

**BIDDING DOCUMENT FOR DISTRIBUTION SYSTEM FOR 24\*7 WATER  
SUPPLY SCHEME  
FOR MOR RAIPUR CITY CENTER AREA**



**REQUEST FOR PROPOSAL**

**For**

**Work for 24 x 7 Water Supply System under Smart City Mission in Mor Raipur City Centre Area of Raipur Municipal Corporation including Refurbishment of existing network in ABD and Outer Area including all work of Mechanical, Electrical, SCADA, Household Connections, Consumer Water Meter Fittings work with three months trial run and post completion Management of 24 x 7 Water Supply in Smart City for a period of 5 years including 2 years defect liability period on**

**DESIGN, BUILD AND OPERATE BASIS**

**Volume IV: Price Bid**

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## A. PREAMBLE TO PRICE SCHEDULES

1. This Bid is For Work for 24x 7 Water Supply System under Smart City Mission in Mor Raipur City Centre Area of Raipur Municipal Corporation including Refurbishment of existing network in ABD and Outer Area including all work of Mechanical, Electrical, SCADA, Household Connections, Consumer Water Meter Fittings work with three months trial run and post completion Management of 24 x 7 Water Supply in Smart City for a period of 5 years including 2 years defect liability period on DBO basis
2. The bidder shall quote his firm and fixed 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 in the electronic formats given by CG e-Procurement System <http://eproc.cgstate.gov.in> which is called Schedule-B, 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 proposal, without giving any reasons whatsoever and the bidder shall not be permitted to withdraw his bid on this account.
5. Price Schedule-A the Bidder shall quote prices for the items on lump sum / unit rate for Consumer Survey and SIP Plan including detailed design and GFC Drawings.
6. In Schedule-B the Bidder shall quote prices for the items on lump sum / unit rate as called for against the BOQ item.
7. In Price Schedule-B, bidder shall quote his price for entire work. Prices quoted in Schedule-B only will be considered for price .In the Price Schedule B-1 to Schedule B-3, bidder shall furnish breakup of his prices quoted in Price Schedule-B and shall be carried forward to Schedule B/Summary for comparison and evaluation.
8. The Bidder shall quote his prices for Operation & Maintenance in Schedule-C. The total shall be carried forward to Schedule B/Summary for comparison and evaluation.
9. 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.
10. 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.
11. Items not specifically listed in his Price Schedules, but required to be executed for satisfactory working/safety 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 No extra payment shall be given for any item which is required to complete and perform the project.
12. The total of the item prices in Price Schedule A, Price Schedule B-1 to Schedule B-3 and Schedule-C shall be equal to the price quoted by the bidder in Price Schedule B/Summary

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/Summary will be considered and binding on the Contractor. The prices in Price Schedule B-1 to Schedule B-3 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.

13. Bidder shall give year wise break up of cost for O & M in Schedule-C
14. 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, de-watering 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.
15. Prices shall be filled online only.
16. 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.
17. The bidder shall interpret the data furnished and carry out any additional survey work, or investigation work required at his own cost. The data available with client is mentioned in GCC
18. The prices quoted shall also include the cost of materials utilized for testing
19. The bidder should acquaint himself with the site conditions including the access to Work site. The successful bidder shall have to make suitable access to work sites at his own cost. These accesses will be used by the other contractors working for Raipur Smart City Limited
20. 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
21. The amount to be quoted for O&M shall be as per Volume-II, General Conditions of Contract.
22. If applicable, 1% of the value of work will be deducted from the Running bill against labor cess, which shall be non refundable.
23. Third Party Inspection / CSC agency will be deployed by Raipur Smart City Limited and charges of the same will be borne by Raipur Smart City Limited
24. Any expenditure incurred by inspection/ CSC agency for the work misinformed by the contractor and charges of inspection/ CSC agency without any work due to misinformation shall be recovered from the contractor.
25. The prices shall be quoted inclusive of all taxes, royalties and duties prevailing at the time of submission of the bids. Statutory variation if any during the currency of contract shall have to borne by the agency which shall be not reimbursed by the Raipur Smart City Limited
26. The rates should be quoted inclusive of GST and all other taxes as per Volume-II, Special Conditions of Contract.
27. The process requires that the bidder shall quote his price for the work components contained in the price schedules for the entire work. Such prices shall remain firm and fix during the entire period of performance of the contract.

28. Payment shall be made for the components for which lump sump prices are quoted, as per the schedule of payment. Total cost will be worked out on the basis of work done of individual items and rates quoted against those particular items only.
29. The price and rate shall be filled up by e-tendering in Schedule-A, Schedule-B1,B2,B3 and Schedule-C in the formats that are made as part of the price bid. The contractors are required to fill up these schedules in proper manner. Rates and prices mentioned or quoted anywhere else other than the price schedules shall not be valid and will be outright rejected.
30. Agency shall have to borne all taxes, duties, cess of Central and State Government. Statutory variation if any during the currency of contract shall have to borne by the agency which shall be not reimbursed by the Raipur Smart City Limited .
31. Royalties: The contractor shall be liable to pay the royalty of the quarried materials/ minerals used in the construction of works at the rates specified Government of Chhattisgarh and shall be recovered from the running bills of the work from time to time and remaining amount if any shall be recovered from the final bill before releasing the security deposit of the work. The contractor shall furnish the statement showing the quantity of quarried materials / minerals from whom purchased ( with full address of the seller) and copies of the bills for purchase to the Executive Engineer of the in charge of the work. The contractor shall also furnished such additional information as regards royalty payment to the competent authority.
32. Agency shall have to take Insurance policy and intimate to Raipur Smart City Limited along with the evidence within time limit. In case of non compliance entire responsibility shall be rest with the agency and required amount shall be recovered from any due amount of the agency.
33. Raipur Smart City Limited can recover penalty amount from the agency for not taking the insurance. Though the penalty amount is recovered, responsibility of the agency for taking insurance shall be continued and will not be escaped from the responsibility.
34. Payment Schedule as mentioned in this Document shall be basis of Interim payment.
35. Rate quoted by the bidder shall be firm for the entire period of Contract without any escalation in accordance with the Conditions of Contract.
36. The item descriptions in price schedule are for subject matter guidance only. The prices shall include all the equipment / materials / accessories and services required as per the specifications.
37. 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 Schedule 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.
38. 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.
39. 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 Schedule B. Payment for items as mentioned in Schedule B will be released as per provision for interim payment as given in schedule mentioned below.
40. The Payment schedule consists of percentage breakup in Broad manner, however based upon Contractors Scheme and Design the same shall be finalized after approval from Engineer-In-Charge

Signature of Contractor

Managing Director  
Raipur Smart City Limited

**B. PAYMENT-SCHEDULE****BREAK UP FOR INTERIM PAYMENTS  
(CIVIL, INSTRUMENTATION WORKS)**

Item	Description of Items	Percentage Payment to be released	Remark
<b>1</b>	<b>On Completion of Consumer Survey, Data integration with GIS, System Improvement Plan, Design &amp; Working Drawings</b>	<b>Amount Quoted in Total for Items (Price Bid Summary- Non SOR Items- 1 &amp; 2) - Design &amp; Drawings shall be paid on pro-rata basis</b>	<b>Net payable amount of each RA Bill shall be split further as below; a) 85% amount of RA Bills shall be paid and b) 15% amount shall be on hold and paid in annual installments (@ as specified in Clause D.1 of Vol IV) during Performance based maintenance of 5 Years.</b>
<b>a</b>	Submission and Approval of Consumer Survey, Detailed Design, GFC drawings and Integration of data with	80%	
<b>b.</b>	Operation and Maintenance Manuals, As-built Drawings etc.	20%	
	<b>Total of 1.0</b>	<b>100%</b>	
<b>2</b>	<b>Distribution System Water Supply for ABD Area</b>	<b>Amount Quoted in Total for Schedule Items (Price Bid Summary- SOR Items- 1-165 &amp; Non SOR Items- 3-7) – Distribution pipeline Cost shall be split as below</b>	<b>Net payable amount of each RA Bill shall be split further as below; a) 85% amount of RA Bills shall be paid and b) 15% amount shall be on hold and paid in annual installments (@ as specified in Clause D.1 of Vol IV) during Performance based maintenance of 5 Years.</b>
<b>a</b>	On receipt of materials at project site on pro-rata basis against monthly running bills at Site	65% of Quoted rate	
<b>b</b>	On Lowering, laying and Jointing on pro-rata basis against monthly running bills at Site	20% of Quoted rate	
<b>c</b>	On Hydraulic testing on pro-rata basis against monthly running bills at Site	5% of Quoted rate	
<b>d</b>	On refilling and disposal of surplus stuff on pro-rata basis against monthly running bills at Site	5% of Quoted rate	
<b>e</b>	After commissioning	5% of Quoted rate	
	<b>Total of 2.0</b>	<b>100%</b>	

Item	Description of Items	Percentage Payment to be released	Remark
<b>3</b>	<b>Mechanical/Static type GSM/ GPRS/RF/LoRA based AMR Water Meters</b>	<b>Amount Quoted in Total for Items (Price Bid Summary- Non SOR Items- 8-13) – Mechanical/Static type GSM/ GPRS/RF/LoRA based AMR Water Meters Cost shall be split as below</b>	<b>Net payable amount of each RA Bill shall be split further as below; a) 85% amount of RA Bills shall be paid and b) 15% amount shall be on hold and paid in annual installments (@ as specified in Clause D.1 of Vol IV) during Performance based maintenance of 5 Years.</b>
a	On supply of Machinery / Equipments on pro-rata basis against monthly running bills at Site	50%	
b	On completion of Erection Works	25%	
c	On Completion of Testing and Commissioning of	15%	
d	On completion of commissioning of the Scheme and issuance of taking over certificate	10%	
	<b>Total of 3.0</b>	<b>100%</b>	
<b>4</b>	<b>Battery Operated Electromagnetic Type Bulk Flow Meter &amp; SCADA System</b>	<b>Amount Quoted in Total for Items (Price Bid Summary- SOR Items- 166-176 &amp; Non SOR Items- 14-23) – Flow Meter &amp; SCADA System Cost shall be split as below</b>	<b>Net payable amount of each RA Bill shall be split further as below; a) 85% amount of RA Bills shall be paid and b) 15% amount shall be on hold and paid in annual installments (@ as specified in Clause D.1 of Vol IV) during Performance based maintenance of 5 Years.</b>
a	On supply of Machinery / Equipment's on pro-rata basis against monthly running bills at Site	50%	
b	On completion of Erection Works	25%	
c	On Completion of Testing and Commissioning of	15%	
d	On completion of commissioning of the Scheme and issuance of taking over certificate	10%	
	<b>Total of 4.0</b>	<b>100%</b>	
<b>5</b>	<b>On Completion of Allied Civil Works</b>	<b>Amount Quoted in Total for Items (Price Bid Summary- Non SOR Items- 24) – Allied Civil Works shall be paid on pro-rata basis</b>	<b>Net payable amount of each RA Bill shall be split further as below; a) 85% amount of RA Bills shall be paid and b) 15% amount shall be on</b>

Item	Description of Items	Percentage Payment to be released	Remark
a	On completion of Allied Civil Works	80%	<b>hold and paid in annual installments (@ as specified in Clause D.1 of Vol IV) during Performance based maintenance of 5 Years.</b>
b	On completion of commissioning of the Scheme and issuance of taking over certificate	20%	
	<b>Total of 5.0</b>	<b>100%</b>	
4	<b>Operation and</b>		
4.1	Every month in installment based on quoted prices of O & M will be paid	<b>Amount Quoted in Total for Items (Price Bid Summary- Non SOR Items- 25-41) – O&amp;M on pro-rata basis</b>	

**D.1 Amount on hold (15%) and to be released on successful performance-based maintenance shall be released in the following manner:**

S.No	Description	Percentage released
1.	After successful completion of 1st year Operation and maintenance and achievement of service level benchmarks	2%
2.	After successful completion of 2 <sup>nd</sup> year Operation and maintenance and achievement of service level benchmarks	2%
3.	After successful completion of 3 <sup>rd</sup> year Operation and maintenance and achievement of service level benchmarks	3%
4.	After successful completion of 4 <sup>th</sup> year Operation and maintenance and achievement of service level benchmarks	3%
5.	After successful completion of 5 <sup>th</sup> year Operation and maintenance and achievement of service level benchmarks	5%

**Bidder shall quote not less than 0.4% per year of the total quoted amount against yearly Operation and not less than 0.6% per year for Maintenance charges (Considering O & M period of 5 years). If it is found that bidder has quoted yearly Operation and Maintenance amount for any year(s) during O & M less than minimum percentage as specified above, the Employer reserves the right to apportion his O & M amount to satisfy above requirement without altering his quoted amount.**

**Notes:**

1. Separate Agreement for comprehensive Operation and maintenance shall have to be made after Handing over of complete project to the department.

**C. METHODOLOGY FOR FINANCIAL BID EVALUATION**

Employer 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, Employer will first evaluate bids for qualification requirement stipulated in the bid document.

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.

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.

Price-Bid will not be opened by Employer, 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.

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.

After complete evaluation of Technical-bids submitted by all the bidders and after any conclusion is made by Employer to its' own discretion, the price bid of technically responsive bidders will be opened. During the financial bid evaluation the bids shall be evaluated as per below formula to decide the lowest evaluated bid.

**EVALUATION OF PRICE BID:**

<b>Procedure For Price Bid Evaluation</b>			
<b>Sr.no</b>	<b>Item Description</b>	<b>Schedule Reference</b>	<b>Updated Factors</b>
a)	Total price for Consumer Survey, Data integration with GIS, System Improvement Plan, Design & Working Drawings	Schedule A	
b)	Total Price for Distribution System	Schedule B (B1+B2+B3)	
c)	Price quoted for Operation and Maintenance		
	Annual quoted price for 1 <sup>st</sup> year	Schedule C	
	Annual quoted price for 2 <sup>nd</sup> year	Schedule C	
	Annual quoted price for 3 <sup>rd</sup> year	Schedule C	
	Annual quoted price for 4 <sup>th</sup> year	Schedule C	
	Annual quoted price for 5 <sup>th</sup> year	Schedule C	
	<b>Total O&amp;M Cost (C=C<sub>1</sub>+C<sub>2</sub>+C<sub>3</sub>+C<sub>4</sub>+C<sub>5</sub>)</b>	<b>C</b>	
	<b>Total Cost (D=A+B+C)</b>	<b>D</b>	
	<b>O &amp; M Price per year shall be minimum 1.75 % of the Design Build Price...i.e Total of Schedule A + Schedule B</b>		
d)	The total price for Construction and Operation & Maintenance (O&M) for 5 years shall be evaluated on NPV method for each bidder. The following factors shall be considered:		
	Discounted cash flow factors for years 1,2,3,...n are taken as d <sub>1</sub> , d <sub>2</sub> ,.....d <sub>n</sub>	d <sub>1</sub>	0.893
	where $d_n = \frac{1}{(1+(r/100))^n}$	d <sub>2</sub>	0.798
	Eg. $d_1 = \frac{1}{(1+(r/100))^1}$	d <sub>3</sub>	0.713
	whereas,	d <sub>4</sub>	0.637
	n=1 for 1 <sup>st</sup> year	d <sub>5</sub>	0.569
	n=2 for 2 <sup>nd</sup> year		
	n=3 for 3 <sup>rd</sup> year		
	.....		
	.....		
	n = n for n <sup>th</sup> year		
e)	<b>Method of evaluation:</b>		
i	1 <sup>st</sup> year for O&M = d <sub>1</sub> * C <sub>1</sub>	1 <sup>st</sup> year (n <sub>1</sub> )	d <sub>1</sub> * C <sub>1</sub>
ii	2 <sup>nd</sup> year for O&M = d <sub>2</sub> * C <sub>2</sub>	2 <sup>nd</sup> Year (n <sub>2</sub> )	d <sub>2</sub> * C <sub>2</sub>
iii	3 <sup>rd</sup> year for O&M = d <sub>3</sub> * C <sub>3</sub>	3 <sup>rd</sup> Year (n <sub>3</sub> )	d <sub>3</sub> * C <sub>3</sub>

<b>Procedure For Price Bid Evaluation</b>			
<b>Sr.no</b>	<b>Item Description</b>	<b>Schedule Reference</b>	<b>Updated Factors</b>
iv	4 <sup>th</sup> year for O&M = $d_4 * C_4$	4 <sup>th</sup> Year ( $n_5$ )	$d_4 * C_4$
v	5 <sup>th</sup> year for O&M = $d_5 * C_5$	5 <sup>th</sup> Year ( $n_5$ )	$d_5 * C_5$
	<b>Summation of Sl. No. i - x discounted outflow (NPV) = N</b>		
f)	Total evaluated price = The net present value of the construction cost and the O & M cost with discounted rate of 10% per year (N)  The bidder with the lowest price based on the above evaluated price will be considered as L <sub>1</sub> Bidder	<b>Total Cost (NPV of Construction &amp; O&amp;M)</b>	<b>N</b>
		<b>Total Evaluated Price</b>	

**Lowest bidder is decided based on the total evaluated bid value as obtained irrespective of agency's quoted rate subjected to overall technical qualification of the bid.  
The Contract shall be awarded as per price quoted by the bidder in the price bid considering Total price consisting of summation of Schedule A, Schedule B & Schedule C.**

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

The Employer reserves right to select any offer or to reject any or all offers without assigning any reasons thereof. Employer does not bind itself to accept the lowest offer.

Signature of the Bidder (Stamp & Signature)

Date: