

जा क्र./१०३ /उसियांविक्र.२चंद्र/ताशा-१/धा.क्र.३८/ब.ऑफर /२०१६	कार्यकारी अभियंता यांत्रिकी उपसा सिंचन विभाग क्र.२,बाबुपेठ चंद्रपुर-४४२४०३ यांचे कार्यालय दि. १२ / ०१ / २०१६.
☎ :- (०७१७२) २२७३८२	
फॅक्स :- (०७१२) २२७३८२	
ई मेल :- mlidn2@rediffmail.com	

प्रति,

मा. अधिक्षक अभियंता ,
यांत्रिकी मंडळ, वैनगंगानगर
नागपुर.

विषय :- किरमीरी दरुर उपसा सिंचन योजना जि. चंद्रपुर.

पंपींग यंत्रसामुग्री व संलग्न घटक भागाचे बजेटरी ऑफर संकेतस्थळावर प्रसिध्द करण्याबाबत.

संदर्भ :- १. आपले कार्यालयीन पत्र क्र. ४६७७ /ताशा-२/२०१५ दि. १४.१२.२०१५.

महोदय,

या पत्रासोबत पाठविण्यात येत असलेली बजेटरी ऑफर क्र. १८ (२०१५-१६) यांत्रिकी संघटनेच्या संकेतस्थळावर (www.mahayantriki.gov.in) प्रसिध्द करण्यात यावी हि विनंती.

कार्यालय	कार्यकारी अभियंता , यांत्रिकी उपसा सिंचन विभाग क्र.२, बाबुपेठ - चंद्रपुर - ४४२४०३.
बजेटरी ऑफर प्रसिध्द करण्याची अंतिम तारीख	दिनांक - १३.०१.२०१६
बजेटरी ऑफर पाठविण्याचा कालावधी	जाहीरात प्रसिध्द झाल्यापासुन १० दिवस

सबब आपले माहीती व मंजूरीच्या कार्यवाहीस्तव सविनय सादर.

सहपत्र :- बजेटरी ऑफर क्र. १८/२०१५-१६ - १ प्रत

कार्यकारी अभियंता
यांत्रिकी उपसा सिंचन विभाग क्र.२
बाबुपेठ - चंद्रपुर.

प्रत:- उप अभियंता , उपसा सिंचन यांत्रिकी उपविभाग क्र. २(विद्युत)/४ , चंद्रपुर यांचे माहीतीकरीता अग्रेषित.

Budgetary Offer No.18/ 2015-2016

Name of Work: Design, Manufacturing, Supply, Erection, Testing and Commissioning of Forced Water Lubricated Vertical Turbine Pump - 2 Nos. with allied equipments at Kirmiri Darur L.I.S, Dist.:- Chandrapur.

Budgetary Offers for estimation purpose are invited from the reputed Original Pump Manufacturers, who are registered of under work Group - II Class "C" or above for Lift Irrigation Scheme work as per Govt. G.R. Misc. 10.09/57/(25/09) Mechanical, Mantralaya, Mumbai dtd. 29/07/2011 with Mechanical Organization.

Qty.	Unit	Description of Items	Rate	Amount	Remarks
2	Nos	Item No.1 (A) – Vertical Turbine Pumps			
		Providing, installing at site of works and giving test to full load Capacity, vertical turbine pumps non-pull out type, complete with strainer, suction bowl, complete column pipe assembly, Discharge head, Motor stools, Shaft enclosing tube, Flexible coupling, sole Plates, base frame foundation, non reversible rotation Ratchet arrangement, etc. suitable for following duties, Specification and conforming to the detailed specification			
		a) Duty point discharge 685 LPS			
		b) Duty point head 33.13 m			
		c) Maximum rpm synchronous 1000 rpm			
		d) Efficiency			
		1. Bowl efficiency 90 %			
		2. Pump efficiency 88 %			
		3. Overall efficiency 84 %			
		e) Head range 25 m to 37 m			
		f) Lubrication system Forced water			
		g) Discharge type Surface			
		h) No. of stages One Stage			
		i) Column pipe dia. Minimum (ID) 700 mm			
		I) Pump floor level 156.36 m			
		II) Sump Bottom Level 141.05 m			
		j) Column pipe thickness minimum 5 mm			
		k) Line shaft dia. Minimum 60 mm			
		l) Sole plate thickness minimum 100 mm			
		m) Diameter of shaft enclosing tube (minimum) 140 mm suitable for item (k) above.			
1	Job	Item No. 1(B) – Forced Water Lubrication and Cooling System			
		Providing, installing at site of works and giving satisfactory test of Forced water lubrication and cooling system with all piping arrangements.			
		i) Pressure Filters			
		ii) Booster pumps (As per required)			

2	Nos.	Item No. 2 Non Return Valve 600 mm Dia.			
		Providing, installing at site of works and testing cast iron, non slam, double flanged type non return valve with bypass arrangement complete, suitable for following duties specification and confirming to detailed specification.			
		a) Diameter 600 mm			
		b) P.N. rating 1.0			
2	Job	Item No. 3 : Butterfly Valve 600 mm Dia.			
		Providing, installing at site of works and testing double flanged butterfly valves conforming to relevant IS/BS 5155 with electrical actuators with 415 volts A.C. Motors D.O.L. starting etc. complete, suitable for following duties, specifications and conforming to detailed specification.			
		a) Diameter 600 mm			
		b) P.N. rating 1.0			
2	Nos.	Item No. 4 : Rubber Expansion Joint 600 mm Dia.			
		Providing & installing at site of works & testing of rubber expansion joint in delivery pipe line complete suitable for following specification			
		i) Diameter = 600 mm			
		ii) Internal Test Pressure 15.00 Kg./cm ²			
2	Nos.	Item No. 5 : Kinetic Air Valve 150 mm Dia.			
		Providing, installing at site of works and testing kinetic air valves with isolating sluice valve For releasing air from the delivery pipes, etc. complete as per detailed specification.			
		i) Diameter = 150 mm , ii) P.N = 1.6			
50	Mtr.	Item No. 6 : Delivery pipelines 600 mm Dia.			
		Manufacturing, Providing, Supply, erection ,testing and joining at site of works and testing of delivery pipe line including jointing in between pump and up to rising main/manifold complete. Suitable for following duties, specification and conforming to detailed specification.			
		(a) Diameter (NB) 600 mm			
		(b) Wall Thickness 8 mm			
2	Nos.	Item No. 7 : H.T. Induction Motors .6.6 KV 280 KW, 3 Phase,1000 rpm, 50 Hz.			
		Providing, installing at site of works and testing to full capacity, solid shaft squirrel cage induction motors, CACW type, F Class insulation, suitable for operation on voltage mentioned below, 3 phase, 50 cycles per second with voltage variation of +/- 10% and frequency of +/-3%, suitable for direct coupling with pumps under Item no. 1(A) as per the latest revision of IS 325, IS 4722 and other relevant IS specification to meet the power requirement of pumps with 10% additional capacity over entire operating range suitable for following duties, specification and conforming to detailed specification under Item no. 7 of detailed itemwise specification under vol. II.			
		(a) Operating voltage 6.6 KV			
		(b) Minimum BHP (KW) rating of motor 280 KW			

2	Nos.	Item No 8: FCMA soft starter			
		Providing and installing at site of work and testing of FCMA soft starter suitable for above motor mentioned in item No.7 and conforming to details specification under item No. 8 of Vol. II			
2	Nos.	Item No. 9 : Capacitor Cubicle 6.6 KV, 3 Phase, 50 Hz, 100 KVAR			
		Providing, installing at site of works and testing of 6.6 KV, 3 phase, 50 cycles per second capacitor cubicles for the motors mentioned against Item no. 7 above, to improve the power factor to 0.95. The KVAR capacity of the capacitor cubicles should not exceed the magnetizing KVAR of motor. The capacitor shall be conforming to detailed specification under Item no. 9 of detailed itemwise specification under vol. II			
1	Set	Item No. 10 : H.T. Panel 6.6 KV , 3 Phase, 630 Amps.			
		Providing, installing at site of works and testing of sheet steel, dust and vermin proof, indoor floor mounting type H.T. Panel, completely assembled, wired tested, painted, conforming to relevant ISS, complete suitable for following duties, specification.			
		(a) Electrical System 6.6 KV, 3 Phase, 50 Hz, A.C. with fault level of 25 KA, Air circuit breaker manually operated drawout type (Ics=Icu=Icw for 1s)			
		(b) Capacity 630 Amps.			
		(c) Panel shall comprise of the following			
		(i) 1 Nos. incoming breakers with following rating			
		Current 630 Amps			
		(iii) 3 nos. outgoing breakers with following rating			
		(1) Breakers for outgoing feeders for motors			
		2+1 with the following ratings.			
		Current 630 Amps			
		Item No. 11 - Batteries, Battery charger & D.C.D.B.			
		Providing, installing at site of work & testing Batteries, battery chargers & D.C.D.B. complete unit comprising of following and as under detailed specification under Item no. 12.1, 12.2 & 12.3 of Volume II.			
		i) Batteries 2 X 55 cell, 110 volts D.C. 200 AH capacity along with all accessories.			
		(ii) Battery charger comprising of 110 volts, 50 Amp, 02 Nos of float cum boost charger with protective relays for above batteries.			
		(iii) D.C.D.B. comprising of two incoming double pole miniature circuit breakers (MCB) 80 Amp - 2 Nos & 13 nos of 10 amp. outgoing feeder with MCB or switch fuse unit, complete with all accessories, etc.			
1	Set	Item No. 12 : Temperature Scanner Panel			
		Providing, installing at site of work & testing of temperature scanner panel comprising of 3 nos. microprocessor temperature scanners having 10 points each to monitor H.T. motor winding and bearings temperature, complete as per detailed specification under Item No. 11 of Vol. II.			

1	Job	Item No. 13 : Preparation of cable schedule and Supply, Installation and Testing of cable as below.			
		Providing, installing at site of work & testing of suitable cables & wires complete as per requirement of pump house as given below as per detailed specification under Item no. 12 of Vol. II			
200	Mtr.	a) 70 sq.mm x 3 core, 11 KV, XLPE, unarmored cable.			
200	Mtr.	b) 50 sq.mm x 3.5 core, 1.1 KV, PVC armoured PVC insulated Aluminium cable.			
		Control Cable			
200	Mtr.	d) 4 sq.mm x 3 core, 1.1 KV PVC insulated copper conductor cable.			
200	Mtr.	d) 6 sq.mm x 4 core, 1.1 KV PVC insulated copper conductor cable.			
300	Mtr.	e) 1.5 sq.mm x 4 core, 1.1 KV PVC insulated copper conductor cable.			
300	Mtr.	f) 2.5 sq.mm x 7 core, 1.1 KV PVC insulated copper conductor cable.			
200	Mtr.	g) 1.5 sq.mm x 30 core, 1.1 KV PVC insulated copper conductor cable.			
1	L.S.	Item No. 14 : Earthing			
		Providing, installing at site of work earthing comprising of adequate no. of earth stations, earth bard and individual double earthing to all electrical equipment as per detailed specification under Item no. 13 Vol. II.			
		Item No. 15 - Remote Control Panel.			
		Providing, Installing at site of work & testing of sheet steel floor mounted vermin proof and powder coated and tropicailized remote control panels with control switches, ammeter, annunciation facia windows, indication lamps etc. for control & monitoring of breakers, pump/motor ancillary equipment/panels, etc. suitable for following items and conforming to detailed specification under Item no. 18 of Volume II.			
		(a) Incoming breakers - 1 no.			
		(b) Pump motor breakers - 3 nos.			
		(d) Booster pumps - 2 nos.			
		(e) Butterfly valves - 2 nos.			
		(f) Water level indicators - 2 nos.			
		(g) Capacitors - 3 nos.			
		(h) Cooling system - 2 nos.			
1	Lot	Item No. 16 : Spares & tools			
		Providing at site of works tools and spares complete as per detailed specification under Item No. 14 as bellow. a. Line Shaft of Standard length 2 Nos. b. Line Shaft Bearing 10 Nos. c. Bottom side line shaft 1 Nos. d. Top side line shaft 1 Nos. e. Radial Ball bearing 2 Nos. f. Sph. Roller Thrust Bearing 2 Nos. g. Guide Spider 4 Nos. h. Oil Indicator 1 Nos. i. Muff Coupling 3 Nos. j. Coupler cap 5 Nos. k. Connector Bearing 5 Nos.			

1	Job	Item No. 17 : Testing, Commissioning, Trial operation & Training to Department staff			
		Testing, Commissioning, Trial operation of the complete equipment and performance tests and training to department staff as per detailed specification under Item no. 15 of Vol. II			
1	Job	Item No. 18 : Modification to Existing L.T. Panel			
		As per Requirement			
1	Job	Item No. 19 : Sump Model Test Sump Model Test to ensure the vortex free and cavitation free operation of existing 2 Nos. pump of 130 H.P. each and 2 Nos pump of 344 H.P.			

Executive Engineer
Mechanical Lift Irrigation Dn. No.2,
Chandrapur