



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

SCHEDULE - A

PRICE BID

Tender notice No:HY/FCD/OT-13/09-10

Dt: 12.10.2009

Item no: 2

Name of work: - Construction of New areas for Re- location of Internal stores etc., for HE & Fab

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
1	Earth work in excavation in all soils by mechanical means (Hydraulic Excavators) / manual means in foundations trenches or drains (not exceeding 1.5m in width or 10 Sq.m on plan) including dressing of sides and ramming of bottoms, lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50M.	1654.00	Cu.m	103.40	171023.60
2	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual means over areas (exceeding 30 cm in depth , 1.5 m in width as well as 10 Sq.M on plan) including disposal of excavated earth , lead upto 50 m and lift upto 1.5 m, disposing earth to be levelled and neatly dressed for Hard Rock (Blasting prohibited).	165.00	Cu.m	325.25	53666.25
3	Filling with available excavated earth (excluding rock) in trenches , plinth , sides of foundations etc. in layers not exceeding 20 cm in depth , consolidation each deposited layer by ramming and watering , lead upto 50.00 m and lift upto 1.50 m.	910.00	Cu.m	45.70	41587.00
4.a	Conveyance of excavated spoil up to a lead of 2 Kms, including loading , unloading and spreading etc. complete as directed by Engineer- in- charge.	910.00	Cu.M	56.41	51333.10
b	Extra for Conveyance of excavated spoil beyond a lead of 2 Kms and up to a lead of 3 Kms, including loading , unloading and spreading etc. complete as directed by Engineer- in- charge.Additional to 9.a	100.00	Cu.M	6.91	691.00
5	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.	423.00	Cu.m	2357.40	997180.20
6	Providing and laying in position cement concrete of specified grade 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).	455.00	Cu.m	2449.00	1114295.00
7	Providing and laying in position specified grade, of Reinforced cement concrete excluding the cost of centering, shuttering, finishing and reinforcement - all work up to plinth level with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size) -	10.00	Cu.m	3359.60	33596.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
8	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size).	128.00	Cu.m	3257.45	416953.60
9 a	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).	365.00	Cu.m	3732.00	1362180.00
9 b	Providing and laying in position ready mix concrete manufactured in fully automatic batching plant and transported to site of work in transit mixer for a lead up to 25 KM having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and reinforcement including cost of admixures in recommended proportions as per ID: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-in-charge. M 20 grade Reinforced cement concrete by using 320 kgs of cement per cu.m of concrete. All works upto floor V level.	200.00	Cu.m	3886.00	777200.00
10	Coursed rubble masonry in second sort with hard stone in foundation & plinth with cement mortar 1:6 (1 cement : 6 coarse sand)	195.00	Cu.m	1913.10	373054.50
11	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 ironite finishing 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.	1250.00	Sq.m	428.50	535625.00
12	Centering and shuttering including strutting, propping etc; and removal of form work, for columns, pillars,peirs,abutments,machine foundations, posts and struts.	2774.00	Sq.m	180.40	500429.60
13	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.	50.00	MT	42700.00	2135000.00
14.a	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.	1990.00	Sq.m	95.10	189249.00
b	Cement Plaster to ceiling / internal walls with 12mm thick cement plaster finished with a floating coat of neat cement of mix 1:3 (1 cement : 3 fine sand) .	1636.00	Sq.m	107.80	176360.80

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
15	Providing and Laying Damp-Proof Course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse Sand : 4 Graded stone aggregate 12.5 mm nominal size) using best water proofing compound at percentage specified by the manufacturer.	185.00	Sq.m	144.15	26667.75
16	Applying exterior emulsion paint 2 coats to external new plastered surfaces including curing etc., over a coat of primer (paint will be issued free of cost by BHEL at their stores).	1730.00	Sq m	28.20	48786.00
17	Applying two or more coats of distemper with oil bound washable distemper of approved brand and manufacture to given an even shade including preparation of the surface, cost of all labour, material and other incidentals including priming coat with cement primer.	2667.00	Sq.m	41.55	110813.85
18	Supply and fixing 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).	566.00	Sq.m	1316.00	744856.00
19	Supply & fixing 5.5 mm thick plain / ground glass to the aluminium frame with rubber beeding screwless snap on clips etc. complete	373.00	sq.m	668.00	249164.00
20.a	Supply and fixing 9 mm thick pre-laminated particle board both side laminated exterior grade fixed to frame with rubber beeding screw less snap on clips etc., complete.	283.00	sq.m	534.00	151122.00
b	---- do ---- of 12 mm thick for doors with both sides laminated.	76.00	sq.m	606.00	46056.00
21	Providing & Fixing of top fixed, side hung of NCL Secular windows fabricated from Roll formed section made of pre painted steel (Base steel as per IS 513 of 0.6 mm thick, 'D' quality, galvanized as per IS 277 with zinc 150 GSM / Sq. Mtr). Section for shutter should be of 46 x 46 mm, external frame should be of 46 x 52 mm, section for glass beading should be of 18 x 25 mm & center mullion should be 46 x 70 mm. The sections to be cut to length, meter joined with corner bracket. Centre mullions are to be fixed using mullion cap. Handle made of high grade aluminium powder coated & with nylon receiver & glazed with 4 mm thick, Modi/Saint Gobain float glass. Gasket made of E.P.D.M. Corner brackets made of C.R.C.A with zinc phosphating. Mullion caps made of glass filled nylon. The above frames should be fixed to the concrete / masonry walls by means of self expanding screws. Approximate size of windows 1.3mx.9m	234.00	Sq m	4506.70	1054567.80

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
22	Supply and fixing of aluminum grills of size 1.3x0.9, 1.50 Mx1.80M and 1.20 mx1.80M . along with aluminium frame consisting aluminium 'F' (solid) 0.80kg/12' supply and fixing of design of 4" aperture aluminium grill to the above frame work with necessary fixtures. It includes fixing of total frame to the existing brick work, finishing etc complete. (The material shall be aluminium alloy :6063, thick 7 mm, ultimate tensile strength more than 19 kgs/sq.mm)	801.00	sq.m	1540.00	1233540.00
23	Supply & fixing of aluminium door with single shutter made out of anodised aluminium box section of size 44.50 x 47.50 x 2.00 mm for verticals, top and middle rails and 101.60 x 44.50 x 2.00 mm for bottom rail inclusive of supply and fixing all aluminium fixtures and fittings such as handles 2 Nos., 1 No., of tower bolt 12 mm dia, 200 mm long, 1 No. of hydraulic door closure of IS specification, 3 Nos. of 4" (100 mm) long butt hinges, stopper - 1 No., suitable locking arrangement etc. complete. Wherever members are joined wooden runners are to be inserted in the box section for fixing hinges, tower bolts, handles, hydraulic door closure and providing necessary rubber beeding for smooth closing of door shutter. All as directed by Engineer-in-charge. The rate shall include cost of door frame using aluminium box section of size 101.60 x 44.50 x 2.00 mm, 12 mm thick toughened glass etc. complete.approx size of door is 2.1mx1.2m	150.00	Sq. m	4000.00	600000.00
24	Supply and fixing of wooden teakwood doors along with teak wood door frame of required size consist teak scantlings of 100 mm x 75 mm and flush door shutter and laminating both door frame and shutter with premium quality teak vineer in required colour and design and malamine polish.Flush door shutter shall be chemically treated and water/insect/borer proof and 30 mm thick. This includes providing brass hinges, brass aldrops, brass tower bolts, brass handles and brass door stoppers.	13.00	Sq-m	3000.00	39000.00
25	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				

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
	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. Boards, where light fixtures to be fixed shall be handed over to Department. Make: Armstrong.	751.00	Sq m	1130.00	848630.00
26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer with M.S. tube .	3.00	M.T	60150.00	180450.00
27a	Fabrication of structural steel work including all materials going into the process of fabrication and forming and integral form 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 rate includes cost of electrodes, gasse etc., The raw structural steel sections will be issued FREE of cost at BHEL stores.	112.00	MT	8805.00	986160.00
b	Erection of Steel work out lined in item No.1 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.	112.00	MT	3774.00	422688.00
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. The required paint only will be issued free of cost by B.H.E.L at their stores.	112.00	MT	596.50	66808.00
28	Fixing 52 Kg rails for various gauges at floor level including fixing side guide angle etc., complete with necessary clamps required for fixing rails in position and alignment, leveling as per B.I.S 7215-1974. (M.S rails, M.S. Angles, Strl. steel will be issued free of cost at their stores).	19.00	MT	6000.00	114000.00
29	Supply and fixing of various sizes of MS bolts, nuts and washers conforming to IS 1367-1961 including cost of all materials, labour etc., complete.(MR)	1.00	MT	49833.00	49833.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
30.a	Design ,supply ,erection of self supported type arched sheet roofing (galvalum sheet) as per specs enclosed for 24mtrs span bay.	4305.00	Sqm	1665.00	7167825.00
b	Supply and installation of hangers /clamp as per project requirement	10.00	Each	240.00	2400.00
c	Supply of skylight (poly carbonate 4.5mm thick) size 2ftx21ft in the curved roof	10.00	nos	10830.00	108300.00
d	Providing & Fixing glazing with 6 mm thick wired glass fixing to the aluminium sections of 2 mm thick with rubber beeding fixed to the MS frame etc; complete as directed by Engineer-in-charge.	100.00	Sq.m	900.00	90000.00
31a	Supplying and fixing of Tracdek Hi-rib single skin galvalume 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 per support) for sheet etc., compete as directed. (Including cost of galvalume sheets). - for cladding colored galvalume	4944.00	Sq.m	720.00	3559680.00
b	do - bare roof galvalume sheet	624.00	Sq.m	660.00	411840.00
32	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.	269.00	Cu.m	355.88	95731.72
33	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.	145.00	Cu.m	582.68	84488.60
34	Dismantling doors ,windows,and clerestory windows(steel or wood) shutter including chowkhats,architrave,holdfasts etc complete and stacking witin 50 m lead of area 3sqr meters and below	51.00	Nos	54.60	2784.60
35	Dismantling doors ,windows,and clerestory windows(steel or wood) shutter including chowkhats,architrave,holdfasts etc complete and stacking witin 50 m lead of area more than 3sqr meters	3.00	Nos	75.35	226.05
36	Dismantling M.S. partitions (Weldmesh,glazed or panelled) of standard size 1.20mx2.40m or 1.20mx3.30m 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.)	94.00	Each	483.00	45402.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
37	Fabrication and fixing inserts in concrete wall with lugs of required dia welded to the insert plates.(St. Steel,electrodes and gas required for work will be issued on free of cost by BHEL at their stores)	3.00	MT	3500.00	10500.00
38	Dismantling steel work in built up sections in angles tees, flats and channels including all guest plates, bolts, cutting rivets, welding etc., including dismembering and stacking within 50 metres lead.The steel sections like trusses columns etc should be dismantled in such a manner so that it can be reused wherever required as directed by Engineer -in-charge.handing over to stores for a distance of 2KM	137.00	MT	890.11	121945.07
39.a	Felling trees of the girth (measured at a height of 1m above ground level) including cutting of trunks and branches removing the roots and stacking of serviceable materials and disposal of unserviceable materials - upto 1.20 M	15.00	Each	359.80	5397.00
b	---- upto 2.40 m---	13.00	Each	1658.85	21565.05
40	Removing of corrugated / semi corrugated, A.C sheets including North Light curves barge boards etc., in roof, sides, gable ends, louvers etc., and stacking the materials carefully for re-use wherever required.	6886.00	Sq.m	41.60	286457.60
41	Removal of wood/M.S., scrap including M.S. packing strips loading into the vehicle and unloading the same at specified yards as directed by the Engineer-in-charge. The vehicle shall be weighed before and after loading for each trip at BHEL weigh bridge. The rate quoted shall include cost of hire charges of vehicle, labour, tools, safety equipment etc., complete. Payment will be made against the weight of the materials disposed.	10.00	MT	381.00	3810.00
42a	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement :2 fine sand) including testing of joints etc. complete - 250mm dia R.C.C pipe.	78.00	RM	258.20	20139.60
b	-----do -----for 300 mm dia RCC pipe.	78.00	RM	338.75	26422.50
c	-----do -----for 450 mm dia RCC pipe.	48.00	RM	499.55	23978.40
43	Dismantling barbed wire or flexible wire rope in fencing including making rolls and stacking within 50m lead	256.00	Kg	5.55	1420.80
44	Supply and fixing of new urinary pans, "Parry ware" make, ceramic, Model (Cat 0575)- "New Magnum Urinal" (600 mm x 400 mm) along with all accessories, C.P spreader brackets etc., regular in colour along with partition for Magnum Urinal ceramic, 'Z' type brackets to be screwed to the wall at the bottom, in regular colour etc., complete.	4.00	Each	3933.00	15732.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
45	Supply and fixing with "Parry ware" make Cascade series wash hand basin of size 550 mm x 450 mm oval shape with counter top with centre tap hole, regular in colour with all accessories like brackets, screws etc., complete .	2.00	Each	2024.00	4048.00
46	Supply and fixing of new "Parry ware" make Orissa pan size 580 mm (Cat 0109/17) with P/S trap box rim with internal foot treads including ceramic low level flushing cistern 10 litres capacity with Parry ware wonder flush kit, regular in colour with all required accessories etc., complete.	3.00	Each	4261.00	12783.00
47	Supply & fixing of 6 mm thick mirror of approved quality "Modi float/Saintgobin glass", with 6 mm thick hard board back and with best quality teak wood frame (design beading) all round the mirror including necessary clamps, polishing to the beading, cost of all materials etc. complete.	1.20	Sq.m	1445.00	1734.00
48	Supply & fixing of PVC door along with frame of Syntex make in required size. The door frame made from extruded PVC sections in an overall size of 40 mm x 48 mm having multi chamber cross section with a maximum wall thickness of 2.5 mm \pm 0.3 mm duly reinforced with PVC to be mitre cut at corners and welded. A tie rod to be provided at bottom. Necessary weather seals shall be provided. Sintex doors are made out of PVC section and panels. The door shutter is made out of extruded PVC sections solid core type with usual process variation and having a wall thickness of 2 mm with a variation of \pm 0.3 mm provided with all plastic reinforcement to avoid any type of rusting or corrodes. The shutter frame is mitered and joined at the corners by means of stainless steel screws. The corners of the shutter frame are being reinforced by polymeric reinforcement of the size 120x200 mm and the lock rail is reinforced by 20x18x255 mm size reinforcement. The rate quoted shall include the cost of brass hinges, brass aldrops and brass tower bolts etc. of suitable size and of approved make.approx size of doors 2mx.9m	4.50	Sq.m	2925.20	13163.40
49	Supply and fixing in position medium teak wood door frame along with single leaf shutters solid core non - decorative type 30 mm thick of approved quality and brand including 3 No.s MS hinges 10 cm long and 1 no. mortise lock (Godrej make) , using scantling of size 100 mm X 75 mm (including with MS holdfasts of size 230 X 50 X 4 mm - 6 No.s and painting with coal tar to the faces coming in contact with masonry / concrete . including cost of all materials , labour etc. complete as directed by Engineer - in - charge. approx size of door 2.1mx1m	2.00	Sq.m	3180.00	6360.00
50	Supply & fixing "Jaquar" make urinal flushing valves for urinal pots in all accessories/Cat: 1077.	4.00	Each	1320.00	5280.00
51	Supply & fixing "Marc" make oyster series brass bib cocks . With all accessories / Cat: MOY 1030.	3.00	Each	506.00	1518.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
52	Supply & fixing "Marc" make oyster series brass pillar cocks . (Cat: MOY 1010) with all accessories etc.	2.00	Each	519.00	1038.00
53	Supply & fixing "Marc" make oyster series brass stop cocks . (Cat: MOY 1040) with all accessories.	9.00	Each	698.00	6282.00
54	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS : 15622 (thickness to be specified by the manufacture) of approved make in all colours, shades except burgundy, bottle green , black of any size as approved by engineer-in-charge in skirting , risers of steps and dados over 12mm thick bed of cement mortar 1:3 (1cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3 Kg per Sq.m including poniting in white cement mixed with pigment of matching shade complete.	50.00	Sq.m	556.60	27830.00
55	Supply & fixing in position PVC Pipes of 3" dia(as per IS 6kg/sq.m) of best quality for drainage lines / urinal / hand wash areas including chasing the brick wall, concrete etc and making good the same after fixing the same etc. complete.	496.00	RM	108.70	53915.20
56	Supplying and fixing CI Nahany traps 1st quality ISI marked conforming to IS: 1729 - 1979 with C.P Grating fixing with white cement as per site requirements with standard practice - 100mm inlet - 75 mm dia (3") outlet pipe - 4 Kgs.	4.00	Each	200.00	800.00
57.a	Supply & fixing 15 mm dia Nominal Bore GI pipe medium Grade properties and weight as per IS 1239 ISI mark with GI fittings including the cost of GI pipe & its fittings, chasing brick work/concrete and making good the same ,cost of labour , all materials etc. complete.	80.00	RM	131.00	10480.00
b	.. Do... 20mm dia (3/4")	48.00	RM	146.00	7008.00
c	.. Do... 25mm dia (1")	72.00	RM	191.00	13752.00
d	.. Do... 80mm dia (3") including trenching and refilling	324.00	RM	458.15	148440.60
58.a	Supply & fixing of Gunmetal Gate (GM peet) valve as per IS -778 class-I, Indian make heavy type 15 mm (1/2") dia NB size.	8.00	Each	242.00	1936.00
b	.. Do .. 20mm dia (3/4")	8.00	Each	327.00	2616.00
c	.. .do ...25mm dia (1")	12.00	Each	482.00	5784.00
	.. .do ...80mm dia (3")	4.00	Each	3906.00	15624.00
59	Supplying ,laying ,jointing and testing 152.4 mm (6") SWG pipes of ISI make conforming to ISI 651 & 4127 with airtight cement joints in Cement mortar 1:5:1 prop. including excavation of trenches and socket pits in anysoil(except rock requiring blasting) up to 1524 mm(5'.0") depth and refilling with watering and tamping.	30.00	RM	254.00	7620.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
60	Construction of brick masonry chamber of dimension 0.914 x 0.457 x 0.914 m (3' x 1'6" x 3') with brick in CM 1:6 including plastering over both sides with CM 1:4, 20 mm thick and fitted with light weight CI frame and cover of size 0.914 x 0.457 m in CM 1:4 including bed concrete of CC 1:4:8 as required, supplying and fixing one CI steps in brick masonry if necessary including earth work excavation in all soils, refilling around the chamber removing the surplus earth etc. complete as directed.CI frame and cover of 40 kgs.	3.00	Each	3226.00	9678.00
61	Construction of brick masonry chamber of size 23 x 30 Cm (9" x 12") in brick work in CM 1:6 and plastering in CM 1:4, 20 mm for gully trap 150 mmx100mm including cost of excavation, PCC 1:4:8, 75 mm thick, all materials, labour etc., complete.	2.00	Each	321.00	642.00
62	Supplying and fixing position PVC tank of 1000 Liters capacity double layer of approved make including giving inlet and out let connections, cost of all materials like GI specials, labour etc, complete	1.00	Each	6000.00	6000.00
63	Making connection of G.I.distribution branch with G.I. main of 50-80mm size by providing and fixing Tee including cutting and threading the pipe etc.complete.	2.00	Each	423.20	846.40
64	Supply and fixing of Electrically operated rolling shutters conforming to as per IS 6248 , Shutter curtain made out of Aluminum Double Wall with 60 mm, OD " C " class Pipe, side Guide 150x2.5 mm thick Top Bracket 6 mm thick, MS Plate and Aluminum Bottom Rail 3.0 mm thick and Angle support 40x40x5 mm thick Angle End to End, Hood Cover 1.00 mm thick, Electrical Gear Operated System with 1 No of Reduxion Gear Box, 1 No Cromption Induction Motor 3 Phase(capacity of the Motor shall be suitable to the size of the doors as mentioned below) with Limit Switch and Reversible Switch make of Bharat Cutter with necessary electrical cabling required for operation of shutter.One coat of Red Oxide paint except shutter curtain. The rolling shutter shall be provided with proper locking arrangement and shall be as per IS 6248. The rate quoted shall include cost of all materials, labour and scaffolding etc complete as directed by Engineer.The measurement will be made on finished item of the work for payment.(The shutter curtain is made out of Aluminium and all the other items) Approx size of each gate is 7mx7m	100.00	sqm	9396.00	939600.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
65	Fabrication and fixing M.S. Angles in the concrete with 10mm dia lugs welded to the M.S. Angle (Strl. Steel, electrodes and gases required for the work will be issued on free of cost by BHEL at their stores).	1.30	MT	3500.00	4550.00
66a	Construction of Rectangular Manhole of inside dimensions 1.20 x 0.90 M including Earth work, bed concrete 1:2:4 – 200 mm thick, walls with C.R.S Masonry 2 nd sort in C.M (1:6) of 0.45 M width, plastering walls inside, out side with C.M (1:4) / 20 mm channeling, inside manhole neat finishing, fixing C.1 Foot steps at 400 c/c. Fixing of Angle iron frame with 75 x 75 x 6 lugs welded in C.C 1:2:4 on top of wall of 8 Cms. Thick including back filling etc., complete. including casting & placing inposition of RCC cover for the manhole. (M.S. Angle, will be issued free of cost). _ Manholes upto 1.50M to 2.00M.	2.00	Each	12000.00	24000.00
b	Same as above but with internal dimensions of 0.60 x 0.90 M upto 1.00 M depth.	3.00	Each	9000.00	27000.00
67a	Removal of waste product loading into the vehicle and unloading the same at specified yards as directed by the Engineer-in-charge. The vehicle shall be weighed before and after loading for each trip at BHEL weigh bridge. The rate quoted shall include cost of hire charges of vehicle, labour, tools, safety equipment etc., complete. Payment will be made against the weight of the materials disposed: -for wood scrap	15.00	MT	508.00	7620.00
b	do -for MS scrap including MS packing strips etc.	20.00	MT	381.00	7620.00
c	do -for garbage , including oil soaked cotton waste, dry packing grass, packing cartoons and waste papers etc.	15.00	MT	655.00	9825.00
68	Dismantling manually /by mechanical means including stacking of serviceable material and disposal of unserviceable material within a lead of 50 m as directed by Engineer-in-charge- for bituminous road	100.00	Sq.M	66.30	6630.00

SNo	Description of the item	Qty	Unit	Rate (Rs)	Amount (Rs)
69	supplying and fixing 24" aluminium turbo ventilators over self supported arched sheet roofing .	10.00	Each	11133.00	111330.00
70	Dismantling and refixing of block name board	1.00	MT	2572.11	2572.11
				Total	29,514,538.75

Rupees : Two Crore ninety five lakhs fourteen thousand five hundred thirty nine only.

Service Tax:- The Service tax as applicable is extra which will be paid by BHEL to the agency after submission of necessary valid documents by the agency.

Note : The Tenders are required to quote the tender value on percentage (%) basis at excess or less or on as per estimate value

Tender %	In figure	In words
Excess		
Less		
Estimated Rate only		

Name of the Contractor :

Signature of the Contractor

Accounts Representative

Opening officer