

# MUNICIPAL CORPORATION OF BHILAI

## NIT

वार्ड क्र. 50 नवीन कॉलेज ग्राउण्ड सामुदायिक शौचालय एवं सेप्टिक टैंक का संधारण कार्य।

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

S.N.	PARTICULARS OF ITEMS	Quantity	UOM
1	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 testing of joints etc. complete : 100 mm diameter	5.00	m
2	Cement concrete flooring with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm) finished with a floating coat of neat cement. 40 mm thick	4.00	Sqm
3	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:100 mm diameter S.W. pipe	3.00	m
4	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer. In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	40.00	Kg
5	Providing and fixing steel door made of angle iron of suitable sizes with M.S. grill of approved pattern made of M.S. flats or square or round bars coat of red oxide zinc chromate primer.	20.00	Kg
6	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.	40.00	Kg
7	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.	10.00	M
	110 mm dia	10.00	M
	150 mm dia	15.00	Sqm
8	Neat Cement punning.		
9	Providing and making 6mm thick cement plaster of mix: In Cement mortar 1:3 (1 cement : 3 fine sand)	12.60	Sqm
10	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix: In Cement Mortar 1:5 (1 cement : 5 fine sand)	12.60	Sqm
11	Providing and making 12mm thick cement plaster of mix: In Cement Mortar 1:4 (1 cement : 4 fine sand)	12.60	Sqm
12	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. 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).	0.27	Cum
13	Providing and fixing 30mm thick fibreglass reinforced plastic (F.R.P.) flush door shutter in different plain and wood finish made with fire retardant grade unsaturated polyester resin, moulded to 3mm thick FRP laminate all around, with suitable wooden blocks inside at required places for fixing of fittings and polyurethane foam (PUF) / Polystyrene foam to be used as filler material throughout the hollow panel, casted monolithically with testing parameters of F.R.P. laminate conforming to table - 3 of IS: 14856 : 2000, complete.	1.80	Sqm
14	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	Each
15	Brick work with modular fly-ash lime bricks (FaLG Bricks) conforming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand)	0.20	Cum

S.N.	PARTICULARS OF ITEMS	Quantity	Unit
16	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. 1:1½:3 (1 cement, 1½ coarse sand, 3 graded stone aggregate 20mm nominal size). Extra for precast PCC/RCC work of any mix including form work, bricking and firing in Cement Mortar 1:2 (1 Cement, 2 coarse sand) and finishing with cement plaster in Cement Mortar 1:5 (1 Cement, 2 coarse sand) but excluding reinforcement.	8.74	Cum
17	Providing and filling in plinth with sand, coarse dust and hard mortar under floor in layers not exceeding 20mm in depth consolidating each deposited layer by ramming and watering, including dressing etc. complete.	8.70	Cum
18	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 in foundation and plinth all complete. Thermo-Mechanically treated bars EC 417.	8.75	Kg
19	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. 1:2:4 (1 cement, 2 coarse sand, 4 graded stone aggregate 20mm nominal size).	8.30	Cum
20	Providing and laying vitrified floor tiles with suitable oil priming of tile surface with water absorption less than 17% and conforming to IS 14622 of approved make but on 20mm thick cement mortar 1:4 including grouting the joints with white cement and matching pigments etc. complete.	1.00	Sqm
21	Providing and laying ceramic glazed floor tiles conforming to IS 14622 of approved 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 300x300mm.	1.00	Sqm
22	Providing and laying ceramic glazed wall tile conforming to IS 14622 of approved make, colour, shades and — 10 mm thick bed of cement mortar 1:2 — cement stone @ 1 kg per sqm including pointing in white cement mixed with matching pigment complete. Size upto 300x300mm.	0.50	Sqm
23	Distemping with acrylic washable distemper to give as new finish on surface (two or more coats)	9.04	Sqm
24	Painting exterior surface with PRIMUM (A.C.P.) or best quality 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 old work (On or more coats applied @ 4.87 for 10 sqm)	9.00	Sqm
25	Providing and fixing 10 litre capacity P.V.C. low level flushing cistern conforming to IS 7231, with all fittings and fixtures complete.	2	Each
26	Painting of old work (two or more coats) to give as new finish with. Satin synthetic enamel paint.	9.770	Sqm
27	Providing and fixing flexible P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. 57 mm dia	2	Each
28	Providing and fixing water closet squatting pan (Indian type W.C. pan), 180mm wide and 100 mm P or 9 imp. 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 China pattern W.C. pan of size 580x440 mm.	9	Each
29	Providing and fixing vitreous china water closet squatting pan (Indian type) including cutting and making good the walls and floors wherever required. White (E.P.P.O) pattern W.C. pan of size 580x440 mm.	3	Each
30	Providing and fixing vitreous china water closet (European type W.C. pan) with white EN method 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. White pedestal type.	2	Each
31	Providing and fixing vitreous china wash basin with C.I. brackets, Elbow C.P. brass waste of standard pattern, including painting of brackets, cutting and making good the walls wherever required. White base 570x410 mm.	1	Each
32	Special red 200mm long x 20mm dia)	2	Each

PARTICULARS OF ITEMS		Quantity	UOM
	Providing and laying precast cement concrete tiles 22mm thick in footpath & courtyard jointed with neat cement mixed with pigment to match the shade of tile including cleaning of joint etc complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) : Ordinary cement without any pigment	2.25	Sqm
<b>WATER SUPPLY WORKS</b>			
34	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.		
	15 mm nominal outer dia .Pipes.	5.00	m
	25 mm nominal outer dia .Pipes.	5.00	m
35	Providing and placing on terrace (at all levels) polyethylene water storage tank ISI marked with cover and suitable locking arrangement and ---- holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	500.00	Ltr
36	Providing and laying in trenches G.I. pipes medium class complete with G.I. fittings including excavation of trenches, refilling the same and testing of joints complete:		
	25 mm dia. nominal bore	5.00	Mt
	15 mm dia. nominal bore	5.00	Mt
37	Providing and fixing on wall surface G.I. pipes medium class complete with G.I. fittings and clamps, including cutting, making good the walls etc. and testing of joints complete: 25 mm dia. nominal bore	5.00	Mt
38	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): 25 mm nominal bore	1	No
39	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality: Bib cock (250 grams)	5	No
40	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 soils.	26.04	Cum
41	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 Extra for every additional lift of 1.5 m or part thereof.	8.68	Cum
42	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. 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	3.472	Cum
43	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. 1:1 ½ :3 (1 cement : 1 ½ coarse sand : 3 graded stone aggregate 20mm nominal size)	8.80	Cum
44	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 in foundation and plinth all complete: Thermo-Mechanically treated bars.	899.73	Kg
45	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% upto plinth level: Cement Mortar 1:4 (1 cement : 4 coarse sand)	62.32	Sqm
46	Brick work with modular fly-ash lime bricks (FALG Bricks) conforming to IS:12894-2002 of class designation 40 in foundation and plinth in : Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)	0.66	Cum
47	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	28.68	Sqm

S.N.	PARTICULERS OF ITEMS	Quantity	Unit
48	Providing and making 6mm thick cement plaster of mix: In Cement mortar 1:3 (1 cement : 3 fine sand) + Neat Cement punning. * Extra for providing and mixing water proofing materials in cement plaster work in proportion as recommended by manufacturer.	55.26	Sqm
49	455x610 mm rectangular C.I. cover (light duty) the weight of the cover to be not less than 23 kg.	2.00	Each
50	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 testing of joints etc. complete 150 mm diameter	5.00	Mtr
51	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 --- 150mm thick as per standard design: 150 mm diameter S.W. pipe	5.00	Mtr
52	Providing and constructing brick masonry chamber for underground C.I. inspection chamber 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) C.I. cover with frame (light duty) 455x610 mm internal ----- 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with ---- etc. complete as per standard design :Inside dimensions 455x610 mm and 45 cm deep for single pipe line	7.00	Each
53	Electrification Work	3000.00	LS

  
**Executive Engineer**  
 Municipal Corporation  
 Bhilai

**Assistant Engineer**  
 Municipal Corporation  
 Bhilai

  
**Sub-Engineer**  
 Municipal Corporation  
 Bhilai