Jabalpur Smart City Limited, Jabalpur

APPENDIX 2.10

TENDER DOCUMENT

For Percentage Rate only in work Departments and other Departments similar to Works Departments

(Effective from 1-1-2014)

Office of the JABALPUR SMART CITY LIMITED

NIT Number and Date	:
Agreement Number and Date	:
Name of Work	: Development of N.M.T (Non-Motorized Transit) from Bus Stand to Madan Mahal Station
Name of the Contractor	:
Probable Amount of Contract (Rs. In Figure)	: 71162000/-
(Rs. In Words)	: Seven Crore Eleven Lakhs Sixty Two Thousand Only
Contract Amount	
(Rs. In Figure)	:
(Rs. In Words)	:
Stipulated Period of Completion	: 6 months

Appendix 2.10

Tender Document

Table of Contents

Section	Particulars	Page
Section 1	NIT	3-5
Section 2	Instructions to Bidders (ITB)	6-12
	Bid Data Sheet	13-14
	Annexure A to M	15-34
Section 3	Table of Clauses	35-35
	Part-I General Conditions of	
	Contract (GCC)	36-53
	Contract Data	54-56
	Annexure N to W	57-72
	Part II Special Conditions of	
	Contract (SCC)	73-73
Section 4	Bill of Quantities (BOQ)	74-74
Section 5	Agreement Form	75-75



Jabalpur Smart City Limited

CIN- U75100MP2016SGC035536

JSCL/2017/281

Date \$ 5/05/2017

Request for Proposal

Jabalpur Smart City Limited invites online proposal for "<u>Development of N.M.T</u> (<u>Non-Motorized Transit</u>) from Bus Stand to Madan Mahal Station" from eligible firms having experience of similar type of work. Interested bidders may obtain details RFP document from <u>www.mpeproc.gov.in</u>, <u>www.jscljabalpur.org</u>.

Bid collection and submission details	
Tenders reference number	
Date of Pre Bid Meeting	14/06/2017
Last date for purchase the Tender	22/06/2017
Last date of online submission	27/06/2017
Date of opening of Online technical bid	29/06/2017
Last date of physical submission	30/06/2017
Date of opening of Financial bid	03/07/2017
Tender Document Cost	20000/-
Earnest Money Deposit	711700/-

Chief Executive Officer Jabalpur Smart City Limited

Reg. Office- Commissioner, Nagar Nigam Office, Jabalpur, M.P- 482001 Website :-www.jscljabalpur.org ,Email:-admin@jscljabalpur.org Contact :-7611136801,7611136800

SECTION 1

Notice Inviting Tenders Jabalpur Smart City Limited, Jabalpur

Office of the Jabalpur Smart City Limited, Jabalpur

N.I.T. NO____/e-tendering

Dated

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

S.No./Pkg /Code		District(s)	Probable Amount (Rs. In lacs)	Completion Period (months)
	Development of N.M.T (Non- Motorized Transit) from Bus Stand to	Jabalpur	711.62	6 Months
	Madan Mahal Station		18	

- 1. Interested bidders can view the NIT on website <u>http://www.mpeproc.gov.in</u> www.jscljabalpur.org.
- The Bid Document can be purchased only online from website <u>http://www.mpeproc.gov.in</u> from <u>17:30 Hours</u> <u>26/05/2017</u> to <u>23:59 Hours</u> <u>22/06/2017</u>
- 3. Amendments to NIT, if any, would be published on website only, and not in Newspaper.

à

Chief Executive Officer

Jabalpur Smart City Limited

Notice Inviting Tenders Jabalpur Smart City Limited, Jabalpur

Office of the Jabalpur Smart City Limited, Jabalpur

N.I.T.NO.	/e-tendering

Dated

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

S.no.	Name of	District(s	Probable	Earnest	Cost of Bid	Category of	Period of
/ Pkg	Work)	Amount of	Money	Document (in	Contractor	completion
/Cod			Contract (Rs.	Deposit	Rupees)		(in Months)
e			In lacs	(EMD) (in			
				Rupees)			
	Development of N.M.T (Non- Motorized Transit) from Bus Stand to	Jabalpur	711.62	711700/-	20000/-	As per Appropriate Class	6 Months
	Madan Mahal Station						

- 1. All details relating to the Bid Document(s) can be viewed and downloaded free of cost on the website.
- 2. Bid Document can be purchased after making online payment of portal fees through Credit/Debit/Cash Card/ internet banking.
- 3. At the time of submission of the bid the eligible bidder shall be required to :
 - I. Pay the cost of bid document.
 - II. Deposit the Earnest Money
 - III. Submit a check list and
 - IV. Submit an affidavit.

Details can be seen in the Bid Data Sheet.

4. Eligibility for bidders :

At the time of submission of the bid the bidder should have valid registration with the Government of Madhya Pradesh, PWD in appropriate class; however, such bidders who are not registered with the Government of Madhya Pradesh and are eligible for

Page - 4 -

registration can also submit their bids after having applied for registration with appropriate authority.

- (a) The bidder would be required to have valid registration at the time of signing of the Contract.
- (b) Failure to sign the contract by the selected bidder, for whatsoever reason, shall result in forfeiture of the earnest money deposit.
- 5. **Pre-qualification** Prequalification conditions, wherever applicable, are given in the Bid Data Sheet.
- 6. **Special Eligibility-** Special Eligibility Conditions, if any, are given in the Bid data sheet.
- 7. The Bid Document can be purchased only online from website <u>http://www.mpeproc.gov.in</u> from <u>17:30 Hours 26/05/2017</u> to <u>23:59 Hours</u> <u>22/06/2017</u>. Other key dates may be seen in bid data sheet.
- 8. Pre Bid meeting is scheduled on 3:00 PM 14/06/2017 at JSCL Office Manas Bhawan, Jabalpur.
- SOR applicable is UADD Schedule of Rates 2012 Volume I, II, III and IV for Building Works & Electrical Works, Certain Items not mentioned in UADD SOR shall be taken from MP PWD SOR 2014 or CPWD SOR and amendments upto the date of submission of tender.
- 10. Amendments to NIT, if any, would be published on website only, and not in newspaper.

Chief Executive Officer Jabalpur Smart City Limited

G,

SECTION 2

INSTRUCTIONS TO BIDDERS (ITB)

1. GENERAL

1. SCOPE OF BID

The detailed description of work, hereinafter referred as 'work' is given in the bid data sheet.

Introduction

Non-Motorized Transport includes walking, cycling, small-wheeled transport (skates, skateboards, push scooters and hand carts) and wheelchair travel. These modes provide both recreation (they are an end in themselves) and transportation (they provide access to goods and activities), although users may consider a particular trip to serve both objectives. For example, some people will choose to walk or cycle rather than drive because they enjoy the activity, although it takes longer.

Non-Motorized Transport (NMT) modes are an important and integral element of urban transport worldwide. The significance and function of non-motorized transport varies by country and over time.

Non-Motorized Transit or N.M.T is type of transit where only pedestrian and non-vehicular movements are allowed. N.M.T's are earmarked for all kind of transport systems which doesn't involve any motor vehicles.

Such type of network is proposed to be developed in Jabalpur city and it will be firstly designed for stretch of 1.2 kms on Omti Nala which will be from Madan Mahal to Bus Stand. In order to the above given information this document has been prepared with all the BOQ's and architectural designs which are been incorporated in this RFP DOCUMENT.

PROJECT OBJECTIVE

The 'Non-Motorized Transit' initiative aims to add value to the Area Based Development (ABD) part of the Jabalpur Smart City by means of bringing in visual and utilitarian changes in existing Area.

The primary objective is to increase the recognition of NMT as one of the key transport modes and essential component of public transport.

- Increase the recognition of walking and cycling in transport, planning, design, and infrastructure provision;
- Provide safe infrastructure for pedestrians and cyclists;
- Mainstream resources for walking and cycling in agencies' financial planning;
- Develop and adopt universal design standards that provide for access to all sectors of the community; and

Improve regulation and enforcement to enhance safety for pedestrians and cyclists

PROJECT SCOPE

The NMT shall be developed to promote the hierarchy considering the pedestrians, second nonmotorized transport, third the last mile connectivity. The NMT over Omti Nala is a unique opportunity to create cross sectional connectivity along the Omti nala from Bus Stand to Madan Mahal. It shall be a complete non-motorized street with barrier free designs for pedestrians.

EXISTING SITUATION

At primary stage Omti Nala was an open drain and was an unmaintained public utility. Later on this drain was covered with R.C.C slab. Width of slab is varying at different sections of Omti Nala and the whole drain was not covered by the slab still at some part the drain is open. Omti Nala is at backspace of many households, commercial spaces, and educational buildings. Very less occupancy has Omti Nala in front. Now-a-days Omti Nala is equipped with R.C.C cover at every section.

CONCEPT

On Omti Nala we are getting minimum of 12 m and maximum of 23 m width, hence because of this variation in width 4 meters of cycle track and 3.5 meters of pedestrian track on both side (making 11 meters) will remain constant throughout the stretch. Many of public utilities like shops, kiosks, public plazas, recreational spaces, elderly sitting spaces, kids play zone, bicycle stand and many other facilities will be provided according to the area available on that section. Since, 1.2 kms is quite large patch so aesthetical treatment of the whole way will be incorporated so as to cut the monotony, end-user must go through sequential unfolding of spaces in his/her way.

Graffiti walls at N.M.T will play a major role in creating a visual scene with less maintenance and its appearance will change by time with input of creative youngsters. Other remaining space will get utilized in landscaping and other design elements. Street furniture will include park benches, light poles, signage, and other requirement as per design also the basic Infrastructure utilities like sewer line, smart toilets, water-less urinals, water connections, electric connections, proper signage, smart poles, etc.

Cycle Track – A cycle track of width 4 meters is to be provided on N.M.T, with SAM (stress absorbing membrane) topped up with plastic track.

Pedestrian Track – Pedestrian track on both side of the cycle track is to be provided of width 4 meters. After basic civil work the pedestrian track will be finished with SAM (stress absorbing membrane), also the pedestrian track and cycle track will be differentiated with the steel railings.

Area for landscaping – Remaining area of N.M.T after earmarking 12 meters for non-vehicular movement will be designed for sitting facilities, plantation, parks and gardens. Street furniture of different materials will be incorporated for providing basic facilities to the end-user.

Infrastructure Utilities – Sewer pipelines, drainage pipelines, water pipelines, electric cable is to be laid underground and will serve as basic infrastructural services.

Recreational Spaces- Some spaces will be developed as recreational space for all age groups; few sections of N.M.T have potential which can be utilized as recreational zones.

Space for Public gatherings- As N.M.T is purely meant to ease out the transportation and to reduce the chaos, public gathering space also emerge out as a basic need so that it can deliver a happening place where people can gather and exchange their thoughts.

Space for Cultural Events- Jabalpur city is a city of celebrations and during time of festivals and occasions whole city becomes chaotic due to less available space in city. So to divert the flow of crowd from already pressurized node in the city, a cultural space is needed to be proposed on N.M.T where fairs and other festive rituals could be organized without hindering the other city functions.

Bicycle Stands – Non-vehicular path will give a direct access to cyclists and even a properly designed cycle track will encourage people to make use of bicycle more and more, so bicycle stand at various points is a basic need.

Wi-Fi Zones – Smart city must be incorporated with smart feature so as fast internet connection is always required to cater need of every age group. As soon as you step out from your home and reach to a certain place a Wi-Fi connection becomes must. Therefore provision of these smart zones on N.M.T is incorporated in the design.

LANDSCAPE, HARDSCAPE AND CYCLE TRACK WORKS

- a. The various components included (but not limited to) in this area wide footpaths, cycle tracks, landscape corridor with trees, road markings, hawker zone, improved junctions, benches and planting beds, etc
- b. Design and Construction of public toilets and ATMs is not part of the contractor scope of work. Although the contractor is required to ensure site coordination and construction activity alignments when these works are being undertaken by other contractors.
- c. General Arrangement Plans (Surface Finishes Layouts) including Materials, Site Furniture, cycle tracks etc.
- d. Levels and Grading Layouts; Material/Lighting/Furniture Schedules; Hardscape
- e. Details (including ramps, cycle tracks, bus bays, on-street parking and benches); pedestrian lighting details; planting schedule; planting and soil details
- f. Hard landscape specification including all details in employer's bill of quantities (BoQ) and technical specs.
- g. Softscape Specifications including all details in Employers BoQ and Technical Specs
- h. Final Setting-Out Plan for hardscape, softscape; furniture, cycle tracks, footpaths, lighting etc.
- i. All detail construction drawings suitable for construction works to be undertaken by competent contractor
- j. All necessary coordinated services drawings (including but not limited to location of light fixtures, cycle tracks, footpaths, existing site services and any new added services etc.)
- k. Shop drawings for all proprietary items/vendor items
- I. The contractor must be aware of general and specific site conditions, topography and any existing landscape prior to commencement of any landscape works on site.

2. GENERAL QUALITY OF WORK:

The work shall have to be executed in accordance with the technical specifications specified in the Bid Data sheet/ Contract Data, and shall have to meet high standards of workmanship, safety and security of workmen and works.

3. PROCEDURE FOR PARTICIPATION IN E- TENDERING:

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

4. ONE BID PER BIDDER

- 4.1 The bidder can be an individual entity or a joint venture (if permitted as per Bid Data Sheet). In case the J.V. is permitted, the requirement of joint venture shall be as per the Bid Data Sheet.
- 4.2 No bidder shall be entitled to submit more than one bid whether jointly or severally. If he does so, all bids wherein the bidder has participated shall stand disqualified

5. COST OF BIDDING:

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

6. SITE VISIT AND EXAMINATION OF WORKS:

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

A. BID DOCUMENTS

7. CONTENT OF BID DOCUMENTS:

The Bid Document comprises of the following documents:

- 1. NIT with all amendments.
- 2. Instructions to Bidders, Bid Data Sheet with all Annexure
- 3. Conditions of Contract :
 - i. Part I General Conditions of contract and the Contract Data with all Annexure, and
 - ii. Part II Special Condition of Contract.
- 4. Specifications
- 5. Drawings
- 6. Priced bill of quantities
- 7. Technical and Financial bid
- 8. Letter of Acceptance
- 9. Agreement, and
- 10. Any other document(s), as specified
- 8. The bidder is expected to examine carefully all instructions, conditions of contract, the **Contract data**, forms, terms and specifications, bill of quantities, forms and drawings in the bid document, Bidder shall be solely responsible for his failure to do so.

9. PRE-BID MEETING (WHERE APPLICABLE)

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

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

10. AMENDMENT OF BID DOCUMENTS:

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

PREPARATION OF BID

11. PREPARATION OF BID

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

12. DOCUMENTS COMPRISING THE BID:

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

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

- i. Registration number or proof of application for registration and organizational details in the format given in the bid data sheet.
- ii. Payment of the cost of Bid Document.
- iii. Earnest Money : and
- iv. An Affidavit Duly Notarized.

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

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

13. LANGUAGE:

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

14. TECHNICAL PROPOSAL:

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

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

15. FINANCIAL BID:

- 15.1 The bidder shall have to quote rates in format referred in Bid Data Sheet, in overall percentage, and not item wise, If the bid is in absolute amount, overall percentage would be arrived at in relation to the probable amount of contract given in NIT. The overall percentage rate would apply for all items of work.
- 15.2 Percentage shall be quoted in figures as well as in words. If any difference in figures and words is found, lower of the two shall be taken as valid and correct.
- 15.3 The bidder shall have to quote rates inclusive of all duties, taxes, royalties and other levies; and the Employer shall not be liable for the same.
- 15.4 The material along with the units and rates, which shall be issued, if any, by the department to the contractor, is mentioned in the Bid Data Sheet.

16. PERIOD OF VALIDITY OF BIDS:

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

17. EARNEST MONEY DEPOSIT (EMD)

- 17.1 The Bidder shall furnish, as part of the Bid, Earnest Money Deposit (EMD), in the amount specified in the Bid Data Sheet.
- 17.2 The EMD shall be in the form of Fixed Deposit Receipt of a scheduled commercial bank, issued in favors of the name given in the Bid Data Sheet. The Fixed Deposit Receipt shall be valid for six months or more after the last date of receipt of bids. However form(s) of EMD may be allowed by the employer by mentioning it in the Bid Data Sheet.
- 17.3 Bid not accompanied by EMD shall be liable for rejection as non-responsive.
- 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 after furnishing the required Performance security.
- 17.6 Failure to sign the contract by the selected bidder, within the specified period, for whatsoever reason, shall result in forfeiture of the earnest money.

18. SUBMISSION OF BID

The bidder is required to submit online bid duly signed digitally, and **Envelope "A"** in physical form also at the place prescribed in the Bid Data Sheet.

OPENING AND EVALUATION OF BID

19. PROCEDURE:

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

20. CONFIDENTIALITY:

- 20.1 Information relating to examination, evaluation, comparison and recommendation of contract award shall not be disclosed to bidders or any other person not officially concerned with such process until final decision on the bid.
- 20.2 Any Attempt by a bidder to influence the employer in the evaluation of the bids or contract award decisions may result in the rejection of his bid.

AWARD OF CONTRACT

21. AWARD OF CONTRACT:

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

22. PERFORMANCE SECURITY

- 22.1 Prior to singing of the contract the bidder to whom LOA has been issued shall have to furnish performance security of the amount in the form and for the duration, etc. as specified in the Bid Data Sheet.
- 22.2 Additional performance security, if applicable, is mentioned in the Bid data sheet and shall be in the form and for the duration, etc. similar to Performance Security..

23. SIGNING OF CONTRACT AGREEMENT:

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

- 23.2 The signing of contract agreement shall be reckoned as intimation to commencement of work. No separate work order shall be issued by the employer to the contractor for commencement of work.
- 23.3 In the event of failure of the successful bidder to submit Performance Security and Additional Performance Security, if any or sign the Contract Agreement, his EMD shall stand forfeited without prejudice to the right of the employer for taking any other action against the bidder.

24. CORRUPT PRACTICES:

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

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

- i. **'Corrupt Practice'** means the offering, giving, receiving or soliciting directly or indirectly, anything of value to influence improperly the actions of another party ;
- ii. **'Fraudulent Practice'** means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a fanatical or other benefit or to avoid an obligation:
- iii. **'Coercive Practice'** means impairing of harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party,
- iv. **'Collusive Practice'** means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party.

(END OF ITB)

BID DATA SHEET

	GENERAL		
SR.NO.	PARTICULARS	DATA	
1	Office inviting tender	Jabalpur Smart City Limited	
2	NIT No.		
3	Date of NIT	26/05/2017	
4	Bid document download available for date & time	26/05/2017 17:30 Hrs To 22/06/2017 23:59 Hrs	
5	Website link	http://www.mpeproc.gov.in	
	SECTION 1 – NIT		
CLAUSE REFERENCE	PARTICULARS	DATA	
1	Portal fees	As notified in e-tendering website	
0	Cost of bid document	Rs. 20,000.00	
2	Cost of bid document payable at	As notified in e-tendering website	
	Cost of bid document in favor of	As notified in e-tendering website	
3	Affidavit format	As per ANNEXURE B	
4	Pre-Qualifications required	Yes Yes	
	If yes, details	As per ANNEXURE C	
5	Special Eligibility	According to Bid Data sheet Bid Data sheet	
	If Yes, details	As per ANNEXURE D	
6	Key dates	As per ANNEXURE A	
	SECTION 2 – ITB		
CLAUSE REFERENCE	PARTICULARS	DATA	
7	Name of 'work'	Development of N.M.T (Non- motorized transit) from Bus Stand To Madan Mahal Station	
8	Specifications	Annexure –E	
9	Procedure for participation in e-tendering	Annexure-F	
40	Whether joint venture is allowed	Yes No	
10	If yes, requirement for joint venture	Annexure – G	
	Pre bid meeting to be held	Yes No	
11	If Yes, Date, Time & Place	Date : <mark>14-05-2017</mark> Time form: 15.00 hrs Place: JSCL Office Manas Bhawan Jabalpur M.P	
	BID DATA SHEET	-	
CLAUSE REFERENCE	PARTICULARS	DATA	

12	Envelopment A containing : Registration number or proof of application for registration and organizational details as per Annexure H	At the Office of the Jabalpur Smart city Limited, Manas Bhavan
	Cost of Bid Document	Rs. 20,000/-
	EMD	Rs. 711700/-
	An affidavit duly notarized as per <i>Annexure – B</i> Should reach in physical form	Before 17:30 Hrs 30/06/2017
13	Envelope-B Technical Proposal	ANNEXURE – I and
10		ANNEXURE –I (Format I-1 to I-5)
14	Envelope-C Financial Bid	ANNEXURE – J
15	Materials to be issued by the department	ANNEXURE – K
16	Period of Validity of Bid	120 Days
17	Earnest Money Deposit	Rs
	Forms of Earnest Money deposit	FDR/e-FDR
		Demand draft of scheduled commercial bank Interest bearing securities of post office.
	EMD valid for a period of	365 Days
	FDR must be drawn in favor of	Executive Director, JSCL
18	Letter of Acceptance (LoA)	ANNEXURE - L
19	Amount of Performance Security	5% of contract amount
	Additional Performance Security, if any	As per rule
	Performance security in the format	ANNEXURE M
	Performance security in favour of	Executive Director, JSCL
	Performance security valid up to	Valid upto defect liability period plus six months

ANNEXURE – A

S. No	WORKS DEPARTMENT	BIDDERS STAGE	START		EXPII	۲Y	ENVELOPES
	STAGE		Date	Time	Date	Time	
1		Purchase of Tender – Online	26/05/17	17:30 Hrs	22/06/17	23:59 Hrs	
2		Bid Submission – Online	26/05/17	17:30 Hrs	27/06/17	15:30 Hrs	
3	Mandatory submission Open (Envelope-A)		29/06/17	15:30 Hrs			Envelope A
4	Technical Proposal open (PQ Envelope-B)		29/06/17	15:30 Hrs			Envelope B
5	Financial Bid open (envelope-C)		03/06/17	15:30 Hrs			Envelope C

KEY DATES

Original term deposit receipt of earnest money deposit, demand draft for the cost of bid document and affidavit shall be submitted by the bidder so as to reach the office as prescribed in bid data sheet, at least one calendar day before specified start time and date in key dates for opening of technical proposal as per key dates in Bid Data Sheet.

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

|| AFFIDAVIT || (To be contained in Envelope A)

(On Non Judicial stamp of Rs. 100)

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

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

I/We am/ are fully responsible for the correctness of following self- certified information / 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 turnover is correct.
 - c. Information regarding various technical 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 4 are correct to the best of my knowledge and belief.

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

Signature with seal of the Deponent (bidder)

Note : Affidavit duly notarized in original shall reach at least one calendar day before opening of the bid.

Annexure—C (Sec clause 5 of Section 1-NIT)

PRE- QUALIFICATIONS CRITERIA

The bidder should have:

A. Financial

- i. experience of having successfully executed:
 - a. Three similar works, each costing not less than the amount equal to 20% of the probable amount of contract during the last 3 financial years; or
 - b. Two similar works, each costing not less than the amount equal to 30% of the probable amount of contract during the last 3 financial years; or
 - c. One similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract in any one financial year during the last 3 financial years;
- ii. Average annual construction turnover on the construction works not less than 50% of the probable amount of contract during the last 3 financial years.
- iii. Executed similar items of work in any one financial year during the last 3 financial years, which should not be less than the minimum, physical requirement, if any, fixed for the work.
- iv. Bid Capacity Bidder shall be allotted work up to his available Bid Capacity, which shall be worked out as given in format 1-2 of Annexure I.

B. Physical

Physical qualifications for the work shall be as below

S.NO.	PARTICULARS	QUANTITY	PERIOD	
1	Physical qualification required	Yes		
2	Construction of Under Ground Utilities	Projects with similar nature work experience	In Last 3 Financial Years	
3	Construction of foot path, Landscape and similar nature works	Projects with similar nature work experience	In Last 3 Financial Years	

(The Employer shall specify all physical qualifications requited).

Note: Above criteria are indicative, subject to suitable stipulations by the departments and specific Bid.

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

SPECIAL ELIGIBILITY CRITERIA

Not Applicable

Note: Above criteria are indicative, subject to suitable stipulations by the departments and specific bid.

SPECIFICATIONS

- 1. MP UADD Specification
- 2. MP PWD Department Specifications,
- 3. CPWD, Specifications

(The soft copy of above specifications is available at departmental website www.mpeproc.gov.in)

The provisions of general / special conditions of contract, those specified elsewhere in the bid document, as well as execution drawings and notes, or other specifications issued in writing by the Employer shall form part of the technical specifications of this work.

PROCEDURE FOR PARTICIPATION IN E-TENDERING

1. **REGISTRATION OF BIDDERS ON E-TENDERING SYSTEM:**

All the PWD registered bidders are already registered on the new e-procurement portal https://www.mpeproc.gov.in. The user id will be the contractor ID provided to them from 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: eproc_helpdesk©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 Digital 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 mandatory identity proofs along with an application. Only upon the receipt of the required documents, a Digital Certificate can be issued. For details please visit cca.gov.in.

NOTE:

I. It may take upto 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 Class III Digital Certificate need not obtain another Digital Certificate for the same. The bidders may obtain more information and the Application From required to be submitted for the issuance of Digital Certificate from cca.gov.in II. Bids can be submitted till bid submission end date. Bidder will require digital signature while bid submission.

The digital certificate issued to the Authorized User of a Partnership firm / Private Limited Company / Public Limited Company and used for online biding 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 the partners of the firm

In case of Private Limited Company, Public Limited Company, the Managing Director has to authorize a specific individual through Authority Letter. 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 2000. This Authorized User will be required to obtain a Digital Certificate. The Digital Signature executed through the use of Digital Certificate of this Authorized User will be binding on the firm. It shall be 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) of the bid on 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 of the bid as set by the Department.

5. PREPARATION AND SUBMISSION OF BIDS

The bidders have to prepare their bids online, encrypt their bid Data in the Bid forms end submit Bid of all the envelopes and documents related to the Bid required to be uploaded as per the time schedule mentioned in the key dates of the Notice inviting e-Tenders after signing of the same by the Digital Signature of their authorized representative.

6. PURCHASE OF BID DOCUMENT

For purchasing of the bid document bidders have to pay Service Charge online ONLY which is Rs. [as per Bid Date Sheet]. 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 upto scheduled time and date as set in the key dates. The payment for the cost of bid document shall be made. online through Debit/Credit card Net banking or NeFT Challan through the payment gateway provided on the portal.

7 WITHDRAWAL, SUBSTITUTION AND MODIFICATION OF BIDS

Bidder can withdraw and modify the bid till Bid submission end date

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

JOINT VENTURE (J.V.)

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

- 1. Number of partners in a Joint Venture shall not exceed 3 (three). The partners shall comply with the following requirements :
 - a. one of the partners shall be nominated as being Lead Partner, and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
 - b. the bid and, in case of a successful bid, the Agreement, shall be signed so as to be legally binding on all partners;
 - c. the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the joint venture and the entire execution of the contract, including payment, shall be done exclusively with the partner in charge;
 - d. all partners of the joint venture shall be liable jointly and severally for the execution of the contract in accordance with the contract terms, and a statement to this effect shall be included in the authorization mentioned under[c] of above, as well as in the bid and in the Agreement tin case of a successful bid];
 - e. The joint venture agreement should indicate precisely the role of all members of IV in respect of planning, design, construction equipment key personnel, work execution, and financing of the project. All members of JV should have active participation in execution during the currency of the contract. This should not be varied/modified subsequently without prior approval of the employer;
 - f. The-joint venture agreement should be registered, so as to be legally valid and binding on all partners and
 - g. a copy of the joint Venture Agreement entered into by the partners shall be submitted with the bid.
- 2. The figures for each of the partners of a joint venture shall be added together to determine the Bidder's compliance with the minimum qualifying criteria required for the bid. All the partners collectively must meet the criteria specified in full. Failure to comply with this requirement will result in rejection of the joint venture's bid.
- 3. The performance security of a joint venture shall be in the name of the partner Lead Partner/joint venture.
- 4. Attach the power of attorney of the partners authorizing the Bid signatory(ies) On behalf of the joint venture
- 5. Attach the agreement among all partners of the joint venture [and which is legally binding on all partners], which shows the requirements as indicted in the Instructions to Bidders'.
- 6. Furnish details of participation proposed in the joint venture as below:

DETAILS OF PARTICIPATION IN THE IOINT VENTURE

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

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

- a. The Lead Partner must meet at least 50% requirement of Technical and Financial eligibility criteria required for the bid.
- b. The other partner(s) must meet at least 25% requirement of Technical and financial eligibility criteria required for the bid.
- c. The lead partner and the other partners should together meet 100% of all the eligibility criteria required for the bid.
- 8. For the meeting the minimum qualification criteria of experience of similar nature work. Every partner can have experience of different works as defined in similar nature works and together should have the experience of all type of works described in similar nature works.

ORGANIZATIONAL DETAILS

(To be Contained in Envelope- A)

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

14	Fax Number with STD Code	
15	Mobile Number	
16	E-mail Address	

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

Signature of Bidder with Seal

Date: _____

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

Envelope — B, Technical Proposal

Technical Proposal shall comprise the following documents:

S.NO.	PARTICULARS	DETAILS TO BE SUBMITTED
1	Experience — Financial & Physical	ANNEXURE - I (FORMAT: I-1)
2	Annual Turnover	ANNEXURE - I (FORMAT: I-2)
3	List of technical personnel for the key positions	ANNEXURE - I (FORMAT: I-3)
4	List of Key equipments/ machines for quality control labs	ANNEXURE - I (FORMAT: I-4)
5	List of Key equipments/ machines for construction work	ANNEXURE - I (FORMAT: I-5)

Note:

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

(See clause 14 of Section 2 -ITB)

FINANCIAL & PHYSICAL EXPERIENCE DETAILS

A. Financial Requirement:

The bidder should have completed either of the below:

- a) three similar works each costing not less than the amount equal to 20% of the probable amount of contract during the last 3 financial years; or
- b) two similar works each costing not less than the amount equal to 30% of probable amount of contract during the last 3 financial years; or
- c) one similar work of aggregate cost not less than the amount equal to 50% of the probable amount of contract in any one financial year during the last 3 financial years;

To be filled in by the contractor:

- I. Details of successfully completed similar works shall be furnished in the following format
- ii. Certificate duly signed by the employer shall also be enclosed for each completed similar work.

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

Existing commitments

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

B. Physical Requirement:

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

S.No.	Particulars	Actual Quantity Executed (To be filled in by the contractor)					
		Year - 1	Year - 2	Year - 3			
1	Physical qualification required		Yes				
2	Construction of Under Ground Utilities						
3	Construction of foot path, Landscape and similar nature works						

Note:

- 1. Certificate duly signed by the employer shall be enclosed for the actual quantity executed in any one year during the last 3 financial years,
- 2. Similar works: The similarity shall be based on the physical size, complexity, methods technology or other characteristics of main items of work viz, earth work, cement concrete, Reinforced cement concrete, etc.

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

ANNUAL TURN OVER

Requirement:

Average annual construction turnover on the construction works not less than 50% of the probable amount of contract during the last 5 financial years;

To be filled in by the contractor:

Financial Year	Payments received for contracts in progress or completed
1	
2	
3	
4	
5	

Note:

i Annual turnover of construction should be certified by the Chartered Accountant.

ii. Audited Balance sheet including all related notes, and income statements for the above financial years to be enclosed.

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

S. No	Key Position	Minimum requirement						Availa	ble with the bi	dder			
		Minimum requirement for work costing	Qualification	Age	Similar work experience	Total Work Experience	S. No.	Name of Personnel	Key Position	Qualification	Age	Similar work experience	Total Work Experience
1	2	3	4	5	6	7	8	9	10	1 1	1 2	1 3	1 4
1	Site Engineer	2	B.E. Civil	below 65 years	5 years' experience	10							
2	Plant Engineer	1	B.E. Mech . / Diplo ma in mech	below 65 years	3 years' experience /7 years' experience	5							
3	Quantity Surveyor	2	B.E. Civil/ Diplo ma Civil	below 65 years	5 years/ 10 years' experience	12							
4	Soil & Material Engineer	1	B.E. Civil /Dipl oma Civil	below 65 years	5 years/ 10 years' experience	12							
	Total	9											

List of Technical Personnel for the Key Positions

Note:

1. Aforesaid personnel shall be deployed within the period starting from the date of award of contract as stipulated in the contract.

2. Approval of the Authority about suitability of personnel shall be obtained before deployment.

ANNEXURE - I (FORMAT: I-4)

(See clause 14 of Section 2-ITB)

List of Key equipment's / Machines for Quality Control Labs

	Nome of Equipment/		Quentity Available	
S.No.	Name of Equipment/ Machinery	From Rs 5 Cr to 20 Cr	Quantity Available with the Bidder	Remarks
	<u>م</u>			
1)	Weigh Balances			
	a) 5-20 kg capacity Electronic type – Accuracy 1 gm	Nil		
	b) 500 gm capacity-Electronic Type Accuracy 0.01 gm	1 No.		
	c) Electronic 5 kg capacity Accuracy 0.5 gm	1 No.		
	e) Chemical Balance 100 gm capacity-accuracy 0.001 gm	Nil		
2)	Oven-electrically operated, thermostatically controlled (including thermometer), stainless steel interior (From 0°C to 220°C Sensitivity 1°C)	1 No		
3)	Sieves : as per IS:460-1962			
	a) I.S. sieves 450 mm internal dia of sieve sets as per BIS of required sieve sizes complete with lid and pan	1set		
	b) IS sieve 200 mm internal dia (brass frame and steel/or brass wire cloth mesh) consisting of sieve sets of required sieve sizes complete with lid	2 sets		
4)	Sieve shaker capable of saking 200 mm and 450 mm dia sieves-electrically operated with time switch (for work costing more than 15 crore only)	1 No		

5)	200 tonnes compression testing machine	1 No	
6)	Stop watches 1/5 sec. accuracy	1 No	
7)	Glassware comprising beakers, pipettes, dishes, measuring cylinders (100 to 1000 cc capacity) glass roads and funnels, glass thermometers range 0°C to 100°C and metallic thermometers range up to 300°C.	2 No. each	
8)	Hot plates 200 mm dia (1500 watt.)	1 No	
9)	Enamel trays		
	a) 600 mm x 450 mm x 50 mm	1 Nos	
	b) 450 mm x 300 mm x 40 mm	1 Nos	
	c) 300 mm x 250 mm x 40 mm	1 Nos	
	d) Circular plates of 250 mm dia	1 Nos	
10)	Water Testing Kit	Nil	
B)	FOR SOILS		
1)	Water Tank	1 No	
2)	Liquid limit device with ASTM grooving tools as per IS:2720	1 No	
3)	Sampling pipettes fitted with pressure and suction inlets, 10 ml. Capacity	1 set	
4)	Compaction apparatus (Proctor) as per IS:2720 (Part 7) complete with collar, base plate and hammer and all other accessories	1 No	
5)	Modified AASHTO Compaction apparatus as per IS:2720 (Part 8) 1974 or Heavy Compaction	1 No	

1	1		1	
	Apparatus as per IS complete with collar, base plate hammer and all other accessories(for work costing more than 15 crore only)			
6)	Sand pouring cylinder with conical funnel and tap and complete as per IS:2720 (Part 28) 1974 including modern equipment.	2 Nos		
7)	Ennore Standard Sand	As required		
8)	Sampling tins with lids 100 mm dia x 75 mm ht. ½kg capacity and miscellaneous items like moisture tins with lid 50 grams etc.	Nil		
9)	Lab CBR testing equipment for conducting CBR testing, load frame with 5 Tonne capacity, electrically operated with speed control as per IS:2720 (Part 16) and consisting of following: (for work costing more than 15 crore only)	1 Set		
	a) CBR moulds 150 mm dia – 175 ht.	6 No		
	b) Tripod stands for holding dial gauge holder	4 Nos		
	c) CBR plunger with settlement dial gauge holder	1 No		
	d) Surcharge weight 147mm dia 2.5 kg wt.	6 Nos		
	e) Spacers disc 148 mm dia 47.7 mm ht. With handle	2 Nos		
	f) Perforated plate (Brass)	2 Nos		

	g) Soaking tank for accommodating 6 CBR moulds	2 Nos		
	h) Proving rings of 1000 kg, 2500 kg capacity	1 No each		
	i) Dial gauges 25 mm travel- 0.01 mm/division	2 No		
10)	Standard penetration test equipment	Nil		
11)	Nuclear moisture Density meter or equivalent(for work costing more than 15 crore only)	Nil		
12)	Speedy moisture meter complete with chemicals	1 No		
13)	Unconfined Compression Test Apparatus (for work costing more than 15 crore only)	Nil		
	C) FOR BITUM	IEN AND BITUMI	NOUS MIXES	
1)	Constant temperature bath for accommodating bitumen test specimen, electrically operated, and thermostatically controlled (to accommodate minimum six Specimens)	1 No		
2)	Penetrometer automatic type, including adjustable weight arrangement and needles as per IS:1203-1958	1 No		
3)	Solvent extraction or centrifuge type apparatus complete with extraction thimbles with solvent and filter paper	1 No		

4)	Bitumen laboratory mixer including required accessories (20 ltrs.) (for work costing more than 15 crore only)	1 No		
5)	Marshall compaction apparatus automatically operated as per ASTM 1559- 62 T complete with accessories (with 180 N Marshall Moulds) (for work costing more than 15 crore only)	1 set		
6)	Furol viscometer	1 No		
7)	Ductility meter (for work costing more than 15 crore only)	1 No		
8)	Softening point (Ring and ball app)	1 No		
9)	Distant reading thermometer	-		
10)	Rifle box	- 1 No		
11)	Automatic Asphlat content Meter	- 1 No		
12)	Thin film over test apparatus for modified binder either with PMB or CRMB(for work costing more than 15 crore only)	-		
13)	Mastic Asphalt Hardness testing equipment(for work costing more than 15 crore only)	-		
14)	Sand Equivalent test apparatus	1 set		
15)	Core cutting machine suitable for upto 150 mm dia core	1 set		
16)	Thermometers (Digital)	4 Nos		
	D) FOR CEMENT, CE	MENT CONCRET	TE AND MATERIALS	

1)	Water Tank	1 No	
2)	Vicat needle apparatus for setting time with plungers as per IS:269-1967	1 No	
3)	Moulds		
	a) 150 mm x 300 mm ht. Cylinder with capping component along with the capping set and compound as per IS	Nil	
	b) Cube 150 mm, and 100 mm (each size)	12 Nos	
4)	Concrete permeability apparatus	Nil	
5)	High frequency mortar cube vibrator for cement testing	Nil	
6)	Concrete mixer power driven, 1 cu.ft. capacity	Nil	
7)	Variable frequency and amplitude vibrating table size 1 m x 1 m as per the relevant British Standard	Nil	
8)	Flakiness index test apparatus	1 No	
9)	Aggregate impact test apparatus as per IS:2386 (Part 4) 1963	Nil	
10)	Los-Angeles abrasion test apparatus as per IS:2386 (Part 4) 1963	Nil	
11)	Flow table as per IS:712-1973	Nil	
12)	Equipment for slump test	1 No	

13)	Equipment for determination of specific gravity or fine and coarse aggregate as per IS:2386 (Part 3) 1963	1 No		
14	Compression and Flexural strength testing machine of 200 T capacity with additional dial for flexural testing	1 No		
15	Core cutting machine with 10/15 cm dia diamond cutting edge	1 No		
16)	Needle vibrator	1 No		
17)	Air entrainment meter	Nil		
18)	0.5 Cft, 1 Cft cylinder for checking bulk density of aggregate with tamping rod	1 No		
19)	Soundness testing apparatus for cement (Lee Chattlier)	Nil		
	E) FOR CONTROL OF	PROFILE AND S	SURFACE EVENNESS	5
1)	Total Station	1 No		
2)	Precision automatic level with micrometer attachment	1 set		
3)	Distomat or equivalent	Nil		
4)	Theodolite – Electronically operated with computerised output attachment	Nil		
5)	Precision staff	4 sets		
6)	3 meter straight edge and measuring wedge	2 sets		
7)	Camber template 2 Lane			
	a) Crown type cross – section	1 sets		

	b) Straight run cross – section	1sets	
8)	Steel tape		
	a) 5 m long	4 Nos	
	b) 10 m long	4 Nos	
	c) 20 m long	4 Nos	
	d) 30 m long	4 Nos	
	e) 50 m long	4 No	
9)	Roughometer (Bump Integrator)	1 No. (when required)	

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

List of Key equipment's /Machines for Construction Work

S. No.	Name of Equipment/ Machinery	Quantity Required with the bidder for works costing	Quantity Available with the bidder	Remarks
1.	JCB	2		
2.	Dumper	4		
3.	Tractor Trolly	2		
4.	Automated Concrete Mixer	2		
5.	Vibrator 25 mm needle	3		
6.	Water and sewer Pipe Loader and unloader	2		
7.	Earth Compactor/roller for getting max dry density	2		
8.	Centrifugal pump for dewatering	4		
9.	Plate vibrator	2		

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

FINANCIAL BID

(To Be Contained in Envelope-C)

NAME OF WORK_

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

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

Note:

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

Signature of Bidder Name of Bidder

The above bid	is hereby acce	epted by me	on behalf	of the	Municipal	Corporation	Jabalpur	dated
the	day of			_ 20				

Signature of Officer by whom accepted

ANNEXURE — K

(See clause 15 of Section 2 -ITB)

MATERIALS TO BE ISSUED BY THE DEPARTMENT

NOT APPLICABLE

ANNEXURE—L

(See clause 21 of Section 2 -ITB)

LETTER OF ACCEPTANCE (LOA)

No. _____

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 Municipal Corporation Jabalpur at your bided percentage _____ below/ above or at par the Bill of Quantities and item wise rates given therein.

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

- a. The performance security/ performance guarantee of Rs. ______ (in-figures) (Rupees ______ in words only). The performance security shall be in the shape of term deposit receipt / bank guarantee of any nationalized / schedule commercial bank valid up to three months after the expiry of defects liability period.
- b. Sign the contract agreement.

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

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

Yours Faithfully

Dated: _____

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

PERFORMANCE SECURITY

То

_____ [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] (hereinafter called "the Contract").

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

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

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

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

We further agree that no change or addition to or other modification of the term of the Contract of the Works to be performed there under or of any of the Contract documents which maybe 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 3 (three) months from the date of expiry of the Defect Liability 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

Clause	Particulars	Clause	Particulars
No.		No.	
A. Gen	eral	21	Payments for Variations and / or Extra
			Quantities
1	Definitions	22	No compensation for alterations in or restriction
			of work to be carried out.
2	Interpretations and Documents	23	No Interest Payable
3	Language and Law	24	Recovery from Contractors
4	Communications	25	Tax
5	Subcontracting	26	Check Measurements
6	Personnel	27	Termination by Engineer in Charge
7	Force Majeure	28	Payment upon Termination
8	Contractor's Risks	29	Performance Security
9	Liability For Accidents To Person	30	Security Deposit
10	Contractor to Construct the Works	31	Price Adjustment
11	Discoveries	32	Mobilization and Construction Machinery
			Advance
12	Dispute Resolution System	33	Secured Advance
B Time	Control	34	Payments Certificates
13	Programme	E. Finishi	ing the Contract
14	Extension of Time	35	Completion Certificate
15	Compensation for Delay	36	final Account
16	Contractor's quoted percentage	F. Other	Conditions of Contract :
C. Qua	lity Control	37	Currencies
17	Tests	38	Labour
18	Correction of Defects noticed	39	Compliance with Labour Regulations
	during the Defect Liability Period		
D. Cos	t Control	40	Audit and Technical Examination . —
19	variations Change in original	41	Death or Permanent Invalidity of Contractor

	Specifications, Designs, Drawings		
	etc.		
20	Extra Items .	42	Jurisdiction

A. General

1. **DEFINITIONS**

- 1.1. **Bill of Quantities:** means the priced and completed Bill of Quantities forming part of the Bid.
- 1.2. **Chief Engineer:** means Chief Engineer of the zone/ basin concerned:
- 13. **Completion:** means completion of the work as certified by the Engineer-in-Charge, in accordance with provisions of agreement.
- 1.4. **Contract:** means the Contract between the Employer and the Contractor to execute, complete and/or maintain the work. Agreement is synonym of Contract and carries the same meaning wherever used.
- 1.5. **Contract Data:** means the documents and other information, which comprise of the Contract.
- 1.6. **Contractor:** means a person or legal entity whose bid to carry out the work has been accepted by the Employer.
- 1.7. **Contractor's bid:** means the completed bid document submitted by the Contractor to the Employer.
- 1.8. **Contract amount:** means the amount of contract worked out on the basis of accepted bid.
- 1.9. **Completion of work:** means completion of the entire contracted work; Exhaustion of quantity of any particular item mentioned in the bid document shall not imply completion of work or any component thereof.
- 1.10. **Day:** means the calendar day.
- 1.11. **Defect:** means any part of the work not completed in accordance with the specifications included in the contract.
- 1.12. **Department:** means Department of the, State Government viz. Water Resources Department, Public Works Department, Public Health Engineering Department Rural Engineering Service and any other organization which adopts this document.
- 1.13. **Drawings:** means drawings including calculations and other information provided or approved by the Engineer-in-Charge.
- 1.14. **Employer:** means the party as defined in the Contract Data, who employs the Contractor to carry out the work. The Employer may delegate any or all functions to a person or body nominated by him for specified functions. The word Employer / Government / Department wherever used denote the Employer.

- 1.15. **Engineer:** means the person named in the Contract Data.
- 1,16. **Engineer in charge:** means the person named in the Contract Data.
- 1.17. **Equipment:** means the Contractor's machinery and vehicles brought temporarily to the Site far execution of work.
- 1.18. Government: means Government of Madhya Pradesh.
- 1.19. In Writing: means communicated in written form and delivered against receipt.
- 1.20. **Material:** means all supplies, including consumables, used by the Contractor for incorporation in the work.
- 1.21. **Superintending Engineer:** means Superintending Engineer-in-Charge of the Circle concerned.
- 1.22. **Stipulated period of completion:** means the period in which the Contractor is required to complete the work. The stipulated period is specified in the Contract Data.
- 1.23. **Specification:** means the specification of the work included in the Contract and any modification or addition made or approved by the Engineer-in-Charge.
- 1.24. **Start Date:** means the date of signing of agreement for the work.
- 1.25. **Sub-Contractor**: means a person or corporate body who has a Contract with the Contractor, duly authorized to carry out a part of the construction work under the Contract.
- 1.26. **Temporary Work:** means work designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the work.
- 1.27. **Tender/Bid, Tendered/Bidder**: are the synonyms and carry the same meaning where ever used. -
- 1,28. **Variation:** means any change in the work which is instructed or approved as variation under this contract.
- 1.29. **Work:** The expression "work' or "works" where used in these conditions shall unless there be something either in the subject or context repugnant to such construction, be construed and taken to mean the work by virtue of contract, contracted to be executed, whether temporary or permanent and whether original, altered, substituted or additional,

2. INTERPRETATIONS AND DOCUMENTS

2.1 Interpretations

In the contract, except where the context requires otherwise:

a. words indicating one gender include all genders;

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

2.2 Documents Forming Part of Contract:

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

3. Language and Law

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

4. Communications

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

5. Subcontracting

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

- a. The Contractor may subcontract up to 25 percent of the contract price with the approval of the Employer in writing, but will not assign the Contract. Subcontracting shall not alter the Contractors obligations.
- b. Following shall not form part of subcontracting:
 - i. Hiring of labour through a labour contractor.
 - II. The purchase of Materials to be incorporated in the works.
 - iii. Hiring of plant& machinery . .
- c. The sub-contractor will have to be registered in the appropriate category in the centralized registration system for contractors of the G0MP.

6. Personnel

- 61 The Contractor shall employ for the construction work and routine maintenance the technical personnel as provided in the Annexure I-3 of Bid Data Sheet if applicable. If the Contractor fails to deploy required number of technical staff, recovery as specified in the Contract Data will be made from the Contractor.
- 6.2 If the Engineer asks the Contractor to remove a person who is a member of the contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within three days and has no further connection with the Works in the Contract.

7. Force Majeure

- 7.1 The term "Force Majeure" means an exceptional event or circumstance:
 - (a) Which is beyond a Party's control,
 - (b) Which such Party could not reasonably have provided against before entering into the Contract
 - (c) Which, having arisen, such Party could not reasonably have avoided or overcome, and
 - (d) Which is not substantially attributable to the other Party.

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

- i. War, hostilities (whether war be declared or not), invasion, act of foreign enemies,
- ii. Rebellion, terrorism, sabotage by persons other than the contractor's Personnel, revolution, insurrection, military or usurped power, or civil war,

- iii. Riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel,
- iv. Munitions of war, explosive materials, ionising radiation or contamination by radioactivity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
- v. Natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity.
- 7.2. In the event of either party being rendered unable by force majeure to perform any duty or discharge any responsibility arising out of the contract, the relative obligation of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by either party shall be borne by respective parties.
- 7.3 For the period of extension granted to the Contractor due to Force Majeure the price adjustment clause shall apply but the penalty clause shall not apply. It is clarified that this sub clause shall not give eligibility for price adjustment to contracts which are otherwise not subject to the benefit of price adjustment clause.
- 7.4 The time for performance of the relative obligation suspended by the force majeure shall stand extended by the period for which such cause lasts. Should the delay caused by force majeure exceed twelve months, the parties to the contract shall be at liberty to foreclose the contact after holding mutual discussions.

8. Contractor's Risks -

- 8.1 All risks of loss or damage to physical property and of personal injury and death which arise during and in consequence of the performance of the Contract are the responsibility of the Contractor.
- 8.2 All risks and consequences arising from the inaccuracies or falseness of the documents, drawing, designs, other documents and/or information submitted by the contractor shall be the responsibility of the Contractor alone, notwithstanding the fact that the design/ drawings or other documents have been approved by the department.

9. Liability for Accidents to Person

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

10. Contractor to Construct the Works

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

- 10.2 In the case of any class of work for which there is no such specification as is mentioned in Contract Data, such work shall be carried out in accordance with the instructions and requirement of the Engineer-in-charge.
- 10.3 The contractor shall supply and take upon himself the entire responsibility of the sufficiency of the scaffolding, timbering, machinery, tools and implements, and generally of all means used for the fulfillment of this contract whether such means may or may not be approved or recommended by the Engineer.

11. Discoveries

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

12. Dispute Resolution System

- 12.1 No dispute can be raised except before the Competent Authority as defined in Contract Data in writing giving full description and grounds of dispute. It is clarified that merely recording protest while accepting measurement and/or payment shall not be taken as raising a dispute.
- 12.2 No dispute can be raised after 45 days of its first occurrence. Any dispute raised after expiry of 45 days of its first occurrence shall not be entertained and the Employer shall not be liable for claims arising out of such dispute.
- 12.3 The Competent Authority shall decide the matter within 45 days.
- 12.4 Appeal against the order of the Competent Authority can be preferred within 30 days to the Appellate Authority as defined in the Contract Data. The Appellate Authority shall decide the dispute within 45 days.
- 12.5 Appeal against the order of the Appellate Authority can be preferred before the Madhya Pradesh Arbitration Tribunal constituted under Madhya Pradesh Madhyastham Adhikaran Adhiniyam, 1983.
- 12.6 The Contractor shall have to continue execution of the Works with due diligence notwithstanding pendency of a dispute before any authority or forum.

B. Time Control

13. **Programme**

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

13.2 The program shall be supported with all the details regarding key personnel, equipment and machinery proposed to be deployed on the works for its

execution. The contractor shall submit the list of equipment and machinery being brought to site, the list of key personnel being deployed, the list of machinery/equipment being placed in field laboratory and the location of field laboratory along with the Programme.

- 13.3 An update of the Programme shall be a programme showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining Works, including any changes to the sequence of the activities.
- 13.4 The Contractor shall submit to the Engineer for approval an updated Programme at intervals no longer than the period stated in the Contract Data. If the Contractor does not submit an updated Programme within this period, the Engineer may withhold the amount stated in the Contract Data from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Programme has been submitted.
- 13.5 The Engineer's approval of the Programme shall not alter the Contractor's obligations.

14. Extension of Time

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

15. Compensation for delay

- 15.1 The. time allowed for carrying out the work, as entered in the agreement, shall be strictly observed by the Contractor.
- 15.2 The time allowed for execution of the contract shall commence from the date of signing of the agreement. It is clarified that the need for issue of work order is dispensed with.
- 15.3 In the event milestones are laid down in the Contract Data for execution of the works, the contractor shall have to ensure strict adherence to the same.

- 15.4 Failure of the Contractor to adhere to the timelines and/or milestones shall attract such liquidated damages as is laid down in the Contract Data.
- 15.5 In the event of delay in execution of the Works as per the time lines mentioned in the Contract Data the Engineer-in-charge shall retain from the bills of the Contractor amount equal to the liquidated damages leviable until the Contractor makes such delays good. However, the Engineer-in-charge shall accept bankable security in lieu of retaining such amount.
- 15.6 If the Contractor is given extension .of time after liquidated damages have been paid, the Engineer in Charge shall correct any over payment of liquidated damages by the Contractor in the next payment certificate.
- 15.7 In the event the Contractor fails to make good the delay until completion of the stipulated contract period (including extension of time) the sum so retained shall be adjusted against the liquidated damages levied.

16. Contractor's quoted percentage

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

C. Quality Control

17. Tests

- 17.1 The Contractor shall be responsible for:
 - a. Carrying out the tests prescribed in specifications, and
 - b. For the correctness of the test results, whether preformed in his

laboratory or elsewhere.

- 17.2 The contractor shall have to establish field laboratory within the time specified and having such equipments as are specified in the Contract Data.
- 17.3 Failure of the Contractor to establish laboratory shall attract such penalty as is specified in the Contract Data.
- 17.4 Ten percent of the mandatory test prescribed under the specification shall be got carried out through laboratories accredited by national Accreditation Board of laboratories (NABL) By the Engineer-in-charge and the cost of such testing shall be deducted form the payments due to contractor.

18. Correction of Defects noticed during the Defect Liability Period

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

D. COST CONTROL

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

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

20. Extra items

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

21. Payments for Variations and / or Extra Quantities

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

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

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

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

23. 'No Interest Payable

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

24. Recovery from Contractors

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

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

25. Tax -

- 25.1 The rates quoted by the Contractor shall be deemed to be inclusive of the commercial tax and other 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 changes in the taxes due to change in legislation or for any other reason shall not be payable to the contractor.

26. check Measurements

- 26.1 The department reserves to itself the right to prescribe a scale of check measurement of work in general or specific scale for specific works or by other special orders.
- 26.2 Checking of measurement by superior officer shall supersede measurements by subordinate officer(s), and the former will become the basis of the payment.
- 26.3 Any over/excess payments detected, as a result of such check measurement or otherwise at any stage up to the date of completion of the defect liability period specified in this contract, shall be recoverable from the Contractor, as per clause 24 above.

27. Termination by Engineer in charge

- 27.1 If the Contractor fails to carry out any obligation under the Contract, the Engineer in Charge may by notice require the Contractor to make good the failure and to remedy it within a specified reasonable time.
- 27.2 The Engineer in Charge, shall be entitled to terminate the Contract if the Contractor
 - a) abandons the Works or otherwise plainly demonstrates the intention not to continue performance of his obligations under the Contract;
 - b) the Contractor is declared as bankrupt or goes into liquidation other than for approved reconstruction or amalgamation;
 - c) without reasonable excuse falls to comply with the notice to correct a particular defect within a reasonable period of time;
 - d) the Contractor does not maintain a valid instrument of financial security as prescribed;
 - e) the Contractor has delayed the completion of the Works by such duration for which the maximum amount of liquidated damages is recoverable;
 - f) If the Contractor fails to deploy machinery and equipment or personnel or set up a field laboratory as specified in the Contract Data;
 - g) If the contractor, in the judgment of the Engineer in chargé has engaged in corrupt or fraudulent practices in competing for or in executing the contract;
 - h) Any other fundamental breaches as specified in the Contract Data.
- 27.3 In any of these events or circumstances, the Engineer in Charge may, upon giving 14 days' notice to the Contractor, terminate the Contract and expel the Contractor from the Site, However, in the case of sub-paragraph (b) or (g) of clause 27.2, the Engineer in Charge may terminate the Contract immediately.
- 27.4 Notwithstanding the above, the Engineer-in-Charge may terminate the Contract for convenience by giving notice to the Contractor.

28. Payment upon Termination

- 28.1 If the contract is terminated under clause 27.3, the Engineer shall issue a certificate for value of the work accepted on final measurements, less Advance Payments and Penalty as indicated in the Contract Data. The amount so arrived at shall be determined by the Engineer-in-Charge and shall be final and binding on both the parties.
- 28.2 Payment on termination under clause 27.4 above -

If the Contract is terminated under clause 27.4 above, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation, of the Contractor's personnel employed solely on the Works, and the Contractor's costs of

protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

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

29. Performance Security

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

30. Security Deposit-

- 30.1 Security Deposit shall be deducted from each running bill at the rate as specified in the Contract Data. The total amount of Security Deposit so deducted shall not exceed the percentage of Contract Price specified in the Contract Data.
- 30.2 The security deposit may be replaced by equivalent amount of bank guarantee or fixed deposit receipt assigned to the Employer, with validity up to 3 (three) months beyond the completion of Defect Liability Period/ extended Delectability Period.
- 30.3 The Security Deposit shall be refunded on completion of' Defect Liability Period.

31. Price Adjustment

31.1 Applicability

- 1. Price adjustment shall be applicable only if provided for in the Contract Data.
- 2. The price adjustment clause shall apply only for the works executed from the date of signing of the agreement until the end of the initial intended completion date or extensions granted for reasons attributed to the Employer by the Engineer.
- 3. The Contractor shall not be entitled to any benefit arising from the price adjustment clause for extension in the contract period for reasons attributed to the Contractor.
- 4. In the Force Majeure event the price escalation clause shall apply.

31.2 Procedure

- 1. Contract price shall be adjusted for increase or decrease in rates and price of labour, materials, fuels and lubricants in accordance with following principles and procedures and as per formula given in the contract data.
- 2. The price adjustable shall be determined during each quarter from the formula given in the contract data.

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

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

- 4. Weightages of various components of the work shall be as per the Contract Data.
- **31.3** To the extent that full compensation for any rise or fail in costs to the contractor is not covered by the provisions of this or other clauses in the contract the unit rates and prices included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.
- **31.4** The index relevant to any quarter, for which such compensation is paid, shall be the arithmetical average of the indices relevant of the calendar month.
- **31.5** For the purpose of clarity it is pointed out that the price adjustment may be either positive or negative, i.e. if the price adjustment is in favour of the Employer, the same shall be recovered from the sums payable to the Contractor.

32. Mobilization and Construction Machinery Advance

- 32.1 Payment of advances shall be applicable if provided in the Contract Data.
- 32.2 If applicable, the Engineer in Charge shall make interest bearing advance payment to the contractor of the amounts stated in the Contract Data, against provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/ scheduled banks, in the name as stated in the Contract Data in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the contractor.
- 32.3 The rate of interest chargeable shall be as per Contract Data.
- 32.4 The construction machinery advance, if applicable, shall be limited to 80% of the cost of construction machinery and admissible only for new construction machinery.
- 32.5 The advance payment shall be recovered as stated in the Contract Data by deducing proportionate amounts from payment otherwise due to the Contractor. No account shall be taken of the advance payment or its recovery in assessing valuations of work done, variations, price adjustments, compensation events, or liquidated damages.

33. Secured Advance

- 33.1 Payment of Secured Advance shall be applicable if provided in the Contract Data.
- 33.2 If applicable, the Engineer shall make advance payment against materials intended for but not yet incorporated in the Works and against provision by the contractor of an unconditional Bank Guarantee in a form and by a nationalized/ scheduled bank, in the name as stated in the Contract Data, in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been adjusted, but the amount of the guarantee shall be progressively reduced by the amounts adjusted by the contractor.
- 33.3 The amount of secured advance and conditions to be fulfilled shall be as stipulated in the Contract Data.
- 3.4 The Secured Advance paid shall be recovered as stated in the Contract Data.

34. Payment Certificates

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

- (a) The Contractor shall submit to the Engineer monthly statements of the value of the work executed less the cumulative amount certified previously, supported with detailed measurement of the items of work executed.
- (b) The Engineer shall check the Contractor's monthly statement and certify the amount to be paid to the Contractor.
- (c) The value of work executed shall be determined, based on the measurements approved by the Engineer/ Engineer-in-charge.
- (d) The value of work executed shall comprise the value of the quantities of the items in the Bill of Quantities completed:
- (e) The value of work executed shall also include the valuation of Variations and Compensation Events.
- (f) All payments shall be adjusted for deductions for advance payment, security deposit, other recoveries in terms of contract and taxes at source as applicable under the law.
- (g) The Engineer may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- (h) Payment of intermediate certificate shall be regarded as payments by way of advance, against the final payment and not as payments for work actually done and completed.
- (i) Intermediate payment shall not preclude the requiring of bad, unsound and imperfect or unskilled work to be removed and taken away and reconstructed or be considered

as an admission of the due performance of the contractor any part thereof, in any respect or the occurring of any claim.

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

E. Finishing the Contract

35. Completion Certificate

- 35.1 A Completion Certificate in the prescribed format in Contract Data shall be issued by the Engineer-in-Charge after physical completion of the Work.
- 35.2 After final payment to the Contractor a Final Completion Certificate in the prescribed format in the Contract Data shall be issued by the Engineer-in Charge.

36. Final Account

- 36.1 The Contractor shall supply the Engineer with a detailed account of the total amount that the Contractor considers payable for works under the Contract within 21 days of issue of certificate of physical completion of works. The Engineer shall issue a Defects Liability Certificate and certify any payment that is due to the Contractor within 45 days of receiving the Contractor's account if it is correct and complete. If the account is not correct or complete, the Engineer shall issue within 45 days a schedule that states the scope of the corrections or additions that are necessary. If the Account is still unsatisfactory after it has been resubmitted, the matter shall be referred to the Competent Authority as defined in the Contract Data, who shall decide on the amount payable to the Contractor after hearing the Contractor and the Engineer in Charge.
- 36.2 In case the account is not received within 21 days of issue of Certificate of Completion as provided in clause 32.1 above, the Engineer shall proceed to finalize the account and issue a payment certificate within 28 days.

F. Other Conditions of Contract

37. Currencies

All payments will be made in Indian Rupees.

38. Labour

- 38.1 The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.
- 38.2 The Contractor shall, if required by the Engineer, deliver to the Engineer a return in detail, in such form and at such intervals as the Engineer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Engineer may require.

39. Compliance with Labour Regulations

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, by 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 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 nonobservance of the provisions stipulated in the notifications/ byelaws/ Acts/Rules / regulations including amendments, if any, on the part of the Contractor, the Engineer/Employer shall have the right to deduct from any money due to the Contractor including his amount of performance security. The Employer/Engineer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer. The employees of the Contractor and the Sub Contractor in no case shall be treated as the employees of the Employer at any point of time.

40. Audit and Technical Examination

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

41. Death or Permanent Invalidity of Contractor

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

42. Jurisdiction

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

[End of GCC]

Contract Data

Clause reference	Particulars	Data
1.14	Employer	EXECUTIVE DIRECTOR, JSCL, JABALPUR
1.15	Engineer	Executive Engineer
1.16	Engineer in Charge	Assistant Engineer
1.12	Stipulated period of completion	12 months (including Rainy season)
3	Language & Law of Contract	Indian Contract Act 1872
4	Address & contact details of the Contractor	As per Annexure H
	Address & contact details of the Employer/ Engineer- phone, Fax, email.	Executive Director, JSCL
5	Subcontracting permitted for the Contract Value	Upto 10% by approval of employer
6	Technical Personnel to be provided the contractor—requirement, &	As per Annexure - I (Format I-3)
	Penalty, if required Technical Personnel not employed	As per rule
10	Specifications	As per Annexure E
	Drawings	As per Annexure N
12	Competent Authority for deciding dispute under Dispute Resolution System	As per rule
	Appellate Authority for deciding dispute under Dispute Resolution System	Executive Director, JSCL
13	Period for submission of updated construction program	7 days
	Amount to be withheld for hot submitting construction program in prescribed period	As per rule
14	Competent Authority for granting Time Extension.	As per rule

15	Milestones laid down for the contract	NO
	If Yes, details of Milestones	As per Annexure - O
l	Liquidated damage	As per Annexure - P
17	List of equipment for lab	As per Annexure - Q
	Time to establish lab	As per rule
	Penalty for not establishing field Laboratory	As per rule
18	Defect Liability Period	<i>60 months after physical completion of work</i>
21	Competent Authority for determining the rate	As per rule
27	Any other condition for breach of contract	As per rule
28	Penalty	Penalty Shall include
		(a) Security deposit as per clause 30 of General Conditions of Contract and
		(b Liquidated Damages imposed as per clause 15 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	<i>Till issue of physical Completion</i> <i>Certificate as per Clause 35.1</i>
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.
31	Price Adjustment formula and procedure to calculate	As per Annexure R The price Adjustment shall apply only in respect of Cement, Steel, Bitumen and POL components
31.1 (1)	Price adjustment shall be applicable	Price Adjustment shall be applicable only in case where the

		amount in NIT is more than Rs. 10 (Ten) Crores. This clause shall not have any bearing with the Contract Amount.
	32:1 Mobilization and Construction Machinery Advance Applicable	No Mobilization and Construction Machinery Advance payable.
	32.2 If yes, Unconditional Bank Guarantee	In the format prescribed in Annexure - S
	32.3 If yes, Rate of interest chargeable on advances	10% annual simple interest
	32.4 If yes, Type & Amount of Advance payment that can be paid	NA
32	32.5 If yes, Recovery of advance payment	Recovery of Mobilization and/or Construction Machinery advance shall commence when 10% of the Contract Amount is executed and recovery of total advance shall be done on pro-rata basis and shall be completed by the time work equivalent to 80% of the Contract Amount is executed.
		In addition to the recovery of principal amount, recovery of interest shall be carried out as calculated on the outstanding amount of principal at the close of each month. The interest shall be accrue from the day of payment of advance and the recovery of interest shall commence when 10% of the Contract Amount is executed and shall be completed by the time work equivalent to 80% of the Contract Amount is executed.
33	33.1 secured Advance Applicable	No Secured Advance payable.
	33.2 if yes, Unconditional Bank Guarantee	In the format prescribed in Annexure—T
	33.2 if yes, Amount of Secured Advance :	75% of value of material as determined by the Engineer in Charge

	33.3 if yes, Conditions for secured advance.	 a) The materials are in-accordance with the specification for Works; b) Such materials have been delivered to site, and are properly stored and protected against damage, or deterioration to the satisfaction of the Engineer. The contractor shall store the bulk material in measurable stacks.; c) The Contractor's records of the requirements, orders, receipt and use of materials are kept in a form approved by the Engineer and such records shall be available for inspection by the Engineer; d) The contractor has submitted with his monthly statement the estimated value of the materials on site together with such documents as may be required by the Engineer for the purpose of valuation of the materials and providing evidence of ownership and payment thereof; e) Ownership of such materials shall be deemed to vest in the Employer for which the Contractor has submitted an Indemnity Bond in an acceptable format; and f) The quantity of materials are not excessive and shall be used within a reasonable time as determined by the Engineer.
35	Completion certificate - after physical completion of the Work	As per Annexure - U
	Final Completion Certificate — after final	As per Annexure-V

	payment on completion of the Work	
36	Competent Authority	Executive Director, JSCL
39	Salient features of some of the major labour laws that are applicable	As per Annexure - W
41	Competent Authority	Executive Director, JSCL

ANNEXURE—N

(See clause 10 of Section 3— GCC)

Drawings

List of drawings -

PLEASE FIND ATTACHED ANNEXURE – 1A FOR DRAWINGS.

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

Details of Milestones

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

Compensation for Delay

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

- i. Slippage up to 25% in financial target during the milestone under consideration 2.5% of the work remained unexecuted in the related time span.
- ii. Slippage exceeding 25% but Up to 50% in financial target during the milestone under consideration 5% of the work remained unexecuted in the related time span.
- iii. Slippage exceeding 50% but Up to 75% in financial target during the milestone under consideration -7.5% of the work remained unexecuted in the related time span,.
- iv. Slippage exceeding 75% in financial target during the milestone under consideration-10% of the work remained unexecuted in the related time span.
- **Note:** For arriving at the dates of completion of time span related to different milestones, delays which are not attributable to the Contractor shall be considered. The slippage on any milestone is if made good in subsequent milestones or at the time of stipulated period of completion, the amount retained as above shall be refunded. In case the work is not completed within the stipulated period of completion along with all such extensions which are granted to the Contractor for either Employer's default or Force Majeure, the compensation shall be levied on the contractor at the rate of 0.05% per day of delay limited to a maximum of 10% of contract price. The decision of Superintending Engineer shall be final and binding upon both the parties.

Annexure – Q (See clause 17 of Section 3 GCC)

List of Equipment for Quality Control Lab

ANNEXURE - R (See clause 31 of Section 3 -GCC)

PRICE ADJUSTMENT

The formulas for adjustment of price are as follow:

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

Weightages* of component in the work

nent in the work
-

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

Adjustment for cement component

- (ii) Price adjustment for increase or decrease in the cost of cement procured by the contractor shall be paid in accordance with the following formula:
- $V_c = 0.85 \times P_c / 100 \times R \times (C_1 C_0) / C_0$
- V_c= increase or decrease in the cost of work during the month under Consideration due to changes in rates for cement.
- C₀= The all India wholesale price index for Grey cement on the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi (www.eaindustry.nic.in)
- C₁= The all India average wholesale price Index for grey cement for the month under consideration as published by Ministry Government of India, New Delhi. (www. eaindustry.nic.in)
- P_c= Percentage of cement component of the work
- Note: For the application of this clause, index of Grey Cement has been chosen to represent Cement group.

Adjustment of steel component

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

 $V_s = 0.85 \text{ x P}_s \text{ x } /100 \text{ x R x } (S_1 - S_0) / S_0$

- V_s= Increase or decrease in the cost of work during the month under consideration due to changes in the rates for steel.
- S_o = The all India wholesale price index for steel (Bars and Rods) on the date of opening of Bids as published by the Ministry of Industrial Development, Government of India, New Delhi (www.eaindustry.nic.in)
- S_i= The all India average wholesale price index for steel (Bars and Rods) for the month under consideration as published by Ministry of Industrial Development, New Delhi (www.eaindustry.nic.in)
- P_s= Percentage of steel component of the Work.
- **Note :** For the application of this clause, index of Bars and Rods has been chosen to represent steel group.

Adjustment bitumen component

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

$$V_{b} = 0.85 x P_{b} / 100 x R x (B_{l} - B_{0} / B_{o})$$

- V_b= Increase or decrease the cost of work during the month under consideration due to changes in rates for bitumen.
- B₀= The official retail price of bitumen at the IOC depot at nearest center on the date of opening of Bids.
- B_i = The official retail price of bitumen of IOC depot at nearest center for the 15th day of the month under consideration.
- $P_b =$ Percentage of bitumen component of the work.

Adjustment of POL (fuel and lubricant) component

- (V) Price adjustment for increase or decrease in cost of POL (fuel and lubricant) shall be paid in accordance with the following formula:
 - $V_{f} = 0.85 x P_{f} / 100 x R x (F_{i} F_{o}) / F_{o}$
 - V_f= Increase or decrease in the cost of work during the month under consideration due to changes in rates for fuel and lubricant.

- F_{0} = The official retail price of High speed Diesel (HSD) a the existing consumer pumps of IOC at nearest center on the date of opening of Bids.
- f_i = The official retail price of HSD at the existing consumer pumps of IOC at nearest center for the 15th day of month of the under consideration.
- P_f= Percentage of fuel and lubricants component of the work.
- Note: For the application of this douse, the price of High Speed Diesel has been chosen to represent fuel and lubricants group.

Bank Guarantee Form for Mobilization and Construction Machinery Advance

То

_____[name of Employer)

_____[address of Employer]

_____[name of Contractor)

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

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

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

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

Yours truly,

Signature and Seal:_____

Name of Bank/Financial Institution: _____

Address: _____

Date: _____

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

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

Bank Guarantee Form for Secured Advance

INDENTURE FOR SECURED ADVANCES

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

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

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

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

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

That the said sum of Rupees ______ so advanced by the Employer to

- (1) the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall be employed by the Contractor in or towards expending the execution of the said works and for no other purpose whatsoever.
- (2) That the materials details in the said Account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own propriety and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance, on the security Of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor

indemnified the Employer against all claims to any materials in respect of which an advance has be made to him as aforesaid.

- (3) That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may here after be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the execution of the said works in accordance with the directions of the Engineer.
- (4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.
- (5) That the said materials shall not be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.
- (6) That the advances shall be repayable in full when or before the Contract receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Employer-will be at liberty to make a recovery from the Contractor's bill for such payment by deducting there from the value of the said materials than actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.
- (7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default were payable by the Contractor to be the Employer together with interest thereon at twelve percent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the Employer in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the Employer to reply and pay the same respectively to him accordingly.
- (8) That the Contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees______ and any

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

- (a) Seize and utilize the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provision in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due to the contractor with the value of work done as if he had carried it out in accordance with the said agreement and at the rates thereby provided. If the balance is against the contractor, he is to pay same to the Employer on demand.
- (b) Remove and sell by public auction the seized materials or any part thereof and out of the moneys arising from the sale retain all the sums aforesaid repayable or repayable to the Employer under these presents and pay over the surplus (if any) to the Contractor.
- (C) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.
- (9) That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.
- (10) That in the event of any conflict between the provisions of these presents and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

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

Name of Work:		
Agreement No	Date	
Amount of Contract Rs		
Name of Agency		
Used MB No		

Physical Completion Certificate

Last measurement recorded

a. Page No. & MB No. _____

b. Date _____

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

Date of issue

Executive Engineer

.....

.....

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

Final Completion Certificate

Name of Work:

Agreement no Date
Name of Agency:
Used MB No.
Last measurement recorded
a: Page No. & MB No
b. Date
Certified that the above mentioned work was physically completed on
(date) and taken over on(date).
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
Executive Engineer

.....

.....

Salient Features of Some Major Labor Laws Applicable

- a) **Workmen Compensation Act 1923** The Act provides for compensation in case of injury by accident arising out of and during the course of employment.
- b) Payment of Gratuity Act 1972:- Gratuity is payable to an employee under the Act on satisfaction of certain conditions on separation if an employee has completed the prescribed minimum years (say, five years) of service or more or on death the rate of prescribed minimum days'(say, 15 days) wages for every completed year of service. The Act is applicable to all establishments employing the prescribed minimum number (say, 10) or more employees.
- c) **Employees P.F. and Miscellaneous Provision Act 1952:** The Act Provides for monthly contributions by the Employer plus workers at the rate prescribed (say, 10% or 8.33%), The benefits payable under the Act are:
 - i. Pension or family pension on retirement or death as the case may be.
 - ii. Deposit linked insurance on the death in harness of the worker.
 - iii. Payment of P.F. accumulation on retirement/death etc.
- d) **Maternity Benefit Act 1951**: The Act provides for leave and some other benefits to women employees in case of confinement or miscarriage etc.
- e) **Contract Labour (Regulation & Abolition) Act 1970**: The Act provides for certain welfare measures to be provided by the Contractor to contract labour and in case the contractor fails to provide, the same are required to be provided, by the Principal Employer by Law.. The principal Employer is required to take certificate of Registration and the Contractor is required to take license from the designated Officer. The Act is applicable to the establishments or Contractor of Principal Employer if they employ prescribed minimum (say 20) or more contract labour.
- f) 'Minimum Wages Act 1948; The Employer is to pay not less than the Minimum Wages fixed by appropriate Government as per provisions of the Act if the employment is a scheduled employment. Construction of buildings, roads, runways is scheduled employment.
- g) **Payment of Wages Act 1936**: It lays down as to by what date the wages are to be paid when it will be paid and what deductions can be made from the wages of the workers.
- h) Equal Remuneration Act 1979: The Act provides for payment of equal wages for work of equal nature to male and female workers and for not making discrimination against female employees in the matters of transfers, training and promotions etc.

- I) Payment of Bonus Act 1965: The Act is applicable to all establishments employing prescribed minimum (say, 20) or more workmen. The Act provides for payments of annual bonus within the prescribed range of percentage of wages to employees drawing up to the prescribed amount of wages, calculated in the prescribed manner. The Act does not apply to certain establishments. The newly set-up establishments are exempted for five years in certain circumstances. States may have different number of employment size.
- j) Industrial Disputes Act 1947: The Act lays down the machinery and procedure for resolution of industrial disputes, in what situations a strike or lock-out becomes illegal and what are the requirements for laying off or retrenching the employees or closing down the establishment.
- k) Industrial Employment (Standing Orders) Act 1946: It is applicable to all establishments employing prescribed minimum (say, 100, or 50). The Act provides for laying down rules governing the conditions of employment by the Employer on matters provided in the Act and gets these certified by the designated Authority.
- Trade Unions Act 1926: The Act lays down the procedure for registration of trade unions of workmen and Employers. The Trade Unions registered under the Act have, 'been given certain immunities from civil and criminal liabilities.
- m) Child Labour (Prohibition & Regulation) Act 1986: The Act prohibits employment of children below 14 years of age in certain occupations and processes and provides for regulations of employment of children in all other occupations and processes. Employment of child labour is prohibited in building and construction industry.
- n) Inter-State Migrant Workmen's (Regulation of Employment & Conditions of Service) Act 1979: The Act is applicable to an establishment which employs prescribed minimum (say, five) or more inter-state migrant workmen through an intermediary (who has recruited workmen in one state for employment in the establishment situated in another state). The Inter-State migrant workmen, in an establishment to which this Act becomes applicable, are required to be provided certain facilities such as Housing, Medical-Aid, Traveling expenses from home up to the establishment and back etc.
- o) The Building and Other Construction workers (Regulation of Employment and Conditions of Service) Act 1996 and the Cess Act of 1996 All the establishments who carry on any building or other construction work and employs the prescribed minimum (say, 10) or more workers are covered under this Act. All such establishments are required to pay cess at the rate not exceeding 2% of the cost of construction as may be modified by the Government. The Employer of the establishment is required to provide safety measures at the building or construction work and other welfare measures, such as canteens, first-aid facilities, ambulance, housing accommodations for workers near the work place etc. The Employer to whom the Act applies has to obtain a registration certificate from the Registering Officer appointed by the Government.

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

SECTION 3

Conditions of Contract

Part — II Special Conditions of Contract [SCC]

SECTION 4

BILL OF QUANTITIES (BOQ)

NON- MOTORIZED TRANSIT (NMT) FROM GHANTA GHAR TO MADAN MAHAL PHASE 1 - FROM NAV BHARAT TO MADAN MAHAL (1.2 KM)

SUMMARY SHEET							
Sr No.	Itom Description						
1	CYCLE TRACK	11691880.00					
2	STORM WATER DRAIN	13755430.00					
3	UTILITY DUCT	14691883.40					
4	COMPOUND WALL	8902218.00					
5	PEDESTARIAN TRACK	15192494.40					
6	WATER SUPPLY	3109837.60					
7	SIGNAGES, ROAD MARKING & FACILITIES	891327.80					
8	LANDSCAPING & HORTICULTURE	1655886.00					
9	TREE GUARD & BENCHES	1270799.94					
	TOTAL	71161757.14					
	SAY	71162000.00					
	in words seven crore eleven lakhs sixty two thousand only						

NOTE:- PLEASE FIND ATTACHED ANNEXURE - 1B FOR DETAILED BOQ (BILL OF QUANTITY).

SECTION 5

AGREEMENT FORM

AGREEMENT

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

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

NOW THIS AGREEMENT WITNESSED as follows:

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

viii. Any other documents listed in the Contract Data as forming part of the Contract.

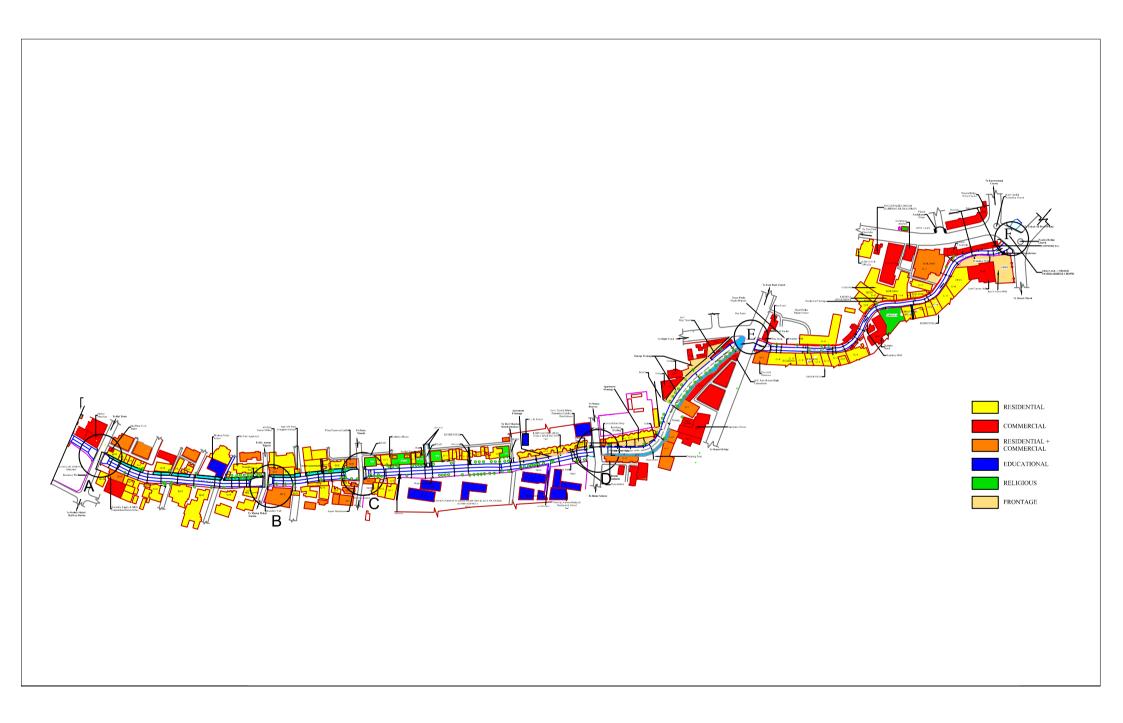
In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of	 was hereunto aff	ixed
in the presence of:		

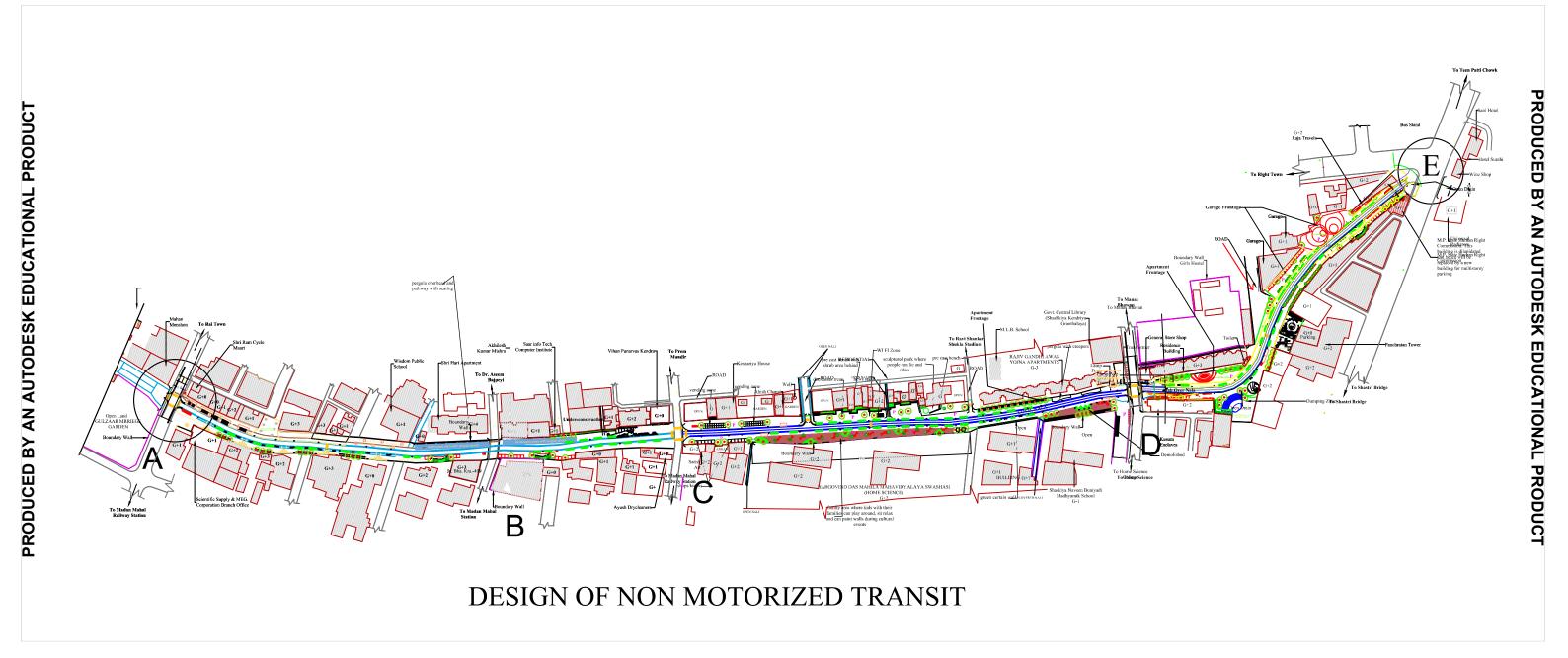
Signed, Sealed and Delivered by the said ______ in the presence of:

Binding Signature of Employer _____

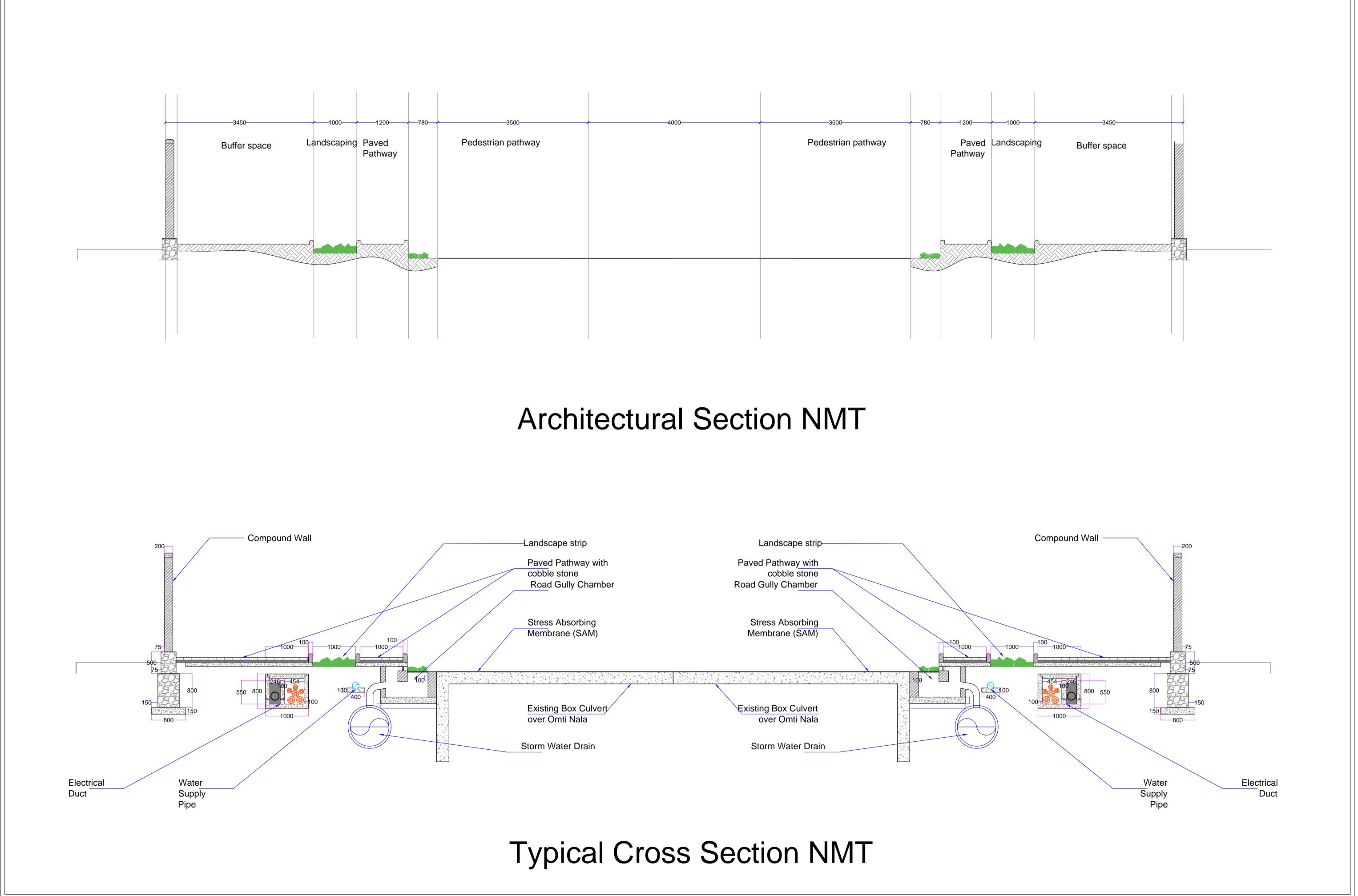
Binding Signature of Contractor



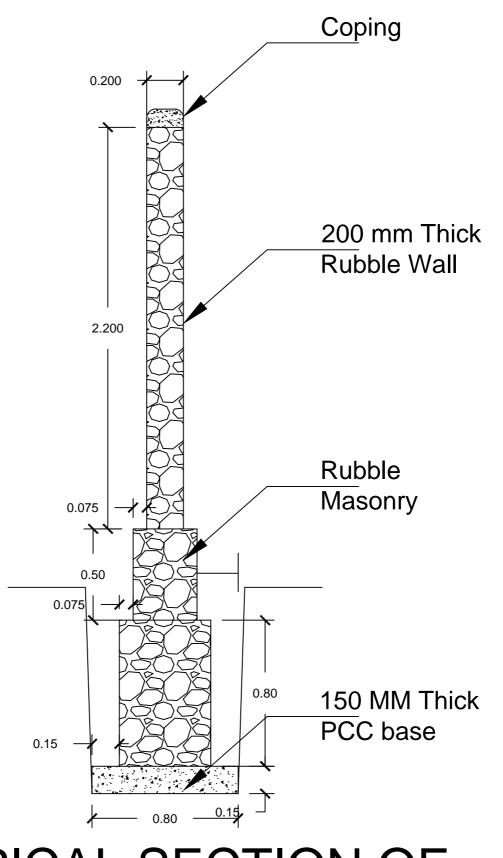
ТООООСЕР ВҮ АМ АUTODESK EDUCATIONAL PRODUCT



PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT



TYPICAL SECTION OF COMPOUND WALL



NON- MOTORIZED TRANSIT (NMT) FROM GHANTA GHAR TO MADAN MAHAL PHASE 1 - FROM NAV BHARAT TO MADAN MAHAL (1.2 KM)

	SUMMARY SHEET						
Sr No.	Item Description	Amount (In Rs.)					
1	CYCLE TRACK	11691880.00					
2	STORM WATER DRAIN	13755430.00					
3	UTILITY DUCT	14691883.40					
4	COMPOUND WALL	8902218.00					
5	PEDESTARIAN TRACK	15192494.40					
6	WATER SUPPLY	3109837.60					
7	SIGNAGES, ROAD MARKING & FACILITIES	891327.80					
8	LANDSCAPING & HORTICULTURE	1655886.00					
9	TREE GUARD & BENCHES	1270799.94					
	TOTAL	71161757.14					
	SAY	71162000.00					

in words seven crore eleven lakhs sixty two thousand only

DETAIL ESTIMATE OF CYCLE TRACK ON OMTI NALA NMT

S.No	Item No. / UADD SOR		Quantity	UNIT	Rate	Amount
1	5.17 (iii) pg no. 53-54 Vol III	Stress Absorbing Membrane (SAM) crack width above 9 mm and cracked area above 50 % (Providing and laying a single coat of a stress absorbing membrane over a cracked road surface, with crack width above 9 mm and cracked area above 50 % after cleaning with a mechanical broom, using modified binder complying with clause 521, sprayed at the rate of 15 kg per 10 sqm and spreading 11.2 mm crushed stone aggregates @ 0.12 cum per 10 sqm, sweeping the surface for uniform spread of aggregates and surface finished to conform to clause 902.)	13200.00	SqM	(in Rs)	1056000.00
2	15.8 pg no. 105 Vol III	Providing, fitting and fixing mild steel railing complete as per standard drawing No.BD/1-88 and Technical Specification and as per relevant clauses of section 1900 and 2700.	2000.00	RM	2525.00	5050000.00
3	NON SOR	Providing and Laying of PLASTITRAK, Roll-on Surfacing Material :A Solvent Free, High Build, Two pack, Seamless, Tough, skid resistant 1.0-1.5 mm thick red (or as required) based on Gloss and color retaining Acrylic Cross Linking Resin System for Cycle track and similar applications including surface cleaning and cost of all material etc. complete.	4800.00	SqM	1150.00	5520000.00
4	8.10 pg no. 71 Vol III	Road Marking with Hot Applied Thermoplastic Compound with Reflectorising Glass Beads on Bituminous Surface (Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads @ 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35 .The finished surface to be level, uniform and free from streaks and holes and as per relevant clauses of section- 800.		·		
		a. At junction (cycle symbols 2500mm X 2000mm @ cycle box)	30.00	sqm	900.00	27000.00
		b. At 50m center to center distance (cycle symbols 1500mm X 1200mm @ cycle box)	43.20	sqm	900.00	38880.00
4	8.5 pg no. 70 Vol III	Direction and Place Identification signs with size more than 0.9 sqm size board. (Providing and erecting direction and place identification retro- reflectorised sign asper IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 2 mm thick with area exceeding 0.9 sqm supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm (height from crown level of the road and bottom of the sign board shall not be less than 1.5 m.), 2 Nos. firmly fixed to the ground by means of properly designed foundation with M 15 grade cement concrete45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including painting of vertical post as per specification.				
		For cycle tracks / only for cycle type signboards . TOTAL	6.00	Each	13831.00	82986.00 11691880.00

	DETAIL ESTIMATE FOR STORM WATER DRAIN						
S.No	UADD SOR Vol	PARTICULARS	Quantity	UNIT	Rate (in Rs)	Amount	
1	15.1 pg no. 151 Vol I	Earth work in Excavation for pipe trench in all kinds of soil and WBM in areas including dressing, watering and ramming and disposal of Excavated earth lead upto 50 meters and lift upto 1.5m, disposal earth to be leveled, neatly dressed.					
	15.4		7920	cum	129.10	1022472.00	
2	pg no. 151 Vol I	Extra for every additional lift of 1.5m or part there of over item 1.5 to 3.0m	3960	cum	5.00	19800.00	
3	15.17 (a)(iii) pg no. 152 Vol I	Providing and laying mechanically mixed cement concrete with crushed stone aggregate excluding centering and shuttering (with 40mm nominal size graded stone aggregate)					
		M-10	660	cum	3529.00	2329140.00	
4	13.3 pg no. 139 Vol I	Providing and Laying non-pressure (NP3) RCC socket & spigot pipes with rubber gasket joint including testing of joints. [Conforming to IS; 458-1988, ISI marked laying as per IS 783:1985)					
	15.9	800 mm dia	1200	mt	4845.00	5814000.00	
5	pg no. 151 Vol I	Filling with moorum for pipe bedding or over the pipe including supply of moorum					
		800 mm dia	6336	Per Cum	625.00	3960000.00	
6	14.9 pg no. 145 Vol I	Road Gully Chambers :- Construction of Brick masonry road gully chambers with brick work in cement mortar 1:5 (1 cement: 5 fine sand) and 12mm plaster 1:3 including foundation in cement concrete grade M- 5 (Nominal Mix) with stone aggregate 40mm nominal size					
	14.9.3 pg no. 145 Vol I	Chamber 110 x 50 x 77.5cm with 500x450 mm horizontal and 450x100 mm vertical gratings both.	80	each	6149.00	491920.00	
7	14.4 pg no. 144 Vol I	Construction of circular type of manhole 1500 mm internal dia. at bottom, 560 mm dia at top, total depth of manhole 2650mm in brick masonry with 1:5 cement mortar (1 cement : 5 fine sand), 12 mm thick Cement plaster 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement. 30 cm thick foundation in Cement concrete grade M-7.5 (Nominal Mix) with stone aggregate 40 mm nominal size, RCC Cement Concrete grade M-20 (Nominal Mix) with 20mm Nominal size on top slab and making channel in cement concrete grade M-15 (Nominal Mix) with stone aggregate 20 mm nominal size neatly finished, curing fixing of ISI marked reinforced concrete heavy duty cover (including transportation of cover) complete. as per standard design					
		sewerline /drain chamber both side	6	each	19683.00	118098.00	
		TOTAL				12755420.00	
		TOTAL				13755430.00	

DETAIL ESTIMATE FOR STORM WATER DRAIN

	DETAIL ESTIMATE FOR UTILITY DUCT						
S No.	UADD SOR ITEM NO	Descriptions of Item	Measureme	Rate	Unit	Amount	
			Quantity				
1	2.9.1,	Excavation					
•	Vol II	Excavation work in foundation trenches or drains not					
		exceeding 1.5 m in width or 10 sqm on plan including					
		dressing of sides and ramming of bottoms lift upto 1.5 m,					
		including getting out the excavated soil and disposal of surplus excavated soils as directed, within a lead of 50m.					
			a / a a a a			707000.00	
		Total Excavation	3600.00	202.00	cum	727200.00	
2	2.27.1	Filling					
-	Vol II	Supplying and filling in plinth under floors including,					
		watering, ramming consolidating and dressing complete. 2.27.1 Crusher Stone Dust					
		Total	240.00	628.00	cum	150720.00	
3	4.1.1 Vol II	Cement Concrete M-15(Duct)					
		Providing and laying in position cement concrete of					
		specified grade excluding the cost of centering and shuttering All work up to plinth level.					
		M 15 with 20mm maxumum size of aggregate.					
			240.00	4154.00	cum	996960.00	
		Providing and laying in position specified grade of					
	5.1.1	reinforced					
4	Vol II	cement concrete excluding the cost of centering, huttering, finishing and reinforcement - All work up to plinth level :					
		M20 with 20mm maxumum size of aggregate.					
		Total quantity of M20 Concrete	1274.70	4728.00	cum	6026781.60	
-	5.20.6						
5	Vol II	Reinforcement for Duct					
		Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.					
	5.20.6	Thermo-Mechanically Treated bars.					
		Taking average weight for estimate (Payable as actual design & weight calculations)	74047.32	60.00	Kg	4442839.38	
5	20.1.1 Vol II	Form work for Duct					
		Centering and shuttering including strutting, propping etc.and removal of form for :					
		20.1.1 Foundations, footings, bases of columns, etc. For mass					
		concrete.					
		Total quantity	5280.00	138.00	Sqm	728640.00	
		Brick work with well burnt chimney bricks in bulls patent					
6	6.1	trench kiln manifactured by ghol process, crushing strength					
-	Vol II	not less than 40kg /sqcm and water absorption not more than 15% in foundation and plinth.					
		Cement mortar 1:6 (1 cement : 6 coarse sand)	18.77	4232.00	cum	79426.18	
7	13.2 Vol II	15mm cement plaster on the rough side of single or half brick wall of mix :					
		1:5 (1 cement: 5 fine sand)	218.96	119.00	Sqm	26056.24	
	0.07.0						
8	2.27.2 Vol II	Sand Filling					

Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
Local Sand	1260.00	1201.00	cum	1513260.00
IOTA				14691883.40

	DETAIL ESTIMATE FOR COMPOUND WALL					
S.NO.	ltem No. / SOR Vol	PARTICULARS	QUANTITY	UNIT	RATE (in Rs)	AMOUNT
1	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed				
		Foundation for Compound Wall	1728.00	cum	127.00	219456.00
2	2.3 pg no. 15 Vol II	Banking excavated earth in layers not exceeding 20 cm. in depth, breaking clods, watering, rolling each layer with ½ tonne roller, or wooden or steel ammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up, in embankments for roads, flood banks, marginal banks, and guide banks etc., lead upto 50 m and lift upto 1.5 m. All kinds of soil				
	2.3.1 pg no. 15 Vol II	All kinds of soil	288.00	cum	128.00	36864.00
3	7.1 pg no. 67 Vol II	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete M-5 stone aggregate 20mm nominal size) at plinth level with :				
	7.1.1	Foundation for Compound Wall	900.00		2671.00	
	7.1.1	B/Wall (UPTO PLINTH LEVEL)	378.00	cum	2671.00	1009638.00
4	7.2 pg no. 67 Vol II	Extra for random rubble masonry with hard stone in superstructure above plinth level and upto floor 2 level, including leveling up with cement concrete M-5 stone aggregate 25 mm nominal size at window sills,ceiling level and the like. (Adding the Rate in Item no 7.1.1 for work above plinth level i.e. 2671 + 483 = 3154.00)	1596.00	cum	3154.00	5033784.00
5	5.1 pg no. 46 Vol II	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
	5.1.1	Concrete M20 Coping in B/wall	42.00	cum	4728.00	198576.00
		TOTAL				8902218.00

DETAIL ESTIMATE OF PEDESTRIAN TRACK

S.No	Item No. /			UNUT	Rate	Amount
3.NO	SOR Vol	PARTICULARS	Quantity	UNIT	(in Rs)	Amount
1	2.6.1 Vol II	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
			2928.00	cum	127.00	371856.00
2	2.27 Vol II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
	2.27.1	Crusher Stone Dust				
			768.00	cum	628.00	482304.00
	4.1.6	Cement concrete grade M- 10 (Nominal Mix) with				
3	Vol II	40 mm maximum size of stone aggregate				
			768.00	cum	3528.00	2709504.00
4	5.1 Vol II	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :				
	5.1.1	Cement concrete grade M-20 (Nominal Mix) with 20 mm maximum size of stone aggregate.				
			648.00	cum	4728.00	3063744.00
5	NON SOR	Providing and laying 100 mm thick natural cobble stone block size 200mm x 200mm . Complete as per the direction of engineer incharge including locking edges and top surface use as runway for pedistrain whearever required with cement mortar 1:3 and pigment of required shade of stone block including cost of labour material etc . All complete.				
			4800.00	sqm	1250.00	600000.00
7	5.2 Vol II	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding including cost of binding wire upto floor two level including all wastage etc. complete.				
	5.20.1 Vol II	Mild steel and Medium Tensile steel bars.(Taking average weight for estimate, payable as per actual design and weight calculation)	00502.44		(0.00	177000/ 40
			29503.44	kgs	60.00	1770206.40
8	20.1 Vol II	Centering and shuttering including strutting, propping etc.and removal of form for :				
	20.1.1	Foundations, footings, bases of columns, etc. For mass concrete.				
			5760.00	sqm	138.00	
		TOTAL				15192494.40

DETAIL ESTIMATE OF WATER SUPPLY

S.No.	ltem No. / SOR Vol	PARTICULARS	Quantity	UNIT	Rate (in Rs)	Amount
1	15.1 pg no. 151 Vol I	Earth work in Excavation for pipe trench in all kinds of soil and WBM in areas including dressing, Watering and ramming and disposal of Excavated earth lead upto 50 meters and lift upto 1.5m, disposal earth to be leveled, neatly dressed.				
		0 to 1.5m	576.00	cum	129.10	74361.60
2	15.17 pg no. 152 Vol I	Providing and laying mechanically mixed cement concrete with crushed stone aggregate excluding centering and shuttering (with 40mm nominal size graded stone aggregate)				
	15.17 (a)(iii) pg no. 152 Vol I	M-10	96.00	cum	3529.00	338784.00
3	4.3 pg no. 50-51 Vol I	Providing, laying and jointing socket & spigot centrifugally cast (Spun) Ductile Iron pressure pipes with inside cement mortar lining (class K-9) conforming to IS 8329/2000 with suitable Rubber Gasket (Push on) joints as per IS:5382/85 including testing of joint (laying conforming to IS 12288 : 1987)				
		100 mm diameter	2400.00	Meter	1102.10	2645040.00
	4.4 pg no. 51 Vol I	Labour for laying in position socket & spigot Ductile Iron (k-9) pressure pipes. [Conform to IS 12288:1987]				
		100 mm diameter	2400.00	Meter	14.00	33600.00
4	4.9 pg no. 53 Vol I	Providing and Laying ductile PN-16 type iron flanged spigot conforming to IS-9523/2000 having dimension as per table 24 of IS-9523/2000 in the nominal diameter/sizes with external bitumen coating and internal cement mortar lining with finishing as per clause 13 of IS-9523/2000. (laying conforming to IS 12288 : 1987)				
		100mm	60.00	Each	96.00	5760.00
	6.6 pg no. 81 Vol I	Providing & fixing cast iron butterfly valves including jointing & testing with cost of jointing material such as bolts, nuts and rubber insertion all complete as per IS :13095-1991	4.00	each	3073.00	12292.00
		100mm dia				
		TOTAL				3109837.60

DETAIL ESTIMATE FOR SIGNAGES, MARKING & FACILITIES

S.No	Item No. / SOR Vol	PARTICULARS	Quantity	UNIT	Rate (in Rs)	Amount
1	Item 8.10 Vol III	Road Marking				
		Solid Lines in White Colour				
		Road Marking with Hot Applied Thermoplastic				
		Compound with Reflectorising Glass Beads on				
		Bituminous Surface (Providing and laying of hot				
		applied thermoplastic compound 2.5 mm thick				
		including reflectorising glass beads @ 250				
		gms per sqm area, thickness of 2.5 mm is				
		exclusive of surface applied glass beads as per				
		IRC:35 .The finished surface to be level, uniform				
		and free from streaks and holes and as per				
		relevant clauses of section-800.				
			527.50	900.00	Sqm	474750.00
0	Item 8.8	Painting lines, dashes, arrows etc				
2	Vol III					
		Painting lines, dashes, arrows etc on roads in				
		two coats on new work with ready mixed road				
		marking paint conforming to IS:164 on				
		bituminous surface, including cleaning the				
		surface of all dirt, dust and other foreign				
		matter, demarcation at site and traffic control				
		as per relevant clauses of section-800 & I.R.C				
		67 including cost of paint etc. complete.	325.00	70.00	Sqm	22750.00
			020.00	70.00	Jan	22/ 50.00
		Road Delineators (Supplying and installation of				
		delineators (road way indicators, hazard				
		markers, object markers), 80-100 cm high				
		above ground level, painted black and white				
3		in 15 cm wide stripes, fitted with 80 x 100 mm				
3		rectangular or 75mm dia circular reflectorised				
		panels at the top, buried or pressed into the				
		ground and confirming toIRC-79 and the				
		drawings as per relevant clauses of section-800				
	8.12 Vol III	of specifications.	20.00	202.00	arah	97/0.00
			30.00	292.00	eacn	8760.00
		Road Markers/Road Stud with Lense Reflector				
		(Providing and fixing of road stud 100x 100 mm,				
		dia cast in aluminium, resistant to corrosive				
		effect of salt and grit, fitted with lense				
4		reflectors, installed in concrete or asphaltic				
		surface by drilling hole				
		30 mm upto a depth of 60 mm and bedded in				
		a suitable bituminous grout or epoxy mortar, all				
	8.20 Vol III	as per BS 873 part 4:1973)	30.00	713.00		21390.00

5	8.3 pg no. 69 Vol III	Providing and fixing of retroreflectorised cautionary, mandatory and informatory sign as per IRC :67 made of encapsulated lens type reflective sheeting vide clause 801.3, fixed over aluminium sheeting, 1.5 mm thick supported on a mild steel angle iron post 75 mm x 75 mm x 6 mm (height from crown level of the road and bottom of the sign boardshall not be less than 1.5 m.) firmly fixed to the ground by means of properly designed foundation with M15 grade cement concrete 45 cm x 45 cm x 60 cm, 60 cm below ground level as per approved drawing including painting of vertical post as per specification.				
	8.3 (i) pg no. 69					
	Vol III 8.3 (iv)	90 cm equilateral triangle	6.00	Each	3715.00	22290.00
	pg no. 69 Vol III	80 cm x 60 cm rectangular Manutacturing, supplying ana tixing retro	10.00	Each	4537.00	45370.00
6	16.59 CPWD SOR VOL 2	reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bilingual), symbols and borders etc. as per IRC ; 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956- 01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size, steel work to be painted				
	16.59.1	Mandatory/ Regulatory sign boards of 900 mm diametre with support length of 3750 mm	28.00	Nos	4786.35	134017.80
7	4.8 UADD SOR VOL II	Precasting and placing in position 125 mm dia Bollards 600 mm high of required shape including providing M.S. Pipe Sleeve 50 mm dia 300 mm long in the Bollard and M.S. Pipes 40 mm dia and 450 mm long with 150x150x6mm M.S. plate welded at bottom and embedded 150mm in cement concrete grade M-10 (Nominal Mix with 20 mm maximum size of stone aggregate) including necessary excavation of size 250x 250x 450mm deep for the same in bitumen/ concrete pavement at specified spacing.	180.00	Nos	900.00	162000.00
		TOTAL				891327.80

DETAIL ESTIMATE OF LANDSCAPING Rate Item No. / S.No PARTICULARS Quantity UNIT (in Rs) Amount SOR Vol Trenching in ordinary soil up to a depth of 60cm including removal and stacking of serviceable materials and then disposing of surplus soil, by spreading and neatly leveling 23.1 within a lead of 50m and making up the MP PWD 1 trenched area to proper levels by filling with SOR earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, 960.00 207.00 198720.00 sludge or manure) cum Supplying and stacking of good earth at site 23.2 including royalty if any and carnage (earth 2 MP PWD measured in stacks will be reduced by 20% SOR 320.00 cum 568.00 181760.00 for payment) Supplying and stacking sludge at site 23.3 including royalty and carriage (sludge MP PWD 3 measured in stacks will be reduced b 8% for SOR 320.00 715.00 228800.00 payment) cum Supplying and stackmg at site dump manure 23.4 from approved source, including carriage MP PWD 4 (manure measured in stacks will be reduced SOR 320.00 by 8% for payment): cum 816.00 261120.00 23.5 Rough dressing the trenched ground 5 MP PWD including breaking clods. 1600.00 100 sqm 495.00 7920.00 SOR 23.6 Uprooting weeds from the trenched area 6 MP PWD after 10 to 15 days of its flooding with water SOR including disposal of uprooted vegetation. 1600.00 100 sqm 168.00 2688.00 23.7 7 MP PWD Fine dressing the ground 1600.00 100 sgm 126.00 2016.00 SOR Spreading of sludge, dump manure and / or 23.8 good earth in required thickness as per MP PWD 8 direction of Officer-in-charge (Cost of sludge, SOR dump manure and /or good earth to be 320.00 cum 18.00 5760.00 paid separately). 23.9 Mixing earth and sludge or manure in the 9 MP PWD required proportion specified or directed by SOR the Officer-in-charae Adding the quantity of earth and sludge 960.00 cum 12.00 11520.00 manure Grassing with selected type of grass including watering and maintenance of the lawn for 30 23.1 days or more till the grass forms a thick lawn, MP PWD 10 free from weeds and fit for mowing including SOR supplying good earth. if needed (the good earth shall be paid for separately): 23.10.3 In rows 5 cm apart in both directions. 1600.00 100 sgm 4002.00 64032.00

11	23.13 MP PWD SOR	Preparation of beds for hedging and shrubbery excavating further 30cm deep of already prepared trench, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, levelling etc. including stacking and disposal of materials declared unserviceable and surplus earth by spreading and levelling as directed, within a lead of 50m lift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately)	256.00	cum	75.00	19200.00
12	23.14	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20%: 1 part of stacked ' volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth. if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately):				
	23.14.2	Holes 60 cm dia, and 60 cm deep.	200.00	each	68.00	13600.00
	23.14.3	holes 45 cm dia, and 45 cm deep.	400.00	each	21.00	8400.00
13	23.15 MP PWD SOR	Providing and planting different variety of plants of approved quality and sizes as mentioned including making pits of required size at site, refilled with B.C. Soil mixture mannuring and pesticide etc complete (to be paid separately) including watering and 90 days maintenance from the date of final bill as per direction of engineer in charge complete in all respect (B.C Mixture paid separately).				
	23.15.1	Any of one from Plameriya alba, fycus benjameena. Malkikeya champa. Begnonia plumaric pudoca Plants (1.8 mtrs to 2.10 mtrs height.	80.00	each	645.00	51600.00
	23.15.2	Any of one from Lantana VAR Red, Lantana Blue White, Hemelia Mini. lantana varicated, ticoma Redicens, Spi Oala, Golden Dunanta.(height 0.3 m to 0.45m)	800.00	each	33.00	26400.00
	23.15.3	Any of one from Hibiscus Vice Rai, Gul Phinia. Bamboo Varicated. Chandani Vencated, Hamilia Pattern, Bouganvellia. Canna Red/Yellow, Taqwamonasia. (height 0.3 m to 0.45 m)	250.00	each	54.00	13500.00
	23.15.4	Any Of one from Spathodia. Silver Oak, Thuja. Golden Bottle Brush, Exora Red (height 0.45 m to 0.60 m)	180.00	each	319.00	57420.00

	23.15.5	Any Of one from Glerodendron, Allamamala New, Allamanda Bail, Thima Bouganvellia .	100.00	each	96.00	9600.00
	23.15.6	Any of one from Climetics, Venentora, (height 0.3 m to 0.45 m)	300.00	each	73.00	21900.00
	23.15.7	Foxtail Palm (1.80mtrs to 2.10mtrs Height)	50.00	each	1784.00	89200.00
	23.15.9	Ficus Varicated (1.80mtrs to 2.10 mtrs height)	45.00	each	994.00	44730.00
	23.15.10	Casia Biflora (0.45mtrs to 0.60 mtrs height)	50.00	each	129.00	6450.00
14	23.22 MP PWD SOR	Providing and fixing M.S. tree guard 45 cm square In plan, height 1.20 metre ground level and 0.40 metre below ground level. The vertical members shall consist of four nos. angle iron of Size 25x25x3mm, 1.8 m long, one at each corner and 8 nos. flat iron of size 25x3 mm, 1.2 m long. The vertical members shall be welded to 4 nos. 25x6 mm M. S. flats placed horizontally around the vertical member of the cage. One name plate of 1 mm thick M.S. Sheet Of Size 250x100 mm shall be welded to the tree guard near the middle height and lettered PWD/ any other approved name. The tree guard shall be fixed to the ground by making suitable holes and by embedding four corners leg in the ground, including refillingwith two or more coats of synthetic enamel paint of approved brand and manufacture Over a coat Of primer, complete in all respect.	150.00	each	1585.00	237750.00
15	23.24 MP PWD SOR	Preparation of mounds of various size and shape by available excavated /supplied earth in layers not exceeding 20 cm in depth, breaking clods, watering of each layer, dressing etc lead upto 50 meter and lift upto 1.5 m complete as per direction Of Officer-in- charge.	600.00	cum	153.00	91800.00
\vdash						
16	23.25 MP PWD SOR	Providing Circular Cement Concrete pots of specificd size, cast with cement concrete of nominal mix 1:2:4 (1 cement: 2 sand; 4 graded stone aggregate 6 mm nominal size), reinforced With 7 Nos (3 nos. horizontal and 4 nos. vertical "U" shape) M.S. wires of 3.5 mm dia as per design, including required form work, finishing with cement punning on exposed Surface, Curing for specified period and stacking in required rows and height, all complete as per direction of Officer-in- charge.				
	23.25.1	Top inside dia 35 cm, outer bottom dia 25 cm, total height 35 cm with wall thickness of 25.4 mm.	350.00	each	152.00	53200.00
		TOTAL				1655886.00

ESTIMATE OF TREE GUARD & BENCHES

				1	Т	
S.No	ltem No. / UADD SOR Vol II	PARTICULARS	Quantity	UNIT	Rate (in Rs)	Amount
		TREE GUARD				
1	2.6.1 UADD SOR VOL II	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.				
			96.00	cum	127.00	12192.00
2	2.27 UADD SOR VOL II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
	2.27.1	Crusher Stone Dust	19.20	cum	628.00	12057.60
3	4.1 UADD SOR VOL II	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level.				
	4.1.2	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate				
			19.20	cum	4154.00	79756.80
4	6.2 UADD SOR VOL II	Brick work with well burnt chimney bricks in bulls patent trench kiln manifactured by ghol process,crushing strength not less than 40kg /sqcm and water absorption not more than 15% in foundation and plinth.				
			34.56	cum	4232.00	146257.92
5	6.3 UADD SOR VOL II	Brick work with chimeny brick of class designation 40 in superstructure above plinth level upto floor 2 level including the cost of scaffolding in :				
		Cement mortar 1:6 (1 cement : 6 coarse sand)	44.16	cum	4220.00	186355.20
		Wall lining butch work upto 10m height with red/ white sand stone 40 mm thick rough facing on the exposed surface with stone strips of minimum				
6	7.4 UADD SOR VOL II	length 300 mm and equired width including embedding every tenth layer and bottom most layer in masonry or concrete after making necessary chases of size 75x75mm and by providing layer of 75mm thick strips i/c 12mm thick bed of cement mortar 1:3 (1 Cement : 3 coarse sand) i/c ruled pointing incement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment to match the shade of stone complete as per direction of Engineer-in- charge.	207.00		1005.00	222212 02
			307.20	sqm	1085.00	333312.00
		TOTAL OF TREE GUARD				769931.52
	1	BENCHES	I I			

2.6.1 1 UADD SOR VOL II	(Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.	4.50	cum	127.00	571.50
		4.50	Com	127.00	571.50
2 UADD SOR VOL II	Supplying and filling in plinth under floors including, watering, ramming consolidating and dressing complete.				
2.27.1	Crusher Stone Dust	1.50	cum	628.00	942.00
4.1 3 UADD SOR VOL II	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering All work up to plinth level.				
4.1.2	Cement concrete grade M-15 (Nominal Mix) with 20 mm maximum size of stone aggregate				
		1.50	cum	4154.00	6231.00
6.24	BRICK WORK Brick work with machine moulded modular bricks of class designation 40 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12mm deep complete from ground level up to plinth level in ement mortar 1:6 (1 cement : 6 coarse sand).	1.86	cum	4021.00	7491.12
7.32	Stone work, plain in copings, cornices, string courses and plinth courses, upto 75 mm thick in Cement mortar 1:6 (1 cement : 6 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade.				
7.32.1	Red sand stone:	21.6	sqm	22483.00	485632.8
					500868.42
	TOTAL				1270799.94