

**Contract No.:**

**GOVERNMENT URBAN DEVELOPMENT COMPANY LIMITED**

**GANDHINAGAR**

**[A WHOLLY OWNED GOVERNMENT OF GUJARAT UNDERTAKING]**



**BIDDING DOCUMENT FOR**

Halwad RoB LC No-65 and LHS LC No-66 under SJMMSVY

“Construction of 2 Lane RoB and LHS in Lieu of LC 65 (Km 656/7-8) and LC 66(Km 657/0-1) Between Halvad-Sukhpur Station on VG-SIOB Section On Halvad-Tikar Road ” Under programme of SJMMSVY.

**VOLUME - III**

**PRICE BID**

**GOVERNMENT OF GUJARAT**

**By**

Vice President (Project)

Gujarat Urban Development Company Limited

Karmayogi Bhavan, Block-1, B-1 Wing,

Ground Floor, Sector-10/A

Gandhinagar, Gujarat -382 010.

(Through e- Procurement Portal only - <https://gudctender.nprocure.com/>)

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## 1. Bid Form (With Price)

**Bidders are required to fill up all the blank spaces in this Bid Form:**

To,  
The Vice President - Projects  
Gujarat Urban Development Company Ltd.,  
Karmayogi Bhavan, Block-1, B-1 Wing,  
Ground Floor, Sector-10 / A,  
Gandhinagar, Gujarat.

**Sub:** (Name of Work: as mentioned in “(as Mentioned in Section I – Tender Notice / Invitation for Bid (IFB))”

Sir,

(1) Having visited the site and examined the Bid Documents, Drawings, Conditions of Contract, Specifications, Schedules, Annexure, Preamble to Price Schedules, Price Schedules etc. including Addenda/Amendments to the above, for the execution of the above Contract, we the undersigned offer to design, Engineer, procure, construct, complete, commission, operate and maintain the whole of the said works for “(as Mentioned in Section I – Tender Notice / Invitation for Bid (IFB))” from the date of commissioning including defects liability period as given in Conditions of Contract and in conformity with the drawings, conditions of Contract, specifications, Preamble to Price Schedules, Annexure, Bidding Documents, including Addenda Nos. \_\_\_\_\_ (insert numbers) for Lump sum fixed price of Rs. \_\_\_\_\_ Rupees \_\_\_\_\_) for Construction including free trial run for three months or such other sum as may be ascertained in accordance with the conditions.

(2) I / We agree that,

- a. If we fail to provide required facilities to the Employer’s representative or any other person/Agency by the Employer to perform on his behalf for carrying out the inspection and testing of materials and workmanship.

OR

- b. If we incorporate into the Works, materials before they are tested and approved by the Engineer’s representative.

OR

- c. If we fail to deliver pure water of required quantity according to the conditions/stipulations of the Contract, the Engineer will be at liberty to take any action including termination of Contract and impose at his absolute discretion any penalties, and/or reject the work.

(3) We undertake, if our Bid is accepted, to complete and deliver the works in accordance with the Contract within time limit as mentioned in Section I – Tender Notice / Invitation for Bid (IFB), inclusive of monsoons, from the date or receipt of **Letter of Acceptance / Notice to proceed** issued to us by you.

(4) We agree to abide by this Bid for a period of 180 days from the Last date of submission of the bid and it shall remain binding upon us and may be accepted at any time before the expiry of that period.

- (5) In the event of our Bid being accepted, we agree to enter into a formal Contract Agreement with you incorporating the conditions of Contract there to annex but until such agreement is prepared this Bid together with your written acceptance thereof shall constitute a binding Contract between us.
- (6) We agree, if our Bid is accepted, to furnish performance Security in the forms and of value specified in the General Conditions of Contract.
- (7) We have independently considered the amounts of liquidated damages shown in Appendix to Bid and agree that they represent a fair estimate of the damages likely to be suffered by you in the event of the work not being completed by us in time.
- (8) We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_.

Signature of Applicant;

(NAME IN BLOCK CAPITALS)

Seal of Company \_\_\_\_\_

(NAME IN BLOCK CAPITALS)

Duly authorised to sign Bid for and on behalf of (fill in block capitals)

\_\_\_\_\_  
\_\_\_\_\_

Witness Signature \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

## 2. PREAMBLE TO PRICE SCHEDULES

### BIDDING DOCUMENT FOR “Halwad RoB LC No-65 and LHS LC No-66 under SJMMSVY”

- 1) The bidder shall quote his firm and fixed price under this Contract, defined in more details in various sections of this bid document.
- 2) It will be entirely at the discretion of the Employer to accept or reject the bidder’s proposal, without giving any reason whatsoever and the bidder shall not be permitted to withdraw his bid on this account.
- 3) **Price Schedule-A** gives the Schedule showing approximately the materials to be free supplied from the by client.
- 4) In Schedule-B the Bidder shall quote prices for the items on lump sum / unit rate as called for against the BOQ item for Item rate tender.
- 5) ~~In Schedule-B the bidder should quote online the percentage above/below/at par with respect to amount put to tender in schedule B for percentage rate tender.~~
- 6) In Price Schedule-B, bidder shall quote his price for entire work. Prices quoted in Schedule-B only will be considered for price evaluation & shall form a part of the Contract Agreement.
- 7) ~~The percentage above/ below/at par with respect to amount put to tender shall be submitted in the electronic formats given by n procure. The percentage (%) above/ below or at par received in any other formats will be rejected and the Bids will be disqualified.~~
- 8) Wherever for a particular item the quantities have been specified payment shall be on unit rate basis and unit variation in quantity will be paid with pro rata basis.
- 9) Each item is to be individually priced online and the amounts shall be added up to arrive at the “Total of each Price Schedule”. No column in the Schedules of prices shall be left blank except where the item description requires the item to be priced on "as applicable" basis. The item shall not be priced if it is “not applicable” to the bidder’s design, in which case the bidder shall add the words “NOT APPLICABLE”. The wording in the item description is for subject matter guidance only; clause references are indicative only and all other relevant clauses shall also be referred to. The prices shall allow for all the works covered under the bid and all liabilities and contractual obligations whether separately specified or not. Items against which no prices are quoted shall not be separately paid for and the bidder shall be deemed to have covered the cost of execution of such items (according to the requirements of the bid document) in the prices quoted for other items.
- 10) The total of the item prices in Price Schedule B and Schedule-C shall be equal to the price quoted by the bidder in Price Schedule B and shall be firm and fixed, during the pendency of the Contract. In case of any discrepancy noted in the various price schedules, those in Schedule B will be considered and binding on the Contractor. The prices in Price Schedule B and Schedule-C of the successful bidder shall be corrected accordingly. Only Price Schedule–B after carried over and arithmetic corrections if any will be considered for financial evaluation of the bid.
- 11) “Schedule-D” gives the basis of interim payment for construction of works.
- 12) Deleted.

- 13) The rates and prices shall be submitted in the electronic formats given by n-procure. Rates and prices received in any other formats will be rejected and the Bids will be disqualified.
- 14) The prices shall allow for all the works covered under the bid including digitized asset mapping and all liabilities and contractual obligations whether separately specified or not. Items against which no prices are quoted shall not be separately paid for and the bidder shall be deemed to have covered the cost of execution of such items (according to the requirements of the bid document) in the prices quoted for other items.
- 15) Items not specifically listed in Price Schedule, but required to be executed for satisfactory working of the system as specified, will not be separately paid for by the Employer when executed and shall be deemed to be already covered by other items and rates listed in the price sheets and total price quoted in 'Summary of Price'. No extra payment shall be given for any item which is required for successful completion and commissioning of the project.
- 16) Deleted.
- 17) Deleted.
- 18) The quoted price by the bidder shall be evaluated as per Clause 5 'Evaluation of Price Bid' under this volume. While Part B, shall form the basis to work out schedule of Interim payments during construction period with the successful bidder.
- 19) The bidder should acquaint himself with all the site conditions including but not limited to the access to Work site, HFL, High/ low Tide Level as etc. The successful bidder shall have to make suitable access to work sites at his own cost. These accesses may be permitted for the use of the other contractors working for GUDC as per instruction of Engineer-in-charge.
- 20) The bidder shall be deemed to have allowed in his bid proposal for all miscellaneous provisions, maintenance cost of equipment and establishments with final removal of all temporary works of whatsoever nature required for construction including temporary bunds, diverting water, pumping, de-watering etc. for the proper execution of works. The rates shall also be deemed to have included any works and setting out that may be required to be carried out for laying of pipeline and construction of structures of all the works involved.
- 21) The Price Schedules are to be read in conjunction with the Conditions of Contract, the Specifications and other sections of these bid documents and these documents are to be taken as mutually explanatory of one another.
- 22) Prices quoted by the bidder shall be firm for the entire period of Contract including defect Liability period / Free maintenance Guarantee period without any escalation in accordance with the Conditions of Contract. The drawings attached with this tender are only for the reference, bidder shall visit the site and collect relevant data before quoting. The successful bidder shall perform all the relevant surveys and design and approvals before execution on site and no escalation or extra claim shall be entertained based on the attached drawings.
- 23) The bidder shall obtain data on survey work, soil investigation work and any other data required for his proposal at his own cost.
- 24) The prices quoted shall also include the cost of materials utilized for testing.

- 25) The item descriptions in price schedule are for subject matter guidance only and the prices shall include all the equipment / materials / accessories and services required as per the specifications. The bidder shall fill in the price schedule furnished.
- 26) 1% of the value of work will be deducted from the Running bill amount against labor cess and it shall be non-refundable.
- 27) Third Party Inspection (TPI) / PMC agency will be deployed by GUDC and charges of the same will be borne by GUDC. If contractor gives misleading information about their readiness for inspection, cost of such futile inspection/ visit of third-party agency due to misinformation shall be recovered from the Contractor.
- 28) Payment against taxes and duties shall be as per 'GCC' of Volume-I-B.
- 29) Liquidated Damages under Clause No. 02 of Volume-I-B and Clause no. 11 of Volume-III shall be read together in conjunction to Mode of Payment (Clause 4.0 of Volume III).
- 30) The rate quoted shall be exclusive of GST, but inclusive of all other taxes and cess or levies or duties which shall not be paid extra. While GST will be paid for admissible part of actual work done at the approved tender rates and tender conditions of price variations. GST shall be paid as per prevailing rates at the time of payment. The TDS shall be deducted at source as per provision of IT rules.
- 31) The rates should be quoted exclusive of GST but inclusive of all other taxes as per Volume-I-B, General Conditions of Contract, Clause No. 47.
- 32) The bidder shall be deemed to have taken full account of all requirements and obligations whether expressed or implied, covered by all parts of this Contract and to have priced the items herein accordingly. The rates and sum shall therefore be included for all incidental and contingent expenses and risks of every kind necessary to construct, complete and maintain the whole of works in accordance with the Contract. No additional claim whatsoever shall be entertained by GUDC.
- 33) The PMC / PIU certified report of successful flow test including leakages / hydro test for the components covered under the respective running bill / final bill must be attached for payment
- 34) All water, electricity, fuel (For running of DG, Diesel pumps etc. for construction purpose) charges during construction and Test & Trial Run shall be borne by the Contractor.
- 35) The contractor shall comply with all the requirements for purchase and use of electric power. Power sourcing from concerned DISCOM source shall be in the scope of the contractor and shall be reimbursed at actual rate by GUDC on submission of proper fees receipt/challans and other relevant documents. All necessary Liaisoning and statutory approval from concerned DISCOM is in bidder's scope.
- 36) The prices quoted shall also include the cost of Temporary/Permanent plugging and blocking of restoration of infrastructures like Kharkuwa. Electrical Line, Telephone cables all types. water lines. gas line. septic tanks. etc. sewer line, branch connections and diversion of flows and removal of all plugs, etc.
- 37) For any Underground and Over Head Utility, the contractor has to confirm it during site visit (as scheduled), the shifting or getting it shifted from the concern dept. (i.e. Liaisoning, follow -up and approval) required will be in contractor's scope. No extra cost will be given to contractor for any

type of utilities shifting. All statutory fees/charges shall be paid by GUDC on submission of proper fees receipt/challans and other relevant documents.

- 38) The price bid submitted by the bidder rates shall be inclusive for;
- a. Removing of Existing Pipeline including removal of specials, valves jointing material including carting and stacking of removed material from site of work to the department store as directed excl. Excavation and refilling Pipes/ Pre Stressed Concrete Pipe.
  - b. Labour charges for repairing leakage in CI/DI pipeline of following diameter at different places including necessary excavation manually or by machinery, removing of mud, dewatering, cleaning of pipe, cutting of pipe, Jointing & repairing using CID joints including CID joints, rubber rings, nut bolts, hiring excavator, Hydra/ Crane, dewatering machine, fuel, operator etc. complete (including cost of jointing material and cost of pipe) CI/DI Pipelines.
  - c. Labour charges for repairing of leakage in PVC pipeline of following dia meter at different places including necessary excavation manually or by mechanized excavation, dewatering removing of mud, cleaning of pipe and leakage portion, cutting the pipeline & removing piece of pipe from trench with inclusive of mechanical devices JCB, Hydra/Crain if necessary & labours required with providing material such couplers, solution etc. comp. (incl. all material but Excluding cost of pipe)
  - d. Labour charges for repairing of leakage in HDPE pipeline of following diameter at different places including necessary excavation manually or by machinery, dewatering, removing of mud, cleaning of pipe and leakage portion, cutting the pipeline, Jointing & repairing using CID joint inclusive of using all required machinery, labour, D G Set, fuel, operator, CID joints, rubber rings, nut bolts etc. complete (but excluding cost of Pipe).
  - e. Contractor Providing and erecting 2.00-meter-high temporary barricading at site; each panel of size 2.50mx2.00m made of 40x40x6mm angle iron or 50x50x3mm hollow MS tube posts/horizontal members/bracings covered with 1.63mm thick MS sheet. The sheet shall be fixed with 30x5mm MS flat by suitable welding/riveting. The panels shall be made so that gap of 50cm above the ground is available making overall height as 2.5m. MS channel ISLC 75 @ 5.70 kg/m, 50cm long shall be provided at the bottom having oval shaped holes of size 50x25mm at both ends with 50cm long MS angle 40x40x6mm bracing. Suitable arrangement shall be made to fix the barricading to avoid from overturning by providing 250mm long expansion fasteners at both ends. The work shall be executed as per drawing/direction of Engineer-in-Charge which includes writing and painting, arrangement for traffic diversion such as traffic signals during construction at site for day and night, glow lamps, reflective signs, marking, flags, caution tape as directed by the Engineer-in- Charge. The barricading provided shall be retained in position at site continuously i/c shifting of barricading from one location to another location as many times as required during the execution of the entire work till its completion. Rate include its maintenance for damages, painting, all incidentals, labour materials, equipments and works required to execute the job. The barricading shall not be removed without prior approval of Engineering- Charge. (Note: - The barricading provided shall remain to be the property of the contractor on completion of the work).



- f. Carry out complete alignment grid survey work by total station along bridge alignment with approaches and service road length including marking of center line of alignment, taking ground level details of existing structures, details of all manholes, catch pits, pipe line, valves, light poles, trees, overhead electrical lines, BSNL section pillar / box, Torrent electrical boxes, PMT including number marked on them, road dividers, footpaths, etc. within 40 m from center line and providing, fixing necessary reference pillars, establishing bench mark, establishing foundation layout on ground, including submission longitudinal section, cross section and drawing report of survey work in three hard copies with soft copy in CD to Engineer-in-charge as directed.
- g. Carryout soil investigation work including drilling 150 mm dia bore holes in all sorts of soil, ordinary rock and hard rock, up to maximum depth as mentioned, collection undisturbed samples and conduction standard penetration tests alternate at an interval of 1.5 to 2.0 m depth, conducting necessary laboratory tests for all type of classification and determination of soil parameters if required, including submission of report in three copies covering investigation data and recommendation for SBC and the pile capacity considering the design criteria, all per specification.
  - 1) The rate is inclusive of submitting soil investigation report in three sets in hard copy as well soft copies.
  - 2) The rate is inclusive of all materials with contractor's labor, tolls and plants, machineries, as required.
  - 3) The rate is inclusive of all taxes including services tax. For up to 30 Mt. depth.
- h. Tracing of existing manholes using all required tools, labours complete.

**3. PRICE SCHEDULES**

BIDDING DOCUMENT FOR “Halwad RoB LC No-65 and LHS LC No-66 under SJMMSVY”

**A. Part-A: Schedule-A**

Schedule showing the approximately the materials to be supplied to the contractor from government stores for the work to be executed and the rate at which they are to be charged.

Sr. No.	Particular	Qty.	Rate at which the material will be charged to the contractor		Place of Delivery
			Rate	Unit	
1	2	3	4	5	6
			Not Applicable		

**B. Part-B: Summary of Schedule-B**

-----Separate Schedule B attached-----

**C. Part-C: Schedule-C Operation & Maintenance**

-----Not Applicable-----

Signature  
Name and Designation  
Company  
Date.

#### 4. Preamble to Mode of Payment

- 1) The contractor after approval of his detailed designs and drawings shall furnish to the Employer's Representative an initial bill of quantities of all items as mentioned in Part B (to be reviewed and updated periodically). This bill of quantities will be used for assessment of percentage progress of any component at any stage.
- 2) Measurements jointly taken (for Turnkey works) by the Employer's Representative and the Contractor will be entered in the measurement books and signed jointly by both the parties which shall form the basis for such interim payments.
- 3) As mentioned in the preamble to price schedule, the provision of measurement will be applicable only for the assessment of value of work done and certified by Engineer-in-Charge for Part B and Part C.
- 4) Payment for items as mentioned in Part B and Part C will be released as per provision for interim payment as given in schedule mentioned below.
- 5) Percentages are indicated against each component of some of the items of Part B specified in Clause 4.1, based on the Employer's best appreciation of the value of the component as related to the total costs of the concerned item as a whole. However, payment for those items which are not covered under clause 4.1 will be made as per quantity verified by Engineer-in-Charge for such items as mentioned in Part B. The extent of amount to be released against each such item will be as per decision of Engineer-in-charge.
- 6) Payment shall be released within 30 days after the fulfilment of condition mentioned in Para 2 above. The decision of the Engineer In-charge in this regard shall be final and binding upon bidder.
- 7) The percentage breakup as indicated in the clause 4.1, may differ from that corresponding to the Bidder's scheme and bidder's design and he should take this into account while quoting his prices for the items specified
- 8) During Defect Liability Period / Free Maintenance Guarantee Period, the Contractor shall be paid as per the clause 4.1, (Break up for schedule of payment). The amount withheld against the O & M from the running bill of the contract shall be released as per direction of engineer in charge. **(If Applicable)**
- 9) The rates quoted for Defect Liability Period / Free Maintenance Guarantee Period works shall be in line to Volume-I-B, General Conditions of Contract, Clause No. 1 "Security Deposit". **(If Applicable)**
- 10) Release of Security deposit shall be as per Volume-I-B Clause-1 of General Conditions of Contract and Volume V Schedule 3, Defect Liability Period / Free Maintenance Guarantee Period Price. **(If Applicable)**
- 11) Deleted.
- 12) Deleted.
- 13) Deleted.

**D. Schedule-D Break Up for Interim Payments**

Deduction for Advance Income Tax	As per the prevailing Tax Rules of the Government of India and the Government of the State of Gujarat.
Deduction for Advance Works Contract Tax	As per the prevailing Tax Rules of the Government of India and the Government of the State of Gujarat.
Deduction for Royalty on Materials used	As per prevailing rates of Geology and Mining Department of Government of Gujarat.
Minimum amount of interim payment certificate	Minimum 10% of the contract value
Rate of Interest up to Delayed Payments	No interest shall be payable to the Contractor on any payment due or awarded by any authority.

**Note:** Payment will be released after certification of quantities recorded in the measurement book by Engineer In-Charge.

## **5. Methodology for Financial Bid Evaluation**

- 1) GUDC will first open the technical bid of all the bidders as per schedule given in the instruction to the Bidders in the presence of the bidders or their authorized representatives who choose to attend on the prescribed place, date and time in the bid for bid opening. After opening of the technical bid, GUDC will first evaluate bids for qualification requirement stipulated in the bid document.
- 2) Prior to the detailed technical evaluation, the Employer will carry out a preliminary examination to determine whether they are complete, whether the required EMD have been furnished, whether the documents have been properly signed, and whether the Tenders are generally in order and whether Qualification criteria to the requirement of the bidding document are met.
- 3) The detailed technical bid evaluation of those bids, who are meeting the qualification requirement, will be carried out. The Price bid of the bidders who are not qualified for the bid, will not be opened and returned to the bidder on award of the contract.
- 4) Price-Bid will not be opened by GUDC until evaluation of Technical-bids submitted by the bidders is completed and any conclusion is made. In the evaluation of Technical-bid, all the drawings, details etc., submitted by the bidders will be scrutinized before opening of price bid.
- 5) In the process of evaluation of Technical-bid, if there are queries regarding the details, data, drawings etc., submitted by the bidders with their Technical-bid then the same will be raised to the bidders and the bidders will have to give the answers / submit more details etc. accordingly. GUDC may appoint a consultant or expert in the field for the evaluation of details, data & drawings etc. submitted by the bidders with their Technical-bids.
- 6) After complete evaluation of Technical-bids submitted by all the bidders and after any conclusion is made by GUDC to its' own discretion, the price bid of technically responsive bidders will be opened.

**Note:**

- (1) L-1 Bidder shall be the preferred bidder.

## 6. Lab Testing Equipment

(The Applicant shall provide adequate information for testing equipment and surveying equipment.)

	Name of Testing Equipment	Minimum Requirements	Equipment with Agency	
			Equipment in hand	Equipment to be procured
<b>1</b>	<b>A - General Lab Equipment</b>			
	a) Electronic balance 7 Kg. to 10 Kg. capacity semi self-indication type accuracy 1 gm.	1 Nos.		
	b) Pan balance 10 kg capacity accuracy 0.01 gm	1 nos.		
	c) Electronic balance 500 gm capacity accuracy 0.001 gm	1 Nos.		
	II) Ovens-electrically operated thermosotically controlled 600 mm x 600 mm range upto 220 C and sensitivity 1 C.	1 No.		
	III) Sieves as per I.S. 460-1962	Full I.S. 3 Set.		
	V) Stop watches, 1/5 sec. accuracy	2 Nos.		
	Vi) Glassware comprising of beaker, pipetters, butters, concial and spherical as per required flasks, dishes, measuring, cyclinders (100 to 1000 cc capacity) glass roads and funnels, glass thermometers range 0 C to 100 C.	Full I.S. Set.		
	Vii) Hot plates 200mm dia. (1500 watt)	10 Nos.		
	Viii) Enamel trays			
	a) 600mm x 450mm x 50mm	6 Nos.		
	b) 450mm x 300mm x 40mm	6 Nos.		
	c) 300mm x 250mm x 40mm	6 Nos.		
	d) Circular plates of 250mm dia.	6 Nos.		
	Xi) Small tools like scoop, hand shovel, trovel, shovel, trimming knife steel straight edge club hammers 91 kg and 1/2 kg) mallet, sieve brush ventire calliper.	each as 4 Nos.		
	xii) Aboestos Gloves	3 Pairs		
	xiii) hydrometer	3 No.		
	xiv) Room temperature / atmosphere temperature thermometer.	3 Nos.		
	xv) Rain guage	1 No.		

	xvi) Hydrometer	1 No.		
	xvii) First Aid Box	1 No.		
	Vi) Laboratory mixer including required accessories about 0.02 cum capacity electrical operated fitted with hitting jacket.	1 No.		
	Vii) Marshal stability apparatus electrically operated completed with all accessories as per ASTM11559-62 T.	1 Set		
	viii) Core cutting machine with 10 cm and 15 cm die diamond cutting edge.	1 No.		
	ix) Metallic & digital Thermometers range upto 300 C	6 Nos.		
	X) Apparatus for specific gravity of bitumen as per the relevant specification.	1 Nos.		
	Xi) Viscosity determination apparatus (Kinematics) as per the relevant IS specification.	1 Set		
	Xii) Swell test apparatus to asphalt institute MS-2 NO-2 specification.	1 No.		
	XIII) Densitometer Pavement quality Indicator (PQ) 301	1 No.		
	IX) Asphalt Extraction	1 No.		
<b>2</b>	<b>B - For Cement and Cement Concrete</b>			
	I) Vicat needle apparatus as per IS-269-1967	1 No.		
	II) Moulds			
	a) 150mm dia. x 300mm height cylinder with capping component	As required		
	b) Cubes 150mm and 100mm size.	As required		
	c) Cubes 70.7 mm for cement mortar	As required		
	III) Concrete Permeability Apparatus as per the relevant IS specifications	1 No.		
	IV) High frequency mortar cube Vibrator for cement testing	1 No.		
	v) Concrete mixer power driven, 0.03 m3 capacity	1 No.		
	Vi) Variable frequency and amplitude vibrating table size 1 meter x 1 meter as per the relevant British standard.	1 No.		
	Vii) Flow table as per the relevant IS specifications.	4 Nos.		
	Viii) a) 2000 Kn (Least count 10 Kn) compression testing	1 No.		

	machine for concrete cube.			
	b) 500 Kn (least count 2 Kn) compression testing machine for cement mortar cube.	1 No.		
	Ix) Equipment for slump test	4 Nos.		
	X) Equipment for determination of specific gravity for fine and coarse aggregate as per IS 2386 (part 3) 1963	1 No.		
	XI) Flexural attachments to compression testing machine.	2 No.		
	XII) Needle Vibrator	4 Nos.		
	VIII) Soundness testing apparatus for cement	1 Set.		
	IX) Rebound hammer for non-destroyer test	1 No.		
<b>3</b>	<b>C – For Control of Profile and surface Evenness</b>			
	I) Total Station	1 Set.		
	II) Theodolite	1 Set		
	III) Precision automatic Level	2 Sets		
	IV) Precision Staff	3 Sets.		
	V) 3 Meter straight edge and measuring wedge	3 Sets.		
	VI) Camber templates 2 lane			
	a) Crown type cross – section	As per requirement		
	b) Straight run cross – section	As per requirement		
	VII) Steel taps of road			
	A) Steel tape	2 Sets.		
	B) 5 m long	20 Sets.		
	C) 10 m long	2 Sets		
	D) 20 m long	2 Sets		
	E) 30 m long	2 Sets.		

Any other equipment which is not mentioned here but which is necessary for complying with the provision of the Contractor or as required by the Engineer.

In the absence of any equipment as per test requirements of section 900 of MORTH specification the same shall be provided by the contractor at any time as directed by the Engineer. No extra payment shall be made to the contractor.

Authorized Signatory  
Designation  
Date:



## 7. List of Registers to be Maintained at Site

Following Documents / Registers to Be Maintained at Site for Ensuring Proper Quality Control of Work in Progress.

- 1) A complete set of Contract Documents
- 2) A Complete set of drawings (tender drawings and Good for Execution Drawings)
- 3) A complete set of change in specification or scope if any and approval thereof.
- 4) Master Test Register for Material for field Test.
  - a. Lab Report
  - b. Lab/Field Test.
- 5) Register for bricks testing. Lab/Field
- 6) Concrete Pouring Card
- 7) Bitumen Test Register
- 8) Paint Register
- 9) Empty Bags of Cement Shall Be Deposited on Monthly Basis at Store of Nagarpalika and Same Shall Be Recorded in Store Register for Cement.
- 10) Register for approval of samples for various materials.
- 11) Site Order Book.
- 12) Register showing defects noticed during execution of work and compliance reports.
- 13) Following Register to be maintained.
  - a. Steel Inward
  - b. Steel Consumption
  - c. Cement Inward/Consumption (Loose)
  - d. Cement Inward/Consumption (Bag)
  - e. Concrete Consumption (On site batching Plant)
  - f. Concrete Consumption (External batching Plant)
  - g. Concrete Cube Register
  - h. Site Instruction
  - i. Event Register
  - j. Drawing Register
  - k. Site Visit Register
  - l. Labour Register
  - m. Hindrance Register
  - n. DPR Register

## **8. Vendor List for Tender work**

Schedule of Approved Makes/Manufacturers of Materials.

The following guidelines are to be noted regarding use of materials in the work;

- 1) As far as possible, materials bearing "Standard Mark (ISI)" from Bureau of Indian Standard (BIS) shall be used in the work.
- 2) Wherever, materials bearing Standard Mark (ISI) are used in the work, the following shall be ensured:
  - a. The supplier has a valid license from BIS during the period the material is being used in the work.
  - b. The Contractor should maintain furnish necessary documents and proof of payments made for the procurement of materials bearing Standard Mark (ISI).
- 3) Mandatory Tests shall be conducted at the specified frequency specified in the Contract. In case, frequency of testing is not stipulated in the contract then standard specification (CPWD, ISI etc.) may be considered for frequency at which materials are to be tested.
- 4) Before bulk purchase of quantities of materials, it is the responsibility of the Contractor to get the samples of materials approved from consultant and EIC. EIC reserves the right to engage Third Party Consultant for verify the material and QAP standards.
- 5) All cost towards the testing shall be borne by the contractor.
- 6) Deleted.

## APPENDIX

### Indicative list of minimum plant & equipment to be deployed on contract work

Sr. No	Type of equipment	Amount put to tender (Rs. in Crore)			
		Up to Rs.10 Cr.	Rs.10-20 Cr.	Rs.20-50 Cr.	Rs.50-100 Cr.
1	Tipper Trucks	6	10	15	20
2	Motor Grader	1	2	3	4
3	Dozer	1	1	1	2
4	Front end Loder	2	2	2	4
5	Smooth Wheeled Roller	2	2	3	4
6	Vibratory Roller	2	2	2	3
7	Drum Mix Plant with Electronic Controls For wet mix. (Minimum 60-70)	1	1	1	1
A	Continuous Batch mix Plant (Min 120 TPH)	0	1	2	2
8	Paver Finisher with Electronic Sensor	1	1	1	2
9	Water Tanker	2	3	4	5
10	Bitumen Sprayer	1	1	1	2
11	Tandem Roller	1	1	1	1
12	Concrete Mixers with integral Wight batching facility	2	2	1	2
13	Concrete batching* mixing plant (minimum Capacity – 15 m <sup>3</sup> / Hour	0	1	1	1
14	Concrete paver capable of paving 7.5 meter width extensible to 10 m. in one single pass including all accessories such as automatic dowel bar insertor integral vibratory system and electronic sensors ancillary equipment for applying curing compound, joint cutting etc.	1	1	--	1
15	Concrete Batching & Mixing plant with automatic control. (Minimum Capacity – 100 cum/hour)	0	-	-	1
16	Transit Mixer				5
17	Plate Vibrator				2
18	Empty Boring Machine/Mat Machine				2
19	Needle Vibrator				5
20	Surface Vibrator				5
21	Vinch Machine				5
22	Steel Form Work				1500 sq.ft
23	Concrete Laying Pump				1
24	Generator (120 k.watt)				2
25	Steel Reinforcement Cutting and Bending Machine.				2

Sr. No	Type of equipment	Amount put to tender (Rs. in Crore)			
		Up to Rs.10 Cr.	Rs.10-20 Cr.	Rs.20-50 Cr.	Rs.50-100 Cr.
26	Prestressing Assembly with all machinery, Equipment & Instrument.				2
		22	31	39	87

- For bridge/building works having cost more than Rs. 10 crore

Note: Above indicative list of minimum machinery shall be modified in accordance with requirement of work on case to case basis.

\*\* The minimum requirement of plants & Equipment specified in Appendix-B at Sr., 7-A and 8 will be considered for those works at the time of Prequalification in which estimated amount of Asphalt work to be done by Paver is of Rs. 10/- crore or more, instead of amount put to tender of those works.