

Issued to agency:



BHARAT HEAVY ELECTRICALS LIMITED
RAMACHANDRAPURAM, HYDERABAD-32
FACTORY CIVIL ENGINEERING DEPARTMENT

SCHEDULE- A

PRICE BID

Tender Notice No:

HY/FCD/OT-02/2009-10 , Dt: 17.04.09

Item no: 1

Name of the work :- Providing civil works to 6 axis taping machine in coil shop of 02 block.

S.No.	Nature of work	Qty	Unit	Rate in Rs	Amount
1	Dismantling reinforced cement concrete / plain cement concrete and disposing of debries upto to a lead of 2 KM including loading, unloading and spreading as directed by Engineer-in-charge etc., complete.	5.86	One Cu.m	582.68	3414.50
2	Dismantling brick masonry walls for all heights, removing and clearing the debries 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.	9.11	One Cu.m	355.88	3242.07
3	Dismantling the existing wooden doors and windows carefully along with fixtures and fittings handing over to stores as directed Engineer-in-charge. The rate quoted shall include cost of frame, hinges and fasteners.	1.92	Sq.m	54.60	104.83
4	Dismantling Steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc; including dismembering and stacking within 50 metres lead.	0.20	MT	850.00	170.00
5	Dismantling carefully the existing ventilators from brick work and stacking neatly and handing over at BHEL stores or as directed by Engineer-in-charge etc., complete.	0.02	Sq.m	54.60	1.09
6	Dismantling the existing wooden / aluminium partitions into small units including removing doors, glass panes, etc., transporting and stacking carefully for reuse, in the departmental stores complete. All as directed by the Engineer-in-charge.	11.82	Sq. m	45.65	539.58
7	Providing and laying in position cement concrete of specified garde excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size).	3.00	Cu.M	2449.00	7347.00

S.No.	Nature of work	Qty	Unit	Rate in Rs	Amount
8	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 up to plinth level with 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate of 20 mm nominal size).	4.00	Cu.M	3732.00	14928.00
9	Reinforcement for R.C.C. work including straightening , cutting , bending , placing in position and binding grills with binding wire all complete by cold twisted bars.	0.40	M.T	42700.00	17080.00
10	Grouting with Fos Rock grouting material, cost of labour, curing, for all leads and lifts etc; complete (Grout Material will be issued on FREE cost of by BHEL at their storea). For pockets	2.00	Cu.M	400.00	800.00
11	Supply and applying 3000 microns thick medium duty flooring of epoxy polyurethane (EPU Based product) floor coat on concrete floor, of approved shade and brand. The scope of work includes surface preparation and application as directed by the manufacturer with a warranty of one year from the date of completion of work. The work should be carried through Authorized applicator of Cipy products. EPU coating should be carried after 2 month of completion of granolithic finish to ensure moisture free surface. (The detailed specification of EPU flooring is given below) ... contd...	350.00	Sq.m	1625.00	568750.00
	The detail specification for application of EPU flooring is as stated below : Testing is done as directed by the manufacturer and the test like Clean, dry and sound test should be conducted. Moisture test should be conducted by moisture meter or plastic sheet method. The residual moisture in the concrete should not be more than 4-5%. The concrete must be clean, dry and sound before EPU coating is applied to it. • Clean means that there is no foreign matter such as dust, dirt, grease or oil on the concrete • Dry means no free water is present. • Sound means there is no laitance or weak surface skin on the top of the concrete. a) Surface preparation The surface should be free from oil grease and foreign particles, which will be achieved by mechanical power tool/manual cleaning and solvent cleaning and scarifier attached with vacuum cleaner up to the depth of 100 to 200 microns loose laitance will be removed. ...contd...				

S.No.	Nature of work	Qty	Unit	Rate in Rs	Amount
	<p>b) Primer application: Providing and applying EPU primer, cipoxy 14 in the ratio 1:1 on the scarified surface by brush or roller or trowel and allow for 6 hours curing.</p> <p>(c) Screed application: Providing and applying 3 component cipoxy 14 and FQ 150 sand 100% solids in the ratio 1:1 and mixed with one part of FQ 150 sand in power mixture to achieve homogeneous mix and applied and leveled by troweling to form a monolithically layer for a thickness 2000 microns and allow curing for 4 to 5 hours</p> <p>d) Grinding: The entire surface would be grounded mechanically to remove any undue protrusions after grinding the entire dust particles would be removed by the vacuum cleaner.</p> <p>e) Sealer application: A layer of Epoxy polyurethane sealer putty will be applied to seal all the micro porosities and allow to dry for 1 to 2 hours. .. contd...</p>				
	f) Self leveling EPU top coat: Cipothane SL is a self leveling, two component EPU based pigmented top coat recommended for epoxy floor coatings. It has excellent flexibility & adhesion.				
	Ensure that the sealer coat is dried. Grind the surface with grinder. Cipothane SL resin is pigmented. Stir it well before mixing with hardener. Mix Cipothane SL (100% solids and solvents) resin and Cipothane SL Hardener in 2:1 ratio by volume. Agitate the mixture for 10 minutes. Apply by leveler at the thickness of 800 microns. Then deaerate by using spike roller. Allow to cure for overnight.				
12	Brick work with FPS bricks of class designation 75 in superstructure above plinth level up to ground floor in all shapes and sizes in cement mortar 1:6.	10.00	Cu.M	2357.40	23574.00
13	Plastering in CM 1:6 , 20 mm thick to internal and external surfaces of walls including the cost of all materials , labour , curing etc, complete -Upto 10.00 M level.	100.00	Sq.m	95.10	9510.00
14	Thorough cleaning of existing oil bound distemper paint/white washing with water by scrapers or any other suitable tools and applying one coat of oil based cement primer and applying 3 coats altek lappam one coat after drying the previous coat and sand papering and applying one coat of oil bound cement primer etc., complete as directed by the Engineer-in-charge. (Only OBD Paint will be supplied by BHEL)	610.00	One Sq.m	84.10	51301.00

S.No.	Nature of work	Qty	Unit	Rate in Rs	Amount
15	Supply and aluminium partition with new anodised box - section of size 101.60 X 44.45 X 2 mm for verticals, Top & Horizontal and 63.50 X 38.10 X 2 mm for intermediate horizontal at spacing suiting to the site requirements as approved. Wherever doors are coming wooden runners are to be provided into box section. This includes grouting of the frame to the floor properly fixed at ends to walls, cost of aluminium section, labour etc; Complete. (The door opening shall be deducted for payment).	117.00	One sq.m	1316.00	153972.00
16	Supply & fixing 5.5 mm thick plain / ground glass to the aluminium frame with rubber beading screwless snap on clips etc. complete	40.00	One sq.m	668.00	26720.00
17	Supply and fixing 9 mm thick pre-laminated particle board both side laminated exterior grade fixed to frame with rubber beading screw less snap on clips etc., complete.	81.00	One sq.m	534.00	43254.00
18	Providing and fixing in true horizontal level 600 mm x 600mm 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 centre to centre 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, and 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, of the tile duly sanded and finished with a coat of protective paint over the formed grid and complete in all respects. Boards, where light fixtures to be fixed shall be handed over to Department. Make: Armstrong	380.00	Sq.m	1130.00	429400.00

S.No.	Nature of work	Qty	Unit	Rate in Rs	Amount
19	Supplying and fixing aluminum sliding door shutters automatic closing/opening(photo electric cell) type made out of new anodised aluminum box section of size 44.50x 47.50x 2.00mm for verticals, top and middle rails and 101.60x44.50x2.00mm for bottom rail inclusive of supply and fixing of all aluminum fixtures and fittings such as handles 2 nos, 1 No of tower bolt 12mm dia 200mm long, 3 nos of 4" long(100mm) butt hinges, stopper 1 No and suitable locking arrangement etc. complete all as directed by Engineer in charge etc. complete.	15.00	Sq.m	7866.00	117990.00
20a	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. The raw structural steel sections, electrodes, gasses will be issued by BHEL on FREE of cost at their stores	4.83	MT	12579.00	60756.57
b	Erection of Steel work out lined in item No.20 a 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.	4.83	MT	Rate included in the above item	
c	Erection of structural steel work outlined above including the charges for handling, leading and stocking at the site at approved locations prior to erection include all site welding, revittings, bolting, jointing and site welding etc., complete.	2.27	MT	1944.00	4412.88
21	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. The required paint only will be issued free of cost by B.H.E.L at their stores.	7.10	MT	596.50	4235.15

S.No.	Nature of work	Qty	Unit	Rate in Rs	Amount
22	Plastering over roof slab in CM 1:4, 20mm thick mixed with water proofing compound, Make: "Sika" @ 3% by weight of cement as per manufacturer's specification, curing as directed. Rate quoted shall include finishing, cost of all materials and labour etc., complete. (Cement =7.69 kgs/sq.m x3% WP@ Rs 20.00 per kg=Rs 4.61) upto 10 m height.	40.00	Sq.m	115.06	4602.40
23	Supply and fixing aluminium composite panel (ACP) 3 mm thick in required colours for exteriors, consisting of two layers of aluminium skins of 0.25 mm thick sandwiching a thermo plastic core in continuous lamination process with PVDF resin coating for exterior grades ensuring long colour and no fungal attacks. The above panels shall be fixed on structural steel arches provided for shop entrances. It includes cost of labour, materials accessories adhesives, scaffolding wastages, transport, taxes fixing into a neat finish in a esthetic point of view without any undulations in faces.	20.00	sq m	2991.00	59820.00
24	Removing of Sky Light glazing from RCC roof of Coil shop and disposal as directed upto a distance of 2 KM.	65.00	sq m	33.47	2175.55
Total				Rs	1,608,100.63
Total : Rupees sixteen lakhs eight thousand one hundred and paise sixty three only.					

I / We have quoted% above [] / below [] (tick the relevant) for the rates given above.
% in words:

Name of the contractor :

Signature of the contractor

Accounts Representative

Opening Officer