



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

SCHEDULE- A

Tender Notice No:

PRICE BID

HY/FCD/OT-17/2011-12, Dt: 15.12.2011

Item no : 1

**Name of work: Modification – Construction of toilets at 11 block from C2 to A2 column outside.**

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
	<b>PART - I - Civil works</b>				
1	Dismantling <b>brick masonry</b> walls for all heights, removing and clearing the debries and carrying away upto a 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.	1.00	Cu.M	355.88	355.88
2	Dismantling <b>reinforced cement concrete / plain cement concrete</b> and disposing of debries upto a lead of 2 Km including loading, unloading and spreading as directed by Engineer-in-charge etc. complete.	15.00	Cu.M	582.68	8,740.20
3	<b>Dismantling steel work in built up sections</b> in angles tees, flats and channels including all gusset plates, bolts, cutting rivets, welding etc., including dismembering and stacking within 50 metres lead.	0.80	MT	890.11	712.09
4	<b>Earth work in excavation in all soils</b> by mechanical means (Hydraulic Excavtors) / 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.	150.00	Cu.m	103.40	15,510.00
5	Earth work in excavation by mechanical means (Hydraulic Excavators) / manual measn 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 <b>Hard Rock</b> (Blasting prohibited).	10.00	Cu.M	325.25	3,252.50
6	Providing and laying in position <b>cement concrete</b> of specified grade excluding the cost of centering and shuttering including consolidation by vibrations for all works up to plinth level with <b>1:4:8</b> (1 cement : 4 coarse sand : 8 graded stone aggregate of 20 mm nominal size).	4.00	Cu.M	2,449.00	9,796.00
7	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).	3.00	Cu.M	3,732.00	11,196.00

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
8	Providing and laying in position specified grade, of <b>Reinforced cement concrete</b> excluding the cost of centering,shuttering, finishing and reinforcement - <b>all work up to plinth level with 1:2:4</b> (1 cement : 2 coarse sand : 4 graded stone aggregate of 20 mm nominal size).	11.00	cu.m	3,359.60	36,955.60
9	<b>Coursed rubble masonry</b> in second sort with hard stone in foundation & plinth with cement mortar 1:6 (1 cement :6 coarse sand).	6.00	Cu.M	1,913.10	11,478.60
10	<b>Brick work</b> with FPS bricks of class designation 75 in superstructure above plinth level up to floor five level in all shapes and sizes in cement mortar 1:6.	12.00	Cu.M	2,463.60	29,563.20
11	<b>Centering</b> and shuttering including strutting, propping etc; and removal of form work, for columns, pillars, peirs, abutments, machine foundations, posts and struts.	28.00	Sq.m	180.40	5,051.20
12	<b>Reinforcement for R.C.C. work</b> including straightening, cutting, bending, placing in position and binding grills with binding wire all complete by cold twisted bars.	0.24	M.T	42,700.00	10,248.00
13a	<b>Plastering in 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.	155.00	Sq.m	95.10	14,740.50
b	Cement Plaster to <b>ceiling</b> /walls with <b>12mm</b> thick cement plaster finished with a floating coat of neat cement of mix 1:3 (1 cement : 3 fine sand).	22.00	Sq.m	107.80	2,371.60
14	Plastering over <b>roof slab in CM 1:4, 20mm</b> 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.mx3% WP@ Rs 20.00 per kg = Rs 4.61) upto 10 m height.	19.00	Sq.m	115.06	2,186.14
15	Applying <b>exterior</b> emulsion paint 2 coats over one coat of primer to external new plastered surfaces including cost of all labour and other incidentals. only exterior paint will be issued by BHEL on free of cost).	70.00	Sq.M	20.55	1,438.50
16	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 <b>3 coats altek lappam</b> 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).	85.00	Sq.m	84.10	7,148.50
17	Applying two coats of <b>Synthetic enamel paint</b> of given shade over a coat of primer to new wood work including scraping the surfaces, cost of all labour, tools and other incidentals etc. complete.	6.00	Sq.m	20.00	120.00

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
18	Applying <b>one coat of synthetic enamel paint</b> of given shade <b>to old steel work</b> including scraping old surfaces, cost of all labour, tools and other incidentals etc.complete.(Only Synthetic enamel Paint will be supplied by BHEL)	3.00	Sq.m	20.00	60.00
19	Supply and fixing of new urinary pans, "Parry ware" make, ceramic, Model (Cat 0575)- "New Magnum Urinal" (590 mm x 400 mm) along with all accessories, C.P spreader brackets etc., along with partition for Magnum Urinal ceramic, 'Z' type brackets to be screwed to the wall at the bottom. Colour - Silky Off - White.	3.00	Each	3,933.00	11,799.00
20	Supply and fixing with "Parry ware" make Cascade pedestal ceramic wash hand basin of size 550mm x 440mm and pedestal size 705 mm height, with centre tap hole with all accessories like brackets, screws, PVC connections etc. complete. Colour: Silky Off - White.	1.00	Each	3,000.00	3,000.00
21	Supply and fixing of new "Parry ware" make Elite - European water closet of size 530 mm x 400 mm, with "P/S" trap including PVC Slimline Dual flush tank (Cistern) of size 475 mm x 318 mm (Code No. C8109), EWC standard seat cover (Cat C8071) with all accessories like Parryware flush kit suitable to the above flush tank, brackets, screws, connecting pipe from flush tank to EWC, PVC Connections etc. complete. Colour: Silky Off - White.	1.00	Each	2,000.00	2,000.00
22	Supply and fixing of new "Parry ware" make Indian Water Closet, Orissa pan of size 580 mm x 410 mm - Open rim (Code No. C0109) including PVC Slimline Dual Flush tank (Cistern) of size 475 mm x 318 mm (Code No. C8109) with all accessories like Parryware flush kit suitable for the above flush tank with all required accessories etc., complete. Colour: Silky Off - White.	1.00	Each	3,000.00	3,000.00
23	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.	1.00	Sq.m	1,445.00	1,445.00

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
24	Providing and fixing shutters along with frames for toilets that are 30 mm thick factory made PVC rigid foam paneled, door and shutters manufactured by M/s. Rajashri made from M.S. tube, 19 gauge thick, size 19x19mm for styles and 15x15mm for top and bottom rails, covered with heat moulded PVC "C" channel of 5mm thick sheet and 30x50mm wide for styles and 5mm thick and 75mm wide PVC sheets for top rail and bottom rail either side and 5 mm thick, 20mm wide cross PVC sheet as gap insert for top rail and bottom rail, paneling of 5mm thick PVC sheet fitted with M.S. frame welded / sealed to the styles and rails with 5x30mm PVC sheet beading on either side and joined together with solvent cement adhesive etc. complete in all respects as per direction of engineer in-charge fixed to frames. This includes providing brass hinges, brass aldrops, brass tower bolts, brass handles and brass door stoppers (For W.C. and bathroom doors).	3.20	Sq.m	1,830.00	5,856.00
25	Supply and fixing of toilet doors along with teak wood door frame of required size consist teak scantlings of 100mm x 75mm 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.	2.10	Sq.m	3,180.00	6,678.00
26	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 8G). The window section and fabrication shall confirm to I.S. 1038.	3.00	sq.m	1,114.00	3,342.00
27	Removing existing Roof/ Side cladding of AC Sheets roofing, louvers side clading including loading, carting, unloading etc., with in the premises up to a lead of 2 km as directed.	60.00	Sqm	43.65	2,619.00
28	Supply & fixing "Jaquar" make Pressmatic urinal flush valve for urinal pots (Cat. No. 51027) with all accessories.	3.00	Each	1,320.00	3,960.00
29	Supply & fixing "Marc" make Oreintal series brass bib cocks, with all accessories / Cat: MOR 1030.	3.00	Each	506.00	1,518.00
30	Supply & fixing "Jaquar" make Pressmatic pillar cock for wash basins, with all accessories. (Cat: 031)	6.00	Each	519.00	3,114.00
31	Supply & fixing "Marc" make Oriental series brass stop cock with all accessories.	1.00	Each	698.00	698.00
32	Supply and fixing of "Jaquar (Allied)" Make Health Fauset with 8 mm dia. 1 M long Flexible tube and wall hook Cat no. 573.	1.00	Each	1,325.00	1,325.00

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
33a	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 pointing in white cement mixed with pigment of matching shade complete.	40.00	Sq.m	556.80	22,272.00
b	Supply & fixing of <b>18 mm thick</b> best quality approved colour and design machine cut <b>mirror polished granite slabs</b> in required sizes for counter wash basins, floorings, vanity counter, claddings, facias etc. including cutting, champering, rounding and mirror polishing etc. complete as directed. Cost of granite slabs shall be Rs. 1600/- per Sq. m and granite slabs of required design and colour will be selected by department.	20.00	sq.m	3,070.92	61,418.40
34	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.	3.00	RM	108.70	326.10
35	Supplying and fixing CI <b>Nahany traps</b> 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.	2.00	Each	200.00	400.00
36a	Supply & fixing <b>15 mm dia Nominal Bore GI pipe medium Grade properties</b> 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. Make: TATA/JINDAL/ZENITH	5.00	RM	131.00	655.00
b	.. Do... 20mm dia (3/4")	20.00	RM	146.00	2,920.00
c	.. Do... 25mm dia (1")	30.00	RM	191.00	5,730.00
37a	Supply & fixing of GM peet valves, heavy quality, ISI marked Leader/Zoloto make of nominal bore for 15 mm (1/2") dia	2.00	Each	242.00	484.00
b	.. Do .. 20mm dia (3/4")	2.00	Each	327.00	654.00
c	.. .do ...25mm dia (1")	4.00	Each	482.00	1,928.00
38	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 <b>gully trap</b> 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

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
39	Providing and placing on terrace (at all floor levels) of <b>polyethylene water storage tank of 1000 ltrs capacity</b> with double layer approved brand and manufacture as per ISI with cover and suitable locking arrangement and making necessary holes for inlet and outlet and overflow pipes with fittings (ballcock, inlet and outlet nipples) without base support for tank. (Brick work will be paid seperately).	1.00	Each	6,000.00	6,000.00
40	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 CM1:6 including plastering over both sides with CM 1:4, 20mm 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	3,226.00	9,678.00
41a	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 any soil (except rock requiring blasting) up to 1524mm (5'.0") depth and refilling with watering and tamping.	125.00	RM	254.00	31,750.00
b	Supplying, laying, jointing and testing 101.60 mm (4") 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 any soil (except rock requiring blasting) upto 1524mm (5'.0") depth and refilling with watering and tamping.	8.00	RM	149.00	1,192.00
42	Supplying and fixing <b>plain PVC pipe of 90 mm dia</b> of approved quality with specials, accessories and approved sealing / jointing compound on the exterior of the inserted portion of the fitting and fixing in position and jointing to MS gutters, including cost of all materials, sealing compound, labour etc., for all heights complete.	23.00	R M	103.86	2,388.78
43	Supply & fixing <b>PVC Ventilating cowl</b> of 110 mm dia.	1.00	Each	14.00	14.00
44	Supply & fixing 12.7 mm PVC connection with brass union nut CP coated.	3.00	Each	67.00	201.00
45	Supply & fixing <b>P Trap</b> 1st quality ISI marked conforming to IS:1729 - 1979 with CP grating fixing with white cement as per site requirements with standard practice - <b>100 mm dia (4")</b> .	3.00	Each	512.00	1,536.00

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
46	Constructing Brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56 m dia at top in cement plaster 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand:6 graded stone aggregate 40mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement :2coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement all complete as per standard design. - 0.91 M deep with S.F.R.C cover and frame (heavy duty, HD-20 grade designation) 560mm internal diameter conforming to IS : 12592, total weight of cover and frame to be not less than 182 Kg; fixed in cement concrete 1:2:4 (1 cement :2coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) - with FPS Bricks class designation 75.	3.00	Each	4,933.50	14,800.50
47	Providing and fixing G.I union in existing G.I pipe line,cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required - 80 nominal dia.	1.00	No.	607.30	607.30
48	Making Connections of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix ( 1 cement : 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 Cement : 3 Coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc; complete. - for pipes 100 to 230 mm diameter.	1.00	Each	164.30	164.30
49	Providing and Fixing PTMT waste coupling for wash basin and sink, of approved quality and colour. - waste Coupling 31 mm of 79 mm length and 62 mm breadth weighing not less than 45 gms.	1.00	Each	75.80	75.80
<b>Total of Part - I</b>			<b>Rs.</b>	<b>3,87,115.69</b>	
<b>PART - II - Electrical works</b>					
1(a)	Supply & Installation of lighting/fans wiring with 1.5 Sq.mm copper conductor single core multi-strand PVC insulated cable run through rigid PVC pipe of suitable size (Sudhakar make) from switch board/FBD to individual points laid on wall/roof including earth continuity for all points with copper wire of 14 SWG with 5 A ceiling rose on teakwood round block.	4.00	Point	372.00	1,488.00
(b)	---do--- for 10 Amps Power Switch cum sockets for chargers, pedestal fans and emergency lamps with 1.5 Sq. mm cable.	1.00	Point	372.00	372.00

S. No.	Description of the item	Qty	Unit	Rate (Rs.)	Amount (Rs.)
2(a)	Supply and fixing of 10 Amps, 250 V SPT switches for control of light fittings with ROMA, Code: 21 011 of Anchor make or equivalent type of North-West make fixed on a suitable Modular type concealed box with suitable top cover for item 1(a).	4.00	Set	250.00	1,000.00
(b)	Supply and fixing of 230 V, 10 Amps switch cum sockets of ROMA code: 21 003 & 30 373 of Anchor make or equivalent type of North-West make fixed on a suitable Modular type concealed box with suitable top cover for item 1 (b).	1.00	Set	400.00	400.00
3	Supply and installation of Energy efficient light fitting, T5 type 2 x 28 W industrial luminaire with 28W T5 Fluorescent lamps. This includes supply & fixing of downrods, round blocks, connecting the copper twin twisted wire from ceiling rose to fitting and other accessories. Make: Philips/Asian Electronics	2.00	Set	1,800.00	3,600.00
4	Supply and installation of 300 mm (12") sweep exhaust fans, which includes assembling and testing of all fans. The fans are to be rigidly fixed to wall with suitable arrangement. Black colour, double ball bearing, low noise, white epoxy powder coated paint finish with bird guard. Make: Orient/Usha/Crompton.	1.00	Set	1,600.00	1,600.00
5	Disconnection of power supply and dismantling of existing light fittings, fans, power boards, cables and other accessories. The removed items are to be handed over to concerned section.	1.00	LS - 1 No. of toilets	500.00	500.00
<b>Total part - II</b>			<b>Rs.</b>	<b>8,960.00</b>	
<b>Total Value of work (Part- I + Part -II)</b>				<b>Total Rs.:</b>	<b>3,96,075.69</b>
<b>Total : Rs. Three lakhs ninty six thousand seventy six only</b>					

**Service tax:** Service tax is extra as applicable, which will be reimbursable to the agency on production of Valid documents.

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

Tender %	In figure	In words
Excess		
Less		
Estimated value		

Name of the Contractor :

Signature of the Contractor

Accounts Representative

Opening officer