

PRICING DOCUMENT/ BILL OF QUANTITIES (BOQ)

PREAMBLE TO THE BOQ

1. The Bill of Quantities shall be read in conjunction with Instructions to Tenderers, General and Special Conditions of Contract, Notice Inviting Tender and Scope of Work.
2. Schedule ‘A’ comprises of Any DSR 2023 items for Civil work as detailed in the Scope of Work.
3. Schedule ‘B’ comprises of items for servicing, maintenance and repair of STP Plant, ETP Plant & UF Unit as detailed in the Scope of Work & BoQ.
4. Schedule ‘C’ comprises of items for chemicals & consumables of STP Plant, ETP Plant & UF Unit as detailed in the Scope of Work & BoQ.
5. Schedule ‘D’ comprises of providing Manpower (skilled & unskilled) for both day to day work and as and when required basis i.e. Plant Operator, Electrician, Plumber, and sweeper, etc. as detailed in the Scope of Work & BoQ.
6. Schedule ‘E’ comprises of Technical Visits of Expert Engineer for whole operation of STP Plant, ETP Plant & UF Unit.
7. For Schedule A, Schedule B, Schedule C & Schedule E, the bidder may quote above, below, or at par with the estimated rates.
8. For Schedule D (Manpower), the bidder shall quote only above the estimated rates. If a tenderer quotes “below/at par” with the estimated rate of Schedule D (Manpower), i.e., offers any rebate/discount/concession for Supply of Manpower as per the Tender Document, then his Financial Bid will be treated as non-responsive, will not be considered, and his EMD will be forfeited.
9. The Bidder with the lowest quoted cost for Contract: AMC-STP-01: “Operation and Maintenance of the Sewage Treatment Plant, Effluent Treatment Plant and Ultra Filtration Unit at the Depot and Staff Quarter on the Noida - Greater Noida Corridor in the financial quote (L1 bidder) shall be selected for the award of contract.
10. It will be deemed to include all Taxes including GST, Duties, Octroi, Royalty etc, cost of all plants, labour, supervision, materials, transport, all temporary works, erection, maintenance, utility identification, contractor’s profit and establishment/ overheads, together with preparation of design and drawings, all general risks, insurance liabilities, compliance of labour laws and obligations set out or implied in the contracts.

Contract: AMC-STP-01: "Operation and Maintenance of the Sewage Treatment Plant, Effluent Treatment Plant and Ultra Filtration Unit at the Depot and Staff Quarter on the Noida – Greater Noida Corridor.

11. The work executed against the BOQ items in would be paid on measurement basis; manpower shall be remunerated as per statutory minimum wages prevailing from time to time.
12. The Contractor may rise their „On Account“ payments on monthly basis as per the status of work on the last day of the respective month.
13. The Financial Bid submitted is unconditional and fulfils all the requirements of the Tender Document.
14. We have completely read and understood the Bid Document. The Financial Tender submitted is unconditional and fulfils all the requirements of the Tender Document.
15. Our Financial Proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal. We understand you are not bound to accept any Proposal you receive.
16. In case of revision (increase or decrease) either in minimum wages and/or ceiling of Wage/Salary limit for payment of EPF & ESI etc, and/or in the percentage value of contribution towards EPF & ESI etc by government (state/union) then the contractor will be reimbursed revised statutory charges/wages etc. of BOQ will be suitably modified). All payments that are statutory are paid with the provision that they are transferred to workmen in toto without any deduction whatsoever. Any default in payment of wages less than statutory wages etc. and claim of such wages etc. from NMRC will be treated as fraudulent practice and action shall be taken against contractor for such fraudulent act in terms of contract/Indian Contract Act/Other applicable Law.
17. If the tenderer fails to quote rates against any item, the tender may be treated as incomplete and non-responsive and shall be rejected.
18. Tenderers shall quote their offer in Indian Rupees (INR) only for Schedule A, Schedule B, Schedule C, Schedule D & Schedule E.
19. Errors will be corrected by the employer for any arithmetic errors in computation or summation as per contract conditions.
20. All the unit rates and amounts should be filled only in figures. In case of any discrepancy between amount in figures and in words, the value provided in figures shall be treated as sacrosanct.
21. The work executed against the BOQ items would be paid on actual targets achieved basis.

PRICE SCHEDULE

AMC-STP-01: Operation and Maintenance of Sewage Treatment Plant (STP), Effluent Treatment Plant (ETP) and Ultra Filtration (UF) Unit installed at Depot of N-GN Corridor

BOQ ITEM NO.	DESCRIPTION OF ITEMS	UNIT	RATE (Rate reference taken from market)	BOQ QTY	BOQ AMOUNT
	SCHEDULE A : DSR				
1.1	Any Other DSR-2023 Civil	LS	₹ 500,000.00	1.00	₹ 500,000.00
	TOTAL OF SCHEDULE A				₹ 500,000.00
	SCHEDULE B : SERVICING, MAINTENANCE AND REPAIR				
2.1	Servicing,Lubrication/oiling, cleaning & greasing of motors, pumps,air blowers, mixer & dewatering machines of the STP regularly per month or as per requirement				
2.1.1	Sewage Lifting Pump-(Submersible type) x 3 Nos.	nos	₹ 183.33	108.00	₹ 19,799.64
2.1.2	Sewage Lifting/ Transfer Pump (Monobloc type) x 2 Nos.	nos	₹ 275.00	72.00	₹ 19,800.00
2.1.3	Sludge Transfer Pumps-(Monobloc type)x 2 Nos.)	nos	₹ 275.00	72.00	₹ 19,800.00
2.1.4	Air Blowers (Twin Lobe type) x 2 Nos.	nos	₹ 625.00	72.00	₹ 45,000.00
2.1.5	Filter Feed Pumps (Monobloc) x 2 Nos.	nos	₹ 275.00	72.00	₹ 19,800.00
2.1.6	Poly Dosing Pumps with HDPE x 1nos	nos	₹ 550.00	36.00	₹ 19,800.00
2.1.7	Agitator/ Mixer x 1 Nos	nos	₹ 550.00	36.00	₹ 19,800.00
2.1.8	Sludge Dewatering Machine (Centrifuge/ Filter Press)	nos	₹ 550.00	36.00	₹ 19,800.00
2.1.9	Agitator/ Mixer for Polyelectrolyte Dosing System of Sludge Dewaterng Process.	nos	₹ 550.00	36.00	₹ 19,800.00
2.2	Servicing,Lubrication/oiling, cleaning & greasing of motors, pumps,air compressor of the UF Plant regularly per month or as per requirement				
2.2.1	UF Feed Pump-(Monoblock type) x 2 Nos.	nos	₹ 275.00	72.00	₹ 19,800.00
2.2.2	CIP Pump-(Monoblock type) x 1 Nos.	nos	₹ 550.00	36.00	₹ 19,800.00
2.2.3	Backwash Pump-(Monoblock type) x 1 Nos.	nos	₹ 550.00	36.00	₹ 19,800.00
2.2.4	Air compressor x 1nos	nos	₹ 1,250.00	36.00	₹ 45,000.00
2.3	Servicing,Lubrication/oiling, cleaning & greasing of motors, pumps, mixer machine of the ETP regularly per month or as per requirement				₹ -
2.3.1	Effluent Lifting Pump-(Submersible type) x 3 Nos.	nos	₹ 185.00	108.00	₹ 19,799.64
2.3.2	Effluent Lifting/ Transfer Pump (Monobloc type) x 2 Nos.	nos	₹ 275.00	72.00	₹ 19,800.00
2.3.3	Chemical Dosing Pumps	nos	₹ 550.00	36.00	₹ 19,800.00
2.3.4	Anoxic Mixer x 1 Nos	nos	₹ 550.00	36.00	₹ 19,800.00
2.4	Repairing/Overhauling of motors, pumps,air blowers, mixer, dewatering machines etc. of the STP/ETP/UF plant including the cost of new spare parts fitted during repair work, removing & refixing, transportation & other taxes all complete as per direction of engineer in charge				₹ -
2.4.1	Sewage Lifting Pump-(Submersible type) x 3 Nos.	nos	₹ 4,000.00	36.00	₹ 144,000.00
2.4.2	Sewage Lifting/ Transfer Pump (Monobloc type) x 2 Nos.	nos	₹ 2,250.00	24.00	₹ 54,000.00
2.4.3	Sludge Transfer Pumps-(Monobloc type)x 2 Nos.)	nos	₹ 2,250.00	24.00	₹ 54,000.00
2.4.4	Air Blowers (Twin Lobe type) x 2 Nos.	nos	₹ 12,500.00	20.00	₹ 250,000.00
2.4.5	Filter Feed Pumps (Monobloc) x 2 Nos.	nos	₹ 2,250.00	24.00	₹ 54,000.00
2.4.6	Poly Dosing Pumps x 1nos	nos	₹ 4,500.00	12.00	₹ 54,000.00
2.4.7	Agitator/ Mixer x 1 Nos	nos	₹ 4,500.00	12.00	₹ 54,000.00
2.4.8	Sludge Dewatering Machine (Centrifuge/ Filter Press)	nos	₹ 10,000.00	6.00	₹ 60,000.00
2.4.9	Agitator/ Mixer for Polyelectrolyte Dosing System of Sludge Dewaterng Process.	nos	₹ 4,500.00	12.00	₹ 54,000.00
2.4.10	UF Feed Pump-(Monoblock type) x 2 Nos.	nos	₹ 2,250.00	24.00	₹ 54,000.00
2.4.11	CIP Pump-(Monoblock type) x 1 Nos.	nos	₹ 4,500.00	12.00	₹ 54,000.00
2.4.12	Backwash Pump-(Monoblock type) x 1 Nos.	nos	₹ 4,500.00	12.00	₹ 54,000.00
2.4.13	Effluent Lifting Pump-(Submersible type) x 3 Nos.	nos	₹ 4,000.00	36.00	₹ 144,000.00
2.4.14	Effluent Lifting/ Transfer Pump (Monobloc type) x 2 Nos.	nos	₹ 6,000.00	24.00	₹ 144,000.00
2.4.15	ETP Chemical Dosing Pumpsx 3nos	nos	₹ 2,500.00	36.00	₹ 90,000.00
2.4.16	Anoxic Mixer x 1 Nos	nos	₹ 4,500.00	12.00	₹ 54,000.00
2.4.17	Air compressor x 1nos	nos	₹ 25,000.00	2.00	₹ 50,000.00
2.4.18	Flushing Pumps x 2 Nos.	nos	₹ 40,000.00	4.00	₹ 160,000.00
2.4.19	Irrigation/Gardening pumps x 4nos	nos	₹ 6,250.00	16.00	₹ 100,000.00

BOQ ITEM NO.	DESCRIPTION OF ITEMS	UNIT	RATE (Rate reference taken from market)	BOQ QTY	BOQ AMOUNT
2.5	Repairing of electric panel accessories/fittings (like cable wire of required gauge, switch set, MCB set, cable tie, thimble & other operating panel accessories etc. complete) for plants operating panels and maintaining STP, ETP & UF plant.				
2.5.1	STP Electrical panel with accessories	nos	₹ 12,500.00	12.00	₹ 150,000.00
2.5.2	UF Electrical panel with accessories	nos	₹ 12,500.00	12.00	₹ 150,000.00
2.5.3	ETP Electrical panel with accessories	nos	₹ 3,500.00	12.00	₹ 42,000.00
2.5.4	HP pumps Electrical panel with accessories	nos	₹ 3,500.00	12.00	₹ 42,000.00
2.6	Lab Report of Outlet water (Lab report of the treated water for STP , ETP, UF Plant will be done Quarterly from NABL/ Govt. approved lab, to ensure the outlet parameters like pH/ TSS/ BOD/ COD/ O&G as per the CPCB norms.)	No.	₹ 7,000.00	12.00	₹ 84,000.00
TOTAL OF SCHEDULE B					₹ 2,536,999.28
SCHEDULE C : CHEMICALS & CONSUMABLES					
3	Providing and dosing of chemicals & consumables for proper operation of STP, ETP & UF Plant inclusive of transportation, loading and unloading at site.				
3.1	For STP				
3.1.1	Bio Culture/ EM Solution	Liter	₹ 385.00	72.00	₹ 27,720.00
3.1.2	Urea	kg	₹ 75.00	72.00	₹ 5,400.00
3.1.3	DAP	kg	₹ 65.00	72.00	₹ 4,680.00
3.1.4	Jaggery	kg	₹ 90.00	72.00	₹ 6,480.00
3.1.5	Sodium Hypo Chlorite/ Hypo	liter	₹ 26.00	6,000.00	₹ 156,000.00
3.1.6	Poly electrolyte for sludge dewatering process	liter	₹ 525.00	36.00	₹ 18,900.00
3.2	For ETP				
3.2.1	Lime	Kg	₹ 25.00	5,400.00	₹ 135,000.00
3.2.2	Alum	Kg	₹ 28.00	5,400.00	₹ 151,200.00
3.2.3	Polyelectrolite	Liter	₹ 525.00	1,080.00	₹ 567,000.00
3.3	For UF Plant				
3.3.1	Hypo chloride	Liter	₹ 26.00	1,080.00	₹ 28,080.00
3.3.2	Citric Acid	Kg	₹ 34.00	1,080.00	₹ 36,720.00
3.4	Providing and fixing MBBR Media (If required)-1lot	nos	₹ 75,000.00	2.00	₹ 150,000.00
3.5	Providing and fixing Tube deck media (If Required)-1lot	nos	₹ 95,000.00	2.00	₹ 190,000.00
3.6	Providing and fixing Sand media and Activated carbon media from both MS Pressure Vessels i.e. Pressure sand filter and Activated Carbon filter.	nos	₹ 135,000.00	2.00	₹ 270,000.00
3.7	Providing and fixing new Solonoid Valve(SV)-5nos	nos	₹ 25,000.00	6.00	₹ 150,000.00
3.8	Providing and fixing UF Membrane x 3nos (Effective surface area-(40-60m2) of Membrane	nos	₹ 600,000.00	1.00	₹ 600,000.00
3.9	Providing and fixing Electro-mgnetic flow meter at Inlet	nos	₹ 45,000.00	1.00	₹ 45,000.00
3.10	Providing and fixing Magnetic/ Level Switches-1lot	nos	₹ 4,500.00	6.00	₹ 27,000.00
3.11	Providing and fixing Pressure Guage/ Indicators-1lot	nos	₹ 4,500.00	6.00	₹ 27,000.00
3.12	Providing and fixing Rotameters	nos	₹ 20,000.00	4.00	₹ 80,000.00
TOTAL OF SCHEDULE C					₹ 2,676,180.00
SCHEDULE D :MANPOWER					
4.1	Skilled Plant Operators (per shift of 8 Hrs with 3 Shifts in 24 Hrs. For 7 Days a week.) Work of Operator: i) Inlet & Outlet flow rate, pH, temperature parameters should be checked & logged by the operators. ii) Opetator will prepare and dose chemical solutions as per the requirement for STP operation. iii) Minor work like oiling & greasing of electromechanical equipments, backwashing of the Pressure Filters (MGF/ ACF) etc. works related to plant operation will done by operator at site. (Note : The vendor has follow the minimum wages rules, PF, ESIC, insurance etc as per the labour laws of Central Govt of India)	No.	₹ 1,029.00	3,285.00	₹ 3,380,265.00

BOQ ITEM NO.	DESCRIPTION OF ITEMS	UNIT	RATE (Rate reference taken from market)	BOQ QTY	BOQ AMOUNT
4.2	Electrician/Plumber/Supervisor for smooth operation and maintenance of the STP/ETP/UF plant.(4 visits per month)	No.	₹ 1,029.00	144.00	₹ 148,176.00
4.3	Sweeper for STP/ETP/UF Plant-1nos(Unskilled) Work of Sweeper- 1.)Remove material from bar Screen- once in 2-3 days 2.)Remove of floating Oil and grease- once in 2-3days 3.) Cleaning Air blower Filter-Regularly 4.) Cleaning of All Plant area/Mechanical items/Electrical equipments, Pipelines etc	No.	₹ 883.46	936.00	₹ 826,918.56
TOTAL OF SCHEDULE D					₹ 4,355,359.56
SCHEDULE E :Technical Visits of Expert Engineer					
5.1	Technical Visit of Expert engineer for the whole operation of the STP/ETP/UF plant.(1 visits per month)	no.	₹ 8,000.00	36.00	₹ 288,000.00
TOTAL OF SCHEDULE E					₹ 288,000.00
TOTAL ESTIMATE AMOUNT OF SCHEDULE A, B, C, D & E (INCLUDING GST & OTHER TAXES)					₹ 10,356,538.84