

Tender Inviting Authority: JOINT MANAGER [ELECTRICAL DIVISION] ,  
THE ODISHA STATE POLICE HOUSING & WELFARE CORPORATION LTD,

Name of work :-INSTALLATION OF AC,INTERNAL WIRING, FIXTURE , LIGHTENING PROTECTION SYSTEM & AREA  
ILLUMINATION WORK AT JMFC COURT BUILDING HINJILIKUT IN THE DIST. OF GANJAM.

Contract No: BID REF NO.- 20 /JM/ ELECT/OPHWC/2019-20

| Bidder Name              |  |      |      |                |            |
|--------------------------|--|------|------|----------------|------------|
| <u>SCHEDULE OF WORKS</u> |  |      |      |                |            |
| Sl. No.                  | Description of work  | Qty. | Unit | Estimated Rate | AMOUNT Rs. |
| <b>A</b>                 | <b>AC WIRING &amp; FIXTURE</b>   |      |      |                |            |
| <b>1</b>                 | Point wiring for 15/16 amp socket(For AC) outlet with 4.0sq.mm FR PVC insulated single core multistrand copper conductor ISI marked in recess 20 mm dia non metallic PVC flexible conduit with 32 Amp, 1 way DP modular type switch , phenolic laminated sheet suitable size ISI marked MS Box & earthing Point with 1 x 1.5 sq.mm FR PVC insulated single core multistrand copper conductor for loop earthing etc as required as per direction of Engineer in charge . ( Make of (a)wire Finolex / L &T / Anchor / Havels/ V guard/HPL(b) Switch/socket- ANCHOR/HAVELLS/L&T/LEGRAND/ ABB)       | 33   | Nos  | 953.99         | 31,481.67  |
| <b>2</b>                 | Supply and Fixing of 200 AMP. TPMCCB [35 KA] with 200 AMP. 415 VOLT CUT OUT - 03 NOS WITHOUT METER SPACE with 200 AMP , 25 / 6 MM. COPPER BUS BAR - 04 NOS, INSTRUMENTS- 0 –200 AMP. AMMETER WITH SELECTOR SWITCH - 01 SET ,200 / 5 AMP. CT - 01 SET, 0 – 500 VOLT. VOLTMETER WITH SELECTOR SWITCH - 01 SET ,INDICATING LAMP WITH CONTROLLING SWITCH - 01 SETincluding all accessories and connections as per instruction of Electrical Engineer-in-Charge. [make-(a)Mcb /Mccb - SIMENS/HPL/ABB/ANCHOR/L&T /HAVELLS/C&S , ( b)volt meter, ammeter-AE/CAPPA, (d) all other accessories ISI mark]. | 1    | Set  | 57,845.00      | 57,845.00  |
| <b>3</b>                 | Supply and laying of 95 sq.mm 3.5 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-25 sl no-5.1.2)Make-Cable- FINOLEX/ HAVELLS/ POLYCAB  | 50   | Mtr  | 674.83         | 33,741.50  |

|    |  |     |            |           |              |
|----|--|-----|------------|-----------|--------------|
| 4  | Supply and fixing of 4 way mcb Box ( 4+12) with 63 amp 4P Isolator/ 4PMCB & 12 nos 32 amp SPMCB with sheet steel encloser , distribution board, on surface/ recess, complete with tinned copper bus bar , neutral bus bar, earth bar, din bar , detachable gland plate, interconnection ,phosphate and power painted including earthing etc as required. ( Sl.No- 2.7.4, 2.5<(>&<)> 2.9)Make- (MCB/MCCB-Legrand/L&T/ABB)         | 5   | Set        | 4,044.38  | 20,221.90    |
| 5  | Recessed wiring to submain in 2 x 6 sqmm FR PVC insulated single core multistarnd copper conductor of ISI marked confirming to IS-694/1990 in 32 mm dia non metallic heavy duty flexible conduit 1.6 mm thick along with 1 x 2.5 sqmm FR PVC insulated single core multistrand copper conductor as earth wire as required from BDB AC to AC point (Make of wire Finolex / L &T / Anchor / Havels/ V guard/HPL)                   | 950 | Mtr        | 179.98    | 170,981.00   |
| 6  | Recessed wiring to submain in 4 x 16 sqmm FR PVC insulated single core multistarnd copper conductor of ISI marked confirming to IS-694/1990 in 32 mm dia non metallic heavy duty flexible conduit 1.6 mm thick along with 2 x 6 sqmm FR PVC insulated single core multistrand copper conductor as earth wire as required from MDB AC to BDB AC (Make of wire Finolex / L &T /Anchor / Havels/ V guard/HPL) ( CSR SL .No- 1.8.11) | 250 | Mtr        | 608.40    | 152,100.00   |
| 7  | Supply and installation of 1.5Tr. Split type Air Conditioner ( 3 Star) of reputed brand with supply and fixing of 5 KVA ,130-280 Volt voltage range wall/floor mounted stabiliser including all accessories,fastner angle copper piping up to 15ft & connections as per instruction of Electrical Engineer-in-charge MAKE of A.C. – CARRIER /MAKE – BLUE STAR, , MAKE OF STABILIZER- JYOTI/SHAKTI/ AUTOTEK                       | 22  | No         | 49,450.00 | 1,087,900.00 |
| 8  | Supply and installation of 2.0Tr. Split type Air Conditioner ( 3 Star) of reputed brand with supply and fixing of 6 KVA ,130-280 Volt voltage range wall/floor mounted stabiliser including all accessories,fastner angle copper piping up to 15ft & connections as per instruction of Electrical Engineer-in-charge MAKE of A.C. – CARRIER /MAKE – BLUE STAR, , MAKE OF STABILIZER- JYOTI/SHAKTI/ AUTOTEK                       | 11  | No         | 60,375.00 | 664,125.00   |
| 9  | Supply and fixing of <b>earthing</b> with G.I. earthing pipe 3 mtr long 40 mm dia ISI marked including accessories and providing masonry enclosure with cover plate having locking arrangement and watring pipe etc with charcoal and salt as reqd. ( csr sr.no- 3.2)  | 2   | <b>NO.</b> | 2,357.36  | 4,714.72     |
| 10 | Providing and fixing 8 SWG (4mm ) dia copper wire on surface or in recess for loop earthing as required. ( csr sr.no- 3.18)  | 120 | <b>Rft</b> | 25.73     | 3,087.60     |

| <b>B</b> | <b>COMPUTER WIRING</b>  |     |     |          | -         |
|----------|---|-----|-----|----------|-----------|
| <b>1</b> | Point wiring for Computer Point with 2.5 sq.mm FR PVC insulated single core multistrand copper conductor ISI marked in recess 20 mm dia non metallic PVC flexible conduit with 2 Nos of 5 Amp, 250 V modular type switch & socket , phenolic laminated sheet suitable size ISI marked MS Box & earthing Point with 1 x 1.5 sq.mm FR PVC insulated single core multistrand copper conductor for loop earthing etc as required as per direction of Engineer in charge . ( Make of (a)wire Finolex / L &T / Anchor / Havels/ V guard/HPL(b) Switch/socket-ANCHOR/HAVELLS/L&T/LEGRAND/ ABB) | 45  | Nos | 1,441.58 | 64,871.10 |
| <b>2</b> | Supply and fixing of 4 way mcb Box ( 4+12) with 63 amp 4P Isolator/ 4PMCB & 12 nos 32 amp SPMCB with sheet steel encloser , distribution board, on surface/ recess, complete with tinned copper bus bar , neutral bus bar, earth bar, din bar , detachable gland plate, interconnection ,phosphate and power painted including earthing etc as required. ( SI.No- 2.7.4, 2.5<(>&<> 2.9)Make-MCB-Legrand/L&T/ABB)  | 4   | Set | 4,044.38 | 16,177.52 |
| <b>3</b> | Recessed wiring to submain in 2 x 2.5 sqmm FR PVC insulated single core multistarnd copper conductor of ISI marked confirming to IS-694/1990 in 20 mm dia non metallic heavy duty flexible conduit 1.6 mm thick along with 1 x 1.5 sqmm FR PVC insulated single core multistrand copper conductor as earth wire as required from BDB to Swich board & Computer Point(Make of wire Finolex / L &T / Anchor / Havels/ V guard/HPL)  | 450 | Mtr | 132.64   | 59,688.00 |
| <b>4</b> | Recessed wiring to submain in 4 x 6 sqmm FR PVC insulated single core multistarnd copper conductor of ISI marked confirming to IS-694/1990 in 20 mm dia non metallic heavy duty flexible conduit 1.6 mm thick along with 1 x 2.5 sqmm FR PVC insulated single core multistrand copper conductor as earth wire as required from BDB to POWER POINT (Make of wire Finolex / L &T / Anchor / Havels/ V guard/HPL) ( CSR SL .No- 1.8.4)   | 180 | Mtr | 276.80   | 49,824.00 |
| <b>C</b> | <b>LIGHTENING PROTECTION SYSTEM</b>   |     |     |          |           |

|   |   |    |      |           |           |
|---|---|----|------|-----------|-----------|
| 1 | <p><b><u>Air-Terminal</u></b><br/>Supply, Installation, Testing &amp; Commissioning of Early Streamer Emission (ESE) type lightning Air terminal.</p> <p><b><u>Supporting Mast</u></b><br/>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.</p> <p><b><u>Protection Radius :- 48 Mtr.</u></b><br/><b>Make :- ABB / STROMKING / POWER TRAC</b><br/>All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.</p> | 1  | No   | 97,850.00 | 97,850.00 |
| 2 | <p><b><u>Lightning Strike Counter</u></b><br/>Supply, Installation, Testing &amp; Commissioning of non-electronic &amp; 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)</p> <p><b>Make :- ABB / STROMKING / POWER TRAC</b><br/>All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.</p>   | 1  | No   | 25,000.00 | 25,000.00 |
| 3 | <p>Supply, Installation, Testing &amp; Commissioning of 25 x 5 MM copper flat (Insulated / through 1.5" diameter super quality PVC pipe) from lightning air terminal to earth electrode on wall / ceiling/concrete column/under buried trench by proper saddling &amp; making connection at both ends the and making good the damages caused. All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge</p> <p><b>Make of PVC Pipe :- AKG / KINJAL / ORIPLAST</b><br/>S..(CSR SL . NO- 3.11) .</p>   | 48 | Mtr. | 509.11    | 24,437.28 |
| 4 | <p>Supply, Installation, Testing &amp; 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.</p> <p><b>Make :- ABB / STAR-X / UNIVERSAL</b><br/>All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.</p>   | 3  | No   | 15,200.00 | 45,600.00 |

|          |   |    |     |           |           |
|----------|---|----|-----|-----------|-----------|
| 5        | <p>Supply, connection &amp; Testing of sub earthing with 16 Sq.mm single core multi stranded copper flexible wire from surge protection device (SPD) panel to earth electrode &amp; Main panel board to SPD panel including all accessories, cable socketing and connections.</p> <p><b>Make :- FINOLEX / ANCHOR / HAVELLS</b></p> <p>All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.</p>   | 18 | Mtr | 154.73    | 2,785.14  |
| 6        | <p>Supply, Installation, Testing &amp; Commissioning of indoor type wall mounted <b>Surge protection device (SPD)</b> panel made of 2 mm thick CRCA sheet, dust and vermin proof duly powder coated having the following arrangement &amp; complete factory wired by 16 Sq.mm single core multi stranded copper flexible wire.</p> <p>[A] Type 1+2 AC Surge Protection Device (SPD) (TP+N) (50 KA) - 01 Set</p> <p>[B] 63 Amp. HRC fuse with link – 03 Nos</p> <p>[C] 100 Amp. 4 pole stud connector – 01 No</p> <p>Make of SPD &amp; HRC Fuse :- HAVELLS / L&amp;T / LEGRAND</p> <p><b>Make of Wire :- FINOLEX / ANCHOR / HAVELLS</b></p> <p>All the work should be carried out as per the specified specifications and instruction of the Engineer-in-Charge.</p> | 1  | No  | 18,665.00 | 18,665.00 |
| <b>D</b> | <b>AREA ILLUMINATION WORK</b>   |    |     |           |           |
| 1        | <p>Recessed wiring to Different Points with 1.5 sq.mm FR PVC insulated single core multistrand copper conductor of ISI marked with 20 mm dia non metallic PVC flexible conduit with 5 Amp, 250 V one way modular switch ISI marked and ceiling rose ISI marked mounted on MS Box having front bakelight cover of suitable size, MS Box with 1.0 sq. FR PVC insulated single core multistrand copper conductor as earth wire including all accessories and connection as per direction of Engineer in charge . ( Make of wire Finolex / L &amp;T / Anchor / Havels/ V guard/HPL) (b) Switch/socket- ANCHOR/HAVELLS/L&amp;T/LEGRAND/ ABB)</p>   |    |     |           |           |
| (a)      | Gate light Point  | 2  | Nos | 896.13    | 1,792.26  |

|   |   |     |     |          |            |
|---|---|-----|-----|----------|------------|
| 2 | Recessed wiring to Security Light Point ( MODULAR) (45 WT) with 1.5 sq.mm FR PVC insulated single core multistrand copper conductor of ISI marked with 20 mm dia non metallic PVC flexible conduit with 15 Amp, 250 V one way modular switch ISI marked and ceiling rose ISI marked mounted on MS Box having front bakelight cover of suitable size, MS Box with 1.0 sq. FR PVC insulated single core multistrand copper conductor as earth wire including all accessories and connection as per direction of Engineer in charge . ( Make of wire Finolex / L &T / Anchor /Havels/ V guard) (b) Switch/socket- ANCHOR/HAVELLS/L&T/LEGRAND/ ABB) | 2   | Nos | 919.77   | 1,839.54   |
| 3 | Supply & fixing of 45 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 with bulb,choke,cover,G.I bracket,clamp & nut bolt connecting wire all accessories ( Make- CROMPTON/ PHILIPS/ WIPRO)   | 24  | No  | 5,037.00 | 120,888.00 |
| 4 | Supply and fixing of <b>earthing</b> with G.I. earthing pipe 3 mtr long 40 mm dia ISI marked including accessories and providing masonry enclosure with cover plate having locking arrangement and watring pipe etc with charcoal and salt as reqd. ( csr sr.no- 3.2)   | 2   | NO. | 2,357.36 | 4,714.72   |
| 5 | Providing and fixing 8 SWG (4mm ) dia copper wire on surface or in recess for loop earthing as required. ( csr sr.no- 3.18)   | 40  | Rft | 25.73    | 1,029.20   |
| 6 | Supply and laying of 10 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. From LT pole to gate light ( sl no-5.1.1)Make-Cable- FINOLEX/ HAVELLS/ POLYCAB  | 60  | Mtr | 230.18   | 13,810.80  |
| 7 | 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   | 120 | Mtr | 250.79   | 30,094.80  |
| 8 | Supply and fixing of Post top Lanterns[GATE LIGHT] Complete set with lamp Make - CROMPTON, CODE-CFPT-118/ECO/ Make- HPL, CODE-HPLLPCFL26b22   | 2   | Nos | 3,349.37 | 6,698.74   |
| 9 | Supply & fixing of outdoor type pole/base mounted pvc Junction box[Make-Syntax] having 01 No 100 A 4 pole stud connector and 01 no 32 A SPMCB/32 A cutout including all accessories and connections.  | 2   | Nos | 1,597.82 | 3,195.64   |

|  |   |   |     |          |                   |
|--|---|---|-----|----------|-------------------|
| <b>10</b>  | Supply and fixing of outdoor/indoor type 63 A DPMCB panel having I/C- 63 A DPMCB-01 No, Outgoing-100 A 1-Phase copper busbar- 01 Set, , 02 nos 32 A DP Switch for indivisual control of minimast with powder coating, all accessories & connections.Make (a)MCB/MCCB- HAVELLS,LEGRAND,L&T,SIMENS,C&S, ABB,HPL,(b) all other accessories ISI mark] | 2 | Nos | 9,062.00 | 18,124.00         |
|  | <b>CESS</b>   |   |     |          | 28332.84          |
|  | Total Rs.   |   |     |          | <b>2861616.97</b> |
|  | Total Estimated Cost in Figures.  |   |     |          | <b>2861616.97</b> |
| EXCESS <input type="checkbox"/> LESS <input type="checkbox"/> (Please Tick) _____% |   |   |     |          |                   |
| Quoted Amount in Figures.  |   |   |     |          |                   |
| Quoted Amount in words   |   |   |     |          |                   |

**N.B-The Estimate Cost is Exclusive of G.S.T**

Signature of Tenderer with seal

Sd/-  
Asst. Project Manager (Elect.)

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

Sd/-  
Consultant (Elect.)

Sd/-  
Joint Manager (Elect.)