

# MUNICIPAL CORPORATION OF BHILAI NIT

वार्ड क्र. 43 बापू नगर स्थित सतनाम धाम के पास शौचालय निर्माण एवं भवन निर्माण कार्य।

(AS PER PWD BUILDING SOR 01.01.2015 & Electrical SOR 01.06.2020)

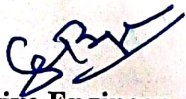
| SN | PARTICULERS OF ITEMS   | QTY.    | UNIT |
|----|--|---------|------|
| 1  | Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits. In all types of soil  | 85.34   | Cum  |
| 2  | Surface dressing of the ground including removing vegetation and making up undulations and in-equalities 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.   | 29.06   | 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.  | 90.50   | 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.  | 90.51   | 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).   | 10.71   | 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).  | 18.23   | 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   | 2954.00 | 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)  | 17.89   | 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 | Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:<br>Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)   | 99.98   | Sqm  |
| 13 | Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for: 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) + Extra for laying PCC/RCC of any grade in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth: | 11.56   | Cum  |
| 15 | Extra for brick work in superstructure: Above plinth and upto floor five level.  | 17.18   | 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..   | 243.00  | Kg   |
| 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  |

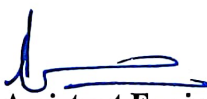
| SN | PARTICULARS OF ITEMS   | QTY.   |      |
|----|--|--------|------|
| 20 | Providing and fixing flush door shutters, conforming to IS 2202 (Part 1), interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges<br>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:<br>100x58x1.90 mm   | 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<br>200mm  | 5.00   | No.  |
| 24 | Providing and fixing M.S. bright finished or black enameled handles with necessary iron screws<br>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:<br>In Cement mortar 1:4 (1 cement : 4 fine sand)  | 112.46 | Sqm  |
| 27 | 12mm thick cement plaster of mix:<br>In Cement Mortar 1:6 (1 cement : 6 fine sand)   | 123.35 | Sqm  |
| 28 | Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:<br>In Cement Mortar 1:5 (1 cement : 5 fine sand)   | 213.59 | Sqm  |
| 29 | Providing and making 12mm thick plain cement mortar bands in<br>cement mortar 1:4 (1 cement : 4 fine sand) per cm width:<br>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<br>20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with<br>matching pigment etc., complete.<br>Size 200x300mm  | 56.91  | Sqm  |
| 31 | Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on<br>20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with<br>matching pigment etc., complete.<br>Size 200x300mm  | 6.60   | Sqm  |
| 32 | Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on<br>wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement<br>slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.<br>Size 200x300mm  | 14.76  | Sqm  |
| 33 | KOTA stone slab 25mm thick in risers and treads of steps, skirtingdado and pillar laid in 12mm (Average) thick cement<br>mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the<br>slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of<br>stone for skirting and dado shall be equal to the height of skirting/ dado up to length of 1.0 M.) | 3.51   | Sqm  |
| 34 | Wall painting with acrylic luxury emulsion (plastic) paint (top most approved branded quality) to give an even shade.<br>On new work (two or more coats)   | 232.54 | Sqm  |
| 35 | Painting new exterior surface (two or more coats) with PREMIUM TEXTURED paint as per manufacturer's<br>specifications to give protective and decorative finish including cleaning washing of surface etc. complete with:<br>On new work (Two or more coats )   | 213.59 | Sqm  |
| 36 | Painting on new work (two or more coats) to give an even shade with:<br>Satin synthetic enamel paint (top most approved branded quality)   | 35.99  | Sqm  |
| 37 | Providing and fixing one side polished 25 mm thick RAJIM SAND STONE shelves fixed in walls in cement mortar 1:3<br>(1 cement : 3 coarse sand) including finishing complete   | 7.20   | Sqm  |
| 38 | 25mm thick cement concrete flooring with 1:2:4 cement concrete (1 cement : 2 coarse sand : 4 graded stone aggregate<br>12.5 mm nominal size) finished with floating coat of neat cement  | 31.56  | Sqm  |
| 39 | P/F white vitreous flat-back basin 580x400 mm with 15mm C.P. Brass pillar cock with R.S. or C.I. brackets painted<br>white C.P. Brass chain with rubber plug 32 32mm pvc waste pipe complete including cutting and making good the<br>floors and walls where required. White size 450x325 mm   | 2.00   | Nos. |
| 40 | P/F 600x 450 barrel edge mirror of superior class (of approved quality) complete with 6mm thick asbestos sheet ground<br>fixed to wooden cleats with brass screws & washer.  | 1.00   | Nos. |

**PARTICULERS OF ITEMS**

|    |   | <b>QTY.</b> | <b>UNIT</b> |
|----|---|-------------|-------------|
| 41 | 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.<br>For 75mm dia pipe  | 3.00        | RMT.        |
| 42 | For 100mm dia pipe  | 8.00        | RMT.        |
| 43 | 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.<br>Nahani trap 110x75mm   | 2.00        | Nos         |
| 44 | Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality: Bib cock (250 grams)   | 2.00        | Nos.        |
| 45 | Stop cock (350 grams)   | 2.00        | Nos.        |
| 46 | 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<br>Towel rail (600mm long x 20mm dia)   | 2.00        | Nos         |
| 47 | Soap dish plate   | 2.00        | Nos.        |
| 48 | 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.        |
| 49 | 20mm nominal outer dia pipe   | 20.00       | RMT.        |
| 50 | 25mm nominal outer dia pipe   | 10.00       | RMT.        |
| 51 | Providing and fixing stainless steel drain jali of approved make/quality  | 3.00        | Nos         |
| 52 | Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end): 25mm dia.   | 1.00        | Nos.        |
| 53 | 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         |
| 54 | 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         |
| 55 | 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   | 2.00        | Nos.        |
| 56 | 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<br>Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets | 1.00        | No          |
| 57 | 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  | 500.00      | Litre       |
| 58 | 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<br>White Orissa pattern W.C. pan of size 580x440 mm  | 1.00        | No.         |
| 59 | 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.  | 2.00        | No.         |
| 60 | Earthing with G.I. earth pipe 4.56 mtr long 40mm dia including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required  | 1.00        | Nos         |
| 61 | Providing and fixing loop earthing 6.0 s.w.g dia G.I. wire in existing surface or recessed conduit along other wires as required  | 30.00       | Rmt         |
| 62 | Providing and fixing metal clad SP & NJ switch fuse unit (re-wirable ) 230/250 volts with porcelain re-wirable fuse including drilling holes on the board connections earthing the body etc. as required (Thimblelling shall be paid seperately) 32 amp   | 1.00        | Rmt         |

| SN | PARTICULARS OF ITEMS  | QTY.  | UNIT   |
|----|---|-------|--------|
| 63 | 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   | 30.00 | Mtr.   |
| 64 | 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                             | 1.00  | Nos    |
| 65 | 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   | 12.00 | Point  |
| 66 | Medium Point  | 12.00 | Point  |
| 67 | Short Point+Extra for providing and fixing light plug point on board in concealed steel conduit point wiring with piano type 3 pin 5 amp socket outlet and 5 amp switch including cost of phenolic laminated sheet and M.S. box etc. as required.etc. as required.  | 4.00  | Points |
| 68 | Wiring for power plug point with 2x4 sq mm FR PVC insulated stranded copper conductor cable in surface steel conduit 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 cable including painting etc. as required Medium Point                 | 2.00  | Nos    |
| 69 | Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die cast Alu. Housing, lamp holder, prismatic glass cover, rubber gasket and wire guard deluxe type including fixing on wall as required, with necessary material complete  | 1.00  | Nos    |
| 70 | Supplying and fixing following piano type switch, socket, other accessories on the existing switch box/ cover including connections etc. as required.<br>Ceiling rose 3 pin 5 amps  | 12.00 | each   |
| 71 | Providing and fixing for house service connection G.I. pipe 50mm dia 3.2 metre long with 2 Nos 50x50x6mm angle iron bracket on wall and 75x90mm shackle insulator with straps including accessories complete  | 1.00  | Set    |
| 72 | 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      |
| 73 | Supplying, installation, testing and commissioning of following surface/ concealed type fluorescent fitting (luminaries) complete with electronic ballast/ copper ballast glow type starter but without fluorescent lamp, on ceiling/ wall surface, earthing the fitting etc. as required.<br>4' x 40 W single box type   | 1.00  | Nos    |
| 74 | Supplying, installation, testing and commissioning of following sizes ceiling fan with resistance type regulator, including wiring the down rods of standard length up to 30 cm with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable, earthing etc. complete as required. 1200 mm dia sweep  | 4.00  | Nos    |
| 75 | Supplying and installing (overhead) service main with PVC insulated aluminium conductor single core cables suspended with bobbin insulator (in group of 2/3/4 wires) on existing bearer wire in an approved manner and as per specification etc. or drawn in existing G.I. pipe bracket or conduit pipe wherever required, including connection, testing etc.<br>3½ x 25 sq. mm | 10.00 | Meter  |
| 76 | 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  | 1.00  | Nos    |
| 77 | Supplying, fixing, testing and commissioning of following CFL (Built in choke type) in existing lighting luminaries as required. 11 watt  | 10.00 | Nos    |
| 78 | Demolishing cement concrete including disposal of material within 50 metre lead. 1:4:8 or leaner mix  | 0.17  | Cum    |
| 79 | 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 1:5 (1 cement : 5 coarse sand)  | 0.20  | Cum    |
| 80 | Supplying, filling, spreading & leveling stone boulders/ Gravels/ Coarse sand, in recharge pit, in the required layers and thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge. (excavation of pit will be paid separately).<br>Stone boulders of size range 5 cm to 20 cm, in recharge pit   | 1.15  | Cum    |
| 81 | Gravels of size range 5 mm to 10 mm, over the existing layer of boulders  | 0.61  | Cum    |
| 82 | Coarse sand of size range 1.5 mm to 2 mm over existing layer of gravel  | 0.26  | Cum    |

  
Executive Engineer  
Municipal Corporation  
Bhilai

  
Assistant Engineer  
Municipal Corporation  
Bhilai

  
Sub Engineer  
Municipal Corporation  
Bhilai