## **RAJKOT MUNICIPAL CORPORATION**

e-Tender No.: RMC/2024/WW/25MLD WTP/NYARI



#### **TENDER DOCUMENTS FOR**

ENGINEERING, PROCUREMENT, CONSTRUCTION, COMMISSIONING AND 2 YEARS

OPERATION & COMPREHENSIVE MAINTENANCE OF 25MLD CAPACITY WATER TREATMENT

PLANT AT EXISTING NYARI WTP SITE, RAJKOT.

#### VOLUME-IV FINANCIAL BID

#### **JANUARY-2024**

:: Milestone dates of e-Tendering ::					
Downloading of e-Tender documents	29-01-2024 to 19-02-2024 up to 17.00 Hrs.				
Pre-bid Meeting     (Queries also to be submitted by e-mail ID <u>kpdethariya@rmc.gov.in</u> & <u>sbchhaiya@rmc.gov.in</u> before 13-02-2024 up to 13:00 Hrs.	13-02-2024 at 11.00 Hrs. at Central Zone Office -RMC				
3. Online submission of e-Tender	19-02-2024 up to 18.00 Hrs.				
4. Physical submission of EMD, Tender fee, Documents required for pre-qualification and other necessary documents.	20-02-2024 up to 18.00 Hrs.				
5. Verification of submitted documents (EMD, Tender fee, Documents required for pre- qualification and other Necessary documents.)	23-02-2024 at 10.30 Hours onwards				
6. Opening of online Primary Bid (Technical Bid)	21-02-2024 at 10.30 Hrs. onwards				
7. Opening of online Commercial Bid (Price Bid) for technically qualified bidders only.	26-02-2024 at 10.30 Hrs. onwards (If possible)				
8. Bid Validity	180 Days				



413, TrinityCyygnus, Nr. Someswar BRTS Junction, University Road, Vesu Surat – 395009 (Gujarat – India) Tel: +91 261 2974000 / 2974111 E-mail: sapient\_srt@sapient.net.in Add. City Engineer [CZ], Water Works (Projects), Rajkot Municipal Corporation, Central Zone Dr. Ambedakar Bhavan, Dhebarbhai Road Rajkot-360 001.

Tel.: +91 97145 03709

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1.0	Form of Price Proposal
2.0	Appendix to Price Proposal
3.0	Price Schedule – A
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6.0	Price Schedule – D

Bidders' stamp & initials  $\hspace{1cm} 2$ 

### FORM OF PRICE PROPOSAL

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

To:

The Municipal Commissioner, Rajkot Municipal Corporation, Central Zone, Dr. Ambedakar Bhavan, Dhebarbhai Road, Rajkot-360 001 Gujarat, INDIA.

SUB:

- (1) Engineering, Procurement, Construction (EPC), Testing, & Commissioning of 25MLD Capacity Water Treatment Plant at Existing NYARI WTP Site, Rajkot along with all related Mechanical and Electrical equipment and accessories, Instrumentation including Miscellaneous works etc. complete.
- (2) Operation and Comprehensive Maintenance of 25MLD Capacity Water Treatment Plant at Existing NYARI WTP Site (entire work / scope forming part of this tender) for Two (02) Years after satisfactory completion and & acceptance of entire water works facility at Existing WTP Nyari Site, Rajkot.

We have examined the Conditions of Contract, Employer's Requirements, Schedules, Addenda Nos. \_\_\_\_\_ and the matters set out in the Appendix hereto. We have understood and checked these documents and have not found any errors in them. We accordingly offer to design, execute commission and to comprehensively maintain for one year the said Works and remedy any defects, fit for purpose in conformity with these documents and the enclosed Proposal, for the fixed lump sum of Rs. \_\_\_\_\_ or other such sums as may be determined in accordance with the terms and conditions of the Contract. The above amounts are in accordance with the Price Schedules herewith and are made part of this bid.

We confirm our agreement with the appointment of Dispute Adjudication Board of General Condition of Contract.

We agree to abide by this Bid until 180 days and it shall remain binding upon us and maybe accepted at any time before that date. We acknowledge that the Appendix forms part of our Bid.

If our bid is accepted, we will provide the specified performance security, commence the Works as soon as reasonably possible after receiving the Employer's Representative's notice to commence, and complete the Works in accordance with the above-named documents within the time stated in the Appendix to Technical Proposal.

Unless and until a formal Agreement is prepared and executed, this Bid, together with your written, acceptance thereof, shall constitute a binding contract between us.

We understand that you are not bou	nd to accept the lowest or any b	id you may receive.
We are, Gentlemen Yours faithfully		
Signature to sign bids for and on behalf of	in the capacity of	duly authorized
Address		
Date		

# APPENDIX TO PRICE PROPOSAL

# APPENDIX TO PRICE PROPOSAL <u>Conditions of Contract</u>

Employer's name and address	The Municipal Commissioner, Rajkot Municipal Corporation, Central Zone, Dr. Ambedakar Bhavan, Dhebarbhai Road, Rajkot-360 001 Gujarat, INDIA.
Contractor's name and address	
Phone No. : Fax No. : E-mail :	
Time for notice to commence	7 Days
Name and address of the Employer's Representative/Engineer	To be nominated by Employer at the time of Award of Contract
Time for Completion of construction of Works	18 months including monsoon period and 3 months successful trial run and acceptance of plant.
Validity Period of Tender Offered	180 days from the last date of receiving of the Tender.
Defects liability period	12 months after commissioning and issue of certificate of Completion.
Period for O & M Contract	Two years from the date of issue of certificate for completion / taking over certificate
Language for communications	English / Gujarati
Electronic transmission systems	
Confidential Details	
Currency of all payments	Indian Rupees

Amount of insurance for work Total cost of work

Amount of third party insurance As per law per occurrence, number of

occurrences: Up to Defect Liability Period

Periods for submission of Up to contract period till completion of O&M

insurance

Evidence of insurance 30 days from commencement date

Relevant policies 60 days -do-

Number of members of Arbitral

Tribunal

Members of Dispute Adjudication

Board (if not agreed) to be

nominated by

As per the Arbitration and Conciliation Act 1996, India along with its latest amendments.

Arbitration rules

Language of arbitration English / Gujarati

Place of arbitration Rajkot

Procedural Law Indian as governed by the Arbitration and

Conciliation Act, 1996, India and its latest

amendments.

Limit of Retention Money 10 % of the construction contract price.

(5 % S.D. + 5 % to be recovered from bill)

Payments in Local Currencies In Indian Rupees

Time for access to the Site Within 15 days from the date of Letter of

Work Order Acceptance / Letter of Intent

Amount of performance security 5% of contract price

0.1% per day with limit as 10% of the Damages for delay

**Construction Contract Price** 

**Deductions of Labour Cess** 1% of contract price for construction workers

welfare fund from all R.A. Bills & final Bill.

Deductions of Income Tax % as applicable of contract price from all

R.A. Bills & final Bill.

**Deductions of Material Testing** 

Expenses.

The material testing fee at the rate of 0.5%

shall be deducted from every running bill of

the contractor.

#### Note on Schedules

- 1. The bid is lump sum bid for design, engineering, procurement, construction, testing, commissioning and operation & maintenance Contract for Water Treatment Plant and all other allied works as specified in tender.
- 2. The bidder shall quote his firm and fixed lump sum price for the entire work under this Contract, defined in more details in various sections of this bid document.
- 3. The rates and prices shall be submitted on-line only in the formats given in the on-line Price Schedules A to C. Rates and prices received in any other formats will be rejected and the Bids will be disqualified.
- 4. It will be entirely at the discretion of the Employer to accept or reject the bidder's design proposal, without giving any reasons whatsoever and the bidder shall not be permitted to withdraw his bid on this account.
- 5. In Price Schedule-A, bidder shall quote his lump sum price for entire work with break-up for items as listed in the other schedules B & C. Prices quoted in Schedule A only will be considered for price evaluation & shall form a part of the Contract Agreement.
- 6. Items not specifically listed in this Price Schedule B, 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 Lump sum prices quoted in Schedule A.
- 7. Bidder shall give year-wise break up of cost for O & M in Schedule C.
- 8. Price Schedule A will be considered for financial evaluation of the bid.
- 9. Price Schedules B shall form the basis to work out a schedule of Interim payments on basis of cost during construction with the successful bidder.
- 10. Schedule 'D' gives the basis of interim payment during construction of various works under this contract on basis of percentage. This also depicts maximum amount payable at interim stage.
- 11. The bidder shall be deemed to have allowed in his price for provision, maintenance and final removal of all temporary works of whatsoever nature required for construction including temporary bunds, diverting water, pumping, dewatering etc. for the proper execution of works. The rates shall also be deemed to include any works and setting out that may be required to be carried out for laying out of all the works involved.
- 12. Prices shall be entered online only. Where there is a discrepancy between the unit rates and the amount entered, the latter shall govern.

- 13. 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.
- 14. Prices quoted by the bidder shall be firm for the entire period of Contract without any escalation.
- 15. The bidder shall interpret the data furnished and carry out any additional survey work, or investigation work required at his own cost. Bidder shall carry out raw water analysis at his own cost to arrive at design criteria to ensure successful and satisfactory performance of the WTP and it is sole responsibility of the contractor to give performance guarantee for the WTP.
- 16. The prices quoted shall also include the cost of materials utilized for testing.
- 17. The bidder should acquaint himself with the site conditions including the access to Worksite. The successful bidder shall have to make suitable access to worksites at his own cost. These accesses will be used by the other contractors working for RMC.
- 18. The rates should be quoted inclusive of all taxes, duties, work contingencies, etc. except GST. GST shall be paid extra at actuals.
- 19. **Break-up of payment** given in Part 1, Schedule D is for general guidance only. This stipulates maximum limit for a particular component for interim payment purpose. Item-wise/ Unit-wise payment shall be made as per Part 2, Schedule D in accordance with the progress/ stage.
- 20. **Mobilization advance** is not applicable / will not be paid.
- 21. Deleted.
- 22. Material Testing: Necessary material testing shall be carried out by contractor in presence of RMC engineers at Govt. approved laboratory at his own cost as directed by Engineer-in-charge. The material testing fee at the rate of 0.5% shall be deducted from every running bill of the contractor. This does not relieve contractor from his contractual obligations of making all arrangements for taking samples during each concreting, curing for the specified period as per specifications, bring to the laboratory and keeping the necessary records as directed.
- 23. Bidder shall note that RMC shall appoint PMC/TPI agency for supervision of this work and fees pertaining to same shall be borne by RMC.
- 24. Inspection and Tests: The purchaser (client) or its representative shall have the right to inspect and / or to test the Goods for confirm their conformity to the Contract. The special conditions of the contract and / or the Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. If not specified or notwithstanding any mention, the contractor shall submit the inspection plan of all major bought-out items for approval with client specifying the stages of inspection as per

manufacturers' quality plan and shall arrange to carry out the inspection along with client or its representative at manufacturers' works as per the approved plan. The Purchaser shall notify the Contractor in writing of the identifying of any representatives retained for these purposes. All the expenses viz. lodging & boarding, transportation, all facilities as required for this purpose shall be borne by the successful bidder for up to two persons of client / client's representative (PMC/TPI).

- 25. The bidder shall note that timely completion of this important work is of essence in meeting the overall schedule of completion of work under this water supply / water treatment project.
- 26. The bidder shall have to identify various risks involved in this work and shall accordingly frame the methodology for constricting the same.
- 27. It will be entirely at the discretion of the Owner to accept or reject the bidder's proposal, without giving any reasons whatsoever.
- 28. The bidder shall interpret the data furnished and carry out any additional survey work, or investigation work required at his own cost.
- 29. From each Running Account Bill, labour cess, Income Tax, Professional Tax and other taxes prevailing from time to time will be deducted as per norms.
- 30. The contractor shall have to avail P F Code as per the prevailing Circular of Government for the employees on work. The required documents shall have to be submitted by the contractor to the competent authority.
- 31. The contractor shall have to get registered under ESI (Employer's State Insurance) Act and obtain ESI Registration number if the number of workers are 10 Nos. or more. Also, the agency shall have to give all the benefits to the workers as available under the ESI Act. The agency should follow all the rules and regulations of ESI Act as per prevailing norms.
- 32. The quoted rates should be exclusive of GST but inclusive of all other applicable State & Central levies, duties, labour cess etc. Applicable GST shall have to be paid by the contractor, which shall be subsequently reimbursed after due verification of CA certified documentary proofs/challans submitted to RMC by the contractor.
- 33. The prices shall have to be quoted firm & fixed (without GST) and any statutory variation. RMC will not consider any statutory variation as well as the price rise in the market and if any, those shall be on account of contractor. As narrated in clause 32, actual amount of GST paid by the contractor shall be subsequently reimbursed.
- 34. During construction activity, proper care must be taken for labour safety and all the provisions of the labour laws must be followed by the contractor.

For any type of license regarding labour etc. has to be achieved by agency

- 35. Testing of the raw materials & finished products like Bricks, Sand, Aggregate, Reinforcement, structural steel etc. should have to be tested periodically as suggested by the Engineer-in-charge at government approved material testing laboratory and testing charges for the same has to be borne by the contractor.
- 36. The contractor shall have to carry out the sub-soil strata investigation at his own cost.
- 37. This office Circular bearing No. RMC/C/329 dated 22-12-2012 and Order No. RMC/C/132 dated 10-06-2013 are uploaded in tender document. The bidders quoting their rates shall have to read, implement, and submit the same duly signed along with the documents to be submitted during physical submission.
- 38. In reference to the above Circular and Order cited above, the bidder's firm who has quoted their rates for this work will be called in person for verification of original documents. The date and time for verification of original documents will be intimated to the bidders separately.
- 39. In case of any ambiguity found in specifications / drawings etc. the decision of engineer-in-charge shall be final and binding to the contractor.

## 40. Issue of Certificate for Completion of Works / Taking Over Certificate:

As soon as the work is completed, the Contractor shall give a notice of such completion to the Employer and on receipt of such notice, the Engineer-in-Charge shall inspect the work, and if he is satisfied that the work is completed in all respects then department will issue a certificate for completion of works / taking over certificate.

For the purpose of obtaining certificate for completion of works and enable employer to take over the plant following procedure shall be adopted:

a) Contractor, having satisfied himself after commissioning and commencing the trial runs to stabilize the process / plant, which is expected to take a maximum of 3 months period, will intimate by providing minimum 7 days advance notice to the engineer-in-charge to witness performance guarantee run (PGR) of the plant during the construction phase of project. The performance guarantee run shall be of 72 hours duration on round the clock basis during which it is the responsibility of the contractor to demonstrate satisfactory performance of equipment / process, compliance of treated water parameters, consumption of chemicals, etc. within guaranteed limits to the satisfaction of engineer-in-charge or his authorized representative(s). Raw Water and Power during Performance Guarantee run shall be supplied free of cost by employer.

As the plant is designed for treating raw water to meet the demand in future years, it is understood that the amount of treated water demand at the time of commissioning may be lower than design capacity and in case of client not able to arrange raw water or take supply of treated water as per full capacity of plant in order to carry out testing of WTP at

- full capacity, the testing shall be carried out based on available raw water quantity or demand of treated water at the time of testing / PGR.
- b) Employer having satisfied himself that the work is completed in all respects and plant having commissioned successfully after successful completion of Performance Guarantee Run will issue a certificate for completion of works / taking over certificate. However, if the plant is observed to fail in any respects during the performance guarantee run, for no fault of employer, the contractor shall at his expense carry out necessary rectification / modifications and re-offer the performance guarantee run to the engineer-in-charge at the earliest instance but in any case not later than 15 days from the date of last PGR. Further, in case of any partial / minor failure observed with individual equipment(s), subject to not affecting the final guaranteed results, it is the discretion of engineer-in-charge to accept the plant for the purpose of commencing O&M period subject to the condition that contractor shall carry out necessary rectification and re-offer the PGR, within 15 days from the date of notification to carry out rectification by engineer-in-charge, for the particular equipment / process to the satisfaction of engineer-incharge. Failure to do so will lead to non-acceptance of the plant and non-commencement of O & M period.
- c) Contractor to further note that in case of failure to establish the process and successful performance of the plant during PGR, leading to nonacceptance of plant by the engineer-in-charge, on two consecutive occasions, the cost of power to conduct any further PGR shall be borne by the contractor.
- d) Failure on the part of contractor to establish and conduct successful PGR within 6 months duration from the date of offering first PGR, and having understood that the contractor has carried out all necessary rectification / modification work at his own cost including replacement of any component as required in order to achieve satisfactory results, will lead to outright rejection of the plant and treated as "default by contractor" as per Clause-3 of this conditions of contract and shall be a sufficient cause for termination of contract and forfeiture of security deposit including amount of performance bond together with value of the work done but not paid for or any other amounts due to contractor pertaining to this contract and registration of the contractor shall also be kept in abeyance for three years from the date as fixed on all cases.
- e) In the case of adverse operating conditions observed viz. non-availability of raw water or abnormal incoming raw water characteristics during the trial run and PGR consecutively for a consecutive period of 15 days or more, the date of commencement of PGR shall be postponed for a suitable duration or shall be conducted after agreeing to alternative consumption norms and alternative output standards, as the case may be, and mutually agreed between employer and contractor. However, the contractor shall be responsible to maintain the site during this period. In the event of sustained inability to supply raw water for a period of greater than 2 weeks, the responsibilities of contractor shall stay

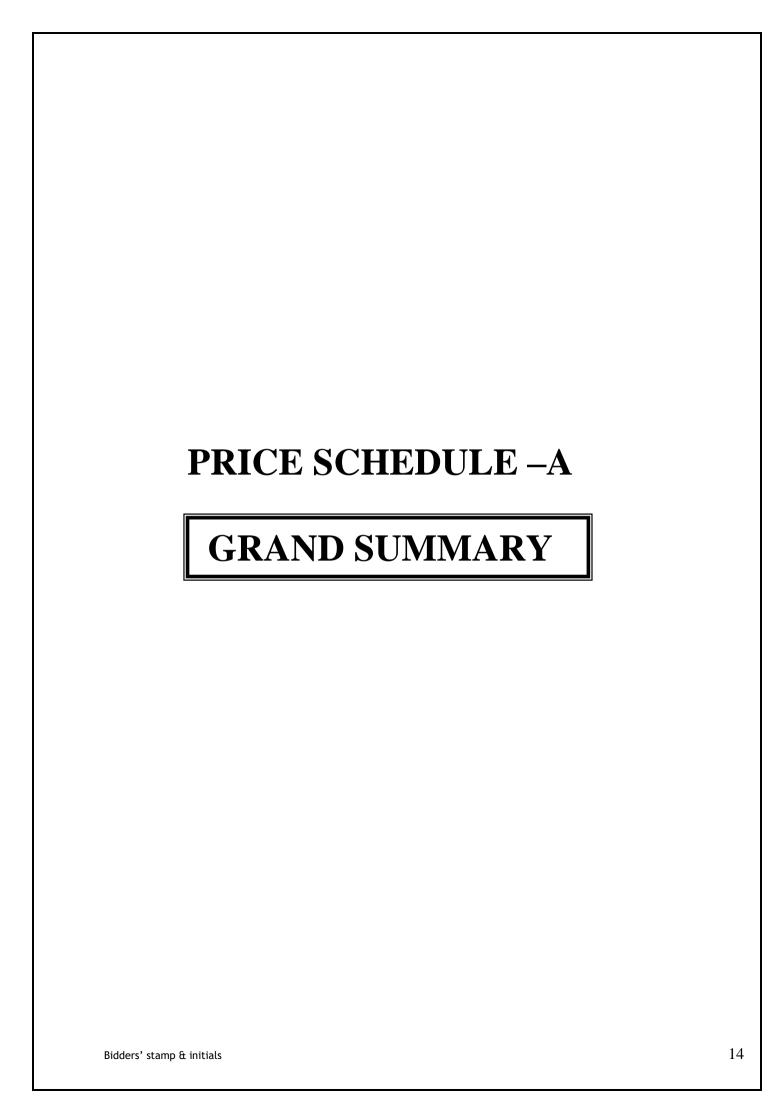
suspended till a maximum of 6 months from the date of intimation of readiness / mechanical completion of plant by contractor. For any further delay beyond 6 months to provide raw water by client, the period proportionate to the delay in supply of raw water shall be deducted from the specified duration of O & M period. However, bidder shall be responsible for providing trial run and performance guarantee run as and when raw water is made available by client and as desired by client and O & M period of balance duration shall commence from the date of takeover / issue of completion certificate by client and payment shall be considered as per the applicable year of O & M.

O&M period shall commence from the date of issue of certificate of completion / taking over certificate.

- 41. The bidder can utilize the space for Site office, stores, steel yard, Concrete batching plant and labour camp, etc. free of cost near the work site if extra space is available in the WTP plot boundary with prior approval of Engineer-in-charge, RMC otherwise bidder shall have to make such arrangement on his own.
- 42. During the physical submission the bidder shall have to submit EMD, Tender Fee, Documents required for pre-qualification, Tender Volume I, II, II & IV (Vol IV shall be unpriced, Rate to be quoted on-line only), Addendum, Corrigendum, Minutes of pre-bid meeting, Replies to bidder's queries, and all other necessary documents. All the documents shall be duly signed & stamped by bidder.

**Signature of Contractor** 

Add. City Engineer [CZ]
(Water Project)
Rajkot Municipal Corporation



# GRAND SUMMARY Price Schedule - A: (Schedule of Prices)

Sr.	Item	Rate offered in		
No.		Figures	Words	
I)	Construction Phase:	To be quoted	To be quoted on-	
	Engineering, Procurement, Construction (EPC), Testing, & Commissioning of 25MLD Capacity Water Treatment Plant at Existing NYARI WTP Site, Rajkot along with all related Mechanical and Electrical equipment and accessories, Instrumentation including Miscellaneous works etc. complete.  (Bidder to fill up <b>Price Schedule-B1</b> for Broad Unit wise Break-up)	on-line only	line only	
TT)	Total Price of (I), in Rs.			
II)	Operation & Maintenance phase: Operation and Comprehensive Maintenance of 25MLD Capacity Water Treatment Plant at Existing NYARI WTP Site (entire work / scope forming part of this tender) for Two (02) Years after satisfactory completion and & acceptance of entire water works facility at Existing WTP Nyari Site, Rajkot. (Bidder to fill up Price Schedule-C for Broad Break-up) Total Price of (II), in Rs.	To be quoted on-line only	To be quoted on- line only	
III)	GRAND TOTAL	To be quoted	To be quoted on-	
	Total Price of (I + II), in Rs.	on-line only	line only	

**Remark:** O & M Price for two years shall not be less than 8% (Eight Percent) of the quoted price for total of construction phase at I above. In case if bidder has quoted the total O & M cost for tow years lower than 8.0% of the quoted price for construction phase than bidder shall be required to furnish bank guarantee for the difference amount (difference of % of quoted price for construction phase LESS total quoted price of O & M by bidder for 2 years) as an additional security to RMC and the same shall be released only after successful completion of one year of O & M.

Signature of Contractor : Add. City Engineer [CZ]
Name Water Projects
Company's Seal : Rajkot Municipal Corporation

Date:

# PRICE SCHEDULE –B

UNIT WISE PRICE SCHEDULE FOR CONSTRUCTION PHASE

#### PRICE SCHEDULE - B SUMMARY OF SCHEDULE OF PRICE (CONSTRUCTION PHASE)

#### RAJKOT MUNICIPAL CORPORATION

#### NAME OF WORK:

- (1) Engineering, Procurement, Construction (EPC), Testing, & Commissioning of 25MLD Capacity Water Treatment Plant at Existing NYARI WTP Site, Rajkot along with all related Mechanical and Electrical equipment and accessories, Instrumentation including Miscellaneous works etc. complete.
- (2) Operation and Comprehensive Maintenance of 25MLD Capacity Water Treatment Plant at Existing NYARI WTP Site (entire work / scope forming part of this tender) for Two (02) Years after satisfactory completion and & acceptance of entire water works facility at Existing WTP Nyari Site, Rajkot.

Percentage break-up of lump sum cost shall be quoted by bidder within the following guide line as % of total construction phase cost in Price Schedule B1:

Sr. No.	Description	Percentage guide line
1.	On approval of Design & Engineering	Maximum 2%
2.	Civil Works	55 to 65 %
3.	Inter connecting Piping Works	6 to 7 %
4.	Mechanical works	15 to 20 %
5.	Electrical works	10 to 15 %
6.	Instrumentation works	4 to 6 %
7.	Trial Run & Testing	Minimum 0.5%
	Total	100%

#### **IMPORTANT NOTE FOR BIDDERS:**

Bidders shall give major break-up of the lump sum prices already quoted for Construction Phase in Price Schedule-A here as per below and in line with Percentage break-up of lump sum cost to be within the above guidelines for each of the discipline / activity of works. The bidders shall fill up major break-up PRICE SCHEDULE – B with utmost care and ensuring reasonable accuracy and covering all components / equipment with consideration of each segment design and rate analysis & as per tender requirements and specifications If the major break-up PRICE SCHEDULE – B submitted by bidder is not found appropriate with consideration above percentage guidelines or quoted with zero price or quoted blank price schedule in all such cases RMC reserves right to obtain revised price break of successful bidder in line with detailed engineering and tender requirements without giving any reason and bidder is deemed to have accepted this condition the actual payment shall be made by RMC based on the revised price break-up submitted by successful bidder and as approved by RMC with required changes as needed in the opinion of RMC and bidder shall have no objection to the same.

# PRICE SCHEDULE – B1

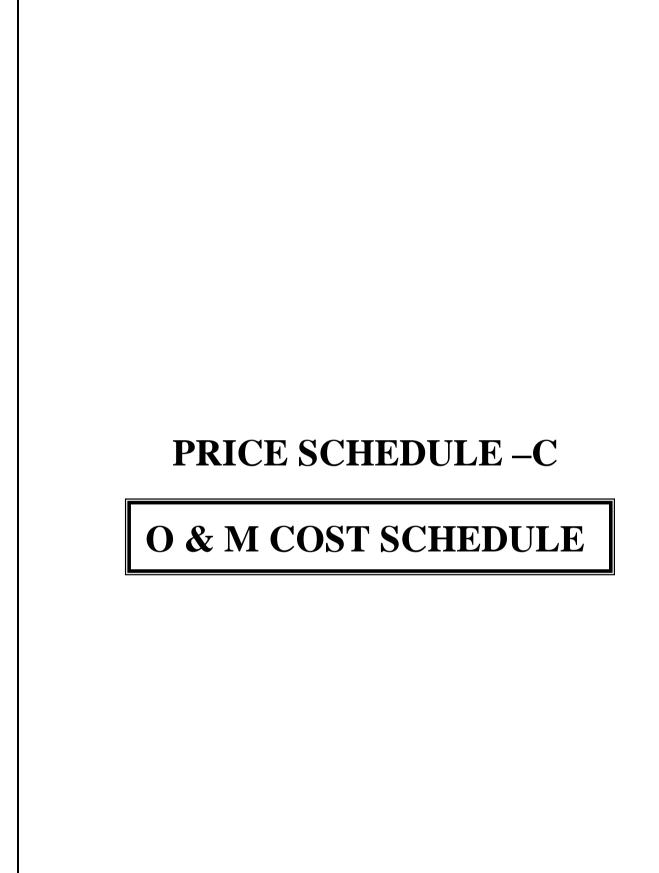
## 25 MLD WATER TREATMENT PLANT

De	Design, Construction, Supply, Erection, Testing & Commissioning (Break-up for Civil, Piping Mechanical, Electrical & Instrumentation Works)							
Sr. No.	Particulars	Civil Works (Fig.)	Piping Works (Fig.)	Mech. Works (Fig.)	Elect. Works (Fig.)	Instru. Works (Fig.)	Total Amount in Figure Rs.	Total Amount in Words Rs.
		(1)	(II)	(III)	( IV )	(V)	VI = (I + II + III + IV + V)	
1	On approval of Design & Engineering (Max. 2% of Construction Phase Cost of WTP)						To be quoted on- line only	To be quoted on- line only
2	Stilling Chamber						Do	Do
3	Flash mixer						Do	Do
4	Clariflocculator						Do	Do
5	Filter House with overhead B/W Tank						Do	Do
6	Chlorination tank with pump house and panel or other rooms as applicable						Do	Do
7	Blower room & other rooms as applicable						Do	Do
8	Dirty Water Sump & Pump House						Do	Do
9	Admin. Cum Chemical Building						Do	Do
10	HT Sub Station (HT Switchyard, Tx. Yard, RMU, DG Otta, etc.)						Do	Do
11	Demolition of existing structures, Any Other as per tender or to complete work In All Respects / Any						Do	Do
12	Other Unforeseen Works Trial Run, Testing & Commissioning of entire Plant (Min. 0.5% of Construction Phase Cost of WTP)						Do	Do
	TOTAL PRICE, IN RS. $\Sigma(1 \text{ to } 12)$	Σ (1 to 12) of (I)	$\Sigma$ (1 to 12) of (II)	Σ (1 to 12) of (III)	Σ (1 to 12) of (IV)	Σ (1 to 12) of (V)	Σ (1 to 12) of (VI)	

Signature of Contractor	:
Name	

Company Seal

Date:



#### O & M COST SCHEDULE - C

#### ABSTRACT OF O & M COST

Sr. No	O & M Period	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	Total
1.	Man Power in Rs.			
2.	Maintenance of office building, civil structure / units including Laboratory, etc. in Rs.			
3.	Maintenance and Repairs including repairs or replacement of spares parts / machinery / equipment as applicable as well as preventive maintenance, Oil & Grease, consumables, Cost of Chemicals except PAC/Alum & Chlorine, etc. for all Piping, Electrical, Mechanical, Instrumentation & Automation Equipment works for entire WTP facility forming scope of this tender, in Rs.			
	<b>TOTAL, IN RS.</b> (1+2+3)			

#### Note:

- 1. O & M cost above shall be inclusive of cost of supply of supply of manpower, repairs and maintenance of all units, spares, consumables, services of any expert as required, laboratory analysis including laboratory ware and chemicals, all other chemicals as required except for PAC/Alum & Chlorine, and any other work required for smooth operation and maintenance of entire facility. PAC/Alum and Chlorine shall be free supply by employer at any one location with plant premises and any unloading, handling / internal transfer, etc. as well loading of empty chlorine tonners in vehicle of employer shall be considered by bidder in their scope.
- 2. Raw Water & Power shall be supplied by employer.
- 3. Cost of obtaining approval from statutory body for transportation & storage (if required) etc. charges for Chlorine, Alum etc. shall be in scope of contractor.

Signature of Contractor : Add. City Engineer [CZ]
Name Water Projects
Company Seal Rajkot Municipal Corporation

Date:



BREAK UP OF PAYMENT SCHEDULE

#### **SCHEDULE - D**

#### **PREAMBLE**

- 1. As mentioned in the Conditions of contract, the Contract being a lump sum type turnkey Contract on EPC basis, the provision of measurement will be applicable only for the assessment of value of work done for inclusion in any interim certificate for part payment to the Contractor.
- 2. The Schedule specifies the procedure for all such assessment of the items for Civil/Piping/Mechanical/Electrical/Instrumentation works specified in Schedule B.
- 3. Each item of Schedule B has been divided into broad components. The Employer's Representative shall assess the value of each component as indicated in paragraph 6 herein below.
- 4. Percentages are indicated against each component of each item of Civil Mechanical/Electrical/Instrumentation works specified in Schedule B, based on the Employer's best appreciation of the value of the component as related to the total costs of the concerned item as whole. A head titled (any other unforeseen work(s) / item(s)) is included in each breakdown of schedule and the bidder shall at the time of tendering indicate any additional items which he considers necessary but cannot be covered by any of the heads indicated in the breakup.
- 5. The percentage breakup as indicated in the Schedule may differ from that corresponding to the tenderer's scheme and design and he should take this into account while quoting his lump sum prices for the items specified in Schedule-B.
- 6. The contractor shall, after approval of his detailed hydraulic as well as structural designs and drawings, furnish to the Employer's Representative an initial bill of quantities to all major items, to be reviewed and updated periodically with the Employer's Representative. This bill of quantities will be used for assessment of percentage progress of the component at any stage. By measurement jointly taken by the Employer's Representative and the Contractor, mutually agreed and entered in the measurement books in the form and by the method approved by the Employer's Representative, and signed jointly by both the parties.
- 7. The payment on running bills & final bill will be regulated as per percentage shown in each item.
- 8. 5% amount of all running bills shall be recovered and kept as retention money and shall be released as per tender.
- 9. Percentage (%) of total cost means cost quoted in Schedule-B and finally approved by the employer.

# SCHEDULE OF MILE STONE PAYMENT D1/1 MILE STONE PAYMENT BREAK-UP FOR CIVIL WORKS

Sr. No.	Item Description	Percentage Mile Stone Payment
1.	WATER RETAINING STRUCTURES ABOVE GROUND (INLET UNIT, FLASH MIXER, ETC.)	
a.	On completion of Excavation, PCC, Footings	15%
b.	On completion of Base slab / Raft	20%
c.	On completion of 50% Side Walls	20%
d.	On completion of 100% Side Walls	20%
e.	On completion of Finishing Items	10%
f.	On completion of Hydraulic Test	10%
g.	On testing, commissioning and trial runs	5%
2.	BELOW GROUND WATER RETAINING STRUCTURES (FLOCCULATOR, LAMELLA CLARIFIER, ETC.)	
a.	On completion of Excavation, PCC	15%
b.	On completion of Raft Slab / Footings	20%
c.	On completion of 50% Side Walls	20%
d.	On completion of 100% Side Walls	20%
e.	On completion of Finishing Items	10%
f.	On completion of Hydraulic Test	10%
g.	On testing, commissioning and trial runs	5%
3.	BELOW GROUND WATER RETAINING STRUCTURES WITH SUPER STRUCTURE (PUMP HOUSE, FILTER HOUSE, ETC.)	
a.	On completion of Excavation, PCC	10%
b.	On completion of Raft Slab / Footings	15%
c.	On completion of 50% Side Walls	20%
d.	On completion of 100% Side Walls	20%
e.	On completion of Column/Beam up to Roof Slab	5%
f.	On completion of Roof Slab	5%
g.	On completion of Masonry in super Structure	5%
h.	On completion of Finishing, Flooring & Misc. Items	5%
i.	On completion of Hydraulic Test	10%
j.	On testing, commissioning and trial runs	5%

Sr. No.	Item Description	Percentage Mile Stone Payment
4.	DOUBLE STOREY BUILDINGS	
a.	On completion of Excavation, PCC	10%
b.	On completion of Plinth Level	10%
c.	On completion of Column/Beam up to First Floor Slab	10%
d.	On completion of First Floor Slab	10%
e.	On completion of Column/Beam up to Second / Roof Floor Slab	10%
f.	On completion of Second / Roof Floor Slab	10%
g.	On completion of Masonry in super Structure (GF)	10%
h.	On completion of Masonry in super Structure (FF)	10%
i.	On completion of Flooring (GF & FF)	10%
j.	On completion of Misc./Finishing Items	5%
k.	On testing, commissioning and trial runs	5%
5.	SINGLE STOREY BUILDINGS	
a.	On completion of Excavation, PCC	10%
b.	On completion of Plinth Level	20%
c.	On completion of Column/Beam up to First Floor / Roof Slab	15%
d.	On completion of First Floor/Roof Slab	20%
e.	On completion of Masonry in super Structure	15%
f.	On completion of Misc./Finishing Items	15%
g.	On testing, commissioning and trial runs	5%
	MISCELLANEOUS WORK	
6.	ANY OTHER TO COMPLETE THE WORK IN ALL RESPECTS / ANY OTHER UNFORESEEN WORKS	
a.	On 50% completion of Work	45%
b.	On 100% completion of Work	50%
c.	On testing, commissioning and trial runs of all other works	5%

Signature of Contractor:

Name

Company Seal

Date:

Add. City Engineer [CZ]
Water Projects
Rajkot Municipal Corporation

D1/2, 3, 4, 5 Mile Stone Payment Breakup for Piping, Mechanical, Electrical & Instrumentation works along with spares as specified

No.	Items	Percentage Mile Stone Payment
1.	On supply of equipment, pipes, specials, valves, accessories, instruments etc. including spares at site, after inspection, along with literature, drawings, operating pamphlets, manual etc. as required.	70%
2.	On erection of all equipment, pipes, specials, valves, instruments and necessary accessories including installation of mechanical / electrical / instrumentation system / equipment, cabling, etc. complete.	15%
3.	On Erection / Installation of Complete Plant & No load trial run	10%
4.	On testing, commissioning and satisfactory trial runs	5%
		100%

Signature of Contractor: Name Company Seal Date: Add. City Engineer [CZ]
Water Projects
Rajkot Municipal Corporation