# 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:- 09 AS PER IFB

NAME OF THE WORK: EXECUTION OF EXTERNAL ELECTRIFICATION & AREA ILLUMINATION WORK AND INSTALLATION OF LIGHTNING PROTECTION SYSTEM AT BATTALION HORS. FOR CAPF AT NUAPADA IN THE DISTRICT OF KALAHANDI.

#### BID REF NO:- 103/PM/ELECT/OPHWC/2023-24

NAME &
ADDRESS
OF THE
<b>FIRM</b>

#### **SCHEDULE OF WORKS**

				Estimated Cost in Rs.		
SI. No.	Description of work  EXTERNAL ELECTRIFICATION WORK	Unit	Qty.	RATE IN RS.	AMOUNT IN RS.	
1	9 Mtr. Long 150x150 mm RS Joist Pole(30.6 Kg/Mtr.)	No	6	32160.70	192964.20	
2	8 Mtr. Long 150x150 mm RS Joist Pole(30.6 Kg/Mtr.)	No	60	20685.60	1241136.00	
3	11/.04 KV 100 KVA Transformer(Star-1,BIS/EEL-2)	No	1	152100.00	152100.00	
4	Construction of 11/0.4 DP mounted 100 KVA S/S ON 11 Mtr. Long RS Joist Pole with double disc arrengement and 5 Nos. GI Flat earthing alongwith LT Distribution box with MCCB arrangement.	No	1	151085.21	151085.21	
5	Construction of 3 Ph 3W 11 KV Line on 11 Mtr. Long 150x150 mm RS Joist Pole for pin point and 2 Nos. single pole cut points with double disc arrangement with single core un-armoured 55 sq. mm insulated AAAC.(except cost of pole)	Km	0.10	317112.13	31711.21	
7	Insulated Piercing connector	Nos	6.00	104.00	624.00	
8	11 KV single pole cutpoint on 11 Mtr. Long RS Joist Pole(Except cost of pole)	No	1.00	25378.73	25378.73	
	Acessories for DP metering unit on 11 Mtr. Long RS Joist Pole with earthing arrangement and control cable.	No	1.00	60819.85	60819.85	

9	LT 3 Ph 5 W LT Line with 95 Sq. mm AB Cable on 8 Mtr. Long RS Joist Pole(Except cost of pole)	V m	1 0	292120.00	690651 92
	`	Km	1.8	383139.90	689651.82
А	TOTAL MATERIAL COST IN RS				2545471.02
В	Stock, storage and insurance (@3% on A)				76364.13
С	TOTAL RS.				2621835.15
	TOTAL KS.				2021033.13
D	T&P @ 2% of C				52436.70
E	Contigency @ 3% of C				78655.05
F	Transportation @ 7.5% of C				196637.64
<u> </u>	Erection charges of Joist Pole and				130037.01
G	Transformer @ 5%				81689.31
Н	Erection charges of PSc Pole@ 20%				
	Erection charges for other materials@				
I	10%				98804.89
	Total Rs.Part-A				3,130,058.75
10	Concrete materials for stay anchor plate	No	25	1652.54	41313.50
11	Padding and Concreting materials for				
	support	No	66	2837.90	187301.40
12	Cost of Fencing with metal spreading	No	1	76348.26	76348.26
	Road crossing Guarding	No	2	7932.30	15864.60
	Total Rs.Part-B				320827.76
	TOTAL RS.(PART-A)				3,450,886.51
	PART-B(SHIFTING AND RECONSTRUCTION OF 33 KV				
	LINE)				
_	CONSTRUCTION OF 33 KV LINE WITH 100 SQ. MM AAAC ON 13 MTR. LONG		0.45		
1	RS JOIST POLE.	KM	0.43		
2	CONSTRUCTION OF 33 KV SINGLE POLE CUT POINT ON 13 MTR. LONG RS	Kivi	4		
	JOIST POLE.	NO.			
_	DISMANTAL OF EXISTING 33 KV		0.25		
3	LINE	Km	0.35		
PART-I					
	13 Mtr. Long 150x150 mm RS Joist				
1	Pole(30.6 Kg/Mtr.)	No.	14	33614.10	470597.40
	Total Rs.	140.		33014.10	470597.40
		lo dias	onge	f 2 mb 200/22 1/3/	
PART-II	Erection of double pole cut point with double Mtr. Long RS Joist Pole.	ie disc arr	angement o	i 5 pii 5 w 55 K v (	OH Line on 13
	Pressure Channel 100X50X6 mm. 4.5		221.2		
2	mtr Long 2Nos(9.2Kg/Mtr)	Kg	331.2	84.50	27986.40
3	Bracing channel 75x40x6mm. 2x4 mtr,		217.6		
	Long .(6.8 kg/mtr)	Kg	21/.0	84.50	18387.20
	Bracing angle 50x50x6 mm -2x4.5 mtr.				
4	Long (4.5 Kg/Mtr.)		162		
	Zong ("O register")	Kg		84.50	13689.00

5	Clamp for Bracing Channel	Kg	24	84.50	2028.00
6	33 KV Disc Insulator (B & S)	No.	24	1872.00	44928.00
7	33 KV H/W fitting (B & S Type)4 bolt	No.	24	650.00	15600.00
8	33 KV pin insulator Polymer	Set	12	624.00	7488.00
9	PG clamp for 100 sq. mm AAAC	No	12	754.00	9048.00
10	H.T Stay Set Complete	No.	16	1365.00	21840.00
11	HT Stay Insulator	No.	16	65.00	1040.00
12	HT Stay Clamp	Pair	16	162.50	2600.00
13	7/10 SWG Stay wire	Kg	160	97.50	15600.00
14	G.I, Bolts, Nuts & Washers	Kg.	20	101.40	2028.00
15	Earthing of Support (Coil type)	Kg	8	215.80	1726.40
16	Danger Board, name plate, GI Barbed wire	L.S	8	312.00	2496.00
17	No.8 Gi wire for earthing	Kg	12	97.50	1170.00
	Total Rs.	8			187655.00
PART-III	Construction of 3 Ph 3 W 33 Kv Line on 13			·	
18	100 sq. mm AAAC	Km.	1.4175	71500.00	101351.25
19	33 kv v Cross Arm(16.8 Kg)	Nos.	6	1833.00	10998.00
20	Back clamp for V cross Arm	Nos.	6	195.00	1170.00
21	33 KV pin insulator Polymer	Nos.	18	624.00	11232.00
22	33 KV F clamp	Nos.	6	390.00	2340.00
23	Earthing support coil type	Nos.	6	215.80	1294.80
24	GI nut, bolt & washer	Kg	9	101.40	912.60
25	Danger Board, name plate, GI Barbed wire	L.S	6	312.00	1872.00
26	No.8 Gi wire for earthing	Kg	9	97.50	877.50
27	Earthing Coil	Nos.	6	215.80	1294.80
	Total Rs.				133342.95
Α	TOTAL MATERIAL COST IN RS				791595.35
В	Stock, storage and insurance (@3% on A)				23747.86
С	TOTAL RS.				815343.21
D	T&P @ 2% of C				16306.86
Е	Contigency @ 3% of C				24460.30
F	Transportation @ 7.5% of C				61150.74
	Erection charges of Joist Pole and				
G	Transformer @ 5% of				24235.77
Н	Erection charges of PSc Pole@ 20% of C		+		
ı	Erection charges for other materials@ 10%				33062.79
	Total Rs.				974559.67
28	Couping of Pole(Including supply of materials 1Mx0.5Mx0.5M)	No.	14	2837.97	39731.58
29	Concreting of stay	No.	16	1652.54	26440.64
30	Dismantal of 33 KV Line	Km	0.35	18075.00	6326.25
	Sub Total				1047058.14

	PART-B				1047058.14
PART-C	AREA ILLUMINATION WORK				
	40001030 Supply and laying of 16 sq.mm 2 core PVC Al. Arm Cableof 1.1 KV grade ISI Marked direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required. (sl no- 5.1.1)(Make Cable- Finolex/ Havells/Polycab/KEI)				
1	Ground Floor	MTR	300	264.25	79275.00
	40001126 providing and fixing 8 SWG(4mm)dia copper wire on surface or in recess for loop earthing as required (sl no- 3.18)				
2	Ground Floor	RFT	240	27.89	6693.60
3	40001319 Supply and fixing of 4sqmm service wire along with G.I wire for support of service wire including all acessories and connections from each quaters to energy meter(Make-Joshi/Multicab) Ground Floor 40002113	MTR	312	40.2	12542.40
4	Supply, erection & stringing of 1-phase 2-wire L.T line with (1X35 + 1 x25) mm² AB cable over 8mtr long PSC Pole along the road. (30 Mtr Span).  Ground Floor	MTR	1300	172.34	224042.00
7	40002124 Supply & fixing of outdoor/indoor type 63A DPMCB panel having I/C-63 A DPMCB-01 No & 63 Amp 2P Change Over/rotary switch ,Outgoing -02 Nos 32 Amp DPMCB & 02 nos 32 A DP switch with powder coating all accessories & connectionMake a)MCB/MCCB- legrand/schnider/abb/,L&T/Anchor/Pa nasonic (b)Voltmeter/Ametre- AE/CAPPA	IVIIA	1300	112.04	22TUT2.UU
5	Ground Floor	NO	6	20125	120750.00

6	40002201 Supply & fixing of 200x150mmx60mm(nominal) size pvc(SINTEX) looping end box with hinged cover having one no.20 amp rating moulded fuse base &holder, 4amp NS type fuse and 4way connector to be used in the bottom of street light pole for cable termination as per electrical engg -in -charge and consoltant and complite as per electrical engg -in -charge and consultation Ground Floor	NO	104	1100	114400.00
7	40008291 Supply and fixing of Earthing with GI earth pipe 3 meter long 40 mm dia Heavy Duty TATA make including accessories and providing masonary enclosure with cover plate having locking arrangement and water pipe etc with charcoal and salt as required.(Minimum 1.5 mtr distance from building & 3 mtr distance from earthing to earthing) Ground Floor	NO	6	3483.1	20898.60
8	40008403 Supply & fixing of 70 Wt. LED Street light fitting comprises of Pressure die cast Aluminium housing powder coated in silver grey and toughened glass, Surge Arrester 1 No & 100lum/wt, Protection IP66 having LM 79 LM 80 tested including bulb,choke,cover,G.I bracket,clamp & nut bolt connecting wire with all accessories . (Make-CROMPTON(MODEL NO-TRP-409-70-57-SL-GL-NSG)/PHILIPS(MODEL NO-BRP032 LED70S 70W 7000 LM)/WIPRO(MODEL NO-LR02-781-XXX-57-G3) Ground Floor	NO	45	6244.87	281019.15

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	40008415				
	Supply & fixing of 120 Wt. LED FLOOD				
	light fitting comprises of Pressure die				
	cast Aluminium housing powder				
	coated in silver grey and toughened glass, Surge Arrester 1 No &				
	100lum/wt, Protection IP66 having LM				
	79 LM 80 tested including				
	bulb,choke,cover,G.I bracket,clamp &				
	nut bolt connecting wire with all accessories and as per instruction of				
	Electrical Engineer-in-charge . (Make-				
	CROMPTON(MODEL NO-TFS-504-120-				
	57-60D-SL-GL-NSG/PHILIPS(MODEL				
	NO-BVP142 LED100S 110W				
	11000)/WIPRO(MODEL NO-LF40-132-				
9	060-57-XX) Ground Floor	NO	59	10995.4	648728.60
9	TOTAL RS.(PART-C)	INU	59	10333.4	1,508,349.35
	101111 No.(111111-C)		l		1,300,57,33

PART-C	LIGHTNING PROTECTION SYSTEM				
1	Air-Terminal Supply, Installation, Testing & Commissioning of Early Streamer Emission (ESE-30))type Lightning Air Terminal. Supporting Mast The mounting pole used to support the lightning air terminal shall be minimum length of 05 Mtr., non corrosive and made up of medium class GI / SS pipe of 1.5" diameter having base plate at bottom for securely fixing the mast on roof top. The mounting pole and supports shall be securely fixed with the brackets and PVC insulated metallic guy wires to withstand the maximum wind velocity of that area. Protection Radius: - 48 Mtr Make: - ABB / STROMKING All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.				
		NO	2	99250.00	198500.00
2	Lightning Strike Counter Supply, Installation, Testing & Commissioning of non-electronic & non-resettable (Not require any external power supply) type lightning strike counter to count the lightning stroke having display with IP-67 enclosure including all accessories and connection(6/7 digit) Make :- ABB / STROMKING All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge. Engineer-in-Charge.	NO	2	27250.00	54500.00
3	Supply, Installation, Testing & Commissioning of maintenance free chemical earthing having enhancing chemical compound with 3 Mtr. Long copper bonded steel rod and suitable termination clamp including all accessories. Make: - ABB / STAR-X / UNIVERSAL All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.	NO	5	16650.00	83250.00

4	Supply, connection &Testing of sub earthing with 16 Sq.mm single core multi stranded copper flexible wire from surge protection device (SPD) panel to earth electrode & Main panel board to SPD panel including all accessories, cable socketing and connections. Make:-FINOLEX / ANCHOR / HAVELLS All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge	MTR	18	154.73	2785.14
5	Supply, Installation, Testing & Commissioning of indoor type wall mounted Surge protection device (SPD) panel made of 2 mm thick CRCA sheet, dust and vermin proof duly powder coated having the following arrangement & complete factory wired by 16 Sq.mm single core multi stranded copper flexible wire. [A] Type 1+2 AC Surge Protection Device (SPD) (TP+N) (50 KA) - 01 Set [B] 63 Amp. HRC fuse with link – 03 Nos [C] 100 Amp. 4 pole stud connector – 01 No Make of SPD & HRC Fuse: HAVELLS / L&T / LEGRAND Make of Wire: FINOLEX / ANCHOR / HAVELLS All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.	NO	1	18665.00	18665.00
6	40002720 Supply and laying of 70sqmm single core FR PVC insulated unseathed copper conductor for voltage grade 1100 volt as per IS-694 in sur face/underground as required(sl no-5.5.2)(Make- KEI/FINOLEX/HAVELLS)	MTR	60	1041.47	62488.20

			1		
7	40003593 Supply & Erection of 12 mtr long Heavy gauge Tata MS stepped pole(6mtrx4inch and 6 mtr x 4 inch) with 2ft x2ft x 10mm MS Base plate and 30 cm x 30cm x6mm MS Top plate including fabrication, painting with 1 coat red oxide and 2 coat aluminium paint/12 mtr long heavy gauge G.I stepped pole with 4nos complete stay set for support of pole couping and concrting along with all accessories complete as required and as per electrical engineer-in-Charge.	SET	2	44714.99	89429.98 <b>509,618.32</b>
	Total Cost(PART-A+PART-B+PART-				6,515,912.32
	C+PART-D)				
	Cess @1%				65159.12
	Total Estimated Cost				6581071.44
	Total Estimated Cost in Figures				6,581,071.00
EXCESS	LESS 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 (Elect) I/C

Sd/Project Manager(Elect)