

Issued to agency:



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

SCHEDULE- A

Tender Notice No:

**PRICE BID**

HY/FCD/OT-1/2009-10 , Dt: 11.04.09

Item no: 5

Name of work: Maint of structural steel works, AC sheet roofing, rainwater pipes.  
 Cleaning of cob webs in Factory area and Admn.Bldg.

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
1	Repairing the leaking PVC joints of rain water pipes, at all levels in factory blocks. The work includes opening of joints, cleaning properly and applying sealing compound to arrest further leakages in the joints. The rate quoted shall include cost of all jointing materials and labour etc., complete.	300.00	Each	43.34	13002.00
2	Closing of sheet cracks, bolt holes or any puchers in the A.C. sheets at roof levels. (Required consumable materials will be supplied by BHEL free of cost at their stores).	300.00	Each	10.45	3135.00
3	Removing of old A.C. sheets, translucent sheets from roof, side walling of factory blocks and sheds and refixing with new/old sheets at all height including transportation of A.C. sheets and disposing off old sheets to a lead of 2 K.Ms. etc., complete as directed. (Required consumable materials will be supplied by BHEL free of cost at their stores).	4000.00	One Sq.M	72.82	291280.00
4a	Supplying and fixing of Tracdek Hi-rib single skin bare galvalume / Zinalume sheets of 0.5 mm thick. One Meter width and length upto 12 M with Factory cut and fixing to the roof shall be crest fixed to roof purlins with number 12-14 x 55 mm long polymer coated galvanized hex-head self drilling screws with integral washers and EPDM seals (4 fasteners for per support) for sheet etc., compete as directed. (including cost of galvalume sheets). - for roofing-Plain.	25.00	One Sq.M	660.00	16500.00
b	.. do .for louvers and cladding (colored)	50.00	One Sq.M	720.00	36000.00

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
5	Removing old G.I. bolts, nuts and washers from the existing A.C. sheeting work or roofs and side cladding of factory blocks and fixing with new G.I. 6.5mm dia 'L' bolts with nuts, washers, bitumen washers etc., complete as directed. The new G.I. bolts should be dipped in Acid/Alkali resisting paint before fixing in position. The bolts, nuts and washers etc., should be suitable as per site conditions. (GI 'J' Bolts & 'L' Bolts, washers and nuts will be supplied by BHEL at their stores).	500.00	Each	3.30	1650.00
6	Removing the existing broken A.C./M.S. spiral pipes and fixing new P.V.C. pipes of 100 mm to 159 mm dia and standard length including cost of jointing materials, labour, conveying new pipes and dismantled pipes to stores etc., complete as directed. (P.V.C. pipes and specials will be supplied by BHEL free of cost at their stores).	300.00	One R.M	88.55	26565.00
7	Fabricating and fixing MS Clamps of 50 mm width fabricated with MS flat/plate of 3.15 to 5 mm thick for PVC pipes of 150 mm dia at all heights of blocks, drilling suitable holes for clamping the pipe with bolts of 16 mm dia of suitable length with nuts, welding the clamps to the MS columns etc., complete as directed by Engineer-in-charge. The rate quoted shall include cost of bolts, nuts and washers, painting two coats with Synthitic Enamel paint over a coat of red oxide primer. (MS plates, flats, acetylene, oxygen will be issued at free of cost by BHEL at their stores)	150.00	Each	36.00	5400.00
8	Fixing M.S./G.I. flashing over the roof of factory blocks or outside walkways, gutters and around ducting including cutting, bending, fixing in position etc., complete as directed by Engineer-in-charge.	100.00	One Sq.M	119.00	11900.00
9	Making locking arrangements to panelled steel door shutters, sliding doors/rolling shutters such as aldrops, tower bolts if any. Such arrangements including gas cutting, welding etc., complete as directed by Engineer-in-charge.	50.00	Each	337.00	16850.00
10	Fabrication and erection of panelled steel door shutter sliding or hinged, Including gas cutting, welding of sheets or angles wherever required etc., complete as directed by Engineer-in-charge. (Structural steel sections will be issued free of cost by BHEL).	50.00	One Sq.M	248.00	12400.00

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
11	Dismantling M.S. partitions (Weldmesh, glazed or panelled) of standard size 1.20 M x 2.40 M or 1.20 x 3.30 M including M.S. Posts and transporting and stacking the materials for reuse etc., complete as directed by the Engineer-in-charge (The rate shall include for removing glass panes before dismantling glazed partitions and stacking glass panes)	100.00	Each	643.35	64335.00
12a	Fabrication of M.S. partitions, (weldmesh, glazed or panelled) of the following sizes as directed. (Strl. Steel sections will be issued free of cost by BHEL). i. Size 1.20 M x 2.40 M.	7.00	Each	562.85	3939.95
12b	ii. 1.20 M x 3.30 M.	7.00	Each	757.10	5299.70
13a	Erection of M.S. partitions (No fabrication) weldmesh / glazed or panelled of the following sizes, with required M.S. posts for fixing with nuts and bolts, drilling holes in C.C. floor complete as directed by Engineer-in-charge. The rate shall include for cost of fixing glass panes after erection of partition frame in case of glazed partition. i. Size 1.20 M x 2.40 M	5.00	Each	447.60	2238.00
13b	ii. 1.20 M x 3.30 M size.	5.00	Each	649.80	3249.00
14	Erection of steel doors for M.S. steel partition for cabins (weldmesh, glazed or panelled) with required M.S. posts and all accessories such as hinges, aldrops etc., including gas cutting, welding etc., complete as directed by Engineer-in-charge. (The rate shall include for fixing glass panes after erection of door in case of glazed doors). (Size approximately 1.20Mx2.40M).	10.00	Each	376.80	3768.00
15	Fixing of weldmesh / expanded metal to angle iron frame of suitable size for RCC louvers/ceiling including gas cutting and welding as directed by the Engineer-in-charge. (M.S. angle iron frame, weldmesh/expanded metal will be supplied by BHEL at their stores at free of cost).	100.00	One Sq.M	69.65	6965.00
16	Dismantling of weldmesh / expanded metal from ceiling including gas cutting etc., complete as directed by Enginner-in-charge. ed by Enginner-in-charge. The dismantled materials should be handed over to BHEL stores for reuse the same wherever it is required.	35.00	One Sq.M	36.70	1284.50

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
17	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 welding as necessary and all site connections. The rate shall include painting with one coat of red oxide as per I.S. specification and all site charges for handling, leading and loading and unloading of materials at fabrication yard. ( The raw structural steel sections acetylene, oxygen will be issued free of cost).	40.00	One MT	6329.55	253182.00
18	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.	40.00	One MT	2599.40	103976.00
19	Dismantling the existing structural steel work carefully by loosening nuts, gas cutting as per the site conditions for reuse and stacking at site/handing over to stores as directed by Engineer-in-charge.	15.00	One MT	1844.90	27673.50
20	Dismantling the existing structural steel work Carefully by loosening nuts, gas cutting as per the site conditions and re-erecting the same, suitably modifying by gas cutting, welding, drilling new holes, jointing the new members by welding or bolting etc., complete.	10.00	One MT	5505.90	55059.00
21	Erection of cycle shed of <b>5 spans</b> including erection of steel posts, trusses and purlins and fixing of Galvalume /A.C. sheet and ridges, using 'J' bolts, nuts, etc., complete as directed by Engineer-in-charge.(labour charges only)	5.00	Each	7610.65	38053.25
22	Earth work excavation in all soils except rock requiring blasting for an initial lead of 10 M and initial depth of 1.5 M including strutting, shoring if any and dressing the bottom of excavation to receive concrete etc., complete.	10.00	One Cu.M	103.40	1034.00
23	Plain cement concrete 1:4:8 using 20 mm and down graded granite stone metal for levelling course including ramming, condolidation curing etc., complete. (60% of 20 mm metal and 40% of 10 mm metal).	10.00	One Cu.M	2449.00	24490.00
24	Dismantling of cycle shed of 5 spans including removal. Transporting and stacking at BHEL stores or any other place (upto 2 KMs. lead) for reuse of A.C. sheet, ridges, purlins, trusses, columns, etc., complete steel columns shall be loosened by breaking concrete using necessary tools etc., as directed by Engineer-in-charge.	5.00	Each	4833.85	24169.25

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
25	Removing the existing A.C. sheets carefully from factory blocks and ceiling along with 'J' blots, nuts etc., of steel cabins and cycle sheds, transporting and stacking at BHEL stores or other specified places (upto 2 KMs., lead) as directed by Engineer-in-charge.	400.00	One Sq.M	43.65	17460.00
26a	Fabrication and fixing of M.S./G.I. pipes/M.S. round for railings to crane gantries. Catwalkways at all heights by jointing or connecting through threading, welding etc., complete.	200.00	One RM	85.10	17020.00
26b	-----do----- ground level	100.00	One RM	72.35	7235.00
27a	Fabrication bending to shape and erection of rain water gutters at roof level including all materials going into the process of fabrication and fixing an integral part of steel work together with all rivets and electrodes for shop or site weldings necessary and all site conditions. The rate shall include removal of old/spoiled valley /eaves gutters, painting with one coat of red oxide to relevant ISspecification before erection and also for all charges for handling, loading and unloading of materials at fabrication yard. The work has to be executed at full height of the blocks. The rate shall include removal and refixing of A.C sheets and North light glazing. a. Valley gutter of 750 mm size using 3.15 mm to 5 mm thick plate made into required shape.	220.00	One RM	564.10	124102.00
27b	Eaves gutter of 400 mm dia using 3.15 mm to 5 mm thick plate.	10.00	One RM	345.00	3450.00
27c	walk ways of size varying from 1.20 M to 1.60 M using M.S. angles of size 60 x 60 x 6 mm / 45 x 45x 6 mm and M.S. pipes of 20 mm dia.	20.00	One RM	228.00	4560.00
28	Fixing wooden planks for walkway in factory blocks including cutting to size. Drilling holes to wooden planks, cost of bolts, nuts and washers etc., complete but excluding cost of wooden planks which will be supplied by BHEL free of cost at their stores.	300.00	Each	56.00	16800.00
29	Supplying and fixing aluminium strips for fixing wire glasses including removal and disposal of the existing damaged aluminium strips to specified places (upto a maximum lead of 2 KMs.) etc., complete. The strips should be suitable to the glasses which will be fixed against item No. 29)	100.00	One RM	141.00	14100.00

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
30	Cleaning of North light glasses on both sides at roof level of factory blocks with paint remover or any suitable chemical solution to the satisfaction of the Engineer-in -charge. The glazing will be consist of 1.52 M and 1.22 M with a overlap and air gap. (BHEL asses one U.S.W. for cleaning for 5.00 Sq.m.).	1000.00	One Sq.M	42.85	42850.00
31	Transporting and fixing in position of North light glazing to factory blocks including fixing of wired glasses, aluminium strips, glazing runners, accessories, bolts, nuts, washers, clamps etc., complete (Only labour charges are to be quoted, and all materials will be issued free of cost by BHEL at their stores).	150.00	One Sq.M	76.50	11475.00
32	Repairs to sliding doors / rolling shutters / panelled type doors / collapsible gates etc., in factory area including lowering of shutters, repairing in all respects such as straightening of bends, welding of sheets or angles, wherever required and reerecting the same including locking angements, before and after closing the doors. The doors to be finished in good condition as directed by Engineer-in-charge.				
32a	Repairs / Replacement of hinges.	50.00	Each	80.12	4006.00
32b	Locking arrangements	0.00		61.24	0.00
32c	Repairs to shutters	800.00	One Sq.M	223.21	178568.00
33	Removing the existing unserviceable collapsible shutter and handing over to stores, supplying and fixing in position new collapsible steel shutter with vertical channels 20 mmx 10 mm x 2 mm braced with flat iron diagonals 20 mm x 5 mm size with top and bottom rails or M.S. 'T' 40 mm x 40 mm x 6 mm with 38 mm dia steel pulleys complete with bolts and nuts. locking arrangements, stoppers, handles, including applying one coat of red oxide primer before erection and two coats of synthetic enamel paint of approved colour and brand after erection etc., complete including cost of all materials.	25.00	One Sq.M	2592.70	64817.50

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
34	Removing the existing unserviceable rolling shutters and handing over to stores. Supply and fixing new rolling shutter of approved make, made of 80 x1.25 mm M.S. laths interlocked together through their entire length and jointed together through their entire length and jointed together at the ends by end locks mounted on specially designed pipe shaft with bracket plates, guide channels and arrangement with inside and outside locking including the cost of supply and fixing the hood cover 1.25 mm thick, Helical springs 2 Nos 27.5 cms long, ball bearings requisite number of approved make and brand, gear box with crank handle, with one cost of red oxide primer and two coats of synthetic enamel paint of approved brand and shade including cost of all materials etc., complete.	10.00	One Sq.M	1208.45	12084.50
35	Repairs to steel windows ventilators such as welding of rivets, flats, pegstays, soppers, parliamentary hinges and strightening of bends in the frame work etc., complete (Plates and pegstays will be given free of cost at BHEL stores).	200.00	One Sq.M	88.55	17710.00
36	Removing cobwebs, including cleaning the dust from the roof sheeting, structures, wired glasses, cranes, girders,gantries, side sheeting and cladding and from top of internal annexes, cabins partitions and sweeping the floor of the resultant dust and waste and disposing the same to specified places (Upto a lead of 2 KMs.) as directed by Engineer-in-charge. (The measurement will be as per the floor area of the factory blocks).	500000.00	One Sq.M	0.62	310000.00
37	Cleaning of valley gutters over the factory roof including cleaning the dust, muct etc., from the A.C. sheets and pouring the waste materials through buckets or with gunny bags by arranging all necessary safety precautions and disposing off the same to specified areas (Upto a lead 2 KMs.) as directed by Engineer-in-charge. The rate shall include for sweeping of factory floors to remove any dust fallen during the operations. (The measurements as per rain water gutter lengths.	50000.00	One RM	1.50	75000.00
38	Cleaning of roof, roof terraces with brooms and brushes and removing the debries including removing the weeds on the walls and terraces, canopies, chajjas etc., complete. (Payment will be made as per plinth area of the building.)	50000.00	One Sq.M	0.64	32000.00

S No.	Description of the item	Approx. Quantity	Unit	Rate in Rs	Amount Rs.
39	Cleaning glass panes of window, partitions with paint remover and thinner, to remove the strains on both sides of glasses. (Payment will be made to one side area of the glasses only).	1200.00	One Sq.M	5.50	6600.00
40	Supply and fixing glazed steel windows and ventilators of approved make including supply and fixing 4 mm thick plain glass with best quality putty. MS handles and peg stays including painting with two coats of synthetic enamel paint over one coat of red oxide paint including supplying and fixing weldmesh 50 x 50 mm (8G x 8 g). The window section and fabrication shall confirm to I.S. 1038.	6.00	One Sq.M	1114.00	6684.00
41	Removing of AC sheet over annexe terrace and cleaning the terrace and refixing the AC sheets after cleaning etc., complete as directed by Enginner-in-charge.	200.00	One Sq.M	31.40	6280.00
42	Supply & fixing in position stainless steel fly mesh of 20 x 30 G including fixing with suitable MS flats including cutting mesh and flat to required size, fixing neatly necessary welding, riveting, cost of all materials and labour etc. complete. (Acetylene, oxygen will be issued by BHEL on free of cost).	100.00	One Sq.M	400.00	40000.00
43	Supplying and fixing of 50mm (2") dia stainless steel tubular railings ( pipe of A304 grade 1.2 mm thick) as per design and drawing of BHEL. The cost will include bending, welding/brazing, buffing , polishing, fixing to the plumb, wastage, etc., complete.The above pipe will be used for hand railing , veritcal pipe, horizontal pipe as per requirement.(The vertical pipe will be embeded in concrete for a depth of 45 cm from finshed floor level alon with necessary hold fasts.The veticals will be at intervals of 1.2 to 1.5 M.).The payment will be made for finished quantity measured above finished floor level.)	30.00	One RM	1435.00	43050.00
				Total: Rs	<b>2,109,250.15</b>

Total in words : Rupees Twenty one lakhs nine thousand two hundred and fifty 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