

Schedule of Quantity

Name of work:-C/o Various works at IGKV DWR for Meteorological Department Raipur (C.G.)

SH : C/o Bore well (01 No), Rain shed around existing portable cabin and approach path.

SLNo	Description	Qty	Unit	Rate	Amount	DSR No.
1	EARTH WORK					2
1.1	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and for all lift, as directed by Engineer-in-charge.					2.6
1.1.1	All kinds of soil	66	cum	179.63	11856.00	2.6.1
1.2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, for all lift, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.					2.8
1.2.1	All kinds of soil.	64	cum	263.42	16859.00	2.8.1
1.3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 and for all lift.	64	cum	198.35	12695.00	2.25
1.4	Supplying, stacking and spreading of moorum and further banking work in layers not exceeding 20cm. in depth, breaking clods, watering, rolling each deposited layer with 8 to 10 tonnes power roller and or sheep foot roller with dressing up complete road embankment, flood banks marginal banks, guide banks, guide banks or filling up ground depressions etc. including all lead and lift.	59.00	cum	684.40	40380.00	NS
2	CEMENT CONCRETE (CAST IN SITU)					4
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :					4.1
2.1.1	1:4:8 (1 Cement : 4 coarse sand (zone-III) derived from natural sources: 8 graded stone aggregate 40 mm nominal size derived from natural sources)	20	cum	6893.74	137875.00	4.1.8
2.1.2	1:5:10 (1 cement : 5 coarse sand (zone-III) derived from natural sources : 10 graded stone aggregate 40 mm nominal size derived from natural sources)	20	cum	6596.82	131936.00	4.1.10
2.2	Centering and shuttering including strutting, propping etc. and removal of form work for:					4.3
2.2.1	Foundations, footings, bases for columns	24	sqm	396.86	9525.00	4.3.1
2.2.2	Retaining walls, return walls, walls (any thickness) including attached pilasters, buttresses, plinth and string courses fillets, kerbs and steps etc.	10	sqm	852.61	8526.00	4.3.2

3	REINFORCED CEMENT CONCRETE					5
3.1	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					5.1
3.1.1	1:1.5:3(1 cement: 1.5 coarse sand (zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	17	cum	9154.30	155623.00	5.1.2
3.2	Centering and shuttering including strutting, propping etc. and removal of form for					5.9
3.2.1	Foundations, footings, bases of columns, etc. for mass concrete	91	sqm	396.86	36114.00	5.9.1
3.2.2	Edges of slabs and breaks in floors and walls					5.9.16
3.2.2.1	Under 20 cm wide	62	metre	211.05	13085.00	5.9.16.1
3.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.					5.22
3.3.1	Thermo-Mechanically Treated bars {Low Alloy Steel (Bar Set-I)} of grade Fe-500D or more. Conforming to IS-1786 and additional requirement.	1500	kg	109.14	163716.00	5.22.6
4	STEEL WORK					10
4.1	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	1066	kg	135.30	144234.00	10.2
4.2	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.					10.16
4.2.1	Hot finished welded type tubes	3238	kg	196.73	637021.00	10.16.1
4.3	Providing and fixing mild steel round holding down bolts with anchor plate, base plate, bolts and washers assembly, having 16 mm dia threaded MS solid bar threaded at top for fixing of members further through base plate and tie plate and welded in anchor plate at bottom and fixing all assembly in position at all levels complete. (The weight of complete assembly payable)	416	kg	98.37	40920.00	10.19 (MDSR)
5	ROOFING					12
5.1	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.					12.41
5.1.1	75 mm diameter	11.00	metre	251.79	2770.00	12.41.1

5.2	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS :5382, leaving 10 mm gap for thermal expansion.					12.42
5.2.1	Coupler					12.42.1
5.2.1.1	75 mm	2	each	92.80	186.00	12.42.1.1
5.2.2	Single pushfit Coupler					12.42.2
5.2.2.1	75 mm	2	each	94.22	188.00	12.42.2.1
5.2.3	Bend 87.5°					12.42.5
5.2.3.1	75 mm bend	2	each	107.17	214.00	12.42.5.1
5.2.4	Shoe (Plain)					12.42.6
5.2.4.1	75 mm Shoe	2	each	94.22	188.00	12.42.6.1
5.3	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	171	sqm	747.51	127825.00	12.50
5.4	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50 mm (base metal of minimum 0.45 mm thickness with total coating thickness of 0.05 mm) with Zinc coating 120 gram per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete :					12.51
5.4.1	Ridges plain (500- 600mm)	16	metre	538.74	8620.00	12.51.1
5.4.2	Gutter (600 mm over all girth)	52	metre	1329.46	69132.00	12.51.6
6	FINISHING					13
6.1	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :					13.61
6.1.1	Two or more coats on new work	150	sqm	157.77	23666.00	13.61.1
7	ROAD WORK					16
7.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.	143	sqm	221.53	31678.00	16.1

7.2	Providing and laying 60 mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge.	187	sqm	983.66	183945.00	16.68
7.3	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer- in-charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	3	cum	10239.01	30717.00	16.69
7.4	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid and finished with screed board vibrator , vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer-in-charge. (The panel shuttering work shall be paid for separately). (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/ recoverable separately).	30	cum	9941.69	298251.00	16.75
8	ALUMINIUM WORK					21
8.1	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.					21.8
8.1.1	Upto 5 mm depth and 5 mm width	64	metre	97.91	6266.00	21.8.1
9	RAIN WATER HARVESTING & TUBEWELLS					23
9.1	Boring/drilling bore well of 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.					23.1 (MDSR)
9.1.1	All types of soil					23.1.1
9.1.1.1	175 mm dia	140	metre	408.65	57211.00	23.1.1.1
9.2	Boring/drilling bore well of 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, for all depth below ground level.					23.2 (MDSR)

9.2.1	Rocky strata including Boulders					23.2.2
9.2.1.1	175 mm dia	110	metre	431.35	47449.00	23.2.2.1
9.3	Supplying, filling, spreading & leveling stone boulders of size range 5 cm to 20 cm, in recharge pit, in the required thickness, for all leads & lifts, all complete as per direction of Engineer-in-charge.	1	cum	1527.92	1528.00	23.5
9.4	Supplying, filling, spreading & leveling gravels of size range 5 mm to 10 mm, in the recharge pit, over the existing layer of boulders, in required thickness, for all leads & lifts, all complete as per direction of Engineer- in-charge.	1	cum	1556.71	1557.00	23.6
9.5	Supplying, filling, spreading & leveling coarse sand of size range 1.5 mm to 2 mm in recharge pit, in required thickness over gravel layer, for all leads & lifts, all complete as per direction of Engineer -in-charge.	1	cum	1556.71	1557.00	23.7
9.6	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineer- in-charge.	13	cum	2048.79	26634.00	23.8
9.7	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 mild steel screwed and socketed/plain ended casing pipes of required dia, conforming to IS: 4270, of reputed & approved make, including painted with outside surface with two coats of anticorrosive paint of approved brand and manufacture, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge.					23.10
9.7.1	100 mm nominal size dia having minimum wall thickness 5.00 mm	47	metre	1375.56	64651.00	23.10.1
9.7.2	150 mm nominal size dia having minimum wall thickness 5.00 mm	50	metre	1995.92	99796.00	23.10.2
9.8	Supplying, assembling, lowering and fixing in vertical position in bore well, ERW (Electric Resistance Welded) FE 410 plain slotted (having slot of size 1.6/3.2 mm) mild steel threaded and socketed/ plain bevel ended pipe (type A) of required dia, conforming to IS: 8110, of reputed and approved make, having wall thickness not less than 5.40 mm, including painted with outside surface with two coats of anticorrosive bitumestic paint of approved brand and manufacture, including hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer -in-charge.					23.11
9.8.1	100 mm nominal size dia	3	metre	1474.28	4423.00	23.11.1
9.8.2	150 mm nominal size dia	42	metre	2127.48	89354.00	23.11.2

9.9	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of useable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by “V” notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, including disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	4	hour	1098.07	4392.00	23.12
9.10	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 borewell of:					23.13
9.10.1	200 mm dia	2	each	325.00	650.00	23.13.3
9.11	Providing and fixing M.S. clamp of required dia to the top of casing/ housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts of required size complete.					23.14
9.11.1	200 mm clamp	2	each	2321.17	4642.00	23.14.3
9.12	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I).					23.15
9.12.1	100 mm dia	1	each	268.28	268.00	23.15.1
Total					2748123.00	

**Executive Engineer
CPWD, Raipur**