

**SCHEDULE OF ITEM**  
**External Electrification work at Sub Mandi Yard Betma of Mandi Samiti**  
**Gautampura Distt. Indore.**

S.No.	Description of Item	Qty	Unit
1/p-39	Supplying of ISI Marked On-Land Change over switches panel mounting type confirming to IS : 13947 (Part I & III) with front operated 4 pole, 415 V with two earthing terminals if required. a) 100 Amps	1	Each
2/p-44	Supplying & fixing of ISI marked Porcelain Rewireable type fuse carrier & base unit of approved make & confirming to IS : 2086-1993 d) 200 Amps/415 Volts	4	Each
3/p-46	Supplying of metal clad ISI Marked bus bar chamber made of heavy gauge iron sheet complete with copper strip and bus bar supports as per specification confirming to IS- 4064 a) 100 Amps 415 VOLTS, 4 way b) 200 Amps 415 VOLTS, 4 way	8 5	Each Each
4/p-64	Supplying of ISI Marked and approved make of Moulded Case Circuit Breaker (MCCB) suitable for 3 phase, 3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS- 8828 a) MCCB with Breaking Capacity 25 KA at 415 V i) Current Rating- 160 Amps & 80%-100% adjustable	2	Each
5/p-72	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle, 10 KA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 : 2002 but without enclosures :-  a) 6 Amp to 32 Amp Rating	10	Each
6/p-89	Supplying, fixing, testing & commissioning wall/ floor mounted LT Panel primer coated with powder coated paint & provided with required gasket for dust/ vermin proof with degree of protection IP42 suitable for 415V 3 phase, 50 Hz, 4 wire system fabricated out of CRCA sheet up to 2 mm thick (1.6 mm for doors) duly compartmentalized for incomer, bus section, outgoings, cable alleys & CT. PT Ampere Meter, Volt Meter, selector switches, Frequency Meter, phase indicating lamps, Energy Meter complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs, ACB, panel mounted Changeover switch/ SFUs, etc. as required but excluding cost of bus bar strips, Ampere Meter, Volt Meter, Selector switch as per approved design & specification	35	Kg
7/p-114	Earthing with G.I. Earth plate 600mm X 600mm X 6 mm thick including accessories and providing masonry encloser in cement mortar, cover plate having locking arrangement on the top and G.I. watering pipe 20mm dia 2.7 Metre long etc. (but without charcoal or coke and salt) complete as required.	2	Each
8/p-114	Add Extra for using salt and charcoal/ coke for G.I. Plate or Copper plate earth electrode as required including excavation & refilling.	2	Each

S.No.	Description of Item	Qty	Unit
9/p-141	Supply of XLPE Insulated power cable (confirming IS-7098 Part-I) 1100 Volt grade. 1 core/ 2 core / 3 ½ core / 4 core ISI MARKED with Alu. Stranded/ solid conductor		
	<b>UNARMOURED 2 Core</b>		
	a) 4 Sq. mm.	100	Metre
	b) 6 Sq. mm.	200	Metre
	c) 10 Sq. mm.	100	Metre
	<b>UNARMOURED 4 Core</b>		
	a) 6 Sq. mm.	100	Metre
	b) 10 Sq. mm.	100	Metre
10/p-151	Supplying & installing G.I. Pipe for protection of underground cable fixed on wall/ support/in trench/ fixed between two rigid existing support of wall/beam for erection of ceiling Fan/down rod for stiff pendent for light luminaties/ fan/ protective for earthing, lightening conductor down strip/ overhead service line/ for submersible cable or centrifugal pump for water supply with necessary iron clamp coupler, bend, tee, elbow, nuts and bolts etc. complete in an approved manner as required to complete excluding cost of excavation/ dismantalling & other finished masonry item complete.		
	a) 32.00 mm	10	Metre
	b) 50.00 mm	15	Metre
11/p-152	Supply and laying rigid PVC single socket and, non-metallic pipe ISI Marked (IS-4985-2000) 10 Kg/Sq. cm class 5 for protection of under ground cable/or for water pump delivery side, for water supply complete with necessary clamp coupler, band, tee, Elbow etc. in an approved manner excluding cost of excavation etc.		
	a) 75.00 mm O.D.	10	Metre
	b) 110.00 mm O.D.	15	Metre
12/p-153	Laying of one number armoured / unarmoured power cable 1.1 KV grade of size not exceeding 25 Sq. mm direct in ground including excavation in all soil/ murrum / soft rock, sand cushioning, protective and refilling the pit etc. as required.	25	Metre
13/p-153	Laying of one number additional armoured/ unarmoured power cable 101 kV grade of size not exceeding 25 Sq. mm direct in ground in the same trench in one tier horizontal formation including excavation in all soil/ murrum/ soft rock, sand cushioning protective covering and refilling the pit etc. as required	25	Metre
14/p-161	Supply of support for overhead line RS joist /'H' Beam of I.S. standard including drilling of required hole etc. complete as required.		
	a) R.S. Joist 175 x 90 – 19.3 kg/per metre	207	Metre
	b) H- Beam 152 x 152 mm, Std weight 37.1 Kg/ Mtr	44	Metre
15/p-161	Supply of steel tubular pole swaged type as per IS : 2713-1980 Complete with base plate and top Canopy		
	a) 410 SP-20 – 8.50 metre	2	Each
	b) 410 SP-34 (Ben type) 9.50 metre	2	Each
16/p-163	Supplying and drawing All Aluminum Alloy conductor (AAAC) of approved make confirming to IS 398-1979 Pt. IV, including binding at existing insulator, jointing, jumpering, tearing off, connecting etc. as required including clearing of obstacles (if any)		
	0.75 dog conductor (Rabbit)	0.20	Km.

S.No.	Description of Item	Qty	Unit
	AAAC 0.5 (Rabbit)	1.00	Km.
	AAAC 0.1 DOG	0.30	Km.
17/p-166	Erection of RS Joist pole / 'H' Beam/ steel tubular / steel rail pole of length 7 metres but not exceeding 10 metres in cement concrete 1:3:6 (1cement : 3 core sand : 6 graded stone aggregate 40 mm nominal size) base, foundation, muffing including excavation and back refilling etc. as required.	31	Each
18/p-167	Supplying and erection of stay set complete (Galvanized) with 16mm dia x 1.8 metre long stay anchor plate of size 200mm x 200 mm x 6.0mm, thimble, stay clamps, turn buckle 19mmx600mm, 7/3.15mm dia G.I. stay wire etc. in cement concrete M-10 (1 Cement : 3 Coarse and : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	8	Each
19/p-180	Supplying & drawing / laying of PVC insulated XIPE Aerial bunch power cable conductor H2/H4 grade Aluminium Solid/ stranded conforming to IS-14255-1995, Alu. Alloy insulated messenger 1100 volts grade cable of approved make in Air with necessary material as per specification of required size as mentioned below -		
	a) 3x50 Sq.mm. 1x16(St. Light), 1x35 (Insulated neutral messenger)	150	P.Mt.
	b) 3x25 Sq.mm. 1x16(St. Light), 1x35 (Insulated neutral messenger)	900	P.Mt.
	C) 3x95 Sq.mm. 1x16(St. Light), 1x35 (Insulated neutral messenger)	150	P.Mt.
	D) 3x120 Sq.mm. 1x16(St. Light), 1x35 (Insulated neutral messenger)	50	P.Mt.
20/p-99	Supplying and fixing street light with high power LED of 1 to 3 W each assembled on single MCPCB, system lumens output with efficacy>90 lm/W. luminaire having color temp 6500K & 50000 burning hrs life with minimum @ L 70, The colour rendering index of LED light should be more than 70. Luminaire comprises of driver, PF 0.95 & surge protection 3KV. Housing made of pressure die cast aluminium with heat resistant flat glass / Lens type, IP65 protection. Submission LM 80-08 Form LED Source Manufacturer & LM79-08 / IS16106 from NABL approved lab. Manufacturer mandatory i/c 50mm.dia G.I. Pipe bracket upto 2 mtr. long in required angle/shape, connection lead, testing etc to complete the job. 2 Yrs Guarantee certificate from manufacturer.		
	60W	2	Each
	90W	15	Each
	120W	2	Each
	180W	2	Each
21/P-170	Supply, fabrication and erection of Angle/Chanel/Flat iron fitting for over head line & sub-station etc such as 'D' bracket, cross arms, top clamp, 'V' cross arms, Back/Support clamps or other similar work etc. including nut bolts of required size, making holes, fabrication, welding, cutting, etc. and painting with one coat of red oxide paint & two coat of aluminium paint as required as per specification. Kg		
		100	Kg
22/P-181	Supplying & fixing of Aerial bunch cable accessories suspension clamps i/c required attachment for single core cable of approved make on pole with clamp, necessary material as per specification for required size.(Sor 42.86		

S.No.	Description of Item	Qty	Unit
23/P-181	Supplying & fixing of Aerial bunch cable accessories Tension clamps (Dead end) i/c required attachment for single core cable of approved make in Air with clamp, necessary material as per specification for required size	10	Each
24/P-181	Supplying & fixing of waterproof Insulation Piercing connector for Aerial bunch cable i/c required attachment for single core cable of approved make in Air with necessary material as per specification of required size as mentioned below  Main: 16-95sq.mm, Tap: 1.5-50sq.mm Each 123	10	Each
25/P-86	31.14 Supplying and fixing flood light with high power LED of 1 to 3 W each assembled on single MCPCB, system lumens output with efficacy>90 lm/W. luminaire having color temp 6500K & 50000 burning hrs life with minimum @ L 70, The colour rendering index of LED light should be more than 70. Luminaire comprises of driver, PF 0.95 & surge protection 3KV. Housing made of pressure die cast aluminium with heat resistant flat glass, IP65 protection. Submission LM 80-08 Form LED Source Manufacturer & LM79-08 / IS16106 from NABL approved lab.Manufacturer mandatory i/c connection lead, testing ecto complete the job. 2 Yrs Guarantee certificate frommanufacturer.		
	150 Watt	12	Each
	60 Watt	1	Each
	90 watt	1	Each
	250 watt	5	Each
33/30.1	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete of approved as required confirming to IS :374/2019 with upto date amendments.		
30.1.2	Ceiling Fan (ISI marked)-1200 mm Sweep, with minimum air delivery 210 m <sup>3</sup> /min and service value ≥ 4.00 as per BEE..	4	Each
34/31.3	Supply and fixing Led tube rod comprising of LED tube with nonintegral/integral driver, upto 6500K color temp having 40000 burning hrs life with minimum @ L 70, system lumen output should be minimum with system efficacy> 100 lm/Watt. LED driver PF> 0.95 & THD < 20%. The colour rendering index of LED light should be more than 70. Submission LM 79-08/IS16106 (2012), IEC60598, IEC61347i/c connection wire, testing etc. to complete the job.		
31.3.4	Tube light LED 1 X 20/22Watt, Integral i/c batten aluminium body, PC diffuser.	4	Each
35/30.6	Supplying, erecting and testing of approved make exhaust fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/anchor hole fasteners etc. complete finished and as required.		
30.6.2	380mm sweep RPM 900 /1400	1	Each
36/41.1	Supply of XLPE insulated power cable (conforming IS-7098 Part-I) 1100 Volt grade, 1 core/2 core/3½ core/4 core ISI marked with alu. stranded /solid conductor		

S.No.	Description of Item	Qty	Unit
41.1.7.2	3½ core unarmoured 35 sq	10	Meter
41.1.7.3	3½ core unarmoured 50 sq	10	Meter
41.1.8.1	3½ core armoured 25 sq	5	Meter
41.1.8.2	3½ core armoured 50 sq	5	Meter
41.1.8.3	3½ core armoured 70 sq	5	Meter
27/3.1	Point wiring (excluding metallic switch box & sheet but including switches, sockets, lamp holders/ceiling roses etc) with 1.5sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in surface rigid P.V.C. conduit (MMS) ISI marked of suitable size and 1.5sq. mm. PVC FRLS insulated copper earth continuity conductor of green colour inside conduit etc. as required as per specification for :- S.Point M.Point L.Point	10 15 15	Each Each Each
28/3.2	Point wiring (excluding metallic switch box & sheet but including switches, ockets) for 3 pin 6 Amp. Socket outlet point with 1.5sq. mm. PVC insulated cable FRLS with copper multi strand conductor ISI marked in surface rigid P.V.C. conduit (MMS) ISI marked of suitable size and 1.5sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board.	5	Each
29/3.3	Wiring for circuit wiring with PVC insulated cable FRLS with copper multi strand conductor ISI marked in surface rigid P.V.C. conduit (MMS) of ISI marked suitable size etc. as required as per specification 2×2.5Sq	5	P.Mt.
42/31.25	Supplying fixing and testing of approved and suitable make LED driver for an existing LED street light. 60Watt, color temp 3000-6500k 90Watt, color temp 3000-6500k 120Watt, color temp 3000-6500k 150Watt, color temp 3000-6500k	2 2 2 2	each each each each
43/31.26	Supplying, fixing and testing of approved and suitable make LED driver for an existing LED Flood light. 60Watt, color temp 3000-6500k 90Watt, color temp 3000-6500k 120Watt, color temp 3000-6500k 150Watt, color temp 3000-6500k	3 3 2 2	each each each each
44	Laying of one nomber Armourd/unarmourd cable 1.1 K grade of size not execting 25Sq on surfece/execting trench etc.	100	pmtr