

Construction Division

Office of the
Executive Engineer (C),
A.O. Building, Annexe,
Room No. 114, Ground Floor
Gandhidham (Kutch)

No. CN/WK/CSR/

Dated: /09/2024

To,

Name of Work : Supply & Installation of RO Plant under CSR request for BSF Campus Gandhidham, Shri Navchetan Andhjan Mandal-Madhapar, Shri United Salt works Prathmik shala-Kandla, Akhil Kutch Maheshwari vikas Seva Sangh, Mirjapar Bhuj & Ganeshnagar Panchayat Prathmik kumar shala At Gandhidham-Kutch.

Sir,

Quotations are invited for the subject works to be carried out with terms and condition attached . Your quotation should reach this office latest by _____ at 15:00 hrs.

SCHEDULE - B

It. No.	Description of Item	Qty	Rate		Unit		Amount																																																		
			In Fig.	In Words	In Fig.	In Words																																																			
1	<p>Supplying & fixing of 250 LPH R.O. Water purifier at Shri Navchetan Andhjan Mandal - Madhapar - Bhuj. with following specifications:-</p> <ul style="list-style-type: none"> •Power stabilizer with necessary arrangements for electricity supply (wiring, plug point, etc.) •ISO standard water tank (500 liters capacity, up to 4.00m height) with all necessary ISO standard fixtures and fittings.) •One-year warranty with three free services in one year for the RO plant, including all labor and materials at no cost. •Completion as directed by the Engineer in charge, with all materials, labor, tools, and tackles. <p>Feed Water Quality</p> <table style="width: 100%; border: none;"> <tr><td>(A) pH</td><td>: Between 3 to 11</td></tr> <tr><td>(B) Suspended solids</td><td>: Nil</td></tr> <tr><td>(C) Turbidity.</td><td>: Less than 1 NTU</td></tr> <tr><td>(D) Free Iron as Fe+3</td><td>: Nil</td></tr> <tr><td>(E) Free organic solvents</td><td>: Nil</td></tr> <tr><td>(F) Free chlorine</td><td>: Nil</td></tr> <tr><td>(G) Oil & Grease</td><td>: Nil</td></tr> <tr><td>(H) Output TDS</td><td>: <200 TDS 90% Rejection from Raw Water</td></tr> <tr><td>(I) Dissolved Silica</td><td>: Less than 10ppm.</td></tr> <tr><td>(J) Temperature</td><td>: 40 Deg. C.maximum</td></tr> <tr><td>(K) Input TDS</td><td>: 2500 maximum</td></tr> </table> <p>RAW WATER TRANSFER PUMP</p> <table style="width: 100%; border: none;"> <tr><td>Quantity</td><td>One No.</td></tr> <tr><td>Type</td><td>Centrifugal pump</td></tr> <tr><td>Make</td><td>Lubi/Crompton/Aroma</td></tr> <tr><td>Material</td><td>Stainless Steel 304 or 316</td></tr> <tr><td>Power consumption</td><td>0.5 HP</td></tr> <tr><td>Type of Drive</td><td>1 Phase, 240 V AC, 50 Hz</td></tr> <tr><td>Capacity</td><td>1.5 m3/hr</td></tr> <tr><td>Discharge Pressure</td><td>2.5 – 3.0 kg/cm²</td></tr> <tr><td>Purpose</td><td>To pump raw water at required pressure so as to enable transfer through the RO pre-treatment stage.</td></tr> </table> <p>PRESSURE SAND FILTER & ACTIVATED CARBON FILTER</p> <table style="width: 100%; border: none;"> <tr><td>Quantity</td><td>1 No.</td></tr> <tr><td>Type</td><td>Vertical Pressure Vessle</td></tr> <tr><td>M.O.C. of Vessel</td><td>FRP</td></tr> <tr><td>Make of Vessel</td><td>Waterflow / Wave Cber / UKL</td></tr> <tr><td>Size</td><td>12" x 52"</td></tr> </table>	(A) pH	: Between 3 to 11	(B) Suspended solids	: Nil	(C) Turbidity.	: Less than 1 NTU	(D) Free Iron as Fe+3	: Nil	(E) Free organic solvents	: Nil	(F) Free chlorine	: Nil	(G) Oil & Grease	: Nil	(H) Output TDS	: <200 TDS 90% Rejection from Raw Water	(I) Dissolved Silica	: Less than 10ppm.	(J) Temperature	: 40 Deg. C.maximum	(K) Input TDS	: 2500 maximum	Quantity	One No.	Type	Centrifugal pump	Make	Lubi/Crompton/Aroma	Material	Stainless Steel 304 or 316	Power consumption	0.5 HP	Type of Drive	1 Phase, 240 V AC, 50 Hz	Capacity	1.5 m3/hr	Discharge Pressure	2.5 – 3.0 kg/cm ²	Purpose	To pump raw water at required pressure so as to enable transfer through the RO pre-treatment stage.	Quantity	1 No.	Type	Vertical Pressure Vessle	M.O.C. of Vessel	FRP	Make of Vessel	Waterflow / Wave Cber / UKL	Size	12" x 52"	1.00			Each	Each	
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It. No.	Description of Item	Qty	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
	Service Cycle	Whenever pressure drop across unit exceeds 0.8 kg/cm ²					
	Capacity	1200 LPH					
	Frontal Pipe Work	APVC					
	Operating Pressure	3.0 kg/cm ²					
	Make of valve	Innitiative / UKL					
	Type of Valve	1" DIAPHRAGM					
	Backwash Duration	15-20 Mins.					
	Filtering Media	Silica Quartz Sand, Gravel, Pebbles & activated Carbon etc.					
	Application	To filter out suspended solids up to 25 micron size & To remove color, odor and some of organics impurities.					
	MICRON CARTRIDGE FILTER						
	Quantity	1 Nos.					
	Replaceable Cartridge	Spun					
	Size of Cartridge	4" x 20" (w x l)					
	Type	Replaceable Cartridge					
	Flow Rate	1.5 m ³ /hr					
	Operating Pressure	2.5 kg/cm ²					
	Application of Cartridge	To protect the membrane and the high pressure pump from suspended particles.					
	Dosing Pump						
	Quantity	One Nos.					
	Capacity	0-6 L.P.H.					
	Type	Electronic Diapharm type Dosing pump with level controller.					
	Operating Pressure	1.5 kg/cm ²					
	HDPE Tank Size	100 Liters					
	Make	Edose / Aqua / UKL					
	HIGH PRESSURE PUMP						
	Quantity	One No.					
	Type	Vertical Pump					
	Capacity	1200 LPH					
	Make	SUMO/C.R./LUBI					
	Discharge Pressure	14 to15 KG/cm ²					
	Power Consumption	1.5 HP					
	Make	Lubi					
	MOC	Brass					
	Application	To boost water energy so as to pass through the membrane module at high pressure for obtaining the desired permeate quality.					
	RO MODULE						
	Quantity	One Lot					
	Item	RO Module consisting of Membrane Housing with RO membranes Mounted on skid & FRP pressure tubes.					
	Type of Membrane	Thin Film Composite Polyamide					
	MOC of Membrane	Polyamide					
	Make of Membrane	HI-TECH / TORAY USA / Flimtec USA					
	Size of Membrane	4"Dia 40" Length (4040) 2500GPD					
	No. of Membranes Required	1 Nos.					
	MOC of Membrane Housing	FRP Nos.					
	Make of Membrane Housing	ALPHA/PANTHARE					
	Size of Housing	4" DIA 40" LENTH 250 PSI,					
	No. of Housing Required	1 Nos.					
	Operating Pressure	14 to15 kg/cm ²					
	Feed Flow	1200 LPH					
	Product Flow Rate	250 LPH					
	Application of membrane	To reduce dissolved salts present in water. (TDS)					
	Skid	MS					
	Rota Meter	2 Nos.					
	Pressure Gauge Meter	2 Nos. Glisrine					
	Electric System	Fully Automatic					
	TDS Meter	1 Nos.					

It. No.	Description of Item	Qty	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
2	<p>Supplying & fixing of KENT EXCELL +15 Litres Under the counter RO+V/UF+TDS Controller (White) 15-Ltr/HR Water Purifier at BSF Campus, Gandhidham. with following specifications:-</p> <p>General Model Name EXCELL+15 LITRES UNDER THE COUNTER RO + UV/UF+TDS CONTROLLER (WHITE) 15-LTR/HR WATER PURIFIER Color White Total Capacity 15 L Purifying Technology RO + UV + UF + TDS Purification Features RO+UV+UF+TDS CONTROLLER</p> <p>Product Details Detachable Storage Tank No Auto Shut Off Yes Auto Start Yes Overflow Protection Yes Child Lock No Filter Type SEDIMENT, CTO, GAC, POST CARBON, UF = ULTRA FILTRATION, RO MEMBRANE, UV = ULTRA VIOLET Membrane Type KENT HI FLOW WELDED RO MEMBRANE Storage Tank Material HYDROSTATIC STAINLESS STEEL TANK Indicators FILTER CHANGE, UV FAIL Other Convenience Features KENT EXCELL+ UNDER THE COUNTEDR MODEL & IT ALSO CAN ATTACH WITH COOLERS Other Features KENT EXCELL+ UNDER THE COUNTEDR MODEL & IT ALSO CAN ATTACH WITH COOLERS</p> <p>Performance Features Filtration Capacity 15 L/hr Installation Type WALL MOUNT Purification Stages 7</p> <p>Dimensions Width 20 cm Height 52 cm Depth 39 cm Weight 12 kg</p> <p>Warranty Warranty Summary One-year warranty with three free services in one year for the RO plant, including all labor and materials at no cost. Warranty Service Type On-site Service, Customer Needs to Call All India Kent Service / Installation No. 92789 12345,?Service Engineer Will Come to the Site to Get the Product Repaired or Inspected Covered in Warranty FILTER & ELECTRICALS PARTS COVERED IN WARRANTY AS PER KENT POLICY Domestic Warranty 1 Year</p>	2.00			Each	Each	
3	<p>Supplying & fixing of 150 LPH R.O. Water Purifier at (i) Shri United Salt works Prathmik shala-Kandla, (ii) Akhil Kutch Maheshwari vikas Seva Sangh mirjapar, Bhuj and (iii) Ganeshnagar Panchayat Prathmik kumar shala At Gandhidham with following specifications:-</p> <ul style="list-style-type: none"> •Power stabilizer with necessary arrangements for electricity supply (wiring, plug point, etc.) •ISO standard water tank (500 liters capacity, up to 4.00m height) with all necessary ISO standard fixtures and fittings) •One-year warranty with three free services in one year for the RO plant, including all labor and materials at no cost. •Completion as directed by the Engineer in charge, with all materials, labor, tools, and tackles <p>Feed Water Quality (A) pH : Between 3 to 11</p>	3.00			Each	Each	

It. No.	Description of Item	Qty	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
	(B) Suspended solids : Nil						
	(C) Turbidity. : Less than 1 NTU						
	(D) Free Iron as Fe+3 : Nil						
	(E) Free organic solvents : Nil						
	(F) Free chlorine : Nil						
	(G) Oil & Grease : Nil						
	(H) Output TDS : <200 TDS 90% Rejection from Raw Water						
	(I) Dissolved Silica : Less than 10ppm.						
	(J) Temperature : 40 Deg. C.maximum						
	(K) Input TDS : 2500 maximum						
	RAW WATER TRANSFER PUMP						
	Quantity One No.						
	Type Centrifugal pump						
	Make Lubi/Crompton/Aroma						
	Material Stainless Steel 304 or 316						
	Power consumption 0.5 HP						
	Type of Drive 1 Phase, 240 V AC, 50 Hz						
	Capacity 1.5 m3/hr						
	Discharge Pressure 2.5 – 3.0 kg/cm ²						
	Purpose To pump raw water at required pressure so as to enable transfer through the RO pre-treatment stage.						
	PRESSURE SAND FILTER & ACTIVATED CARBON FILTER						
	Quantity 1 No.						
	Type Vertical Pressure Vessle						
	M.O.C. of Vessel FRP						
	Make of Vessel Waterflow / Wave Cber / UKL						
	Size 12" x 52"						
	Service Cycle Whenever pressure drop across unit exceeds 0.8 kg/cm ²						
	Capacity 1200 LPH						
	Frontal Pipe Work APVC						
	Operating Pressure 3.0 kg/cm ²						
	Make of valve Ininitative / UKL						
	Type of Valve 1" DIAPHRAGM						
	Backwash Duration 15-20 Mins.						
	Filtering Media Silica Quartz Sand, Gravel, Pebbles & activated Carbon etc.						
	Application To filter out suspended solids up to 25 micron size & To remove color, odor and some of organics impurities.						
	MICRON CARTRIDGE FILTER						
	Quantity 1 Nos.						
	Replaceable Cartridge Spun						
	Size of Cartridge 4" x 20" (w x l)						
	Type Replaceable Cartridge						
	Flow Rate 1.5 m3/hr						
	Operating Pressure 2.5 kg/cm ²						
	Application of Cartridge To protect the membrane and the high pressure pump from suspended particles.						
	Dosing Pump						
	Quantity One Nos.						
	Capacity 0-6 L.P.H.						
	Type Electronic Diapharm type Dosing pump with level controller.						
	Operating Pressure 1.5 kg/cm ²						
	HDPE Tank Size 100 Liters						
	Make Edose / Aqua / UKL						
	HIGH PRESSURE PUMP						
	Quantity One No.						
	Type Vertical Pump						
	Capacity 1200 LPH						
	Make SUMO/C.R.I./LUBI						
	Discharge Pressure 14 to15 KG/cm ²						
	Power Consumption 1.5 HP						
	Make Lubi						
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It. No.	Description of Item	Qty	Rate		Unit		Amount
			In Fig.	In Words	In Fig.	In Words	
	Application RO MODULE Quantity Item Type of Membrane MOC of Membrane Make of Membrane Size of Membrane No. of Membranes Required MOC of Membrane Housing Make of Membrane Housing Size of Housing No. of Housing Required Operating Pressure Feed Flow Product Flow Rate Application of membrane Skid Rota Meter Pressure Gauge Meter Electric System TDS Meter	To boost water energy so as to pass through the membrane module at high pressure for obtaining the desired permeate quality. One Lot RO Module consisting of Membrane Housing with RO membranes Mounted on skid & FRP pressure tubes. Thin Film Composite Polyamide Polyamide HI-TECH / TORAY USA / Flimtec USA 4"Dia 40" Length (4040) 2500GPD 1 Nos. FRP Nos. ALPHA/PANTHARE 4" DIA 40" LENTH 250 PSI, 1 Nos. 14 to15 kg/cm ² 1200 LPH 150 LPH To reduce dissolved salts present in water. (TDS) MS 2 Nos. 2 Nos. Glisrine Fully Automatic 1 Nos.					

Total Rs,

(Rs. In word _____)

CONTRACTOR**Executive Engineer (C),
Deendayal Port Authority**