by GSCDCL will comprise basic data for guidance of Contractor. Any missing or additional information required by the contractor is to be immediately brought to the notice of the Engineer-in-charge in writing. The contractor will not make any claims whatsoever on account of deficiency in the data of Detailed Project Report.

- (2) The approved drawings shall remain in the sole custody of the Engineer-in-Charge. The Contractor shall obtain and make at his own expense any further copies required by him. At the completion of the contract the Contractor shall return to the Engineer-in-Charge all Drawings provided under the Contract.

- (3) **One copy of the Drawings to be kept on Site.**

One copy of the Drawings furnished to the Contractor as aforesaid, shall be kept by the Contractor on the site and the same shall at all reasonable times be available for inspection and use by the Engineer-in-Charge and his representatives and by any other person authorized by the Engineer-in-Charge in writing.

- (4) **Disruption of Progress**

The Contractor shall give written notice to the Engineer-in-Charge whenever planning or progress of the works is likely to be delayed or disrupted unless any further drawing or order, including a direction, instruction or approval is issued by the Engineer-in-Charge within a reasonable time. The notice shall include details of the drawing or order required and of why and by when it is required and of any delay or disruption likely to be suffered if it is late.

- (5) **Delay and Cost of delay of Drawings**

If, by reason of any failure or inability of the Engineer-in-Charge to issue within a time reasonable in all the circumstances any drawing or order required by the Contractor in accordance with sub-clause (3) of this Clause, the Contractor suffers delay then the Engineer-in-Charge shall take such delay into account in determining any extension of time to which the Contractor is entitled under Clause 44 hereof. However, the Contractor shall not be entitled to any compensation for such delay, except extension of time.

- (6) **Further Drawings and Instructions**

The Engineer-in-Charge shall have full power and authority to supply to the Contractor from time to time during the progress of the Works such further drawings and instructions as shall be necessary for the purpose of the proper and adequate execution and maintenance of the Works. The Contractor shall carry out and be bound by the same.

- (7) **Final Completion of Works:**

The Work shall be considered as finally complete at the end of the Defects Liability Period subject to the Contractor having replaced and/or rectified and made good all the defective items of work and defects in accordance with clause above, to the satisfaction of the Project Manager, Architect, Owner and provided that the Contractor has performed all its obligations and fulfilled all its liabilities under the Contract, and when the Project Manager has certified in writing that the Works are finally complete. Such Final Completion in respect of those parts of the project for which extended guarantee periods are stipulated elsewhere in the Contract Documents, shall be achieved at the end of such stipulated guarantee periods.

15.0 Building Maintenance: 3 years after completion of work

16.0 Sufficiency of the tender

The Contractor shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the Works and of the rates and prices of various Quantities and the Schedule of Rates and Prices, if any, except in so far as it is otherwise provided in the Contract, cover all his obligations under the Contract and all matters and things necessary for the proper execution and maintenance of the Works. If, however, during the execution of the Works the Contractor shall encounter physical conditions, other than climatic conditions on the Site, or artificial obstructions, which conditions or obstruction could, in his opinion, not have been reasonable foreseen by an experienced contractor the Contractor shall forthwith give written notice thereof to the representative of Engineer-in-Charge and if in the opinion of the Engineer-in-Charge, such conditions or artificial obstructions could not have been reasonably foreseen by an experienced Contractor, than the Engineer-in-Charge shall certify and the Employer shall pay the additional cost to which the Contractor shall have been put by reason of such conditions, including the proper and reasonable cost. However, the decision of Engineer-in-charge shall be final and binding.

**EXECUTIVE DIRECTOR
GWALIOR SMART CITY DEVELOPMENT CORPORATION LIMITED**

Bill of Quantities (BOQ)

“Architectural Conversion of a former Birth-Death-Marriage registration Office Building into a Tourist Information Centre (TIC) at Maharaj Bada, Gwalior”

Probable Amount of Contract :(Rs. In Figure): Rs 16.20 lacs

(Rs. In Words): Rupees Sixteen Lakh Twenty Thousand Only

SECTION 5
AGREEMENT FORM
AGREEMENT

(On Non Judicial Stamp Paper of appropriate amount as per guidelines)

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

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

NOW THIS AGREEMENT WITNESSED as follows:

1. In this Agreement, words and expression shall have the same 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 Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
4. The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.
 - i. Letter of Acceptance
 - ii. Contractor's Technical & Financial Bid
 - iii. Condition of Contract: General and Special
 - iv. Contract Data
 - v. Bid Data
 - vi. Drawings
 - vii. Bill of Quantities and _
 - viii. Any other documents listed in the Contract Data as forming part of the Contract.

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

The Common Seal of affixed in the presence of:

Signed, Sealed and Delivered by the said

_____ In the presence of:

Witness – 1

Witness - 2

Binding Signature of Employer _____

Binding Signature of Contractor _____