

**GUJARAT WATERSUPPLY & SEWERAGE BOARD**

**GANDHINAGAR**

(A WHOLLY OWNED GOVERNMENT OF GUJARAT UNDERTAKING)



**Name of Work:** Comprehensive Operation & Maintenance of Civil & Electromechanical assets such as elevated service reservoirs (E.S.R), HGLR, sump, pump house, all distribution pipelines, valves, pumping machinery & electrical equipment etc. for the Raval regional water supply schemes, including supply of 5.37 MLD potable water to all the 09 villages and 1 city for 60 months period. Taluka:-Kalyanpur District:- Devbhumi Dwarka based on Narmada Pipe line NC-21. Excluding supply of PAC/Alum, Bleaching Powder/Chlorine Gas etc. complete.

Taluka: Kalyanpur

Dist.:Devbhumi Dwarka

**Estimated Cost : Rs1,87,56,205.69/-**

**VOLUME – II**

**PRICE BID**

Chief Engineer

Gujarat Water Supply & Sewerage Board

**Zone –3 Rajkot**

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**VOLUME II**

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**PRICE SCHEDULE A**

Schedule showing approximate quantity of materials to be supplied to the contractor at the govt. store for the work to be executed on contract and the rate which they are to be charged.

Sr. No.	Particular	Quantity	Issue Rate	Unit	Place of Delivery
1	Various dia. of -All type of- Pipes	As per Requirement	Free of Cost	Rmt	Departmental store at Suryavadar HW store or any other store in DevbhumiDwarka District Jurisdiction where material is available.
2	All type of valve	As per Requirement	Free of Cost	No.	Departmental store at Suryavadar HW store or any other store in DevbhumiDwarka District Jurisdiction where material is available.
3	PAC 10% liquid	As per Requirement	Free of Cost	...	Departmental store at Suryavadar HW store or any other store in DevbhumiDwarka District Jurisdiction where material is available.
4	Bleaching Powder / Chlorine gas	As per Requirement	Free of Cost	...	Departmental store at Suryavadar HW store or any other store in DevbhumiDwarka District Jurisdiction where material is available.
5	Submono Pump Set with Accessories	As per Requirement	Free of Cost	Set.	Departmental store at Suryavadar HW store or any other store in DevbhumiDwarka District Jurisdiction where material is available.

**Note:**

1. Materials not included in "Schedule – A" but required for the work shall be provided by the contractor at his own cost.
2. Any materials required for items other than labour charges items mentioned in "Schedule – B" and materials not included in "Schedule – A" but available with dept. will be issued on request of the contractor at departmental issued rate or market rate whichever is more.
3. The contractor shall provide his own arrangement for loading, unloading and transporting the materials issued by the dept. from store to site at his own cost. Contractor will be responsible for damages whatsoever during transfer.
4. The unused materials issued by the department for this work shall be returned to the department in good and acceptable condition by the contractors. Any such unused materials not returned by the contractor in time or issued will be recovered at Double of (As per issue rate + 3% storage charge or Board RC + 3% storage charges) whichever is more.

5. All materials such as Specials, Fittings, Spares, etc. shall be brought by Agency / Contractor at site of work.
6. The material which requires to be procured by contractor and same as available with the department the same can be issued to the contractor after prior approval from the competent authority and charged for the same will be at the current market rate or issue rate fixed by the department whichever is higher. The contractor shall have to deposit total cost of materials issued or shall be recovered from the running account bill.
7. The materials issued for the above work shall be used in the above O&M work only. If any of materials issued for this work and found used in other works shall be charged at the double rate.
8. As per the instructions of the competent authority and availability of materials, if needed contractor have to transport the same from the other store to .....Scheme for which no extra carting, loading, unloading will be paid.
9. The materials issued free of cost to the contractor is to be transported to the site of work in good condition by the contractor for which no extra payment will be made.
10. The materials to be brought/purchase by the contractor shall be got approval from the EIC before using in the work.

**Signature of the contractor**

**Executive Engineer  
P. H. Works Division  
GWSSB, Khambhaliya**

**PRICE SCHEDULE B****Price Schedule for Comprehensive O&M of Sani-II RWSS.**

**Name of Work:** Comprehensive Operation & Maintenance of Civil & Electromechanical assets such as elevated service reservoirs (E.S.R), HGLR, sump, pump house, all distribution pipelines, valves, pumping machinery & electrical equipment etc. for the Raval regional water supply schemes, including supply of 5.37 MLD potable water to all the 09 villages and 1 city for 60 months period. Taluka:-Kalyanpur District:- Devbhumi Dwarka based on Narmada Pipe line NC-21. Including supply of PAC/Alum, Bleaching Powder/Chlorine Gas etc. complete.

<b>Schedule - B</b>		
<b>Part</b>	<b>Description</b>	<b>Amount up to 2 decimals (In Rs.)</b>
<b>A</b>	<b>Part A</b> Operation & Maintenance of Civil & Electromechanical assets such as elevated service reservoirs (E.S.R), HGLR, sump, pump house, all distribution pipelines, valves, pumping machinery & electrical equipment etc. for the raval water supply schemes, including supply of 5.37 MLD potable water to all the 09 villages & 1 city for 60 months period. Taluka:-Kalyanpur District:- Devbhumi Dwarka based on Narmada Pipe line NC-21. Including supply of PAC/Alum, Bleaching Powder/Chlorine Gas etc. complete.	<b>15810422.27</b>
<b>B</b>	<b>Part B</b> Maintenance activities, measured and paid separately, such as painting, cleaning of reservoirs/ tanks, procurement and replacement of filter media etc complete as per this tender document	<b>2584221.99</b>
<b>C</b>	<b>Part C</b> Repair, upgradation of non-functional assets which are crucial for safe and efficient functioning of RWSS	<b>361561.43</b>
	<b>Total Amount (A+B+C)</b>	<b>18756205.69</b>

Total of Schedule B in Rupees One Crore Eighty Seven lac fifty six thousand two hundred five and sixty nine paise only.

**I / We am / are willing to carry out the work at \_\_\_\_\_ % above / Below percent (should be written in figure and words) of the estimated rates mentioned above amount of my / our tender works out as under.**

Estimated amount Put to tender: Rs. <b>18756205.69</b>	Estimated amount Put to tender: Rs. <b>18756205.69</b>
Deduct _____ % above Rs. _____	Add _____ % above Rs. _____
Net Rs. _____	Net Rs. _____
In words Rupees _____	In words Rupees _____

**Note:**

- Rates to be quoted exclusive of GST.
- Part A is payable on monthly basis whereas part B & C are subject to completion of activities and approval of the measurement.
- Water supply of target quantity of water to all villages on a daily basis. If due to breakdown, agency is not capable of supplying water then such quantity should be supplied the next day to cope up with the shortage. Such that the water supplied on the next day will be 2 times the regular per day target.
- Contractor should quote rate in words & figure both.
- Insurance Policy should be procured in favour of Executive Engineer, PH Works Division, Khambhaliya, and contractor has to produce it before entering into agreement with department, for the full period of O&M.
- The bidders should strictly note that rate will be fixed and firm. No escalation will be given during the maintenance period.
- The work should be carried out as per the terms and conditions laid down in the tender specification.
- The cost of raw water, electricity will be borne by GWSSB.
- Contractor will supply necessary stock of Chlorine gas at the location of chlorination plant. All other required material for O&M work shall be brought by the contractor at his own cost including loading, unloading and carting and the same material shall get approval from the Engineer-in-charge before use in the work.
- The cost is including all type of taxes (other than GST), octroi, freight, loading, unloading, carting labour charges payment to labour including insurance, P.F. and all other liabilities for the staff engaged for the O&M work.
- All replaced material (provided from the department's store) shall be returned to department store by the contractor at his own cost.
- Painting of overall structures: Internal/external painting of civil structures, machineries, manifolds, valves etc.

Interior Paint: Distemper paint to all civil assets

Exterior paint: shall be acrylic emulsion paint colour (like APEX): pump house, treatment plants, treated water pumping stations, GSRs, ESRs, sump, stores, etc all.

Oil paint colour: All type of doors, windows, ventilation, shutter, pump, motor, all valves & equipment inside pump house, transformer yard, D.P. structure, transformer etc

Black Japan colour: air valve, sluice valve, riser pipe of air valve, zero velocity valve, butterfly valve (outdoor), bypass arrangement etc.

**Breakup of Schedule B****Part A: Operation & Maintenance**

Sr. No.	Qty.	Unit	Item	Rate (in Rs.)	Per	Total Amount in Rs.
1	2	3	3	4	5	6=[2] x [4]
A	60	Months	Item No.1 <i>Operation &amp; Maintenance of Civil &amp; Electromechanical assets such as elevated service reservoirs (E.S.R), HGLR, sump, pump house, all distribution pipelines, valves, pumping machinery &amp; electrical equipment etc. for the raval supply schemes, including supply of 5.37 MLD potable water to all the 09 villages &amp; 1 city for 60 months period. Taluka:-Kalyanpur District:-Devbhumi Dwarka based on Narmada Pipe line NC-21. Including supply of PAC/Alum, Bleaching Powder/Chlorine Gas etc. complete.</i>			
i	12	Months	First Year	233726.00	Month	2804712.00
ii	12	Months	Second Year	247749.56	Month	2972994.72
iii	12	Months	Third Year	262614.53	Month	3151374.40
iv	12	Months	Fourth Year	278371.41	Month	3340456.87
v	12	Months	Fifth Year	295073.69	Month	3540884.28
<b>Total Part - A</b>						<b>15810422.27</b>

Total for Part A in. Rupees One Crore fifty eight lac ten thousand four hundred twenty two & twenty seven paise only

**Part B- Maintenance (separately payable on actuals, as measured)**

Sr. No.	Qty.	Unit	Item	Rate (in Rs.)	Per	Total Amount in Rs.
1	2	3	3	4	5	6=[2] x [4]
B1 (i)			Item no.2 Inside-Outside Painting to all Functional civil structures, as per schedule (twice in the contract period)			
	8642.83	Sqm	Sump	113.40	Sqm	980096.45
		Sqm	Pump House			
		Sqm	Compound Wall			
		Sqm	ESR			
B1 (ii)			<b>Item no. 3</b> Oil paint colour: All type of doors, windows, ventilation, shutter, pump, motor, all valves &		Sqm	

Sr. No.	Qty.	Unit	Item	Rate (in Rs.)	Per	Total Amount in Rs.
1	2	3	3	4	5	6=[2] x [4]
	38.84		equipment inside pump house, transformer yard, D.P. structure, transformer etc(twice in the contract period)	104.27		4049.85
<b>B1 (iii)</b>	<b>890.19</b>		<b>Item no.4</b> Food Grade epoxy coat: Inside of storage reservoir/ tanks as per schedule. (twice in the contract period)	1451.00	.Sqm	1291665.69
<b>Sub Total- Part B1 (i, ii, iii)</b>						<b>2275811.99</b>
<b>B2</b>			<b>Item no.5</b> <b>Cleaning of Storage reservoir: UG sumps, ESR, HGLR/ GLCC and all village level sumps every six month s(10 times in the contract period)</b>			
<b>a</b>	<b>10</b>	<b>Job</b>	Sump - 30.00 Lakh Lit - 01 No.	26175.00	<b>Job</b>	261750.00
<b>b</b>	<b>10</b>	<b>Job</b>	ESR – 5.00 Lakh Lit - 01 No.	4666.00	<b>Job</b>	46660.00
<b>Sub Total- Part B2</b>						<b>308410.00</b>
<b>Total- Part B (B1+B2)</b>						<b>2584221.99</b>

Total for Part B in. Rupees Twenty fivelakh eighty four thousand two hundred twenty one & ninty nine paisaonly.

### **Part C- Upgradation or Repair of non-functional legacy assets**

Sr. No.	Qty.	Unit	Item	Rate (in Rs.)	Per	Total Amount in Rs.
1	2	3	3	4	5	6=[2] x [4]
			<b>Item no. 6</b> <b>Upgradation or Repair of non-functional legacy assets (separately payable on actuals, as measured)</b>			
	1	Job	Repairing of Pump house Slab at Suryavadar Headworks	53030.43	Job	53030.43
	1	Job	Mechanical work	308531.00	Job	308531.00
<b>Total- Part C</b>						<b>Rs. 361561.43</b>

Total for Part C in. Rupees three lakh sixty one thousand five hundred sixty one & forty three paise only

**Part C: Detailed BOQ****Civil**

No.	Details	No.	Length (Mt.)	Width (Mt.)	Height (Mt.)	volume	unit	Rate	Amount
	<b>Suryavadar HW pump house :4.5 x 6 Sq. Mt.</b>								
1	Demolition including stacking of servicable materials and disposal of unserviceable materials with all lead and lift (RCC Work)								
	RCC Slab of P.H	1.00	6.00	4.50	0.125	3.38	cum	1097.15	3702.88
	Beam	3.00	4.50	0.30	0.300	0.41	cum	1097.15	444.35
2	providing formwork of ordinary timber planking so as to give a rough finish including centering shuttering struting and propping height not exceeding 4 meter and removal of the same for in situ RCC work.	1.00	6.00	4.50		27.00	sqm	71.63	1934.01
	Beam	3.00	4.50	0.30		4.05	sqm	71.63	290.10
3	Providing & Laying controlled cement concrete M 250 and curing complete excluding cost of formwork and reinforcement for RCC work, Slabs upto floor two level	1.000	6.000	4.500	0.150	4.050	cum	4627.790	18742.55
	Beam	3.000	4.500	0.300	0.300	1.215	cum	4627.790	5622.76
4	Providing HYSD bar reinforcement for RCC work including bending, binding and placing in position complete upto floor two level.								
	for main bar	37.67		5.45	205.28	126.72	kg		
	for distribution bar	27.67		3.95	109.28	53.97	kg		
	beam	12.00		5.00	60.00	37.04	kg		
	stirrups	90.00		1.20	108.00	53.33	kg		
						271.06			

5% extra for lap bend wastage					284.61	Kgs	63.24	17998.63
5	Providing 10mm thick cement plaster in single coat on brick/concrete walls for interior plastering upto floor two level & finished even & smooth in cement mortar (1 cement : 6 sand)	1.00	6.00	4.50	27.00	sqm	109.71	2962.17
	Beam	3.00	4.50	0.90	12.15	sqm	109.71	1332.98

**Mechanical****TOTAL****53030.43**

Item No.	Description of Item	Qty.	Unit	Rate	Amount
1	Providing and erecting Approved make pole moulded case circuit breaker <b>80A(MCCB)</b> Conforms to IS/IEC 60947-2 with trip free Mechanism, Current Limiting type with Microprocessor release with adjustable Setting & having 2NO+2NC Potential free auxiliary Contact with all necessary Electro-Mechanical Protection & Interlocks etc. with Inclosure	2	Each	34352.00	68704.00
2	Supplying and erecting <b>LED street light / Flood light fittings</b> with High power White LEDs wattage of 1 Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminum with diffuser and Polycarbonate optics / lenses with company mark / name engraved or ambossed 120 to 300 V., Power Factor more than 0.95, THD < 10 %, CCT 5000 K to 5700 K, Uniformity ratio > 0.45, Luminare efficacy > 85 %. CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL / Bridge Lux (U.S.A.) Make LED used for luminaire. (Each fittings required LM-79 & LM-80 certificates) (B) Flood Light (IP-65), Surge-10 KV <b>240 watts Cat.III</b>	8	Each	10711.00	85688.00
3	Providing and erecting AC-3 duty <b>3 pole power contactor</b> with 2 NO. & 2 NC aux contacts complete with 415V/ 220V operating coil suitable for (L & T, BCH, T.C., Siemens, C & S make)	1	Each	4746.00	4746.00
4	Supplying & erecting approved make <b>Digital time switch</b> having lithium cell 6 years operative and operate battery backup 1 channel day clock with 14 memory Programme, suitable to operate on 240 V + 5 %, 16A with, floating contract Minimum switching steep time 1 minimum & LCD display. Also comprised permanent ON /OFF switching, Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.	1	Each	3137.00	3137.00

5	Providing and erecting <b>XLPE (IS:7098) (I)-88 ISI</b> armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables. <b>4 core 16 Sq.mm</b>	50	Mtr.	152.00	7600.00
6	Providing and fixing heavy duty flange type brass <b> cable gland</b> with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc. for following size of cables. <b>2 to 4 core 16 Sq.mm</b>	4	Each	47.00	188.00
7	Providing & erecting <b>240 V MCB</b> double pole switch for lighting Load (B Curve) having 10 KA breaking capacity & conforms to IS : 8828 in existing box having following capacity. <b>6 to 32 Amp. Cat.III</b>	8	Each	297.00	2376.00
8	Providing and erecting approved make <b>thermo -plastic moulded distribution box for mounting MCB /ELCB</b> having DIN rail transparent moulded flap 100Amp. copper bus strip for 7 ways (Without MCB/ELCB)	2	Each	908.00	1816.00
9	<b>a) Making trench in Hard Murrum / Tar Road</b> of suitable width of 90 cm or required depth for laying any size of cable or locating the fault all over the run and back filling the same and making the surface as normal ground	50	Mtr.	74.00	3700.00
	<b>b) If required, use additional machinery like hammer driller or JCB.</b>	10	Mtr.	354.00	3540.00
10	Supply& Installation of SM Pump Set: Supply & Installation of Horizontal Sub-Mono Pump Set 3 Phase 400/440 Volt, 50 c/s, A.C. Supply & 2900 RPM with 30 M Copper Cable following IS 14220 and MOC:- Casing- CI FG260, Impeller- CF8M & Shaft- SS410. SM- (440 LPM X 52 M ) Parallal rate taken of SM-2.9	2	Nos	26143.00	52286.00
11	Supply& Installation of SM Pump Set: Supply & Installation of Horizontal Sub-Mono Pump Set 3 Phase 400/440 Volt, 50 c/s, A.C. Supply & 2900 RPM with 30 M Copper Cable following IS 14220 and MOC:- Casing- CI FG260, Impeller- CF8M & Shaft- SS410. SM- (960 LPM X 43 M ) Parallal rate taken of SM-3.6	2	Nos	37375.00	74750.00
<b>Total, Rs...</b>					<b>308531.00</b>

**Brief note on operational issues and need for the repairs:** \_\_\_\_\_

\_\_\_\_\_ (include notes from inspection by DEE and the need for such items)

### **Abstract of BOQ for Part C**

Total Estimated Cost of Part C: 361561.43

Total time limit for completion of Part C scope of work: 6 (months) (shall not be more than 12 months from start date of contract).

Part C of the price bid shall include **inherited non-functional legacy assets which need to be repaired to make the system functional and efficient. The items shall be as per the baseline assessment carried out by the concerned DEE.**

**This may include the following items:**

- Resolving technical issue due to which tail end villages are not receiving water
- Resolving technical issue to ensure water supply to villages (other than tail end)
- Rectification/ repair of non-functional assets
- Replacement of electromechanical asset at end of life. Such as transformers, pumping machinery etc.

**This part shall be a one-time activity. Once all assets are repaired, maintenance and upkeep of the same will be the responsibility of O&M agency.**

**Instructions:**

- For Part C, approval shall be sought from concerned engineer as per the delegation of powers.
- Such cases will be scrutinized, and necessary actions will be recommended by a special task team formed by the GWSSB.
- The estimated cost of Part C shall not be more than 30% of the total estimated cost of the tender (Part A + Part B).
- No extra/ excess items will be allowed under Part C scope.