

**THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD.**  
**JANAPATH, BHOINAGAR, BHUBANESWAR - 22**  
**[Electrical Division]**  
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**PRICE BID FOR THE WORK UNDER SL. NO :- 01 AS PER IFB**

**NAME OF THE WORK :- EXECUTION OF EXTERNAL ELECTRIFICATION WORK FOR POWER SUPPLY TO NEW BUILDING OF ODISHA SECRETERIAT TRAINING INSTITUTE AT BHUBANESWAR IN THE DISTRICT OF KHURDA.**

**BID REF NO :- 35/DGM/ELECT/OPHWC/2024-25**

**NAME & ADDRESS OF THE FIRM**

**SCHEDULE OF WORKS**

Sl. No.	Description of work	Unit	Qty.	Estimated Cost in Rs.	
				RATE IN RS.	AMOUNT IN RS.
<b>I</b>	<b>11 KV LINE</b>				
<b>A</b>	<b>11 KV DP WITH AB SWITCH</b>				
<b>1</b>	WPB(GI) 160x152 (11Mtr. Long, 30.44KG/Mtr.)	No	2	34153.58	68307.16
<b>2</b>	Top Channel 100X50X6mm, 9.56 KG/Mtr., each channel length 3 mtr., 2 no's channel required =( 2x9.56x3)	KG	57.36	102	5850.72
<b>3</b>	Fish Plate 50x6 mm., 2.36 kg/Mtr., each 0.280 mtr. length, 6 no's required = (6x2.36x0.280)	KG	3.965	102	404.43
<b>4</b>	AB switch Mounting Channel 75X40X4.8mm, 7.14KG/Mtr, each channel length 3 Mtr., 2 no's channel required =( 7.14x3x2)	KG	42.84	102	4369.68
<b>5</b>	AB Switch Side Support Channel 100X50X6mm,9.56 KG/Mtr., each channel length 0.35 mtr., 4 no's channel required =( 9.56x4x0.35)	KG	6.692	102	682.58
<b>6</b>	Channel Support for down Pipe 75X40X 4.8mm., 7.14KG/Mtr., each channel length 0.8 Mtr., 1 no's channel required =( 7.14x0.8x1)	KG	5.712	102	582.62
<b>7</b>	Double Pole Bracing Channel 75X40X 4.8mm., 7.14KG/Mtr., each channel length 3 Mtr., 2 no's channel required =( 7.14x3x2)	KG	85.68	102	8739.36
<b>8</b>	50x50x6mm.GI Bracing Angle, 4.5Kg./mtr., each angle length 3.512 mtr., 2 nos angle required = (4.5x3.512x2)	KG	63.216	102	6448.03
<b>9</b>	Danger Plate, 2 no's.	No.	2	108.80	217.60
<b>10</b>	Back Clamp for danger Plate 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 2 no's = (2x0.59x0.510)	KG	0.6018	102.00	61.38
<b>11</b>	H.T. Stay clamp, 50x8 mm. flat, 3.14Kg/Mtr., 0.551 Mtr. Length, 2 no's qty. required ( 1 Pair)	Pair	2	170.00	340.00
<b>12</b>	H.T. Stay set (Complete )	Set	2	1428.00	2856.00
<b>13</b>	H.T. Stay Insulator Type-C	No.	2	68.00	136.00
<b>14</b>	7/10 SWG Stay Wire 15kg /stay	K.g.	30	102.00	3060.00
<b>15</b>	Gi Pipe Earthing 40mm. 3 Mtr. Long	No.	2	1428.00	2856.00
<b>16</b>	50x6mm GI Flat 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	48.38	102.00	4934.76
<b>17</b>	GI barbed wire anticlimbing device 3 Kg. Per support, 2 no's qty. required =(2x3kg)	Kg	6	108.80	652.80
<b>18</b>	Back Clamp for anticlimbing device 25X3 mm. flat, 0.59Kg/Mtr. Flat of 0.510mtr length 8 no's = (8x0.59x0.510)	KG	2.407	102.00	245.51
<b>19</b>	Lightning Arrester(12KV,10KA) (Station Class,class-2)	EA	3	4828.00	14484.00
<b>20</b>	AB Switch (11KV,200A,3pole,50Hz)	Set	1	9996.00	9996.00
<b>21</b>	11 KV pin insulator polymer	No.	3	272	816.00
<b>22</b>	H W fitting(B&S) 70KN, 3Bolt	No.	6	476	2856.00

23	Disc insulator (B&S) 70 KN polymer	No.	6	1564	9384.00
24	Non metallic ties 11 KV(for covered conductor)	No	3	251.00	753.00
25	IPC for 50 sq. mm AAAC covered conductor	No	9	371.00	3339.00
26	GI Nut , Bolt & Washer of different sizes (13.718 Kg each DP with AB Switch)	K.g.	13.718	106.08	1455.21
27	Black Paint(GIS Numbering & Zebra stripping)	Ltr	1	299.20	299.20
28	55 sq. mm AAA XLPE covered conductor	Mtr.	61.8	99.74	6163.93
29	Yellow Colour Paint(GIS Numbering & Zebra stripping) for Background	Ltr	2	167.46	334.92
A	<b>A. Sub total</b>				<b>160,625.91</b>
B	<b>B. Stock, Storage &amp; Insurance @ 3% of A</b>				<b>4,818.78</b>
C	<b>Sub Total (C=A+B)</b>				<b>165,444.68</b>
D	<b>T&amp;P @ 2% of C</b>				<b>3,118.38</b>
E	<b>Contingency @ 3% of C</b>				<b>4,963.34</b>
F	<b>Transportation @ 7.5% of C</b>				<b>12,408.35</b>
G	<b>Erection Charges @ 5% on poles</b>				<b>3,517.83</b>
H	<b>Erection Charges @ 10%</b>				<b>8,556.29</b>
I	<b>Total</b>				<b>198,008.88</b>
30	Fixing of complete 11KV 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 excvation including excvation, 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.	EA	2	2301.53	4603.06
31	Concreting ratio 1:1.5:3(M-20 grade )(500mmX500mmX1800mm) = 0.45Cu.mtr	Cu.m tr	0.9	6648.85	5983.97
32	Couping ratio 1:1.5:3 (M-20 grade) with dimension ( 500X500X450)= 0.1125 Cu mtr	Cu.m tr	0.225	6648.85	1495.99
33	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 GI flat around pipe .	No.	2	3784.73	7569.46
<b>Total Material + Services Cost</b>					<b>217,661.35</b>
<b>Salvage value</b>					<b>13,040.64</b>
<b></b>					<b>204,620.71</b>
<b>PART-B-Construction of 11 kv line using 3Cx95 sq. mm of Length 60 Mtr with 1 Run spare from proposed DP to RMU at Consumer premises.</b>					
<b>Supply Portion</b>					
1	<b>Supply of materials for 11kV, 3Core, 95sqmm, XLPE insulation armoured UG cable with accessories</b>				
a	<b>Length of 11kV 3C, 95sqmm cable (Open trench method)</b>	<b>Mtr.</b>	<b>60</b>		
1.1	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)	Mtr.	120.00	1,019.00	122,280.00
1.2	Supply of Indoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95 sqmm, HT UG cable kits.	Set	6	9,664.16	57,984.96
1.3	Supply of Outdoor termination kits Heat Shrinkable type suitable for 11kV, 3Core, 95 sqmm, HT UG cable kits.	Set	2	14,890.64	29,781.28
1.4	Supply of <b>HDPE</b> PE 80-PN8 pipe of <b>160mm</b> diameter (for 11 KV UG cable laying)	Mtr.	94.00	667.00	62,698.00
2	<b>Supply of 11kV RMU</b>				
a	<b>No. of 11kV 3Way 630 A LLV WITH HTMU &amp; AUX PT</b>	<b>nos.</b>	<b>1</b>		
2.1	Supply of 11KV RMU 3 Way, 630A (LLV)with HTMU & AUXPT(BKR CT ratio -50/1 Amp, Metering CT ratio -20/5A))	Nos.	1	642,100.00	642,100.00

<b>3</b>	<b>Earthing</b>				
3.1	Earthing Conductor: <b>50X6 mm</b> (2.4kg./mtr.) <b>GI Flat</b> for equipment, structure etc.)	kg	13.20	102.00	1,346.40
3.2	Pipe Earthing 40mm. GI Pipe	Nos.	2	1,428.00	2,856.00
<b>Sub Total (Supply Portion) (in Rs.)</b>					<b>919,046.64</b>
<b>Erection Portion</b>					
<b>Sl. No.</b>	<b>Description of items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (in Rs.)</b>	<b>Amount (in Rs.)</b>
<b>1</b>	<b>Laying, Commissioning, Testing of 11kV, 3core, 95sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method</b>				
1.1	Laying, Commissioning, Testing of 11kV, 3core, 95sqmm, aluminium, XLPE insulation armoured (extruded type) UG cable by open trench method.	Mtr.	120.00	100.17	12,020.40
1.2	Erection of Straight through jointing kits Heat Shrinkable type suitable for 11kV, 3Core, 95sqmm, aluminium UG cable kits for 3core (set)	Set	8	1,944.33	15,554.64
1.3	Laying of <b>160mm dia</b> PE 80-PN8, <b>HDPE pipe</b> inside open trench.	Mtr.	94.00	306.87	28,845.78
<b>2</b>	<b>Erection, Commissioning, Wiring and Testing of 11kV RMU</b>				
2.1	Erection of 11kV RMU 3 Way630A (LLV)with HTMU & AUXPT	Nos.	1	15,343.50	15,343.50
<b>Sub Total (Erection Portion) (in Rs.)</b>					<b>71,764.32</b>
<b>Civil Portion</b>					
<b>Sl. No.</b>	<b>Description of items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (in Rs.)</b>	<b>Amount (in Rs.)</b>
<b>1</b>	<b>Civil works with supply of all materials like cement, MS tor rod, brick, coarse &amp; fine aggregates and labour, T&amp;P, etc for UG Cable Trench</b>				
1.1	Earth work excavation of soil (1mtr. width X 1mtr. depth) Route Length				
1.1.a	Earth work excavation of <b>soil</b>	Cum	29.4	716.03	21,051.28
1.1.b	Earth work excavation of <b>hard rock</b>	Cum	12.6	1,759.39	22,168.31
1.2	Back filling with excavated soil outside and above the trench	Cum	42	204.58	8,592.36
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	0.02	3,874,084.29	77,481.69
<b>2</b>	<b>Civil works with supply of all materials like cement, MS ton rod, bricks, coarse &amp; fine aggregates and labour, T&amp;P, etc for HT Cable trench</b>				
2.1	Earth work excavation of <b>soil(1.6 Mtr. Wx1.775 Mtr. D)</b>	cum	9.94	716.03	7,117.34
2.2	Earth work excavation of <b>Hard rock(1.6 Mtr. Wx1.775 Mtr. D)</b>	Cum	4.26	1759.39	7,495.00
2.3	Back filling with excavated soil outside and above the trench	Cum	3.64	204.58	744.67
2.4	PCC(1:3:6),M-10 Grade below trench (width 1500 mm ,thickness 75 mm throughout)	Cum	0.5625	5247.48	2,951.71
2.5	Supply and Erection of material for RCC partition Slab 750mmx100 mm(M-25 Grade)	Cum	0.4875	7483.54	3,648.23
2.6	Supply and Erection of material for RCC trench (150 mm thick(M-30 Grade)	Cum	3.075	7483.54	23,011.89
2.7	Supply and erection of Rod ,bending ,cutting and binding of prefabricated RCC trench(65.23 Kg/cum)	Kg	200.5823	111.50	22,364.93
2.8	Supply and erection of Rod ,bending ,cutting and binding of prefabricated RCC slabs(67.8 Kg/cum)	Kg	33	111.50	3,685.35

2.9	Centering and shuttering of mass concrete	M2	29.5	307.89	9,082.76
2.1	Structural steel work riveted (channel GI-75x40x4.8 mm)(Flat GI-75x6mm)	Kg	17.185	130.00	2,234.05
<b>3</b>	<b>Civil works for Prefabricated RCC foundation with supply of all materials</b>				
3.1	Prefabricated RCC foundation of 11 KV RMU	EA	1	26,000.00	26,000.00
3.2	SITC of GI fencing with gate around each RMU	RM	18	3,682.44	66,283.92
3.3	Construction of earthing chamber including installation of earthing pipe.Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance,including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe.	Set	2	3,784.73	7,569.46
3.4	Supply and erection of GI Pipe of dia. 150mm, Class-B (8Mtr.)	Mtr	16	1,496.91	23,950.56
3.5	Supply and Erection of Cable Route Marker along the cable route at an interval of 30mtrs with civil works	Nos.	2	1,035.17	2,070.34
<b>Sub Total (Civil Portion) (in Rs.)</b>					<b>337,503.84</b>
<b>A</b>	<b>Sub Total (Supply Portion)</b>				<b>919,046.64</b>
<b>B</b>	Stock, Storage & Insurance @ 3 % of A				27,571.40
<b>C</b>	<b>Sub Total (A+B)</b>				<b>946,618.04</b>
<b>D</b>	Contingency @ 3 % of C				28,398.54
<b>E</b>	Tools & Plants Charges @ 2% of C (considered for earthing items)				27.74
<b>F</b>	Transportation @ 7.5% of C				70,996.35
<b>G</b>	Erection Charges @ 10% of earthing items				138.68
<b>H</b>	<b>Total (C+D+E+F+G)</b>				<b>1,046,179.35</b>
<b>I</b>	Sub Total (Erection Portion + Civil Portion)				409,268.16
<b>J</b>	<b>Total Cost (H+I)</b>				<b>1,455,447.51</b>
<b>PART-C</b>	<b>INSTALLATION OF 250 KVA S/S.</b>				
<b>1</b>	50x6mm GI Flat for earthing, 2.36kg/mtr., (2.5x7 mtr. For mesh formation, 12 Mtr. For L.A and 2.5 Mtr for raising, 11 Mtr. For AB Switch ,2.8 Mtr. for HG Fuse, 5x2 Mtr. For DTR neutral,(13-4.5)mtr. For DTR Body, 0.500 Mtr. For LTDB & AB switch operating handle, 3 Mtr. for fencing. )	Kg	154.82	102.00	15791.64
<b>2</b>	250 KVA , 11/0.4 KV (CU) Transformer BIS Energy Level-II	No	1	601213.06	601213.06
<b>3</b>	LT Distribution Box with MCCB, Aluminium Busbar of 3 Bay with kit kat fuse for 250 KVA S/S	No	1	65280.00	65280.00
<b>4</b>	55 sq. mm All Alloy conductor-PVC insulated	Mtr	50	55.24	2762.00
<b>5</b>	1 Cx 400 mm2 LT XLPE Cable(Armoured) - FOR 250 KVA Trf.	Mtr	120	363.08	43569.60
<b>6</b>	Channel for 11 KV U/G cable rising GI 100x50x6 mm (3000 mm Long)(.56 Kg/Mtr.),2 Nos.	Kg	286.8	102.00	29253.60
<b>7</b>	LT cable supporting angle (GI),50x50x6 mm GI 4.5 Kg/Mtr.,each angle(GI) length 2 Mtr. 4 Nos. required	Kg	36	102.00	3672.00
<b>8</b>	11 KV LA (12KV,10 KA)station class-2	No	3	4828.00	14484.00
<b>9</b>	GI Pipe for earthing 40mm dia 3mtr long	No	5	1428.00	7140.00
<b>10</b>	GI Nut, Bolt & washers of different sizes	Kg	35	106.08	3712.80
<b>11</b>	Danger plate	Kg	2	108.80	217.60
<b>12</b>	Back clamp for Danger Plate 25x3 mm ,flat, 0.59 Kg/Mtr., flat of 0.510 Mtr. Length 1 Nos=(1x0.59x0.510)	Kg	0.6018	102.00	61.38
<b>13</b>	Name Plate	No	1	108.80	108.80
<b>A</b>				<b>A. Sub total</b>	<b>787,266.48</b>
<b>B</b>				<b>B. Stock, Storage &amp; Insurance @ 3% of A</b>	<b>23,617.99</b>
<b>C</b>				<b>Sub Total (C=A+B)</b>	<b>810,884.48</b>
<b>D</b>				<b>T&amp;P @ 2% of C</b>	<b>15,173.00</b>
<b>E</b>				<b>Contingency @ 3% of C</b>	<b>24,326.53</b>

<b>F</b>	<b>Transportation @ 7.5% of C</b>				<b>60,816.34</b>
<b>G</b>	<b>Erection Charges @ 5% for transformer and joist pole cost including stock, storage &amp; insurance @3%</b>				<b>30,962.40</b>
<b>H</b>	<b>Erection Charges @ 20% on PSC Poles</b>				
<b>I</b>	<b>Erection Charges @ 10% for other materials</b>				<b>13,940.30</b>
<b>J</b>	<b>Total</b>				<b>956,103.05</b>
<b>14</b>	Construction of earthing chamber including installation of earthing pipe. Making earthing chamber including excavation, soil treatment with betonide powder, calculation of earth resistance, including installation of 3 Mtr. GI Pipe 40/50 mm including welding of GI flat around pipe.	No	5	3784.73	18,923.65
<b>15</b>	LT DB Plinth	No	1	6000.00	6000.00
<b>16</b>	DTR Plinth	No	1	28000.00	28000.00
<b>17</b>	Laying of 1Cx400 sq. mm LT XLPE cable	Mtr	120	96.66	11,599.20
<b>18</b>	SITC and erection of GI fencing with gate	RM	20	3682.44	73,648.80
<b>19</b>	SITC OF GI Pipe of dia 150 mm ,class-B(8 Mtr.)	Mtr	24	1496.91	35925.84
<b>20</b>	Supply of AL Lugs suitable for 400 sq. mm cable/conductor, crimping with cable and fixing /connecting include supply and erection of PVC Tape as per voltage requirement.	EA	16	322.21	5,155.36
<b>21</b>	Supply and erection of double compression flameproof type glanding for armoured cable 1 core ,300-1000 sq. mm including making hole in Base plate and dressing of cable along with vermin proofing properly .supply to be done as per TPCODL specification and approved make dowells.	EA	8	1227.48	9819.84
					189,072.69
				Sub total Rs	<b>1,145,175.74</b>
	<b>DISMANTLING CHARGES</b>				
1	Dismatling of RSJ/WPB Pole	EA	2	1380.92	2761.84
2	Dismatling of 100 KVA Transformer	EA	1	3262.64	3262.64
3	Dismatling of ACSR/AAAC 34/55 sq. mm OH Line	Mtr.	75	6.44	483.00
	Total Rs.(dismantling )				6507.48
	Total Rs.				<b>2,811,751.44</b>
	Cess @ 1%				<b>28,117.51</b>
	Total Estimated Cost				<b>2,839,868.96</b>
	Total Estimated Cost in Figures				<b>2,839,869.00</b>
EXCESS	<input type="checkbox"/> LESS <input type="checkbox"/> (Please Tick)			_____ %	
	Quoted Amount in Figure				
	Quoted Amount in word				

N:B- The Estimated cost is exclusive of GST.

**Signature of Tenderer with seal**

**Sd/-  
Asst. Project Manager (Elect)**

**Sd/-  
D.M I/C (Elect)**

**Sd/-  
DGM Engg. (Elect.)**