pnekasiimi, com No .: PHE/MDNS/DBL 08-2023 Dated:

Adv. Cost:

Allotted Cost:

M/s UEE Electrical Engineers Pvt. Ltd. Shradanand Marg Delhi - 110006

Cell No: 9899963794

B/O: Main Bazaar, Kathua, J&K-184101 GST No: 01AAACU1624K1ZR

Subject:

Various electro-mechanical works to be carried out at WSS Peripheral Parihaspora

Baramulla (Gund Ibrahim, Trikolbal, Hanjiwera) under JJM.

This office e-NIT No.: e-NIT No. 07 of 2023-24, S. No. 08 issued under Reference: endorsement No.: PHE/MDNS/DB/702-14, dated: 09-05-2023.

Authorization awarded by Member Secretary DJJM Superintending Engineer Jal 2. Shakti (PHE) Hydraulic Circle Baramulla/Bandipore HQ at Sopore issued vide No. SE/Hyd/DB/5221-35, dated: 08-08-2023.

Dear Sir,

For and on behalf of Lt. Governor of J&K U.T contract for execution of "Various electromechanical works to be carried out at WSS Peripheral Parihaspora Baramulla (Gund Ibrahim, Trikolbal, Hanjiwera) under JJM" is hereby awarded to your firm on the quoted/negotiated rates, as per 'General Terms & Conditions' and 'Schedule of cost and quantities' annexed herewith as under:

Annexure A: General Terms & Conditions.

Annexure B: Schedule of cost and quantities.

Encl. ___ leaves

Copy to the:

X Sopore

Executive Enginee

akti PHE Mechanical Division (North)

HQ at AM, for favour

for information &

Rs 227.835 Lacs

Rs 209.836 Lacs

1. Chief Engineer Jal Shakti (PHE) Department Kashmir Srinagar for favour of information. 2. District Development Commissioner _ 1. for favour of information.

3. Superintending Engineer Jal Shakti (PHE) Mechanical Circle (North) Srinagar, for favour of

4. Superintending Engineer Jal Shakti (PHE) Hydraulic Circle of information.

5. Executive Engineer Jal Shakti (PHE) Division for favour of information.

6. Provisional Head, TPIA JJM Kashmir, (WAPCOS Limited) Corporate Office 76-C Institutional area Sector-18 Gurugram-122015 (Haryana) for favour of information.

7. Assistant Executive Engineer Jal Shakti (PHE) Medhanical Sub-Division necessary action.

8. File concerned.

Annexure "B" Schedule of cost and quantities to this office Allotment Order No: PHE/MDNS/DB/ 3860-1, dated: 23 08 023

me of work:

Various electro-mechanical works to be carried out at WSS Peripheral Parihaspora Baramulla (Gund Ibrahim, Trikolbal, Hanjiwera) under JJM

S. No.	Description	Unit	Qty.	Rate	Amount
	Raw Water Stage				
	Design, supply, providing, installation, successful testing and commissioning of vertical turbine pumping unit				
	as per IS 1710 driven by VT motor for pumping water from Nallah of following parameters.				
	•Site Condition			}	
	Altitude = 1580 Meters/Greater (AMSL)			· -	
	Ambient Temperature = +40°C to - 15°C		İ		1
	Relative Humidity = 60%				
	•Type of water = Raw water having specific gravity of unity average.				
- 1	 Quality of water = Raw water with silt having medium to coarse sand. 		1		1
- 1.	•Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level		ì		
- 1.	•Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level		1		
	A.PUMP		1		
	1.Discharge = 42000 GPH				
13	2.Type = Self water lubricated, VT pump, open line shaft.		1		
	3.Liquid to be handled = Raw Water				
- 1	.RPM = 1460		1		
	.Head = 20 Meterst				
	.Efficiency = Not less than 50%				
7.	Impeller = Semi-enclosed mixed flow all bronze/stainless steel				
8.	Line shaft/head shaft = Stainless steel			1	
9.	Length of each line shaft = 1 m maximum		1		
10	D.Total length of line shaft = 10 m/as specified (excluding Head shaft)				
111	1.Impeller shaft = Stainless steel				
	Line shaft bearing = Cut less rubber/ Neoprene rubber				
1	rocuring.			1	
	occurring.				
- 1		1	1	l	
- 1		iah.	2	8,50,000	.00 17,00,0
1 13.	Line shaft coupling = Stainless steel	job	2	8,50,000	27,50,5
14.	Suction Strainer = MS fabricated				
15.	Suction Bowl/Bell mouth= Cast Iron	1		1	1
116	Pump Rowl = Cast iron				
117	Column pipe = Mild Steel of wall thickness not less than 8mm flanged type in assorted lengths	1			
117.	VT Pump to be designed with minimum number of stages.	1	1		
		1			
B.Pi	rime Mover				
1.Ty	/pe = Vertical hollow shaft, AC squirrel cage induction motor				
	ower Supply = 03 Phase, 415V+ 15% AC	1	-		1
3.Fr	equency = 50Hz + 3%	1	-	1	
4.RP	PM = 1450 Synchronous	1	1 100		
C C#	Friency - Not less than 90%				
6.HP	P = 5. HP = Corresponding to Head and discharge but not less than 35HP				
7 Cla	ass of insulation = F or above	1		1.	
1		1		1	1
8. Typ	pe of duty = Continuous pe of rotor = suitable among single squirrel cage / double squirrel cage , single or double skewed squirrel	10	i		>
cage.	•				
10.G	D2 = suitable for above parameters.		1	1	
11.M	lotor thrust bearing = Anti friction ball /roller bearing		- 1		
			1		
Then	ethod of starting = star/delta notor should be able to with stand fluctuations in voltage and should be conforming to latest IS				1
	fications.				1
			1	1	1
	essories pump unit shall be provided with suitable discharge head with proper stiffening box arrangement, non-				
• Each	n pump unit shall be provided with suitable discribing head with proper summing in providing the satisfactory se ratchet, coupling etc as per standard specification besides all other accessories required for satisfactory se ratchet, coupling unit at site are included in the job.				12
			١		1
1,5	rmance and mechanical works required for installation of pumping equipment is compulsory and pumping un Providing of test certificate & Characteristic Curve of pumping equipment is compulsory and pumping un		1		
Moto					

A Xum

5. No.	Description	Unit	Qty.		Rate	Amo	ou <	MOLY
1.02	Fabrication Providing and fitting of modular control panel as per the below mentioned technical specification. The technical details/ Ratings of various components of Modular Control Panel are given Below a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C. Breaking Capacity of S0kA=(02No's) b. Changeover Switch of rating = 200Amp (01No.), c. Bus Bar copper = 200A (01No.) d. Motor Breakup Protection MCCB of rating = Thermal release range 125-160A With S.C. Breaking Capacity of 36kA = (02 Nos.) e. FASD starters: Motor rating 3-phase 415V, 50HZ AC-3 Duty with Relay range of 45-75 Amp (02No's) e. Auxillary MCB for f. Heating/Lighting = 63 Amp. (01No.) Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz. Relay range = 11-18 A. Protection = Under voltage/ over Voltage Qty = 02 No's f) Auxiliary MCCB for Heating/Lighting: Circuit Breaker = MCCB (Outgoing) Qty. = 1 No. No. of poles = 4P Current Rating = 63 Amp. Rated operational voltage = 415 V + 15 % Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 25 KA	Job	1	3	,03,186.00		3,03,186.00	A Long to the land
F R C C IV Survey diff	model of the Moduar Control Pannel: Protections = Thermal Overload with pre-alarm, Short Circuit, PhaseLoss, Unbalance, Phase reversal, Under Current, Prolong starting, Locked cotor & Earth fault and over current Rty. = 02 No's (01 No. for each starter) M-power module for mobile starter for submersible motor 1P/3P 3 wire cuantity = 02 Nos. (RS Languages = English, Hindi citable Region- North India the panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A, gital voltmeter of range 0-500 V, and digital frequency meter (01 No each). The enclosure of the ment shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for month and noiseless movement of windows and advanced locking arrangements.							
Probel Typ step Typ Inpo Out Frec Win Insu Cool Temp Mou Corre Wave Duty Enclo Core I Load I Overlo	oviding, fitting, testing and commissioning of 100 KVA Voltage Stabilizer as per specifications low: be of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi	jo	ob	2	1,96	,466.00	3,9	2,932
nousing indicate nsulati trengtl nd fille	abe or otherwise visible to naked eye. The top of the container to have a display panel for g 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neo ors for incoming and outgoing phases (06 No's). In mg media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielectric h of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels at site up to top level. In a site up to top level.	on c						

131	1	Description		-		
	N		Unit	Qty.	Rate	Amount
	1.04	Farth work in excavation by mechanical means(hydralic excavator) in trenches in all kinds of soil for laying of 250mm MS delivery pipe(not exceeding 1.5m in width) including dressing of sides and ramming of bottoms lift upto 1.5m,including getting out excavated earth and disposal of surplus excavated earth as directed, within a lead of 50 meters/(As per site requirment)	Cum	210	256.85	53,938.50
	1.05	50m and lift upto 1.5m/(As per site requirment)	Cum	196.5	218.40	42,915.60
	1.06	Providing, laying, fitting and testing of Mild steel Delivery pipe/Rising main of 250mm nominal dia. with 5.9mm wall thickness from raw water stage to filtration plant/As per site requirment. The pipe shall be jointed through end to end welding with suitable no. of bends, offsets etc as per site requirment. The Mild steel pipes shall conform to IS-3589 with latest amendments. The pipe shall be laid underground as per the defined contour/site requirement after carrying out the earth excavation. The road cuts and safe overburden thereof with oversized pipe jacketing, head load from road side to the site of installation after cleaning of pipes are also included in the job. The job execludes the cost of earth excavation, backfilling but includes cost of pipe, materials, carriage, gas cutting and welding, arrangement of power supply/DG Set for welding process, skilled labour, necessary tools and tackles etc and finally testing of the delivery pipe on full load.	М	234	5,800.00	13,57,200.00
1.	.07	Providing and laying of thrust/holding cement concrete blocks 1:2:4 mix during pipe laying as per site requirment.	Cum	2	7,078.00	14,156.00
1.0	08	Providing, fabrication and fitting of delivery manifold system with washout arrangement for VT pumping units fabricated out of 12meter. Heavy duty 200mm NB MS pipe having 5.9mm thickness with fabrication of suitable No. of flanged MS Bends /offsets/dismantling joints/ pipe spacer/reducer joints/pipe supports etc/as per site requirement and as per the directions given by the site Incharge. The job includes providing and fitting of adequate number of 18mm thick MS flanges on each joint of delivery manifold and as per site requirement. The flange welding shall be carried out in double layers using reputed make electrodes to form strong and leak proof joint. The ob further includes Providing and Fitting of nuts and bolts and Rubber Insertion Gaskets etc as per site requirement. Painting of complete delivery manifold system with one coat of anticorrosive reducide primer after surface preparation by grinding, buffing, emery cloth etc and then painting with wo coats of approved paint. The job includes cost on account of material, carriage, gas cutting, welding, skilled labour, necessary tools and tackles etc and finally connecting of 200mm delivery manifold with 250mm rising main through flanged joint and sucessful testing of the delivery manifold on full load.	Job	1	1,20,000.00	1,20,000.00
1.09	ir p co fo ex	abrication of gantry mechanism/CGI shed/pump base frame by way of providing Structural steel built up sections, trusses and framed work, including cutting, hoisting, grouting, fixing in position and applying a priming coat of steel primer and 02 coats of paint of approved shade all pumplete welded. The drawings and Dimensions or Gantry/CGI shed/pump base frame etc will be provided by Site In Charge at the time of secution of job.The quantity may vary as it is conditional to civil structure being constructed/as ar site requirement.	Kg	1400	135.00	1,89,000.0
1.10	ho	brication, providing and fitting of split type MS clamps12 mm thick, 4" wide for lowering and lding of VT pumping units as per sample. The job includes the cost of required size of nuts and lts.	job	2	3,200.00	6,400.0
1.11	to i.Va ii.E iii.V iv.T v.Se vi.C vii.C Bes	oviding, fitting, testing and commissioning of ARV (Air Release valve) as per IS 14845 to be fitted G.I rising Main. The ARV Shall have the following specifications: - alve type - single chamber, single/double orifice. and connection - flanged ends to IS 1538 Working temperature - 45oc to -150 c est pressure - body / seat 2.5 x PN caling ring - EPDM construction -ductile iron with stainless steel floats coating - epoxy with corrosion resistance does the above works, The job also cost on account of P/F R.I gasket, GI Pipe, nuts and bolts wired for installation of ARV and arrangement of gas cutter/ welding set at site.	No	1	19,394.0	19,394

	Description	Unit	Qty.	Rate	Amoun
1.12	Dia = 100 mm Providing and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate/ Providing and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate/ Sluice valves as per IS14846 for regulating the water supply outside the pumping units . The body and bonnent of the valve shall be of ductile iron, wedge with fully vulcanized EPDM rubber(Approved for drinking water) and NBR seal. The Gate/Sluice valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions It shall have electrostatic epoxy coating(approved for drinking water) both inside and outside of the valve. The valve shall be supplied along with hand wheel.	Job	3	34,310.00	1,02,9301
th ap	The job includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to the inbuilt flanges of the valve which shall be fitted with rising main of the pumping unit at appropriate spots as per site requirement. The job includes the cost on account of P/F of nuts, bolts and gasket required for the job.	į.			
Siz	Size: 200 mm PN: 1.6/16 Providing and fitting of Ductile Iron double flanged, Slanted seat swing check valve(NRV) as per IS				
53 rut sha 1.13 It si	Providing and fitting of Ductile Iron double flanged, Slanted seat swing check valve, 1887) as per 19 5312. The body shall be of ductile cast iron with fully encapsulated vulcanized EPDM rubber(Approved for drinking water). The valve shall be compatible for buried applications and shall be safe to install in both horizontal and vertical positions. It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve.	Job	3	42,392.00	1,27,176.00
Cos The the app	rost on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work. The job includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to the inbuilt flanges of the valve which shall be fitted with Rising main of the pumping unit at appropriate spots as per site requirement. The job includes the cost on account of P/F of nuts, bolts and gasket required for the job.				
along Gear beari and t	oviding, installation and testing of Heavy Duty manua type triple spur gear chain pulley block ong with monorail geared travelling trolley having following features ears:- The hoist shall have precision machine case Hardened alloy steel gear mounted on arings and housed in a dust proof gear box. The lubrication of gears should be of high viscosity d temperature for longer life of gears. Dead Chain:- The load chain be made of high tensile alloy steel having wear resistance and leatest mobility. The chain should be accurately collaborated, tested and have adequate in built				
factor Load of design safe an i.Make ii.Capa	tor of safety for safer operation. d chain wheel:- the load chain well should be double ball bearing supported and Specially igned, perfectly machined wheel providing correct grip of load chain to makes the hoist most and reliable against any failure. The main specifications of C.P Block are given below: Reputed make	Job	1	62,972.00	62,972.00
iv.Min.	o. Of load chain falls = 2 or above in. Height of lift = 6 M				
3 Phase wound Specific	fications conforming to IS: 1180 (Part 1) 2014 with latest amendments				
Type of Manufa Specifica Type: HT	of cooling: ONAN.Rating: 100 KVA HT Transformer, 3 phase (Level 2). Ifacturers certificate be apended Ifactions conforming to IS: 1180 (Part 1) 2014 with latest amendments. HT/LT Transformer				A
Operatin Input =1 Output =	of cooling: ONAN. ting conditions: =11000 volts t =433 volts AC supply in 3- phase.			Š.	
Output=4	3 No. HT bush rods with insulators, washer, nuts etc. =4 No. LT bush rods switch insulators, washers, nuts etc. he core shall be of high permeability to reduce core losses and the strips shall be of suitable	Job	1	2,09,945.0	.00 2,09,945.
Transforn shall be fa transform	rmer Coils: Suitable number of HT and LT coils in each leg of the core. The transformer coils fabricated out of superior quality aluminum wire/strips, properly wound. The HT mer is completely filled with suitable grade transformer oil up to required level. The job				

360	Description	Unit	Qty.	Rate	Amount
de.	Whe HT transformer shall be of reputed make from an ISO certified company as per relevant standards and ext certificate shall be provided before installation. The transformer shall also be provided with breather fill with silica jel crystals, conservator with oil level indicator, explosion vet and adequate radiator fins/ Tubes. The impedance of transformer shall be as per IS: 1180 (Part 1) 2014 with latest amendments. NOTE: The scope of the work shall include obtaining of necessary inspection/clearance certificate from the concerned department for all the required equipment. The testing and commissioning shall be completed only after obtaining above certificate.	a II			
1.1	Supply, installation, erection of 9 mtrs long H.T pope of specifications ST- 410 (sp-33). The job further includes drilling of holes for installation of various accessories , wherever required the job further includes G wire earthing of pole as per REC standard.	.l Job	14	20,686.00	2,89,604.00
111	Cement bottoming 1:2:4 mix as per REC mix as per REC standards 0.5 cum/pole	job	14	3,539.00	49,546.00
1.18	P/F of Galvanized nuts, bolts of various sizes as per site requirement.(1kg/pole)	Kg	70	142.00 136.00	11,360.00 9,520.00
1.19	GI Barbed wire for Anti Climbing with fixtures/as per site requirement.	kg No	14	153.00	2,142.00
1.20	P/F Danger Plate with clamps Wedge connecters/PG Clamps/as per site requirement.	No	24	421.00	10,104.00
1.21	Providing and fitting G.I Channel /platform for T-bed/Angle/ Flat /Riser of sizes including clamps	Kg	1200	123.00	1,47,600.00
1.23	Supply, Installation, Testing and commissioning of Polymeric Gang operated Air break switch 3 Phase, 3 Pole 200 A. Vertical Type, outdoor type, triple pole, suitable for vertical installation, single break provided with locking arrangement at both ON and OFF position consisting of HT post double insulator, copper or copper alloy high pressure heavy contact assembly, rod with bearings, operating handle and 2 length of 32mm dia. GI pipe conforming to IS 1818 1961, 06 No. of insulators, rated voltage 11KV 200A complete as per IS specs.	Set	2	11,730.00	23,460.00
1.24	Supply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable for vertical installation.	Set	1	4,983.00	4,983.00
1.25	Supply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, A With polymer housing, Station Type as per Clause 30	Set	1	7,754.00	7,754.00
1.26	upply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, ighting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm.	No	3	596.00	1,788.00
1.27	upply and fitting of 11 KV polymeric composite pin insulator 12 KV, 5KN, Lighting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm	No.	42	347.00	14,574.00
1.28 F	inting of poles Red oxide	lit	14	306.00	4,284.00
1.29 P	inting of poles Aluminum paint	lit	14	510.00	7,140.00
	ndry items like aluminium lugs, jumpers, binding tape.	LS	1	1,755.00	1,755.00
I.31 ea ari ea	rthing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of rthing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body,neutral,G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts,refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover.	Job	7	10,462.00	73,234.00
3/	riding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for ent of various accessories	Meter	1000	60.00	60,000.00
Suppole Spe Type Open Input Outp Core: and g Trans: shall be is command at the HT and a the breath radiate amend NOTE: from the shall be specific to the shall be specificated to the shall be specific ted to the shall be specific ted to the shall be specificated to the shall be specific to the shall be specific to the shall be specificated to the shall be specificat	t=4 No. LT bush rods with insulators, washer, nuts etc. t=4 No. LT bush rods switch insulators, washers, nuts etc. The core shall be of high permeability to reduce core losses and the strips shall be of suitable size uge. ormer Coils: Suitable number of HT and LT coils in each leg of the core. The transformer coils a fabricated out of superior quality aluminum wire/strips, properly wound. The HT transformer oletely filled with suitable grade transformer oil up to required level. The job includes carriage, leads and lifts involved. transformer shall be of reputed make from an ISO certified company as per relevant standards est certificate shall be provided before installation. The transformer shall also be provided with r fill with silica jell crystals, conservator with oil level indicator, explosion vet and adequate fins/ Tubes. The impedance of transformer shall be as per IS: 1180 (Part 1) 2014 with latest ments. the scope of the work shall include obtaining of necessary inspection/clearance certificate a concerned department for all the required equipment. The testing and commissioning completed only after obtaining above certificate.	job	1	39,422.00	39,422.00
piate(2)	ed stay set with 50x8mm stay clamp, guy insulator(02No.),anchor 0x200x6mm),nuts and bolts,2No. Turnbuckels,1.8m long,16mm diameter solid GS stay rod 15mm dia GI standerd wire complete.	set	2	4,922.00	9,844.00

		Unit	Qty.	Rate	Amount
S. No.	Supply Installation testing and commissioning of 3-phase, 4-wire Trivectoniete With and output	Job	1	27,000.00	27,000 LA1 Cut
1.35	ring type CT complete unit as per little and all allied accessories, transportation charges,	Unit	1	7,350.00	7,350 00
1.36	component, as per site required to the job. component, earthing etc are included in the job. Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 No each) Electrification and illumination of pump house by way of providing & fitting Eight No. of lighting points and Two No. of heating points viz: a) Wiring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi-				1.4
1.37	a) Wiring to lighting points with 1.55q mm and heating points with 2.53q mm and stranded copper conductor insulated, unsheathed 1.1 KV grade ISI marked with length as required upto control panel as per site requirment. b) PVC conduit/ channel 1.5" and 1" to be fitted on walls of pump house as per site requirment. c) Eight No. of Bulb holders (angle type or any other type) with eight No. of 12Watt LED bulbs . d) Modular Switch boards with frame to be fitted on walls of pump house consisting of ISI marked items like 10A switches, indicator, 03 pin flash type socket for lighting (As per requirment) and combined 16A switch and 05 pin flash type socket(02No)for heating .	Job	1	28,000.00	28,000.00
1	The job includes cost on account of material, skilled labour,tools and tackes, including screws, cement nails, rawl plugs and other consumable items as per site requirement. Illumination of Premises: Providing and erection of 9 Mtr long Hot Dip Galvanized octagonal pole (single Section) with control 150mm, top 75mm wide, thickness 3mm with 70 Microns Zinc coating having inside arrangement for providing of power connection along with following items. 13 Way Terminal Connector 20 Amp. 13 No MCB 8 Amp. The job includes fabrication, providing and fitting of three arm GI structure at the top having 120 ngle between arms and each arm having 15° inclination with respect to horizontal plane. Each rm should be of 2′ length and size and shape appropriate as per requirement of the luminary. The job also includes providing and fitting of required length of flexible multi strand 2 mm copper wire from each terminal connector to each holding arm. The pole is mounted on 1:2:4 Cement concreting of size not less than 2′x2′x6″ (cost of concreting of included in the job) using 04 No anchor bolts of required size not less than 7″ in length. The implete job includes earthing in GI Electrode as per relevant IS Code	Job	1	22,226.00	22,226.00
.39 ling	oviding, Installation and testing of 2KVA fully automatic copper wound voltage stabilizer with put voltage 70-240 V and output 220 V. The stabilizer shall be installed and connected to the extric circuit as per location provided by site in charge.	Job	1	8,154.00	8,154.00
Proof on Have Inp Power Color Bear Lum Opee The Prote The	poviding, installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type) top of octagonal pole including MCB filted in box 10A vide item No.36 ving following specs: put: 90-240 V 50 Hz wer Factor: >0.9 our Temperature: 4K - 6.5K am Angle: 120* - 170* hens: >12000 erating Temperature: -20*C to 60*C LED is pressure die cast aluminum housing with power coated finish and having Ingress tection up to IP-68. LED is properly fitted on the arm of the pole and connected to the copper wire as provided in high mast pole	Job	3	9,486.00	28,458.00

, No.	Description						7	
-	iabrication of 6'x3' (2No's) angle iron beds having 2' height using 50x50x6mm angle iron by way of	Unit	Qty.	Rate	e	Amount		
1.41	Providing and fitting of Structural steel in built up sections , trusses and framed work, including cutting , hoisting , fixing in position and applying a priming coat of approved steel primer all complete welded.	Кg	82		135.00	11,070	1 1 -	ob
1.42	Providing and fitting of 19mm Ply wood board to be fitted on the angle iron beds. The job includes cutting, fixing painting of the play sheet by one coat of primer and two coats of enamel paint	Sft	36		154.00	5,54	4.00	
1.43	Providing and fitting of 400mm ISI Marked sweep wall fan	No.	1		3,600,00	2.00	00.00	
	a) Providing of good quality conveinence and utility items bedding for night stay/Shift consisting of	:		<u> </u>	3,000.00	3,60	0.00	
1.44	i) Mattress with warm cover size 6'x3' (6Kg)- 02 No's ii) Quilt with warm cover size 5'x8' (6Kg)- 02 No's iii) Pillows with covers - 02 No's iii) Pillows with covers - 02 No's iv) Single bed warm blankets with one sided Fur- 02 No's The filling material for mattress, quilt and pillow shall be of good quality cotton b)The job also includes providing of pressure cooker 5ltr 02 No's, Steel patella (utensil) 5ltrs 02 No's, cooking heater 01 No., room heater 01 No., steel buckets 10 litre capacity 01 No., Plastic bucket 10 litre capacity with Mug 02 No's each, steel glasses 06 No's, steel Plates with large spoons and bowls 03 No's each, Cup and Saucer set (01 No. Set) and, 5kg Gas cylinder with burne stove. The job also includes providing of thermo-cool 15'x12' along with excel matting of 15'x12' size. The job also includes providing of unbreakable Plastic Chair table set consisting of chairs 04 No's, extra heavy Table 01 No. The job also includes providing of good quality safety Door locks (0 No's) of Godrej, Link locks,		1		39,619.00	39,	619.00	Me
1.45	The Tool Kit for maintenance: The Tool Kit for maintenance shall comprise of the following and all the items as mentioned below shall be of: Providing of tool kit consists of following items i.Double ended Spanner (Chrome plated) 02 sets complete iii.Double ended Ring spanners chrome plated 02 sets complete iii.Allen key set black finish 02 sets complete iv.Combination Pliers insulated with thick C.A sleeve; size in mm 165, 210, 255 each – 02 No. v.Long nose plier insulated with thick C.A sleeve; size in mm 165, 205 each – 02 No. vi.Side cutting plier insulated with thick C.A sleeve; size in mm 165, 205 make – 02 No. vii.Insulated screw Drivers Blade length in mm Blade dia. in mm Tip dimensions in mm Quantity 5031.6 x 0.402 7531.6 x 0.402 10033 x 0.402 1253.53.5 x 0.5 02 120044 x 0.602 20045 x 0.802 viii.Hammer with handle weight – 110 mg, 340 gm, 600 gm –each – 1No x.Heavy duty pipe Wrench length in mm - 200, 300, 600 each – 01 No. c.Electric Multimeter = 1No. kii.Digital multimeter – 1No. kiii.Digital Clamp tester capable to measure up to 400A - 1 No. kiii.Hack saw frame with hack saw blade – 01 no.		ob .	1	28,840.0	00	28,840.00	
1.46	Supply, installation, Testing & commissioning of 1000VA Full Sine wave power inverter includi Providing / Installation of 12V, 180AH Tubular inverter Battery with trolley and cover. with 2-4 mm2 Cu (25 m) wiring as per site requirement along with other accessories like SS-Combination of the item.	core	Job	1	34,05	53.00	34,053.0)0
1.47 1.	Supply, installation of 6 kg CO2 type fire extinguisher manufactured as per IS: 15683of 2006 of mark and comply with DGMS (Approval). The co2 extinguisher should be suitable for class B dire and also for fire involving electrical equipment. The cylinder used for fire extinguisher shapproved by petroleum and explosive safety organization (PESO) as per gas cylinder rules 20 as per IS: 7285 of 2004. The body should be made of seamless steel (manganese) confirming 2285 with IS mark and should be provided with squeeze grip nozzle and should be filled with onfirming to IS: 15222 of 2002 with certificate. The extinguisher shall be provided with nanufactures test certificate and hydraulic test certificate by BIS from PESO.	& C all be 04 and to IS:	Job	2	6,4	447.00	12,894	.00
1.48 a	roviding, laying & fixing of shock proof rubber mats with adhesive/bonding material on the of the pump house, covering area around electro-mechanical machinery for safeguarding the mb of the workmen due to possible leakage of current & short circuit. The floor surface shoade good & shall be free from dust, grease, foreign material & moisture free. The mats shown is per IS 15652:2006 & shall have the following specifications: - Tomposition: Rubber (synthetic mats for electrical purpose) Thickness: - 2.5mm Size: - 1M wide. The relative parts shall be accepted with manufacturers test certificate.	ne life & all be	Meters	10	1	1,205.00	12,05	30.0

		Unit	Qty.	Rate	Amour
S. No.	Description				/
1 49	Providing and Fitting of 70 sqmm, 3.5 core LT 1.1 KV, XLPE Armoured Aluminium Cable conforming to IS: 7089 part 1st as service line from the HT transformer to control panel including necessary thimbling, crimping, taping etc. NOTE:- The cable terminal ends for connection to switchgear at various requisite points shall be Al.	Meter	100	668.00	66.80 C
- 1	Thimbles of reputed make and of appropriate size and comments		30	260.00	7,800 00
1.50	Providing and Fitting of 10 sqmm, 1.1KV 2 core PVC Insulated Sheathed 2 Core copper cable for	Meter	30	1.17.17	,,000,00
-	connecting Lighting pole with power supply conforming to IS: 694:2010. Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, 50 Sq. mm PVC insulated copper cable for internal connections as per IS 694 along with thimbling	Meter	180	780.00	1,40,400.00
a	is per requirment at site.	Unit	1	1,205.00	1,205.00
1.52 P	roviding of 1 KW heat convector for operators for winter season	Unit	1	1,911.00	1,911.00
1.53 P	roviding of solar/electrical lantern chargeable on both solar & electrical 220v supply.	Oine		erfiling of the	4 41
2 Fi D pu pa •S Alt An Rel	ilter Water Stage A. For Gund Ibrahim OHT Design, supply, providing, installation, successful testing and commissioning of vertical turbine sumping unit as per IS 1710 driven by VT motor for pumping water from Nallah of following strameters. Ide Condition Littude = 1580 Meters/Greater (AMSL) Inbient Temperature = +40°C to - 15°C Lative Humidity = 60% Type of water = Raw water having specific gravity of unity average.				
•Qi •Su •Wi A.Pi 1.Di 2.Ty 3.Lio	uality of water = Naw water maving specific gravity of unity average. uality of water = Raw water with silt having medium to coarse sand. ump/liner Bed Level = 8m/otherwise specified below from Machine floor level later column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level UMP ischarge = 16000 GPH upe = Self water lubricated, VT pump, open line shaft. quid to be handled = Raw Water under the water water water under the water water water water	20			
6.Eff 7.Im; 8.Lin 9.Ler 10.To 11.Im 12.Lir 13.Lin 14.Sur 16.Pur 17.Col	rad = 40 Meters ficiency = Not less than 50% peller = Semi-enclosed mixed flow all bronze/stainless steel the shaft/head shaft = Stainless steel the shaft head shaft = 1 m maximum total length of line shaft = 10 m/as specified (excluding Head shaft) the shaft = Stainless steel the shaft bearing = Cut less rubber/ Neoprene rubber the shaft coupling = Stainless steel cotion Strainer = MS fabricated the shaft bear ing = Cut less rubber in the shaft coupling = Stainless steel cotion Strainer = MS fabricated the shaft stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated The shaft coupling = Stainless steel cotion Strainer = MS fabricated	job	. 2	6,60,000.00	13,20,000.00
B.Prim 1.Type 2.Powe 3.Frequ 4.RPM 5.Efficie 6.HP = 7.Class	the Mover = Vertical hollow shaft, AC squirrel cage induction motor er Supply = 03 Phase, 415V+ 15% AC uency = 50Hz + 3% = 1450 Synchronous ency = Not less than 90% Corresponding to Head and discharge but not less than 25HP. of insulation = F or above of duty = Continuous	-		My sales	
9.Type o skewed 10.GD2 11.Moto 12.Meth	of rotor = suitable among single squirrel cage / double squirrel cage , single or double squirrel cage. = suitable for above parameters. or thrust bearing = Anti friction ball /roller bearing and of starting = star/delta				
specifica C.Access Each pu rrangen ccessori umping ote: Pro					

N	Description	Unit	Qty.	Rate	Amount
2.02	Individual Providing and fitting of modular control panel as per the below mentioned technical specification. The technical details/ Ratings of various components of Modular Control Panel are given Below a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C. Breaking Capacity of 50kA=(02No's) b. Changeover Switch of rating = 200Amp (01No.), c. Bus Bar copper = 200A (01No.) d. Motor Breakup Protection MCCB of rating = Thermal release range 125-160A With S.C. Breaking Capacity of 36kA = (02 Nos.) e. FASD starters: Motor rating 3-phase 415V, 50HZ AC-3 Duty with Relay range of 30-60 Amp (02No's) e. Auxillary MCB for f.Heating/Lighting = 63 Amp. (01No.) Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz. Relay range = 11-18 A. Protection = Under voltage/ over Voltage City = 02 No's f) Auxillary MCCB for Heating/Lighting: Circuit Breaker = MCCB (Outgoing) City. = 1 No. No. of poles = 4P Current Rating = 63 Amp. Rated operational voltage = 415 V + 15 % Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 25 KA	Job	1	2,72,539.00	2,72,539.00
; ; ;	g) Motor Protection Relay: Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections suitable for the Moduar Control Pannel:- Protections = Thermal Overload with pre-alarm, Short Circuit, PhaseLoss, Unbalance, Phase reversal, Under Current, Prolong statrting, Locked Rotor & Earth fault and over current City. = 02 No's (01 No. for each starter) M-power module for mobile starter for submersible motor 1P/3P 3 wire Quantity — 02 Nos. VRS Languages — English, Hindi initiable Region- North India The panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A, digital voltmeter of range 0-500 V, and digital frequency meter (01 No each). The enclosure of the sanel shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for mooth and noiseless movement of windows and advanced locking arrangements.				
b T start Type Inn Coc Tee M M Coc WM En Coc Low The Coc Low The Coc Low The Type Hool ind Insistre and The Coc Low The Coc Lo	roviding, fitting, testing and commissioning of 50 KVA Voltage Stabilizer as per specifications elow: ype of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi ep. ype of Regulator: Double plate type with electrolytic copper contacts. put voltage: 250-400 volts.(3 phase) utput voltage: 400 ±10% volts. equency: 50 ±3 C/S. indings: Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried. sulation: Fiber glass insulations to tested parameters. voling: Naturally, Oil cooled mp. Rise (Max): 30°C above ambient ounting: On Uni-directional wheels. prection rate: 30 volts per step ave form distortion: virtually nil ty cycle: 100% continuous. closure: MS sheet enclosure in pressed CGR Sheet powder coated with radiators. yer laminates: High grade, low eddy loss, grain oriented silicon steel laminations. ad: Three phase induction motor load. ad Amperes (continuous) erload in 24-hours operation: 10% above continuous Ampere rating. e voltage stabilizer shall have T-oil level indicator gauge preferably glass et tube or otherwise visible to naked eye. The top of the container to have a display panel for using 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neon icators for incoming and outgoing phases (06 No's). Julating media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielectric enth of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels in the part of the provided and site up to top level. The part of the provided with manufacturers dully stamped test certificate and shapped test with specifications.		2	1,07,401	.00 2,14,802

	Description	Unit	Qty.	Rate	Amen
S. No.	Ms. Homes 12 mm thick and 4" wide for lowering	job	2	2,800.00	No.
	and holding of VT pumping unit as per sample. The job includes which and bolts. Providing, fitting, testing and commissioning of ARV (Air Release valve) as per IS 14845 to be fitted to G. I rising Main. The ARV Shall have the following specifications: - r. Valve type - single chamber, single/double orifice. ii. End connection - flanged ends to IS 1538 iii. Working temperature - 45oc to -150 c	No	1	19,394.00	19,3947
B	iv.Test pressure - body / seat 2.5 x PN v.Sealing ring - EPDM v/.Construction -ductile iron with stainless steel floats viii.Coating - epoxy with corrosion resistance Sesides the above works. The job also cost on account of P/F R.I gasket, GI Pipe, nuts and bolts				
figure 63	equired for installation of ARV and arrangement of gas cutter/ welding set at site. Providing/supplying and fitting of 150mm G.I flanged Rising Main including delivery manifold/Y unction with washout arrangement at site. The Pipe shall be hot dip Galvanized, class B confirming to IS 1239. The job includes providing and fitting of M.S Flanges conforming to BIS 392/1997 Table 17 (Rating PN16). The flanges shall be double welded both from inside and utside of the pipe using standard electrode of reputed make. anges (as per IS 6392/1997 Table:17) bickness shall conform to IS 6392 Part 1st Table-17. The flange welding shall be carried out in public layers using reputed make electrodes to form strong welding joint.	Mater	230	2,893.00	6,65,390.00
DC Nut Nut Rub Rub qua	Arc Welding using welding electrode having diameter not less than 4mm. ts and Bolts ts and Bolts (conforming to IS:1363 Part 1st) ober Insertion Gaskets ober Insertion Gaskets (conforming to IS: 638/79) to be used between flanged Joints. The intity may vary as it is conditional to civil structure being constructed/as per site requirement.	Meter	230	-,	
2.07 of nu The c	viding and fitting of 100mm GI bend with flanges The Flanges shall be MS conforming to BIS 2/1997 Table 17 (Rating PN16) and welded on both sides. The job includes prividing and fitting outs, bolts, gaskets etc as per site requirement. quantity may vary as it is conditional to civil structure being constructed/as per site irement.	job	8	5,728.00	45,824.00
Provi sluice The b rubbe buriec It shal the va Cost o The joi the inb approp	iding and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate/evalves as per IS14846 for regulating the water supply outside the pumping units and bonnent of the valve shall be of ductile iron, wedge with fully vulcanized EPDM er(Approved for drinking water) and NBR seal. The Gate/Sluice valve shall be compatible for diapplications and shall be safe to install in both horizontal and vertical positions all have electrostatic epoxy coating(approved for drinking water) both inside and outside of alive. The valve shall be supplied along with hand wheel. In account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work, be includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to built flanges of the valve which shall be fitted with rising main of the pumping unit at pariate spots as per site requirement. The job includes the cost on account of P/F of nuts, and gasket required for the job.	Job	3	25,977.00	77,931.00
shall be sha	Af 16 Ag and fitting of Ductile Iron double flanged, Slanted seat swing check valve(NRV) as per IS the body shall be of ductile cast iron with fully encapsulated vulcanized EPDM Approved for drinking water). The valve shall be compatible for buried applications and safe to install in both horizontal and vertical positions. ave electrostatic epoxy coating (approved for drinking water) both inside and outside of	Job	3	32,205.00	96,615.00

Design, supply, providing, installation, successful testing and commissioning of vertical turbine pumping unit as per IS 1710 driven by VT motor for pumping water from Nallah of following parameters. Site Condition Altitude = 1580 Meters/Greater (AMSL) Ambient Temperature = +40°C to - 15°C Relative Humidity = 60% Type of water = Raw water having specific gravity of unity average. Quality of water = Raw water with silt having medium to coarse sand. Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
parameters. •Site Condition Altitude = 1580 Meters/Greater (AMSL) Ambient Temperature = +40°C to - 15°C Relative Humidity = 60% •Type of water = Raw water having specific gravity of unity average. •Quality of water = Raw water with silt having medium to coarse sand. •Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level •Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1. Discharge = 8500 GPH	
parameters. •Site Condition Altitude = 1580 Meters/Greater (AMSL) Ambient Temperature = +40°C to - 15°C Relative Humidity = 60% •Type of water = Raw water having specific gravity of unity average. •Quality of water = Raw water with silt having medium to coarse sand. •Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level •Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
•Site Condition Altitude = 1580 Meters/Greater (AMSL) Ambient Temperature = +40°C to - 15°C Relative Humidity = 60% •Type of water = Raw water having specific gravity of unity average. •Quality of water = Raw water with silt having medium to coarse sand. •Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level •Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
Ambient Temperature = +40°C to - 15°C Relative Humidity = 60% •Type of water = Raw water having specific gravity of unity average. •Quality of water = Raw water with silt having medium to coarse sand. •Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level •Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
Relative Humidity = 60% •Type of water = Raw water having specific gravity of unity average. •Quality of water = Raw water with silt having medium to coarse sand. •Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level •Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
Type of water = Raw water having specific gravity of unity average. Quality of water = Raw water with silt having medium to coarse sand. Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
•Quality of water = Raw water with silt having medium to coarse sand. •Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level •Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	
Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level A.PUMP 1.Discharge = 8500 GPH	in the second
A.PUMP 1.Discharge = 8500 GPH	190
1.Discharge = 8500 GPH	
	- 1
2.Type = Self water lubricated, VT pump, open line shaft.	l ·
3.Liquid to be handled = Raw Water	
4.RPM = 1460	
5.Head = 200 Meters	
6.Efficiency = Not less than 50%	
7.Impeller = Semi-enclosed mixed flow all bronze/stainless steel	
8. Line shaft/head shaft = Stainless steel	1
9. Length of each line shaft = 1 m maximum	Į.
10.Total length of line shaft = 10 m/as specified (excluding Head shaft)	
11.Impeller shaft = Stainless steel	
12.Line shaft bearing = Cut less rubber/ Neoprene rubber	
13.Line shaft coupling = Stainless steel	
14. Suction Strainer = MS fabricated 3.01 45 5 10,30,000.00	20,60,000.00
16.Pump Bowl = Cast iron	20,00,000.00
17. Column pipe = Mild Steel of wall thickness not less than 8mm flanged type in assorted lengths	
18.VT Pump to be designed with minimum number of stages.	
B.Prime Mover	
1.Type = Vertical hollow shaft, AC squirrel cage induction motor	- 5
2.Power Supply = 03 Phase, 415V+ 15% AC	3
3.Frequency = 50Hz + 3%	3
4.RPM = 1450 Synchronous	1/2
5.Efficiency = Not less than 90%	
6.HP = Corresponding to Head and discharge but not less than 60HP	- F
7.Class of insulation = F or above	
8.Type of duty = Continuous	
9.Type of rotor = suitable among single squirrel cage / double squirrel cage , single or double skewed	. 0
10.GD2 = suitable for above parameters.	
11.Motor thrust bearing = Anti friction ball /roller bearing	
12.Method of starting = star/delta	
The motor should be able to with stand fluctuations in voltage and should be conforming to latest IS	
specifications.	
C.Accessories C.Accessories	
•Each pump unit shall be provided with suitable discharge head with proper stiffening box arrangement, non-	
reverse ratchet, coupling etc as per standard specification besides all other accessories required for	· ·
satisfactory performance and mechanical works required for installation of pumping unit at site are included	
in the job.	
Note: Providing of test certificate & Characteristic Curve of pumping equipment is compulsory and pumping	
unit is to be approved from the concerned authority before procuring	1

A. Ju

unit is to be approved from the concerned authority before procuring.

	December	Unit	Qty.	R	ote	Ann		110
S. No	Description Description	ingli-damenti pilo-damenti ta	The Section of Street, Street,	1			10.	21121
	Fabrication Providing and fitting of modular control panel as per the below mentioned technical Fabrication Providing and fitting of modular control panel are			η.	4 5 5		· ·	Laurete
	specification. The technical details/ Ratings of Various Conv.		1				10	CHE CE
1	given Below a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 200-250A with S.C.			- 7			`	visin
	Breaking Capacity of 50kA=(02No's)							low
					1.411		\	1
	d. Motor Breakup Protection MCCB of rating = Thermal release rating	1 .				The state of		
	Capacity of 36kA = (02 Nos.) e. FASD_starters: Motor rating 3-phase 415V, 50HZ_AC-3 Duty with Relay range of 66-110 Amp		-				/ .	
	(02No's)				er 011 00		3.55 01.	
	e. Auxillary MCB for f.Heating/Lighting = 63 Amp. (01No.)	Job	1	3,	55,811.00		3,55,811 00	1
3.02	Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz.		20					
	Relay range = 11- 18 A.					17	1	A
	Protection = Under voltage/ over Voltage					1 411		
	Qty = 02 No's f) Auxiliary MCCB for Heating/Lighting:					21		
	Circuit Breaker = MCCB (Outgoing)							
- 1	Qty = 1 No.	1	1					
1	No. of poles = 4P		1.57			1.376		
	Current Rating = 63 Amp.							
1	Rated operational voltage = 415 V + 15 %							1
	Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 25 KA	-				1 2 4		
- 1.	g) Motor Protection Relay:		11			2 1		1
- 1	Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections			1.1				
	uitable for the Moduar Control Pannel:-	=		- 21		- 1		1
- 1	Protections = Thermal Overload with pre-alarm, Short Circuit,							
- 1	haseLoss, Unbalance, Phase reversal, Under Current, Prolong statrting, Locked							
- 1	otor & Earth fault and over current			1				
1	ty. = 02 No's (01 No. for each starter)							
- 1	M-power module for mobile starter for submersible motor 1P/3P 3 wire			1				
,	uantity – 02 Nos.		1	ı				
1	(RS Languages – English, Hindi			and a				
- 1	uitable Region- North India			-				
	ne panel shall be provided with phase indicators (03 N0) and digital ammeter of range 0-60 A,					T		1
	gital voltmeter of range 0-500 V, and digital frequency meter (01 No each). The enclosure of the onel shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for	- 1		1				
Ι'	nooth and noiseless movement of windows and advanced locking arrangements.							
3"	NOTE BITCH TO ISSUE STATE OF THE CONTROL OF THE CON					_		
Pro	oviding, fitting, testing and commissioning of 150 KVA Voltage Stabilizer as per specifications							
bel	low:		1	1				1
Туг	pe of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi			1		1		
ste	p.			١		-		
Typ	e of Regulator: Double plate type with electrolytic copper contacts.		١					
Inp	ut voltage :250-400 volts.(3 phase)			1				
Out	put voltage :400 ±10% volts.		1	- L				
Fre	quency :50 ±3 C/S.		1			١		
Wir	idings: Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried.		1	1		1		
Inst	lation: Fiber glass insulations to tested parameters.			1		1		
	ling :Naturally, Oil cooled					1		
	p. Rise (Max):30°C above ambient		1					
	unting :On Uni-directional wheels.		1			1		
1	ection rate :30 volts per step		1			1		
1	e form distortion :virtually nil	1	1	١		4.		
1	cycle :100% continuous.			1		196	1	
Fnch	osure: MS sheet enclosure in pressed CGR Sheet powder coated with radiators.		1					
1	laminates : High grade, low eddy loss, grain oriented silicon steel laminations.		1	- 1		4		
1	: Three phase induction motor load.		1			1		
	•					- 1		
	Amperes (continuous)		1	1		1		
Overl	oad in 24-hours operation: 10% above continuous Ampere rating.					1		
The v	oltage stabilizer shall have T-oil level indicator gauge preferably glass			1				
		or				1		
type t	ube or otherwise visible to naked eye. The top of the container to have a display panel for					ı		
type t	ube or otherwise visible to naked eye. The top of the container to have a display panel fong 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of ne	eon	15			ı		
housii indica	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of ne tors for incoming and outgoing phases (06 No's).	eon						
housii indica	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of ne tors for incoming and outgoing phases (06 No's).	eon	ioh	,	3.20	.894.00	6,4	1,78
housii indica Insulai	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of no tors for incoming and outgoing phases (06 No's). ting media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielecti	eon ric	job	2	3,20	,894.00	6,4	1,78
housii indica Insulat streng	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of no tors for incoming and outgoing phases (06 No's). ting media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielecti th of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barro	eon ric	job	2	3,20,	,894.00	6,4	1,78
housii indica Insulat streng	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of no tors for incoming and outgoing phases (06 No's). ting media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielecti th of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barre led at site up to top level.	eon ric els	job	2	3,20	,894.00	6,4	1,78
housindica Insulation Strenge and fill The vo	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of no tors for incoming and outgoing phases (06 No's). ting media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielecti th of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barre led at site up to top level. Itage Stabilizer shall be accepted with manufacturers dully stamped test certificate and	eon ric els	job	2	3,20	,894.00	6,4	1,78
housindica Insulat streng and fill The vo	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of no tors for incoming and outgoing phases (06 No's). ting media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielecti th of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barre led at site up to top level.	eon ric els	job	2	3,20	,894.00	6,4	1,78

	Description	т			and the second of the second of the second of the second of
No.		Unit	Qty.	Rate	Amount
	esign, supply, providing, installation, successful testing and commissioning of vertical turbine				
	mping unit as per IS 1710 driven by VT motor for pumping water from Nallah of following		1		
	parameters.				
	•Site Condition				
	Altitude = 1580 Meters/Greater (AMSL)				
	Ambient Temperature = +40°C to - 15°C				
	Relative Humidity = 60%				
	•Type of water = Raw water having specific gravity of unity average.				
	•Quality of water = Raw water with silt having medium to coarse sand.				
	•Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level		1		
	•Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level		\		
	A.PUMP				
	1.Discharge = 8500 GPH		1		
	2.Type = Self water lubricated, VT pump, open line shaft.				
	3.Liquid to be handled = Raw Water				
1	4.RPM = 1460				
	5.Head = 70 Meters				1
	6.Efficiency = Not less than 50%				
	7.Impeller = Semi-enclosed mixed flow all bronze/stainless steel				
	8.Line shaft/head shaft = Stainless steel				
- 1	9.Length of each line shaft = 1 m maximum				
- 1					
	11.Impeller shaft = Stainless steel				
	12.Line shaft bearing = Cut less rubber/ Neoprene rubber		1		
	13.Line shaft coupling = Stainless steel			1	
01	14.Suction Strainer = MS fabricated			6 60 000 0	42.22.22
	16.Pump Bowl = Cast iron	job	2	6,60,000.00	13,20,000
- 1	17.Column pipe = Mild Steel of wall thickness not less than 8mm flanged type in assorted lengths				
	18.VT Pump to be designed with minimum number of stages.				
	B.Prime Mover		1		
- 1	1.Type = Vertical hollow shaft, AC squirrel cage induction motor			1	
	2.Power Supply = 03 Phase, 415V+ 15% AC		1		
- 1	3.Frequency = 50Hz + 3%				
- 1	4.RPM = 1450 Synchronous				
- 1	5.Efficiency = Not less than 90%				1
- 1					1
- 1	5.HP = Corresponding to Head and discharge but not less than 25HP		1		
- 1	7.Class of insulation = F or above		1		
- 1	3.Type of duty = Continuous	1	1		
- 1	0. Type of rotor = suitable among single squirrel cage / double squirrel cage , single or double skewed	1	1		
	quirrel cage.				'
- 1	0.GD2 = suitable for above parameters.		1		
	1.Motor thrust bearing = Anti friction ball /roller bearing			1	
	2.Method of starting = star/delta		1		1
T	he motor should be able to with stand fluctuations in voltage and should be conforming to latest IS				1
s	pecifications.	1			
	Accessories				
	Each pump unit shall be provided with suitable discharge head with proper stiffening box arrangement, non-	-		-	
r	everse ratchet, coupling etc as per standard specification besides all other accessories required for			1	1
s	atisfactory performance and mechanical works required for installation of pumping unit at site are included				
- 1	the job.				
, N	ote: Providing of test certificate & Characteristic Curve of pumping equipment is compulsory and pumping				
'	nit is to be approved from the concerned authority before procuring.				
IU	nit is to be approved from the concerned authority before procuring.	1		1	

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S. No	Description	Unit	Qty.	Rat	te	Arren
	Fabrication Providing and fitting of modular control panel as per the below mentioned technical					Armon Les ans
	specification. The technical details/ Ratings of various components of Modular Control Panel are			T. VIII A		anub.
	given Below					para.
	a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C. Breaking Capacity of 50kA=(02No's)	1				/og/o
	b. Changeover Switch of rating = 200Amp (01No.), c. Bus Bar copper = 200A (01No.)	1				1
	o. Motor Breakup Protection MCCB of rating = Thermal release range 125-160A With S.C. Breaking	1		1 - 10		
	Capacity of 36kA = (02 Nos.)					
	e. FASD_starters: Motor rating 3-phase 415V, 50HZ_AC-3 Duty with Relay range of 36-60 Amp				4 3 3 4	
	1021103/					
4.02	e. Auxillary MCB for f.Heating/Lighting = 63 Amp. (01No.)	Job	1	2,7	2,539.00	27252
	Power Specs = 3 ¢, 415 + 15% V, 50 + 3 % Hz. Relay range = 11-18 A.	300		-,.	August A	2,72 ,539 ₍₁ ,
	Protection = Under voltage/ over Voltage		- r-	ing.	The ball	
	Qty = 02 No's		,	- 4. 8	1	
	f) Auxiliary MCCB for Heating/Lighting:					Tally.
	Circuit Breaker = MCCB (Outgoing)			1 1	pe have	
	Qty. = 1 No.					
	No. of poles = 4P				12 1	Land (Sec.)
.	Current Rating = 63 Amp.		ŀ		1 12 1	1
- 1	Rated operational voltage = 415 V + 15 %					
_	Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) = 25 KA		-			
	g) Motor Protection Relay:					10,307
- 1	Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections suitable for the Moduar Control Pappels.		1			
1	suitable for the Moduar Control Pannel:-					
	Protections = Thermal Overload with pre-alarm, Short Circuit		1	1		
1.	Mase Loss, Officialities, Phase reversal Under Current Prolonger					
,	and over current					
Ic	Rty. = 02 No's (01 No. for each starter)					
Į h) M-power module for mobile starter for submersible motor 10/20 2					
1-	02 1005.	1	1		No. 194	
IN.	/RS Languages – English, Hindi				3 1 1	
5	uitable Region- North India		1		>	
T	he panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A,	1	1	1 5	* 1	
1	and digital frequency meter (01 No seek) The seek			N 10	7.	
15	and this be of excellent it and tinish, corrosion resistant and nowder coated gliding biggers.					
15	noter and horseless movement of windows and advanced locking arrangements.			- = h *		
Pr	oviding, fitting, testing and commissioning of 50 KVA Voltage Stabilizer as per specifications	<u> </u>				1
lpe	low:					
Ty	pe of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi		1		1	
Ste	:p.		1			
Typ	pe of Regulator : Double plate type with electrolytic copper contacts.			1		
Inp	ut voltage :250-400 volts.(3 phase)				l	
	tput voltage :400 ±10% volts.	1	1		41	
Fre	quency :50 ±3 C/S.					
	ndings: Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried.				*	
Inst	ulation: Fiber glass insulations to tested parameters.		1			
Coc	ling :Naturally, Oil cooled	1				
	pp. Rise (Max):30°C above ambient					
Moi	unting :On Uni-directional wheels.			,		
	rection rate :30 volts per step					
	re form distortion :virtually nil			1		No. of
	c continuistorition : virtually fill	1		_		13.43
		job)	2	1,07,401.00	2,14,80
	osure: MS sheet enclosure in pressed CGR Sheet powder coated with radiators.		1			- A
	laminates : High grade, low eddy loss, grain oriented silicon steel laminations.	- 1				
	: Three phase induction motor load.					
	Amperes (continuous)	1	- 1			
Over	load in 24-hours operation: 10% above continuous Ampere rating.					1
The	oltage stabilizer shall have T-oil level indicator gauge preferably glass			1		
			- 1			
type	tube or otherwise visible to naked eye. The top of the container to have a display panel for					
nous	ng 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neo	n				1
ndica	ators for incoming and outgoing phases (06 No's).		1			
	iting media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielectric					
tren	gth of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels			1		
	lled at site up to top level.					e e
	oltage Stabilizer shall be accepted with manufacturers dully stamped test certificate and sh	اااد				
hev						1
	name plate with specifications.	1011				

No.	Description	Unit	Qty.	Rate	Amount
	Design, supply, providing, installation, successful testing and commissioning of vertical turbine				
	Imping unit as per IS 1710 driven by VT motor for pumping water from Nallah of following				
	parameters				
1	•Site Condition				
	Altitude = 1580 Meters/Greater (AMSL)				
	Ambient Temperature = +40°C to - 15°C				
	Relative Humidity = 60%				
	 Type of water = Raw water having specific gravity of unity average. 				
	 Quality of water = Raw water with silt having medium to coarse sand. 				
	Sump/liner Bed Level = 8m/otherwise specified below from Machine floor level				
1.	Water column in liner/sump = 2 m/as specified otherwise above from sump/liner bed level				
14	A.PUMP		1		
12	Discharge = 8500 GPH			1	
2	Type = Self water lubricated, VT pump, open line shaft.				
3	Liquid to be handled = Raw Water		1		
4	RPM = 1460				
5.	Head = 110 Meters			1	
6.	Efficiency = Not less than 50%				
7.	Impeller = Semi-enclosed mixed flow all bronze/stainless steel			1	
8.1	Line shaft/head shaft = Stainless steel				
9.1	length of each line shaft = 1 m maximum		1		
10	.Total length of line shaft = 10 m/as specified (excluding Head shaft)		1		
111.	Impeller shaft = Stainless steel		1		
ž	Line shaft bearing = Cut less rubber/ Neoprene rubber		1		
- 1	Line shaft coupling = Stainless steel				
	Suction Strainer = MS fabricated				
01	Francis On MO-H - the Continue	job	2	7,50,000.0	15,00,00
15.F	Pump Bowl = Cast iron	,,,,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
17.0	Column pipe = Mild Steel of wall thickness not less than 8mm flanged type in assorted lengths		1		
18.V	T Pump to be designed with minimum number of stages.		1		
B.Pri	ime Mover		1		
1.Typ	pe = Vertical hollow shaft, AC squirrel cage induction motor		1		1
2.Pov	wer Supply = 03 Phase, 415V+ 15% AC			1	
3.Fre	quency = 50Hz + 3%				
	M = 1450 Synchronous				
1	ciency = Not less than 90%		1		1
1	= Corresponding to Head and discharge but not less than 30HP				1
1	s of insulation = For above				
	of duty = Continuous	1			
1 ,,	of rotor = suitable among single squirrel cage / double squirrel cage , single or double skewed			1	
1				1	
1	el cage.			1	
1	2 = suitable for above parameters.	1			
11.Mot	tor thrust bearing = Anti friction ball /roller bearing	1			
1	hod of starting = star/delta	1			1
The mo	tor should be able to with stand fluctuations in voltage and should be conforming to latest IS	1	1		
specific	ations.	1			
C.Acces	sories			1	
•Fach n	ump unit shall be provided with suitable discharge head with proper stiffening box arrangement, non-		1	1	1
	ratchet, coupling etc as per standard specification besides all other accessories required for				
		1	1		
	ory performance and mechanical works required for installation of pumping unit at site are included	1	1		
in the job		1	1		
Note: Pro	oviding of test certificate & Characteristic Curve of pumping equipment is compulsory and pumping	1		1	
				1	1
in tis to	be approved from the concerned authority before procuring.	1	1	1	1

	Description	Unit	Qty.	Rate	Amoun
5.02 P. R. P. Q. (f) Cit	Fabrication Providing and fitting of modular control panel as per the below mentioned technical specification. The technical details/ Ratings of various components of Modular Control Panel are given Below a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C. Breaking Capacity of 50kA=(02No's) b. Changeover Switch of rating = 200Amp (01No.), c. Bus Bar copper = 200A (01No.) d. Motor Breakup Protection MCCB of rating = Thermal release range 125-160A With S.C. Breaking Capacity of 36kA = (02 Nos.) e. FASD starters: Motor rating 3-phase 415V, 50HZ AC-3 Duty with Relay range of 45-75 Amp 02No's) e. Auxillary MCB for f.Heating/Lighting = 63 Amp. (01No.) Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz. Relay range = 11- 18 A. rotection = Under voltage/ over Voltage ty = 02 No's Auxillary MCCB for Heating/Lighting: recuit Breaker = MCCB (Outgoing) ty. = 1 No.		1	3,03,186.00	3,03,186.00
No Cu Rat	o. of poles = 4P Frent Rating = 63 Amp. ted operational voltage = 415 V + 15 % timate S.C Breaking Cap. at (415V AC, 50 Hz) = 25 KA			7 7	
Dig suit Pro Pha Rote	Motor Protection Relay: gital Motor Protection Relay with LCD Display for 3-phase supply with following protections table for the Moduar Control Pannel:- ptections = Thermal Overload with pre-alarm, Short Circuit, pseLoss, Unbalance, Phase reversal, Under Current, Prolong statrting, Locked or & Earth fault and over current . = 02 No's (01 No. for each starter)				
h) M Qua IVRS Suita The I digita pane	M-power module for mobile starter for submersible motor 1P/3P 3 wire intity – 02 Nos. Languages – English, Hindi able Region- North India panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A, al voltmeter of range 0-500 V, and digital frequency meter (01 No each). The enclosure of the el shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for both and noiseless movement of windows and advanced locking arrangements.				
Provi belov Type step. Type of Input Outpu Freque Windin Insulat Coolin Temp. Mount Correct Wave of Duty of Enclose Core la Load A Overloa The vol	iding, fitting, testing and commissioning of 75 KVA Voltage Stabilizer as per specifications w: of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi of Regulator: Double plate type with electrolytic copper contacts. voltage: 250-400 volts. (3 phase) ut voltage: 400 ±10% volts. ency: 50 ±3 C/S. ings: Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried. ition: Fiber glass insulations to tested parameters. ing: Naturally, Oil cooled Rise (Max): 30°C above ambient ting: On Uni-directional wheels. ition rate: 30 volts per step form distortion: virtually nil ycle: 100% continuous. ure: MS sheet enclosure in pressed CGR Sheet powder coated with radiators. aminates: High grade, low eddy loss, grain oriented silicon steel laminations. Three phase induction motor load. imperes (continuous) ad in 24-hours operation: 10% above continuous Ampere rating. Itage stabilizer shall have T-oil level indicator gauge preferably glass	job	2	1,63,721.00	3,27,442.00
housing indicate Insulati strengtl and fille	the or otherwise visible to naked eye. The top of the container to have a display panel for g 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neon ors for incoming and outgoing phases (06 No's). ing media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielectric h of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels ed at site up to top level. tage Stabilizer shall be accepted with manufacturers dully stamped test certificate and shall tame plate with specifications.	1			

Un	Description	Unit	Qty.	Rate	Amount
6.01	pabrication of gantry mechanism/CGI shed/pump base frame by way of providing Structural steel built up sections, trusses and framed work, including cutting, holsting, grouting, fixing in position and applying a priming coat of steel primer—and 02 coats of paint of approved shade all complete welded. The drawings and Dimensions for Gantry/CGI shed/pump base frame—etc will be provided by Site in Charge at the time of execution of job. The quantity may vary as it is conditional to civil structure being constructed/as	Kg	2600	135.00	3,51,000.00
6.02	Register requirement. Capacity= 3 Ton Supply, Installation and testing of motorized chain hoist with hook suspension along travelling trolley of proper specifications having following features The chain hoist shall also have the following characteristics:- Motor: The basic drive of the hoist be provided with 3 phase squired cage totally enclosed induction motor having a high starting torque with class "F" insulation. The make of the motor be NGEF / SEIMNS / GEC/ Crompton and conform to IS: 325 (RPM-1500) Brake: The hoist shall have instant action, Fail to safe electromagnetic disc brake mounted on the end of the motor to ensure minimum safety and reliability when the load is held in its position as soon as the supply to the motor is switched off internally or accidentally. The adjustment & maintenance of break shall be quick and simple. Gears: The hoist shall have precision cut super and helical gears made of alloy steel mounted on bearings and housed in a dust proof gear box. The lubrication of gears be of high viscosity and temperature for longer life of gears. Load Chain: The load chain be made of high tensile alloy steel having wear resistance and greatest mobility. The chain should be accurately collaborated, tested and have adequate in built factor of safety for safer operation. Load chain wheel: Specially designed, perfectly machined wheel providing correct grip of load chain made of malleable cast iron makes the hoist most safe and reliable against any failure. Lifting Hook: The limit switch shall have span action, shunt type prevent over				
	Indit Staff. The limit shall be controlled by heavy duty air break direction reversing type bidders and electrically inter – locked for safety. Contactors relay, fuses, low voltage transformer be fitted for control voltage and are to be housed in fabricated / pressed sheet steel box dust proof. Push button pendent: The contactors shall be operated by a pendent push button station suspended from hoist by a rope / dog chain to prevent any damage to the pendent cable and for easy operation. Test: The hoist supplied is to be tested at 25% overload and the test certificate of the same be provided at the time of installation. The complete unit as specified above is required to be fitted / tested at site. Besides the above works the job Includes Providing and fitting 3-Core 6 sq. mm ,50 m submersible cable for providing power supply to motor of chain Hoist including P/F protection device of suitable capacity. The main specifications of the chain Hoist are given below:	Job	1	1,61,700.00	1,61,700.00
	i.Make = reputed make Capacity = 2 ton Hoisting speed = 2.4 M/Min Hoist motor H.P = as per requirement No. Of chain falls = 4 Min. Height of lift = 6 M ii.Make = reputed make Capacity = 3 ton Hoisting speed = 2.4 M/Min Hoist motor H.P = as per requirement No. Of chain falls = 4 Min. Height of lift = 6 M				
6.03	Providing, installation and testing of Heavy Duty manua type triple spur gear chain pulley block along with monorail geared travelling trolley having following features Gears:- The hoist shall have precision machine case Hardened alloy steel gear mounted on bearings and housed in a dust proof gear box. The lubrication of gears should be of high viscosity and temperature for longer life of gears. Load Chain:- The load chain be made of high tensile alloy steel having wear resistance and greatest mobility. The chain should be accurately collaborated, tested and have adequate in buil factor of safety for safer operation. Load chain wheel:- the load chain well should be double ball bearing supported and Specially designed, perfectly machined wheel providing correct grip of load chain to makes the hoist most safe and reliable against any failure. The main specifications of C.P Block are given below: i.Make = Reputed make ii.Capacity = 2 ton (P) iii.No. Of load chain falls = 2 or above iv.No. Height of lift = 6 M	t Job	1	62,972.0	0 62,972.00

All the sections of the section of t	S. No	Description	Unit	Qty.	Rate	
	6.04	Providing, installation and testing of Heavy Duty manual type triple spur gear chain pulley block along with monorail geared travelling trolley having following features Gears:- The hoist shall have precision machine case Hardened alloy steel gear mounted on bearings and housed in a dust proof gear box. The lubrication of gears should be of high viscosity and temperature for longer life of gears. Load Chain:- The load chain be made of high tensile alloy steel having wear resistance and greatest mobility. The chain should be accurately collaborated, tested and have adequate in built factor of safety for safer operation. Load chain wheel:- the load chain well should be double ball bearing supported and Specially designed, perfectly machined wheel providing correct grip of load chain to makes the hoist most safe and reliable against any failure. The main specifications of C.P Block are given below: i.Make = Reputed make ii.Capacity = 2 ton (P) iii.No. Of load chain falls = 2 or above iv.Min. Height of lift = 6 M	Job	1	44,473.00	13. Isabrication 109 and bold Cre 131
	6.05 E N R R R	Providing/supplying and fitting of 100mm G.I flanged pipe to be used for fabrication of delivery manifolds/Y-Junction with washout arrangements. Rising Main at site. The Pipe shall be hot dip Galvanized, class B onfirming to IS 1239. The job includes providing and fitting of M.S Flanges conforming to BIS 6392/1997 Table 17 (Rating PN16). The flanges shall be double welded both from inside and outside of the pipe using standard electrode of reputed make. Flanges (as per IS 6392/1997 Table:17) Thickness shall conform to IS 6392 Part 1st Table-17. The flange welding shall be carried out in double layers using reputed make electrodes to form strong welding joint. Welding Electrode OC Arc Welding using welding electrode having diameter not less than 4mm. Nuts and Bolts Suts and Bolts (conforming to IS:1363 Part 1st) Subber Insertion Gaskets subber Insertion Gaskets (conforming to IS: 638/79) to be used between flanged joints. The uantity may vary as it is conditional to civil structure being constructed/as per site requirement.	Meter	80	1,897.00	1,51,760.00
6.	06 of Th	oviding and fitting of 100mm GI bend with flanges The Flanges shall be MS conforming to BIS 392/1997 Table 17 (Rating PN16) and welded on both sides. The job includes prividing and fitting nuts, bolts, gaskets etc as per site requirement. He quantity may vary as it is conditional to civil structure being constructed/as per site quirement.	job	20	3,614.00	72,280.00
5.01	Proslui The rub buri It sh the Cost The the i	a = 150 mm Dividing and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate/ ice valves as per IS14846 for regulating the water supply outside the pumping units. Be body and bonnent of the valve shall be of ductile iron, wedge with fully vulcanized EPDM ber(Approved for drinking water) and NBR seal. The Gate/Sluice valve shall be compatible for ied applications and shall be safe to install in both horizontal and vertical positions hall have electrostatic epoxy coating(approved for drinking water) both inside and outside of valve. The valve shall be supplied along with hand wheel. It on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work. job includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to inbuilt flanges of the valve which shall be fitted with rising main of the pumping unit at ropriate spots as per site requirement. The job includes the cost on account of P/F of nuts, and gasket required for the job.	Job	10	19,019.00	1,90,190.00
ė.	Proving sluice The brubbe buried It shall the va Cost of the including appropriate the shall be shall	ding and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate/evalves as per IS14846 for regulating the water supply outside the pumping units anody and bonnent of the valve shall be of ductile iron, wedge with fully vulcanized EPDM er(Approved for drinking water) and NBR seal. The Gate/Sluice valve shall be compatible for diapplications and shall be safe to install in both horizontal and vertical positions. If have electrostatic epoxy coating(approved for drinking water) both inside and outside of account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work. In account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work. In both inside and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable to built flanges of the valve which shall be fitted with rising main of the pumping unit at priate spots as per site requirement. The job includes the cost on account of P/F of nuts, and gasket required for the job.	Job	10	20,581.00	2,05,810.00

No.	Description	Unit	Qty.	Rate	Amount
1	Sabrication, providing and fitting of split type MS clamps 12 mm thick and 4" wide for lowering				Amount
5.09	and holding of VT pumping unit as per sample. The job includes the cost of required size of nuts and bolts.	job	6	2,400.00	14,400.00
	Creation of pole mounted, outdoor type Electric Sub Station by way of \$5/I/T/C of 11/0.433 KVA, 3 Phase Distribution Transformer with Bimetallic Terminal connectors Energy level -2 Aluminum wound Specifications conforming to IS: 1180 (Part 1) 2014 with latest amendments Type of cooling: ONAN.Rating: 200 KVA HT Transformer, 3 phase (Level 2). Manufacturers certificate be apended Specifications conforming to IS: 1180 (Part 1) 2014 with latest amendments. Type: HT/LT Transformer Type of cooling: ONAN. Operating conditions: Input =11000 volts Output =433 volts AC supply in 3- phase. Terminals: Input=3 No. HT bush rods with insulators, washer, nuts etc. Output=4 No. LT bush rods switch insulators, washers, nuts etc. Core: The core shall be of high permeability to reduce core losses and the strips shall be of suitable size and gauge. Transformer Coils: Suitable number of HT and LT coils in each leg of the core. The transformer coils shall be fabricated out of superior quality aluminum wire/strips, properly wound. The HT transformer is completely filled with suitable grade transformer oil up to required level. The job includes carriage, and all leads and lifts involved. The HT transformer shall be of reputed make from an ISO certified company as per relevant standards and a test certificate shall be provided before installation. The transformer shall also be provided with breather fill with silica jel crystals, conservator with oil level indicator, explosion vet and adequate radiator fins/ Tubes. NOTE: The scope of the work shall include obtaining of necessary inspection/clearance certificate from the concerned department for all the required equipment. The testing and commissioning shall be completed only after obtaining above certificate.	Job	2	3,82,996.00	7,65,992.00
.11	Supply, installation, erection of 9 mtrs 9 +B96:C118m Long pole H.T of specifications ST- 410 (sp-33). The job further includes drilling of holes for installation of various accessories .wherever required the job further includes G.I wire earthing of pole as per REC standard.	Job	10	20,686.00	2,06,860.00
.12	Cement bottoming 1:2:4 mix as per REC mix as per REC standards 0.5 cum/pole P/F of Galvanized nuts, bolts of various sizes as per site requirement (1kg/pole).	job	10	3,539.00	35,390.00
.14	GI Barbed wire for Anti Climbing with fixtures/as per site requirement.	Kg	70	142.00	
	P/F Danger Plate with clamps	kg	50	136.00	5,000.0.
\rightarrow	Wedge connecters/PG Clamps/as per site requirement.	No	10	153.00	
17	Providing and fitting G.I Channel /platform for T-bed/Angle/ Flat /Riser of sizes including clamps	No	12	421.00	-,
18	Supply, Installation, Testing and commissioning of Polymeric Gang operated Air break switch 3 Phase, 3 Pole, 200 A, Vertical Type, outdoor type, triple pole, suitable for vertical installation, single break provided with locking arrangement at both ON and OFF position consisting of HT post double insulator, copper or copper alloy high pressure heavy contact assembly, rod with bearings, operating handle and 2 length of 32mm dia. GI pipe conforming to IS 1818 1961, 06 No. of insulators, rated voltage 11KV 200A complete as per IS specs.	Kg Set	3	11,730.00	
15 1	Supply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable for vertical installation	Set	2	4,983.00	9,966.0
1	supply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With polymer housing, Station Type. Supply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN,	Set	2	7,754.0	15,508.0
21	ighting impulse 75KV Positive, and 80 KV Negative , creepage distance 320 mm.	No	6	596.0	3,576.0
- 1	11 kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 V Negative, creepage distance 320mm	No.	30	347.0	10,410.0
	Painting of poles Red oxide	lit	10	306.0	3,060.00
	Painting of poles Aluminum paint	lit	10	510.0	
25	undry items like aluminium lugs, jumpers, binding tape.	LS	2	1,755.0	
26	arthing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of carthing pipe of 40 mm Nominal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral earthing of size 25 mm x 3 mm for connection of transformer body,neutral,G.O Set, lightening irrestor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts,refilled with earth enhancement materials and earth Chamber made of brick masonary with RCC slab cover.	Job	18	10,462.00	
1	providing and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for itment of various accessories	Meter	200	60.00	12,000.00
28 P	rovid ng and fitting of LT Distribution box FITTED with 200 A 4 pole MCCB for incomer and SFU for utgans.	job	2	1,05,767.00	2,11,534.00

	and the second s	Unit	4.7			Providir.
	Description				4,922.00	10. 19 810
Name and Address of the Owner, where		set	4		4,522.00	19/ II Mattr
S. No	Galvanised stay set with 50x8mm stay clamp, guy insulator(02No.), anchor plate(200x200x6mm), nuts and bolts, 2No. Turnbuckels, 1.8m long, 16mm diameter solid GS stay rod plate(200x200x6mm), nuts and bolts, 2No. Turnbuckels, 1.8m long, 16mm diameter solid GS stay rod plate(200x200x6mm), nuts and bolts, 2No. Turnbuckels, 1.8m long, 16mm diameter with suitable and 7/3 15mm dia GI standerd wire complete.			_		In Mari
	Galvanised stay set with social bolts, 2No. Turnbuckels, 1. Bit 1879					
6.25	plate(200x200x6mm),nuts and bolts,2No. Turnbuckels,1.0	Job	2		27,000.00	54,000 (iv)
	and 7/3.15mm dia GI standerd wire complete. Supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an autout supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation, testing and commissioning of 3 phase, 4 wire Trivectometer with an output supply, Installation output supply, In	70.0		1		1
			-	_	7,350.00	
6.30	connections (as per site requirement) with all allied as	Unit	1		7,330.00	7,350.00 6.39
	Icomponent to the standard with 13 feet to		+			
6.31	connections (as per site requirement) with all allied accomponent etc. are included in the job. Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 No each) Electrification and illumination of pump house by way of providing & fitting Eight No. of lighting link rods and Link r	L ,	1			
	No each				7.37	
	Electrification and illumination of pump techniques points and Two No. of heating points viz: a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multi- a) Wirring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm and 2.5Sq	1		1	194 19 Tall	/45÷
	a) Wiring to lighting points with 1.55q mm and heating points with 2.55q with length as required			1		1
-		1	١.		28,000.00	56,000.00
	Tupto control panel as per site required	Jop	2			
6.32	b) PVC conduit/ channel 1.5" and 1" to be fitted on walls of pump mode as pump mode					
0.00	Leight No. of Bulb holders langue type of any		-		** •	
	d) Modular Switch boards—with frame to be fitted on walls of pump riouse consumptions and all marked items like 10A switches, indicator, 03 pin flash type socket for lighting (As per requirment) and 0.5 pin flash type socket (02No) for heating.			- 1		
- -	and combined 16A switch and 05 pin flash type socket(02No)for heating .					
1	The job includes cost on account of material, skilled labour, tools and tackes, metables					A STORY
	cement nails, rawl plugs and other consumable items as per site requirement.					
	III	1. 1				
	Providing and erection of 9 Mtr long Hot Dip Galvanized octagonal pole (single Section) with					
1	bottom 150mm, top 75mm wide, thickness 3mm with 70 Microns Zinc coating having inside	1 10	1		1.4	
	arrangement for providing of power connection along with following items.		Tor.			
1	1)3 Way Terminal Connector 20 Amp. 2)3 No MCB 8 Amp.					
1	The job includes fabrication, providing and fitting of three arm GI structure at the top having 120°	1	25	2	22,226.00	44,452.00
6.33	angle between arms and each arm having 15° inclination with respect to horizontal plane. Each	Job		2	,	
	arm should be of 2' length and size and shape appropriate as per requirement of the luminary.	1		-	1 1	
1	The job also includes providing and fitting of required length of flexible multi strand 2 mm copper					
1	wire from each terminal connector to each holding arm.		- 1		. *	
1	The pole is mounted on 1:2:4 Cement concreting of size not less than 2'x2'x6" (cost of concreting					
1	not included in the job) using 04 No anchor bolts of required size not less than 7" in length. The				4	
1	complete job includes earthing in GI Electrode as per relevant IS Code					-
	Providing, Installation and testing of 2KVA fully automatic copper wound voltage stabilizer with			1	2 454 00	16,308.00
6.34	input voltage 70-240 V and output 220 V. The stabilizer shall be installed and connected to the	Jo	b	2	8,154.00	10,500.00
	electric circuit as per location provided by site in charge.					
	Providing installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type	e)				
	on top of octagonal pole including MCB fiited in box 10A vide item No.36					
	Having following specs:					
	Input: 90-240 V 50 Hz					
	Power Factor: >0.9					
,	Colour Temperature: 4K - 6.5K	١,	ob	6	9,486.00	56,916.00
6.35	Beam Angle: 120° - 170°	"	۱ ۳	١	3,400.00	30,523
	Lumens: >12000					
	Operating Temperature: -20°C to 60°C					
	The LED is pressure die cast aluminum housing with power coated finish and having Ingress				= _	
	Protection up to IP-68.	in				
16	The LED is properly fitted on the arm of the pole and connected to the copper wire as provided i	"'	1			
	the high mast pole Fabrication of 6'x3' (4No's) angle iron beds having 2' height using 50x50x6mm angle iron by way	v of				
	providing and fitting of Structural steel in built up sections, trusses and framed work, including	,			1	
6.36	cutting , hoisting , fixing in position and applying a priming coat of approved steel primer all		Kg	164	135.0	0 22,140.00
0.30						
	complete welded.					
	Providing and fitting of 19mm Ply wood board to be fitted on the angle iron beds. The job inclu	des				
6.37	cutting, fixing painting of the play sheet by one coat of primer and two coats of enamel paint		Sft	72	154.0	11,088.00
	Providing and fitting of 400mm ISI Marked sweep wall fan		No	2	3,600.	7,200.00
6.38			No.		3,000.	7,200.00

	Description	Unit	Qty.	Rate	Amount
6 39	Providing of good quality conveinence and utility items bedding for night stay/Shift consisting of Mattress with warm cover size 6'x3' (6kg)- 02 No's Quilt with warm cover size 5'x8' (6kg)- 02 No's Pillows with covers - 02 No's Single bed warm blankets with one sided Fur- 02 No's The filling material for mattress, quilt and pillow shall be of good quality cotton The job also includes providing of pressure cooker 5ltr 02 No's, Steel patella (utensil) 5ltrs 02 No's, cooking heater 01 No., room heater 01 No., steel buckets 10 litre capacity 01 No., Plastic bucket 10 litre capacity with Mug 02 No's each, steel glasses 06 No's, steel Plates with large spoons and bowls 03 No's each, Cup and Saucer set (01 No. Set) and, 5kg Gas cylinder with burner/stove. The job also includes providing of thermo-cool 15'x12' along with excel matting of 15'x12' size. The job also includes providing of unbreakable Plastic Chair table set consisting of chairs 04 No's, extra heavy Table 01 No. The job also includes providing of good quality safety Door locks (03 No's) of Godrej, Link locks,	dot	2	39,619.00	79,238.00
6.40	TOOL KIT For Maintenance: The Tool Kit for maintenance shall comprise of the following and all the items as mentioned below shall be of: Providing of tool kit consists of following items Louble ended Spanner (Chrome plated) 02 sets complete iii. Double ended Ring spanners chrome plated 02 sets complete iii. Allen key set black finish 02 sets complete iv. Combination Pilers insulated with thick C.A sleeve; size in mm 165, 210, 255 each – 02 No. v. Long nose plier insulated with thick C.A sleeve; size in mm 165, 205 each – 02 No. vi. Side cutting plier insulated with thick C.A sleeve; size in mm 165, 205 make – 02 No. vii. Insulated screw Drivers Blade length in mm Blade dia. in mm Tip dimensions in mm Quantity 5031.6 x 0.402 7531.6 x 0.402 10033 x 0.402 1253.53.5 x 0.502 20044 x 0.602 30055 x 0.802 viii. Hammer with handle weight – 110 mg, 340 gm, 600 gm –each – 1No. ix. Heavy duty pipe Wrench length in mm - 200, 300, 600 each – 01 No. x Electric Multimeter = 1No. xii. Digital multimeter – 1No. xiii. Digital Clamp tester capable to measure up to 400A - 1 No. xiii. Hack saw frame with hack saw blade – 01 no. xiv. S-16 MXL, S- 16 H X L Socket Set (19 sockets + 6 Accessories) – 01 No.	job	2	28,840.00	57,680.00
6.41	Supply, installation, Testing & commissioning of 1000VA Full Sine wave power inverter including Providing / Installation of 12V, 180AH Tubular inverter Battery with trolley and cover. with 2-core 4 mm2 Cu (25 m) wiring as per site requirement along with other accessories like SS-Combine (02 No's), 3-pin plugs etc of reputed make for proper fitment and installation of the item.	Job	2	34,053.00	68,106.00
6.42	Supply, installation of 6 kg CO2 type fire extinguisher manufactured as per IS: 15683of 2006 with IS mark and comply with DGMS (Approval). The co2 extinguisher should be suitable for class B & C fire and also for fire involving electrical equipment. The cylinder used for fire extinguisher shall be approved by petroleum and explosive safety organization (PESO) as per gas cylinder rules 2004 and as per IS: 7285 of 2004. The body should be made of seamless steel (manganese) confirming to IS: 7285 with IS mark and should be provided with squeeze grip nozzle and should be filled with co2 confirming to IS: 15222 of 2002 with certificate. The extinguisher shall be provided with manufactures test certificate and hydraulic test certificate by BIS from PESO.		4	6,447.00	25,788.00
	Providing, laying & fixing of shock proof rubber mats with adhesive/bonding material on the floor of the pump house, covering area around electro-mechanical machinery for safeguarding the life & limb of the workmen due to possible leakage of current & short circuit. The floor surface shall be made good & shall be free from dust, grease, foreign material & moisture free. The mats shall be as per IS 15652:2006 & shall have the following specifications: - Composition: Rubber (synthetic mats for electrical purpose) Thickness: - 2.5mm Size: - 1M wide. The rubber mats shall be accepted with manufacturers test certificate.	Meters	24	1,205.00	28,920.00
6.44	Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, 35 Sq. mm PVC insulated copper cable for internal connections as per IS 694 along with thimbling as per requirement at site.	Meters	270	546.00	1,47,420.00

		Unit	Qty.	Nove		WY Y
ſ	Description discluding 1100 Volts,		180	780.00		1,1:0,400.6
5. No.	Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, Providing, installation, testing of power wiring for working voltage up to and including voltage up to a power wiring to a power wir	Meters	100			
6.45	1 including 1100 Voits,	Meters	180	1,100.00		1,98,000.00
	as per requirment at site. Providing, installation, testing of power wiring for working voltage up to and including Providing, installation, testing of power wiring for working voltage up to and including with thimbling 70 Sq. mm PVC insulated copper cable for internal connections as per IS 694 along with thimbling as per requirment at site. Providing and Fitting of 120 sqmm, 3.5 core LT 1.1 KV, XLPE Armoured Aluminium Cable Conforming to IS: 7089 part 1st as service line from the HT transformer to control panel including necessary thimbling, crimping, taping etc. NOTE:- The cable terminal ends for connection to switchgear at various requisite points shall be Al. Thimbles of reputed make and of appropriate size and connected by hydraulic crimp tool only.	Meter	100	1,050.00		1,05,000.00
- 1	'	Mator	60	260.00		15,600.00
6.48	Providing and Fitting of 10 sqmm, 1.1KV 2 core PVC Insulated Sheathed 2 Core copper cable for	Meter		1,205.00		3,615.00
0.40	connecting Lighting pole with power supply conforming to is. 034.2020.	Unit	3	1,911.00		5,733.00
6.49 F	Providing of 1 KW heat convector for operators for winter season Providing of solar/electrical lantern chargeable on both solar & electrical 220v supply.	Unit				-
7 R	Renovation to old/existing common stage i.e WSS Trikolbal and Hanjiwera supply, installation, testing and commissioning of 10000GPH, 70m head Horizontal pumping unit as per IS 520 with following specification:-					
Pi 1.1 MC A) B) C) T E) N F)Mot suitz vibra chec Job i Note	Jump: Type: Horizontal split casing /Multi stage Interial of construction Impeller: Stainless steel Shaft: SS410 Pump casing: Cast Iron Impeller: Horizontal squirrel cage Induction Type Type: Horizontal squirrel cage Induction Type No of phases: 415 ± 15%v, 03 phase,50 Hz, AC supply Winding:-Copper wound squirrel cage Type of enclosure:-SPDP/TEFC Method of cooling:- Air cooled with fan mounted Method of Starting: star delta Itor Rating: Suitable for above parameters not less than 30HP The pump-motor should be mounted on a common base frame fabricated out of M.S channel of able size and duly fitted with T- type foundation bolts /nuts and washers to make the pumping unit ation free. The pump and motor should be coupled through suitable coupling. The coupling faces cked for both angular and axial alignment with the help of tapered gauges/feeler gauges or dial indicate includes testing and commissioning of pumping unit on full load at site. E: Test certificate having the Serial No. of the Pumping Unit along with the performance curve in licate from the Manufacturer must be produced on delivery of the item and pumping unit is to be roved from the concerned Sub Divisional office before procuring.	job or.	2	3,06,716.	00	6,13,432.00
Provisuice The L rubbe burier It sha the va Cost of The jo the intappro	e 100 mm iding and fitting of, Ductile Iron double flanged, non-rising spindle soft seated glandless gate e valves as per IS14846 for regulating the water supply outside the pumping units. body and bonnent of the valve shall be of ductile iron, wedge with fully vulcanized EPDM er(Approved for drinking water) and NBR seal. The Gate/Sluice valve shall be compatible for applications and shall be safe to install in both horizontal and vertical positions will have electrostatic epoxy coating(approved for drinking water) both inside and outside of alve. The valve shall be supplied along with hand wheel. In account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work, but includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable includes providing and fitting of 02 nos. M.S flanges (Table flanges) perfectly adaptable includes spots as per site requirement. The job includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on account of P/F of nuts, and accepted to the includes the cost on accep	J.	ob 4	1 19,0	19.00	76,076.
PN: 1.0 Provid 5312. Trubber shall be It shall the valu Cost on The job the inbu	ling and fitting of Ductile Iron double flanged, Slanted seat swing check valve(NRV) as pe The body shall be of ductile cast iron with fully encapsulated vulcanized EPDM r(Approved for drinking water). The valve shall be compatible for buried applications and e safe to install in both horizontal and vertical positions. have electrostatic epoxy coating (approved for drinking water) both inside and outside of	of k. e to	Job	4 20	9,581.00	82,3

2	Description	Unit	Qty.	Rate	Amou	ed.	of the
1	Avication Providing and fitting of modular control panel as per the below mentioned technical		1	1.515		water and the same of the same	
	1 - Retrictions The Continued Details/ Ratings of Various components of Modules Control Continued			9			with 5
4	igiven below		1				Ser.
	a. Main Circuit Breaker (Incommer MCCB) of rating = Thermal release range 160-200A with S.C.					8	TO STATE OF
	Breaking capacity or 20k4=(05M0.2)				A. Carrier	a de la companya de l	SECTION.
	b. Changeover Switch of rating = 200Amp (01No.), c. Bus Bar copper = 200A (01No.)				Sales and the sa	ACC 1000	Sec.
	d. Motor Breakup Protection MCCB of rating = Thermal release range 125-160A With S.C. Breaking				0.0	4	16
	Capacity of 36kA = (02 Nos.)					40	हो। स्था इस्टे स्ट
	e. FASD_starters: Motor rating 3-phase 415V, 50HZ_AC-3 Duty with Relay range of 45-75 Amp		Ŷ.			and the same of th	300
	(02No's)						TEXTO
7.04	e. Auxillary MCB for f.Heating/Lighting = 63 Amp. (01No.)	Job	1	3,03,186	3 (00)	,03,186.00	1
	Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz. Relay range = 11- 18 A.				and the second		, E E
	Protection = Under voltage/ over Voltage				a constant	4	itie
	Qty = 02 No's				1	1	Descri
	f) Auxiliary MCCB for Heating/Lighting:						K. 500
	Circuit Breaker = MCCB (Outgoing)				1	1	SUE
	Qty. = 1 No.		and a second		g, w	and the state of t	福建
	No. of poles = 4P				4	0.000	les
	Current Rating = 63 Amp.		1				201
	Rated operational voltage = 415 V + 15 %				a de la companya de l		257
-	Ultimate S.C Breaking Cap. at (415V AC. 50 Hz) = 25 KA	+-	_				
	g) Motor Protection Relay:		1				1
	Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections						1
	suitable for the Moduar Control Pannel:-		1	1			- 5
	Protections = Thermal Overload with pre-alarm, Short Circuit,		1				1
	PhaseLoss, Unbalance, Phase reversal, Under Current, Prolong statrting, Locked			1	1		1
	Rotor & Earth fault and over current Qty. = 02 No's (01 No. for each starter)		1				1
	h) M-power module for mobile starter for submersible motor 1P/3P 3 wire				-		
	Quantity – 02 Nos.			1	1		
	IVRS Languages – English, Hindi						
	Suitable Region- North India						1
	The panel shall be provided with phase indicators (03 NO) and digital ammeter of range 0-60 A,		1		1		
	digital voltmeter of range 0-500 V, and digital frequency meter (01 No each). The enclosure of the	he	1	1			
	panel shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges fo	r	1				
	smooth and noiseless movement of windows and advanced locking arrangements.				-		
	Providing, fitting, testing and commissioning of 75 KVA Voltage Stabilizer as per specifications		1		1		
	below:		1	- 1			
	Type of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi		1	1			
	step.		1	1	1		1
	Type of Regulator : Double plate type with electrolytic copper contacts.	1		1	1		1
	Input voltage :250-400 volts.(3 phase)	- 1		1			
	Output voltage :400 ±10% volts.			1	1		
	Frequency :50 ±3 C/S.	.	1	1	1		
	Windings: Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried	.	1	1			
	Insulation: Fiber glass insulations to tested parameters.	1	1	1			
	Cooling :Naturally, Oil cooled		1				-
	Temp. Rise (Max):30°C above ambient	1	1	1			1
	Mounting :On Uni-directional wheels.						B 400 PM
	Correction rate :30 volts per step	1					8
	Wave form distortion :virtually nil	1					
.05	Duty cycle :100% continuous.	1	job	2	1,63,721.00	3,27,	442.00
	Enclosure: MS sheet enclosure in pressed CGR Sheet powder coated with radiators.						
	Core laminates : High grade, low eddy loss, grain oriented silicon steel laminations.			1	d de de		
	Load : Three phase induction motor load.				1		o in the same
	Load Amperes (continuous)		=				ON THE PERSON NAMED IN COLUMN TO SERVICE AND ADDRESS OF THE PERSON NAMED ADDRESS OF THE PERSON NAMED IN COLUMN TO SERVICE AND ADDRESS OF T
			1		-		and the same of
	Overload in 24-hours operation: 10% above continuous Ampere rating.		1				
	The voltage stabilizer shall have T-oil level indicator gauge preferably glass		1				
	type tube or otherwise visible to naked eye. The top of the container to have a display panel	for	1				
	housing 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of						
	indicators for incoming and outgoing phases (06 No's).		1			4	
	Insulating media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with diele	ctric	1				
	strength of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate ba		1				
	and filled at site up to top level.	11612	1				
		. al - l - l	.1				
	The voltage Stabilizer shall be accepted with manufacturers dully stamped test certificate an	na snal	'			*	
	nave name plate with specifications.						
	ch /						

T		Unit	Qty.	Rate	Amount S. No.
	Description A23 KVA				W S
S. No.	Creation of pole mounted, outdoor type Electric Sub Station by way of S/I/T/C of 11/0.433 KVA, 3 Phase Distribution Transformer with Bimetallic Terminal connectors Energy level -2 Aluminum	1			10 1
	Creation of pole mounted, outdoor type Electric Sub Station by way of S/I/Te of 22/ 3 Phase Distribution Transformer with Bimetallic Terminal connectors Energy level -2 Aluminum			and the second	
	5 Thay Elistrication Transfer		7		
	would be a second with latest amendments	-	hou 1		
	Specifications conforming to IS: 1180 (Part 1) 2014 Miles Type of cooling: ONAN.Rating: 200 KVA HT Transformer, 3 phase (Level 2).		100		
	Manufacturers certificate be apended	1			
	Manufacturers certificate be apended Specifications conforming to IS: 1180 (Part 1) 2014 with latest amendments.	1	1		
	Type: HT/LT Transformer		- "		
	Type of cooling: ONAN.		. 4		
	Operating conditions:				
	Input =11000 volts Output =433 volts AC supply in 3- phase.		1 5		
	Terminals:	1		3,82,996.00	3 92 00
	Input=3 No. HT bush rods with insulators, washer, nuts etc.	Job	1	5,02,000.00	3,82,996.00
7.06	la de la companya de	- 1			
	Coutput = 4 No. LT bush rods switch insulators, washers, nuts etc. Core: The core shall be of high permeability to reduce core losses and the strips shall be of suitable				
		1			
	Transformer Coils: Suitable number of HT and LT coils in each leg of the core. The transformer coils				
- 1	shall be tabricated out of superior quality aluminum wire/strips, properly woulder the transfer of the tabricated out of superior quality aluminum wire/strips, properly woulder the transfer of the tabricated out of superior quality aluminum wire/strips.			3.0	
- 1	transformer is completely filled with suitable grade transformer oil up to required level. The job		1		
	includes carriage, and all leads and lifts involved		100		
	The HT transformer shall be of reputed make from an ISO certified company as per relevant standards and a test certificate shall be provided before installation. The transformer shall also be provided with breather fill			- 143 A 18 A	
	with silica jel crystals, conservator with oil level indicator, explosion vet and adequate radiator fins/ Tubes.			The Call to	
1	The impedance of transformer shall be as per IS: 1180 (Part 1) 2014 with latest amendments.				
,	NOTE: The scope of the work shall include obtaining of necessary inspection/clearance certificate from the		1	and the state of the	
0	concerned department for all the required equipment. The testing and commissioning shall be completed	- 1			
	only after obtaining above certificate.				
	23) The	-+		101	- 3 2000 (1000)
	upply, installation, erection of 9 mtrs 9 +B96:C118m Long pole H.T of specifications ST- 410 (sp-33). The	Joh	4	20,686.00	82,744.00
.07	ob further includes drilling of holes for installation of various accessories .wherever required the job further includes G.I wire earthing of pole as per REC standard.	Job	7	1 1 1 1 1 1 1 1 1	
		- , 	4	3,539.00	14,156.00
.08 C	ement bottoming 1:2:4 mix as per REC mix as per REC standards 0.5 cum/pole	job	30	142.00	4,260.00
	/F of Galvanized nuts, bolts of various sizes as per site requirement (1kg/pole).	Kg	20	136.00	2,720.00
	Il Barbed wire for Anti Climbing with fixtures/as per site requirement. /F Danger Plate with clamps	kg No	4	153.00	612.00
	/edge connecters/PG Clamps/as per site requirement.	No	3	421.00	1,263.00
-	roviding and fitting G.I Channel /platform for T-bed/Angle/ Flat /Riser of sizes including clamps	Kg	750	123.00	92,250.0
C.	apply, Installation, Testing and commissioning of Polymeric Gang operated Air break switch 3 Phase, 3 Pole,				
	10 A, Vertical Type, outdoor type, triple pole, suitable for vertical installation, single break provided with				
lloc	cking arrangement at both ON and OFF position consisting of HT post double insulator, copper or copper		_	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	oy high pressure heavy contact assembly, rod with bearings, operating handle and 2 length of 32mm dia.	Set	2		00.100.0
G			-	11,730.00	23,460.0
וטן	pipe conforming to IS 1818 1961, 06 No. of insulators, rated voltage 11KV 200A complete as per IS specs.		- 1	11,730.00	23,460.0
J 61	pipe conforming to IS 1818 1961, 06 No. of insulators, rated voltage 11KV 200A complete as per IS specs.		<u> </u>	11,730.00	23,460.0
Suj	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable		1	# (1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1	
Suj		Set	1	4,983.00	
Su _j 5 for	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation	Set	1	# (1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1	
Sup 5 for 6 Sup	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With	Set Set	1	4,983.00	4,983.0
Sup for Sup pol	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type.		1	# (1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1	4,983.0
Sup for Sup pol	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN,	Set	1	4,983.00 7,754.00	4,983.0 7,754.0
Sup for Sup pol	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type.		1	4,983.00	4,983.0 7,754.0
5 for 6 Sup pol Sup Ligl	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN,	Set No	1 3	4,983.00 7,754.00 596.00	4,983.0 7,754.0 1,788.0
5 for Suppol	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm.	Set	1	4,983.00 7,754.00	4,983.0 7,754.0 1,788.0
5 Suppol 6 Suppol 7 Ligl 8 kV I	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm.	Set No	1 3	4,983.00 7,754.00 596.00 347.00	4,983.0 7,754.0 1,788.0 4,164.
5 Sup for 6 Sup pol Sup 7 Ligl 8 kV I	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm	Set No No.	1 1 3 12	4,983.00 7,754.00 596.00 347.00 306.00	4,983.0 7,754. 1,788. 4,164. 1,224.
5 Suppol 6 Suppol 7 Ligl 8 kV I 9 Pair 0 Pair	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminum paint	Set No No.	1 1 3 12 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00	4,983.0 7,754. 1,788. 4,164. 1,224. 2,040.
5 Suppole Supp	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminum paint adry items like aluminium lugs, jumpers, binding tape.	Set No No. lit lit	1 1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00	4,983.0 7,754. 1,788. 4,164. 1,224. 2,040.
Suppole Suppol	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminum paint	Set No No. lit lit	1 1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00	4,983.0 7,754. 1,788. 4,164. 1,224. 2,040.
5 Sup for Sup 7 Ligl 3 11 is kV i 9 Pair 10 Pair 10 Eart Eart Non	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminium paint idry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm	Set No No. lit lit	1 1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00	4,983.0 7,754. 1,788. 4,164. 1,224. 2,040.
5 Sup for Sup pol Sup 7 Ligl 8 KV I 9 Pair 10 Pair 10 Pair 10 Eart Non	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminum paint dry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral	Set No No. lit lit	1 1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00	4,983.0 7,754.0 1,788.0 4,164.0 1,224.0 2,040.0 1,755.0
5 Suppole 6 Suppole 7 Ligl 8 11 is kV is Sun 10 Pair 10 Pair 10 Sun 11 Eart 11 Non 11 eart	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm niting of poles Red oxide niting of poles Aluminum paint adry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening	No. lit	1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755.
5 Suppole 6 Suppole 7 Ligl 8 11 is kV is Sun 10 Pair 10 Pair 10 Sun 11 Eart 11 Non 11 eart 12 arre	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm niting of poles Red oxide niting of poles Aluminum paint addry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening istor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with	No. lit	1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755.
5 Suppol 6 Suppol 7 Ligl 8 kV I 9 Pair 1 Sun Eart Non eart arre eart	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Red oxide nting of poles Aluminum paint dry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover.	No. lit	1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755.
5 Suppol 6 Suppol 7 Ligl 8 kV I 9 Pair 1 Sun Eart Non eart arre eart Prov	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminum paint dry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover. iding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for	No. lit	1 3 12 4 4	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755.
5 Suppole 6 Suppole 7 Ligl 8 kV I 9 Pair 1 Sun Eart Non eart arre eart Prov	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm nting of poles Red oxide nting of poles Aluminum paint dry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm minal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening instar, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover. Iding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for ent of various accessories	Set No No. lit lit LS	1 3 12 4 4 1	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755.
5 Suppol 6 Suppol 7 Ligl 8 kV I 9 Pair 1 Sun Eart Non eart arre eart Prov fitme	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm noting of poles Red oxide noting of poles Aluminum paint dry items like aluminium lugs, jumpers, binding tape. thing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm ninal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover. iding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for ent of various accessories	No. lit lit LS Job	1 3 12 4 4 1	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755. 62,772.
5 Suppole 6 Suppole 7 Ligl 8 kV I 9 Pair 1 Sun Eart Non eart arre eart Prov fitme 200 / Provi	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm Inting of poles Red oxide Inting of poles Aluminum paint Indry items like aluminium lugs, jumpers, binding tape. Ithing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm Ininal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover. Inding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for ent of various accessories Amp Iding and fitting of LT Distribution box FITTED with 200 A 4 pole MCCB for incomer and SFU for	Set No No. lit lit LS	1 3 12 4 4 1	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164.1 1,224. 2,040. 1,755. 62,772.
5 Suppole 6 Suppole 7 Ligl 8 kV I 9 Pair 1 Sun Eart Non eart arre eart Prov fitme 200 / Provi outgo	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation poply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. poply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, hiting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm niting of poles Red oxide nating of poles Red oxide nating of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm ninal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with henhancement materials and earth Chamber made of brick masonary with RCC slab cover. Iding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for earth of various accessories Amp Iding and fitting of LT Distribution box FITTED with 200 A 4 pole MCCB for incomer and SFU for poing circuits.	No. lit lit LS Job	1 3 12 4 4 1	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	23,460.0 4,983.0 7,754.0 1,788.0 4,164.0 1,224.0 2,040.0 1,755.0 5,400 1,05,767
5 Suppole 6 Suppole 7 Ligl 8 Ligl 9 Pair 11 I Sun Eart Non eart arre eart Prov fitme 200 A Provi outge Galve	pply, Installation, Testing and commissioning of 11KV polymer fuses Set Horn Gap 3-phase 200 A suitable vertical installation pply, Installation, Testing and commissioning of Gapless Surge arrestor station class, 10KA, 9KV, LA With ymer housing, Station Type. pply and fitting of 11 KV polymeric composite disc insulator 12 KV, minimum falling load 45KN, htting impulse 75KV Positive, and 80 KV Negative, creepage distance 320 mm. kV polymeric composite Disc Insulator 12 kV, Min failing load 45kN, Lighting Impulse 75kV Positive and 80 Negative, creepage distance 320mm Inting of poles Red oxide Inting of poles Aluminum paint Indry items like aluminium lugs, jumpers, binding tape. Ithing of substationExcavation of earth pit of dia 650 mm & depth 3000 mm, installation of thing pipe of 40 mm Ininal bore & 4mm wall thickness & length 2.5 mtr long as Per IS 1239.GI Strip for neutral thing of size 25 mm x 3 mm for connection of transformer body, neutral, G.O Set, lightening estor, LT Control Panel and voltage stablizer as per IS 2629/85, GI nuts & bolts, refilled with the enhancement materials and earth Chamber made of brick masonary with RCC slab cover. Inding and fitting of ACSR as per IS 398 (part-2) 1996 for 50 sq.mm ACSR (Galvanised steel reinforced) for ent of various accessories Amp Iding and fitting of LT Distribution box FITTED with 200 A 4 pole MCCB for incomer and SFU for	No. lit lit LS Job Meter job	1 3 12 4 4 1	4,983.00 7,754.00 596.00 347.00 306.00 510.00 1,755.00	4,983.0 7,754.0 1,788.0 4,164. 1,224. 2,040. 1,755. 62,772. 5,400

S. No.	Description		-			
998		Unit	Qty.	Rate	A	mount
7.26	Supply, Installation, testing and commissioning of 3-phase, 4-wire Trivectometer with suitable taining type CT complete unit as per latest IEC Standard. The required size cable for input and output connections (as per site requirement) with all allied accessories, transportation charges, labour component etc are included in the job.	Job	1	27,000.00		27,000.00
7.27	Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 No each)	Unit	1	7,350.00		7,350.00
7.28	Electrification and illumination of pump house by way of providing & fitting Eight No. of lighting points and Two No. of heating points viz: a) Wiring to lighting points with 1.5Sq mm and heating points with 2.5Sq mm PVC single core multistranded copper conductor insulated, unsheathed 1.1 KV grade ISI marked with length as required upto control panel as per site requirment. b) PVC conduit/ channel 1.5" and 1" to be fitted on walls of pump house as per site requirment. c) Eight No. of Bulb holders (angle type or any other type) with eight No. of 12Watt LED bulbs . d) Modular Switch boards with frame to be fitted on walls of pump house consisting of ISI marked items like 10A switches, indicator, 03 pin flash type socket for lighting (As per requirment) and combined 16A switch and 05 pin flash type socket(02No)for heating . The job includes cost on account of material, skilled labour, tools and tackes, including screws, cement nails, rawl plugs and other consumable items as per site requirement.	Job	1	28,000.00		28,000.00
7.29	Providing, Installation and testing of 2KVA fully automatic copper wound voltage stabilizer with input voltage 70-240 V and output 220 V. The stabilizer shall be installed and connected to the electric circuit as per location provided by site in charge.	dot	1	8,154.0	00	8,154.00
7.30	Providing, installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type) on top of octagonal pole including MCB fiited in box 10A vide item No.36 Having following specs: Input: 90-240 V 50 Hz Power Factor: >0.9 Colour Temperature: 4K - 6.5K Beam Angle: 120* - 170* Lumens: >12000 Operating Temperature: -20*C to 60*C The LED is pressure die cast aluminum housing with power coated finish and having Ingress Protection up to IP-68. The LED is properly fitted on the arm of the pole and connected to the copper wire as provided in	Job	3	9,486.	00	28,458.00
7.31	Fabrication of 6'x3' (2No's) angle iron beds having 2' height using 50x50x6mm angle iron by way of providing and fitting of Structural steel in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete welded	Kg	82	13!	5.00	11,070.00
7.32	Providing and fitting of 19 mm thick multilayered ply Ply wood board to be fitted on the angle iron beds of size 6×3 feet, 2 no's including cutting, fixing all complete including painting of the play sheet by one coat of primer and two coats of enamel paint	Sft	36	15	4.00	5,544.0
7.55	Providing and fitting of 400mm ISI Marked sweep wall fan	No	. 1	3,60	00.00	3,600.0
.i i i i 7 7 7.34	Providing of good quality conveinence and utility items bedding for night stay/Shift consisting of Mattress with warm cover size 6'x3' (6Kg)- 02 No's Quilt with warm cover size 5'x8' (6Kg)- 02 No's Quilt with warm cover size 5'x8' (6Kg)- 02 No's Single bed warm blankets with one sided Fur- 02 No's Fe filling material for mattress, quilt and pillow shall be of good quality cotton The job also includes providing of pressure cooker 5ltr 02 No's, Steel patella (utensil) 5ltrs 02 No's, cooking heater 01 No., room heater 01 No., steel buckets 10 litre capacity 01 No., Plastic ucket 10 litre capacity with Mug 02 No's each, steel glasses 06 No's, steel Plates with large poons and bowls 03 No's each, Cup and Saucer set (01 No. Set) and, 5kg Gas cylinder with burne cove. The job also includes providing of thermo-cool 15'x12' along with excel matting of 15'x12' ze. The job also includes providing of unbreakable Plastic Chair table set consisting of chairs 04 o's, extra heavy Table 01 No. The job also includes providing of good quality safety Door locks (05) of Godrej, Link locks,	Jo	ıb :	1 39,6	519.00	39,619

		Unit	Qty	<i>i</i> .	Rate		Amount		17,410
	Description	Onic	-	50			49	1	
7.35	TOOL KIT For Maintenance: The Tool kit for maintenance shall comprise of the following and all the items as mentioned below shall be of: Providing of tool kit consists of following items i.Double ended Spanner (Chrome plated) 02 sets complete iii.Double ended Ring spanners chrome plated 02 sets complete iii.Allen key set black finish 02 sets complete iii.Allen key set black finish 02 sets complete iv.Combination Pliers insulated with thick C.A sleeve; size in mm 165, 210, 255 each −02 No. v.Long nose plier insulated with thick C.A sleeve; size in mm 165, 205 each −02 No. vi.Side cutting plier insulated with thick C.A sleeve; size in mm 165, 205 make −02 No. vii.Insulated screw Drivers Blade length in mm Blade dia. in mm Tip dimensions in mm Quantity 5031.6 x 0.402 7531.6 x 0.402 1253.53.5 x 0.5 02 1253.53.5 x 0.5 02 1200.44 x 0.602 30055 x 0.802 viii.Hammer with handle weight − 110 mg, 340 gm, 600 gm −each − 1No. vi.Electric Multimeter ≈ 1No. xi.Digital multimeter ≈ 1No. xii.Digital Clamp tester capable to measure up to 400A - 1 No. xiii.Hack saw frame with hack saw blade − 01 no. xii.S.16 MXI. S. 16 HXI. S. 16 HXI. Socket Set /19 sockets + 6 Accessories = 01 No.	job		1	28,8	40.00	2	28,840.00	546.5
7.36	Supply, installation, Testing & commissioning of 1000VA Full Sine wave power inverter including Providing / Installation of 12V, 180AH Tubular inverter Battery with trolley and cover. with 2-co 4 mm2 Cu (25 m) wiring as per site requirement along with other accessories like SS-Combine (No's), 3-pin plugs etc of reputed make for proper fitment and installation of the item.	re .	ob	1	34	4,053.00		34,053.00	
7.37	Supply, installation of 6 kg CO2 type fire extinguisher manufactured as per IS: 15683of 2006 wit mark and comply with DGMS (Approval). The co2 extinguisher should be suitable for class B & 0 fire and also for fire involving electrical equipment. The cylinder used for fire extinguisher shall approved by petroleum and explosive safety organization (PESO) as per gas cylinder rules 2004 as per IS: 7285 of 2004. The body should be made of seamless steel (manganese) confirming to 7285 with IS mark and should be provided with squeeze grip nozzle and should be filled with confirming to IS: 15222 of 2002 with certificate. The extinguisher shall be provided with nanufactures test certificate and hydraulic test certificate by BIS from PESO.	be and IS:	Job	2	*	6,447.00		12,894.	00
li m as Co Ti	roviding, laying & fixing of shock proof rubber mats with adhesive/bonding material on the flethe pump house, covering area around electro-mechanical machinery for safeguarding the lamb of the workmen due to possible leakage of current & short circuit. The floor surface shall hade good & shall be free from dust, grease, foreign material & moisture free. The mats shall per IS 15652:2006 & shall have the following specifications: - composition: Rubber (synthetic mats for electrical purpose) mickness: - 2.5mm Size: - 1M wide. The rubber mats shall be accepted with manufacturers test certificate.	ife & be be	Meters	s 6		1,205.0	00	7,23	00.00
ald Ge be an Lo gre fac Loa des safe i.M. ii.Ca	oviding, installation and testing of Heavy Duty manua type triple spur gear chain pulley being with monorail geared travelling trolley having following features ars:- The hoist shall have precision machine case Hardened alloy steel gear mounted on arings and housed in a dust proof gear box. The lubrication of gears should be of high visible temperature for longer life of gears. Outdoor Chain:- The load chain be made of high tensile alloy steel having wear resistance and atest mobility. The chain should be accurately collaborated, tested and have adequate it for of safety for safer operation. If the load chain well should be double ball bearing supported and Special igned, perfectly machined wheel providing correct grip of load chain to makes the hoise and reliable against any failure. The main specifications of C.P Block are given below: The load chain falls = 2 or above in. Height of lift = 6 M	cosity n built	Jol	b	1	44,4	73.00	4	4,473.00

Am	Description	Unit	Qty.	Rate	Amount	
7.4	Providing, installation and testing of Heavy Duty manual type triple spur gear chain pulley block along with monorail geared travelling trolley having following features. Gears:- The hoist shall have precision machine case Hardened alloy steel gear mounted on bearings and housed in a dust proof gear box. The lubrication of gears should be of high viscosity and temperature for longer life of gears. Load Chain:- The load chain be made of high tensile alloy steel having wear resistance and greatest mobility. The chain should be accurately collaborated, tested and have adequate in built factor of safety for safer operation. Load chain wheel:- the load chain well should be double ball bearing supported and. Specially designed, perfectly machined wheel providing correct grip of load chain to makes the hoist most safe and reliable against any failure. The main specifications of C.P. Block are given below: i. Make Reputed make ii. Capacity 1 ton (P) iii. No. Of load chain falls 2 or above iv. Min. Height of lift 6 M	lob	1	17,416.00	17,416.00	
7.41	Providing and Fitting of 70 sqmm, 3.5 core LT 1.1 KV, XLPE Armoured Aluminium Cable conforming to IS: 7089 part 1st as service line from the HT transformer to control panel including necessary thimbling, crimping, taping etc. NOTE:- The cable terminal ends for connection to switchgear at various requisite points shall be Al. Thimbles of reputed make and of appropriate size and connected by hydraulic crimp tool only.	Meter	100	668.0	0.008,80	00
7.42	Providing, installation, testing of power wiring for working voltage up to and including 1100 Volts, 35 Sq. mm PVC insulated copper cable for internal connections as per IS 694 along with thimbling	Meter	180	546.0		
	as per requirment at site. Providing of 1 KW heat convector for operators for winter season	Unit	1	1,205.0		
7.43	Providing of solar/electrical lantern chargeable on both solar & electrical 220v supply.	Unit	1	1,911.0	00 1,911	.00
8	Common work for raw water stage and filter water stage/as per site requirment/Conditional to civil structure being constructed.					
	Bio-toilet of size 4/x4/x8/ with FRP bio-digester tank of capacity 700 liters with anaerobic bacterial incolumn 200 liters complete with all accessories: Providing/construction/installation/commissioning of onsite brick masonry constructed/pre cast, re-inforced concrete constructed/fiber reinforced plastic constructed toilet block with bio-digester super structure shall be: General specifications On site constructed/ factory made Single unit/ paneled form as per site requirement Easy to maintain and clean All weather protection Well ventilated Shall have no effect on natural calamity with regard to Effluent drawn out Shall be feasible for operation under -15 to 40 degree celcius temperature. Technical specification for onsite constructed/pre cast RCC toilet super structure Toilet block size: 4ft x4ft x 8ft Material-Precast concrete M25, onsite brick masonry or fiber reinforced Plastic Desired features of toilet block: Tiles- upto 3ft on side walls or as material of construction Poor-Tiles or as material of construction Paint on outside walls and inside walls as per material of construction Western toilet sheet made of ceramic (as per site requirement) Taps and flushing system- Water tap at a nominal height of minimum 13inches for Orissa and flushing system.	job	2	1,49,600	2,99,20	00.00

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5. No.							
Electric wire to connect the bulb Stand for water tank-Mild steel of ISA 40x 40 x5mm with CGI roof and proper frost protection	3 m						
oboor-PVC/AL/FRP any other water proof material Door-PVC/AL/FRP any other water proof material oboor-PVC/AL/FRP any other water proof material oboor-PVC/AL/FRP any other water proof material	24.1						
placed on top with suitable retrieval							
*Hand Washing Joseph Witch Research *Management (Bio digestor) *Capacity of bio-digestor: 900litersDesign- With four chambers to ensure long hydraulic retention *Capacity of bio-digestor: 900litersDesign- With four chambers to ensure long hydraulic retention *Capacity of bio-digestor: UPVC/on site concrete constructed/ any other chemically intime.Construction of bio digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Construction of bio-digestor- UPVC/on site concrete constructed/ any other chemically intime.Constructed of the chemical c							
lactive material. Catalyst-rightly effective and approved any of the volume of digestor							
Bio digestor lining-Inert vulcanized 1.0mm thick body, geo textile for bacteria retention. Thickness of lining- 2mm geo textile for bacteria retention. Thickness of lining- 2mm							
•Lifting-lugs .3-4 people usage Further, job includes all types of works like for tank, other pipes etc		-	-20				
bio digester, carriage, transportation, handling, pipes for filled connection, lock etc.Note: The quantity for disposal of effluents as per latest Govt norms, electric connection, lock etc.Note: The quantity may vary as it is conditional to civil structure being constructed/as per site requirement.			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 27 02 55			
Total advertised/estimated cost:		1		2,27,83, 566.10			
Develope metal by 11 firm:							
Total: (Rupees Two Crore Nine Lakh Eighty Three Thousand Six Hundred and	2,09,83,664.00						