Name of Work:

Design manufacture, supply, erection, testing and commissioning etc. complete job as per requirement of pumping machinery 2 Nos. 120 HP each (tentatively) and allied equipments for **Awarde** Tal. Patan Dist. Satara. Lift Irrigation Scheme Maharashtra State.

Item No	Discription	Qty.	Unit	Rate	Amount in Rs.
	Vertica Turbine Pumps				
	1) Duty point Discharge per pump=0.1145Cub.m/sec.				
	2) Duty point head= 64.98m				
	3) Head range= 56 to 84m				
	4) No. of impeller stages=2stage				
1	5) Pump HP=120 HP	2	Nos		
	6) Max. syn. RPM= 1500 rpm				
	7) Column Pipe Diam. =250mm				
	8) Delivery Pipe Diam.= 250mm 9) Delivery Pipe thickness = 5mm				
	10) No. of pumps working in parallel=2				
	11) Self Water lubricated				
	Non-Return Valve with bypass arrengment				
2	Diam.=250mm P.N. rating=1.6	2	Nos		
	Butterfly valve with electrical actuators &				
3	inbuilt starters with bypass arrengement Diam.	2	Nos		
	= 250mm P.N. rating = 1.6				
4	Kinetic air valve	2	Nos		
	Inn Diam.= 50 mm & P. N. rating 1.6				
5	Delivery pipe Diam. = 250 mm Lenth 15 Mtr.	30	Mtr.		
3	Wall thichness =5mm	30	14161.		
	Dismentaling Joints Diam.= 250 mm				
6	wall thicknees = 5mm				
	Induction Motor:- Providing & Erection &				
	giving test & trial of vertical solid shaft				
	induction Motor (TEFC) with 1500 RPM & 98	2	Nos		
7	KW confirming to 15-325 having continuous				
,	rating suiable for operation @ 415 Volt + 10%	_			
	3 phase, 50 Hz+/3%, with "F" class insulation,				
	tempreture ride limited to class B sulation. as				
	per standard IS code required				
	Capacitors:- Providing & Installing at site of				
	works & Testing of 415 V, 3 phase, 50 Hz &	2	Nos		
	suitable KVAR Capacitor cubicles for the				
0	motors to impure the power factor to 0.95 .				
8	The capacitor cubicles should be corprised of				
	suitable capacity HRC fuses, Insulation suitech,				
	earthing terminals with proper connection				
	with motor the XLPE cubicles.				
9	ATS Starter:- Supplying & erection fully				
	automatic star delta starter to operate				
	induction Motor working on 380-440 V, 3				
	phase 50Hz with 40 volt coil , overload clemant	2	Nos		
	& ON OFF push buttons with necessary	-	1,03		
	material & connected to supply 120 HP for two				
	motors of 98KW.				

	L T. Distribution panel 415V, 3Ph, 50Hz 1ACB-				
10	630 Amp Switches. 63 Amp3 No.s, 32 Amp-4	4			
10	No s, 16Amp3 Nos & 16 Amp MCCB Double	1	Set.		
	pole-4 Nos, with change over switch 200A.				
	preparation of Cable schedule, cable tray and				
11	supply, installation and testing of Power LT &	1	Set.		
	Control cables etc. Complete.				
12	Earthing to above specified equipments	1	Set.		
	Providing & Erecting & Connecting 5 Tonne				
13	Capacity Aux. hook, Single girder with micro-	1	No.		
	speed facility for main hoist.				
14	Testing, Commissioning Trials and operataion	1	Job		
	etc.				
15	Spares & tools required as per attached list of	1	1 Set.		
	1 No. pump set	1	Jet.		
				Total	

NOTE:- The detailed technical specifications are as per standard DTP of Pumping machinery WRD (Govt. of Maharashtra)

Executive Engineer,
Tembhu Lift Irrigation Mechanical & Electrical
Unit Ogalewadi, Karad

Name of Work

Design manufacture, supply, erection, testing and commissioning etc. complete job as per requirment of pumping machinery 2 Nos. 296 HP each (tentatively) and allied equipments for **Konjawade** Tal. Patan Dist. Satara. Lift Irrigation Scheme Maharashtra State.

Item No	Discription	Qty.	Unit	Rate	Amount in Rs.
1	Vertica Turbine Pumps 1) Duty point Discharge per pump=0.2610Cub.m/sec. 2) Duty point head at POL = 72.22m 3) Head range= 56 to 84m 4) No. of impeller stages= Single stage 5) Pump HP=296 HP 6) Max. syn. RPM= 1500 rpm 7) Column Pipe Diam. = 400mm 8) Delivery Pipe Diam.= 400mm 9) Delivery Pipe thickness = 5mm 10) No. of pumps working in parallel=2 11) Self Water lubricated	2	Nos		
2	Non-Return Valve, PN rating 1.6 with bypass arrengment Diam.=400mm P.N. rating=1.6	2	Nos		
3	Butterfly valve with electrical actuators & inbuilt starters with bypass arrengement Diam.= 400mm P.N. rating = 1.6	2	Nos		
4	Kinetic air valve -double orfice type Inn Diam.= 100 mm & P. N. rating 1.6	2	Nos		
5	Delivery pipe Diam. = 400 mm Lenth 15 Mtr. Wall thichness =5mm	30	Mtr.		

6	Dismentaling Joints Diam.= 400 mm	2	Nos.	
	wall thicknees = 5mm			
	Induction Motor :- Providing & Erection &	2		
	giving test & trial of vertical solid shaft			
	induction Motor (TEFC) with 1500 RPM & 235			
	KW, 3.3 kv confirming to IS-325 having		Nos	
7	continuous rating suiable for operation @ 415			
	Volt + 10%, 3 phase, 50 Hz+ /-3%, with "F"			
	class insulation, tempreture rise limited to			
	class "B" sulation. as per standard IS code			
	required			
	Capacitors:- Providing & Installing at site of	2		
	works & Testing of 3.3 KV, 3 phase, 50 Hz &			
_	suitable KVAR Capacitor cubicles for the			
8	motors to improve the power factor to 0.95 .		Nos	
	The KVAR capacitor of the capacitors should			
	not exceed the magnetizing KVAR of motor.			
	H. T. Panel with of fowling specifications			
	Voltage rating 3.3 KV ,3Phase, 50 Hz incomer			
	feeder-1No.,630Amp. VCB Motor feeder-	1	Set.	
9	2Nos.+ 1 Spare, 630 Amp., VCB with provision			
	of ON/OFF button of each feeder from remote			
	end and necessary control relays meters, logic			
	control wiring, indicators etc.			
	L T. Distribution panel 415V, 3Ph, 50Hz 1ACB-			
	630 Amp Switches. 63 Amp3 No.s, 32 Amp-4		Set.	
10		1		
	No s, 16Amp3 Nos & 16 Amp MCCB Double			
	pole-4 Nos, with change over switch 200A.			
11	DCDB Battery (Dry type), Battery charger 110V	1	Set.	
	160 Amps-Hours.	-	500.	
	preparation of Cable schedule, cable Trays	1	Job	
12	supply, installation and testing of Power HT. LT			
	& Control cables etc. Complete.			
13	Earthing to above specified equipments	1	Set.	
14	Temp. Scanner Panel	1	No.	
_	EOT Crane 5 Tonne Capacity, Aux hook, Single			
15	ginder with priors and of facility for waste but to	1	No	
	girder with micro-speed facility for main hoist Testing, Commissioning Trials and operataion			
16	etc.	1	Job	
17	Spares & tools required as per attached list of	4	Cat	
17	1 No. pump set	1	Set.	
				Total

NOTE:- The detailed technical specifications are as per standard DTP of Pumping machinery WRD (Govt of Maharashtra)

Executive Engineer,
Tembhu Lift Irrigation Mechanical & Electrical Unit
Ogalewadi, Karad

Name of Work

Design manufacture, supply, erection, testing and commissioning etc. complete job as per requirment of pumping machinery 2 Nos. 296 HP each (tentatively) and allied equipments for **Konjawade** Tal. Patan Dist. Satara. Lift Irrigation Scheme Maharashtra State.

Item No	Discription	Qty.	Unit	Rate	Amount in Rs.
	Vertica Turbine Pumps				
	1) Duty point Discharge per				
	pump=0.2610Cub.m/sec.				
	2) Duty point head at POL = 72.22m				
	3) Head range= 56 to 84m		Nos		
	4) No. of impeller stages= Single stage				
1	5) Pump HP=296 HP	2			
	6) Max. syn. RPM= 1500 rpm				
	7) Column Pipe Diam. =400mm				
	8) Delivery Pipe Diam.= 400mm				
	9) Delivery Pipe thickness = 5mm 10) No. of pumps working in parallel=2				
	11) Self Water lubricated				
	Non-Return Valve, PN rating 1.6 with				
2	bypass arrengment Diam.=400mm P.N.	2	Nos		
	rating=1.6				
	Butterfly valve with electrical actuators &				
3	inbuilt starters with bypass arrengement	2	Nos		
	Diam.= 400mm P.N. rating = 1.6				
4	Kinetic air valve -double orfice type	2	Nos		
4	Inn Diam.= 100 mm & P. N. rating 1.6	2	NOS		
	Delivery pipe	30			
5	Diam. = 400 mm Lenth 15 Mtr.		Mtr.		
	Wall thichness =5mm				
6	Dismentaling Joints Diam.= 400 mm	2	Nos.		
	wall thicknees = 5mm				
	Induction Motor :- Providing & Erection &				
	giving test & trial of vertical solid shaft	2	Nos		
	induction Motor (TEFC) with 1500 RPM &				
	235 KW, 3.3 kv confirming to IS-325 having				
7	continuous rating suiable for operation @				
	415 Volt + 10%, 3 phase, 50 Hz+ /-3%, with				
	"F" class insulation, tempreture rise limited				
	to class "B" sulation. as per standard IS code				
	_				
	required				
	Capacitors:- Providing & Installing at site of				
	works & Testing of 3.3 KV, 3 phase, 50 Hz &		Nos		
	suitable KVAR Capacitor cubicles for the				
8	motors to improve the power factor to 0.95	2			
	. The KVAR capacitor of the capacitors				
	should not exceed the magnetizing KVAR of				
	motor.				
	motor.				

9	H. T. Panel with of fowling specifications Voltage rating 3.3 KV ,3Phase, 50 Hz incomer feeder-1No.,630Amp. VCB Motor feeder-2Nos.+ 1 Spare, 630 Amp., VCB with provision of ON/OFF button of each feeder from remote end and necessary control relays meters, logic control wiring, indicators etc.	1	Set.		
10	L T. Distribution panel 415V, 3Ph, 50Hz 1ACB-630 Amp Switches. 63 Amp3 No.s, 32 Amp-4 No s, 16Amp3 Nos & 16 Amp MCCB Double pole-4 Nos, with change over switch 200A.	1	Set.		
11	DCDB Battery (Dry type), Battery charger 110V 160 Amps-Hours.	1	Set.		
12	preparation of Cable schedule, cable Trays supply, installation and testing of Power HT. LT & Control cables etc. Complete.	1	Job		
13	Earthing to above specified equipments	1	Set.		
14	Temp. Scanner Panel	1	No.		
15	EOT Crane 5 Tonne Capacity, Aux hook, Single girder with micro-speed facility for main hoist	1	No		
16	Testing , Commissioning Trials and operataion etc.	1	Job		
17	Spares & tools required as per attached list of 1 No. pump set	1	Set.		
				Total	

NOTE:- The detailed technical specifications are as per standard DTP of Pumping machinery WRD (Govt of Maharashtra)

Executive Engineer,
Tembhu Lift Irrigation Mechanical & Electrical
Unit Ogalewadi, Karad