

Issued to: _____

BHARAT HEAVY ELECTRICALS LIMITED

RAMACHANDRAPURAM :: HYDERABAD-32
TOWNSHIP ADMINISTRATION

TENDER DOCUMENTS (PRICE BID)

Name of work : Electrical works for renovation of type-III & type-IV blocks (20 nos.) in NH-IV area.

Tender Notice : HY/TA/E/OT-03/2014-15, Dt. 16.02.2015; Item No. 02

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1. Schedule - A : Schedule of rates and approximate quantities

ADDRESS :

PHONE NO. : _____

E-mail : _____

SCHEDULE - 'A'

ELECTRICAL WORKS FOR RENOVATION OF TYPE-III & TYPE-IV BLOCKS (20 NOS.) IN NH-IV AREA.

Sl. No.	Nature of work	Unit	Qty. for type-III	Qty. for type-IV	Total Qty.	Rate	Amount
(1)	(2)	(3)	(4)			(5)	(6)
1(a)	Supply & Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Point	1128	N.A.	1128	416.00	4,69,248.00
1(b)	Supply & Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Point	N.A.	960	960	544.00	5,22,240.00
2(a)	Supply & Wiring for twin control light point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way piano type switch, phenolic laminated sheet, suitable size MS box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Point	48	N.A.	48	625.00	30,000.00
2(b)	Supply & Wiring for twin control light point with 1.5 sq.mm FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box, required bends, junction boxes etc. and earthing the point with 1.5 sq.mm. FR PVC insulated multistranded copper conductor single core cable etc as required; complete all as directed by Engineer-in-charge.	Point	N.A.	32	32	710.00	22,720.00
3	Supply and fixing 3-pin, 5 Amps. ceiling rose including connection etc. as required; complete all as directed by Engineer-in-charge.	Each	528	464	992	34.00	33,728.00

Sl. No.	Nature of work	Unit	Qty. for type-III	Qty. for type-IV	Total Qty.	Rate	Amount
(1)	(2)	(3)	(4)			(5)	(6)
4	Supply and fixing PVC batten / angle holder including connection etc. as required; complete all as directed by Engineer-in-charge.	Each	576	496	1072	34.00	36,448.00
5(a)	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing metal box of 150mm X 75mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 3 pin 5/6 amps socket outlet and 5/6 amps piano type switch, connection etc. as required; complete all as directed by Engineer-in-charge.	Each	384	N.A.	384	687.00	2,63,808.00
<u>5(b)</u>	Supply and wiring for light plugs (separate socket) with 2 x 1.5 sq.mm + 1 x 1.5 sq.mm (earth wire) of FR PVC insulated multistranded copper conductor single core cable in surface / recessed medium class PVC conduit as required along with Supply and fixing suitable size GI box on surface or in recess including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, modular plate, connection etc. as required; complete all as directed by Engineer-in-charge.	Each	N.A.	384	384	823.00	3,16,032.00
6(a)	Supply and fixing of 6 Amps. piano type switch and 3 pin 6 Amps. socket outlet on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	720	N.A.	720	65.00	46,800.00
<u>6(b)</u>	Supply and fixing of 6 Amps. modular switch and 3 pin 6 Amps. modular socket outlet with modular base & cover plate on the existing switch box including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	N.A.	704	704	313.00	2,20,352.00
7(a)	Supply and fixing metal box of 180mm X 100mm X 60mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including providing and fixing 6 pin 6A/16A amps socket outlet and 16 Amps piano type switch, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	144	N.A.	144	225.00	32,400.00
<u>7(b)</u>	Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 6 pin 6A/16A amps modular socket outlet and 16 Amps modular switch with neon, connection, etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 2.5 sq.mm run of mains)	Each	N.A.	224	224	366.00	81,984.00
8	Supply and installation of 20A SP MCB and 20A socket outlet in single phase MCB box on surface or in recess, with chained cover for the socket outlet and complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge. (wiring separate with 4.0 sq.mm run of mains)	Each	96	96	192	693.00	1,33,056.00

Sl. No.	Nature of work	Unit	Qty. for type-III	Qty. for type-IV	Total Qty.	Rate	Amount
(1)	(2)	(3)	(4)			(5)	(6)
9	Supply & wiring for circuit / submain wiring alongwith earth wire with the following sizes of FR PVC insulated multistranded copper conductor, single core cable in surface/ recessed medium class PVC conduit as required; complete all as directed by Engineer-in-charge.						-
a)	2 x 2.5 sq.mm + 1 x 2.5 sq.mm earth wire	Metre	5400	6400	11800	131.00	15,45,800.00
b)	2 x 4.0 sq.mm + 1 x 4.0 sq.mm earth wire	Metre	1800	1600	3400	162.00	5,50,800.00
c)	2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire	Metre	600	640	1240	206.00	2,55,440.00
10	Supply, fixing and connecting calling bell on Hylam sheet of thickness 3mm preferably white with suitable MS box concealed in wall; complete all as directed by Engineer-in-charge.	each	48	32	80	126.00	10,080.00
11	Supply and fixing of 63A, 415V rewirable fuse unit including connections etc. as required; complete all as directed by Engineer-in-charge.	each	36	32	68	121.00	8,228.00
12	Supplying and fixing following way, sheet steel, single pole and neutral MCB distribution board on surface / in recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required (But without MCB/RCCB/Isolator); complete all as directed by Engineer-in-charge.						-
a)	240V, 2 + 12 way, Double Door	Each	48	32	80	1,068.00	85,440.00
b)	240V, 2 + 6 way, Double Door	Each	N.A.	32	32	778.00	24,896.00
13	Supplying and fixing following rating isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge.						-
a)	240V, 63 Amps, double pole isolator	Each	48	32	80	303.00	24,240.00
b)	240V, 40 Amps, double pole isolator	Each	N.A.	32	32	245.00	7,840.00
14	Supplying and fixing Single Pole, 5 Amps to 32 Amps rating, 240/415 volts, "C" curve, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required; complete all as directed by Engineer-in-charge.	Each	576	576	1152	141.00	1,62,432.00
15	Supply & installation of earthing arrangement comprising of 40 mm dia, 3 mm thick GI pipe buried upto a minimum depth of 4.5 mtrs including excavation of pit and filling the pit with homogenous layers of coke/charcoal, salt & sand etc. as required conforming to IS Standards (IS:3043). The earth pit to be provided with brick masonry chamber with hinged cover and watering arrangement; complete in all respects, as directed by Engineer-in-charge.	Each	24	16	40	3,385.00	1,35,400.00
16	Providing and fixing 4.00 mm dia annealed copper wire on surface or in recess for loop earthing as required; complete all as directed by Engineer-in-charge.	metre	720	480	1200	87.50	1,05,000.00

Sl. No.	Nature of work	Unit	Qty. for type-III	Qty. for type-IV	Total Qty.	Rate	Amount
(1)	(2)	(3)	(4)			(5)	(6)
17	Supply, fabrication and mounting of 16 SWG (1.6 mm) MS sheet enclosure for power control cubicle panel / boxes with hinges & mechanical locking arrangements etc., including cutting, bending, drilling, welding & reveting etc., complete and painting with powder coating including cost and conveyance of all materials and labour charges; complete all as directed by Engineer-in-charge.	kgs	300	200	500	184.00	92,000.00
18	Supply & fixing of two run of 16.0 Sq.mm (7/16) twin core PVC insulated & sheathed WPTC 1.1 kV grade multistranded Aluminium Conductor flat cable of recommended make for service mains along with 7/20 SWG steel support wire including necessary clips insulation tape etc., for service tapping as directed by Engr-in-charge.	metre	840	560	1400	153.00	2,14,200.00
19	Supply, fabrication and fixing / grouting of eye bolt made of MS rounds 10/12/16mm dia. as directed by Engineer in charge.	kg	24	16	40	122.00	4,880.00
20	Supply & fixing of guy insulator of 80x50mm. One guy insulators to be fixed at either ends of the GI wire supporting the service connection cable.	Each	24	16	40	44.00	1,760.00
21	Providing and fixing of 40 mm dia G.I. pipes complete with G.I. fittings and clamps including cutting and making good the walls, for entry of service wire to the building. Also suitable size of PVC/Rubber bushes should be provided at the entry side; all complete as directed by Engineer-in-charge.	metre	96	64	160	264.00	42,240.00
22	supply & fixing of rigid conduit PVC pipe 40 mm dia and 2.0 mm thick (sudhakar make) on surface/concealed including bends; all complete as directed by Engineer-in-charge.	metre	96	64	160	72.00	11,520.00
23	Supply & fixing of bus bar insulators with necessary screw etc..	Each	96	64	160	22.00	3,520.00
24	Supply and fixing of crimping type copper lugs of suitable sizes confirming to I.S. specifications for cables upto 16 sq. mm. including connections; complete all as directed by Engineer-in-charge.	Each	1440	1200	2640	5.00	13,200.00
25	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required; complete all as directed by Engineer-in-charge. (Ceiling fan will be supplied by BHEL)	Each	144	160	304	73.50	22,344.00
26	Supplying and fixing stepped type electronic fan regulator on the existing switch box / cover including connections etc. as required; complete all as directed by Engineer-in-charge.	Each	144	160	304	322.00	97,888.00
27	Installation of exhaust fan (upto 450 mm sweep) in the existing opening, including making good the damage, connection, testing, commissioning etc. as required; complete all as directed by Engineer-in-charge. (Exhaust fan will be supplied by BHEL)	Each	96	96	192	163.00	31,296.00

Sl. No.	Nature of work	Unit	Qty. for type-III	Qty. for type-IV	Total Qty.	Rate	Amount
(1)	(2)	(3)	(4)			(5)	(6)
28	Dismantling and removal of old wirings and fittings such as switch boards / fans / tube lights / old wire accessories etc. Removed materials to be segregated and to be handed over at stores; as directed by directed by Engineer- in-charge.	L.S.	48	32	80	1,000.00	80,000.00
29	Dismantling & refixing of three phase / single phase energy meters 5-10/20 amps 250V / 415 V as directed by Engineer-in-charge.	Each	48	32	80	96.00	7,680.00
TOTAL		(Rupees fifty seven lakhs forty six thousand nine hundred & forty only)					57,46,940.00

Note:- The tenderers are required to quote their tender value on %age basis at excess or less or on par with estimated value.

Tender (%)	in figures	in words
Excess		
Less		
Estimate rate only		

Conditions :

1	A penalty of 0.1% of the gross value of work will be levied for every week's delay of work subject to a maximum penalty of 10% of the gross value of work.
2	The rate quoted by the contractor shall be inclusive of all taxes (except service tax) and duties levied by Central/State Govt. organizations as well as local authorities, as applicable from time to time.
3	Service tax will be extra if applicable for this contract. Service Tax if paid by the contractor with respect to this work will be reimbursed by BHEL on production of documentary evidence for having paid the service tax by the contractor.
4	The contractor if asked by the contract executing officer should produce proper documents (i.e., cash bills/invoices/delivery challans etc. in original) in support of purchase of materials, whichever is in the scope of the contractor as mentioned in the schedule of the contract.
5	Maintenance period : one (1) year from the date of completion

Sl. No.	Nature of work	Unit	Qty. for type-III	Qty. for type-IV	Total Qty.	Rate	Amount
(1)	(2)	(3)	(4)			(5)	(6)

Sl. No.	Name of accessories	Recommended Make to be used
1	FR PVC insulated multistranded copper conductor single core cable (1.5 / 2.5 / 4.0 / 6.0 sq.mm) (of suitable colour code as directed by Engr-in-charge)	1100 Volt Grade, Flame Retardant Low Smoke Type Only. FINOLEX / L&T / HAVELLS / ANCHOR.
2	PVC Conduits	Sudhakar / Avonplast / Nandi
3	6A & 16A piano type / modular type switches & sockets, Bell push	Anchor / GM / SSK / MK
4	Lamp Holder, 3-pin ceiling rose	Anchor / GM / SSK / MK
5	Calling Bell	Anchor / GM / SSK / MK
6	63A, 240V rewirable porcelain fuse unit	Anchor / GM / SSK / MK
7	MCB Dist. Board, 5-32A SP MCBs, 63A DP isolators	Havells / Legrand / Indoasian / Standard
8	Metallic MCB Distribution Box with Metal Clad Socket + Plug top (for Air Conditioner)	Havells / Legrand / Indoasian / Standard
9	16.0 Sq.mm (twin core) PVC insulated, sheathed, 1.1 kV grade Al. Conductor cable	Payal / Fincab / Gold / Havells
10	Stepped type electronic fan regulator	Anchor / GM / SSK / MK
11	Generally all materials supplied by the Contractor	approved make and ISI certified as agreed by the Engr.-in-Charge.