

BILL OF QUANTITY CUM PRICE SCHEDULE

Name of Project : 400/220KV SUB-STATION AT AURANGABAD
Name of Work : CIVIL WORKS FOR CONTROL ROOM BUILDING

S.No.	Description of Item	Quantity	Unit	Unit Rate(Rs)	Amount(Rs)
1	Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30cm in depth 1.5m in width as well as 10sqm on plan) including dewatering as necessary of rain water/subsoil seepage water and disposal of excavated earth upto 100m and lift upto 3.5m, disposed earth to be levelled and neatly dressed.				
(a)	All kinds of soil.	650	cum	101.85	66202.50
2	Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width as well as 10sqm on plan) including dewatering as necessary of rain water/subsoil seepage water and dressing of sides and ramming of bottoms, lift upto 3.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 100m.				
(a)	All kinds of soil.	50	cum	103.40	5170.00
3	Filling available excavated earth (including rock) in trenches, plinth, sides of foundations, etc., in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 100m and lift upto 3.5m.	400	cum	45.70	18280.00
4	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 3.0 m including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20cm in depth including consolidating each deposited layer by ramming,watering etc.and disposing of surplus excavated soil as directed within a lead of 100m.				
(a)	All kinds of soil				
4.1	Pipes, cables etc, not exceeding 80mm dia.	20	meter	70.45	1409.00
4.2	Pipes, cables etc. exceeding 80mm dia. but not exceeding 300 mm dia.	20	meter	115.05	2301.00
4.3	Pipes, cables etc. exceeding 300mm dia but not exceeding 600mm	20	meter	179.65	3593.00
5	Carriage & disposal of surplus excavated earth/rock beyond initial lead by mechanical means not necessarily all the times on pucca roads, including loading, unloading, dressing of excavated material, etc., complete as per specifications -.				
(a)	Lead upto 1 km.	200	cum	49.42	9884.00
(b)	Lead upto 3 km.	50	cum	63.32	3166.00
(c)	Lead upto 5 km.	50	cum	76.48	3824.00

6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level.				
(a)	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size)	10	cum	3257.45	32574.50
(b)	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size)	10	cum	2713.05	27130.50
(c)	1:4:8(1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size)	60	cum	2449.00	146940.00
7	Extra for providing and mixing water proofing material 'Impermo' or equivalent in cement concrete work in the proportion recommended by the manufacturer.	50	kg	27.45	1372.50
8	Supplying and filling in plinth with Jamuna/local sand under floors including watering, ramming, consolidating and dressing complete.	50	cum	301.50	15075.00
9	Supplying chemical emulsion in sealed containers including delivery as specified.				
	Chloropyriphos emulsifiable concentrate of 20%	40	litre	174.30	6972.00
10	Diluting & injecting chemical emulsion for PRE-CONSTRUCTIONAL ANTI-TERMITE treatment and creating a continuous chemical barrier under and all around the column pits, wall trenches, basement excavation, top surface of plinth filling, junction of wall & floor, along the external perimeter of building, expansion joints, over the top surface of consolidated earth on which apron is to be laid , surroundings of pipes and conduits, etc complete as per specifications (Plinth area of the building at ground floor only shall be measured for payment).	375	sqm	50.00	18750.00
11	Providing and laying damp proof course 50mm thick cement concrete 1:1.5:3 (1 Cement:1.5 coarse sand : 3 graded stone aggregate 12.5 mm nominal size) .	35	sqm	178.05	6231.75
12	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7 kg per sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	35	sqm	58.60	2051.00
13	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				
(a)	1:1.5:3 (1 cement: 1.5 coarse sand:3 graded stone aggregate 20mm nominal size)	200	cum	3732.00	746400.00
14	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars,piers,abutments, posts and struts etc. up to floor five level excluding cost of centering, shuttering, finishing and reinforcement:				
(a)	1:1.5:3 (1 cement:1.5 coarse sand:3 graded stone aggregate 20mm nominal size)	300	cum	4092.35	1227705.00

15	Centering and shuttering including strutting, propping, etc., and removal of form for:				
(a)	Foundations, footings, bases of columns, etc., for mass concrete.	125	sqm	119.25	14906.25
(b)	RCC walls at all levels (any thickness).	10	sqm	180.40	1804.00
(c)	Suspended floors, roofs, landings, balconies, chajjas and access platforms at all levels.	375	sqm	187.35	70256.25
(d)	Lintels, beams, plinth beams and cantilevers.	830	sqm	162.65	134999.50
(e)	Columns, Pillars, Piers, Posts and Struts .	310	sqm	238.40	73904.00
(f)	Stairs	60	sqm	204.00	12240.00
16	Extra for additional height in centring ,shuttering wherever required with adequate bracing ,propping etc. including cost of deshuttering and decentring at all levels over a height of 3.5 meter for every additional height of 1 meter or part thereof (Plan area to be measured).				
	Suspended floors, roofs, landing, beams and balconies .	300	sqm	106.20	31860.00
17	Steel reinforcement -Cold twisted bars /TMT- Fe 500 (To be procured from SAIL, TISCO, IISCO and RINL only)				
(a)	Including supply and straightening, cutting, bending, binding, (i/c cost of binding wire), placing in position, etc., all labour & material, complete.	60000	kg	42.70	2562000.00
18	Brickwork with F.P.S.bricks of class designation 75 in foundation and plinth in:				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	30	cum	2121.75	63652.50
19	Brickwork with F.P.S.bricks of class designation 75 in superstructure above plinth level to floor V level in all shapes and sizes in:				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	210	cum	2357.40	495054.00
20	Half brick masonry with bricks of class designation 75 in foundation and plinth in:				
	Cement mortar 1:4 (1 cement : 4 coarse sand)	40	sqm	270.35	10814.00
21	Half brick masonry with bricks of class designation 75 in superstructure above plinth level to floor V level.				
	Cement mortar 1:4 (1 cement : 4 coarse sand)	80	sqm	302.80	24224.00
22	Extra for providing and placing in position 2 Nos 8mm dia bars at every third course of half brick masonry (with FPS bricks)	120	sqm	47.80	5736.00
23	Marbel work gang saw cut (polished and machine cut) of thickness 18mm for staircase in cement mortar 1:3 (1 cement : 3 coarse sand) including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade.				
	Raj Nagar Plain white marble/Udaipur green marble/Zebra black marble.	20	sqm	1511.60	30232.00

24	Providing and fixing 18mm thick mirror polished, machine cut for column facia, kitchen platforms, vanity counters and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement: 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing etc. complete at all levels. (over 1sqm but upto 2sqm)				
	Granite black.	2	sqm	2543.65	5087.30
25	Providing and fixing best quality marble slab polished on both sides & machine cut, exposed corners rounded etc. of size 610 x 1150mm, 20mm thick in urinal partition by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 6mm nominal size) as per direction of Engineer-in-charge and finished smooth				
		1	sqm	2274.45	2274.45
26	Providing and fixing chromium plated brass 100mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality).				
		12	each	409.30	4911.60
27	Providing and fixing aluminium sliding door bolts anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc., complete.				
	300 X 16mm	12	each	158.50	1902.00
28	Providing and fixing aluminium tower bolts anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.				
	300 X 10mm	34	each	71.45	2429.30
	150 X 10mm	62	each	42.75	2650.50
29	Providing and fixing aluminium handles anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc., complete.				
	125mm	96	each	48.80	4684.80
30	Supplying and fixing rolling shutters of approved make, made of required size MS laths interlocked together through their entire length and jointed together at the end by end locks mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with mechanical arrangement for operation complete including the cost of providing and fixing necessary 27.5cm long wire springs grade no. 2 and MS top cover of required thickness for rolling shutters.				
	80 X 1.25mm MS laths with 1.25mm thick top cover.	13	sqm	1208.45	15709.85
31	Providing and fixing ball bearing for rolling shutters.				
		4	each	356.50	1426.00

32	Structural steelwork welded in built up sections like edge protection angles, pipes, insert plates with lugs & framed work including providing, cutting, hoisting, fixing in position/ embedding in concrete and applying a priming coat of approved steel primer all complete.	1000	kg	42.15	42150.00
33	Providing and fixing circular/Hexagonal cast iron or MS sheet box for ceiling fan clamp of internal dia 140mm, 73mm height, top lid of 1.5mm thick MS sheet with its top surface hacked for proper bonding, top lid shall be scewed into the cast iron/ MS sheet box by means of 3.3mm dia. round headed screws, one lock at the corners. Clamp shall be made of 12mm dia MS bar bent to shape as per standard drawings.	10	each	81.20	812.00
34	Steelwork welded in built up sections/framed work including providing, cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc., as required.				
(a)	In covering of floors/trenches of control room building with chequered plates, stringers, treads, landings, etc., of staircases involving use of chequered plates, wherever required, all complete.	1000	kg	48.95	48950.00
(b)	In gratings, frames, ladders, stair railings, gates (including pipes), rails, ISMB, ISMC and similar works.	1200	kg	51.20	61440.00
35	Cement concrete flooring 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps, etc., complete.				
	40mm thick with 20mm nominal size stone aggregate.	150	sqm	192.95	28942.50
36	52mm thick CC flooring with " Hardcrete" concrete hardner topping under layer 40mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer 12 mm thick Hardcrete cement hardner consisting of mix 1:2 (1 cement hardner mix: 2 stone aggregate 6mm nominal size) by volume with which Hardcrete hardening compound of approved quality is mixed @ 2 liter Hardcrete per 50 Kg of cement including cement slurry, but excluding the cost of nosing of steps etc., complete.	35	sqm	286.55	10029.25
37	Cement plaster skirting (upto 30cm height) with cement mortar 1:3 (1cement: 3 coarse sand) finished with a floating coat of neat cement.				
	21mm thick	12	sqm	168.50	2022.00
38	Precast terrazo tiles min. 20 mm thick with graded marble chips of size upto 12mm laid in floors, and landings, jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles laid over 20mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand).				
	Light shade using white cement	270	sqm	566.95	153076.50

39	Precast terrazo tiles min. 20 mm thick with graded marble chips of size upto 12mm laid in skirting and risers of steps not exceeding 30 cm in height on 12mm cement plaster 1:3(1 cement :3 coarse sand),jointed with neat cement slurry mixed with pigment to match the shade of the tiles including rubbing and polishing complete with precast tiles of :				
	Light shade using white cement	18	sqm	665.75	11983.50
40	Providing and fixing 1st quality ceramic glazed tiles conforming to IS:15622 (thickness to be specified by manufacture) of approved make in all colours (shades as approved by Engineer-in-Charge) in skirting,risers of steps and dados over 12 mm thick bed of Cement mortar 1:3 (1 Cement:3 coarse sand) and jointing with grey cement slurry @3.3 kg/sqm including pointing in white cement mixed with pigment of matching shade complete.	50	sqm	556.60	27830.00
41	Providing and laying 1st quality ceramic glazed floor tiles 300X300 mm (thickness to be specified by manufacturer) conforming to IS:15622 of approved make in colours as approved by Engineer in Charge laid on 20mm mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with pigment of matching shade complete.	25	sqm	598.65	14966.25
42	Providing and laying polished vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption's less than 0.08% and conforming to IS: 15622 of approved make in all colours and shades laid over 20mm thick cement mortar 1:4 (1 Cement:4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete as per direction of Engineer-in charge.				
	Size of tile 60 x 60 cm	60	sqm	1448.55	86913.00
43	Providing and fixing approved quality polished vitrified tiles (thickness to be specified by the manufacturer) of approved make and colours in skirting,risers of steps and dados over 12 mm thick bed of Cement mortar 1:3 (1 Cement:3 coarse sand) and jointing with grey cement slurry @3.3 kg/sqm including pointing in white cement mixed with pigment of matching shade complete.	8	sqm	1354.97	10839.76
44	Making khurras 45X45cm with average minimum thickness of 5cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate of 20mm nominal size) over PVC sheet 1mX1mX400micron, finished with 12mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement rounding the edges and making and finishing the outlet complete.	4	Each	108.00	432.00
45	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 10mm gap for thermal expansion. (i) Single socketed pipes.				
	110mm diameter	40	RM	163.40	6536.00

46	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 10mm gap for thermal expansion. (i) Single socketed pipes.				
	110mm bend 87.5 degree	8	each	134.20	1073.60
	110mm Shoe plain	4	each	263.10	1052.40
47	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 MS screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4coarse sand) and making good the wall etc. complete				
	110mm	16	each	96.90	1550.40
48	18mm cement plaster on external face of walls in two coats with under layer 12mm thick cement plaster 1:5 (1 cement :5 coarse sand) finished with a top layer of 6mm thick 1:6 cement plaster(1cement : 6 fine sand)	620	sqm	111.15	68913.00
49	12mm cement plaster on even side of the walls in the mix: 1:6 (1cement :6coarse sand)	1200	sqm	72.70	87240.00
50	2mm thick plaster of paris punning over the plastered surfaces on wall surfaces as directed by engineer-in-charge.	1800	sqm	47.20	84960.00
51	6mm cement plaster to ceiling of mix 1:3 (1 cement : 3 fine sand)	750	sqm	62.15	46612.50
52	Applying priming coat (a) With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works. (b) Applying one coat of cement primer of approved brand and manufacture on wall surface:	50	sqm	12.65	632.50
		200	sqm	17.20	3440.00
53	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade New work (two or more coats) over and including priming coat with cement primer.(Work to be carried as per relevant IS codes.)	1100	sqm	41.55	45705.00
54	Distempering with first quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete as per manufacturer's specification New work (two or more coats)	450	sqm	23.55	10597.50
55	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade. Two or more coats on new work.	400	sqm	40.05	16020.00
56	Finishing walls with Acrylic exterior flat paint of required shade over an under caot of suitable primer on new cement plaster surface: New work : (Two or more coat).	600	sqm	50.40	30240.00

57	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:				
	Two or more coats on new work.	20	sqm	33.25	665.00
58	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade.				
	Two or more coats on new work.	70	sqm	32.40	2268.00
59	Forming groove of uniform size from 12X12mm and upto 25X15mm in plastered surface and joints of ceiling and wall as per approved pattern using wooden battens, nailed to the underlayer including removal of wooden battens, repairs to the edges of plaster panel and finishing the groove complete as per specifications and directions of the Engineer-in-charge.	250.00	RM	13.30	3325.00
60	Making plinth protection of 50mm thick cement concrete 1:2:4 (1 cement : 2coarse sand : 4 graded stone aggregate 20mm nominal size) laid over 75mm thick bed of dry brick balast 40mm nominal size well rammed and consolidated and grouted with fine sand including finishing the top smooth.	60.00	sqm	245.97	14758.20
61	Providing and fixing water closet squatting pan (Indian type WC pan) with 100mm sand cast Iron P or S trap ,10 liter low level white PVC flushing cistern with manually controlled device (handle lever) conforming to IS 7231 with all fittings and fixtures complete including cutting and making good the walls and floors wherever required:				
	White vitreous china orissa pattern WC pan of size 580 X 440mm with integral type foot rests.	1	each	2304.65	2304.65
62	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing & C. P. flush bend with fittings and C. I. brackets, 40mm flush bend, overflow arrangement with specials of standrad 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 solid plastic seat and lid	2	each	3253.95	6507.90
63	Extra for using coloured pedestal type W. C. pan (European type) with low level cistern of same colour instead of white vitreous china W.C. pan and cistern.	2	each	876.95	1753.90
64	Providing and fixing clooured vitreous china flat back half stall urinal of size 580x380x350mm with PVC automatic flushing cistern, Parryware/Hindware/Seabird/Orient (Coral) with fittings , standard size C. P. brass flush pipe, spreaders with unions and clamps (all in C. P. brass) with waste fitting as per IS: 2556, C.I. trap with outlet grating and other couplings in C. P. brass including painting of fittings , cutting and making good the walls and floors wherever required:				
	Single half stall urinal with 10 litre P.V.C automatic flushing cistern of approved make.	2	each	3720.30	7440.60

65	Providing and fixing wash basin of approved colour and size with CI bracket , 15 mm C.P. brass pillar taps, close hole basin mixer 32 mm C.P. brass waste and bottle trap of standard pattern, including painting of fittings etc. cutting and making good the walls wherever required:				
	Vitreous China counter type wash basin size 630 x 450mm with a pair of 15mm C. P. brass pillars taps	2	each	1332.90	2665.80
	Vitreous China Flat back wash basin size 550 x 400mm with a pair of 15mm C. P. brass pillars taps	2	each	1176.10	2352.20
66	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C. I. brackets and stainless steel plug 40mm with provision of 2 nos. CP brass long body bib cock conforming to IS standrad and weighing not less than 650gm for CP bottle trap complete including painting of fittings and brackets, cutting and making good the wall wherver required.				
	460 x 915 mm bowl depth 178mm with drain board	1	each	3482.90	3482.90
67	Providing and fixing 100 mm sand cast iron grating for gully, floor or Nahani trap.	10	each	16.45	164.50
68	Providing and fixing 1000 x 600 x 6 mm thick bevelled edge mirror of float glass (of approved quality) complete shall be fixed mounted on 12 mm thick water proof plywood backing and hardwood beading all-round and mirror fixed to the backing with 4 nos. of CP cap screws & washers, including fixing the mirror to the wall with necessary screws, plugs & washers etc. with each wash basin	4	each	800.00	3200.00
69	Providing and fixing 600 x 120 x 5 mm glass shelf with edges rounded off supported on anodised aluminium angle frame with C.P. Brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc. complete.	3	each	218.80	656.40
70	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with C.P. Brass screws with concealed fitting arrangement of approved quality and make.				
	600 mm long and min. 25mm dia towel rail with total length of 645mm,width 78mm and effective height 88mm,weighing not less than 190gms.	3	each	329.50	988.50
71	Providing and fixing PTMT liquid soap container 109mm wide,125mm high and 112mm distance from wall of standard shape with bracket of same materials with snap fittings of approved quality ,colour and make ,weighing not less than 105 gm (Prayag or equivalent).	4	each	164.65	658.60
72	Providing and fixing toilet paper holder. CP brass.	3	each	147.10	441.30
73	Providing and fixing soil, waste and vent pipes:				
	100 mm dia.				
	Sand cast iron S & S pipe.	20	RM	451.00	9020.00

74	Providing and fixing M.S holder-bat clamps of approved design to Sand Cast iron/ cast iron (spun) pipe embedded in and including cement concrete blocks 10 x 10 cm of 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including cost of cutting holes and making good the walls etc.				
	For 100 mm dia pipe	10	each	65.35	653.50
75	Providing lead caulked joints to SCI pipes and fittings of diameter				
	100mm	10	each	126.50	1265.00
76	Providing and fixing SCI trap of self cleansing design with SCI screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors:				
	100mm inlet and 100mm outlet.	2	each	544.30	1088.60
77	Providing and fixing G.I. Pipes (medium grade) as per IS 1239 Part I & II complete with G.I. Fitting and clamps , including cutting and making good the walls etc. (internal work).				
(a)	15 mm dia nominal bore.	40	RM	105.85	4234.00
(b)	20 mm dia nominal bore.	20	RM	133.85	2677.00
(c)	25 mm dia nominal bore.	5	RM	179.65	898.25
78	Providing and fixing G.I. Pipes (medium grade) as per IS 1239 Part I & II complete with G.I. Fitting and clamps , including cutting chases and making good the walls etc. (Concealed pipe including painting with anti corrosive bitumastic paint)				
(a)	15 mm dia nominal bore.	15	RM	144.75	2171.25
(b)	20 mm dia nominal bore.	10	RM	170.15	1701.50
79	Providing and fixing G.I. Pipes (medium grade) complete with G.I. Fitting and clamps , including trenching and refilling, etc. (external work).				
(a)	15 mm dia nominal bore.	10	RM	94.05	940.50
(b)	20 mm dia nominal bore.	10	RM	116.60	1166.00
(c)	40 mm dia nominal bore.	30	RM	219.60	6588.00
80	Making connection of GI distribution branch with GI main of following sizes by providing and fixing tee, including cutting and threading the pipe etc., complete.				
	25 to 40mm nominal bore.	5	each	166.05	830.25
81	Providing and fixing C.P. brass bib cock of approved quality conforming to IS: 8931				
	15mm nominal bore	5	each	207.00	1035.00
82	Providing and fixing C.P. brass stop angle valve for basin and cistern points of approved quality conforming to IS:8931.				
	15mm nominal bore	5	each	347.65	1738.25
83	Providing and fixing brass gate valve with CI wheel of approved quality (screwed end)				
(a)	25mm nominal bore	1	each	285.50	285.50
(b)	32mm nominal bore	1	each	358.00	358.00

84	Providing and fixing gun metal ball valve with operating lever of approved quality complete.				
	High or low pressure with plastic floats				
	15mm nominal bore	1	each	228.35	228.35
85	Providing and fixing gun metal non-return valve of approved quality complete.				
	25mm nominal bore				
	Horizontal	1	each	292.15	292.15
	Vertical	1	each	317.70	317.70
86	Providing and placing on terrace (at all floor levels) polyethylene water storage tank of approved brand and manufacture 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. The tank should be ISI marked .	4000	per litre capacity	5.25	21000.00
87	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testiing of joints etc. complete.				
(a)	100 mm diameter.	10	RM	105.90	1059.00
(b)	150 mm diameter.	10	RM	151.65	1516.50
88	Providing, laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40mm nominal size) all round SW pipes including bed concrete as per standrad design:				
(a)	100 mm diameter.	10	RM	331.20	3312.00
(b)	150 mm diameter.	10	RM	405.05	4050.50
89	Providing and fixing square-mouth S.W. Gully trap grade 'A' complete with C.I. Grating brick masonry chamber with bricks of class designation 75 and water tight C.I. Cover with frame of 300 x 300 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 standard design.:				
	100 x 100 mm size P type				
	With F.P.S bricks	3	each	935.15	2805.45
90	Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 cement: 4 coarse sand) RCC top slab with 1:2:4 mix(1 cement:2 coarse sand: 4 graded stone aggregate 20mm nominal size) foundation concrete 1:4:8 (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 mix(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.				
	Inside size 90X80cm and 45cm deep including CI cover with frame (light duty) 455X610mm internal dimensions total weight of cover and frame to be not less than 38kg (weight of cover 23kg and weight of frame 15kg)				
	With FPS bricks	1	each	5383.70	5383.70

	Inside size 120X90cm and 90cm deep including CI cover with frame (medium duty) 500mm internal diameter total weight of cover and frame to be not less than 116kg (weight of cover 58kg and weight of frame 58kg)				
	With FPS bricks	1	each	11882.20	11882.20
91	Extra for depth for manholes				
	Size 90X80cm				
	With FPS bricks 75 class designation	4	RM	2654.00	10616.00
92	Providing MS foot rests including fixing in manholes with 20x20x10cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size) as per standard design				
	With 20 x 20mm square bar	4	each	149.85	599.40
93	Constructing brick masonry road gully chamber 50 x 45 x 60cm with bricks of class designation 75 in cement mortar 1:4 (1 cement: 4 coarse sand) including 500 x 450mm pre-cast RCC horizontal grating with frame complete as per standard design				
	With FPS bricks 75 class designation	4	each	2248.35	8993.40
94	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded builtup standard tubular and other sections of approved make conforming to IS: 733 and IS:1285, fixed with rawl plugs and screws or with fixing clips or with expansion hold fasteners including necessary filling up of gaps at junctions at top, bottom and sides with required PVC/neoprene felt, etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, aluminium snap beading for glazing/panelling, CP brass/stainless steel screws, all complete as per architectural drawings and direction of Engineer-in-charge. (Glazing and panelling to be paid for separately).				
(a)	For fixed portion				
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	520	kg	306.30	159276.00
(b)	For shutters of doors, windows & ventilators including providing and fixing hinges/pivots and fittings wherever required including the cost of PVC/neoprene gasket required.				
	Powder coated aluminium (minimum thickness of powder coating 50 micron)	1040	kg	326.60	339664.00
95	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions, etc., with PVC/neoprene gasket, etc., complete as per the architectural drawings and directions of Engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item).				
	With glass panes of 5.5mm thickness (weight not less than 13.75kg/sqm)	120	sqm	673.55	80826.00
96	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS 6315 marked "hardwyn" make (Model 3000) or equivalent for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M. S. sheet outer box with slide plate etc. complete as per direction of Engineer-in-charge.				
	With Stainless steel cover plate	4	each	1733.50	6934.00

97	Providing and fixing 12mm thick prelaminated three layer medium density (exterior grade) particle board conforming to IS: 12823 Grade I Type II bonded with phenol formaldehyde synthetic resin of approved brand and manufacture, in panelling fixed in aluminum doors, windows shutters and partition frames with CP brass/stainless steel screws etc. complete as per architectural drawings and directions of Engineer-in-charge.				
	Pre laminated particle board with decorative lamination on both side	12	sqm	812.60	9751.20
98	Providing, laying cement based water proofing treatment including preparation of surface as required for treatment of roofs,balconies,terraces etc consisting of following operations:				
	a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with proprietry water proofing compound conforming to IS:2645 and approved by Engineer-in-charge shall be applied and grouted over the RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.				
	b) Laying plain cement concrete 1:5:10 (1cement : 5 fine sand : 10 burnt brick aggregate of 40mm nominal size) admixed with proprietry water proofing compound conforming to IS:2645 and approved by Engineer-in-charge over 20mm thick layer of cement mortar of mix 1:5 (1 cement: 5 coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs.				
	c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge.				
	d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1cement:4coarse sand) admixed with water proofing compound conforming to IS:2645 and approved by Engineer-in-charge and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square.				
	e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test.All above operations to be done in order and as directed and specified by the Engineer-in-charge:				
	With average thickness of 120 mm and minimum thickness at khurra as 65 mm	340	sqm	503.40	171156.00
99	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6mm nominal size) reinforced with 1.6mm dia mild steel wire including centering and shuttering, roughning, cleaning, fixing and finishing in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete				
	50mm thick	10	sqm	359.20	3592.00

100	Add or deduct plaster drip course /groove in plastered surface or moulding to RCC projections:	75	meter	11.95	896.25
101	Providing & fixing 15mm thick approximately 600 x 600mm Mineral fibre board panel along with false ceiling and making cut-outs for electrical fixtures, AC diffusers, openable access etc complete as per drawings with silhouette profile system with 15mm wide flange incorporating 6mm central recess white/black main runners at 1200mm centre to centre and not greater than 600mm from the adjacent wall. The cross tees shall be provided to make a module of approximately 600mm x 600mm by fitting 600mm long cross tees centrally placed between 1200mm long cross tees. Cross tees also have 15mm wide flange incorporating 6mm central recess white/black. The module formed above shall be anchored to the slab with channels or angles , suspenders as per manufacturer's specification.	600	sqm	500.00	300000.00
102	Providing and laying Tiles/Paver block as per clause 10 point no. 56 of Customer/Employer specification. Rate shall be inclusive of cost of Tiles/paver block, cement mortar 1:4 (1 cement : 4 coarse sand), PCC 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) including supplying, laying etc. all complete.	100	sqm	584.36	58436.00
103	Making soak pit 2.5m diameter 3m deep with 45X45cm dry brick honeycomb shaft with bricks of class designation 75 and SW drain pipe 100mm diameter, 1.8m long complete as per standard design and specification.				
	With FPS bricks	1	each	9938.65	9938.65
104	Providing and fixing fire proof door including frame conform to IS:3614 (Part-I) & (Part-II) with metal covered on both side having insulating core filled up with mineral wool. The door shall be provided with all accessories and hardware and zinc silicate primer (minimum DFT 75 microns) after blast cleaning the surface to near white metal surface (Sa 2 1/2). The door shall be finished with suitable fire retardant painting system				
	Fire proof door with minimum 3 hours fire rating	10	sqm	2000.00	20000.00
				Total:	8145560.2