

CONSTRUCTION OF SPECIALITY BLOCK AT GENERAL HOSPITAL, ERNAKULAM

PART II -PLUMBING WORKS

Item No	Details of items	Quantity	Unit	Rate Rs (In figures & words)	Amount (Rs.)
1	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete including painting of fittings and brackets, cutting and making good the walls and floors wherever required : W.C. pan with ISI marked white solid plastic seat and lid.(Make: Hindware, Jaquar, Parryware)	3	Each		
2	Providing and fixing wash basin/counter wash basin with C.I. brackets, 15 mm C.P. brass pillar taps,32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require White Vitreous China Wash basin size 630x450 mm with a pair of 15 mm C.P. brass pillar taps. (Make: Hindware, Jaquar, Parryware)	8	Each		
3	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS: 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required : Kitchen sink without drain board 610x510 mm bowl depth 200 mm	3	Each		
4	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.Flexible pipe 40 mm dia	11	Each		
5	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing :Rectangular shape 453x357mm	11	Each		
6	Providing and fixing toilet paper holder :C.P. Brass	3	Each		
7	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.600mm long towel rail with total length of 645mm, width 78mm and effective height of 88mm, weighing not less than 190gms.	11	Each		

8	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Make: Supreme, Finolex, Astral Internal work - Exposed on wall (inside and outside)				
a	15 mm nominal outer dia .Pipes.	10	Metre		
b	20 mm nominal outer dia .Pipes.	50	Metre		
c	25 mm nominal outer dia .Pipes	60	Metre		
d	32 mm nominal outer dia .Pipes.	60	Metre		
9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. Make: Supreme, Finolex, Astral Concealed work including cutting chases and making good the walls etc.				
a	15 mm nominal outer dia .Pipes	30	Metre		
b	20 mm nominal outer dia .Pipes	40	Metre		

c	25 mm nominal outer dia .Pipes.	25	Metre		
10	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.Make: Supreme, Finolex, Astral External work				
a	20 mm nominal outer dia .Pipes.	30	Metre		
b	25 mm nominal outer dia .Pipes.	60	Metre		
c	32 mm nominal outer dia .Pipes.	50	Metre		
11	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
a	25 mm nominal bore	8	Each		
b	32 mm nominal bore	2	Each		
12	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete				
	20 mm nominal bore	3	Each		

13	Constructing masonry Chamber 60x60x75 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20mm nominal size) , i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design : With common burnt clay F.P.S.(non modular) bricks of class designation 7.5.	1	Each		
14	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank	4000	Litre		
15	Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms.: 15 mm nominal bore: Make:Jauqar, Hindware, Parryware, crome	3	Each		
16	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.:15 mm nominal bore.: Make:Jauqar, Hindware, Parryware, crome	3	Each		
17	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931 a) 15 mm nominal bore:15mm nominal bore: Make:Jauqar, Hindware, Parryware, crome	14	Each		
18	Providing and fixing PTMT grating of approved quality and colour.:Rectangular type with openable circular lid.150 mm nominal size square 100 mm diameter of the inner hinged round grating	3	Each		
19	Providing and fixing PTMT swivelling shower, 15mm nominal bore. Weighing not less than 40gms.Make:Jauqar, Hindware, Parryware, crome	3	Each		
20	Providing and fixing PTMT soap Dish Holder having length of 138mm, breadth 102mm, height of 75mm with concealed fitting arrangements. Weighing not less than 106 gms.	14	Each		
21	Cutting holes up to 30x30 cm in walls including making good the same: With common burnt clay F.P.S. (non modular) bricks.	10	Each		

22	Cutting holes up to 15x15cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof.	10	Each		
23	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.(i) Single socketed pipes. 110 mm diameter	40	Metre		
24	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.				
a	Coupler: 110 mm	10	Each		
b	Single tee with door: 110x110x110 mm	2	Each		
c	Bend 110 mm	30	Each		
d	110 mm Shoe	8	Each		
25	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete. 110 mm	50	Each		
26	Providing and fixing to the inlet mouth of rain water pipe cast iron grating 15 cm diameter and weighing not less than 440 grams.	8	Each		

27	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design : 100x100 mm size P type With common burnt clay F.P.S. (non modular) bricks of class designation 7.5				
a)	150 x 100 mm size P type. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	5	Each		
b)	180x150 mm size P type With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	Each		
28	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :All kinds of soil:Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia.	20	Metre		
29	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 : 250 mm dia. R.C.C. Pipe	20	Metre		
30	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size), inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :				
a	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	6	Each		

b	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	Each		
31	Extra for depth for manholes				
a	Size 90x80 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	3	Metre		
b	Size 120x90 cm With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	2	Metre		
32	Providing orange colour safety foot rest of minimum 6 mm thick plastic encapsulated as per IS : 10910 on 12mm dia steel bar conforming to IS : 1786 having minimum cross section as 23 mmx25mm and over all minimum length 263 mm and width as 165mm with minimum 112 mm space between protruded legs having 2 mm tread on top surface by ribbing or chequering besides necessary and adequate anchoring projections on tail length on 138 mm as per standard drawing and suitable to with stand the bend test and chemical resistance test as per specifications and having manufacture's permanent identification mark to be visible even after fixing, including fixing in manholes with 30x20x15 cm cement concrete block 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) complete as per design.	8	Each		
33	Providing & fixing of CP Health faucet. Hand operated spray unit (instand type) . Make:Jauqar, Hindware, Parryware, crome., (Lowest retail price not less than 1200/each. Materials to be selected by the Engineer in charge)	3	Set		
34	Providing and fixing PVC soil, waste and vent pipe to IS : 13592 of SWR quality, including all fittings, like EG : Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring / solvent cement by application of leak proof adhesive like FRP paste including cutting holes in walls and floors and making good the damages, trenching, filling, providing clamps etc. complete Make: Supreme, Finolex, Astral				

a)	50mm dia (6kg / sq.cm)	30.00	Mtr.		
b)	63mm dia (6kg / sq.cm)	40.00	Mtr.		
c)	75mm dia (6kg / sq.cm)	10.00	Mtr.		
d)	90mm dia (6kg / sq.cm)	20.00	Mtr.		
d)	110mm dia (6 kg / sq.cm)	20.00	Mtr.		
e)	160mm dia (6 kg / sq.cm)	60.00	Mtr.		
35	Providing and fixing PVC floor trap self cleansing design with or without vent arm complete including cutting and making good the walls and floors. Make:Supreme,Finolex,Prince etc.,110mm dia inlet 110mm dia outlet	3	Each		
	TOTAL PART II -PLUMBING				