

**MUNICIPAL CORPORATION OF BHILAI  
NIT**

वार्ड क्र. 28 छावनी, शंकर नगर आई.टी.आई. ग्राउण्ड में आंगनवाडी निर्माण कार्य।

(As Per PWD Building SOR 01.01.2015 & Electrical SOR 01.06.2020)

SN	PARTICULARS OF ITEMS	QTY.	UNIT
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. In all types of soil	68.70	Cum
2	Surface dressing of the ground including removing vegetation and making up undulations and inequalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area).	80.00	Sqm
3	Extra for every additional lift of 1.5 m or part thereof.	16.22	Cum
4	Filling from available excavated stuff (Excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering with a lead upto 50 M. and lift upto 1.5 M.	25.48	Cum
5	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.	75.83	Cum
6	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Foundations, footings, base of columns and plinth beam in any shape and size.	59.04	Sqm
7	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. 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	10.32	Cum
8	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work. 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	12.53	Cum
9	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete: Thermo-Mechanically treated bars	2035.80	Kg
10	Brick work with modular fly-ash lime bricks (FALG Bricks) conforming to IS:12894-2002 of class designation 35 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand)	15.09	Cum
11	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Columns, Pillars, Piers and likes- rectangular or square in shape	39.44	Sqm
12	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	99.98	Sqm
13	Beams, lintels, cantilevers & walls	33.97	Sqm
14	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work. 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	11.42	Cum
15	Extra for brick work in superstructure: Above plinth and upto floor five level.	12.19	Cum
16	Half brick thick (9cm) brick masonry with modular well burnt clay bricks of crushing strength not less than 35 kg/sqcm and water absorption not more than 20% in superstructure above plinth level upto floor five level. Cement Mortar 1:4 (1 cement : 4 coarse sand)	22.27	Sqm
17	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry.	22.27	Sqm
18	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..	194.40	Kg

SN	PARTICULERS OF ITEMS	QTY.	UNIT
19	Providing and fixing double glazed hermetically sealed glazing in aluminium windows, ventilators and partition etc. with 6 mm thick clear float glass both side having 12 mm air gap including providing EPDM gasket, perforated aluminium spacers, desiccants, sealant (Both primary and secondary sealant) etc. complete	9.72	Sqm
20	Providing and fixing flush door shutters, conforming to IS 2202 (Part 1), interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges. 30mm thick (single leaf)	9.14	Sqm
21	Providing and fixing M.S. bright finished or black enameled Butt hinges IS : 1341 marked with necessary iron screws:	15.00	No.
22	Providing and fixing M.S. bright finished or black enameled sliding door bolts with bolts, nuts and necessary iron screws. 250 x 16 mm	10.00	No.
23	Providing and fixing M.S. bright finished or black enameled Tower bolts (Barrel type) with necessary iron screws. 200 mm	5.00	No.
24	Providing and fixing M.S. bright finished or black enameled handles with necessary iron screws. 100 mm	10.00	No.
25	Providing and fixing MS bright finished single hanging door stopper with necessary MS steel screws complete.	10.00	No.
26	6mm thick cement plaster of mix: In Cement Mortar 1:4 (1 cement : 4 fine sand)	112.46	Sqm
27	12mm thick cement plaster of mix: In Cement Mortar 1:6 (1 cement : 6 fine sand)	120.08	Sqm
28	Providing and making 15 mm thick cement plaster on rough side of single or half brick wall of mix. In Cement Mortar 1:6 (1 cement : 6 fine sand)	213.59	Sqm
29	Providing and making 12mm thick plain cement mortar bands in cement mortar 1:4 (1 cement : 4 fine sand) per cm width: Raised Band	180.00	Rmt.
30	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. Size 200x300mm	52.71	Sqm
31	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. Size 200x300mm	14.76	Sqm
32	KOTA stone slab 25mm thick in risers and treads of steps, skirting dado and pillar laid in 12mm (Average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of stone for skirting and dado shall be equal to the height of skirting/ dado up to length of 1.0 M.)	3.51	Sqm
33	Distemping with acrylic washable distemper to give an even shade. On new work (Two or more coats). On new work (two or more coats)	232.54	Sqm
34	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: On new work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	213.59	Sqm
35	Painting on new work (two or more coats) to give an even shade with: Satin synthetic enamel paint (top most approved branded quality)	35.99	Sqm
36	Providing and fixing one side polished 25 mm thick RAJIM SAND STONE shelves fixed in walls in cement mortar 1:3 (1 cement : 3 coarse sand) including finishing complete. For one side polished	7.20	Sqm
37	P/F white vitreous flat-back basin 580x400 mm with 15mm C.P. Brass pillar cock with R.S. or C.I. brackets painted white C.P. Brass chain with rubber plug 32 32mm pvc waste pipe complete including cutting and making good the floors and walls where required. White size 450x325 mm	2	Nos.

SN	PARTICULERS OF ITEMS	QTY.	UNIT
38	P/F 600x 450 barrel edge mirror of superior class (of approved quality) complete with 6mm thick asbestos sheet ground fixed to wooden cleats with brass screws & washer.	1	Nos.
39	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 good the wall wherever required.		
	For 75mm dia pipe	3.00	RMT.
	For 100mm dia pipe	3.00	RMT.
40	Providing and fixing on wall face UV stabilized Unplasticised - PVC moulded fittings/ accessories having 3.2mm wall thickness for Rigid PVC pipes conforming to IS : 13592 (heavy) jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.		
	Nahani trap 110x75mm	2	Nos
41	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality:		
	Bib cock (250 grams)	2	Nos.
	Stop cock (350 grams)	2	Nos.
42	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		
	Towel rail (600mm long x 20mm dia)	2	Nos
	Soap dish plate	2	Nos.
43	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 CONCEALED WORK including cutting chases and making good the walls etc., CONCEALED WORK including cutting chases and making good the		
	15mm nominal outer dia pipe	15.00	RMT.
	20mm nominal outer dia pipe	20.00	RMT.
	25mm nominal outer dia pipe	10.00	RMT.
44	Providing and fixing stainless steel drain jali of approved make/quality	3	Nos
45	Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end):		
	25mm dia.	1	Nos.
46	Providing laying and jointing of glazed stoneware pipe grade "A" with stiff mixture of cement mortar in proportion of 1:1 (1 cement : 1 Sand) including testing of joints and earth excavation, refilling and disposal of surplus earth complete in all respect for:-		
	100mm dia S.W. pipe	3.00	RMT
47	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete 150mm thick as per standard design:		
	100mm dia S.W. pipe	3.00	RMT
48	Providing and fixing square mouth S.W. Gully trap of size 150x100mm 'P' or 'S' type grade "A" complete with C.I. grating brick masonry chamber with locally available best quality bricks and 75 th. R.C.C. precast cover made of M-20 grade Cement conc. As per detailed drawings and direction of Engineer		
	150 x 100 mm size P type	2	Nos.

SN	PARTICULERS OF ITEMS	QTY.	NIT
49	Providing and constructing brick masonry chamber for underground pipe and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm <sup>2</sup> in cement mortar 1:4 (1 cement : 4 coarse sand) RCC cover of suitable size and 75mm thick with 1:1.5:3 mix (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including reinforcement 8mm dia bars at 150mm both ways and MS hooks for lifting, including foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design		
	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets	1	Nos
50	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		
	500 lit capacity 1 nos	500.00	Lit
51	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		
	White Orissa pattern W.C. pan of size 580x440 mm	1	Nos
52	Providing and constructing soak pit 1.20x1.20x1.20m filled with brickbats including S.W. drain pipe 100 mm diameter and 1.20 m long complete as per standard design.	2	NOS
	<b>ELECTRICAL SOR 01.06.2020</b>		
53	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as per specification and IS Code 3043: 1987(R 2016)		
		1	Nos
54	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ concealed conduit/ submain wiring/ cable as per specification.	30.00	Rmt
55	Providing and fixing metal clad SP & NJ switch fuse unit (re wirable ) 230/250 volts with procelain rewirable fuse including drilling holes on the board connections earthing the body etc. as required (Thimblelling shall be paid seperately)		
	32 amp	1.00	Rmt
56	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in concealed steel conduit as required. 3 X 2.5 sq. mm in 20mm conduit		
	3 X 2.5 sq. mm in 20mm conduit	30.00	Mtr.
57	Supplying and fixing on surface / recess following way 240 volts SP & N MCB distribution board of sheet steel phosphatized and powder painted complete with tinned copper busbar neutral busbar earth bar din bar detachable gland plate including interconnections earthing etc. as required ( But without MCB / RCCB/ Isolator)		
	4 way single door	1	Nos
58	Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed steel 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.		
	Short Point	12	Point
	Medium Point	12	Point
59	Short Point+Extra for providing and fixing light plug point on board in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) point wiring with piano type 3 pin 5/6 amp socket outlet and 5/6 amp switch including cost of phenolic laminated sheet and M.S. box etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5)		
		4	Points

Sl.	PARTICULERS OF ITEMS	QTY.	UNIT
60	Wiring for power plug point with 3x4 sq mm FRLS PVC insulated stranded copper conductor wire for phase, neutral and earth in concealed FRLS PVC conduit (heavy duty, thickness of pipe should be 2 mm) along with piano type 16 amp switch and 6 pin 16 amps socket outlet with suitable size M.S. box, phenolic laminated sheet, earthing the switch box and socket outlet with same size wire etc. as per specification and IS: 694 (2010), IS: 9537 (2000 Part 5)		
	Medium Point	2	Nos
61	Supplying and fixing following piano type switch, socket, other accessories on the existing switch box/ cover including connections etc. as required. Ceiling rose 3 pin 5 amps	12	each
62	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode at 0.5 Metre depth below ground level including excavation and refilling the trench etc. as required.	13.00	M
63	Supplying of following sizes ceiling fan		
	1200 mm dia sweep	4	Nos
64	Supplying, installation, testing and commissioning of following sizes fancy exhaust fan having built in louvers in existing opening in wall including earthing etc. complete as required 300 mm dia	1	Nos
65	Supplying, installation, testing and commissioning of following COB LED Spot Light fitting complete with Electronic Driver Heat sink Capacitor and all other accessories including connection, earthing etc complete as per specification and IP20, P.F. should be greater than 0.9. LED chip efficacy ratio $\geq$ 100 lumens /watt.	10	Nos
	20 watt		



Executive Engineer  
Municipal Corporation  
Bhilai



Assistant Engineer  
Municipal Corporation  
Bhilai



Sub Engineer  
Municipal Corporation  
Bhilai