

11 kV lines							
Sl. No.	Description of items	Unit	Total Quantity	Unit rate	GST	All Incl unit rate	Total Amount
Supply Portion							
A	11 kV U/G & CSS						
1	Supply of materials for 11kV, 3Core, 400sqmm Aluminium, XLPE insulation UG Cable with accessories						
a	Length of 11kV 3C, 400sqmm cable (open trench)	M	13390				
b	Length of 11kV 3C, 400sqmm cable (HDD)	M	2715				
1.1	Supply of 11kV, 3Core, 400sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA- 15kA)	M	16105				
1.2	Supply of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG Cable kits	EA	39				
1.3	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, HT UG Cable kits	EA	137				
1.4	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, HT UG Cable kits	EA	51				
1.5	Supply of materials for High Density Polyethelene (HDPE) pipe 200mm diameter, PE 80- PN8 for laying of 11kV UG cable	M	12982				
2	Supply of materials for 11kV, 1Core, 630sqmm Aluminium, XLPE insulation UG Cable with accessories		0				
a	Length of 11kV 1C, 630sqmm cable (open trench)	M	100				
b	Length of 11kV 1C, 630sqmm cable (HDD)	M	0				
2.1	Supply of 11kV, 1Core, 630sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 59.4kA and SC rating of Armour in kA-20kA)	M	300				
2.2	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 1Core, 630sqmm, HT UG Cable kits	EA	12				
3	Supply of materials for 11kV, 1Core, 400sqmm Aluminium, XLPE insulation UG Cable with accessories		0				
a	Length of 11kV 1C, 400sqmm cable (open trench)	M	130				
b	Length of 11kV 1C, 400sqmm cable (HDD)	M	0				
3.1	Supply of 11kV, 1Core, 400sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 37.7 kA and SC rating of Armour in kA-15kA)	M	520				
3.2	Supply of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 1Core, 400sqmm, aluminium UG Cable kits	EA	4				
3.3	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 1Core, 400sqmm, HT UG Cable kits	EA	12				
4	Supply of materials for 11kV, 3Core, 95sqmm Aluminium, XLPE insulation UG Cable with accessories		0				
a	Length of 11kV 3C, 95sqmm cable (open trench)	M	75				
b	Length of 11kV 3C, 95sqmm cable (HDD)	M	0				
4.1	Supply of 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable (SC rating of cable in kA- 9kA and SC rating of Armour in kA- 9kA)	M	150				
4.2	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, HT UG Cable kits	EA	12				
4.3	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, HT UG Cable kits	EA	3				
4.4	Supply of materials for High Density Polyethelene (HDPE) pipe 160mm diameter, PE 80- PN8 for laying of 11kV UG cable	M	150				
5	Supply of 11kV RMU		0				
5.1	Supply of 11kV RMU 4WAY 630A LLVV WITH FRTU & AUXPT	EA	24				
5.2	Supply of 11kV 4WAY RMU 630A LVVV(1+3B)+FRTU+AUXPT	EA	4				
5.3	Supply of 11kV RMU 1WAY 630A SINGLE BREAKER MOUDLE+AUXPT	EA	1				
5.4	Supply of 11KV CT PT 30/5A-RESN.CAST CUBICLE	EA	1				
5.5	Supply of 11KV CT PT 100/5A-RESN.CAST CUBICLE	EA	2				
5.6	Supply of 11KV CT PT 400/5A-RESN.CAST CUBICLE	EA	6				
6	Earthing		0				
6.1	Earthing Conductor: 50X6 mm (2.4kg./mtr.) Flat(GI) for equipment, structure etc.)	KG	501.6				
6.2	Pipe Earthing 40mm. GI Pipe	EA	76				
7	FRTU for RMU SCADA Automation (No. of FRTU)	EA	3				
7.1	Pre-Wired FRTU Panel with FRTU	EA	3				
7.2	Managed Layer2 Ethernet Switch (FRTU Panel)	EA	3				
7.3	Networking Accessories	SET	3				

7.4	CMR with Mounting Base for Digital Inputs	EA	96				
7.5	Interposing Relay for Digital Output	EA	48				
7.6	Battery Charger	EA	3				
7.7	Battery	EA	3				
7.8	4G Modem cum Router	EA	3				
7.9	Instrumentation Cable 12 C X 0.5 mm2, Armored cable for Status and Indications	M	120				
7.10	Instrumentation Cable 7 C X 1.5 mm2, Armored for Control Output	M	120				
7.11	Twisted Pair Shielded & Over all shielded Instrumentation Cable 5 P X 1.0 mm2, Armored for Analog Input	M	120				
7.12	4 C X 4 mm2 Copper cable for extension of CT & PT	M	60				
7.13	2 C X 4 mm2 Cable for DC Power Supply	M	30				
7.14	4P X 0.36 mm2, Armored Communication Cable for MFM	M	60				
7.15	Armored CAT6 SFTP Cable	M	60				
7.16	Un-Armored CAT6 SFTP Cable	M	60				
7.17	Multi Function Meter	EA	6				
8	Compact Sub-station		0				
8.1	1000 KVA , 11/ 0.4 KV Compact Sub-station	EA	4				
8.2	630 KVA , 11/ 0.4 KV Compact Sub-station	EA	3				
8.3	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (2.5x7 mtr. For mesh formation, 10x2 mtr. for DTR Nutral, (5+5) mtr. For DTR Body, 3 mtr. for Fencing, (5+5) mtr. For RMU Body) (Each 60.5x 2.36=142.78 Kg)	KG	999.46				
8.4	40 mm Nominal bore GI pipe (medium gauge) earthing device with 3 mtr .Long	EA	49				
8.5	Supply of 1.1kV, 4Core, 300 sqmm, XLPE insulation armoured -Aluminium UG cable	M	180				
8.6	Supply of HDPE PE 80-PN8 pipe of 160mm diameter	M	180				
B	11 kV Overhead part (with 100 Sq.mm. AAAC)		0				
9	DP required Without AB switch		0				
9.1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)-DP	EA	0				
9.2	Top Channel(GI) 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 2.3 mtr., 2 no's Channel(GI) required =(2x9.56x2.3)	KG	648.64				
9.3	Fish Plate(GI) 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required =(6x2.36x0.280)	KG	0				
9.4	Double Pole Belting Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 1.66 Mtr., 4 no's Channel(GI) required =(7.14x1.66x4)	KG	126.432				
9.5	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 2.671 mtr., 4 nos Angle(GI) required =(4.5x2.671x4)	KG	0				
9.6	Danger Plate, 2 no's.	EA	0				
9.7	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 2 no's =(2x0.59x0.510)	KG	4.8144				
9.8	H.T. Stay clamp, 50x8 mm. Flat(GI), 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	EA	0				
9.9	H.T. Stay set (Complete)	SET	0				
9.10	H.T. Stay Insulator Type-C	EA	0				
9.11	7/10 SWG Stay Wire 15kg /stay	KG	0				
9.12	GI Pipe Earthing 40mm. 3 Mtr. Long	EA	0				
9.13	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 5x2.36	KG	283.2				
9.14	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	KG	0				
9.15	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 8 no's =(8x0.59x0.510)	KG	0				
9.16	11 KV pin insulator polymer	EA	0				
9.17	H W fitting(B&S) 70KN, 3Bolt	EA	0				
9.18	Disc insulator (B&S) 70 KN polymer	EA	0				
9.19	WEDGE CONNECTOR FOR 100 SQMM.CONDUCTOR	EA	0				
9.20	GI Nut , Bolt & Washer of different sizes (12.261 Kg each DP without AB Switch)	KG	0				
9.21	Black Paint(GIS Numbering & Zebra Stripping)	L	0				
9.22	Yellow Colour Paint(GIS Numbering & Zebra Stripping) for Background	L	0				
10	DP required With AB switch/Isolator		7				
10.1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)-DP	EA	16				

10.2	Top Channel(GI) 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 3 mtr., 2 no's Channel(GI) required =(2x9.56x3)	KG	458.88				
10.3	Fish Plate(GI) 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	31.7184				
10.4	AB switch Mounting Channel(GI) 75X40X4.8mm, 7.14KG/Mtr, each Channel(GI) length 3 Mtr., 2 no's Channel(GI) required =(7.14x3x2)	KG	342.72				
10.5	AB Switch Side Support Channel(GI) 100X50X6mm,9.56 KG/Mtr., each Channel(GI) length 0.35 mtr., 2 no's Channel(GI) required =(9.56x2x0.35)	KG	53.536				
10.6	Channel(GI) Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 0.8 Mtr., 1 no's Channel(GI) required =(7.14x0.8x1)	KG	45.696				
10.7	Double Pole Belting Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 3.0 Mtr., 4 no's Channel(GI) required =(7.14x3x4)	KG	685.44				
10.8	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 4 nos Angle(GI) required = (4.5x3.512x4)	KG	505.728				
10.9	Danger Plate, 2 no's.	EA	20				
10.10	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	4.8144				
10.11	H.T. Stay clamp, 50x8 mm. Flat(GI), 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	EA	16				
10.12	H.T. Stay set (Complete)	SET	16				
10.13	H.T. Stay Insulator Type-C	EA	16				
10.14	7/10 SWG Stay Wire 15kg /stay	KG	240				
10.15	GI Pipe Earthing 40mm. 3 Mtr. Long	EA	36				
10.16	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	387.04				
10.17	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	KG	48				
10.18	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	19.2576				
10.19	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	36				
10.20	AB Switch (11KV,400A,3pole,50Hz)	SET	7				
10.21	11 KV 630 Amp Motorized Isolator with Earth Switch	SET	1				
10.22	11 KV pin insulator polymer	EA	33				
10.23	H W fitting(B&S) 70KN, 3Bolt	EA	45				
10.24	Disc insulator (B&S) 70 KN polymer	EA	48				
10.25	WEDGE CONNECTOR FOR 100 SQMM.CONDUCTOR	EA	54				
10.26	Paddle clamp for wedge connector of 100 sq.mm AAA conductor	EA	48				
10.27	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	KG	129.726				
10.28	Black Paint(GIS Numbering & Zebra Stripping)	L	8				
10.29	Yellow Colour Paint(GIS Numbering & Zebra Stripping) for Background	L	16				
11	Pin point		0				
11.1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	EA	1				
11.2	11 KV V cross Arm(GI) (10.2 K.g. each)	EA	1				
11.3	Top bracket 100x50X6 mm GI Channel(GI) (2kg each)	EA	1				
11.4	Danger Plate, 1 no's. for each pole	EA	1				
11.5	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	0.3009				
11.6	GI barbed wire anticlimbing device 3 Kg. Per support	KG	3				
11.7	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	1.2036				
11.8	11 KV pin insulator polymer, 3 Nos. required for each support	EA	3				
11.9	Earthing of Support (Coil Type)	EA	1				
11.10	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	KG	0.262				
11.11	GI Nut , Bolt & Washer of different sizes (1.45 Kg/ Pin Point)	KG	1.45				
11.12	100 sq.mm AAA conductor	KM	0.3204				
11.13	Crimping type Midspan Compression Joint for 100 sq.mm AAA conductor	EA	0				
11.14	Black Paint(GIS Numbering & Zebra Stripping)	L	1				
11.15	Yellow Colour Paint(GIS Numbering & Zebra Stripping) for Background	L	2				
C	11 kV Overhead part (with 100 Sq.mm. XLPE AAA Covered Conductor)		0				
12	DP with AB Switch		0				
12.1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)-DP	EA	0				
12.2	Top Channel(GI) 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 3 mtr., 2 no's Channel(GI) required =(2x9.56x3)	KG	0				
12.3	Fish Plate(GI) 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	0				
12.4	AB switch Mounting Channel(GI) 75X40X4.8mm, 7.14KG/Mtr, each Channel(GI) length 3 Mtr., 2 no's Channel(GI) required =(7.14x3x2)	KG	0				

12.5	AB Switch Side Support Channel(GI) 100X50X6mm,9.56 KG/Mtr., each Channel(GI) length 0.35 mtr., 2 no's Channel(GI) required =(9.56x2x0.35)	KG	0				
12.6	Channel(GI) Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 0.8 Mtr., 1 no's Channel(GI) required =(7.14x0.8x1)	KG	0				
12.7	Double Pole Belting Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 3.0 Mtr., 4 no's Channel(GI) required =(7.14x3x4)	KG	0				
12.8	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 3.512 mtr., 4 nos Angle(GI) required = (4.5x3.512x4)	KG	0				
12.9	Danger Plate, 2 no's.	EA	0				
12.10	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	0				
12.11	H.T. Stay clamp, 50x8 mm. Flat(GI), 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	EA	0				
12.12	H.T. Stay set (Complete)	SET	0				
12.13	H.T. Stay Insulator Type-C	EA	0				
12.14	7/10 SWG Stay Wire 15kg /stay	KG	0				
12.15	GI Pipe Earthing 40mm. 3 Mtr. Long	EA	7				
12.16	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (12.5 Mtr. For L.A, 3 Mtr for AB Switch Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 20.5x2.36	KG	206.5				
12.17	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	KG	0				
12.18	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	0				
12.19	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	21				
12.20	AB Switch (11KV,400A,3pole,50Hz)	SET	0				
12.21	11 KV pin insulator polymer	EA	0				
12.22	H W fitting(B&S) 70KN, 3Bolt	EA	0				
12.23	Disc insulator (B&S) 70 KN polymer	EA	0				
12.24	NON METALLIC TIES-11KV 100SQMM CVRD AAAC	EA	0				
12.25	IPC for 100 sq.mm AAA conductor (For covered conductor)-11kv	EA	0				
12.26	Spike (GI) (using 50x6mm Flat(GI) welded with 8 mm square bar) (2 Nos of spike per Set in each Pole)	Set	0				
12.27	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	KG	0				
12.28	Black Paint(GIS Numbering & Zebra Stripping)	L	0				
12.29	Yellow Colour Paint(GIS Numbering & Zebra Stripping) for Background	L	0				
13	Cut point		0				
13.1	WPB (GI) Pole 160x152 (11Mtr. Long, 30.44KG/Mtr.)	EA	10				
13.2	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 1.2 mtr., 4 no's Channel(GI) required =(4x9.56x1.2)	KG	413.004				
13.3	Fish Plate(GI) 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 16 no's required = (16x2.36x0.280)	KG	84.5824				
13.4	Straight Cross Arm 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 0.306 mtr., 4 no's Channel(GI) required =(4x9.56x0.306)	KG	105.31152				
13.5	Danger Plate, 1 no's.	EA	10				
13.6	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 1 no's = (1x0.59x0.510)	KG	3.0072				
13.7	GI barbed wire anticlimbing device 3 Kg. Per support	KG	30				
13.8	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 4 no's = (4x0.59x0.510)	KG	12.0388				
13.9	11 KV pin insulator polymer	EA	32				
13.10	H W fitting(B&S) 70KN, 3Bolt	EA	48				
13.11	Disc insulator (B&S) 70 KN polymer	EA	48				
13.12	Earthing of Support (Coil Type)	EA	10				
13.13	No-8 GI wire (Dia 4.6mm) 0.131 KG/ Mtr.- 2 Mtr. For connecting pole with Coil earthing	KG	2.616				
13.14	NON METALLIC TIES-11KV 100SQMM CVRD AAAC	EA	28				
13.15	IPC for 100 sq.mm AAA conductor (For covered conductor)-11kv	EA	42				
13.16	Spike (GI) (using 50x6mm Flat(GI) welded with 8 mm square bar) (2 Nos of spike per Set in each Pole)	Set	14				
13.17	H.T. Stay clamp, 50x8 mm. Flat(GI), 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required (1 Pair)	EA	16				
13.18	H.T. Stay set (Complete)	SET	16				
13.19	H.T. Stay Insulator Type-C	EA	16				
13.20	7/10 SWG Stay Wire 15kg /stay	KG	240				
13.21	GI Nut , Bolt & Washer of different sizes (7.433 Kg each Cut Pole)	KG	66.564				
13.22	Black Paint(GIS Numbering & Zebra Stripping)	L	5				
13.23	Yellow Colour Paint(GIS Numbering & Zebra Stripping) for Background	L	20				
13.24	55 SQ.MM. AAAC XLPE Covered Conductor	Mtr.	40				
13.25	Dead End Clamp suitable for messenger XLPE Aerial bunched Cable	EA	4				

	Sub Total (Supply Portion) (in Rs.)		0				
Erection Portion			0				
A	11 kV U/G & CSS		0				
1	Erection, Commissioning & Testing of 11kV new line by 3Core, 400sqmm, XLPE UG cable		0				
1.1	Laying, Commissioning & Testing of 11kV, 3Core, 400sqmm, XLPE insulation (extruded type) UG cable by open trench method.	M	13390				
1.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 11kV, 3Core, 400sqmm, aluminium UG cable kits	EA	227				
1.3	Installation, Laying, Commissioning & Testing of 11kV, 3Core, 400sqmm, XLPE U/G cable by HDD method with HDPE pipe (200mm dia, PN8 PE80) including supply of HDPE Pipe.	M	2715				
1.4	Laying of 200mm dia PE 80-PN8, HDPE pipe inside open trench.	M	12982				
2	Erection, Commissioning & Testing of 11kV new line by 1Core, 630sqmm, XLPE UG cable		0				
2.1	Laying, Commissioning & Testing of 11kV, 1Core, 630sqmm, XLPE insulation (extruded type) UG cable by open trench method.	M	300				
2.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 11kV, 1Core, 630sqmm, aluminium UG cable kits	EA	12				
2.3	Laying of 110mm dia PE 80-PN8, HDPE pipe inside open trench.	M	0				
3	Erection, Commissioning & Testing of 11kV new line by 1Core, 400sqmm, XLPE UG cable		0				
3.1	Laying, Commissioning & Testing of 11kV, 1Core, 400sqmm, XLPE insulation (extruded type) UG cable by open trench method.	M	520				
3.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 11kV, 1Core, 400sqmm, aluminium UG cable kits	EA	16				
3.3	Installation, Laying, Commissioning & Testing of 11kV, 1Core, 400sqmm, XLPE U/G cable by HDD method with HDPE pipe (110mm dia, PN8 PE80) including supply of HDPE Pipe.	M	520				
4	Erection, Commissioning & Testing of 11kV new line by 3Core, 95sqmm, XLPE UG cable		0				
4.1	Laying, Commissioning & Testing of 11kV, 3Core, 95sqmm, XLPE insulation (extruded type) UG cable by open trench method.	M	150				
4.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, aluminium UG cable kits	EA	15				
4.3	Laying of 160mm dia PE 80-PN8, HDPE pipe inside open trench.	M	150				
5	Erection, Commissioning, Wiring and Testing of 11kV RMU		0				
5.1	Erection of 11kV RMU 4WAY 630A LLVV WITH FRTU & AUXPT	EA	24				
5.2	Erection of 11kV RMU 1WAY 630A SINGLE BREAKER MOUDLE+AUXPT	EA	1				
5.3	Erection of 11kV RMU 4WAY 630A LLVV + FRTU+AUXPT	EA	4				
5.4	Erection of 11 kV Metering Cubicle	EA	9				
6	FRTU and OFC for RMU SCADA Automation		0				
6.2	Services of FRTU Panel, Communication and Other Supplied System	EA	3				
7	Compact Sub-station		0				
7.1	Erection of 1000 KVA , 11/ 0.4 KV Compact substation	EA	4				
7.2	Erection of 630 KVA , 11/ 0.4 KV Compact substation	EA	3				
7.3	Laying of 1.1kV, 4Core, 300 sqmm, XLPE insulation armoured -Aluminium UG cable	M	180				
7.4	Laying 160mm HDPE Pipe in Open trench	M	180				

7.5	Supply and erection of double Compression Flameproof Type Glanding for armored Cable 3.5/4C 240-300sqmm including making hole in Base plate and dressing of cable along with vermin proofing properly .Supply to be done as per TPCODL Spec and approved make dowells.	EA	12				
B	11 kV Overhead part (with 100 Sq.mm. AAAC)		0				
8	DP Without AB Switch		0				
8.1	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per TP Central Orissa Distribution Co. Ltd. specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size - 500(B)x500(W)x1800(H) - and copping of 500(B)x500(W)x450(H) BA has to do the installation,welding & fabrication work of different size GI	No.	0				
8.2	Channel(100x50x6mm, 75x75x6mm, 50x50x6mm,75X40X4.6mm etc) as per size requirement	Kg	171.36				
8.3	Installation of HT Danger Board as per TPCODL specification	No.	4				
8.4	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate	No.	0				
8.5	Bidder has to provide necessary civil material for construction of Earthing chamber, excavation & installation of incuding earthingpipe dia up to 100mm dia for length of 3Mtr.Scope also includes necessary nutbolt ,25 Kg Bentonide Power connection &	EA	0				
8.6	BA will lay Earthing Conductor: 50X6 mm (2.4Kg./Mtr.) or 40x6 GI Flat for Raiser from the burial earth mat to equipment, structure etc)	km	0				
8.7	Installation of Barbed Wire (to avoid the climbing at pole) for 9Mtr/11Mtr/13 Meter pole/H Pole as per TPCODL specification and drawing.	Set	0				
8.8	Installation of 11KV Polymer Insulator along with Nutbolts for 11KV line.Nutbolts will be paid separately	No.	0				
8.9	Installation of 11KV Polymer Disc Insulator (45KN- 90KN) along with Hardware fitting for 11KV line.Nutbolts will be paid separately.,	No.	0				
8.1	Supply and fixing of Bird guard as per TPCODL specification	EA	0				
8.11	Installation of All type of Connector PG Clamp, T Clamp , connector, palm connector	No.	0				
8.12	Installation of different size of GI Nut ,bolt & washers,,	kG	0				
9	DP With AB Switch		0				
9.1	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per TP Central Orissa Distribution Co. Ltd. specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20	No.	16				
9.2	BA has to do the installation,welding & fabrication work of different size GI Channel(100x50x6mm, 75x75x6mm, 50x50x6mm,75X40X4.6mm etc) as per size requirement	Kg	2123.7184				
9.3	Installation of HT Danger Board as per TPCODL specification	No.	16				
9.4	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate	No.	16				
9.5	Bidder has to provide necessary civil material for construction of Earthing chamber, excavation & installation of incuding earthingpipe dia up to 100mm dia for length of 3Mtr.Scope also includes necessary nutbolt ,25 Kg Bentonide Power connection &	EA	16				
9.6	BA will lay Earthing Conductor: 50X6 mm (2.4Kg./Mtr.) or 40x6 GI Flat for Raiser from the burial earth mat to equipment, structure etc)	km	0.161266667				
9.7	Installation of Barbed Wire (to avoid the climbing at pole) for 9Mtr/11Mtr/13 Meter pole/H Pole as per TPCODL specification and drawing.	Set	16				
9.8	Installation,Testing & comissioning of the Lighting arrester (single phase) in existing structure providing necessary manpower, nutbolt ,Terminal connection, earthing connection ,site minor modification ,welding Ms channel etc	No.	36				
9.9	Installation of 11KV Polymer Insulator along with Nutbolts for 11KV line.Nutbolts will be paid separately	No.	36				
9.10	Installation ,Testing & comissioning of 11 kV 3- Phase (200Amp ,400Amp) G.O /AB Switch on existing structure including alignment correction o f all phases as per TPCODL specification and drawing		7				

9.11	Installation ,Testing & comissioning of 11 kV 3- Phase (630Amp) Isolator on existing structure including alignment correction o f all phases as per TPCODL specification and drawing	EA	1				
9.12	Installation of 11KV Polymer Disc Insulator (45KN- 90KN) along with Hardware fitting for 11KV line.Nutbolts will be paid separately.,	No.	48				
9.13	Supply and fixing of Bird guard as per TPCODL specification	EA	72				
9.14	Installation of All type of Connector PG Clamp, T Clamp , connector, palm connector	No.	96				
9.15	Installation of different size of GI Nut ,bolt & washers,,	kG	129.744				
10	Pin Point		0				
10.1	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compaction of foundation as per TP Central Orissa Distribution Co.	No.	1				
10.2	Installation of V cross arm on pole along with Nut bolts for 11KV line.Nutbolts will be paid separately	No.	1				
10.3	Installation of Top bracket on pole along with Nutbolts for 11KV line.Nutbolts will be paid separately	No.	1				
10.4	Installation of HT Danger Board as per TPCODL specification	No.	1				
10.5	Installation of Barbed Wire (to avoid the climbing at pole) for 9Mtr/11Mtr/13 Meter pole/H Pole as per TPCODL specification and drawing.	Set	1				
10.6	Installation of 11KV Polymer Insulator along with Nutbolts for 11KV line.Nutbolts will be paid separately	No.	3				
10.7	Supply and fixing of Bird guard as per TPCODL specification	EA	3				
10.8	Erection of earthing coil (8 SWG wire dia) along with 8 SWG Wire, Nut -bolt & other accessories to earth the pole as per TP Central Orissa Distribution Co. Ltd. Design Scope of work also includes the excavation of earth upto 1.2 Mtr depth for erection	EA	1				
10.9	Installation of different size of GI Nut ,bolt & washers,,	kG	1.45				
10.10	Stringing of Dog Conductor(80sq.mm to 125 sq.mm AAAC) including jumpering.BA has to provide necessary Tools , manpower for stringing &Jumpering.BA will also supply aluminium binding wire of required size for tying the conductor with insulator	Mtr.	324.45				
10.11	Fixing of Mid Span Compression Joints suitable for AAAC/ACSR Conductor	EA	0				
C	11 kV Overhead part (with 100 Sq.mm. XLPE AAA Covered Conductor)		0				
11	DP with AB Switch		0				
11.1	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compaction of foundation as per TP Central Orissa Distribution Co.	No.	0				
11.2	BA has to do the installation,welding & fabrication work of different size GI Channel(100x50x6mm, 75x75x6mm, 50x50x6mm,75X40X4.6mm etc) as per size requirement	Kg	0				
11.3	Installation of HT Danger Board as per TPCODL specification	No.	0				
11.4	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate	No.	0				
11.5	Bidder has to provide necessary civil material for construction of Earthing chamber, excavation & installation of incuding earthingpipe dia up to 100mm dia for length of 3Mtr.Scope also includes necessary nutbolt ,25 Kg Bentonide Power connection &	EA	0				
11.6	BA will lay Earthing Conductor: 50X6 mm (2.4Kg./Mtr.) or 40x6 GI Flat for Raiser from the burial earth mat to equipment, structure etc)	km	0				
11.7	Installation of Barbed Wire (to avoid the climbing at pole) for 9Mtr/11Mtr/13 Meter pole/H Pole as per TPCODL specification and drawing.	Set	0				
11.8	Installation,Testing & comissioning of the Lighting arrester (single phase) in existing structure providing necessary manpower, nutbolt ,Terminal connection, earthing connection, site minor modification, welding Ms channel etc	No.	21				
11.9	Installation of 11KV Polymer Insulator along with Nutbolts for 11KV line.Nutbolts will be paid separately	No.	0				
11.10	Installation ,Testing & comissioning of 11 kV 3- Phase (200Amp ,400Amp) G.O /AB Switch on existing structure including alignment correction o f all phases as per TPCODL specification and drawing	EA	0				

11.11	Installation of 11KV Polymer Disc Insulator (45KN- 90KN) along with Hardware fitting for 11KV line.Nutbolts will be paid separately.,	No.	0				
11.12	Bidder will Install Non-metallic Tie as per TPCODL spec suitable upto 159sqmm for 11kv covered conductor.Bidder has to provide necessary necessary manpower.Tools Bidder will	EA	0				
11.13	Installation of 11 KV IPC, suitable upto 259sqmm covered conductor as per TPCDOL design.	No.	0				
11.14	Installation of different size of GI Nut ,bolt & washers,,	kG	0				
12	Cut Point		0				
12.1	Installation/Erection of 11 Mtr long, RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Km., excavation, refilling, flooding with water, ramming/compacting of foundation as per TP Central Orissa Distribution Co. Ltd. specifications and drawing including removal & disposal of extra malba as per instruction of EIC. The scope of work include providing & laying of 1:1.5:3 , M20, concrete of size 600(D)x500(W)x1800(L) and casting of 600(D)x500(W)x4500(L)	No.	10				
12.2	BA has to do the installation,welding & fabrication work of different size GI Channel(100x50x6mm, 75x75x6mm, 50x50x6mm,75X40X4.6mm etc) as per size requirement	Kg	602.88736				
12.3	Installation of HT Danger Board as per TPCODL specification	No.	10				
12.4	Fixing of complete 11KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate	No.	16				
12.5	Installation of Barbed Wire (to avoid the climbing at pole) for 9Mtr/11Mtr/13 Meter pole/H Pole as per TPCODL specification and drawing.	Set	10				
12.6	Installation of 11KV Polymer Insulator along with Nutbolts for 11KV line.Nutbolts will be paid separately	No.	32				
12.7	Installation of 11KV Polymer Disc Insulator (45KN- 90KN) along with Hardware fitting for 11KV line.Nutbolts will be paid separately.,	No.	48				
12.8	Bidder will Install Non-metallic Tie as per TPCODL spec suitable upto 159sqmm for 11kv covered conductor.Bidder has to provide necessary necessary manpower.Tools Bidder will	EA	38				
12.9	Installation of 11 KV IPC, suitable upto 259sqmm covered conductor as per TPCDOL design.	No.	48				
12.10	Erection of earthing coil (8 SWG wire dia) along with 8 SWG Wire, Nut -bolt & other accessories to earth the pole as per TP Central Orissa Distribution Co. Ltd. Design Scope of work also includes the excavation of earth upto 1.2 Mtr depth for erection	EA	10				
12.11	Installation of different size of GI Nut ,bolt & washers,,	kG	66.564				
12.12	Stringing of Insulated Rabbit Conductor for Jumpering work of Distribution Transformer & making of connection hooks etc.	Mtr.	40				
12.13	Installation of All type of Connector PG Clamp, T Clamp , connector, palm connector	No.	4				
	Sub Total (Erection Portion) (in Rs.)		0				
			0				
			0				
	Civil Portion		0				
1	Civil works for U/G Cable Laying in Open Trench		0				
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth)-Route Length	M	13141				
1.1.a	Earth work excavation of soil	M3	6182.8				
1.1.b	Earth work excavation of hard rock	M3	6910.2				
1.2	Back filling with excavated soil outside and above the trench	M3	13177				
1.3	Damage of asphalt/tar road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1mtr. width)	KM	13.177				
2	RMU Civil Works						
2.1	Earth work Excavation- (upto1.5m): Earth work in excavation in ordinary soil,soft/weathered rock by mechanical (Hydraulic excavator) /manual means in foundation, trenches or drains including dressing of sides and ramming of bottoms, lift upto 1.5 m, including vegetation removal, getting out the excavated soil, back filling layer of 230-300 mm in depth, compacting and disposal of surplus excavated soil as directed, within a lead of 50 mas per direction of Engineer-in-charge.	M3	162				
2.2	Filling Available earth: Filling available earth (excluding rock)in trenches, plinth, sides of foundations etc. in layers not exceeding 30 cm in depth: consolidating each deposited layer by ramming watering, lead up to 50 m and lift upto 1.5m as per direction of Engineer-in-charge.	M3	54				

2.3	P & L 225 or 300 mmthk dry rubble soling: P & L 225 or 300 mmthk dry rubble soling :- Providing and laying 225 or 300 mm thick dry rubble soling with maximum 230mm size approved quality stones including filling gaps with small chips ramming with hand rammer etc. complete as per direction of Engineer-in-charge.	M3	67.5				
2.4	Clearing vegetation: Clearing vegetation including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of same upto a distance of 50 m outside of periphery of the area cleared as per direction of Engineer-in-charge.	M2	270				
2.5	CC 1:2:4 (coarse sand)-20mm: Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:2:4 (1 cement : 2 coarse sand (zone-III) :4 graded stone aggregate 20mm nominal size as directed by EIC.	M3	67.5				
2.6	RCC 1:1.5:3 upto Plinth Level: Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	M3	67.5				
2.7	Centring and Shuttering Foundations: Centring and shuttering including strutting ,propping etc.and removal of form with proper finishing for : Foundations , footings , bases of columns etc for mass concrete as directed by EIC.	M2	94.5				
2.8	Centring and Shuttering (Lintels, etc): Centering and shuttering including strutting, propping etc. and removal of form for with proper finishing : Lintels, beams, plinth beams, girders, bressumers and cantilevers as directed by EIC.	M2	148.5				
2.9	Steel reinforcement for R.C.C-upto plinth: Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	1080				
2.10	Steel reinforcement for R.C.C-above plinth: Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	1620				
2.11	B/W in CM 1:6 upto plinth: Brick work with first class fly ash bricks in substructure upto plinth level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand) as directed by EIC.	M3	189				
2.12	St. Steel, Single Section: Structural steel work in single section, fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as directed by EIC.	Kg	14850				
2.13	12 mm cement plaster(1:4)coarse sand: 12 mm cement plaster of mix: 1:4 (1 cement : 4 coarse sand)	M2	1755				
2.14	Premium Acrylic Smooth exterior paint: Finishing walls with Premium Acrylic Smooth exterior weather coat paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm)	M2	540				
2.15	Synthetic Enamel Paint (New work): Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	M2	1080				
2.16	GI chain link fencing 80X80 mm: Providing and fixing galvanized steel chain link fencing with 80x80 mm mesh size, 2.5 mm dia mesh wire conforming to IS:2721, MS stirrups wire 2.5 mm dia with tying wire 1.6 mm dia mild steel including providing 25 mm x 4.75 mm MS stretcher bars, eye bolt strainers, ring nuts, hair pins, staples of 3.5 mm wire, cleats of MS angle 75 x 60 x 6 mm, MS droppers 25 mm x 4.75 mm with 38 mm x 4.85 mm half round staples etc., completed as per drawings and specified as directed. (Flat, angle etc will be paid separately).	M2	1008				

3	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of Flat(GI) around pipe .	EA	95				
4	BA will lay Earthing Conductor: 50X6 mm (2.4Kg./Mtr.) or 40x6 GI, 75X6 & any other size Flat for Raiser from the burial earth mat to equipment, structure etc).	km	0.3925				
5	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	M	408				
6	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	EA	541				
7	BA will supply all civil Material, excavation , removal of Malba ,refilling, including Manpower, machinery etc as per TPCODL Drawing for Plinth for L.T. Distribution box 6ft hight (below GL2ft) x5ftx5ft	NO	4				
8	Civil cost for making TRF plinth from 250KVA of upto 1000KVA.BA has to provide necessary civil material, manpower, machinery for construction of plinth as per TPCODL Drawing.,	No.	4				
9	CSS Civil works		0				
9.1	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of Flat(GI) around pipe .	EA.	49				
9.2	BA will lay Earthing Conductor: 50X6 mm (2.4Kg./Mtr.) or 40x6 GI, 75X6 & any other size Flat for Raiser from the burial earth mat to equipment, structure etc).	km	0.239491667				
10	CSS Foundation	EA	0				
10.1	Earth work Excavation- (upto1.5m): Earth work in excavation in ordinary soil,soft/weathered rock by mechanical (Hydraulic excavator) /manual means in foundation, trenches or drains including dressing of sides and ramming of bottoms, lift upto 1.5 m, including vegetation removal, getting out the excavated soil, back filling layer of 230-300 mm in depth, compacting and disposal of surplus excavated soil as directed, within a lead of 50 mas per direction of Engineer-in-charge.	M3	175				
10.2	Filling Available earth: Filling available earth (excluding rock)in trenches, plinth, sides of foundations etc. in layers not exceeding 30 cm in depth: consolidating each deposited layer by ramming watering, lead up to 50 m and lift upto 1.5m as per direction of Engineer-in-charge.	M3	70				
10.3	P & L 225 or 300 mmthk dry rubble soling: P & L 225 or 300 mmthk dry rubble soling :- Providing and laying 225 or 300 mm thick dry rubble soling with maximum 230mm size approved quality stones including filling gaps with small chips ramming with hand rammer etc. complete as per direction of Engineer-in-charge.	M3	175				
10.4	Clearing vegetation: Clearing vegetation including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of same upto a distance of 50 m outside of periphery of the area cleared as per direction of Engineer-in-charge.	M2	217				
10.5	Applying residual petroleum bitumen: Applying a coat of residual petroleum bitumen of grade of BG-10 of approved quality using 1.7 kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil as directed by EIC.	M2	245				
10.6	CC 1:2:4 (coarse sand)-20mm: Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:2:4 (1cement : 2 coarse sand (zone-III) :4 graded stone aggregate 20mm nominal size as directed by EIC.	M3	21				
10.7	RCC 1:1.5:3 upto Plinth Level: Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	M3	245				

10.8	Centring and Shuttering Foundations: Centring and shuttering including strutting ,propping etc.and removal of form with proper finishing for : Foundations , footings , bases of columns etc for mass concrete as directed by EIC.	M2	700				
10.9	Steel reinforcement for R.C.C-above plinth: Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	3500				
10.10	B/W in CM 1:6 upto plinth: Brick work with first class fly ash bricks in substructure upto plinth level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand) as directed by EIC.	M3	21				
10.11	St. Steel, Single Section: Structural steel work in single section, fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as directed by EIC.	Kg	6300				
10.12	12 mm cement plaster(1:4)coarse sand: 12 mm cement plaster of mix: 1:4 (1 cement : 4 coarse sand)	M2	140				
10.13	Premium Acrylic Smooth exterior paint: Finishing walls with Premium Acrylic Smooth exterior weather coat paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm).	M2	140				
10.14	Synthetic Enamel Paint (New work): Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	M2	280				
10.15	GI chain link fencing 80X80 mm: Providing and fixing galvanized steel chain link fencing with 80x80 mm mesh size, 2.5 mm dia mesh wire conforming to IS:2721, MS stirrups wire 2.5 mm dia with tying wire 1.6 mm dia mild steel including providing 25 mm x 4.75 mm MS stretcher bars, eye bolt strainers, ring nuts, hair pins, staples of 3.5 mm wire, cleats of MS angle 75 x 60 x 6 mm, MS droppers 25 mm x 4.75 mm with 38 mm x 4.85 mm half round staples etc., completed as per drawings and specified as directed. (Flat, angle etc will be paid separately).	M2	280				
10.16	150 mm HDPE pipe: Providing and fixing HDPE pipes conforming to IS 4984 and Grade 80 and PN 8 in cable duct banks, openings in RCC work at all elevations of following sizes including cutting, fixing(welding) and levelling in position as per drawings, specifications all complete 150 mm NB	M	315				
11	RCC CABLE TRENCH		50				
11.1	Earth work in excavation in ordinary soil,soft/weathered rock by mechanical (Hydraulic excavator) /manual means in foundation, trenches or drains including dressing of sides and ramming of bottoms, lift upto 1.5 m, including vegetation removal, getting out the excavated soil, back filling layer of 230-300 mm in depth, compacting and disposal of surplus excavated soil as directed, within a lead of 50 mas per direction of Engineer-in-charge.	Cum	172.5				
11.2	Supplying and filling in plinth with River sand under floors including, watering, ramming, consolidating and dressing complete.	Cum	11.5				
11.3	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:3:6 (1 cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size) as directed by EIC.	Cum	11.5				
11.4	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	Cum	23				
11.5	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	Cum	21				
11.6	Centring and shuttering including strutting , propping etc.and removal of form with proper finishing for : Walls (any thickness) including attached plaster, buttresses, plinth and string courses etc as directed by EIC.	M2	280				
11.7	Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	4957				

11.8	Providing and fixing precast reinforced concrete cable trench covers, drain covers, fencing post, etc. of class M25 concrete w/c 0.5 (max) leaving cut-outs/ pockets, placing of inserts/ embedments,etc.,complete all as per drawing including shuttering, vibrating, machine mixing, providing lifting arrangements, placing inserts curing handling, transporting, etc. complete but excluding the cost of providing reinforcement, inserts / embedments, with 30 mm downgraded aggregates as directed by EIC. (Cement consumption 7.9 Bag/M3)	Cum	6				
11.9	Structural steel work in single section, fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	2651				
Sub Total (Civil Portion) (in Rs.)							
Transportation							
1	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Trailer with labours as required (price per trip). Scope of work also include loading and unloading of materials heavy items like, 14 mt Rail Pole, PCC Pole, HT Panel, Transformer, Cable Drum, LT Board . Item whose loading& unloading is to be done with crane , charges for crane will be paid separately. (Full Trailer)	EA	7				
2	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Tractor with labours as required (price per trip). Scope of work also include loading and unloading of materials heavy items like, Rail Pole, PCC Pole, HT Panel, Transformer, Cable Drum, LT Board . Item whose loading& unloading is to be done with crane , charges for crane will be paid separately.	EA	6				
3	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Full body Truck with labours as required (price per trip). Scope of work also include loading and unloading of materials except heavy items like HT Panel, Transformer, Cable Drum, LT Board where loading, unloading is to be done with crane and will be paid separately (Full Truck),.	EA	22				
4	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Tempo 407 with labours as required (price per trip). Scope of work also include loading and unloading of materials except heavy items like HT Panel, Transformer, Cable Drum, LT Board where loading, unloading is to be done with crane and will be paid separately.,.	EA	1				
Dismantling Portion							
1	Dismantling of 09/11 Mtr. Joist/WPB Pole- 116X100mm	EA	34				
2	Dismantling of existing 11/0.4kV, 33/0.4KV, 500kVA Three Phase Distribution Transformer including removal of HT/LT leads, earth connections and unloading by crane if required.	EA	3				
3	Dismantling of ACSR/AAAC 80/100 mm2 from overhead line	M	8504				
4	Dismantling of 11/13 Mtr. Joist/WPB Pole- 150X150 mm/ 160X160 mm	EA	40				
5	Dismantling of 9 Mtr. PCC Pole	EA	2				
6	Dismantling of existing 11/0.4kV, 33/0.4KV, Three Phase Distribution Transformer below 100KVA including removal of HT/LT leads, earth connections and unloading by crane if required.	EA	1				
7	Dismantling of ACSR/AAAC 34/ 55mm2 from overhead line	M	50				
8	Dismantling of faulty Equipmet like CT, PT , metering unit	EA	1				
9	Dismantling of Stay set complete	EA	10				

33 kV lines							
Line Length in KM							
33 kV Outdoor Bay at PSS and OPTCL Grid Sub-station							
Sl. No.	Description of Items	Unit	Total Quantity	Unit rate	GST	All Incl unit rate	Total Amount
Supply Portion							
1	Supply of materials for 33kV, 3Core, 400sqmm Aluminium, XLPE insulation UG Cable with accessories						
a	Length of 33kV 3C, 400sqmm cable (open trench)	M	15520				
b	Length of 33kV 3C, 400sqmm cable (HDD)	M	3750				
1.1	Supply of 33kV, 3Core, 400sqmm Aluminium, XLPE insulation UG Cable with spare (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA- 20kA)	M	19270				
1.2	Supply of Straight through jointing kits Heat Shrinkable type suitable for 33kV, 3Core, 400sqmm, aluminium UG Cable kits	EA	71				
1.3	Supply of Outdoor termination kits Heat Shrinkable type suitable for 33kV, 3Core, 400sqmm, HT UG Cable kits	EA	13				
1.4	Supply of Indoor termination kits Heat Shrinkable type suitable for 33kV, 3Core, 400sqmm, HT U/G Cable kits (Touch Proof)	EA	19				
1.5	Supply of materials for High Density Polyethylene (HDPE) pipe 200mm diameter, PE 80- PN8 for laying of 33kV UG cable	M	15424				
2	Supply of materials for 33kV, 1Core, 630sqmm Aluminium, XLPE insulation U/G Cable with accessories		0				
a	Length of 33kV 1C, 630sqmm cable (open trench)	M	390				
b	Length of 33kV 1C, 630sqmm cable (HDD)	M	0				
2.1	Supply of 33kV, 1Core, 630sqmm Aluminium, XLPE insulation U/G Cable (SC rating of cable in kA- 59.4kA and SC rating of Armour in kA-20kA)	M	1250				
2.2	Supply of Outdoor termination kits Heat Shrinkable type suitable for 33kV, 1Core, 630sqmm, HT U/G Cable kits for 1Core	EA	4				
2.3	Supply of Indoor termination kits Heat Shrinkable type suitable for 33kV, 1Core, 630sqmm, HT U/G Cable kits for 1Core	EA	18				
2.4	Supply of Indoor termination kits Heat Shrinkable type suitable for 33kV, 1Core, 630sqmm, HT U/G Cable kits (Touch Proof)	EA	22				
2.5	Supply of materials for High Density Polyethylene (HDPE) pipe 110mm diameter, PE 80- PN8 for laying of 33kV U/G cable	M	1218				
3	Supply of materials for 33kV, 1Core, 400sqmm Aluminium, XLPE insulation U/G Cable with accessories		0				
a	Length of 33kV 1C, 400sqmm cable (open trench)	M	50				
b	Length of 33kV 1C, 400sqmm cable (HDD)	M	0				
3.1	Supply of 33kV, 1Core, 400sqmm Aluminium, XLPE insulation UG Cable (SC rating of cable in kA- 37.7kA and SC rating of Armour in kA-20kA)	M	150				
3.2	Supply of Straight through jointing kits Heat Shrinkable type suitable for 33kV, 1Core, 400sqmm, aluminium UG Cable kits for 1Core	EA	3				
3.3	Supply of Outdoor termination kits Heat Shrinkable type suitable for 33kV, 1Core, 400sqmm, HT UG Cable kits for 1Core	EA	3				
3.4	Supply of materials for High Density Polyethylene (HDPE) pipe 110mm diameter, PE 80- PN8 for laying of 33kV U/G cable	M	126				
4	Supply of 33kV RMU & Metering Cubicle		0				
4.1	Supply of RMU 33kV 4W/ 630A LLVV(2ISO+2BKR)+ AUX.PT	EA	2				
4.2	Supply of RMU 33kV 4W 630A LLVV(1ISO+3BKR) + AUXPT	EA	1				
4.3	Supply of 33kV CT PT 600/5 A-RESN.CAST CUBICLE	EA	2				
5	Earthing		0				
5.1	Earthing Conductor: 50X6 mm (2.4kg./mtr.) Flat(GI) for equipment, structure etc.)	KG	92.4				
5.2	Pipe Earthing 40mm. GI Pipe	EA	14				
6	FRTU for RMU SCADA Automation		0				
a	No. of FRTU	EA	2				
6.1	Pre-Wired FRTU Panel with FRTU	EA	2				
6.2	Managed Layer2 Ethernet Switch (FRTU Panel)	EA	2				
6.3	Networking Accessories	SET	2				
6.4	CMR with Mounting Base for Digital Inputs	EA	64				
6.5	Interposing Relay for Digital Output	EA	32				
6.6	Battery Charger	EA	2				
6.7	Battery	EA	2				
6.8	4G Modem cum Router	EA	2				
6.9	Instrumentation Cable 12 C X 0.5 mm2, Armored cable for Status and Indications	M	80				
6.10	Instrumentation Cable 7 C X 1.5 mm2, Armored for Control Output	M	80				
6.11	Twisted Pair Shielded & Over all shielded Instrumentation Cable 5 P X 1.0 mm2, Armored for Analog Input	M	80				
6.12	4 C X 4 mm2 Copper cable for extension of CT & PT	M	40				
6.13	2 C X 4 mm2 Cable for DC Power Supply	M	20				
6.14	4P X 0.36 mm2, Armored Communication Cable for MFM	M	40				
6.15	Armored CAT6 SFTP Cable	M	40				
6.16	Un-Armored CAT6 SFTP Cable	M	40				
6.17	Multi Function Meter	EA	4				
7	33 KV DP With Isolator		9				
7.1	WPB (GI) Pole 160x152 (13Mtr. Long, 30.44KG/Mtr.)-DP	EA	18				
7.2	Top Channel(GI) 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 4.3 mtr., 2 no's Channel(GI) required =(2x9.56x4.3)	KG	739.944				
7.3	Fish Plate(GI) 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	35.6832				
7.4	Insulator Support Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 4.3 Mtr., 1 no's Channel(GI) required =(1x7.14x4.3)	KG	276.318				
7.5	Isolator Support Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 4.3 Mtr., 2 no's Channel(GI) required =(2x7.14x4.3)	KG	552.636				
7.6	Double Pole Belting Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 4.3 Mtr., 4 no's Channel(GI) required =(4x7.14x4.3)	KG	1105.272				
7.7	50x50x6mm.GI Bracing Angle(GI), 4.5Kg./mtr., each Angle(GI) length 4.927 mtr., 4 nos Angle(GI) required = (4*4.5*4.927)	KG	798.174				
7.8	Isolator Operating Down Pipe Support Channel(GI) 75X40X 4.8mm., 7.14KG/Mtr., each Channel(GI) length 0.8 Mtr., 1 no's Channel(GI) required =(1x7.14x0.8)	KG	51.408				
7.9	Down Pipe Diagonal Support Angle(GI), 4.5Kg./mtr., each Angle(GI) length 0.388mtr., 1 nos Angle(GI) required = (1*4.5*0.388)	KG	15.714				

7.10	Down Pipe Base Support Angle(GI), 4.5Kg./mtr., each Angle(GI) length 0.34mtr., 1 nos Angle(GI) required = (1*4.5*0.340)	KG	13.77				
7.11	Isolator Support Side Channel(GI) 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 0.5 mtr., 2 no's Channel(GI) required =(2x9.56x0.5)	KG	86.04				
7.12	Danger Plate, 2 no's.	EA	18				
7.13	Back Clamp for danger Plate 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	5.4162				
7.14	H.T. Stay clamp, 50x8 mm. Flat(GI), 3.14Kg/Mtr., 0.511 Mtr. Length, 2 no's qty. required (1 Pair)	EA	18				
7.15	H.T. Stay set (Complete)	SET	18				
7.16	H.T. Stay Isolator Type-C (2 No's.)	EA	36				
7.17	7/8 SWG Stay Wire 15kg /stay	KG	270				
7.18	GI Pipe Earthing 40mm. 3 Mtr. Long	EA	18				
7.19	50x6mm Flat(GI) for earthing, 2.36kg/mtr., (15 Mtr. For L.A, 4 Mtr for Isolator Body, 2.5 mtr. For mesh formation and 2.5 mtr. For raising)= 24x2.36	KG	509.76				
7.20	GI barbed wire anticlimbing device 3 Kg. Per support	KG	54				
7.21	Back Clamp for anticlimbing device 25X3 mm. Flat(GI), 0.59Kg/Mtr. Flat(GI) of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	21.6648				
7.22	Lightning Arrester(30KV,10KA) (Station Class,class-2)	EA	27				
7.23	33 kV 1250 AMP Double break (Turn & twist center rotating) Motorized isolator with earth switch with PI(Polymer)	EA	2				
7.24	33 KV 1250 AMP Double break (Turn & twist center rotating) isolator without earth switch with PI(Polymer)	EA	8				
7.25	33KV pin insulator polymer	EA	27				
7.26	H W fitting(B&S) 90KN.4 Bolt	EA	54				
7.27	Disc insulator (B&S) 90 KN polymer	EA	54				
7.28	Wedge connector for 232 sq.mm AAA conductor	EA	54				
7.29	Paddle clamp for wedge connector of 232 sq.mm AAA conductor	EA	54				
7.30	GI Nut , Bolt & Washer of different sizes (22.15 Kg each DP with Isolator)	KG	199.35				
7.31	Black Paint(GIS Numbering & Zebra Stripping)	L	9				
7.32	Yellow Colour Paint(GIS Numbering & Zebra Stripping) for Background	L	18				
7.33	232 sq.mm AAA conductor	M	247.2				
8	33 kV Bay at PSS		0				
8.1	T-1 GI Column(7.25 mtr long, consisting of 2 Nos of 150X76X6.5 mm Channel(GI)) for 33kV incoming line, Nominal Unit Wt - 0.35 MT/column	KG	350				
8.2	T-2 GI Column (7.25mtr long, consisting of 2 Nos 175X75X6 mm Channel(GI)) for 33kV incoming line -1 no, Nominal Unit Wt - 0.42 MT/column	KG	420				
8.3	T-1A GI Column (for 33 kv Bus) (6 mtr long, consisting of 2 Nos of 150X76X6.5 mm Channel(GI) jointed by plates) Nominal Unit Wt - 0.31 MT/column (0.31x2=0.62MT)	KG	620				
8.4	T-2A GI Column (for 33 kv Bus) (6 mtr long, consisting of 2 Nos 175X75X6 mm Channel(GI) jointed by plates) Nominal Unit Wt - 0.37 MT/column (0.37x2=0.74MT)	KG	740				
8.5	G-3 GI Beam(5.05mtr long, consisting of 2 Nos 150X75 X5.7mm) for 33kV incoming line - (2 nos. Beam- one for Surge Arrester and other for Isolator, Nominal Unit Wt - 0.2 MT/Beam	KG	200				
8.6	G-2 GI Beam (6.1 mtr long, consisting of 2 Nos 125X65 X5.3 mm Channel(GI) jointed by plates) for 33kV Bus Stringing , Nominal Unit Wt - 0.175 MT/Beam (0.175x2 = 0.35 MT)	KG	350				
8.7	G-1 GI Beam (6.1 mtr long, consisting of 2 Nos 125X65 X5.3 mm Channel(GI) jointed by plates) for 33kV Bus Stringing , Nominal Unit Wt - 0.175 MT/Beam (0.175x2 = 0.35 MT)	KG	350				
8.8	13 Mtr. Long H-Pole(GI)	EA	4				
8.9	Channels for Proposed & Existing 33kV BUS arrangement Channel(GI) 100X50X6mm, 9.56 KG/Mtr., each Channel(GI) length 3.25 mtr., 20 no's Channel(GI) required =(20x9.56x3.25)	KG	1553.5				
8.10	Equipment Structures (GI) For 33 KV Isolator (Unit Wt of Equipment Structures per set - 0.33 MT)	KG	1980				
8.11	GI Spikes with cone and GI (2 nos) base plate 10mm (50x3000 mm GI pipe) (Unit Wt=0.035 MT) (0.035x6 = 0.21 MT)	KG	210				
8.12	GI Pipe Earthing 40mm. 3 Mtr. Long	No.	20				
8.13	50x6mm Flat(GI) for earthing, 2.36kg/mtr.	KG	708				
8.14	232 sq.mm AAAC for 33kV side jumpering and Bus Formation etc.	M	100				
8.15	33 kV 1250 AMP Double break (Turn & twist center rotating) Motorized isolator with earth switch with PI(Polymer)-(24 V DC)	EA	2				
8.16	33 kV 1250 AMP Double break (Turn & twist center rotating) Motorized isolator with earth switch with PI(Polymer)-(48 V DC)	EA	0				
8.17	33 kV 1250 AMP Double break (Turn & twist center rotating) Motorized isolator without earth switch with PI(Polymer)-(24 V DC)	EA	8				
8.18	33 kV 1250 AMP Double break (Turn & twist center rotating) Motorized isolator without earth switch with PI(Polymer)-(48 V DC)	EA	0				
8.19	33KV Outdoor VCB-1250 A, 25 KV/3 sec Gang operated type (48 V DC)	EA	0				
8.20	33KV Outdoor VCB-1250 A, 25 KV/3 sec Gang operated type (24 V DC)	EA	1				
8.21	Indoor CR PANEL FOR Feeder(IC/OG) PROTECTION 33KV Outdoor VCB (48 V DC)	EA	0				
8.22	Indoor CR PANEL FOR Feeder(IC/OG) PROTECTION 33KV Outdoor VCB (24 V DC)	EA	1				
8.23	Indoor CR PANEL FOR Transformer PROTECTION 33KV Outdoor VCB (48 V DC)	EA	0				
8.24	Indoor CR PANEL FOR Transformer PROTECTION 33KV Outdoor VCB (24 V DC)	EA	0				
8.25	33KV, Single Phase, Outdoor, OILCOOLED CT , 25KA/3sec CTR-200-400-800/1-1-1 A(Accuracy Class-PS/0.2S/5P20,Burden -/30VA/30VA	EA	3				
8.26	33KV, Single Phase, Outdoor, OILCOOLED PT 33000/√3/110/√3 Volt (Accuracy class 3P/3P/0.2, Burden-100/100/100 VA	EA	3				
8.27	Lightning Arrester(30KV,10KA) (Station Class,class-2)	EA	3				
8.28	Lightening arrester 33 kV, 10 kV, CL III. (with surge counter)	EA	3				
8.29	Control Cable 12Core x 2.5 mm2	Mtr	80				
8.30	Control Cable 16Core x 2.5 mm2	Mtr	80				
8.31	Control Cable 4Core x 2.5 mm2	Mtr	80				
8.32	Control Cable 7Core x 2.5 mm2	Mtr	80				
8.33	1 Core x 16 mm2 Aluminium cable from Battery to Battery Charger & Battery Charger to DCDB	M	0				
8.34	Supply of 48 V maintenance free VRLA Battery	Set	0				
8.35	Supply of 48V, Float cum Boost Battery Charger	No	0				
8.36	Disc insulator (B&S) 90 KN polymer	No.	72				
8.37	H W fitting(B&S) 90KN.4 Bolt	No.	72				
8.38	33KV pin insulator polymer	No.	36				
8.39	Wedge connector for 232 sq.mm AAA conductor	NO.	12				
8.40	Paddle clamp for wedge connector of 232 sq.mm AAA conductor	EA	36				
8.41	GI Nut , Bolt & Washer of different sizes	K.g.	200				
	Sub Total (Supply Portion) (In Rs.)						

Erection Portion							
1	Erection, Commissioning & Testing of 33kV new line by 3Core, 400sqmm, XLPE UG cable						
1.1	Laying, Commissioning & Testing of 33kV, 3Core, 400sqmm, XLPE insulation (extruded type) UG cable by open trench method .	M	15520				
1.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 33kV, 3Core, 400sqmm, aluminium UG cable kits	EA	103				
1.3	Installation, Laying, Commissioning & Testing of 33kV, 3Core, 400sqmm, XLPE U/G cable by HDD method with HDPE pipe (200mm dia, PN8 PE80) including supply of HDPE Pipe.	M	3750				
1.4	Laying of 200mm dia PE 80-PN8, HDPE pipe inside open trench.	M	15424				
2	Erection, Commissioning & Testing of 33kV new line by 1Core, 630sqmm, XLPE UG cable		0				
2.1	Laying, Commissioning & Testing of 33kV, 1Core, 630sqmm, XLPE insulation (extruded type) UG cable in trefoil formation by open trench method.	M	1250				
2.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 33kV, 1Core, 630sqmm, aluminium UG cable kits	EA	44				
2.3	Laying of 110mm dia PE 80-PN8, HDPE pipe inside open trench.	M	588				
3	Erection, Commissioning & Testing of 33kV new line by 1Core, 400sqmm, XLPE UG cable		0				
3.1	Laying, Commissioning & Testing of 33kV, 1Core, 400sqmm, XLPE insulation (extruded type) UG cable in trefoil formation by open trench method.	M	150				
3.2	Erection of Straight through jointing Kits/Outdoor termination kits/Indoor termination Kits Heat Shrinkable type suitable for 33kV, 1Core, 400sqmm, aluminium UG cable kits	EA	6				
3.3	Laying of 110mm dia PE 80-PN8, HDPE pipe inside open trench.	M	126				
4	Erection, Commissioning, Wiring and Testing of 33kV RMU & Metering Cubicle		0				
4.1	Erection of RMU 33KV 4W 630A LLVV(2ISO+2BKR)+ AUX.PT	EA	2				
4.2	Supply of RMU 33KV 4W 630A LVVV(1ISO+3BKR) + AUXPT	EA	1				
4.3	Erection of 33 kV Metering Cubicle	EA	4				
5	FRTU and OFC for RMU SCADA Automation		0				
5.1	Services of FRTU Panel, Communication and Other Supplied System	EA	2				
6	33 KV DP With Isolator		9				
6.1	Installation/Erection of 13 Mtr long RS JOIST/WPB Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling/flooding with water, ramming/compacting offoundation as per TP Central Orissa Distribution Co. Ltd. specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete concrete of size - 500(B)x500(W)X2200(H) , and cooping of 5 00(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) .As per drawing.	No.	18				
6.2	BA has to do the installation,welding & fabrication work of different size GI Channel(100x50x6mm, 75x75x6mm, 50x50x6mm,75X40X4.6mm etc) as per size requirement	Kg	3674.9592				
6.3	Installation of HT Danger Board as per TPCODL specification	No.	18				
6.4	Fixing of complete 33KV line Complete stay set includes 1) Turn Buckle Assembly 2) Stay Rod & Stay plate 3) Stay Insulator 4) Stay Wire. 5)Stay clamps with Nuts & bolts BA will do the excvaton including excvaton, supply of 0.5Cum cement concrete foundation 1:2:4 size (500mmx500mmx800mm) using 20mm BHG metal with all labour and material as per TPCODL Drawing & Standard.Note:- Excavation of earth will be done of size 500X500X1500 mm.	No.	18				
6.5	Bidder has to provide necessary civil material for construction of Earthing chamber, excavation & installation of incuding earthingpipe dia up to 100mm dia for length of 3Mtr.Scope also includes necessary nutbolt, 25 Kg Bentonide Power , connection & welding with incoming earth flat. The work to be executed as per TPCODL drawing & design	EA	18				
6.6	BA will lay Earthing Conductor: 50X6 mm (2.4Kg/Mtr.) or 40x6 GI Flat for Raiser from the burial earth mat to equipment, structure etc)	km	0.2124				
6.7	Installation of Barbed Wire (to avoid the climbing at pole) for 9Mtr/11Mtr/13 Meter pole/H Pole as per TPCODL specification and drawing.	Set	18				
6.8	Installation of 3phase ,30 KV 10KA Lighting arrester along with earthing connection, Fixing of all Three arrester on Ms channel	No.	27				
6.9	"Installation ,testing & commissioning of 33KV , 3 Ph gang operated , Manual Operated, Disconnector (Isolator) with solid core pos tinsulator.- With earth switch with gear box arrangement and other accessories including jumpering & earthing connection if any ",,	SET	2				
6.10	"Installation ,testing & commissioning of 33KV , 3 Ph gang operated , Manual Operated, Disconnector (Isolator) with solid core pos tinsulator.- Without earth switch with gear box arrangement and other accessories including jumpering & earthing connection if any ",,		8				
6.11	Installation of 33KV Polymer Pin Insulator 10KN along with Nutbolts for 33KV line.Nutbolts will be paid separately,,	No.	96				
6.12	Installation of 33KV Polymer Disc Insulator (90KN- 120KN) along with Hardware fitting for 33KV line.Nutbolts will be paid separately,,	No.	336				
6.13	Installation of All type of Connector PG Clamp, T Clamp , connector, palm connector, Miniwedge connector, Wedge connector and other types of connector.	No.	1248				
6.14	S & I of Bird Guard	EA	720				
6.15	Supply & installation of different size of GI Nut ,bolt, spring & washers etc	kG	4102.18				
6.16	Stringing of 232Sqmm AAA Conductor etc.BA has to provide necessary Tools , manpower for stringing &Jumpering.BA will also supply aluminium binding wire of required siz.	M	247.2				
7	33 kV Bay at PSS		0				
7.1	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of Flat(GI) around pipe .	No.	20				

7.2	Installation/Erection of 13 Mtr long RS JOIST/WPB/H- Pole including loading and unloading, transportation from site/tent upto 3 Kms., excavation, refilling, flooding with water, ramming/compacting offoundation as per TP Central Orissa Distribution Co. Ltd. specifications and drawing including removal & disposal of malba as per instruction of EIC. The scope of work include providing & laying of laying of 1:1.5:3 , M20 Grade cement concrete of size - 500(B)x500(W)X2200(H) , and cooping of 5 00(B)x500(W)x450(H). Scope of work also includes 5 days curing and zebra painting (In Black & Yellow Strips/Zebra) .As per drawing.	No.	4				
7.3	BA has to do the installation, welding & fabrication work of different size GI Channel(100x50x6mm, 75x75x6mm, 50x50x6mm, 75X40X4.6mm etc) as per size requirement	Kg	1553.5				
7.4	Installation of 33KV Polymer Disc Insulator (90KN- 120KN) along with Hardware fitting for 33KV line. Nutbolts will be paid separately...	EA	72				
7.5	Installation of 33KV Polymer Pin Insulator 10KN along with Nutbolts for 33KV line. Nutbolts will be paid separately...	EA	36				
7.6	Installation of All type of Connector PG Clamp, T Clamp , connector, palm connector, Miniwedge connector, Wedge connector and other types of connector.	EA	18				
7.7	Supply & installation of different size of GI Nut ,bolt, spring & washers etc	EA	200				
7.8	Installation of 3phase ,30 KV 10KA Lighting arrester along with earthing connection, Fixing of all Three arrester on Ms channel.	EA	6				
7.9	Erection of Control Cable upto 120 sq.mm	M	160				
7.1	Erection of Control Cable upto 10 sq.mm	M	160				
	Sub Total (Erection Portion) (in Rs.)						
	Civil Works						
1	Civil works for U/G Cable Laying in Open Trench						
1.1	Earth work excavation of soil (1mtr. width X 1.2mtr. depth)-Route Length	M	13824.5				
1.1.a	Earth work excavation of soil	M3	6635.76				
1.1.b	Earth work excavation of hard rock	M3	9953.64				
1.2	Back filling with excavated soil outside and above the trench	M3	16589.4				
1.3	Damage of asphalt/tar road and other utilities and reconstructing to bring to its original shape after laying of cable in open trench (1mtr. width)	KM	14.146				
2	RMU Civil Works	EA	3				
2.1	Earth work Excavation- (upto 1.5m): Earth work in excavation in ordinary soil, soft/ weathered rock by mechanical (Hydraulic excavator) /manual means in foundation, trenches or drains including dressing of sides and ramming of bottoms, lift upto 1.5 m, including vegetation removal, getting out the excavated soil, back filling layer of 230-300 mm in depth, compacting and disposal of surplus excavated soil as directed, within a lead of 50 mas per direction of Engineer-in-charge.	M3	18				
2.2	Filling Available earth: Filling available earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 30 cm in depth: consolidating each deposited layer by ramming watering, lead up to 50 m and lift upto 1.5m as per direction of Engineer-in-charge.	M3	6				
2.3	P & L 225 or 300 mmthk dry rubble soling: P & L 225 or 300 mmthk dry rubble soling :- Providing and laying 225 or 300 mm thick dry rubble soling with maximum 230mm size approved quality stones including filling gaps with small chips ramming with hand rammer etc. complete as per direction of Engineer in-charge.	M3	7.5				
2.4	Clearing vegetation: Clearing vegetation including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of same upto a distance of 50 m outside of periphery of the area cleared as per direction of Engineer-in-charge.	M2	30				
2.5	CC 1:2:4 (coarse sand)-20mm: Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:2:4 (1cement : 2 coarse sand (zone-III) :4 graded stone aggregate 20mm nominal size as directed by EIC.	M3	7.5				
2.6	RCC 1:1.5:3 upto Plinth Level: Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	M3	7.5				
2.7	Centring and Shuttering Foundations: Centring and shuttering including strutting ,propping etc. and removal of form with proper finishing for : Foundations , footings , bases of columns etc for mass concrete as directed by EIC.	M2	10.5				
2.8	Centring and Shuttering (Lintels, etc): Centering and shuttering including strutting, propping etc. and removal of form for with proper finishing : Lintels, beams, plinth beams, girders, bressumers and cantilevers as directed by EIC.	M2	16.5				
2.9	Steel reinforcement for R.C.C-upto plinth: Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	120				
3	Steel reinforcement for R.C.C-above plinth: Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	180				
3.1	B/W in CM 1:6 upto plinth: Brick work with first class fly ash bricks in substructure upto plinth level in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand) as directed by EIC.	M3	21				
3.2	St. Steel, Single Section: Structural steel work in single section, fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete, as directed by EIC.	Kg	1650				
3.3	12 mm cement plaster(1:4)coarse sand: 12 mm cement plaster of mix: 1:4 (1 cement : 4 coarse sand)	M2	195				

3.4	Premium Acrylic Smooth exterior paint: Finishing walls with Premium Acrylic Smooth exterior weather coat paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm)	M2	60				
3.5	Synthetic Enamel Paint (New work): Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	M2	120				
3.6	GI chain link fencing 80X80 mm: Providing and fixing galvanized steel chain link fencing with 80x80 mm mesh size, 2.5 mm dia mesh wire conforming to IS:2721, MS stirrups wire 2.5 mm dia with tying wire 1.6 mm dia mild steel including providing 25 mm x 4.75 mm MS stretcher bars, eye bolt strainers, ring nuts, hair pins, staples of 3.5 mm wire, cleats of MS angle 75 x 60 x 6 mm, MS droppers 25 mm x 4.75 mm with 38 mm x 4.85 mm half round staples etc., completed as per drawings and specified as directed. (Flat, angle etc will be paid separately).	M2	108				
4	Construction Earthing chamber including installation of earthing pipe.Making earthing chamber including excavation , soil treatment with bentonide powder , calculation of earth resistance, including Installation of 3Mtr GI Pipe 40mm/50mm including welding of Flat(GI) around pipe .	EA	14				
5	BA will lay Earthing Conductor: 50X6 mm (2.4Kg/Mtr.) or 40x6 GI, 75X6 & any other size Flat for Raiser from the burial earth mat to equipment, structure etc).	km	0.039				
6	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	M	160				
7	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	EA	567				
8	33 kV Bay Civil		0				
8.1	VCB Foundation		0				
8.1.a	BA will excavate & remove the debris. BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	7.28				
8.1.b	BA will Back fill the excvated site with same earth.BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	4				
8.1.c	Supplying and spreading, filling other works with fine sand under floors,ground etc as per EIC instruction. Scope of work also includes watering, ramming, consolidating and dressing complete and other works if required at site .	Cum	0.34125				
8.1.d	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6(M-10 Grade)) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	0.455				
8.1.e	Providing and laying Plain Cement Concrete (PCC) of proportion (1:1.5:3(M-20 Grade)) in foundations and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	2.825				
8.1.f	Centring and shuttering including strutting , propping etc.and removal of form for Foundations, footings, bases of columns etc. for mass concrete	Sqm	13.25				
8.1.g	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all copmplete, cold twisted bars/TMT as per TPCODL specification (Scope also include supply of material)	Kg	140				
8.2	CT & PT Foundation		0				
8.2.a	BA will excavate & remove the debris. BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	7.96875				
8.2.b	BA will Back fill the excvated site with same earth.BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	4.5				
8.2.c	Supplying and spreading, filling other works with fine sand under floors,ground etc as per EIC instruction. Scope of work also includes watering, ramming, consolidating and dressing complete and other works if required at site .	Cum	0.363				
8.2.d	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6(M-10 Grade)) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	0.363				
8.2.e	Providing and laying Plain Cement Concrete (PCC) of proportion (1:1.5:3(M-20 Grade)) in foundations and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	2.3625				
8.2.f	Centring and shuttering including strutting , propping etc.and removal of form for Foundations, footings, bases of columns etc. for mass concrete	Sqm	14.94				
8.2.g	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all copmplete, cold twisted bars/TMT as per TPCODL specification (Scope also include supply of material)	Kg	122.43				
8.3	Column as per Drawing Schedule-		0				
8.3.a	BA will excavate & remove the debris. BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	51.30975				
8.3.b	BA will Back fill the excvated site with same earth.BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	24				

8.3.c	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6(M-10 Grade)) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	2.1				
8.3.d	Providing and laying Plain Cement Concrete (PCC) of proportion (1:1.5:3(M-20 Grade)) in foundations and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	14.175				
8.3.e	Centring and shuttering including strutting , propping etc.and removal of form for Foundations, footings, bases of columns etc. for mass concrete	Sqm	89.64				
8.3.f	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete, cold twisted bars/TMT as per TPCODL specification (Scope also include supply of material)	Kg	734.58				
8.4	Isolator		0				
8.4.a	BA will excavate & remove the debris. BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	28.35				
8.4.b	BA will Back fill the excavated site with same earth.BA will provide necessary Tools,Machinery & Manpower for the activity.	Cum	12				
8.4.c	Providing and laying Plain Cement Concrete (PCC) of proportion (1:3:6(M-10 Grade)) in foundations, Trench and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	1.701				
8.4.d	Providing and laying Plain Cement Concrete (PCC) of proportion (1:1.5:3(M-20 Grade)) in foundations and plinths using approved quality of cement, 20mm size hard crusher broken granite stone metal and screened, washed sharp sand for mortar of approved quality and from approved quarry, including hoisting, lowering, laying concrete, ramming, watering and curing etc. complete to required levels in layers not exceeding 15cm thick in each layer including cost, conveyance, loading, unloading, royalties and taxes, cess, of all materials & cost of all labours, sundries, T&P and all other machinaries required for the work etc., as directed by Engineer-in-Charge.	Cum	17.1				
8.4.e	Centring and shuttering including strutting , propping etc.and removal of form for Foundations, footings, bases of columns etc. for mass concrete	Sqm	89.64				
8.4.f	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete, cold twisted bars/TMT as per TPCODL specification (Scope also include supply of material)	Kg	734.58				
8.5	Land Leveling & Compaction/ Gravels spreading :		0				
8.5.a	BA will supply all materials required for backfilling and has to carry out the job of backfilling with earth, as per TPCODL standards	Cum	23.4				
8.5.b	Supplying, Laying, spreading and compacting with hand roller stone aggregate of specified sizes: 63 mm to 45 mm size stone aggregate to WBM specifications in uniform thickness, hand picking to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate, watering and compacting to the required density . Scope of work also includes of jungle such as grass,small tree,plant etc.	Cum	7.8				
8.6	Modification and extension of Control Room along with other civil works	LS	1				
8.7	RCC CABLE TRENCH	M	250				
8.7.a	Earth work in excavation in ordinary soil,soft/weathered rock by mechanical (Hydraulic excavator) /manual means in foundation, trenches or drains including dressing of sides and ramming of bottoms, lift upto 1.5 m, including vegetation removal, getting out the excavated soil, back filling layer of 230-300 mm in depth, compacting and disposal of surplus excavated soil as directed, within a lead of 50 mas per direction of Engineer-in-charge.	Cum	862.5				
8.7.b	Supplying and filling in plinth with River sand under floors including, watering, ramming, consolidating and dressing complete.	Cum	57.5				
8.7.c	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:3:6 (1 cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size) as directed by EIC.	Cum	57.5				
8.7.d	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	Cum	115				
8.7.e	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centring, shuttering and reinforcement- All work upto plinth level 1:1.5:3 (1 cement: 1.5 coarse sand (zone-III) : 3 graded stone aggregate 20 mm nominal size) as directed by EIC.	Cum	105				
8.7.f	Centring and shuttering including strutting , propping etc.and removal of form with proper finishing for : Walls (any thickness) including attached plaster, buttresses, plinth and string courses etc as directed by EIC.	M2	1400				
8.7.g	Steel reinforcement for R.C.C. work including Shifting, straightening, cutting, bending, placing in position and binding all complete upto plinth level. Cold twisted bars / Thermo-Mechanically Treated bars of approved make as directed by EIC.	Kg	24785				
8.7.h	Providing and fixing precast reinforced concrete cable trench covers, drain covers, fencing post, etc. of class M25 concrete w/c 0.5 (max) leaving out-puts/ pockets, placing of inserts/ embedments,etc.,complete all as per drawing including shuttering, vibrating, machine mixing, providing lifting arrangements, placing inserts curing handling, transporting, etc. complete but excluding the cost of providing reinforcement, inserts / embedments, with 30 mm downgraded aggregates as directed by EIC. (Cement consumption 7.9 Bag/M3)	Cum	30				

8.7.i	Structural steel work in single section, fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	Kg	13255				
8.8	Chainlink Fencing of Switchyard		0				
8.8.a	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. - All kinds of soil	M3	13.5				
8.8.b	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1m above ground level and removal of rubbish upto a distance of 50 m outside of periphery of the area cleared.	M2	1200				
8.8.c	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:3:6 (1 cement : 3 coarse sand (zone-III) : 6 graded stone aggregate 20 mm nominal size)	M3	3				
8.8.d	12 mm cement plaster of mix: 1:4 (1 cement : 4 coarse sand).	M2	85				
8.8.e	Finishing walls with Premium Acrylic Smooth exterior weather coat paint with Silicone additives of required shade New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20kg/ 10 sqm)	M2	85				
8.8.f	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work.	M2	270				
8.8.g	Providing all material and constructing brick masonry 230mm. thick and above upto plinth in cement mortar (1:4) using approved quality class 50 conforming to IS:3102 table moulded bricks, including leaving inserts / pockets steel scaffolding, curing, raking joints, etc.	M3	15				
8.8.h	Structural steel work in single section, fixed with or without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	KG	2000				
8.8.i	Providing and fixing galvanized steel chain link fencing with 80x80 mm mesh size, 2.5 mm dia mesh wire conforming to IS:2721, MS stirrups wire 2.5 mm dia with tying wire 1.6 mm dia mild steel including providing 25 mm x 4.75 mm MS stretcher bars, eye bolt strainers, ring nuts, hair pins, staples of 3.5 mm wire, cleats of MS angle 75 x 60 x 6 mm, MS droppers 25 mm x 4.75 mm with 38 mm x 4.85 mm half round staples etc., completed as per drawings and specified as directed. (Flat, angle etc will be paid separately).	M2	180				
8.8.j	Centring and shuttering including strutting , propping etc.and removal of form with proper finishing for : Columns, Pillars, Piers, Abutments, Posts and Struts as directed by EIC.	M2	7.5				
8.9	Area Development work with Filling for (50X40X1mtr)		0				
8.9.a	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering- All work upto plinth level: 1:4:8 (1 cement : 4 coarse sand (zone-III) : 8 graded stone aggregate 20 mm nominal size) as directed by EIC.	M3	75				
8.9.b	Supplying, filling, spreading & levelling gravels of size range 40 mm to 60 mm gravels in the swith yard and other areas in required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	M3	75				
8.9.c	Providing and laying 80 mm thick factory made cement concrete interlocking paver block of M-30 grade made by block making machine with strong vibratory compaction and of approved size and design / shape laid in required colour and pattern over and including 50mm thick compacted bed of course sand, filling the joints with course sand etc. all complete as per the direction of Engineer - in - charge.	M2	350				
8.9.d	Supply of unskilled workman i/c all T&P for miscellaneous works at site as per direction of E in charge.	M3	100				
8.9.e	Supplying and filling in plinth with River sand under floors including, watering, ramming, consolidating and dressing complete.	M3	100				
8.9.f	Supplying and levelling at site. Good earth	M3	300				
	Sub Total (Civil Portion) (in Rs.)						
Transportation							
1	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Trailer with labours as required (price per trip). Scope of work also include loading and unloading of materials heavy items like, 14 mt Rail Pole, PCC Pole, HT Panel, Transformer, Cable Drum, LT Board . Item whose loading& unloading is to be done with crane , charges for crane will be paid separately. (Full Trailer)	EA	13				
2	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Tractor with labours as required (price per trip). Scope of work also include loading and unloading of materials heavy items like, Rail Pole, PCC Pole, HT Panel, Transformer, Cable Drum, LT Board . Item whose loading& unloading is to be done with crane , charges for crane will be paid separately.	EA	12				
3	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Full body Truck with labours as required (price per trip). Scope of work also include loading and unloading of materials except heavy items like HT Panel, Transformer, Cable Drum, LT Board where loading, unloading is to be done with crane and will be paid separately (Full Truck),.	EA	5				
4	Transportation of various items from TPCODL store/site to other site or vice versa in TPCODL operational area - Tempo 407 with labours as required (price per trip). Scope of work also include loading and unloading of materials except heavy items like HT Panel, Transformer, Cable Drum, LT Board where loading, unloading is to be done with crane and will be paid separately.,.	EA	1				