

## RATE PROFORMA

GOVERNMENT OF MAHARASHTRA				
WATER RESOURCES DEPARTMENT				
Executive Engineer, Lift Irrigation Mechanical Division No.1, Bhandara				
Sealed Rates are invited by the Executive Engineer, Lift Irrigation Mechanical Division No.1, Bhandara (Phone No.07184 – 252166) for the purpose of estimation of the following works.				
<b>Specification of Forced water Lubricated type V.T. Pumps 2 Nos. with allied equipments for Left Bank &amp; V.T. Pumps 2 Nos. with allied equipments for Right Bank at Nimn Chulband Lift Irrigation Scheme Dist. Bhandara.</b>				
Qty.	Unit	Description of work	Rate Rs. P.	Rates to be quoted by
1	2	3	4	5
2	Nos.	<b>Item No.1(A)- Vertical Turbine Pumps.</b> <b>a)</b> Head in meter :- 17.39 M <b>b)</b> Discharge per pump :- 1216.5 LPS <b>c)</b> HP per pump :- 315 HP <b>d)</b> RPM :- 400 RPM <b>e)</b> Length of pump :- 13.75 Mtr. <b>f)</b> Discharge type :- Sub Surface Delivery <b>g)</b> Overall Efficiency :- 85.5% <b>h)</b> Column Dia. & Thickness :- 900mm & Min.10mm <b>i)</b> Line Shaft Dia. :- 80 mm <b>j)</b> Bell Mouth Dia. :- 1050 mm <b>k)</b> Stages :- Min. one stage		
		<b>Item No.1(B)- Forced Water Lubrication System</b>		
2	Nos.	i) Pressure Filter (suitable for above VT pump specification)		
2	Nos.	ii) Booster Pump		
2	Nos.	<b>Item No. 2:</b> Non Return Valve 800 mm Dia.		
2	Nos.	<b>Item No. 3:</b> Butterfly Valve 800 mm Dia		
2	Nos.	<b>Item No. 4:</b> Kinetic Air Valve 200 mm Dia		
30	Mtr.	<b>Item No. 5:</b> Delivery Pipe Line 800 mm Dia		
2	Nos.	<b>Item No. 6:</b> Rubber Expansion Joint 800 mm Dia.		
2	Nos.	<b>Item No. 7:</b> H.T. Induction Motors 6.6 KV, 260 KW, 3 Phase, 400 rpm, CACW, 50 Hz.		
2	Nos.	<b>Item No. 8 :</b> FCMA Soft Starter for above motor 7		
2	Nos.	<b>Item No. 9 :</b> Capacitor Cubicle 6.6 KV, 3 Phase, 50 Hz, 80 KVAR.		
2	Nos.	<b>Item No.10- Vertical Turbine Pumps.</b> <b>a)</b> Head in meter :- 37 M <b>b)</b> Discharge per pump :- 643.5 LPS <b>c)</b> HP per pump :- 360 HP <b>d)</b> RPM :- 1000 RPM <b>e)</b> Length of pump :- 13.75 Mtr. <b>f)</b> Discharge type :- Sub Surface Delivery <b>g)</b> Overall Efficiency :- 83.6% <b>h)</b> Column Dia. & Thickness :- 650mm & Min.10mm <b>i)</b> Line Shaft Dia. :- 65 mm <b>j)</b> Bell Mouth Dia. :- 750 mm <b>k)</b> Stages :- Min. one stage		
2	Nos.	<b>Item No.11:</b> Non Return Valve 600 mm Dia.		
2	Nos.	<b>Item No. 12:</b> Butterfly Valve 600 mm Dia		
2	Nos.	<b>Item No. 13:</b> Kinetic Air Valve 150 mm Dia		
30	Mtr.	<b>Item No. 14:</b> Delivery Pipe Line 600 mm Dia		

2	Nos.	<b>Item No. 15:</b> Rubber Expansion Joint 600 mm Dia.	
2	Nos.	<b>Item No. 16:</b> H.T. Induction Motors 6.6 KV, 290 KW, 3 Phase, 1000 rpm, CACW, 50 Hz.	
2	Nos.	<b>Item No. 17 :</b> FCMA Soft Starter for above motor 1t	
2	Nos.	<b>Item No. 18:</b> Capacitor Cubicle 6.6 KV, 3 Phase, 50 Hz, 120 KVAR.	
1	Set	<b>Item No. 19:</b> HT Panel- Incomer 1 & 2 & buscoupler 6.6 KV, 3 Phase, 25 KA ( 250 MVA) 1000 Amps.(1 Each) Motor feeders -6.6 KV, 3 Phase, 25 KA, 800 Amp.,- 5 Nos.	
1	Set	<b>Item No. 20:</b> L.T. distribution Panel 415 V, 3 Phase, 800 Amp. Comprises of the following	
		<b>i.</b> 415 Volts, 500 Amps. ACB for auxiliary transformer incoming feeder- 1 No.	
		<b>ii.</b> 415 Volt, 100 Amps. HRC, SFU - 3 Nos.	
		<b>iii.</b> 415 Volt, 63 Amps. HRC, SFU - 4 Nos.	
		<b>iv.</b> 415 Volt, 32 Amps. HRC, SFU - 4 Nos.	
		<b>v.</b> 415 Volt, 16 Amps. HRC, SFU - 5 Nos.	
		<b>vi.</b> 4 Nos. Electrical motor starter DOL type reversible push button operated suitable for butterfly valves.	
		<b>Item No.21:</b> Battery, Battery Charger and DCDB	
1	Set	A) Batteries 2x55 cell, 110 volts D.C.200 AH alongwith all accessories.	
1	Set	B) Battery Charger comprising of 110 volts, 50 Amps. 2 Nos. of float cum Boost Charger with protective relays for above batteries	
1	Set	C) D.C.D.B. Comprising of two incoming double pole miniature circuit breakers 80 Amps. 2 Nos. & 13 Nos. of 10 Amp. Outgoing feeder with MCB complete with all accessories etc.	
1	Set	<b>Item No. 22:</b> Temperature Scanner Panel ( comprises of 5 Nos. of scanner)	
		<b>Item No.23:</b> Preparation of cable schedule and supply, Installation and Testing of cable as below.	
200	Mtr.	a)50 mm <sup>2</sup> x 3 core,6.6 KV XLPE ALarmored earthed cable	
200	Mtr.	b)35 mm <sup>2</sup> x 3 core,6.6 KV XLPE ALarmored earthed cable	
150	Mtr.	c)185 mm <sup>2</sup> x 3.5 core, 1.1 KV PVC armoured PVC insulated AL cable.	
500	Mtr.	d)50 mm <sup>2</sup> x 4 core,1.1 KV PVC armoured PVC insulated AL cable.	
250	Mtr.	e)16 mm <sup>2</sup> x 4 core,1.1 KV PVC armoured PVC insulated AL cable.	
250	Mtr.	f)6 mm <sup>2</sup> x 4 core,1.1 KV PVC armoured PVC insulated AL cable	
150	Mtr.	g)35 mm <sup>2</sup> x 3.5 core,1.1 KV PVC armoured PVC insulated AL cable.	

<b>Control Cable</b>		
300	Mtr.	h) 6 mm <sup>2</sup> x 4 core, 1.1 KV PVC insulated copper conductor cable
300	Mtr.	i) 6 mm <sup>2</sup> x 4 core, 1.1 KV PVC insulated copper conductor cable
400	Mtr.	j) 1.5 mm <sup>2</sup> x 4 core, 1.1 KV PVC insulated copper conductor cable
400	Mtr.	k) 2.5 mm <sup>2</sup> x 7 core, 1.1 KV PVC insulated copper conductor cable
200	Mtr.	l) 1.5 mm <sup>2</sup> x 27 core, 1.1 KV PVC insulated copper conductor cable
1	LS.	<b>Item No. 24:</b> Earthing
1	Set	<b>Item No. 25 :</b> Water Level Indicator
1	Set	<b>Item No. 26 :</b> Remote Control Panel
1	No.	<b>Item No. 27:</b> Monorail Crane 5T with all accessories
1	Lot	<b>Item No. 28:</b> Spares & Tools ( as per list enclosed )
1	Job	<b>Item No. 29 :</b> Testing, Commissioning, Trial operation and Training to Department staff.

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