

MUNICIPAL CORPORATION OF BHILAI
NIT

पेयजल हेतु बोर खनन कार्य 01 नग वार्ड क्र 52 सेक्टर 03 सड़क 03 में बोर खनन
सह पाईप लाईन विस्तारीकरण कार्य।

As Per PWD Building 1.1.2015 Electrical SOr 1.06.2020

S.N.	PARTICULERS OF ITEMS	Quantity	UOM
1	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	Point
2	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. All types of soil 150 mm dia.	25.00	Mtr.
3	Rocky strata including Boulders. 150 mm nominal dia	74.00	Mtr.
4	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	26.00	Mtr.
5	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 dia.	13.50	Mtr.
6	Development of tube well in accordance with IS : 2800 (part I) and IS:11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity aircompressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notchmethod or any other approved method, measuring static level & drawdown etc. by step drawdown method, collecting water samples & getting tested in approvedlaboratory, i/c disinfection of tube well, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	10.00	hr
7	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	Each

8	Providing ISI Mark 32 mm dia G.I. (B class) riser pipe and M.S. plunger rod in 3 meter length socketed on one end as per IS: 1239 (Part I) 1990 with up to date amendments and socket as per IS: 2062/1990 up to date amendments.	73.00	Mtr.
9	Supplying, installation, testing and commissioning of submersible pump set for water supply system with submersible motor directly coupled to multi-stage submersible pump of specified discharge capacity, head, delivery size in existing bore well including 2 sets of suitable size holding clamps made out of 50 mm X 6 mm MS flat, connection with suitable submersible cable of standard length etc. as per specification and IS: 694 (2010). Note: submersible Cable should be rust proof, safe from oil / Grease and under water Chemical / abrasion Resistant..2.0 HP, single phase	1.00	each
10	Supply, installation, testing and commissioning of 1-3 HP 1 phase submersible motor starter cum control wall/ floor mounted type made out of not less than 1.6 mm thick MS sheet and comprising of following panel mounting switchgears there in including connection inter-connection etc. as per specification. a) Phase indicating lamps with fuses and toggle switches 1 set b) 1/2/3 HP 1 phase DOL starter with over load and no volt relay 1 No c) 25 A "C" curve DPMCB 1 No d) Voltmeter 0-250 V 1 set e) Ammeter 0-10 A 1 set	1.00	each
11	Supplying, laying and fixing following size submersible cable along with GI/PVC/HDFC pipe line or laid in ground etc as per specification and IS: 694 (2010). Note: Cable should be rust proof, safe from oil / Grease and under water Chemical / abrasion Resistant.3x2.5 sqmm	71.00	Mtr.
12	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.	1.02	Cum
13	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).	0.26	Cum
14	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)	0.53	Cum
15	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)Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	0.09	Cum
16	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including form work.Extra for brick work in superstructure above plinth level for every floor or	1.58	Cum
17	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.	2.83	Cum
18	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.75 mm thick	1.96	Sqm

19	Providing and making 15mm thick cement plaster of mix: In Cement mortar 1:5 (1 cement : 5 fine sand)	1.68	Sqm
20	Distempering with acrylic washable distemper to give an even shade. On new work (Two or more coats)	1.68	Sqm
21	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	2000.00	Ltr
22	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:20 mm dia. nominal bore	14.00	Mtr.
23	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :20 mm nominal bore.	2.00	Each
24	Providing and fixing G.I. Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required : 25 mm nominal bore.	2.00	Each
25	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:20 mm dia. nominal bore	70.00	Mtr.
26	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 nominal bore.	44.00	Mtr.
27	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)	2.00	Each
28	Providing and fixing stainless steel drain jali of approved make/quality.	3.00	Each
29	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff up to 1.5 m lift and lead up to 50m (at least 5m away from the excavated area), including dressing and leveling of pits. In all type of soil. (Page-9 Item-1.1.1)	2.64	Cum
30	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 40 in foundation and plinth in: C M 1:5 (Page-45 Item- 7.5.3)	1.22	Cum
31	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).Stone boulders of size range 5 cm to 20 cm, in recharge pit (Page-201, Item-21.14.1)	0.47	Cum
32	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).Gravels of size range 5 mm to 10 mm, over the existing layer of boulders (Page-201, Item-21.14.2)	0.47	Cum
33	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). Coarse sand of size range 1.5 mm to 2 mm over existing layer of gravel (Page-201, Item-21.14.3)	0.37	Cum

34	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 graded stone aggregate 20mm nominal size). (Page-23 Item-3.2.1)	0.17	Cum
35	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. FE 415. (Page-24 Item-3.12.1)	10.39	Kg
36	Providing and making 12mm thick cement plaster of mix : in Cement Mortar-1:6 (Page-103 Item-11.2.4)	1.41	Sqm

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