

Government of Jammu & Kashmir  
Office of the Executive Engineer, Jal Shakti (PHE) Mechanical Division (North) Sopore  
Website: phekashmir.com Email ID : phe.mdns@gmail.com

No.: PHE/MDNS/DB/ 3803 -10  
Dated: 22 - 08 - 023.

Adv. Cost:	Rs 14.475 Lacs
Allotted Cost:	Rs 13.622 Lacs

M/s Euro Light Enterprises *J*  
Down Town Sopore  
GST No: 01AADFE7197D1ZP  
Cell No: 7889975363

Subject: Electrical and Mechanical works to be carried at WSS Bandpora Goripora Stage 1<sup>st</sup> and 2<sup>nd</sup> under JJM.

- Reference: 1. This office e-NIT No.: e-NIT No. 37 of 2022-23, S. No. 05, dated: 07-01-2023 issued under endorsement No.: PHE/MDNS/DB/5443-55, dated: 07-01-2023 and this office corrigendum No. PHE/MDNS/DB/5847-49, dated 28-01-2023  
2. Authorization awarded by Member Secretary DJJM Superintendent Engineer Jal Shakti (PHE) Hydraulic Circle Baramulla/Bandipore HQ at Sopore issued vide No. SE/Hyd/DB/1630-43, dated: 13-05-2023.

Dear Sir,

For and on behalf of Lt. Governor of J&K U.T contract for execution of "Electrical and mechanical works to be carried at WSS Bandpora Goripora Stage 1<sup>st</sup> and 2<sup>nd</sup> 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

*Jal Shakti PHE Mechanical Division (North) Sopore*  
Executive Engineer

Copy to the:  
1. Chief Engineer Jal Shakti (PHE) Department Jammu, Srinagar for favour of information.

2. District Development Commissioner \_\_\_\_\_, for favour of information.  
3. Superintending Engineer Jal Shakti (PHE) Mechanical Circle (North) Srinagar, for favour of information.  
4. Superintending Engineer Jal Shakti (PHE) Hydraulic Circle \_\_\_\_\_ HQ at \_\_\_\_\_, for favour of information.  
5. Executive Engineer Jal Shakti (PHE) Division \_\_\_\_\_, for favour of information.  
6. Provisional Head, TPA 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) Mechanical Sub-Division \_\_\_\_\_ for information & necessary action.  
8. File concerned.

**Annexure "B" Schedule of cost and quantities  
to this office Allotment Order No: PHE/MDNS/DB/3803-10 dated: 22-08-2023**

Name of Work: Electrical and mechanical works to be carried at WSS Bandpora Goripora Stage 1st and 2nd under JJM

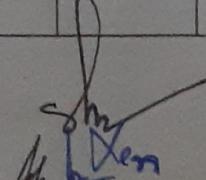
Sl.No	Description of Work / Item(s)	No.of Qty	Units	Rate	Amount
1.01	<p>Providing, fitting, installation, testing and commissioning of Submersible pumping unit of approved make with following specifications: at Stage 1st: well casing 200 mm dia</p> <p><b>PUMP:</b> Discharge of the Pump = 8000 GPH Dynamic Head = 100 M Speed = 2900 RPM Efficiency = Not less than 50% Type of pump=Mixed flow. Type of fluid to be handled = Clear Water</p> <p><b>MATERIAL OF CONSTRUCTION:</b> Impeller = Stainless Steel Pump Shaft = Stainless Steel SS 410, Pump Casing = Cast Iron/Stainless steel</p> <p><b>IMPELLER:</b> Impeller is of the enclosed or semi – enclosed type and properly balanced. Enclosed Impellers equipped with seal rings on their hubs.</p> <p><b>COUPLING:</b> A suitable coupling arrangement provided with pump set. Non-Return Valve: - Non Return Valve of the suitable size provided above the pump discharge case.</p> <p><b>MOTOR:</b> Working Voltage = <math>415 \pm 15</math> V, 03 phase Rating = Corresponding to the head and discharge not less than 17.5 HP.</p> <p>Frequency = <math>50 \pm 3</math> % Hz Working Voltage = <math>415 \pm 15\%</math> v, 03 phase Efficiency = Not less than 90% Class of insulation = F/Suitable for above parameters</p> <p>Submersible motor should be water filled water lubricated squirrel cage type having capacity for above pumping parameters and working on 3 phase; AC supply ranging from 380 to 415 volts, 50Hz. The motor should be sealed by radial rings to avoid mixing of well water with motor filled water.</p> <p>a) The job includes providing and fitting of interlocking arrangement against any failure of coupling. It must be fabricated out of MS strips of suitable size and length.</p> <p>b) The job includes providing and fitting of appropriate size MS nipple 2 feet long threaded on one end and welded to same size MS flange of thickness (as per Table-17) at another end for column pipe as per site requirement. The threaded portion should be as per size of pumping out let for proper fixing.</p> <p>The job includes providing and fitting of R. I. cloth joints/rubber washers with nuts, bolts and washers for all joints of column pipe. The job also includes lowering of pumping unit in the well then proper testing and commissioning of pumping unit on full load at site.</p> <p>Note: Providing of test certificate &amp; Characteristic Curve of pumping equipment is compulsory and pumping unit is to be approved from the concerned Sub Divisional office before procuring.</p>	2.00	job	1,06,727.00	2,13,454.00
1.02	<p>Cutting of hot dip galvanized 100mm dia G.I, C-Class pipe across the section by dint of pipe cutter/ gas cutter. The job also includes Providing and welding of M.S flanges to the two ends of pipe. The Thickness of flange shall conform to IS 6392 Part 1st Table-17. The flange welding shall be carried out in double layers using Advani/Estab/L&amp;T- SS Bond make electrodes to form strong welding joint by dint of DC arc welding. The job further includes Providing and Fitting of nuts and bolts (conforming to IS:1363 Part 1st) and Rubber Insertion Gaskets (conforming to IS: 638/79) to be used between flanged joints</p>	2.00	Job	1,544.00	3,088.00
1.03	<p>Providing and fitting of,100mm dia Ductile Iron double flanged, non-rising spindle soft seated glandless gate/ sluice valves as per IS14846 with rating PN: 1.6/16 for regulating the water supply outside the pumping units.</p> <p>The body and bonnet 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</p> <p>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.</p> <p>Cost on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work.</p> <p>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</p>	1.00	No	19,094.00	19,094.00

Sl.No	Description of Work / Item(s)	No.of Qty	Units	Rate	
1.04	<p>Providing and fitting of 100mm dia Ductile Iron double flanged, Slanted seat swing check valve( NRV) as per IS 5312 with rating PN:1.6/16. 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.</p> <p>It shall have electrostatic epoxy coating (approved for drinking water) both inside and outside of the valve.</p> <p>Cost on account of Nuts, bolts, gaskets, etc required for the job is included in the scope of work.</p> <p>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.</p>	1.00	No	20,581.00	20,581.00
1.05	<p>Providing and fitting of 100 mm dia flanged flanged bends/elbow to delivery manifold and washout flanged on both ends and to make it leak proof, including nuts and bolts and rubber gaskets as per requirement.</p> <p>The flanges shall be M.S Flanges conforming to BIS 6392/1997 Table 17 (Rating PN16) and welded on both sides.</p>	1.00	job	3,614.00	3,614.00
1.06	<p>Creation of pole mounted, outdoor type Electric Sub Station as per the technical specifications given here under -</p> <p>Specifications conforming to IS: 1180 (Part 1) 2014 with latest amendments.</p> <p>Capacity: 100 KvA (Level II)</p> <p>Type: HT/LT Transformer</p> <p>Type of cooling: ONAN.</p> <p>Operating conditions:</p> <p>Input =11000 volts</p> <p>Output =433 volts AC supply in 3- phase.</p> <p>Terminals:</p> <p>Input=3 No. HT bush rods with insulators, washer, nuts etc.</p> <p>Output=4 No. LT bush rods switch insulators, washers, nuts etc.</p> <p>Core: The core shall be of high permeability to reduce core losses and the strips shall be of suitable size and gauge.</p> <p>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.</p> <p>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 jell 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.</p> <p>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</p>	1.00	Job	2,09,945.00	2,09,945.00
1.07	G.I V cross with top Bracket including clamps	30.42	Kgs	212.00	6,449.04
1.08	11 KvA Polymeric Insulators 12 kV ,5kN , Lighting impulse 75 kV Positive and 80 kV Negative with creepage distance 320mm	3.00	Nos	347.00	1,041.00
1.09	P/F of Galvanized nuts, bolts of various sizes as per site requirement.	10.00	Kgs	142.00	1,420.00

Description of Work / Item(s)	No.of Qty	Units	Rate	Amount
Painting of poles with Red Oxide coating	2.00	Ltr	306.00	612.00
Painting of poles Aluminium paint.	2.00	Ltr	510.00	1,020.00
Providing and fitting of ACSR as per IS 308 (part-2) 1996 for 50 Sq.mm ACSR (Galvanised steel reinforced) for Element of various accessories	15.00	m	60.00	900.00
1.13 GI Channel/ Angle/Flat of sizes including clamps	200.00	Kgs	212.00	42,400.00
1.14 Supply, Installation, Testing and commissioning of Polymeric Gang operated 03 phase Air break switch, 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 specia	1.00	Set	11,730.00	11,730.00
1.15 Supply, Installation, Testing and commissioning of D.O. Set ,Gapless Surge arrestor station class Set, 10KA, SKV, LA With polymer housing, Station Type.	1.00	No	7,754.00	7,754.00
1.16 Providing and fitting of Galvanized stay set with 50 X 8 mm Stay Clamp , Guy insulator (2no.), Anchor plate (200X200X6mm) , nuts and bolts , 2 NO- turn buckle , 1.8 m long , 16 mm diameter solid G.I stay rod & 7/3 15 mm dia. G.I stranded wire complete.	1.00	Set	5,018.00	5,018.00
1.17 Sundry items like Aluminum Lugs , Jumpris, binding Tape	1.00	LS	1,105.00	1,105.00
1.18 Providing & Fitting of 35 Sq mm Single Core Copper Conductor (Flexible) PVC Insulated Heavy Duty Industrial Cables (Unsheathed), 1100 Volts Conforming to IS: 694- for connecting motors from panel , stabilizers in rubber conduit . Job includes providing & laying of flexible conduit for Cu. cable with lugs as per requirement Heat Shrinkable Outdoor cable termination Kit	50.00	M	546.00	27,300.00
1.19 Providing and fitting of 165sqmm 3-Core flat submersible copper cable conforming to IS: 694 (Part 1st) - 1964 & IS: 694 (Part 2nd) - 1964 for Submersible Pumping Unit and other electrical Equipment. The cable connections terminal shall be fitted with copper thimbles of required size.	90.00	M	711.00	63,990.00
1.20 Providing, installation ,testing of power service cable for working voltage up to and including 1100 volts; 70 Sq mm armored aluminum 3.5 core cable as service line from output terminals of HT/LT transformer to cubical panel. Cost includes laying of cable in trenches in PVC conduit where ever it is to be laid underground as per site requirement included is termination of ends with suitable Aluminum tube terminals duly crimped & taped	60.00	M	668.00	40,080.00
1.21 Providing, fitting, testing and commissioning of 50KVA voltage stabilizer as per specifications below: Type of voltage controller: Manually operated copper wound, 3-phase, AC power supply multi step. Type of Regulator : Double plate type with electrolytic copper contacts. Input voltage :250-400 volts (3 phase) Output voltage :400 ±10% volts. Frequency :50 ±3 C/S. Windings : Electrolytic grade copper of adequate section, vacuum impregnated and Oven-dried. Insulation : Fiber glass insulations to tested parameters. Cooling :Naturally, Oil cooled Temp. Rise (Max):30°C above ambient Mounting :On Uni-directional wheels. Correction rate :30 volts per step Wave form distortion :virtually nil Duty cycle :100% continuous. Enclosure : MS sheet enclosure in pressed CGR Sheet powder coated with radiators. Core laminates : High grade, low eddy loss, grain oriented silicon steel laminations. Load : Three phase induction motor load. Load Amperes (continuous) Overload in 24-hours operation: 10% above continuous Ampere rating.	1.00	Job	1,07,401.00	1,07,401.00

Sl.No	Description of Work / Item(s)	No.of Qty	Units	Rate
	<p>The voltage stabilizer shall have T-oil level indicator gauge preferably glass type tube or otherwise visible to naked eye. The top of the container to have a display panel for housing 02 numbers Digital voltmeters (0-500V) along with 4-way selector switch and set of neon indicators for incoming and outgoing phases (06 No's).</p> <p>Insulating media (T. Oil) of 11 KVA grade to be provided and filled up to top level, with dielectric strength of 5 KV at 4m air gap. The T-Oil of specific grade should be provided in separate barrels and filled at site up to top level.</p> <p>The voltage Stabilizer shall be accepted with manufacturers duly stamped test certificate and shall have name plate with specifications.</p>			
1.22	<p>Fabrication Providing and fitting of 3 phase modular control panel. The technical details/ Ratings of various components of Modular Control Panel are given Below</p> <p>b. Main Circuit Breaker = 200 A</p> <p>c. Changeover Switch = 200 A</p> <p>d. Motor Breakup Protection MCCB = 160 A</p> <p>e. FASD starter - 2 units with rating Line contactor _AC3 70 A, Delta Contactor- AC3 70 A Star Contractor- AC3 50 A Timer- Star Delta Electronic</p> <p>Thermal overload relay- with relay range 25-50 direct/CT operated suitable-range Aux coil voltage Wide Band fitted with separate stabilization unit min 1KW Aux wiring</p> <p>f). Auxillary MCCB =63 Amp With S.C. Breaking Capacity of 36kA</p> <p>g). Motor Protection Relay suitable</p> <p>i) M-Power module for mobile starter &amp; Earth fault relay</p> <p>Rest Specification</p> <p>Fabrication, Providing and fitting of Modular motor control panel of appropriate size fabricated out of 14 SWG sheet having required openings/vents and protection Class : IP-55 &amp; fitted with accessories as under:</p> <p>a) Bus bar Chamber: The bus bar chamber shall be fitted at the top of the panel horizontally throughout the length. There shall be 3 Nos. of phase bus bar and 1 No neutral bus bar and 1 No earthing bus bar. The bus bars shall be air insulated and made-up of high conductivity COPPER with current density of suitable rating for 200 Ampere. All panel compartments shall be provided with suitable cable alley and vertical bus bar alley. Suitable segregation shall be provided in between bus bar chamber and adjoining compartments. The bus bar shall be PVC sleeved with color strips of red, yellow, blue and black and the same be arranged in accordance with IS-375 specs. Electrical clearances shall be maintained between phases, neutral and</p>	1.00	Job	2,34,576.00      2,34,576.00
	<p>Rated operational voltage=415 V + 15 %</p> <p>Rated frequency=50+/-3%Hz</p> <p>Ambient temperature=40C°</p> <p>Ultimate S.C Breaking Cap. at (415V AC, 50 Hz)=As per requirement</p> <p>Type of release=Thermal-Magnetic</p> <p>Overload protection=0.8 – 1×In adjustable</p> <p>Short-circuit protection=6-10×In adjustable.</p> <p>Current rating = As per requirement</p> <p>c) Change over Switch: Qty. = 01 No. Rating = As per requirement Type =Front operated, on load, 4 pole, 400 +15%V, 50 + 3%Hz.</p> <p>d) Motor Back-up Protection MCCB: Qnty=2 No No. of poles =3P Current Rating =As per requirement Rated operational voltage = 415 V +15 % Rated frequency =50 + 3% Hz Ambient temperature =40C° Ultimate S.C Breaking Cap. at (415V AC, 50 Hz) =As per requirement Current rating = 160 A</p> <p>e.Submersible starters:- Fully automatic star delta starters. Capacity = As per requirement details above Power Specs = 3 Φ, 415 + 15% V, 50 + 3 % Hz. Relay range = As per requirement. Coil Voltage = preferably 220-240 v with separate stabilization unit. Protection = single phasing , phase, Reversal, phase unbalance (55 ± 5 V)</p>			

	Description of Work / Item(s)	No.of Qty	Units	Rate	Amount
	<p>e) Main Circuit Breaker (Incomer MCCB): Qty.=02 No. of poles =4 Pole Current Rating = As per requirement Rated insulation voltage = 690V Terminal capacity = 120 Sq. mm with lug Or above Conformity to standard = IS/IEC 60947-4-1 Qty. =2 No's</p> <p>f) Auxiliary MCCB for Heating/Lighting: Circuit Breaker=MCCB (Outgoing) Qty.=1 No. No. of poles=4P Current Rating =As per requirement. Rated operational voltage = 415 V + 15 %</p> <p>g) Motor Protection Relay: Digital Motor Protection Relay with LCD Display for 3-phase supply with following protections suitable for the Modular Control Panel:- Protections = Thermal Overload with pre-alarm, Short Circuit, Phase Loss, Unbalance, Phase reversal, Under Current, over current, Prolong starting, Locked Rotor, Under voltage, over voltage &amp; Earth fault.</p> <p>h.M-power module for mobile starter for submersible motor 1P/3P 3 wire English , Hindi, IVRS Languages – Suitable 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 for each starter). The enclosure of the panel shall be of excellent fit and finish, corrosion resistant and powder coated gliding hinges for smooth and noiseless movement of windows and advanced locking arrangements</p>				
1.23	<p>Providing, installation and testing of 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.</p> <p>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.</p> <p>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:</p> <p>Make = Reputed make Capacity = 3 ton (P) No. of load chain falls = 2 or above</p>	1.00	Job	62,972.00	62,972.00
1.24	<p>Providing, installation, testing and commissioning of area lighting 120 Watt LED (Street Light Type) on top of octagonal pole , including MCB fitted in box 10A</p> <p>Having following specs: Input: 90-240 V 50 Hz Power Factor: &gt;0.9 Colour Temperature: 4K - 6.5K Beam Angle: 120° - 170° Lumens: &gt;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 the high mast pole</p>	4.00	Job	9,486.00	37,944.00
1.25	Providing and installation of Junction Box with DP 32Amp MCB to serve as amin switch for LED lighting including complete wiring min 20-30 m from panel board. The job includes making of electric connection to the circuit.	1.00	job	2,227.00	2,227.00
1.26	Providing, Installation and testing of 2KVA fully automatic 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.	1.00	Job	8,154.00	8,154.00
1.27	<p>Providing &amp; fitting of lighting points for (machine room , operators room,) as per site requirement in 1.5 mm<sup>2</sup> multistranded single core 1100 volts, pvc insulated copper conductor through pvc conduit pipe by way, switches, socket modules , regulators ,indicators, 08/10 watt LED lamps Surface light Make.</p> <p>Included is cost on account of modular switch boards with the wooden frames as per site requirements</p>	12.00	Job	1,680.00	20,160.00



Sl.No	Description of Work / Item(s)	No.of Qty	Units	Rate	
1.28	Providing fitting of heating points in 2.5mm <sup>2</sup> multistranded single core 1100 volts, pvc insulated copper conductor through pvc conduit by way of p / f of 15 Amp switches, 6 pin socket on modular fitting as per site requirements. Heating points are to be connected from main control panel. All accessories required is to be provided by the firm	2.00	Job	1,470.00	2,940.00
1.29	Providing and fitting of 9" x 9" exhaust fan with complete wiring in 1.5 mm cu wire through conduit and 6 A modular control complete job. Make Providing and fitting of 9" x 9" exhaust fan with complete wiring in 1.5 mm cu wire through conduit and 6 A modular control complete job.	1.00	Job	2,625.00	2,625.00
1.30	Providing, fitting of Distribution Board of reputed make 4 way S P N single door powder coated sheet steel enclosure for surface mounting fitted with bus bar, DIN channel, neutral link and incoming contact. the above DB is to be provided /fitted with double pole 40 amp MCB for Main. 32 A for heating circuit & rest 3 of 16/6 amps each for premises luminary, auxiliary circuit of reputed make. Further job includes providing / fitting 4 mm <sup>2</sup> multistranded single core 1100 volts, pvc insulated copper conductor through pvc conduit as service line from main panel as per site requirements. Connections should be made in such a way Lighting points is to be connected via automatic transformer by way of p/f switch socket arrangement with allied fixtures & and heating points to main panel. Job includes dismantling of existing damaged conduit , wires, conduit and cleaning the surface properly	1.00	Job	5,775.00	5,775.00
1.31	Earthing of Panel board, stabilizer, Motors, heating points, lighting points, D.G sets, electric substation, comprising of company fabricated earthing electrode as per IS: 3043. The job includes Auguring of bore of required dia/depth for installation of electrode along with backfill compound mixed with soil and all other items required thereof for achieving the best result. The job includes connecting of electric gadgets through GI strip as per relevant standards. Safe earthing electrode size : 65/80 mm dia (As specified), Length : 2000 mm Back fill compound : 30 kg	1.00	Job	10,462.00	10,462.00
1.32	Fabrication, providing, fitting of base frame for pumping units, covering of holes, fabrication of gantry, ladder, DG set covering, HT/LT transformer Bed with gantry fabricated out of ISMC/ISMB/ISA/Bars/MS Pipe/MS plain-chequered Sheets. Including making of holes in concrete, including metal primer 1 coat and two coats of approved shade . The works is to be executed as per site requirement and as per dimentions of Pumping unit and as per directions of site engineer.	300.00	kgs	135.00	40,500.00
1.33	Earth work in excavation by manual means in trenches for foundations, drains , pipes , cables etc (Not exceeding 1.5 m in width) and ramming of bottoms lift 1.5 m, including getting out excavated earth and disposal of surplus excavated earth as directed ( All kinds of soil) (2.81 schedule)	15.00	cum	291.00	4,365.00
1.34	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 mm <sup>2</sup> 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.	1.00	job	34,053.00	34,053.00
1.35	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.	6.00	M	1,205.00	7,230.00
1.36	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 ii.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 50 3 1.6 x 0.4 02 75 3 1.6 x 0.4 02 100 3 3 x 0.4 02 125 3.5 3.5 x 0.5 02 150 3.5 3.5 x 0.5 02 200 4 4 x 0.6 02 300 5 5 x 0.8 02	1.00	Job	28,840.00	28,840.00

Description of Work / Item(s)		No.of Qty	Units	Rate	Amount
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 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. xiv.S-16 MXL, S- 16 H X L Socket Set (19 sockets + 6 Accessories) - 01 No.					
1.37 a) Providing of good quality bedding for night stay/Shift consisting of:- 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 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 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.	1.00	Job	39,619.00	39,619.00	
1.38 Fabrication of 6' x 6' angle iron bed 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	94.75	Kg	114.00	10,801.50	
1.39 Providing and fitting of 19 mm thick multilayered ply sheet of size 6 x 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	36.00	sft	150.00	5,400.00	
1.40 Providing of solar/electrical lantern chargeable on both solar & electrical 220v supply.	1.00	Job	1,911.00	1,911.00	
1.41 Providing of bamboo ladders 18 feet long along with 15 feet long Link rods and HT Glove pair (01 No each)	1.00	Job	7,350.00	7,350.00	
1.42 Providing of 1 KW heat convector for operators for winter season	1.00	Job	1,205.00	1,205.00	
1.43 Providing and fitting of 01 No. angle iron/sheet metal board duly painted showing various specifications of the mechanical and electrical equipments installed at site. The legs are to be grouted in cement concrete.	24.00	sft	215.00	5,160.00	
Rupees Thirteen Lakh(s) Sixty Two Thousand Two Hundred Sixty Five Only		Total allotted amount:			13,62,265.00

Executive Engineer  
Jal Shakti (PHE) Mechanical Division (North)  
Sopore