

तात्काळ

जा.क्र. 6८१ /उसियाविक्र.१भं/तांशा-१/बजेटरी ऑफर/२०१९.	कार्यालय कार्यकारी अभियंता उपसा सिंचन यांत्रिकी विभाग क्र.१ भंडारा-४४१ ९०४
☎ :- (०७१८४) २५२१९६	
ई मेल - lismech1@gmail.com	दिनांक :- २९/०४/२०१९

प्रति,

मा. अधीक्षक अभियंता  
यांत्रिकी मंडळ  
नागपुर

विषय :- बजेटरी ऑफर महायांत्रिकी संकेतस्थळावर [www.mahayantriki](http://www.mahayantriki) प्रसिध्द करणेबाबत.  
बजेटरी ऑफर क्रमांक ०३ सन २०१९-२०

महोदय,

या पत्रासोबत पाठविण्यात येत असलेली बजेटरी ऑफर महायांत्रिकी संकेतस्थळावर प्रसिध्दीस देण्यात यावी ही  
विनंती.

१	कार्यालयाचे नांव	कार्यकारी अभियंता, उपसा सिंचन यांत्रिकी विभाग क्र.१, एस.टी. वर्कशॉप समोर, नागपुर रोड, भंडारा.
२	बजेटरी ऑफर महायांत्रिकी संकेतस्थळावर प्रसिध्दीची अंतीम तारीख	०२/०५/२०१९

सहपत्र :- बजेटरी ऑफर - प्रत्येकी १ प्रती.

( स. सु. पाणी )  
कार्यकारी अभियंता,  
उपसा सिंचन यांत्रिकी विभाग क्र.१  
भंडारा.

प्रतिलिपी :- १) उप अभियंता, उपसा सिंचन यांत्रिकी उपविभाग क्र. १ आंबाडी यांना माहितीस्तव अग्रेषित.

२) उप अभियंता, उपसा सिंचन यांत्रिकी उपविभाग क्र. २ गोंदिया यांना माहितीस्तव अग्रेषित.

सहपत्र :- बजेटरी ऑफर - प्रत्येकी १ प्रती.

३) उप अभियंता, उपसा सिंचन यांत्रिकी व विद्युत उपविभाग क्र.१, भंडारा यांना माहितीस्तव अग्रेषित.

सहपत्र :- बजेटरी ऑफर - प्रत्येकी १ प्रती.

४) उप अभियंता, यांत्रिकी अभियांत्रिकी कर्मशाळा उपविभाग क्र.१, भंडारा यांना माहितीस्तव अग्रेषित.

५) कार्यकारी अभियंता, उपसा सिंचन यांत्रिकी विभाग क्र.१ भंडारा यांचे कार्यालयातील नोटीस बोर्डावर लावण्यासाठी.

सहपत्र :- बजेटरी ऑफर - १ प्रती.

६) मा. अधीक्षक अभियंता यांत्रिकी मंडळ नागपुर यांचे कार्यालयातील नोटीस बोर्डावर लावण्यासाठी.

सहपत्र :- बजेटरी ऑफर - १ प्रती.

**RATE PROFORMA**  
**GOVERNMENT OF MAHARASHTRA**  
**WATER RESOURCES DEPARTMENT**

Budgetary Offer No. 03 of 2019-20

Issue Date - 02/05/2019, Closing Date - 16/05/2019, Opening date - 17/05/2019

Executive Engineer, Lift Irrigation Mechanical Division No.1, Bhandara

Sealed rates (excluding GST) are invited from contractor by the Executive Engineer, Lift Irrigation Mechanical Division No.1, Bhandara. (Phone No.07184 - 252166) for the purpose of estimation of the following works.

Name of work - Design, manufacturing, supplying, erection, testing & commissioning with quality assurance plan at each stage of 02 Nos of submersible pump with allied equipments at Devari Navegaon Lift Irrigation Scheme Stage-2, Tah.- Gondia, Dist. - Gondia.

Est Qty may be more or less	Unit	Description of work	Rate per Unit	Amount
2	No	<b>Item No. 1 - Submerged centrifugal pump vertically mounted with motor.</b> Providing, installing at site of works and giving test to full capacity, Submerged centrifugal -Vertically Mounted with motor. Motor housing confirming to IP-68. Pump shall be suitable for 3% floating sand. Pump casing & cover shall be of material grade C1FG 260:IS210. Pump impeller shall be confirming to stainless steel CF8M-SS316, SS410-shaft & hardware shall be confirming to SS316. Motor winding with class H insulation with temp. rise limited to class F. The motor works on 415V, 3phad/se, 50Hz, AC, Duty-S1, supply with cable guard, thrust bearing, 2RTD's for top & bottom bearing, 3 RTD's for Motor winding, water leak sensor etc. The pump set shall be suitable for direct coupling with suction strainer & discharge outlet as per manufacturer's design. The pump shall be started on FCMA starter. Appropriate control system, protection & interlock should be provided for over temp., water leak, over load, low water level with fault annunciation & trip alarm. The pump shall be supplied with appropriate spares as per manufacturer's recommendation etc. Complete for following duties, specification. The pump shall be supplied with auto coupling with guide bar system & pump monitoring system.		
		a) Duty point discharge -	0.22 m <sup>3</sup> /s	
		b) Duty point head -	18.09 m	
		c) Head range -	13 to 23	
		d) No. of maximum stages -	Single Stage	
		e) Efficiency :-	80%	
		f) Maximum rpm synchronous -	1000	
		g) Discharge type -	Surface	
		h) Delivery pipe dia -	350 mm	
		i) Maximum no of pump working in parallel - Upto 2 Nos		
		j) Application - raw water		
		k) Guide rail without strip = 10 Mtr.		
		l) Lifting chair = 10 m		
		m) Submersible Motor cable = 10 m		
		n) capacity - 66 HP		
		o) RPM = 1000		
2	No	<b>Item No. 2 Non Return Valve</b> Providing, installing at site of works and testing cast iron, non slam, double flanged type non return valve with by pass arrangement complete, suitable for following duties specification and confirming to detailed specification, under item no.2 of volume II.		
		a) Diameter -	350 mm	
		b) P.N. rating -	1.0	
2	No	<b>Item No. 3 : Butterfly Valve including actuator</b> 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. starter etc. complete, suitable for following duties, specifications and conforming to detailed specification under item no. 3 of detailed itemwise specification under volume II.		
		a) Diameter -	350 mm	
		b) P.N. rating -	1.0	

2	No	<b>Item No. 4 : Kinetic Air Valve</b>		
		Providing, installing at site of works and testing kinetic air valves of 80 mm dia, PN-1.0 rating for releasing air from the delivery pipes, etc, complete as per detailed specification, Item no. 4 of Volume II.		
		a) Diameter - 80 mm		
		b) P.N. rating - 1.0		
30	Mtr	<b>Item No. 5 - Delivery Pipe</b>		
		Providing and joining at site of works and testing delivery pipe lines including jointing of all in between valves and up to rising main/manifold complete. Suitable for following duties, specification and conforming to detailed specification under item No. 5 of detailed itemwise specification in volume II.		
		(a) Diameter - 350 mm		
		(b) thickness - 6 mm		
2	No	<b>Item No. 6 - Dismantle Joint.</b>		
		Providing, installing at site of works and testing of Dismantle Joint in pump delivery pipe line complete, suitable for following duties, specification and conforming to detailed specification under item No. 6 of detailed itemwise specification in volume II.		
		Diameter - 350 mm		
2	No	<b>Item No. 7- HFSR soft Starter</b>		
		Providing and Installing at site of work and testing of FCMA soft starter suitable for above motor of 58 kW and confirming to detailes specification (with overload and earth fault protection)		
1	No	<b>Item No. 8 – Capacitor Cubical 0.415 KV, 3 Phase, 50 Hz, 50 KVAR</b>		
		Providing,installing at site of works and testing -of 0.415 KV,3 phase,50 Hz, 50 KVAR capacitor cubicle for the motors mentiond against item no.8 above,to improve the power factor to 0.98. The KVAR capacity of the capacitor cubicles should not exceed the magnetising KVAR of motor.		
<b>Item No. 9 - Preparation of cable schedule &amp; accessories.</b>				
200	mtr	(i) Supplying, erecting & terminating PVC armoured cable 3½ core 70 sq mm aluminium conductor with continuous 8.35 sq mm (10 SWG) G.I. earth wire complete erected with glands & lugs, on wall/ trusses/pole or laid in provided trench/pipe as per specification no. CB-LT/AL.		
20	mtr	(ii) 1R x 4C x 16 sqmm + 1R X 3C X 16 sqmm Dual PVC Sheathed, Round Type, Cu conductor (Std)		
20	mtr	(iii) 1R X 12C X 1.5 sqmm Dual PVC Sheathed, Round Type, Cu conductor (Std)		
2	No	(iv) Supplying and erecting under floor junction box of size 150mm x 150 mm x 55 mmwith flush finish powder coated appearance having knock outs for UPVC duct entry of size 60 x 25 mm width and 95 x 35 mm ducts complete as per specification no. WG-MA/UFB		
100	kg	(v) Supplying and erecting Iron, sheet metal workconsisting of CRCA Sheets, Various sections of iron, Plates, Chequered Plates, Rods, Bars, MS pipes, etc. for panel board or any other purposes complete with bending, cutting, drilling and welding complete erected at the position with necessary materials duly painted with one coat of red oxide and two coats of enamel paint to match the switchgears or as per directions by the authority		

Item No.10 - LT Panel				
1	No	(i) Providing & erecting Incoming and Outgoing Cable Alleys suitable for MCCB panel board of 250A incoming and 8 way outgoing or 400A incoming and 6 way outgoing made from CRCA sheet 1.6 mm thick duly powder coated and having vertical insulated partition for shielding between the shared face of cableway and basic DB.		
1	No	(ii) Supplying & erecting on load type Four pole Iron clad/metal clad ON LOAD change over switch 100A., 415/500 Volts erected on angle iron frame approved make.		
2	No	(iii) Providing & erecting Floor / Wall mounting, MCCB Panel board suitable for Four Pole Incoming 250A, 4 ways Four pole outgoing on provided iron frame, as per Specification No. SW-SWR/MCCBPB. (Excluding MCCB'S)		
2	No	(iv) Providing & erecting 3 Pole MCCB upto 100A, 415V capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron frame/wooden board as per specification No. SW-SWR/MCCB		
4	No	(v) Providing & erecting 3 Pole MCCB upto 100A, 415V capacity with S.C. rating 25 kA (Ics=100% of Icu), thermal setting with provided leads on iron frame/wooden board as per specification No. SW-SWR/MCCB		
1	No	(vi) Supplying and erecting LT/CT multifunction DLMS compliance energy meter of accuracy of class 0.5 , 3x240V, 50 Hz with optical & RS 232 port, backlit LCD, measures & Displays Trivector Energy, load survey, TOD,tamper detection & logging, power ON /OFF events,instaneous parameters of Rating ~5 Awith display in absence of power complete with zero adjustment & test certificate from manufacturer erected on provided M.S. box and connected to CTs.		
3	No	(vii) Providing and erecting L.T. Current Transformer with bar primary 50/5 to 1000/5 ratio with 15VA burden erected in provided CRCA box duly secured with insulating materials connected to the meter with test certificates.		
1	No	(viii) Phase Failure Relay CurrentsensingPhaseFailureRelaywithoverloadprotection(without CTs)		
3	No	(ix) Electronic Motor Protection Relay (for LT motors) Providing,installinginpanelEMPRforprotectionlikeoverload,phasefailure,lockedrotor,phasereversalwithtripindicationandadjustable over current function, DIN rail mounted.		
Item No.11 - Earthing				
8	No	(i) Supply, Installation, Testing and commissioning of ULCertified / CPRI Tested Maintenance Free Earthing comprising of Electrode of 17.2 mm diameter Low Carbon Steel with 250 micron Molecular Copper Bonded Earthing Rodof Length 3m along with 25 kg Carbon Based environment friendly back fill Ground Enhancing compound required to fill up the excavated earth with required quantity as per specification no EA-MOBI		
100	kg	(ii) Supplying and erecting GI stripof required size used for earthing on wall and/or any other purpose with necessary GI clamps fixed on wall painted with bituminous paint in an approved manner with joints required. As per specification No EA-EP.		
Item No.12- Temperature Scanner Panel				
1	Set	Providing,Installing at site of work & testing of Temperature Scanner pannel comprising of 2+1=3 no. microprocessor temp. Scanner having 24 points each to monitor bearing temperature as per detailed specifications .		
Item No. 13 - Spares & Tools.				
1	Lot	Providing at site of works tools and spares complete as per detailed specification under item No. 13 of detailed itemwise specification in volume II.		
Item No. 14 -Testing, Commissioning, Trials & operations for one year after performance guarantee test.				
1	Job	Testing, commissioning, trial operation of the complete equipment and performance tests and training to department staff as per detailed specification under item No. 14 of detailed itemwise specification in volume II.		

Note - The above rates are excluding of GST.

  
 (S. S. Pani)  
 Executive Engineer  
 Lift Irrigation Mechanical Division No.1  
 Bhandara