



**BHARAT HEAVY ELECTRICALS LIMITED**  
**RAMACHANDRAPURAM::HYDERABAD::32**  
**FACTORY CIVIL ENGINEERING DEPARTMENT**

**SCHEDULE- A**

Tender Notice No:

HY/FCD/OT-04/2013-14, Dt: 19.06.2013

**PRICE BID**

Item no.: 1

**Name of work: Construction of foundation for marking tables in 02 Shop in DE Bay  
(Civil & Electrical Works).**

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
	<b>Civil works</b>				
1	<b>Dismantling steel work</b> in built up sections in angles tees, flats and channels including all gusset plates, bolts, cutting rivets, welding etc., including dismembering and stacking within 50 meters lead including conveyance upto 2 KM etc. complete as directed by Engineer-in-charge.	14.00	MT	890.11	12,461.54
2	Dismantling <b>reinforced cement concrete</b> / plain cement concrete and disposing of debris upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	40.00	Cu.m	577.66	23,106.40
3	Dismantling <b>brick masonry</b> walls for all heights, removing and clearing the debris and carting away upto to lead of 2 KM including loading, unloading and spreading segregating useful materials as directed by Engineer-in-charge including the cost of all labour scaffolding etc., complete.	5.00	Cu.m	350.86	1,754.30
4	Dismantling the existing wooden / <b>aluminum partitions</b> /half height partitions if required into small units including removing doors and glass panes and stacking in stores, removing the old furniture, almirahs/records and any other items lying in the floor including transportation, loading & unloading, stacking in stores within 2 Kms lead etc. complete as directed by Engineer-in-charge.	190.00	Sq.m	75.00	14,250.00
5	Dismantling of aluminium gypsum partitions, doors, windows, fixed glazing and <b>false ceiling ( MS sheet / Arm strong)</b> including disposal of unserviceable surplus material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.	120.00	Sq.m	8.65	1,038.00
6	Brick work with Ground moulded clay FPS brick of class designation 75 in super structure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 Coarse sand) etc. complete as directed by Engineer-in-charge**.	7.00	Cu.M	2,104.00	14,728.00
7	Plastering in <b>CM 1:6, 20 mm</b> thick to internal and external surfaces of walls including the cost of all materials, labour, curing etc, complete -Upto 10.00 M level etc. complete as directed by Engineer-in-charge**.	65.00	Sq.m	65.80	4,277.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
8	Applying <b>two coats of oil bound distemper</b> of given shade <b>over a coat of primer</b> including through cleaning of the surfaces, cost of all labour and other incidentals etc. complete as directed by Engineer-in-charge. <b>(Only OBD, OBD Primer Paint will be supplied by BHEL).</b>	65.00	Sq.m	29.00	1,885.00
9a	Fabrication of structural steel work including all materials going into the process of fabrication and forming an integral part of steel work together with all shop and site rivets and electrodes for site welding as necessary and all site connections comprising sag rods, floor beams, girders, bracings, trusses and frame work for fixed false ceiling and for movable false ceiling, purlins with channel / angles, MS flat supports including all connections as per detailed drawings connected steel works etc., cleats, gusset plates, all bolts, nuts, washers, base plates, anchor bolts as per detailed drawings, cutting, welding and painting 2 coats of red-oxide primer before erection etc., complete. The rate shall include painting 2 coat of Red-oxide as per IS specifications and all charges for handling, leading and loading at the fabrication yard. <b>The raw structural steel sections, electrodes, gasses will be issued by BHEL on FREE of cost at BHEL stores**.</b>	3.00	MT	7,563.80	22,691.40
b	Erection of Steel work out lined in item No.9a above including the charges for handling, leading and stacking at site at approved locations prior to erection including all site rivetting, bolting, jointing and site welding where ever required etc. complete as directed by Engineer-in-charge.	3.00	MT	3,241.60	9,724.80
c	Painting at site of all structural steel work with 2 coats of aluminium paint / synthetic enamel paint of approved shade to trusses, columns, girders, bracings etc., with aluminium paint or synthetic enamel paint as required etc., complete. <b>The required paint only will be issued free of cost by B.H.E.L at BHEL stores.</b>	3.00	MT	596.50	1,789.50
10	Supplying and fixing <b>aluminumm partitions</b> with new anodised aluminun box section of size 101.60x 44.45x 2.00mm for verticals, and with 63.50x 38.10x 2.00mmm for horizontals spacing suitable to the site requirements and as approved by . Wherever doos are coming wooden runners are to be provided in the box section. The rate shall include grouting of frame to the floor properly fixed at ends to walls, cost of aluminum sections, labour etc. complete as directed by Engineer-in-charge. (The door opening shall be deducted for payment)	95.00	Sq.M	1,316.40	1,25,058.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
11	<b>Supply &amp; fixing of aluminium full/half height door</b> with new anodised aluminium box section powder coated in required colour of size 101.60 x 44.45 x 2.00 mm for verticals, top and middle rails and supply & Fixing of all aluminium fixtures and fittings suitable to the door , handles, suitable locking arrangement etc. complete , wherever members are joined wooden runners are to be provided bottom horizontals at spacing suiting to the site requirements as approved. Wherever doors are coming wooden runners are to be inserted in the box section. This includes grouting of rails / aluminium sliding section to the floor properly etc. complete as directed by the Engineer-in-charge. <b>Providing &amp; Fixing of 5 mm thick plain glass</b> with rubber beading with screwless snap on clips etc. for top portion of the door frame of approximate size 3'X 2.5" on each door leaf and <b>8 mm thick "Novapan" particle board, exterior grade, laminated on both sides</b> fixed to bottom portion of the door frame of approximate size 3'X4.5' on each door leaf with rubber beading, screwless snap on clips etc. complete .(No. of door- 1, door leaf- 2no.s and the approximate size of the door if 1.80 X 2.40 M - 2 No.s & 1.2m X 2.10M - 2No.s).	2.50	Sq.m	4,000.00	10,000.00
12	<b>Supply and erection of false ceiling</b> Providing and fixing in true horizontal level 600 mm x 600 mm false ceiling system manufactured by M/s. Armstrong World Industries using DUNE SUPREME RH 99 MICROLOOK EDGE WITH SILHOUETTE GRID, using hot dipped galvanized steel section, rotary stitched main tee of size 15mm x 42 mm web height, having 0.36 mm gauge at every 600 mm center to center maximum and rotary stitched cross tee of size 15 mm x 42 mm, having 0.33 mm gauge at every 600 mm. c/c. and wall angle of size 19 x 19 mm., having 0.35 mm gauge fixed to the periphery of the wall. The above grid is suspended at every 600mm c/c. in both directions using 2.0 mm. thick pre-straightened GI wire laying Dune Supreme Microlook Edge ceiling tiles manufactured by M/s. Armstrong World Industries, of size 600mmx600mmx15mm having NRC 0.50, Light reflectance of >85% (WT), thermal conductivity k = 0.052-0.057 W/m0K, Humidity Resistance of 99% (having LIFETIME GUARANTEE against SAG), having Fire Performance CLASS O / CLASS 1 (BS 476), surface having 3 coats of white paint - crisp finely granulated with microperforations, back of the tile duly sanded and finished with a coat of protective paint over the formed grid and complete in all respects. <b>Make: Armstrong/USG</b>	55.00	Sq. m.	1,130.00	62,150.00
13	<b>Dismantling Old Plastering / Granolithic flooring</b> and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 meters lead.	300.00	Sq.m	8.20	2,460.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
14	Granolithic topping of 25 mm thick using 1 cement 1 granite chips of 10mm down graded laid over base concrete when it is green conditions and <b>ironite finishing</b> 12mm thick using a mix of 50Kg of ironite , 200 Kg of cement and 0.30 Cu.m of granite metal 6mm down graded including cost of form work , curing etc. complete. - <b>The cement will be issued free of cost by BHEL at BHEL stores**.</b>	300.00	Sq.m	295.50	88,650.00
15	Finishing with <b>Epoxy Paint</b> (Two or more coats) at all locations prepared and applied as pre manufacturer's specifications including appropriate priming coat, preparation of surface etc. complete on concrete Work etc. complete as directed by Engineer-in-charge.	360.00	Sq.m	77.75	27,990.00
16	Providing and laying in position specified grade of reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement, including consolidation by vibrations for all works <b>up to plinth level</b> with <b>1:1½:3</b> (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size ) - <b>The cement and steel will be issued free of cost by BHEL at BHEL stores**.</b>	1.00	Cu.M	1,641.30	1,641.30
17	<b>Centering</b> and shuttering including strutting, propping etc.; and removal of form work, for walls (any thickness) including attached pilasters,butteresses, plinth and string courses etc. <b>upto plinth level.</b>	10.00	Sq.M	180.40	1,804.00
18	Grinding of the floor including grinding of the floor with floor grinding machine, removal of dirt, stains, oil patches etc. and washing and polishing in to a neat finish etc. complete as directed by Engineer-in-charge.	336.00	Sq.m	145.00	48,720.00
	<b>Total value for civil work</b>			₹	<b>4,76,179.24</b>
	<b>Electrical work</b>				
1	LIGHTING FIXTURES Supply & Installation of lighting fixtures with lamps as per the details below including necessary hardware such as clamps, nuts, bolts, nails, screws and suspension rods as required for fixing the fixtures in position as directed by architect / consultant, complete in all respects. Supply & fixing of energy efficient light fitting of Philips FBS 450/236 D6 HF wing -C- LX recess mounted direct, indirect light efficiency.	6.00	Each	5,175.00	31,050.00
2	Supply and 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.	8.00	Each	1,874.00	14,992.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
3	Supply and wiring for <b>light plugs (separate socket)</b> 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. (upto a length of 5m)	6.00	Each	687.00	4,122.00
4	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)	3.00	Each	225.00	675.00
5	Supply & laying of PVC pipe of dia 25mm (1") 1.5mm gauge for telephone cables including cost of all materials, labour charges etc. complete.	15.00	RMT	18.00	270.00
6	Supply and installation of copper wire/strips in following sizes 14 SWG copper bare wire	50.00	RM	50.00	2,500.00
7	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.	14.00		416.00	5,824.00
8	Supply, Installation and commissioning of 8way SPNDB for electrical distribution having below mentioned switchgears, complete in all respects. 63A, DP, MCB as incomer - 1 No. 16A, SP, MCB outgoing (10KA) - 8 Nos.	1.00	points	3,400.00	3,400.00
9	<b>WIRING</b> Supply & Installation of surface/concealed point wiring FRLS using 600v grade 1.5 SQ.MM copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through 1.2mm thick PVC conduits laid concealed over false ceiling or in wall chases including 1.0 SQ.MM green color copper earth wire and provision of grid plate type switches as approved by architect, complete in all respects etc. complete as directed by Engineer-in-charge. Primary light points of 5A switch.	14.00	points	1,087.00	15,218.00
10	Supply and laying of 2 runs of 2.5 SQ.MM. PVC insulated copper conductor FRLS cable along with 1run of 1.5Sq.mm PVC insulated copper conductor cable. Run in a 19mm dia. 1.2mm thick PVC conduit on surface of the ceiling or in wall etc. complete as directed by Engineer-in-charge.	6.00	points	144.00	864.00

S. No.	Description of the item	Qty	Unit	Rate (₹)	Amount (₹)
11	Supply and installation of end terminations for above mentioned cables, including compressed type brass glands, crimping type copper lugs, insulation tape etc. as required complete with earthing of glands in following sizes, complete in all respects. 4Cx120 Sq.mm copper	3.00	points	1,200.00	3,600.00
12	Supply & wiring for circuit / submain wiring along with earth wire with 2 x 6.0 sq.mm + 1 x 6.0 sq.mm earth wire 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.	50.00	RMT	206.00	10,300.00
13	Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation and refilling the trench etc. as required, but excluding sand cushioning and protective covering. Upto 35 sq. mm-(3½x25 Sq.mm)	50.00	RMT	41.50	2,075.00
14	Supplying and making indoor end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. 3 X 25 sq. mm (25mm)	4.00	Each	147.00	588.00
<b>Total value for electrical work</b>				₹	<b>95,478.00</b>
<b>Total value of work</b>				₹	<b>5,71,657.24</b>
<b>Total : ₹ Five lakhs seventy one thousand six hundred fifty seven and twenty four paise only</b>					

**Note:** \*\* The cement, structural steel will be issued free of cost by BHEL at BHEL stores.

1	A penalty of 0.5% of the gross value of work will be levied for every week's delay of work or part there of subject to a maximum penalty of 10% of the gross value of work executed after the period of completion.
2	The rates are inclusive of all taxes and duties except Service tax, which is extra as per service tax norms will be paid by BHEL to the agency after submission of necessary documents.

**Note :** The bidders are required to quote the tender value on percentage (%) basis at excess or less or on par with estimate value in figures and words.

Tender %	In figure	In words
Excess		
Less		
Estimated value		