

**PROPOSED CONSTRUCTION OF ARANYA BHAWAN ANNEX
AT PANJABARI, GUWAHATI - 781 037.**

BOQ OF RESIDENTIAL CAMPUS EXTERNAL ELECTRICAL WORKS

SI No.	Description	Units	Qty	Rate	Amount
	SCHEDULE ITEMS				
	Wiring in surface/ recessed PVC conduit FR (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) cable				
	CIRCUIT WIRING				
1.	Wiring for light/fan/call bell point with 2x1.5 sq. mm. P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface/ recessed conduit wiring system with 20mm dia 2mm thick / heavy rigid PVC IS: 9537 Part - III conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) including 6 Amp flush type switch/ bell push (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.) GI/ MS switch board (ISI marked) with phenolic laminated sheet cover ,ceiling rose (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.) etc. complete				
	Short point up to 3.00 metre. length.	Each	2		
	Medium point up to 6.00 metre. Length.	Each	2		
	Long point up to 10.00 metre. Length.	Each	1		

SI No.	Description	Units	Qty	Rate	Amount
2.	Wiring to 5 a pin 6 Amps plug point with 1.5 sq. mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface/ recessed 2 mm thick/ heavy rigid ISI marked IS: 9537 PART - III rigid PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) wiring system including 5 pin 6 Amps flush type plug socket and 6 Amps F/T switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.), GI/ MS switch board (I.S.I. mark with phenolic laminated sheet cover including earth continuity with 1.5 sq. mm. cable to third pin of the plug socket etc. as required complete, when placed elsewhere.	Each	1		
	Medium point up to 6.00 metre. Length.				
3.	Wiring for 5/6 pin 16 Amps power plug point with 4 sq. mm. P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) in surface/ recessed conduit wiring system including and fixing 5/6 pin 16 Amps flush type socket outlets and 16 Amps flush type switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt./ Havells make), GI/ MS switch board (I.S.I. mark with phenolic laminated sheet cover earth continuity with 2.5 sq. mm cable to the 3rd pin of the socket as required complete with 20 mm. dia. 2mm thick/ heavy rigid ISI marked IS: 9537 PART - III rigid PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.)				
	Extra long point up to 15.00 metre. length.	Each	1		

SI No.	Description	Units	Qty	Rate	Amount
4.	Wiring for 5 pin 6 amp plug with 1.5 sq mm P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) including 5 pin 6 amp socket outlet (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.)make) and 6 amp flush type switch (Anchor penta /Gold medal /Kolor kany.Kom/Havells or equivalent make as approved by the Deptt.)make) earthing the 3rd pin of the socket as required on the switch board in surface/ recessed P.V.C. conduit wiring system. When fitted on same board of light and fan.	Each	1		
5.	Wiring for drawing sub-main line with P.V.C. insulated single core unsheathed industrial (Multistrand) cable FR conforming to IS-694: 1990 with flexible bright annealed electrolytic copper conductor for voltage grade up to 1100 volts (Finolex /RR Kabel /Nicco / Anchor or Equivalent Make as approved by the Deptt.) PVC conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) including earth continuity in surface/ recessed 20 mm. dia. 2mm thick/ heavy ISI marked IS: 9537 PART - III rigid PVC conduit wiring system.				
	With 2 x 2.5 sq. mm. + earth continuity with 1x1.5 sq. mm. in 20 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	RM	25.00		
	With 2 x 10 sq. mm. + earth continuity with 1x 6 sq. mm. cable in 25 mm. dia. 2mm thick/ heavy rigid PVC IS: 9537 Part - III conduit.	RM	15.00		

Sl No.	Description	Units	Qty	Rate	Amount
	SUPPLY AND FIXING OF RIGID PVC CONDUIT (AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) IN SURFACE AND RECESS WIRING SYSTEM				
6.	Supply and fixing 19 mm dia 2.00mm average wall thickness heavy rigid PVC IS: 9537 Part - III conduit (Berlia/ AKG / Precision/ Presto Plast/Polycab/ MW or equivalent make as approved by the Deptt.) in recessed system including cutting the wall and making good the same as required:	Metre	10.00		
	Wiring with HFFR cable and Modular switch etc. (ALL PRODUCTS SHOULD BE ENERGY EFFICIENT AND ENVIRONMENT FRIENDLY)				
7.	Supplying ,installation, testing & commissioning of 5 pair Unarmoured Telephone Cable through existing conduit in surface/ recess system.	Metre.	50.00		
	FITTINGS AND ACCESSORIES (ALL PRODUCTS SHOULD BE ENERGY EFFICIENT AND ENVIRONMENT FRIENDLY)				
8.	Supplying and fixing of Fan box (AKG or equivalent as approved by the Deptt.)with inbuild rod as required.	Each	1		
9.	Supplying and fixing of polished Brass Bracket of 18 S.W.G, 25 cm long cast back plate and brass lamp holder complete including connection as approved by the Deptt.)as required Without Lamp/ [BK]	Each	1		
10.	Supplying and fixing of bulk head fitting suitable for CFL lamp complete with all accessories including 20 watts CFL lamp and connection as approved by the Deptt.)as required. [BH]	Each	2		
11.	Supplying and fitting of 18/20 Watt CFL lamp in the existing batten holder/angle holder/decorative bracket/bulk head fitting/ pendent holder etc. as specified and directed by the deptt.	Each	1		
12.	Supplying and fixing of Frosted glass shade of 100 mm dia (Nominal Size as required.	Each	1		

SI No.	Description	Units	Qty	Rate	Amount
	MCB DB (ABB, SCHNEIDER MG, LEGRAND, HAGER MAKE) & (SCHNEIDER NEO BREAK, C&S, Havells, INDOASIAN, HPL OR EQUIVALENT MAKE AS PPROVED BY THE DEPTT.)				
	MCB IN-comer SPN DB				
13.	Supplying with fitting and fixing sheet steel, phosphatised, powder painted dust & vermin proof Double door IP-43 surface mounting SPN MCB DB incorporated with bas-bar, Neutral link, Earth bar and din rail etc fitted on wall with grouting nuts & bolts as reqd. complete with making necessary connection as approved, specified and directed by the deptt.				
	ABB, Schneider MG, legrand, Hager make)				
	8 way SPN Double Door	Each	1		
	MCB, MCCB, RCCB, RCBO (ABB, SCHNEIDER MG, LEGRAND, AND HAGER MAKE) & (SCHNEIDER NEO BREAK, C&S, Havells, INDO ASIAN, HPL OR EQUIVALENT MAKE AS PPROVED BY THE DEPTT.) MCB (Conform to IS / IEC 60898-1:200/ MCCB (Conform to IS/IEC 60947- RCCB (Conform to IS/IEC 12640 / 61008)				
14.	Supplying with fitting and fixing single Pole 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	C Series (Schneider MG, legrand, Hager make)	Each	4		
	6 to 32A				
15.	Supplying with fitting and fixing DP 10 KA 240/415V 50Hz MCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	C Series (ABB, Schneider MG, legrand, Hager make)	Each	1		
	6 to 32A				

SI No.	Description	Units	Qty	Rate	Amount
16.	Supplying with fitting and fixing 30/100/300mA sensitivity 240/415V 50Hz DP RCCB of the following capacity complete with making necessary connection as approved, specified and directed by the deptt.				
	100/300mA sensitivity DP RCCB (ABB, Schneider MG, legrand, Hager make)	Each	1		
	25A				
	EARTHING				
17.	Supply, installation & testing of G.I. earth station with perforated 40 mm dia and 4.50 Metre long heavy duty G.I. pipe with necessary 40 mm dia. G.I. Fittings such as Socket, Tee, elbow, nipple and 50 mmx40 mm G.I. reducing socket for funnel including locking arrangement 300 mmx300 mmx6 mm hinged cover C.I. earth plate complete with digging of earth pit, construction of brick chamber and plastering of both inner & outer surface of wall as specified and directed by the deptt .	Each	12		
18.	Supply, installation & testing of Copper Plate earth station with 600 mmx600 mmx3 mm copper earth plate with necessary 40 mm dia. G.I. medium duty watering pipe with G.I. Fittings such as Socket, Tee, elbow, nipple and 50 mmx40 mm G.I. reducing socket for funnel including locking arrangement with 300 mmx300 mmx6 mm C.I. hinged cover plate complete with digging of earth pit, construction of brick chamber and plastering of both inner & outer surface of wall as specified and directed by the deptt .	Each	4		
19.	Extra for using salt (5 K and Charcoal (64 K in pipe Earth Station pit to provide low impedance ground in location of high soil resistivity as and when required and specified by the Deptt.	Each	12		
20.	Extra for using salt (5 K and Charcoal (96 K in G.I./Copper plate Earth Station pit to provide low impedance ground in location of high soil resistivity as and when required and specified by the deptt .	Each	4		

Sl No.	Description	Units	Qty	Rate	Amount
21.	Supplying & laying of 6 SWG G.I. earth from Earth Electrode (below G.L.) to electrical switch gears or electrical machineries including making necessary connection as approved, specified and directed by the deptt.	Metre.	600.00		
22.	Supplying & laying of following size 25mmX5mm G.I. strips drawn on surface from earth electrode to Electrical switch gears, machineries etc complete with supply of G.I. nuts & bolts, screws etc including riveting, soldering & making necessary connection as approved, specified and directed by the deptt.	R.M.	150.00		
23.	Supplying & laying of following 25mmX5mm size Copper strips drawn on surface from earth electrode to Electrical switch gears, machineries etc complete with supply of Brass nuts & bolts, screws etc including riveting, soldering & making necessary connection as approved, specified and directed by the deptt.	Metre.	60.00		
	LUMINAIRES				
24.	Supplying with fitting fixing of CFL/Fluorescent luminaries complete with all accessories such as ballast, starter etc. directly on wall / ceiling including connection as approved by the Deptt.)with 1.5 sq mm P.V.C. insulated S.C. copper conductor as required and as directed by the department.				
	Striplite luminaries complete with VPIT copper ballast/ Electronic ballast and decorative end cap and 1 X 36 / 40 watt Fluorescent tube.(Crompton Greaves make) Model- DSG1114LDB CROMGOLD / DSG1114LDBN CROM GOLD NEW / DSG1314EB CG GOLD / DSG 1414EB PLANET GOLD with Super Saver / Super Brite Lamp. Or equivalent (Equivalent will be selected by the deptt considering the mother items rate) PHILIPS/ WIPRO/ BAJAJ/ Havells/ HPL/ SOLAR/ JAQUAR make. [FL]	Each	1		
	STREET LIGHT LUMINAIRES AND PANEL BOARD				

SI No.	Description	Units	Qty	Rate	Amount
25.	Supplying with fitting & fixing of the following road lighting luminaries complete in the existing pole with high power LED and extendable up to with unique peanut lens to ensure uniform distribution including making necessary connection as approved by the Deptt.)with 2x 2.50 sq.mm F.R. multistrand and P.V.C. insulated single core copper cable as specified and directed by the department.				
	Philips make) type: 919515810052, BRP 320 1x24/45 LED or equivalent (Equivalent will be selected by the deptt considering the mother items rate WIPRO/ BAJAJ/ HAVELS/ HPL/ SOLAR/ CROMPTON make)	Each	10		
26.	Supplying and installation and commissioning of vermin and dust proof totally enclosed double door cubical type compartmental floor mounting panel board of size 1.20 m x1.00 m x0.50 m made of 16 SWG1.66mm) thick CR sheet and 35 mm x 35 mm x 6 mm size angle and 35 mm x6 mm flat iron having 4 nos legs at the bottom and G.I. Sheet reefing on the top complete painting with 2 coats of red oxide metal primer and 2 coats of enameled paint. The panel board is to be erected in 1:3:6 RCC pole foundation including excavation of trench and brick soling etc. complete neatly internal wiring done as specified and directed by the department comprising of the following electrical items.				
	1. 40 Amp 4 pole 415 Volt 50 Hz MCCB as incomer - 1 no				
	2. 32 Amp 2 pole open execution with HBC fuse SDFU unit as outgoing - 3 nos.				
	3. 25 mm x 5 mm size 4 strip copper Bus-Bar- 1 set				
	4. 40 Amp 4 pole ON-OFF poser contactor - 1 No.	Each	1		
	5. Surface mounting timer switch - 1 No.				
	6. 63 Amp bakelite HBC fuse kit-kat - 3 Nos				
	7. 0-40 Amp electro-mechanical counter display 3 Phase 4 wire electronic hybrid energy meter				
	CEILING FAN, EXHAUST FAN AND AIR CURTAIN				

SI No.	Description	Units	Qty	Rate	Amount
27.	Supplying including fitting fixing of following A.C. Ceiling fan complete with all accessories like down rod, canopy etc. of following sweeps with making necessary connection as approved by the Deptt.)as required complete and as directed by the Department [Without regulator].	Each	1		
	Premium model 1200 mm Sweep (ORIENT PSPO make) / Premium model 1050 / 1200 mm Sweep SS 390 Deco Havells make) [F]				
28.	Supplying fitting and fixing of ceiling fan Regulator including complete connections etc. complete as required and as directed by the department.				
	Electronic Registance Type	Each	1		
	U. G. CABLE AND CABLE WORKS				
29.	Supply and laying of following size PVC/XLPE insulated and PVC sheathed 1.1 KV G Solid Aluminium conductor up to 10 sq mm balance stranded conductor, XLPE Insulated, cores laid up, PVC tape inner sheathed, Armour (Aluminium for single core up to 70 sq mm balance Aluminium strip, Galvanised for cables up to 2x10 sq mm.3x10 sq mm,4x6 sq mm balance all galvanised steel strip) , extruded PVC Type ST2 sheathed, 650/1100V grade as per IS 7908(Part 1) 1988 armoured U.G. cable U.G. cable laid in ground/partially in air (as required for termination over ground including excavation of cable trench up to depth of 75cm, refilling, protective brick covering, Sand cushioning etc complete handling of surplus spoil, debris et to proper place as specified and directed by the deptt. (Nicco/Havells/ RPG/CCI/Polycab/Gloster/ Finolex make) .				
	3 Core A2XWY A2XFY				
	4.00 Sq.mm 3 Core armoured U.G. cable	Metre	200.00		
	6.00 Sq.mm 3 Core armoured U.G. cable	Metre	80.00		
	3 & 1/2 Core A2XFY				
	25.00 Sq. mm.3 & 1/2 Core armoured U.G. cable	Metre	35.00		
	70.00 Sq. mm.3 & 1/2 Core armoured U.G. cable	Metre	150.00		
	300.00 Sq. mm.3 & 1/2 Core armoured U.G. cable	Metre	80.00		

SI No.	Description	Units	Qty	Rate	Amount
30.	Supply and laying of following size Solid Aluminium conductor up to 10 sq mm balance stranded conductor, XLPE Insulated, cores laid up, PVC tape inner sheathed, Armour (Aluminium for single core up to 70 sq mm balance Aluminium strip, Galvanised for cables up to 2x10 sq mm.3x10 sq mm,4x6 sq mm balance all galvanised steel strip) , extruded PVC Type ST2 sheathed, 650/1100V grade as per IS 7908(Part 1) 1988, LT armoured U.G. cable laid in pucca flooring, road crossing, drain crossing as per site requirement and partially in air to connection as approved by the Depts. the control switch, through medium duty G.I. pipe (Tata/ Nezone make or equivalent as approved by the Deptt) bend and socket including excavation and refilling the trench and making good damage done as specified and directed by the deptt. (Nicco/ Havells/ RPG/CCI/Polycab/Gloster/ Finolex make)				
	Core - 3 A2XWY A2XFY				
	4.00 Sq.mm 3 Core U.G. cable in 25mm dia medium duty G.I. pipe	Metre	30.00		
	6.00 Sq.mm 3 Core U.G. cable in 32mm dia medium duty G.I. pipe	Metre	15.00		
	Core - 3 & 1/2 A2XWY A2XFY				
	25.00 Sq.mm 3&1/2 Core U.G. cable in 40mm dia medium duty G.I. pipe	Metre	10.00		
	70.00 Sq.mm 3&1/2 Core U.G. cable in 50mm dia medium duty G.I. pipe	Metre	20.00		
	300.00 Sq.mm 3&1/2 Core U.G. cable in 100mm dia medium duty hot dip G.I. pipe (AKG OR equivalent as approved by the deptt.)	Metre	15.00		

Sl No.	Description	Units	Qty	Rate	Amount
31.	Supply and laying of following size armoured telephone cable laid in pucca flooring, road crossing, drain crossing as per site requirement and partially in air to connection as approved by the Depts. the control switch, through medium duty G.I. pipe (Tata/ Nezone make or equivalent as approved by the Deptt) bend and socket including excavation and refilling the trench and making good damage done as specified and directed by the deptt. . (Nicco/ Havells/ RPG/CCI/Polycab/Gloster/ Finolex make) .	Metre	40.00		
	20 pair				
32.	Supply and laying of following size armoured telephone cable laid in air or through existing cable trench/ duct/ cable tray/ HDPE pipe including fitting required size of lugs at the both end of the cable by using crimping tool and making good damaged done as specified and directed by the deptt. (Nicco/ Havells/ RPG/CCI/Polycab/Gloster/ Finolex make) .	Metre	60.00		
	20 pair				
31.	Supplying including installation of cast iron cable marker as specified and directed by the deptt.	Each	50		
	CABLE KITS				
32.	Supply including fitting and fixing of Resin Cast type outdoor end cable Termination Kit for 3 Core/1.1 KV PILC cable (MS - SE For the following sizes including testing and commissioning as specified and directed by the Deptt.				
	240.00 & 300.00 Sq.mm., 3.5 Core cable.	Each/ Set	1		
	Motor Pump Set				
33.	Supplying including installation, connection as approved by the Deptt., testing and commissioning of CENTRIFUGAL MONOBLOCK PUMP SET complete as directed and specified by the deptt.				
	3 HP single Phase Centrifugal monoblock pump set (Crompton Greaves/ Aquatic/ CRI/ V-Guard make) 2900 rpm with DOL Starter (Crompton Greaves/ Control & Switch Gear/ BCH/ L& T / Siemens make) .	Each	2		

SI No.	Description	Units	Qty	Rate	Amount
34.	Supplying including installation, connection as approved by the Deptt., testing and commissioning of SUBMERSIBLE PUMP SET 3 (Three Phase) with steel cable rope and submersible cable complete as directed and specified by the deptt.				
	Three phase Submersible motor pump set (Texmo / Crompton Greaves/ Aquatic/ CRI/ V-Guar suitable for 100 mm bore well and above. 3 HP STAGE 7 to 40 with MCB controlled Submersible motor pump set control panel.	Each	2		
	LUMINARIES				
35.	Supplying fitting and fixing of LED post top lantern BGP150 LED1000/WW PSU 220-240V 7043 42 w protection IP 65 /IK 10 / Class 1 Philips make on existing GI pipe pole with foundation.	Each	2		
	OCTAGONAL POLE				
36.	Supplying including installation of the Octagonal poles shall be designed to withstand the maximum wind speed of 169 km/hr. The top loading i.e. area and weight of fixtures are to be considered to calculate maximum deflection of the poles and the same shall meet the requirement of BS:5649 Part VI 1982. The pole shaft shall have octagonal cross section and shall be continuously tapered with single longitudinal welding. There shall not be any circumferential welding of the pole shaft. The welding of the pole shaft shall be done by Submerged Welding process. All octagonal pole shafts shall be provided with the rigid flange plate of suitable thickness with provision for fixing 4 foundation bolts. The base plate shall be fillet welded to the pole shaft at two locations i.e. from inside and outside. The welding shall be done as per process approved by Third Party Inspection agency. (BAJAJ/ PHILIPS/ VALMONT/ PARUTHI ENGR/Nezone make)				

SI No.	Description	Units	Qty	Rate	Amount
	Pole Type BOP or equivalent-8030 Height 8 m The materials of the pole as follows : Conforming to grade S355JO Conforming to grade S355JO, Base Plate :- Fe 410 Conforming to IS 226/ IS 2062, Foundation Bolts :- 6.8 Gr. As per IS 1367, Pole Sections :- The Octagonal Poles shall be in single piece with single longitudinal welding join, Galvanization :- The poles shall be hot dip galvanized as per IS 2629 / IS 2633 / IS 4759 standards with average coating thickness of 65 micron. The galvanizing shall be done in single dipping. Door opening:- The Octagonal poles shall have door of approximate 500 mm length at the elevation of 500 mm from the base plate. The door shall be vandal resistance and shall be weather proof to ensure safety of inside connection as approved by the Depts.. The door shall be flush with the exterior surface and shall have suitable locking arrangement. The pole shall be adequately strengthened at the location of the door compensate for the loss in section. There shall also be suitable arrangement for the purpose of earthing, Smart pack Junction box with 6 MCB & Terminals for mounting inside base	Each	10		
37.	Supplying including fitting and fixing of Hot Dip galvanised arm bracket for installation of luminaries. Header with top cap 300 mm long pipe of thickness 3 with arrangement to fix on pole top with 3 Nos. of bolts. i Armed of required length size 48.3mm out side dia x 3.25mm thick (BAJAJ/ PHILIPS/ VALMONT/ PARUTHI ENGR/Nezone make) Stiffener plate from arm of the following types :	Each	10		
	Single arm bracket 1500mm long for 3m to 10 metre. Poles.				
38.	Main LT Feeder Panel : EXTERNAL				

Sl No.	Description	Units	Qty	Rate	Amount
	Supplying and installation of metal enclosed free standing floor readable mounted front operated cubical type switch gear panel suitable for OUTDOOR Type installation conforming to IS: 8623 (Part I & II). Panel should be made of sheet steel and thickness not less than 2mm and structural steel having light section with arrangement for sealing the covers and lockable doors. The panel shall be completely dust tight and vermin proof and shall be painted with anti corrosive and anti condensation type two coats of primer and two coats of paint conforming to Degree of Protection for enclosure shall be IP-55. All wiring shall be PVC insulated and PVC sheathed of 1100 volt grade of required size. The panel should have provision of entry of cable at the bottom and also provision of out going feeders from the bottom of the panel. The panel shall be incorporated with single copper busbar system. The bus bar shall be of high quality copper of uniform cross section. The panel shall consist of the following items (viz. Voltmeter, Ammeter, CT, indicating lamps, selector switch etc.) connected as per drawing and shall be flush mounted on the front of the panel.	Set	1		
	Incomer				
	250A 4P MCCB, 50 KA Electronic Release – 2 Nos.				
	250 4P on-load changeover switch – 1 No.				
	Bus-Bars: 480 Amps TPN electrolytic copper bus bar of uniform cross-section – 1 sets (30mmx10mm)				
	Outgoing				
	100A 4P MCCB, 25 KA – 4 Nos.				
	40A 4P MCCB, 25 KA – 3 Nos.				
	63A 4P MCCB, 25 KA – 1 No.				
	40A 4P MCB – 2 nos.				
	40A DP MCB – 1 No.				
	32A DP MCB – 2 Nos.				
	Selector Switch –4 Nos.				
	Digital Multi Function Meter , Ammeter, Voltmeter, PF meter – 4 Nos.				
	CT250A/5A - 2 Sets.				
	Switch Fuse Unit – 6 Nos.				
	LED Indicating Lamp Unit – 6 Nos.				
39.	LT PUMP PANEL				

SI No.	Description	Units	Qty	Rate	Amount
	Supplying and installation of metal enclosed wall/floor mounted front operated cubical type switch gear panel suitable for indoor installation conforming to IS: 8623 (Part I & II). The Panel should be made of sheet steel and thickness not less than 2mm and structural steel having light section. The panel shall be completely dust tight and vermin proof and shall be painted with anti corrosive and anti condensation type two coats of primer and two coats of paint. All wiring shall be PVC insulated and PVC sheathed of 1100 volt grade of required size. The panel should have provision of entry of cable at the bottom and also provision of out going feeders from the bottom of the panel. The bus bar shall be of high quality	Set	1		
	Incommer				
	100A 4P MCCB 25 KA- 1No.				
	Ameter,voltmeter ,Switch fuse Unit ,Selector Switch, CT				
	Busbar				
	200 A TPN electrolytic Cu Busbar (25mmx5 mm) with uniform cross-section				
	Outgoing				
	25 A DP,MCB -1 no.				
	40 A 4P,MCB -4 nos				
	4.5 mtr Pole for Post Top Lantern				
40.	Fabrication, supply and erection of 4.5 Mtr. Long 75mm dia MS pole with MS base plate of 300x300x10mm thickness at the bottom of the pole with fixing arrangement for post top lantern and to accomodate a junction box. The foundation is of cement concrete of 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate) size 0.8 x 0.8 x .35 m with collar of size 0.4m dia x 0.5m height to accomodate the looping type cable end box including excavation and refilling etc. as required. The pole shall be painted with one coat of red oxide primer and two coats of aluminium paint.	Each	2		

SI No.	Description	Units	Qty	Rate	Amount
39.	Supplying with fitting and fixing sheet steel cable junction box of size 40cm x 20cm x 15 cm made of 16 SWG thick MS Sheet with provision for hinge door and panel locking arrangement complete painted with 2 coats of metal primer and 2 coats of enamelled gloss paint of approved brand and manufacture to give an even shape including cleaning surface to remove of all dirt, dust and other foreign matter, the box is to be fitted on the bottom section of pole with minimum 165 mm dia 25 mm x 5mm size flat iron pole clamp complete with making necessary connection as directed consisting of the following electrical items.				
	12mm x 2mm x 15cm long 2 strip copper Bus Bar - 1 set	Each	12		
	32 Amp "L" series DP MCB - 1 No.				
	6/16 amp "L" series SP MCB as outgoing - 3 Nos.				
40.	Supply, Installation antistatic rubber mat suitable for 1.1 KV Voltage grade	Sq.M	4.00		
41.	Supply, Fitting Fixing of Shock Treatment Chart	Each	4		
	Grand Total Rs				