

Name of Project - KPTCL 400 kV S/S at Nelamangla & Hoody
BILL OF QUANTITIES FOR UNDER GROUND EARTHING AND ELECTRODES , REV.00

S. No	Description	Unit	Quantities		Total Quantity	Rate	Total Amount (Rs.)
			Nelamangla	Hoody			
1	Unloading, storing and laying of 40 mm dia MS Rods at a depth of 600 mm measured from the top of FGL (either top of gravel or top of land as the case may be) for bringing out risers just below ground level near the equipment foundations as per requirement including following works: - excavation of trenches - laying of MS rod - welding of rods (refer Drg No.TB-STD-316-ROD WELDING for Welding details of rods) - backfilling of soil for bringing out pig tail risers of 40 dia MS rod for equipments. - any other work necessary to complete the laying of earthmat (40 mm Diameter MS rod will be supplied by BHEL)	MT	9	14	23		
2	Providing 40mm dia M.S.Rod 1.05 m long earthmat spikes including heating, bending top 50mm overlap flattening and making spike edge at the ground level and welding the rod with ground mat flat at a depth of 600 mm with necessary earth work as per Technical specifications, This shall include all cutting, bending, welding, fixing, application of zinc rich paint on cutting surface, etc to the main earthmesh. (40 mm Diameter MS rod will be supplied by BHEL)	Nos.	120	220	340		
3	Fabrication & laying of Auxiliary Mat of 40 mm Dia MS Rods at a depth of 300 mm from top of FGL including excavation & backfilling as per Drg No. 'TB-STD-316-AUXILLARY MAT' & connection with existing main earthmat - any other work necessary to complete the laying of earthmat	Nos.	6	18	24		
4	Installing of 40/100 mm dia GS pipe Electrode (length - 3.0 Mtr) as per dr. no. TB-342-316-PIPE ELECTRODE with test links and treated earth pit with CI frame and hinged cover alongwith all associated civil works i.e - excavation - installing the pipe electrode with alternate layers of Coke & charcoal, salt - backfilling and compaction - Casting the Test Pit with Cast Iron covers - any other work necessary to complete the work (Only GI Pipe, Nuts, Bolts & Washers, test links will be supplied by BHEL. Other items like CI frame, CI cover, charcoal, salt etc shall be supplied by contractor)	Nos.	2	2	4		
4	Installing of 40 mm diameter Rod Electrode with test pit/link as per Drg. No. TB-STD-316-ROD ELECTRODE including following works : - excavation - installing the rod electrode - backfilling and compaction - Casting the Test Pit with Cast Iron covers - any other work necessary to complete the work (only 40 mm Diameter MS rod & test link shall be supplied by BHEL, other items like CI frame, cover etc.)	Nos.	3	8	11		

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			Nelamangla	Hoody			
6	Installing of 40 mm diameter Rod Electrode without test pit/link including following works: - excavation/hammering of rod in earth - installing the rod electrode - backfilling and compaction - any other work necessary to complete the work (40 mm Diameter MS rod will be supplied by BHEL)	Nos.	1	1	2		
	TOTAL AMOUNT						
Note-	The soil investigation reports are not available, therefore the above quantities sl. no. 1 to 6 may vary by any extent at contract stage						