

# MUNICIPAL CORPORATION BHILAI (C.G.)

## NIT

कार्य का नाम :- वार्ड-02 दीनदयाल कॉलोनी में गार्डन निर्माण व सौन्दर्यीकरण कार्य।

As Per PWD Building & Road SOR 01.01.2015, Electrical SOR 01.06.2020 & NON SOR ITEM

S.No.	Description and details of work	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.	118.97	Cum
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. 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).	12.18	Cum
3	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in foundation and plinth in: Cement Mortar 1:6 (1 cement : 6 coarse sand)	32.48	Cum
4	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.	150.77	Cum
5	Providing & laying 60mm thick precast interlocking concrete blocks of approved size (approx 305 sqcm) and shape/ pattern, over 40 mm thick average complete coarse sand bed with joints of 3mm thick filled by fine sand including leveling with surface vibrator, temping and sweeping etc. complete of minimum compressive strength of 250 kg/sq.cm Pigment Coloured (rubber mould) precast interlock concrete blocks	487.20	Sqm
6	Providing and making 12mm thick cement plaster of mix: In Cement Mortar 1:5 (1 cement : 5 fine sand)	81.20	Sqm
7	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. 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 40mm nominal size).	25.47	Cum
8	Providing and placing in position angle iron post and strut of required size including bottom to be split and bent at right angle in opposite direction for required length and drilling holes upto 10 mm dia as per requirement including priming coat with red oxide zinc chromate primer and placing the post/ strut in cement concrete block	685.28	Kg
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	1347.00	Kg
10	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.	1705.66	Kg
11	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.	136.00	Sqm


S.No.	Description and details of work	Qty.	Unit
12	Providing and fixing in position chain linked steel wire fabric made of 4 mm dia G.I. wire of required width in mesh to concrete/ wooden/ angle iron posts including securing and screwing with 2mm dia G.I. wire, G.I. staples, G.I.U-nails or steel pins etc., complete. Aperture 50x50mm	204.00	Sqm
13	Painting exterior surface with PREMIUM 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)	136.00	Sqm
14	Supply Of Swaged steel tubular Pole as per IS 2713 with base plate of size 300 x 3000 x 6 mm welded at bottom ----- specified height including painting with one coat of red oxide zinc chromate primer. Designation 410 SP-26 height 9.00 metre	4.00	Each
15	Erection of STEEL TUBULAR or "H" BEAM/ ISMB pole in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) foundation and cement concrete collar of size 0.4 metre dia and 0.50 metre height from ground level including excavation and refilling etc. as per specification of length: 7 metre to 10 metre	4.00	Each
16	Supplying and fixing water tight terminal box made of 1.6mm thick M.S. sheet with detachable gland plate in bottom, hinged front open able cover, rubber gasket, having 1 Nos 4way connector and 1 No SPMCB inside the box for cable connection, fixed to pole with 2 Nos clamp made from 40x3mm M.S. flat with 2 No nut bolt dully painted with 2 coat of red oxide paint and 2 coat aluminium paint complete as per specification. 30 x 20 x 15 cms	4.00	Each
17	Supplying and making end termination with brass compression gland and aluminum lugs for following size armoured aluminum conductor power cable of 1.1 KV grade as per specification.	21.52	Each
18	Supply & fixing & cramping suitable size & all type aluminum ferule/lugs for following size 1.1 KV grade power cable core/lead pressed with high pressure cramping tool including connection to switch gear/MCCB etc as required 25 sq.mm. Item - 17.28.4	16.00	Each
19	Supplying and fixing G.I. pipe along with wall or pole/ support with 2 Nos MS clamps for protection of under ground cable in approved manner including bolts and nuts or metal dash fasteners complete as per specification. 40 mm dia	90.00	Metre
20	Painting new steel and other metallic surface with red oxide zinc chromide primer paint complete with supply of material labour etc. including preparation of surface	25.20	Sqm
21	Supply and fixing following street light pole bracket on existing pole made out of 50 mm dia MS "B" class pipe welded to 300 mm long MS pole canopy of suitable dia at a angle of 102.50 including having MS triangular stiffner of size 150 X 50 X 5 mm thick, making arrangement for tightening the bracket with pole by providing suitable size heavy duty nuts and bolts in canopy, painting with one coat of approved steel primer etc. as per specification. Double Over Hang 1.50 metre Long	16.00	Each
22	Painting wood steel and other metallic surface with Aluminium Paint complete with material and labour including preparation of surface.	25.20	Sqm
23	Providing and laying Cast-in-situ cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm including mixing with mechanical mixer, compacting with vibrator, finishing and currying etc. complete but excluding form work.	1.02	Cum
24	Providing timber / steel form work for cement concrete work at all levels including removing of the same.	11.30	Sqm

S.No.	Description and details of work	Qty.	Unit
25	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)	4.00	Set
26	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, multi strand wire in the existing surface/ concealed, FRLS PVC conduit / PVC casing capping as per specification and IS: 694 (2010) . 3 x 2.50 sq.mm	72.00	Sqm
27	Providing and fixing porcelain re-wireble fuse carrier and base unit on wooden board including drilling holes on the board, screws, connections etc. as per specification. (Thimbeling shall be paid separately). 32 amps	4.00	Each
28	Supplying, installation, testing and commissioning of following 230/250 volts LED street light fitting with all accessories like driver, heat sink made of die cast aluminium with IP 66 protection and 15 KV surge protection on pole bracket, including connection, earthing, Separate housing for driver etc complete as per specification and P.F. should be greater than 0.9. LED chip efficacy ratio > 120 lumens /watt.	8.00	Each
29	Supplying and laying following sizes one number FRLS PVC insulated/XLPE, PVC sheathed, steel armoured, aluminium conductor power cable of 1.1 KV grade direct in ground at a depth not less than 40 cm and upto 90 cm including excavation, sand cushioning, protective covering and refilling the trench etc as per specification, IS: 1554 (1988, Part 1) / IS: 7098 (1988, Part 1). 2 x 16 sq. mm	100.00	Metre
30	Supplying, installation, testing and commissioning of Acrylic LED light (a) Specification of Acrylic 3 mm thick x 3 " width x 4 " depth *(imbose) (b) Specification of LED modules :- Each Moduel should have 6 Nos LED of 1 watt	48.00	Sqft
31	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: 50 mm dia. nominal bore	50.00	Metre
32	40 mm dia. nominal bore	30.00	Metre
33	25 mm nominal bore	30.00	Metre
34	Making connection of G.I. distribution branch in G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: (Dia of main line to be measured) 25 mm nominal bore	2.00	Each
35	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end): a) 50mm. nominal bore	2.00	Each
36	Providing and filling sand all around the G.I. pipes in external work. 50mm dia pipe.	50.00	Metre
37	25mm dia pipe.	30.00	Metre
38	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality and weighting not less than 400 grams): Bib cock	2.00	Each
39	Providing and fixing G.I. Union in G.I. pipe (New work) including cutting and threading the pipe and making long screws etc. complete: 50 mm nominal bore	2.00	Each
40	Carrying out the resistivity survey by VES method using Schlumberger configuration for locating the proper spot for drilling of tube well within the selected habitation, including photography, interpretation of resistivity data and submission of report in the desired format along with resistivity readings, necessary graph and photographs. (only successful point is payable)	1.00	Point


S.No.	Description and details of work	Qty.	Unit
41	Boring/drilling bore well perfectly vertical for the specified depth suitable to receive required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and submitting strata chart/bore log, including hire & running charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge upto 90 metre depth below ground level.	45.00	Mtr.
42	Rocky strata including Boulders. 150 mm nominal dia	10.00	Mtr.
43	Supplying, assembling, lowering and fixing in vertical position in bore well, ISI marked G.I. casing pipe (Plain) medium class in 4 to 7 meters length one end fitted with socket as per IS: 1239 (Part-1&Part-2) 1992 with IVth ----- of reputed & approved make, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer- in-charge. 150 mm nominal dia	47.00	Mtr.
44	Boring/drilling bore well perfectly vertical for the specified depth suitable to receive required dia for casing/ strainer pipe, by suitable method prescribed in IS: 2800 (part I), including collecting samples from different strata, preparing and --- charges of all equipments, tools, plants & machineries required for the job, all complete as per direction of Engineer-in-charge beyond 90 metre & upto 150 metre depth below ground level. Rocky strata including Boulders. 150 mm nominal dia	44.00	Hour
45	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for bore well of: 150 mm nominal dia	1.00	Each
46	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	88.00	Mtr.
47	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: Stop cock (concealed) (600 grams)	4.00	Each
48	Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end): 25 mm nominal bore	4.00	Each
49	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 40mm nominal size).	0.98	Cum
50	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 40mm nominal size).	7.68	Sqm
51	Finishing walls with water proofing cement paint of required shade to give an even shade. On new work (Two or more coats applied @ 3.84 kg/10 sqm)	5.52	Sqm
52	Painting on new work (two or more coats) to give an even shade with: Satin synthetic enamel paint	20.70	Sqm

S.No.	Description and details of work	Qty.	Unit
53	Trenching in ordinary soil upto a depth of 60cm including removal and stacking of serviceable materials and then disposing of by spreading and neatly leveling with in a lead of 50m and making up the trenched area to proper levels by filling with earth or earth mixed with sludge or/and manure before and after flooding trench with water (excluding cost of imported earth, sludge or manure).	40.00	Cum
54	Supplying and stacking of good earth at site including royalty, loading, unloading and carriage upto 5 km (earth measured in stacks will be reduced by 20% for payment).	20.00	Cum
55	Supplying and stacking sludge at site including royalty, loading, unloading and carriage upto 5 km (sludge measured in stacks will be reduced by 8% for payment).	20.00	Cum
56	Supplying and stacking at site well decayed cow dung manure from approved source, including loading, unloading and carriage upto 5 km (manure measured in stacks will be reduced by 8% for payment).	20.00	Cum
57	Rough dressing the trenched ground including breaking clods.	100.00	Sqm
58	Uprooting weeds from the trenched area after 10 to 15 days of its flooding with water including disposal of uprooted vegetation.	100.00	Sqm
59	Fine dressing the ground	100.00	Sqm
60	Spreading of sludge, dump manure or/and good earth in required thickness (Cost of sludge, dump manure or/ and good earth to be paid separately).	100.00	Sqm
61	Mixing earth and sludge or manure in proportion specified or directed.	100.00	Cum
62	Preparation of beds for hedging and shrubbery by excavating 60cm deep and trenching the excavated base to a further depth of 30cm, refilling the excavated earth after breaking clods and mixing with sludge or manure in the ratio of 8:1 (8 parts of stacked volume----including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50m lift upto 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).	100.00	Cum
63	Digging holes in ordinary soil and refilling the same with the excavated earth mixed with manure or sludge in the ratio of 2:1 by volume (2 parts of stacked volume of earth after reduction by 20% : 1 part of stacked volume of manure after reduction by 8%) flooding with water, dressing including removal of rubbish and surplus earth, if any with all leads and lifts (cost of manure, sludge or extra good earth if needed to be paid for separately) : Holes 60 cm dia, and 60 cm deep.	100.00	No
64	Edging with modular well burnt clay bricks of crushing strength not less than 25kg/ sqcm laid dry length wise including excavation, refilling, consolidating with hand packing and spreading neatly surplus earth within a lead of 50 m :	100.00	Metre
65	Providing and planting following herbs in garden including preparation of soil, base plantation, providing and spreading different fertilizers, soil and sand: Hedges like Alife, Dorenta, Tikoma etc	50.00	Each
66	Furn like Arica, China etc (3 year old	50.00	Each
67	Hibiscus (Flower)/ Rose	50.00	Each
68	Carpet grass (well developed)	100.00	Sqm

S.No.	Description and details of work	Qty.	Unit
<b>NON SOR ITEM</b>			
1	Providing & fixing of Steel Bench Area 1.20x0.70 m Height 0.45 m above level seating ----- proper grip fixing with 1:2:4 Cement Concrete	5.00	Each
2	Providing and planting well developed and healthy(5' and above) ornamental plants with digging holes, soil filling and chemical and biological treatment like Ficus, cycas Chhatim, bottle Palm, Supari palm, musanda and avenue palm ,tree i/c six month maintenance till well Estabalish.as directed by engineer incharge. (NON SOR ITEM)	100.00	Each
3	Providing and planting well established flowering and ornamental plants/shrubs like Nerium ,Bougainvilla ,Crotons, Vidhya etc. with digging holes and chemical treatment . i/c six month maintenance till well Estabalish.as directed by engineer incharge. (NON SOR ITEM)	60.00	Each
4	Providing and planting well developed succulent healthy ornamental plants with digging holes and chemical treatment like Thuja, cycas, lolina etc. i/c six month maintenance till well Estabalish.as directed by engineer incharge. (NON SOR ITEM)	100.00	Each

  
**Executive Engineer**  
**Municipal Corporation**  
**Bhilai (C.G)**

  
**Asstt. Engineer**  
**Municipal Corporation**  
**Bhilai (C.G)**

  
**Sub. Engineer**  
**Municipal Corporatio**  
**Bhilai (C.G)**