

SuperIntending Engineer (Chief)
O/o Chief Engineer (Civil Works)
CSPDCL, RAIPUR



135

135

Government of Chhattisgarh

Public Works Department

Schedule of Rates

for

Building Works

2015

w.e.f. 1st January 2015

Issued By

Engineer-in-Chief
Chhattisgarh PWD
Sirpur Bhawan
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Office of the Engineer in Chief,
Public Works Department Chhattisgarh (Raipur)

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Schedule of rates for Building Works

Preamble

The **Schedule of rates** published by PWD is an important document, as this does not only serve as an useful tool for estimation, evaluation & execution of govt. works by P.W.D. people - but also referred to as an authority by other govt., semi government & private entities like builders, architects and consultants.

The last schedule of rates (SOR) for building works was published in 2009. Since then, the department has registered considerable changes in the prices of labour, materials, POL and machineries. Apart from it, the entire building community is witnessing a great change, as new ideas, items, concepts & technologies are coming up. All these have necessitated revision in the prevailing SOR.

It is a matter of great pleasure that this new **Schedule of rates for building works** is coming in to force from 01st January 2015.

Considerable efforts have been made to incorporate the above changes, but there always remain scope for betterment. Suggestions in this regard shall be highly welcomed.

Though every possible care has been taken in preparing this SOR but in a work like this, the chances of typographical and other errors can not be ruled out. It will be appreciated, if these could be brought to notice.

I sincerely express my gratitude and thanks to Shri D.K. Agrawal Chief Engineer PWD Raipur, who has taken immense pain in inspiring and guiding his entire team for making this document comprehensive and unique.

I would also commend S/Shri A.K. Chakraborti (Superintendent Engineer), P.K. Agrawal (Executive Engineer), P.K. Gupta (Assistant Engineer), Rajeev Nashine (Assistant Engineer), Hemant Arora (Assistant Engineer), C.K. Pandey (Assistant Engineer) & Pradeep Parvate (Sub Engineer) for their continuous untiring efforts in the above mission.

The help extended by M/s Ojasvi Software New Delhi in the preparation of this SOR is also appreciated.

The work has been made possible with the sincere efforts of several other persons & institutions. It is not possible here to name them all, but we sincerely acknowledge with thanks the help & cooperation extended by them.

This **SOR** is available on the department website (www.cg.nic.in/pwdraipur) also.

Raipur
27/12/2014


Er. D.K. Pradhan
E-in-C PWD, Chhattisgarh

CONTENTS

S. No	NAME OF CHAPTER/ SUBHEAD	PAGE NO.
0	GENERAL NOTES	1
1	EARTH WORK	5
2	FORM WORK	14
3	CEMENT CONCRETE (PLAIN AND REINFORCED)	18
4	WATER PROOFING	26
5	MORTARS	34
6	STONE WORK	36
7	BRICK WORK	41
8	WOOD WORK	48
9	STEEL AND ALUMINIUM WORK	76
10	ROOFING AND CEILING	88
11	PLASTERING AND POINTING	100
12	FLOORING	108
13	WALL LINING (MARBLE & STONE WORK)	122
14	DISTEMPERING, PAINTING AND FINISHING	128
15	PILE WORK	137
16	DISMANTALING AND DEMOLISHING	145
17	REPAIRS TO BUILDINGS	151
18	SANITARY INSTALLATIONS	157
19	WATER SUPPLY	172
20	DRAINAGE	186
21	TUBE WELL AND RAIN WATER HARVESTING	196
22	HORTICULTURE AND LANDSCAPING	202
23	FIRE FIGHTING	208

0.0 GENERAL NOTES

132

- 0.1 Reference mentioned herein shall be applicable to all sections to the extent the context permits and are intended to supplement the provisions in the particular section. In case of any discrepancy/ deviation, the provisions in the particular section shall take precedence.
- 0.2 The rates for all items of work, unless clearly specified otherwise, shall include cost of all labour, materials, machinery, testing charges, royalty, taxes, octroi and other inputs involved in the execution of the items.
- 0.3 This SOR is based on CPWD specifications. The execution of items of this SOR is to be done as per CPWD specifications amended up to date and as per all applicable BIS codes and standards.

0.4 INTERPRETATIONS

- 0.4.1 The Engineer-in-Chief, PWD Chhattisgarh shall be the sole deciding authority as to the meaning, interpretation and implications for various provisions of the specifications. His decision in writing shall be final.
- 0.4.2 Wherever any reference is made to any Indian Standard, it shall be taken as reference to the latest edition with all amendments issued thereto. In the event of any variation between the specifications mentioned before the each chapter and the Indian Standard, the CPWD specifications shall be followed.

0.5 DEFINITIONS

The following terms and expressions in the specification shall have the meaning or implication hereby assigned to them unless specified otherwise elsewhere.

- 0.5.1 **Contractor:** The Contractor shall mean the individual, or firm, or company, whether incorporated or not, undertaking the works and shall include the legal personal representatives of such individual or the persons composing such firm or company, or the successors of such individual or firm or company and the permitted assignees of such individual, or firm, or company.
- 0.5.2 **Engineer-in-Charge:** The 'Engineer-in-Charge' means the Engineer Officer, who shall supervise and be in charge of the work and who shall sign the contract on behalf of the Governor of Chhattisgarh.
- 0.5.3 **Site:** The 'site' shall mean the land/ or other places, on, into or through which the work is to be executed under the contract or any adjacent land, path or street through which the work is to be executed under the contract, or any adjacent land, path or street which may be allotted or used for the purpose of carrying out the contract.
- 0.5.4 **Store:** The 'store' shall mean the place of issue of materials included in the appropriate schedule of a contract for issue by the PWD. In all other cases 'Store' shall mean any PWD store in the district.
- 0.5.5 **IS:** The standard, specification and Code of Practices issued by the Bureau of Indian Standards.
- 0.5.6 **Best:** The word 'best' when used shall mean that in the opinion of the Engineer-in-Charge, there is no superior material/ article and workmanship obtainable in the market and trade respectively. As far as possible the standard required shall be specified in preference to the word 'Best'.
- 0.5.7 **Department:** 'Department' shall mean Public Works Department or PWD.

0.6 FLOOR AND LEVELS

0.6.1 Building:

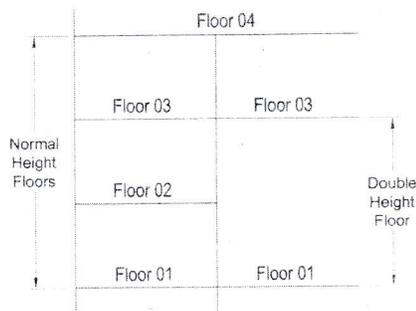
0.6.1.1 **Floor 1** is the lowest floor above the ground level in the building unless otherwise specified in a particular case. The floors above floor 1 shall be numbered in sequence as floor 2, floor 3 and so on. The number shall increase upwards.

0.6.1.2 **Floor level:** For floor 1, top level of finished floor shall be the floor level and for all other floors above floor 1. Top level of the structural slabs shall be the floor level.

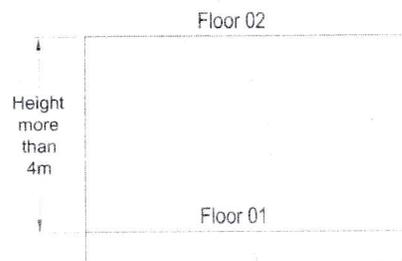
0.6.1.3 **Plinth level:** Floor 1 level or 1.2 m above the ground level whichever is lower shall be the plinth level.

0.6.1.4 **If two floor levels meet at any level with reference to different parts of a building, such as in case of double height slab, then the floor level and floor no.** of this slab shall refer to the part of the building where normal height floors exist e.g. slab top level of conference hall (or, porch) at ground floor is at second floor level of adjacent part of the building, then floor no. of slab top level of conference hall shall be numbered as floor 3 level (not as floor 2 level, as it appears, treating the hall as individual and numbering ground floor as floor 1 and next slab as floor 2) (Fig 1).

But in case of individual building with excessive height slab, such as auditorium, the slab shall be numbered on normal numbering system that is floor 2 level (Fig 2).



(Fig. 1)



(Fig. 2)

0.6.1.5 Floor no of mazenine floors would refer to the part of the building, where they exist.

0.6.2 Special Structures:

0.6.2.1 For structures like retaining walls, wing walls, chimneys, over head reservoirs/ tanks and other elevated structures, where elevations/ heights above a defined datum level have not been specified and identification of floors cannot be done as in case of building, level, at 1.2 m above the ground level shall be the floor 1 level as well as plinth level. Level at a height of 4m above floor 1 level will be reckoned as floor 2 level and level at a height of 4 m above the floor 2 level will be floor 3 level and so on, where the total height above floor 1 level is not a whole number multiple of 4 metre, top most floor level shall be the next in sequence to the floor level below even if the difference in height between the two upper most floor levels is less than 4 metres

0.7 FOUNDATION AND PLINTH

The work in foundation and plinth shall include:

- (a) **For buildings:** All works upto 1.2 metre above ground level or upto floor 1 level whichever is lower.
- (b) **For retaining wall, wing walls, compound walls, chimneys, over head reservoirs/ tanks and other elevated structures:** All works upto 1.2 metre above the ground level.
- (c) **For reservoirs/ tanks (other than overhead reservoirs/ tanks):** All works upto 1.2 metre above the ground level.
- (d) **For basements:** All works upto 1.2 m above ground level or upto floor 1 level whichever is lower.

Note: Specific provision shall be made in the estimate for such situations where the foundation level is at more than 3 (three) metre depth from the ground level for all types of structures mentioned above.

0.8 MEASUREMENTS

- 0.8.1 In booking dimensions, the order shall be consistent and in the sequence of length, width and height or depth or thickness.
- 0.8.2 **Rounding off:** Rounding off, where required shall be done in accordance with IS: 2-1960. The number of significant places rounded in the rounded off value should be as specified.

0.9 MATERIALS

- 0.9.1 Samples of all materials to be used on the work shall be got approved by the contractor from the Engineer-in-Charge well in time. The approved samples duly authenticated and sealed shall be kept in the custody of the Engineer-in-Charge till the completion of the work. All materials to be provided by the contractor shall be brand new and as per the samples approved by the Engineer-in-Charge
- 0.9.2 Mandatory tests are required to be carried out as per relevant IS: code. Testing of samples shall be done in the laboratory approved by the Engineer-in-Charge.
- 0.9.3 The materials, supplied by the Department shall be deemed to comply with the specifications.
- 0.9.4 Materials stored at site, depending upon the individual characteristics, shall be protected from atmospheric effects due to rain, sun, wind and moisture to avoid deterioration.
- 0.9.5 All material brought at the site shall be tested, before being used in the work.
- 0.9.6 Materials like timber, paints etc. shall be stored in such a way that there may not be any possibility of fire hazards. Inflammable materials and explosives shall be stored in accordance with the relevant rules and regulations or as approved by Engineer-in-Charge in writing, so as to ensure desired safety during storage.
- 0.9.7 The unit weight of materials unless otherwise specified shall be as given in IS: 1911-1967.

0.10 WAGES TO LABOUR:

The contractor shall be bound to pay the wages to the labours, as per the minimum wages act, rules and other instructions issued by State Govt. from time to time.

0.11 SAFETY IN CONSTRUCTION

0.11.1 The contractor shall employ only such methods of construction tools and plant, as are appropriate for the type of work, or as approved by Engineer-in-Charge. If the contractor fails to comply the orders of Engineer-in-Charge/ department with respect to safety measures and any untoward incident happens, contractor will be solely responsible.

The contractor shall take all precautions and measures to ensure safety of works and workman and shall be fully responsible for the same. Safety pertaining to construction works such as excavation, centring and shuttering, trenching, blasting, demolition, scaffolds, ladders working platforms, gangway, mixing of bituminous materials, electric and gas welding use of hoisting and construction machinery shall be governed by PWD specifications, CPWD specifications, relevant safety codes and the direction of Engineer-in-Charge

0.12 NON SCHEDULE ITEMS

0.12.1 Items not included in this SOR shall neither be provided in any estimate. nor be executed without written prior permission of the Superintending Engineer, even though they are shown in the drawings. If any new item is required to be executed in any work, proposal with full justification along with financial implications of the same must be submitted to the Superintending Engineer for obtaining written prior approval.

0.13 BASIC RATES OF STEEL AND CEMENT

For preparation of SOR, "Base Rates" of Steel and Cement have been taken as given below -

(A)	STEEL	
	(I) Reinforcing Steel - Average Base Rate for all sections.	
	(i) Cold twisted/ Hot rolled deformed bars	Rs. 40.90 per kg.
	(ii) Thermo-Mechanically Treated bars	
	FE 415 -	Rs. 41.50 per kg.
	FE 500D -	Rs. 41.75 per kg.
	FE 550D -	Rs. 42.20 per kg.
	(II) Structural Steel & Steel Sheets	
	Average Base Rate for all sections -	Rs. 43.00 per kg.
(B)	CEMENT -	Rs. 5100.00 per MT.



RATE FOR PROPOSED SoR 2018-19

ANNEXURE - II					
in INR					
S. No.	Particulars	Unit	New Bin Code	Proposed Rate for SoR 2018-19	Remarks
1	140 Kg 8 Mtr. Long PCC Pole	No.	7130800012	2255.2	Rates include GST.
2	200 Kg 8 Mtr. Long PCC Pole	No.	7130800033	2552.95	Rates include GST.
3	200 Kg 9 Mtr. Long PCC Pole	No.	7130800001	3046.2	Rates include GST.
4	280 Kg 9.1 Mtr. Long PCC Pole	No.	7130800033	4402.65	Rates include GST.
5	365 Kg 11 Mtr. Long PCC Pole	No.	7130800002	7605.2	Rates include GST.
6	Cement	Per Bag	7130200401	240	Rates include GST.
7	River Sand	Cmt	7132498006	903	Rates include GST.
8	Concrete mix proportion 1:1:5:3	Cmt	7130200201	SI No 8 of enclosed list.	Is not store item.
9	Concrete mix proportion 1:2:4	Cmt	0	SI No 8 of enclosed list.	Is not store item.
10	Concrete mix proportion 1:3:6	Cmt	7130200202	SI No 8 of enclosed list.	Is not store item.
11	Construction of Brick Masonary cable trench for 10 Mtr. length	RM	0	2152	Rates include GST.
12	Construction of PCC (Cable covering tiles 250x250x40 mm) for 10 Nos.	Per 10	7130201343	330	Rates include GST.
13	RCC Block (Base Pa) for PCC Pole [with 6 mm MS Bar]	Each	0	158	Rates include GST.
14	Construction of room to install 33 kv Metering Cubicle	Each	0	335650	Rates include GST.

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529

RATE FOR PROPOSED SoR 2018-19										ANNEXURE - III	
										in INR	
1	H.T. Wire 4 mm	60000.00	18%	108000.00	70800.00	Per MT	Rate obtained from verbal discussion with concerned market agencies (Quotation awaited)				
2	Cement	188.00	28%	52.64	240.64	Per Bag	Rate obtained from verbal discussion with concerned market agencies (Quotation awaited)				
3	Metal	900.00	5%	45.00	945.00	per Cum	Rate obtained from verbal discussion with concerned market agencies (Quotation awaited)				
4	Sand	860.00	5%	43.00	903.00	per Cum	Rate obtained from verbal discussion with concerned market agencies (Quotation awaited)				
5	GI Wire 8 S.W.G.	50.00	18%	9.00	59.00	per kg	Rate obtained from verbal discussion with concerned market agencies (Quotation awaited)				
6	Mould releasing oil	30.00	-	-	30.00	per litre	Rate obtained from verbal discussion with concerned market agencies				
7	Barrels	12.00	18%	2.16	14.16	each	Rate obtained from verbal discussion with concerned market agencies				
8	Anchor Grip (Wedges)	15.00	18%	2.70	17.70	each	Rate obtained from verbal discussion with concerned market agencies				
9	Nut Bolts	80.00	18%	14.40	94.40	kg	Rate obtained from verbal discussion with concerned market agencies				
10	Cutting / Welding rods	80.00	18%	14.40	94.40	kg	Rate obtained from verbal discussion with concerned market agencies				

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List of Civil items for stage-I estimate/administration approval for 2018 19

Annexure-I

S.No.	Particulars	Unit	Rate(as per SoR PWD)
1	Construction of Distribution Centre office building (Urban) as per Drg. No. 04-01/DC/AR/15-R5, dtd. 01.04.2005 including all taxes, royalty, T&P, materials, labours, transportation etc. complete.	Job	2596319.00
2	Construction of Distribution Centre office building (Rural) as per Drg. No. 04-01/DC/AR-16-R2, dtd. 04.04.2005 including all taxes, royalty, T&P, materials, labours, transportation etc. complete.	Job	1250417.00
3	Construction of A1 type Control Room with toilet As per Drg. No 04-01/AR/24-R2, dtd. 13.06.2007 including all taxes, royalty, T&P, materials, labours, transportation etc. complete.	Job	906710.00
4	Drilling of 150mm dia borewell (upto 100 M depth) with 1.5 HP submersible motor pump and water supply line for switch yard including all taxes, T&P, materials, labours, transportation etc. complete.	Job	170146.00
5	Construction of 4.0 M wide Cememnt concrete road on hard soil or hard moorum as per given drawing including cost of mixture machine, vibrator, curing, all materials, T&P, labour, transportation, loading, unloading, royalty, taxes etc. complete.	M	4328.00
6	Construction of 4.0 M wide Cememnt concrete road on black cotton soil as per given drawing including cost of mixture machine, vibrator, curing, all materials, T&P, labour, transportation, loading, unloading, royalty, taxes etc. complete	M	4845.00
7	Construction of brick masonry drain (Internal size 250mmX300mm size)as per given drawing including dressing, curing, all materials, T&P, labour, royalty, taxes etc. complete.	M	1172.00
8	Construction of 7.50 M long 600mm internal dia NP-3. Hume pipe culvert as per given drawing including all labour, T&P, curing, materials, transportation, loading, unloading, royalty, taxes etc. complete.	Nos.	33635.00
9	Construction of 2.40 M high chain link wire mesh fencing on Hard Soil or Hard moorum as per given drawing including all labour, T&P, curing, materials, transportation, loading, unloading, royalty, taxes etc. complete.	M	2494.00
10	Construction of 2.40 M high chain link wire mesh fencing on Black Cotton Soil as per given drawing including all labour, T&P, curing, materials, transportation, loading, unloading, royalty, taxes etc. complete.	M	2860.00
11	Construction of 4.50mX2.15m size yard/area gate as per given drawing including all labour, T&P, curing, materials, transportation, loading, unloading, royalty, taxes etc. complete.	Each	35276.00

SCHEDULE

Name of Work :SCHEDULES OF RATES

As per SOR :SCHEDULE OF RATES PUBLIC WORKS DEPARTMENT [PWD BUILDING-01.01.2015]

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
1	1.1	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.		
	1.1	In all types of soils.	cum	185.00
2	1.2	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).	sqm	7.20
3	1.17	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.	cum	65.00
4	1.18	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.	cum	371.00
5	1.22	Supplying chlorpyrifos/ Lindane emulsifiable concentrate of 20% in sealed containers including delivery as specified.	litre	208.00
6	1.25	Diluting chemical emulsion (chlorpyrifos/ lindane) in water as per manufacturers recommendation and injecting for pre-constructional curative cum preventive anti-termite treatment:(Five year service guarantee bond to be signed by contractor)		
	25.1	Surface treatment by spreading emulsion under floor, over the plinth area before laying base concrete @ 5 litres / sqm	sqm	27.50
7	2.1	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:		
	1.1	Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	sqm	139.00
	1.3	Window sills, anchor blocks, string course, bends, copings, bed plates and like.	sqm	184.00
	1.4	Edge of slab, breaks in floor and walls upto 200mm.	metre	34.00
	1.5	Columns, Pillars, Piers and likes- rectangular or square in shape	sqm	297.00
	1.7	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)	sqm	235.00
	1.8	Beams, lintels, cantilevers & walls	sqm	202.00
	1.10	Folded plates slabs	sqm	194.00
	1.13.	Weather shade, chhajja, Cornices and mouldings	sqm	294.00
8	3.1	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	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).	cum	2659.00
	1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).	cum	2970.00

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
	1.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size).	cum	3552.00
	1.5	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	cum	4073.00
9	3.2	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.		
	2.1	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	cum	4163.00
10	3.4	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:	cum	97.50
11	3.12	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:		
	12.2	Thermo-Mechanically treated bars FE 500D	kg	54.50
12	3.13	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.	cum	4237.00
13	3.15	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	sqm	93.50
14	6.1	Random rubble masonry with hard stone in foundation and plinth in Cement Mortar 1:6 (1 Cement : 6 Coarse Sand) including leveling up with cement concrete 1:6:12 (1 cement : 6 coarse sand: 12 stone aggregate 20mm nominal size) upto plinth level.	cum	2515.00
15	6.2	Extra for random rubble masonry with hard stone in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	cum	203.00
16	7.5	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:		
	5.2	Cement Mortar 1:4 (1 cement : 4 coarse sand)	cum	3452.00
	5.4	Cement Mortar 1:6 (1 cement : 6 coarse sand)	cum	3263.00
17	7.6	Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	cum	121.00
18	8.12	Providing and fixing flush door shutters, conforming to IS : 2202 (Part-I), decorative type core of block board construction with frame of first class hard wood and well matched teak ply veneering with vertical grains or cross bands and face veneers on both faces of shutters excluding hinges.		
	12.2	35 mm. thick (single leaf)	sqm	2005.00
19	8.15	Extra for double leaf shutter instead of single leaf.	sqm	52.00
20	3.132	Providing and fixing stainless steel butt hinges IS : 12817 marked with necessary stainless steel screws etc complete.		
	32.2	125x2.5mm (heavy)	each	76.50
21	3.137	Providing and fixing stainless steel sliding door bolts with 16mm rod, 2.5mm thick flap, necessary stainless steel nuts bolts and screws etc complete.		
	37.1	300mm	each	238.00
	37.2	250mm	each	228.00
22	3.138	Providing and fixing stainless steel door latch with 12mm rod, 2.5mm thick flap, necessary stainless steel screws etc complete.		

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
	38.2	250mm	each	85.00
23	3.139	Providing and fixing stainless steel tower bolts (Barrel type) with necessary stainless steel screws etc complete.		
	39.3	150 x10mm	each	57.50
24	3.140	Providing and fixing stainless steel door handles having flap thickness 2.5mm, necessary stainless steel screws etc complete.		
	40.2	125 mm	each	22.50
25	3.141	Providing and fixing Stainless steel "D" shape door handles made of 10mm dia rod with necessary stainless steel screws etc complete.		
	41.2	150 mm	each	49.50
26	3.143	Providing and fixing stainless steel hanging door stopper with necessary stainless steel screws complete.		
	43.2	Double	each	65.00
27	3.151	Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 Nos of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door frame to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and direction of Engineer-in-Charge.	metre	346.00
28	3.152	Providing and fixing 30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5mm thick heat moulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle on either side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per Manufacturer's specification including 3 nos ISI marked stainless steel hinges of size 100x58x1.9 mm complete. (for W.C. and bathroom door shutter).		
	52.1	PVC door shutter	sqm	2318.00
29	9.1	Structural steel work in single section including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.	kg	61.50
30	9.3	Steel work in tubular (round, square or rectangular hollow tubes etc.) structure in built-up sections, trusses and frame work including cutting, hoisting, fixing in position upto a height of 5m above plinth level, consisting of columns trusses, roof and bottom purlins, base plate, holding down bolts, wind ties bracing (if required), bolts, nuts and washers for fastening etc. complete with applying a priming coat of red oxide zinc chromate		

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
		primer.		
	3.2	Electric resistance or induction butt welded tubes Grade-300	kg	93.50
31	9.11	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size with top and bottom rails of T-iron 40x40x6mm with 38mm steel pulleys complete with bolts, nuts, locking arrangement stoppers, handles including applying a priming coat of red oxide zinc chromate primer.	sqm	3330.00
32	9.13	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.	kg	75.00
33	9.15	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 welded to frame with all necessary fitting complete including applying a priming of red oxide zinc chromate primer.	kg	67.50
34	9.16	Providing and fixing M.S. frames of doors, windows, ventilators and cupboards joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of grade M-10 or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.		
	16.2	Angle-iron frames	kg	73.50
35	9.18	Providing and fixing in position doors, windows and ventilators frames made of cold rolled pressed steel sheet framed profiles made from commercial M.S. Sheets conforming to I.S. 513 of 1973 and as per general specifications of I.S 4351 including hinges jamb, lock jamb, steel butt hinges, base tie, joints mitred and welded with 10cm long legs of size 15x3mm M.S. flat, embedded in cement concrete blocks 15x10x10cm size of grade M-10 or rawl plugs and screws or with fixing clips or with bolts and nuts including neatly compacted filling M-10 cement concrete in profile section applying a priming coat of red oxide zinc chromate primer.		
	18.4	Single rebate/ mullion 100mmx50mm size, 1.6mm thick sheet.	metre	474.00
	18.5	Double rebate 115mmx50mm size, 1.6mm thick sheet	metre	528.00
36	9.34	Providing and fixing stainless wire gauge of average width of aperture 1.56mm with wire of 0.35mm to existing steel door, window shutter frames with necessary M.S. strip beading etc. complete.	sqm	791.00
37	9.39	Providing and fixing in position G.I. barbed wire (93.8gram/m) to concrete/ wooden/ angle iron posts (straight or diagonal) including securing and screwing with G.I. tying wire, G.I. stapples, G.I.U-nails or steel pins etc., complete(Cost of posts, struts to be paid for separately)	metre	9.40
38	9.43	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.		
	43.2	Aperture 75x75mm	sqm	291.00
39	9.45	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	Kg	69.50

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
		post/ strut in cement concrete block.		
40	9.47	Providing and fixing aluminium work for doors, windows, ventilators and partitions made out of extruded aluminium standard sections (main section with minimum 1.5mm thickness) conforming to IS: 733, IS: 1285 mitred and jointed mechanically including aluminium cleats, neoprene weather stripping gasket beveled edge beading, screws duly fixed in wall/ floor with fixing clips or hold fasteners or bolts and nuts as required aluminium sections shall be anodized transparent or dyed to approved shade according to IS: 1868, minimum anodic coating shall be of grade AC-15. (Glazing to be paid for separately:		
	47.1	For fixed portion	Kg	331.00
	47.2	For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/ neoprene gasket required (Fittings shall be paid for separately).	Kg	338.00
41	9.48	Extra for powder coated (minimum 50 micron) aluminium sections instead of anodized.	Kg	27.00
42	9.50	Providing and fixing 12mm thick pre-laminated particle board flat pressed with decorative lamination and balancing lamination on specified sides exterior Grade – I MDF Board 12 mm thick confirming to IS:14587, including fixed in aluminium doors, windows shutters and partition frames with C.P. brass/ stainless steel screws etc. complete.		
	50.2	With decorative lamination on both side	sqm	906.00
43	9.51	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with PVC/ neoprene gasket etc. complete. (Cost of aluminium snap beading shall be paid in basic item):		
	51.1	With float glass panes of 4 mm thickness	sqm	611.00
	51.2	With float glass panes of 5 mm thickness	sqm	708.00
44	9.59	Extra for providing and fixing reflective glass panes in aluminium door, window, ventilator shutters and partitions instead of float glass.		
	59.1	4 mm thickness	sqm	309.00
	59.2	5 mm thickness	sqm	292.00
45	11.1	Providing and making 6mm thick cement plaster of mix:		
	1.2	In Cement mortar 1:4 (1 cement : 4 fine sand)	sqm	87.00
46	11.2	Providing and making 12mm thick cement plaster of mix:		
	2.2	In Cement Mortar 1:4 (1 cement : 4 fine sand)	sqm	103.00
	2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	sqm	91.50
47	11.3	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:		
	3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	sqm	107.00
48	11.5	Neat Cement punning.	sqm	33.00
49	11.8	Providing and making 18mm thick cement plaster in two coats with under layer of 12mm thick plaster 1:5 (1 cement : 5 fine sand) and top layer of 6mm thick with cement plaster 1:3 (1 cement : 3 fine sand) finished rough with sponge.	sqm	167.00
50	11.32	Providing and making 18 mm thick plain cement mortar band in cement mortar 1:4 (1 cement : 4 fine sand) per cm width:		
	32.3	Raised Band	metre	3.30
51	11.38	Providing and making pointing on stone work with cement Mortar 1:3 (1 cement : 3 fine sand)		
	38.3	Raised and cut pointing	sqm	106.00

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
52	12.7	Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall and dados over 12 mm thick bed of cement Mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm including pointing in white cement mixed with matching pigment complete.		
	7.2	Size above 200x300mm	sqm	646.00
53	12.9	Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, 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.		
	9.1	Size 300x300mm	sqm	692.00
54	12.12	Providing and laying vitrified floor tiles with soluble salt printing, of size 600x600mm with water absorption less than 0.5% and conforming to IS : 15622 of approved make, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.	sqm	963.00
55	12.13	Providing and laying vitrified floor tiles with double charge/ multi charge printing with water absorption less than 0.5% and conforming to IS : 15622 of approved make in all colours and shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.		
	13.1	Size 600x600mm	sqm	1151.00
56	12.37	Chequerred precast cement concrete tiles 22mm thick in footpath & courtyard jointed with neat cement slurry 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) :		
	37.2	Medium shade using approximately. 50% white cement and 50% ordinary cement.	sqm	591.00
57	12.46	15 mm thick Table rubbed polished Granite stone slab in risers and treads of steps skirting dado and pillars laid on 12mm (Average) thick base of cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry including rubbing and polishing etc. complete (single stone is to be used for risers and treads of steps and width of stone for skirting and dado shall be equal to the height of skirting & dado and length of 1.0 m).		
	46.2	Granite stone black	sqm	2719.00
58	13.19	Extra for providing edge moulding to 15mm thick stone counters, vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.		
	19.2	Granite work	metre	172.00
59	13.24	Providing and fixing one side polished 25 mm thick RAJIM SAND STONE shelves fixed in walls in cement mortar 1:3 (1 cement : 3 coarse sand) including finishing complete.		
	24.1	One side polished	sqm	331.00
60	14.10	Wall painting with acrylic premium emulsion (plastic) paint of required shade to give an even shade.		
	10.1	On new work (two or more coats)	sqm	44.50
61	14.11	Wall painting with acrylic luxury emulsion (plastic) paint of required shade to give an even shade.		
	11.1	On new work (two or more coats)	sqm	52.50

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
62	14.12	Applying one coat of cement primer on wall surface (applied @ 0.80 litrs/10 sqm) complete.	sqm	23.00
63	14.13	Providing and applying 2mm thick ready mix exterior grade approved make putty (like Birla wall care, Alltek Superfine W/R of (NCL), Asian, ICI, Nerolac, J.K. wall putty) on walls to make the surface smooth and even.	sqm	94.50
64	14.14	Finishing walls with water proofing cement paint of required shade to give an even shade.		
	14.1	On new work (Two or more coats applied @ 3.84 kg/10 sqm)	sqm	41.00
65	14.15	Painting exterior surface with 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:		
	15.1	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)	sqm	56.00
66	14.16	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:		
	16.1	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)	sqm	74.50
67	14.22	Painting on new work (two or more coats) to give an even shade with:		
	22.1	Satin synthetic enamel paint	sqm	55.00
	22.2	Premium synthetic enamel paint	sqm	47.00
	22.3	Aluminium paint	sqm	58.50
68	14.25	Providing and laying French sprit polish on new wood work after preparing the surface by rubbing down smooth with sand papers, covering the knots, if visible, applying a coat of wood filler, cleaning the surface, applying 50 or more coats of French spirit polish till the surface gives high gloss.	sqm	143.00
69	15.5	Boring, providing and installing cast in situ single under reamed piles of specified diameter and length below pile cap in cement concrete 1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size), to carry a safe working load, excluding the cost of steel reinforcement but including the cost of boring with auger by manual means and making one bulb using suitable bulb enlarging tool by MANUAL MEANS with all instruments and arrangements required for boring true to vertical line etc. all complete. (Length of pile for payment shall be measured upto to the bottom of pile cap):		
	5.1	250 mm dia piles.	metre	541.00
70	18.1	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 :		
	1.2	Coloured Long pattern W.C. pan of size 580 mm	each	2913.00
71	18.4	Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked 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 :		
	4.1	White pedestal type	each	2882.00
72	18.13	Providing and fixing white vitreous china urinal basin with waste fitting as per		

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
		IS : 2556, and other couplings in C.P. brass complete:		
	13.2	Flat back type urinal of size 460x380x250mm	each	1529.00
73	18.17	Providing and fixing vitreous china wash basin with C.I. brackets, 32 mm C.P. brass waste of standard pattern, including painting of brackets, cutting and making good the walls wherever required :		
	17.2	White Size 550x400 mm	each	1408.00
74	18.19	Providing and fixing vitreous china pedestal for wash basin completely recessed at the back for the reception of pipes and fittings.		
	19.1	White	each	1130.00
75	18.29	Providing and fixing 600x450 mm beveled edge 4mm mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	each	599.00
76	18.76	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.		
	76.2	110 mm dia pipe.	metre	267.00
	76.3	150 mm dia pipe.	metre	440.00
77	18.77	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.		
	77.1	Tee/ Tee with door/ Bend 45° / Bend 90°		
	.1.2	110 mm	each	154.00
	.1.3	150 mm	each	273.00
	77.3	Vent cover		
	.3.2	110 mm	each	44.00
	77.6	Nahani trap 110x75mm	each	90.50
78	18.78	Providing and fixing UV stabilized Unplasticised -PVC pipe clips of approved design to Rigid PVC pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.		
	78.2	110 mm	each	61.00
79	19.4	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 testing of joints complete as per direction of Engineer in Charge. INTERNAL WORK - EXPOSED ON WALL		
	4.3	25 mm nominal outer dia .Pipes.	metre	199.00
	4.4	32 mm nominal outer dia .Pipes.	metre	271.00
	4.5	40 mm nominal outer dia .Pipes.	metre	362.00
80	19.5	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.		

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
		CONCEALED WORK including cutting chases and making good the walls etc.,		
	5.3	25 mm nominal outer dia .Pipes.	metre	213.00
81	19.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This included jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge. EXTERNAL WORK		
	6.1	15 mm nominal outer dia pipes	metre	91.50
	6.3	25 mm nominal outer dia pipes	metre	165.00
82	19.7	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:		
	7.3	25 mm dia. nominal bore	metre	258.00
	7.4	32 mm dia. nominal bore	metre	318.00
	7.5	40 mm dia. nominal bore	metre	364.00
83	19.8	Providing and fixing concealed in wall G.I. pipes medium class complete with G.I. fittings and clamps, including painting with anti corrosive bitumastic paint, cutting chases, making good the walls etc. and testing of joints complete:		
	8.3	25 mm dia nominal bore	metre	297.00
84	19.9	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:		
	9.1	15 mm dia. nominal bore	metre	131.00
	9.3	25 mm dia. nominal bore	metre	222.00
85	19.11	Providing and fixing G.I. Union in G.I. pipe (New work) including cutting and threading the pipe and making long screws etc. complete:		
	11.3	25 mm nominal bore	each	117.00
86	19.13	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality:		
	13.1	Bib cock (250 grams)	each	185.00
	13.2	Bib cock (350 grams)	each	237.00
87	19.14	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:		
	14.1	Bib cock (400 grams)	each	382.00
	14.4	Piller Cock (400 grams)	each	398.00
	14.5	Two way bib cock (800 grams)	each	708.00
	14.7	Angle valve for basin mixer and geyser points (450 grams)	each	382.00
	1.14	Soap dish plate	each	163.00
	1.17	Towel ring (150 mm dia)	each	254.00
	.19	Health foscet (hand jet) with flexible connection pipe (for WC)	set	774.00
	.20	CP brass water jet to be fixed in seat cover of WC with flexible connection pipe	set	577.00
88	19.15	Providing and fixing stainless steel drain jali of approved make/quality.	each	51.00
89	19.16	Providing and fixing brass/ gun metal gate valve with C.I. wheel of approved quality (screwed end):		
	16.1	25 mm nominal bore	each	436.00
	16.2	32 mm nominal bore.	each	510.00
90	19.17	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete :		

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
	17.1	15 mm nominal bore	each	284.00
91	19.42	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	litre	7.30
92	20.2	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:		
	2.1	100 mm diameter S.W. pipe	metre	357.00
93	20.7	Constructing brick masonry manhole with well burnt modular clay bricks crushing strength not less than 35kg/cm ² in cement mortar 1:4 (1 cement : 4 coarse sand), R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation in cement concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size) inside plastering 12mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) finished with a floating coat of neat cement complete as per standard design :		
	7.1	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) :	Each	6703.00
94	20.31	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.	Each	1709.00
95	21.1	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.		
	1.1	All types of soil		
	1.3	150 mm dia.	metre	339.00
	1.2	Rocky strata including Boulders.		
	1.2.3	150 mm dia.	metre	396.00
96	21.2	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 beyond 90 metre & upto 150 metre depth below ground level. All types of soil		
	2.2	Rocky strata including Boulders.		
	2.3	150 mm dia.	metre	424.00
97	21.5	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 revision (Up-to-date amendments), of reputed & approved make, including required hire & labour charges, fittings & accessories, all complete, for all depths, as per		

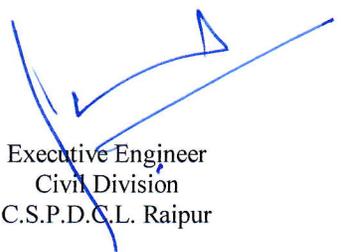
S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
		direction of Engineer- in-charge.		
	5.3	150 mm nominal dia	metre	1304.00
98	21.6	Supplying, assembling, lowering and fixing in vertical position in bore well, slotted casing pipe made from ISI marked G.I. pipe (Plain) medium class in 4 to 7 meters length one end fitted with socket as per IS: 1239 (Part-1&Part-2) 1992 with IVth revision (having slot of size 1.6/3.2 mm), of reputed and approved make, including hire & labour charges, fittings & accessories, all complete, for all depths, as per direction of Engineer-in-charge.		
	6.3	150 mm nominal dia	metre	1317.00
99	21.11	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:		
	11.3	150 mm dia	each	217.00
00	21.17	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)	point	1502.00
01	3.7	(PWD ELECTRICAL-01-08-2015-7)Wiring for light/ fan/ exhaust fan / call bell point with 1.5 sqmm FR PVC insulated stranded copper conductor single core cable in concealed PVC conduit, with 5 amp modular switch, modular base and cover plate, suitable size G.I. box and earthing the point with same size cable as required.		
	1	Short Point	Point	278.00
	2	Medium Point	Point	431.00
	3	Long Point	Point	595.00
02	3.9	(PWD ELECTRICAL-01-08-2015-9)Extra for providing and fixing light plug point on board in concealed PVC conduit point wiring with modular type 3 pin 5 amp socket outlet and 5 amp switch including cost of base and cover plate and G. I. box etc. as required.	Point	240.00
03	3.11	(PWD ELECTRICAL-01-08-2015-11)Wiring for power plug point with 2x4 sq mm FR PVC insulated stranded copper conductor cable in concealed PVC conduit along with modular type 16 Amp switch and 6 pin 16 amps socket outlet with modular base and cover plate, suitable size G.I. box, earthing the switch box and socket outlet with same size cable etc. as required.		
	1	Short Point	Point	589.00
	2	Medium Point	Point	934.00
	3	Long Point	Point	1347.00
	4	Extra Long Point I	Point	1838.00
	5	Extra Long Point II	Point	2383.00
04	3.13	(PWD ELECTRICAL-01-08-2015-13)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 PVC conduit as required.		
	2	3 X 2.5 sq. mm in 20mm conduit	Metre	104.00
	8	3 X 10 sq. mm in 25mm conduit	Metre	283.00
	9	3 X 16 sq. mm in 32mm conduit	Metre	434.00
05	7.4	(PWD ELECTRICAL-01-08-2015-4)Supplying and fixing following modular switch, socket, other accessories on the existing modular plate & switch box including connections but excluding modular plate etc. as required.		
	1	5/6 amps one way switch	Each	68.00

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
	3	Bell push	Each	81.50
	4	15/16 amp switch	Each	96.00
	5	3 pin 5/6 amp socket outlet	Each	87.50
	6	6 pin 15/16 amp socket outlet	Each	126.00
	8	Fan regulator (two module size) electronic stepped type moving all rounds	Each	203.00
	12	Telephone socket outlet	Each	71.50
	14	Computer Outlet Jack	Each	224.00
06	8.1	(PWD ELECTRICAL-01-08-2015-1)Supplying, installation, testing and commissioning of following sizes ceiling fan 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.		
	2	1200 mm sweep	Each	1503.00
07	8.4	(PWD ELECTRICAL-01-08-2015-4)Supplying and fixing of wall/ cabin fan of 400mm sweep including connection etc. as required.	Each	2282.00
08	8.6	(PWD ELECTRICAL-01-08-2015-6)Supplying, installation, testing and commissioning of following sizes heavy duty (continuous running) 1400 rpm exhaust fan in existing opening in wall including earthing etc. complete as required.		
	1	300 mm sweep	Each	2558.00
09	8.7	(PWD ELECTRICAL-01-08-2015-7)Supplying, installation, testing and commissioning of 250/ 300 mm sweep 1400 rpm medium duty (continuous running) exhaust fan in existing opening in wall including earthing etc. complete as required.	Each	1428.00
10	8.11	(PWD ELECTRICAL-01-08-2015-11)Supplying, installation, testing and commissioning of following T-5 fluorescent fitting (luminaries) complete with electronic ballast but without fluorescent lamp, on ceiling/ wall surface, earthing the fitting etc. as required.		
	1	Single box type with decorative end caps	Each	635.00
11	8.12	(PWD ELECTRICAL-01-08-2015-12)Supplying, fixing, testing and commissioning of following 230/250 volts fluorescent lamp (tube) in existing lighting luminaries as required.		
	2	4' x 28 watt (T-5)	Each	143.00
12	8.17	(PWD ELECTRICAL-01-08-2015-17)Supplying, fixing and testing of approved make bulk head luminaries 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.	Each	430.00
13	8.18	(PWD ELECTRICAL-01-08-2015-18)Supplying, fixing, testing and commissioning of following CFL (Built in choke type) in existing lighting luminaries as required.		
	4	15 Watt	Each	183.00
	5	20 Watt	Each	233.00
14	11.6	(PWD ELECTRICAL-01-08-2015-6)Supplying and fixing on surface/ recess vertical type following way, 415 volts, TPN MCB distribution board of sheet steel phosphatized and powder painted, with 200 amps tinned copper busbar, common neutral link, earth bar, din bar, detachable gland/ knock out plate, provision for 63/100 amp MCCB as incomer including interconnection between incomer MCCB and busbars, earthing etc. as required. (But without MCCB and MCB) (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)		

S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
	1	4 way (4 + 12), Single door with provision for 100 amps MCCB as incomer	Each	3644.00
15	11.11	(PWD ELECTRICAL-01-08-2015-11)Supplying and fixing SP MCB, 240 volts, 'C' curve, suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
	2	6 amps to 32 amps	Each	154.00
16	11.16	(PWD ELECTRICAL-01-08-2015-16)Supplying and fixing TP&N MCB, 440 volts, 'C' curve, suitable for lighting and other loads in the existing MCB DB complete with connections, testing and commissioning etc. as required.		
	5	63 amps	Each	1339.00
17	14.4	(PWD ELECTRICAL-01-08-2015-4)Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe, with charcoal and salt as required.	Set	6754.00
18	14.5	(PWD ELECTRICAL-01-08-2015-5)Supplying and laying 8 SWG copper wire at 0.50 metre below ground level for conductor earth electrode, including soldering etc. as required.	Metre	76.00
19	26.3	(PWD ELECTRICAL-01-08-2015-3)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 required.		
	2	1.5 HP, single phase	Each	17633.00
20	26.5	(PWD ELECTRICAL-01-08-2015-5)Supplying and fixing of following sizes 'B' class G I pipe with all necessary Tee's, bends, sockets in the suction/ delivery line including cutting and threading etc. as required.		
	7	25 mm dia.	Metre	250.00
21	26.7	(PWD ELECTRICAL-01-08-2015-7)Supplying and fixing of following sizes GM gate valve ISI mark in the suction/ delivery line etc. as required.		
	7	25 mm dia.	Each	469.00
22	26.11	(PWD ELECTRICAL-01-08-2015-11)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 required. 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	Each	4125.00
23	26.12	(PWD ELECTRICAL-01-08-2015-12)Supplying and fixing M.S. clamp 50 cm long made of 50mmx5mm thick M.S. Flat for holding the pipes and submerable pump set as required.	Each	314.00
24	1.4	(PWD ROAD-01.01.2015-4)Hire charges for machineries : (only working hours to be paid and idle hours not to be paid)		
	vii)	Road rollers :		
		(d) Vibratory roller	Hour	1200.00
25	1.5	(PWD ROAD-01.01.2015-5)Supply of mineral aggregate like broken stone/crushed stone (crushed in mechanical crusher) as per clause 520 at road site including all lead and stacking etc. complete.		



S.N	REF.	ITEM DESCRIPTION	UNIT	RATE
	iv)	45 mm standard size Crushed stone	Cum.	1083.00
26	1.6	(PWD ROAD-01.01.2015-6)Supply of fine aggregate and filler material as per clause 520 including all lead and stacking etc. complete		
	ii)	Sand/Shingle/Kanker/Laterite	Cum.	652.00
27	9.5	(PWD ROAD-01.01.2015-5)Providing and laying Reinforced Cement Concrete pipe NP 3 / prestressed concrete pipe. (Laying Reinforced cement concrete pipe NP3 /prestressed concrete pipe for culverts including fixing collar with cement mortar 1:2 but excluding bedding below pipes, excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .)		
	B	600 mm dia	Meter	2459.00



Executive Engineer
Civil Division
C.S.P.D.C.L. Raipur

Rate analysis of 8.0 m / 140 kg. P.C.C. Pole for SOR 2018-19.

S. No.	SoR Ref.	Item Description	Qty.	Unit	Rate	Amount
1	N. SoR	Providing and laying pre-stressed cement concrete of M-40 grade in superstructure including form work but excluding reinforcement complete as per drawing and specifications and IS : 1343-2012.	0.148	Cum	6500.00	962.00
2	3.6 (SOR PWD 2015)	Providing and laying High tensile steel wires/ strands at any level including all accessories i.e. sheathing duct, tube anchorage set, and stressing, stressing operations and grouting with cement complete as per drawing and technical specifications	8.6	Kg.	145.00	1247.00
3	N. SoR	Providing and laying Galvanised iron wires/ strands at any level including all accessories and grouting with cement complete as per drawing and technical specifications	0.77	Kg.	60.00	46.20

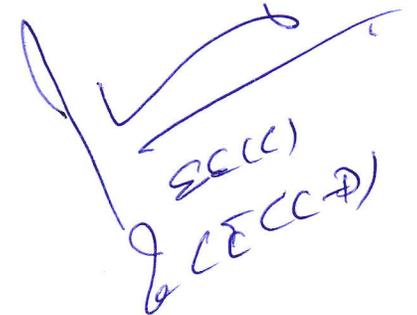
Total 2255.20

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see
2 CE (C-D)

Rate analysis of 8.0 m / 200 kg. P.C.C. Pole for SOR 2018-19.

S. No.	SoR Ref.	Item Description	Qty.	Unit	Rate	Amount
1	N. SoR	Providing and laying pre-stressed cement concrete of M-40 grade in superstructure including form work but excluding reinforcement complete as per drawing and specifications and IS : 1343-2012.	0.157	Cum	6500.00	1020.50
2	3.6 (SOR PWD 2015)	Providing and laying High tensile steel wires/ strands at any level including all accessories i.e. sheathing duct, tube anchorage set, and stressing, stressing operations and grouting with cement complete as per drawing and technical specifications	10.25	Kg.	145.00	1486.25
3	N. SoR	Providing and laying Galvanised iron wires/ strands at any level including all accessories and grouting with cement complete as per drawing and technical specifications	0.77	Kg.	60.00	46.20

Total 2552.95


S.C.C.
L.C.C.C.P.

Rate analysis of 11.0 m / 365 kg. P.C.C. Pole for SOR 2018-19.

S. No.	SoR Ref.	Item Description	Qty.	Unit	Rate	Amount
1	N. SoR	Providing and laying pre-stressed cement concrete of M-40 grade in superstructure including form work but excluding reinforcement complete as per drawing and specifications and IS : 1343-2012.	0.47	Cum	6500.00	3055.00
2	3.6 (SOR PWD 2015)	Providing and laying High tensile steel wires/ strands at any level including all accessories i.e. sheathing duct, tube anchorage set, and stressing, stressing operations and grouting with cement complete as per drawing and technical specifications	31.00	Kg.	145.00	4495.00
3	N. SoR	Providing and laying Galvanised iron wires/ strands at any level including all accessories and grouting with cement complete as per drawing and technical specifications	0.92	Kg.	60.00	55.20
					Total	7605.20



 60000/

 2 CE (C-D)

**CHAPTER- 9
PIPE CULVERTS**

Item No.	Descriptions	Unit	Rate (Rs.)
9.1	Excavation for Structures (Earth work in excavation of foundation of structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious matter, dressing of sides and bottom and backfilling with approved material.)		
	Ordinary soil		
	Up to 3 m depth	Cum.	146.00
9.2	Providing and laying Reinforced Cement Concrete pipe NP 4 / prestressed concrete pipe on first class bedding (Laying Reinforced cement concrete pipe NP4/prestressed concrete pipe for culverts on first class bedding of granular material including fixing collar with cement mortar 1:2 and bedding as per clause 2904 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .)		
A	600 mm dia	Meter	2863.00
B	900 mm dia	Meter	6147.00
C	1000 mm dia	Meter	6767.00
D	1200 mm dia	Meter	9015.00
9.3	Providing and laying Reinforced Cement Concrete pipe NP 4 / prestressed concrete pipe (Laying Reinforced cement concrete pipe NP4 /prestressed concrete pipe for culverts including fixing collar with cement mortar 1:2 but excluding bedding below pipe , excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .)		
A	600 mm dia	Meter	2706.00
B	900 mm dia	Meter	5990.00
C	1000 mm dia	Meter	6609.00
D	1200 mm dia	Meter	8843.00
9.4	Providing and laying Reinforced Cement Concrete pipe NP 3 / prestressed concrete pipe on first class bedding. (Laying Reinforced cement concrete pipe NP3 /prestressed concrete pipe for culverts on first class bedding of granular material including fixing collar with cement mortar 1:2 but excluding excavation, protection works, backfilling, concrete and masonry works in head walls and parapets).		
A	450 mm dia	Meter	1893.00
B	600 mm dia	Meter	2617.00
C	900 mm dia	Meter	5032.00
D	1000 mm dia	Meter	5528.00

Item No.	Descriptions	Unit	Rate (Rs.)
E	1200 mm dia	Meter	7157.00
9.5	Providing and laying Reinforced Cement Concrete pipe NP 3 / prestressed concrete pipe. (Laying Reinforced cement concrete pipe NP3 /prestressed concrete pipe for culverts including fixing collar with cement mortar 1:2 but excluding bedding below pipes, excavation, protection works, backfilling, concrete and masonry works in head walls and parapets .)	Meter	1769.00
A	450 mm dia	Meter	2459.00
B	600 mm dia	Meter	4874.00
C	900 mm dia	Meter	5370.00
D	1000 mm dia	Meter	6984.00
E	1200 mm dia	Meter	759.00
9.6	Providing 1st class bedding below pipes with graded sand or other granular materials passing through 5.6 mm sieve as per clause 2904.	Cum.	759.00
9.7	Stone masonry work in cement mortar 1:3 for head wall complete as per drawing and Technical Specifications section 1400 and 2200	Cum.	3428.00
(i)	Random Rubble Masonry (coursed or uncoursed)	Cum.	3562.00
(ii)	Coursed rubble masonry (first sort)	Cum.	4220.00
(iii)	Ashlar masonry (first sort)	Cum.	32.00
9.8	Pointing with cement mortar (1:3) on stone masonry head walls as per Technical specifications section 1300 and 2200	Sqm.	32.00
9.9	Plain cement concrete complete as per drawing and Technical Specifications	Cum.	3768.00
	PCC Grade M 15	Cum.	4174.00
	PCC Grade M 20	Cum.	2413.00
9.10	Providing and laying boulders apron on river bed for protection against scour with stone boulders weighing not less than 40 kg each complete as per drawing and Technical specification as per clause 2503.	Cum.	2413.00
9.11	Providing and laying Pitching Stone/Boulder on slopes laid over prepared filter media including boulder apron laid dry in front of toe of embankment complete as per drawing and Technical specifications as per clause 2504.	Cum.	2079.00
9.12	Providing and laying Filter material underneath pitching in slopes complete as per drawing and Technical specification including trimming of slopes to proper profile and preparation of bed and as per clause 2504.	Cum.	2079.00

ECC

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Rate Analysis for concrete mix proportion 1:1:5:3

Dtd.05.05.2018

Details of Cost for 1.00 Cum	Rate	Unit	Qty.	Amount (Rs.)
MATERIAL				
Portland Cement	Rs. 240.00	Bag	8.00	1920.00
Sand	Rs. 820.00	Cum	0.43	352.60
Coarse Aggregate				
40mm size	Rs. 1180.00	Cum	0.57	672.60
20mm size	Rs. 1260.00	Cum	0.28	352.80
LABOUR				
Mason	Rs. 400.00	Day	0.12	48.00
Beldar	Rs. 350.00	Day	1.68	588.00
			Total	3933.20
Add.10% for contractor's profit				393.32
Cost per 1.00 Cum				4326.52

Say Rs. 4327/- per Cum


A.E. (Civil)
Civil Division
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Civil Division
CSPDCL Raipur


S.E. (Civil)
Distr.-Circle
CSPDCL Raipur

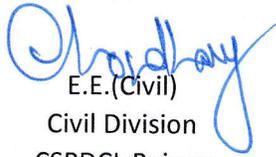
Rate Analysis for concrete mix proportion 1:2:4

Dtd.05.05.2018

Details of Cost for 1.00 Cum	Rate	Unit	Qty.	Amount (Rs.)
MATERIAL				
Portland Cement	Rs. 240.00	Bag	6.34	1521.60
Sand	Rs. 820.00	Cum	0.43	352.60
Coarse Aggregate				
40mm size	Rs. 1180.00	Cum	0.60	708.00
20mm size	Rs. 1260.00	Cum	0.25	315.00
LABOUR				
Mason	Rs. 400.00	Day	0.12	48.00
Beldar	Rs. 350.00	Day	1.68	588.00
			Total	3533.20
Add.10% for contractor's profit				353.32
Cost per 1.00 Cum				3886.52

Say Rs. 3887/- per Cum


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SOR 2018-19

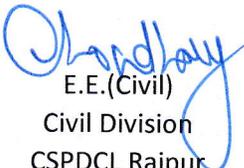
Rate Analysis for concrete mix proportion 1:3:6

Dtd.05.05.2018

Details of Cost for 1.00 Cum	Rate	Unit	Qty.	Amount (Rs.)
MATERIAL				
Portland Cement	Rs. 240.00	Bag	4.40	1056.00
Sand	Rs. 820.00	Cum	0.47	385.40
Coarse Aggregate				
40mm size	Rs. 1180.00	Cum	0.65	767.00
20mm size	Rs. 1260.00	Cum	0.24	302.40
LABOUR				
Mason	Rs. 400.00	Day	0.12	48.00
Beldar	Rs. 350.00	Day	1.68	588.00
			Total	3147.40
Add.10% for contractor's profit				314.74
Cost per 1.00 Cum				3462.14

Say Rs. 3462/- per Cum


A.E. (Civil)
Civil Division
CSPDCL Raipur


E.E.(Civil)
Civil Division
CSPDCL Raipur


S.E.(Civil)
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CSPDCL Raipur