

**OFFICE OF THE MUNICIPAL CORPORATION JAGDALPUR**  
**DETAILED ESTIMATE**

**NAME OF WORK :- ESTIMATE FOR CONSTRUCTION OF TOILET IN AUDITORIUM BUILDING INFRONT OF P.G. COLLAGE AT KUSHABHAU THAKRE WARD NO. 48, JAGDALPUR DIST. BASTAR (C.G.)**

**AS PER S.O.R:-SCHEDULE OF RATES PUBLIC WORK DEPARTMENT (01/01/2015)**

S.	S.O.R.	Particulars of Items	Nos	L.	B.	D.	Quantity	Unit	Rate	Amount
1	2	3	4	5	6	7	8	9	10	11
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.								
	1.1.1	In all types of soil								
		column	1	14	1.20	1.20	1.50	30.24		
		septic tank	1	1	5.50	3.00	2.00	33.00		
							63.24	Cum	185.0	11699.00
2	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).								
		column	1	14	1.20	1.20	0.15	3.02		
		septic tank	1	1	5.50	3.00	0.15	2.48		
			1	1	14.00	5.00	0.15	10.50		
							16.00	Cum	2970.00	47517.03
3	2.1.1	Foundations, footings, base of columns and plinth beam in any shape and size.								
		column c1	4	14	1.20	-	0.25	16.80		
		ground beam outer side	2	2	14.00	-	0.30	16.80		
		inner side	2	2	5.00	-	0.30	6.00		
		septic tank beam	2	2	5.50	-	0.20	4.40		
			2	3	2.80		0.20	3.36		
							47.36	Sqm	139.00	6583
4	1.18	Providing and filling in plinth with sand/ Crusher dust and hard moorum under floor in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.								
		column	1	14	1.20	1.20	0.45	9.07		
		upto plinth level	1	1	14.00	3.50	1.20	58.80		
		front	1	1	10.00	3.00	0.60	18.00		
							85.87	Cum	371.00	31859
5	2.1.5	Columns, beams & walls- circular or any other geometrical shape other than square and rectangular in all sizes								
		column up to plinth level	2	14	0.20	-	1.20	6.72		
			2	14	0.30	-	1.20	10.08		
		column above plinth level c1	2	14	0.20	-	3.20	17.92		
			2	14	0.30	-	3.20	26.88		
		slab beam outside	2	2	14.00	-	0.20	11.20		
		slab beam outside	2	2	5.30	-	0.20	4.24		
							77.04	Sqm	297.00	22881
6	2.1.7	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)								
		septic tank beam	1	1	5.00	-	2.80	14.00		
		outer side	1	2	5.00	-	0.12	1.20		
			1	2	2.80	-	0.12	0.67		
		slab shuttering	1	1	14.00	-	2.50	35.00		
		outer side	1	2	14.00	-	0.12	3.36		
			1	2	2.50	-	0.12	0.60		
							54.83	Sqm	235.00	12886
7	3.12	Providing and placing in position reinforcement for R.C.C. work i/c straightening, cutting, bending, binding etc. complete as per drawings i/c cost of binding wire all complete:								



2	3	4	5	6	7	8	9	10	11
	column jaali main	14	10	1.20		0.617	103.66		
	distribution	14	10	1.20		0.617	103.66		
	column #300/200	14	6	4.00		0.888	298.37		
	ring	14	24.53	2.00		0.395	271.30		
	septic tank raft	1	34.33	2.80		0.617	59.31		
		1	19.67	5.00		0.395	38.84		
	septic tank long wall s/b 01 top /bottom	2	4	5.00		0.888	35.52		
	crank	2	2	5.50		0.888	19.54		
	ring	2	30.41	1.00		0.395	24.03		
	short wall s/b 02 top /bottom	3	4	2.80		0.888	29.84		
	crank	3	2	3.30		0.888	17.58		
	ring	3	17.47	1.00		0.395	20.70		
	p/b 01 top /bottom l/w	2	4	14.00		0.888	99.46		
	crank	2	2	14.50		0.617	35.79		
	ring	2	83.35	0.90		0.395	59.26		
	p/b 02 top /bottom	3	4	2.50		0.888	26.64		
	crank	3	2	3.00		0.617	11.11		
	ring	3	15.71	0.90		0.395	16.75		
	s/b 01 top /bottom l/w	1	4	14.00		0.888	49.73		
	crank	1	2	14.50		0.617	17.89		
	ring	1	83.35	0.90		0.395	29.63		
	s/b 02 top /bottom s/w	3	4	2.50		0.888	26.64		
	crank	3	2	3.00		0.617	11.11		
	ring	3	15.71	0.90		0.395	16.75		
	SLAB MAIN BAR	1	93	14.00		0.617	806.21		
	top extra	2	25	0.90		0.617	27.77		
	distribution	1	18	7.30		0.395	50.94		
							2308.01	Kg	54.50
									125786
8	3.2 Providing and laying nominal mix reinforced cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.								
	3.2.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
	column footing	1	14	1.20	1.20	0.20	4.03		
	column upto ground level	1	14	0.20	0.30	1.20	1.01		
	column upto slab	1	14	0.20	0.30	3.20	2.688		
	septic tank raft	1	1	5.00	2.80	0.15	2.100		
	septic tank beam	1	2	5.00	0.20	0.20	0.400		
		1	3	2.80	0.20	0.20	0.336		
	plinth beam l/w	1	2	14.00	0.20	0.30	1.680		
	s/w	1	3	5.30	0.20	0.30	0.954		
	slab beam	1	2	14.00	0.20	0.20	1.120		
		1	3	2.00	0.20	0.20	0.240		
	septic tank slab	1	1	5.00	2.80	0.12	1.680		
	total slab	1	1	14.00	2.50	0.12	4.200		
							20.438	Cum	4163.00
									85083
9	7.5.4 Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 40 in foundation and plinth in (Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)								
	septic tank wall	1	2	5.00	0.20	1.70	3.40		
	s/w +partation wall	1	3	2.80	0.20	1.70	2.86		
	up to pb	1	2	14.00	0.20	0.45	2.52		
		1	3	5.30	0.20	0.45	1.43		
							10.21	Cum	3263.00
									33305
10	7.5.4 Brick work with modular fly-ash lime bricks (FALG Bricks) confirming to IS:12894-2002 of class designation 40 in SUPER STRUCTURE								
	7.6 Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)								
	p/b to slab level	1	2	14.00	0.20	2.10	11.76		
		1	3	1.50	0.20	2.10	1.89		
		1	3	2.00	0.20	2.00	2.40		
		1	1	14.00	0.20	2.00	5.60		
	deduction opening door	-1	8	0.80	0.20	2.10	-2.69		
	open door	-1	2	1.20	0.20	2.10	-1.01		
	ventilation	-1	10	0.50	0.20	0.30	-0.30		
							17.65	Cum	3384.00
									59741

	3	4	5	6	7	8	9	10	11
13	Providing and laying damp proof course (upto 50mm thick) with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including formwork.								
	1	1	14.00	0.20	0.10	0.28			
	1	3	2.00	0.20	0.10	0.12			
	deduction	-1	2	1.20	0.20	0.10	-0.05		
						0.35	Cum	4237.00	1491
12	9.15 Providing and fixing M.S. grill of approved pattern made of M.S. flats or square or round bars welded to steel frame of windows etc. including applying a priming coat of red oxide zinc chromate primer..								
	ventilation	1	10	0.50	0.30	1.50			
						1.50			
		@	38.50 kg/sqm			57.75	Kg	67.50	3898
13	9.13 Providing and fixing steel door/ window with M.S. sheet 1mm thick, frame of angle iron, diagonal braces of angle/ flat iron of suitable size, 3.00 mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of red oxide zinc chromate primer.								
	door	1	10	0.80	2.10	16.80			
						16.80			
		@	68 kg/sqm			1142.4	Kg	75.00	85680
14	9.3 Steel work in tubular (round, square or rectangular hollow tubes etc.) structure in built-up sections, trusses and frame work including cutting, hoisting, fixing in position upto a height of 5m above plinth level, consisting of columns trusses, roof and bottom purlins, base plate, holding down bolts, wind ties bracing (if required), bolts, nuts and washers for fastening etc. complete with applying a priming coat of red oxide zinc chromate primer.								
	9.3.2 Electric resistance or induction butt welded tubes Grade-300 ladder								
	PERLIN 2"x2" dia @ 7.93kg/rmt for ramp	1	4	4.00	7.93	126.88			
		4	4	1.00	7.93	126.88			
						253.76	Kg	88.50	22458
15	3.2 Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.								
	3.2.1 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		2	4.00	1.50	0.35	4.20			
	steps	1	6.40	0.60	0.15	0.96			
		1	6.40	0.50	0.15	0.51			
		1	6.40	0.30	0.15	0.36			
		1	10.00	3.00	0.17	5.10			
						11.13	Cum	4073.0	45,321
16	11.2 Providing and making 12mm thick cement plaster of mix:								
	11.2.4 In Cement Mortar 1:6 (1 cement : 6 fine sand)								
	inner side long wall	1	2	14.00	-	2.10	58.80		
		1	2	5.00	-	2.10	21.00		
	Deduction opening						79.80		
	door	1	8	1.00	-	2.10	4.75		
	open door	1	2	1.50	-	2.10	6.30		
							11.05		
							68.75	Sqm	91.50
									6291
17	11.3 Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:								
	11.3.4 In Cement Mortar 1:6 (1 cement : 6 fine sand)								
	outer wall l/w	2	2	14.00	-	3.00	168.00		
		2	2	5.00	-	3.00	60.00		
	Deduction opening						228.00		
	door	1	10	1.00	-	2.10	4.75		
	open door	1	2	1.50	-	2.10	6.30		
							11.05		
							216.95	Sqm	107.00
									23214
18	11.1 Providing and making 6mm thick cement plaster of mix:								



		3	4	5	6	7	8	9	10	11
		Cement mortar 1:4 (1 cement : 3 fine sand)								
		1	1	14.00		3.50	49.00			
		1	2	14.00		0.12	3.36			
		1	2	3.50		0.12	0.84			
							53.20	Sqm	87.00	4628
12.9	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.									
12.9.2	Size above 200x300mm toilet	1	1	14.00	5.00		70.000			
							70.000	Sqm	858	60060.00
20	12.7 Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.									
	12.7.2 Size above 200x300mm toilet	2	8	1.50	1.20		28.80			
		2	8	1.20	1.20		23.04			
		2	2	2.00	1.20		9.60			
		2	2	14.00	1.20		67.20			
	deduction door	-1	8	0.80	1.20		-7.68			
	open door	-1	2	1.50	1.20		-3.60			
							117.36	Sqm	646	75814.56
21	14.12 Applying one coat of cement primer on wall surface (applied @ 0.80 litres/10 sqm) complete.						53.20			
	6 mm plaster	1					68.75			
	12 mm plaster	1					216.95			
	15 mm plaster	1					338.90	Sqm	23.00	7795
22	14.1.2 Providing and applying plaster of paris putty over plastered wall surface including scaffolding complete									
	More than 2 mm thickness to make surface even and smooth in true plumb and line and level						271.12	Sqm	93.50	25349.72
	80% of total plaster work									
23	14.15 Painting exterior surface with ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:						271.12	Sqm	56.00	15182.72
	14.15.1 On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over									
	<b>Electrical</b>									
24	4.1 Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in surface PVC conduit, with 5 amp piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with same size cable etc as required.									
A	4.1.1 Short Point	6	1				6.00	Point	213.0	1278
B	4.1.2 Medium Point	18	1				18.00	Point	356.0	6408
	6.4 Supplying and fixing following size/ modules, GI box along with modular base & cover plate for modular switches in recess etc as required.									
25	F 6.4.6 200mmX150mm (12 Module)	1	8				8.00	Each	273.00	2184
C	22.16 Supplying and erection aerial fuse complete as required.									
D	22.16.2 30 amp	1	8				8.00	Each	113.00	904
	7.1 Supplying and fixing following piano type switch, socket, other accessories on the existing switch box/ cover including connections etc. as required.									
26	E 7.1.15 Batten/ angle holder	1	45				45.0	Each	37.50	1688
	8.36 Supplying, fixing, testing and commissioning of approved make following 230/250 volts electronic ballast in existing luminaries at all locations as required.									
27	8.36.1 For 36/40 watt T8 flu. Fitting	1	8				8.00	Each	253.0	2024

	3	4	5	6	7	8	9	10	11
2	Supplying, fixing, testing and commissioning of following LED lamps with inbuilt electronic driver heat sink and all other accessories in existing holder/ luminaries as required and furnishing 2 Yrs Guarantee certificate from manufacturer.	1	8	-		8.00	Each	648.00	5184
8.22.2	5 Watt								
	<b>SANITARY</b>								
18.76	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.	1	1	15.00		15.00	Metre	182.0	2730
18.76.1	75 mm dia pipe.	1	1	15.00		15.00	Metre	267.0	4005
18.76.2	110 mm dia pipe.								
30	18.18 Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :	1	1	6.00		6.00	each	936.0	5616
31	18.18.1 White Size 550x450 mm								
	19 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.	1	1	70.00		70.00	Metre	91.50	6405
32	19.6.1 15 mm nominal outer dia .Pipes.								
	19 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.	1	1	80.00		80.00	Metre	165	13200
33	18.6.3 25 mm nominal outer dia .Pipes.								
	18.1 Providing and fixing water closet squatting pan (Indian type W.C. pan ), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required :								
	18.1.3 White Orissa pattern W.C. pan of size 580x440 mm	1			6.00	6.00	Each	1888.00	11328.00
34	18.4 Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10 litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all fittings and fixtures complete including cutting and making good the walls and floors wherever required :	2				2.00	Each	2882	5764
35	18.4.3 White pedestal type								
	19.14.20 CP brass water jet to be fixed in seat cover of WC with flexible connection pipe	2				2.00	Set	577	1154
36	18.25.2 Providing and fixing flexible P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.	1	1	6.00		6.00	Each	88.50	531
37	18.16 Providing and fixing one piece construction white vitreous china squatting plate urinal with an integral rim longitudinal flushing pipe.	1	1	6.00		6.00	Each	1401.00	8406
38	18.17 Providing and fixing vitreous china wash basin with C.I. brackets, 32mm C.P. brass waste of standard pattern, including painting of brackets, cutting and making good the walls wherever required :	1	1	6.00		6.00	Each	1430.00	8580
39	9.42 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	1	2	1000.00		2000.00	Each	7.30	14600
40	19.14 Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required:								
A	19.14.1 Bib cock	1	14			14.00	Each	382	5348
B	19.14.6 Stop cock (concealed) (600 grams)	1	14			14.00	Each	494	6916
C	19.14.7 Angle valve for basin mixer and geyser points (450 grams)	1	10			10.00	Each	382	3820
41	19.15 Providing and fixing stainless steel drain jali of approved make/quality.	1	18			18.00	Each	51	918
42	19.17.3 Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :								
	25 mm nominal bore	1	4			4.00	Each	432	1728
43	19.14.5 Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required:								



