

Central Mechanical Engineering Research Institute, Durgapur
Engineering Service Division (Electrical)

Name of the work : Providing and fixing of lightning conductor at security main gate office roof-
and shifting of street light pole for making space to construct side bay near -
gate no. 3, CSIR-CMERI Durgapur.

Make of Electrical material

S.No.	Item	Make
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- | | | |
|---|---|--|
| 1 | 1.1 KV grade XLPE insulated, PVC seathed, Gloster/polycab/equivalent
Aluminium conductor armoured power cables | |
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14.11.18

[Signature]

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S.No	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	2	Each		
2	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	50	Metre		
3	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)	15	Metre		
4	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	2	Each		
5	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	2	Each		
6	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	10	Metre		
7	Supply of 1.1 KV grade XLPE insulated, PVC sheathed, Aluminium conductor armoured power cables conforming to IS 7098 (Part - 1) 1988 and ISI marked of following sizes.				
a)	2 X 6 sq mm A2XWY/A2XFY cable.	20	Mtr		
b)	2 X 10 sq mm A2XWY/A2XFY cable.	40	Mtr		
8	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm	20	Metre		

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S.No.	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
9	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc as required. Upto 35 sq. mm	40	Metre		
10	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/ HUME/ METAL pipe as required. Upto 35 sq. mm	5	Metre		
11	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.				
a)	2 X 10 sq. mm (19mm)	2	each		
b)	2 X 6 sq. mm (19mm)	1	each		
12	Supplying and making straight through joint with cast resin compound including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.				
a)	2 X 10 sq. mm	2	each		
b)	2 X 6 sq. mm	1	each		
13	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	15	Mtr		
14	Supply and fixing of hinged cover looping box made by 16 SWG MS Sheet of suitable size including painting with 1No. 15Amp. Porcelain Kit-Kat fuse and 32 Amp. TPN looping connector and one earthing point with clamp, nut bolt etc. as required .	1	Nos		
15	Erection of metallic pole of following length in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation including excavation and refilling etc. as required.				
a)	Above 4.5 meter and upto 6.5 meter	1	Each		

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S.No.	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
16	Dismantling of pole/ street light standard/ strut embedded in cement concrete foundation etc. as required.	1	Each		
17	Providing brick work (in width 225 mm or more) with F.P.S. bricks of class designation 7.5 in cement mortar 1:4 (1 cement : 4 coarse sand) at all levels.	0.2	Cum		
18	Providing 15mm thick cement plaster of mix 1:4 (1 cement : 4 fine sand) at all levels.	1.5	Sqm		

Total Rs.

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