GOVERNMENT OF CHHATTISGARH
PUBLIC WORKS DEPARTMENT

DETAILED STANDARD ESTIMATE FOR CONSTRUCTION OF TWIN "F" TYPE QUARTER

ESTIMATED COST – Rs. 26.25 LACS

EXECUTIVE ENGINEER, PUBLIC WORKS DEPARTMENT,
DIVISION NO.-2, RAIPUR (C.G.)

REPORT AND SPECIFICATIONS

1 NAME OF WORK : Detailed Standard Estimate For Construction Of **Twin F-Type Quarter.**

2 AMOUNT OF ESTIMATE : Rs. 26.25 Lacs

3 AUTHORITY : Department of Health, Government of C.G., Raipur.

4 NECESSITY : Detailed Standard Estimate has been framed to cover the cost of construction of Twin F-Type quarter.

5 PROVISION : Following provision have been made in the estimate :

Foundation : Framed structure with 2.1 m footing depth

Superstructure : Brick Masonry in C.M. 1:6

Door & Window : i) Door frames of pressed steel profile and 35 mm thick flush door shutters.
ii) Window will be of Aluminum frame with MS Grill & glazed shutter.
iii) PVC door shutter at W.C. & Bath.

Slab : 120 mm thick R.C.C. Roof slab of M-20.

Plaster : One side 12 mm thick plaster in C.M. 1:6
Other side 15 mm thick plaster in C.M. 1:6
Ceiling plaster 6 mm thick in C.M. 1:4

Finishing : Outer wall with water proofing cement paint.
Inner wall distempering with washable distemper over putty .

Flooring : In general ceramic glazed tiles flooring has been provided.
In Staircase & lobby Kota Stone flooring has been provided.

Water Supply, Sanitary Fittings and Electrification:
Details for Water Supply and Sanitary work & provision for Electrification work has been made and included in the cost.

6 RATES & SPECIFICATIONS : Rates provided in the estimate are as per S.O.R. for Building work I force from 1st June 2009. The work will be executed as per CPWD specifications with upto date amendment.

Sub-Engineer

Sub-Divisional Officer
PWD, Central Store Sub Division,
Raipur

Executive Engineer
PWD, Division No.
Raipur

Superintending Engineer
P.W.D. Raipur Circle
RAIPUR (C.G.)

CHIEF ENGINEER
P.W.D. Raipur Zone, Raipur
(CHHATTISGARH)

GENERAL ABSTRACT FOR CONSTRUCTION OF TWINE F-TYPE QUARTER

S.No.	Description	No. of Units	Total Amount (in Rs.)
1	Cost of 2F Type Quarter	2	20,16,000 =00
2	Add 4% for External Water Supply		80640 =00
3	Add 9% for Electrification 20%		403200.00
4	Cost of Septic Tank	1	16,600 = 00
		Total	B = 520,440.00
			A+B 2536440.00
5	Add 3.5% for Work Charge & Contingencies		88775.40
		Total Rs. -	26252,15.400

Say Rs. 26.25 Lacs

SUB ENGINEER

SUB DIVISIONAL OFFICER
CENTRAL STORE SUB DIVISION
RAIPUR

EXECUTIVE ENGINEER
P.W.D. DIVISION No. 2
RAIPUR

मुख्य अभियंता
लोक निर्माण विभाग, रायपुर (छ.ग.)

Superintending Engineer
P.W.D. Raipur Circle 1
RAIPUR (C.G.)

DETAILED MEASUREMENTS FOR CONSTRUCTION OF F-TYPE Quarter AT RAIPUR

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
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								
	1.1.1	In all types of soil								
		For column footings	35	1.60	1.40	2.10	164.64			
		For ground beam L.wall	1	12.60	0.30	0.10	0.38			
			4	3.00	0.30	0.10	0.36			
			2	3.40	0.30	0.10	0.20			
			1	9.00	0.30	0.10	0.27			
			2	1.20	0.30	0.10	0.07			
			1	10.00	0.30	0.10	0.30			
		X.Wall	2	3.65	0.30	0.10	0.22			
			4	2.10	0.30	0.10	0.25			
			1	2.70	0.30	0.10	0.08			
			2	3.80	0.30	0.10	0.23			
			2	2.85	0.30	0.10	0.17			
		Shelves	8	0.70	0.30	0.10	0.17			
		Back Verandah	2	1.00	0.30	0.10	0.06			
			2	0.10	0.30	0.10	0.01			
		Wash space	2	3.80	0.30	0.10	0.23			
			3	0.60	0.30	0.10	0.05			
		Steps	2	0.60	0.60	0.30	0.22			
			2	1.20	0.40	0.30	0.29			
			1	1.00	0.60	0.30	0.18			
			1	2.60	0.40	0.30	0.31			
							168.69	cum	**112.80**	**19027.89**
2	1.6	Extra for every additional lift of 1.5 m or part thereof.								
	1.6.1	All types of soil								
		For Coloumn footing	35	1.60	1.40	0.60	**47.04**	cum	**15.30**	**719.71**
3	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).								
		column footing	35	1.60	1.40	0.15	11.76			
		Ground Beam L.Wall-	1	18.60	0.30	0.10	0.56			
			4	4.20	0.30	0.10	0.50			
			2	4.00	0.30	0.10	0.24			
			1	17.40	0.30	0.10	0.52			
			2	1.80	0.30	0.10	0.11			
			1	14.80	0.30	0.10	0.44			
		X.Wall-	2	8.25	0.30	0.10	0.50			
			5	3.30	0.30	0.10	0.50			
			2	6.85	0.30	0.10	0.41			
			2	6.45	0.30	0.10	0.39			
		Shelves-	8	1.90	0.30	0.10	0.46			
			4	1.575	0.30	0.10	0.19			
		Back Verandah-	2	2.20	0.30	0.10	0.13			
			2	1.90	0.30	0.10	0.11			
		Wash Space-	2	3.80	0.30	0.10	0.23			
			2	0.60	0.30	0.10	0.04			
			1	1.20	0.30	0.10	0.04			
		Steps-	2	1.20	1.00	0.10	0.24			

DETAILED MEASUREMENTS FOR CONSTRUCTION OF F-TYPE Quarter AT RAIPUR

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
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								
	1.1.1	In all types of soil								
		For column footings	35	1.60	1.40	2.10	164.64			
		For ground beam L.wall	1	12.60	0.30	0.10	0.38			
			4	3.00	0.30	0.10	0.36			
			2	3.40	0.30	0.10	0.20			
			1	9.00	0.30	0.10	0.27			
			2	1.20	0.30	0.10	0.07			
			1	10.00	0.30	0.10	0.30			
			2	3.65	0.30	0.10	0.22			
		X.Wall	4	2.10	0.30	0.10	0.25			
			1	2.70	0.30	0.10	0.08			
			2	3.80	0.30	0.10	0.23			
			2	2.85	0.30	0.10	0.17			
			8	0.70	0.30	0.10	0.17			
		Shelves	2	1.00	0.30	0.10	0.06			
		Back Verandah	2	0.10	0.30	0.10	0.01			
			2	3.80	0.30	0.10	0.23			
		Wash space	3	0.60	0.30	0.10	0.05			
			2	0.60	0.60	0.30	0.22			
		Steps	2	1.20	0.40	0.30	0.29			
			1	1.00	0.60	0.30	0.18			
			1	2.60	0.40	0.30	0.31			
							168.69	cum	**112.80**	**19027.89**
2	1.6	Extra for every additional lift of 1.5 m or part thereof.								
	1.6.1	All types of soil								
		For Coloumn footing	35	1.60	1.40	0.60	**47.04**	cum	**15.30**	**719.71**
3	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).								
		column footing	35	1.60	1.40	0.15	11.76			
		Ground Beam L.Wall-	1	18.60	0.30	0.10	0.56			
			4	4.20	0.30	0.10	0.50			
			2	4.00	0.30	0.10	0.24			
			1	17.40	0.30	0.10	0.52			
			2	1.80	0.30	0.10	0.11			
			1	14.80	0.30	0.10	0.44			
		X.Wall-	2	8.25	0.30	0.10	0.50			
			5	3.30	0.30	0.10	0.50			
			2	6.85	0.30	0.10	0.41			
			2	6.45	0.30	0.10	0.39			
		Shelves-	8	1.90	0.30	0.10	0.46			
			4	1.575	0.30	0.10	0.19			
		Back Verandah-	2	2.20	0.30	0.10	0.13			
			2	1.90	0.30	0.10	0.11			
		Wash Space-	2	3.80	0.30	0.10	0.23			
			2	0.60	0.30	0.10	0.04			
			1	1.20	0.30	0.10	0.04			
		Steps-	2	1.20	1.00	0.10	0.24			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			1	2.60	1.00	0.10	0.26			
		Under Floor- Ent. Verandah	2	4.00	1.65	0.10	1.32			
		Dining/Living	2	4.00	5.90	0.10	4.72			
		Bed Room	2	4.20	3.00	0.10	2.52			
		Bed Room	2	4.30	3.05	0.10	2.62			
		Bed Room	2	3.60	3.50	0.10	2.52			
		Kitchen	2	4.00	3.50	0.10	2.80			
		Toilet/Lobby	2	4.20	1.50	0.10	1.26			
		Toilet	2	1.90	2.10	0.10	0.80			
		Stair lobby	1	2.20	7.65	0.10	1.68			
		Back Verandah-	2	2.40	1.30	0.10	0.62			
		Wash Space-	2	3.90	1.00	0.10	0.78			
		Shelves-	4	0.70	0.60	0.10	0.17			
			4	0.65	0.60	0.10	0.16			
			4	0.60	0.425	0.10	0.10			
							39.69	cum	**2310.85**	91715.33
4	3.4	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work.								
	3.4.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		Column Footing-	35	1.30	1.10	0.45	22.52	] = 26.16 Cum. - 4(A)		
		Column upto G.L.	35	0.40	0.20	1.30	3.64			
		Upto P.L.-	35	0.40	0.20	0.60	1.68			
		Ground Beam L.Wall-	1	18.60	0.20	0.40	1.49			
			4	4.20	0.20	0.30	1.01			
			2	4.00	0.20	0.30	0.48			
			1	17.40	0.20	0.30	1.04			
			2	1.80	0.20	0.40	0.29			
			1	14.80	0.20	0.40	1.18			
		X.Wall-	2	8.25	0.20	0.40	1.32			
			5	3.30	0.20	0.30	0.99			
			2	6.85	0.20	0.30	0.82			
			2	6.45	0.20	0.30	0.77			
		Shelves-	4	1.90	0.20	0.30	0.46			
			4	1.85	0.20	0.30	0.44			
			4	1.53	0.20	0.30	0.37			
		Back Verandah-	2	2.20	0.20	0.30	0.26			
			2	1.90	0.20	0.30	0.23			
		Wash Space-	1	8.00	0.20	0.30	0.48			
			2	0.60	0.20	0.30	0.07			
			1	1.00	0.20	0.30	0.06			
		Lintel Beam L.Wall	1	18.60	0.20	0.20	0.74			
			4	4.20	0.10	0.20	0.34			
			2	4.00	0.20	0.20	0.32			
			2	7.60	0.10	0.20	0.30			
			1	2.20	0.20	0.20	0.09			
			2	1.80	0.20	0.20	0.14			
			1	14.80	0.20	0.20	0.59			
		X.Wall-	2	8.25	0.20	0.20	0.66			
			3	3.30	0.20	0.20	0.40			
			2	3.30	0.10	0.20	0.13			
			2	1.10	0.10	0.20	0.04			
			2	4.00	0.20	0.20	0.32			
			2	6.45	0.20	0.20	0.52			
			2	1.70	0.10	0.20	0.07			
		Back Verandah-	2	2.20	0.10	0.20	0.09			
			2	1.90	0.10	0.20	0.08			
		Wash Space-	1	8.00	0.10	0.20	0.16			
			2	1.20	0.20	0.20	0.10			
			1	1.10	0.10	0.20	0.02			
		Shelves-	2	3.05	0.70	0.05	0.21			
			2	1.35	0.45	0.05	0.06			
			2	2.65	0.45	0.05	0.12			
		Chhajja	2	5.80	0.60	0.062	0.43			
			2	3.70	0.60	0.062	0.28			
			2	8.25	0.60	0.062	0.61			
		Slab Beam L.Wall	1	18.60	0.20	0.28	1.04			
			4	4.20	0.10	0.18	0.30			
			2	4.00	0.20	0.18	0.29			
			1	17.40	0.20	0.18	0.63			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			2	1.80	0.20	0.28	0.20			
			1	14.80	0.20	0.28	0.83			
		X.Wall-	2	8.25	0.20	0.28	0.92			
			5	3.30	0.20	0.18	0.59			
			2	6.85	0.20	0.18	0.49			
			2	6.45	0.20	0.28	0.72			
		Shelves-	4	1.90	0.20	0.18	0.27			
			4	1.85	0.20	0.18	0.27			
			4	1.525	0.20	0.18	0.22			
		Back Verandah-	2	2.20	0.20	0.18	0.16			
			2	0.60	0.20	0.18	0.04			
		Wash Space-	3	1.20	0.20	0.28	0.20			
		Slab	1	19.80	10.25	0.12	24.35			
			1	21.00	1.50	0.12	3.78			
			1	8.40	1.20	0.12	1.21			
			4	1.10	0.60	0.12	0.32			
			4	1.05	0.60	0.12	0.30			
			4	0.60	0.73	0.12	0.21			
		Deduct for staircase opening & duct	1	5.55	2.20	0.12	-1.47			
			1	0.45	1.00	0.12	-0.05			
		Stair case Beam-	1	1.00	0.30	0.28	0.08			
			1	2.20	0.30	0.28	0.18			
		1st flight	1	4.25	1.00	0.12	0.51			
		Landing	1	2.20	1.20	0.12	0.32			
		2nd flight	1	2.75	1.00	0.12	0.33			
		steps	22x1/2	1.00	0.30	0.15	0.50			
		Kitchen P.F.	2	5.35	0.60	0.05	0.32			
		Deduct for Sink	2	0.61	0.46	0.05	-0.03			
							84.48	**cum**	**3290.90**	**278020.96**
5	3.14	**Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete:**								
	3.14.1	**Thermo-Mechanically treated bars Take 110 kg/cum. Of R.C.C.**		84.48 @ 110 kg/cum.			**9292.80**	**kg**	**46.80**	**434903.04**
6	2.1	**Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:**								
A	2.1.1	**Foundations, footings, base of columns and plinth beam in any shape and size.**								
		Column Footing	35x2	1.30		0.45	40.95			
			35x2	1.10		0.45	34.65			
		Ground Beam L.Wall-	1x2	18.60		0.40	14.88			
			4x2	4.20		0.30	10.08			
			2x2	4.00		0.30	4.80			
			1x2	17.40		0.30	10.44			
			2x2	1.80		0.40	2.88			
			1x2	14.80		0.40	11.84			
		X.Wall-	2x2	8.25		0.40	13.20			
			5x2	3.30		0.30	9.90			
			2x2	6.85		0.30	8.22			
			2x2	6.45		0.30	7.74			
		Shelves-	4x2	1.90		0.30	4.56			
			4x2	1.85		0.30	4.44			
			4x2	1.53		0.30	3.66			
		Back Verandah	2x2	2.20		0.30	2.64			
			2x2	1.90		0.30	2.28			
		Wash Space	1x2	8.00		0.30	4.80			
			2x2	0.60		0.30	0.72			
			1x2	1.00		0.30	0.60			
							193.28	**sqm**	**73.80**	**14264.06**

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
B	2.1.6	Columns, Pillars, Piers and likes- rectangular or square in shape								
		Column	35	1.20		5.08	213.36			
		Deduction for beams Ground Beam	36	0.20		0.40	-2.88			
			86	0.20		0.30	-5.16			
		Lintel Beam	67	0.20		0.20	-2.68			
			35	0.10		0.20	-0.70			
		Slab Beam	51	0.20		0.28	-2.86			
			59	0.20		0.18	-2.12			
							196.96	sqm	**183.50**	**36142.16**
C	2.1.8	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)								
		Slab Ent. Verandah	2	4.00	1.65		13.20			
		Dining/Living	2	4.00	5.90		47.20			
		Bed Room	2	4.20	3.00		25.20			
		Bed Room	2	4.30	3.05		26.23			
		Bed Room	2	3.60	3.50		25.20			
			2	2.10	0.60		2.52			
		Kitchen	2	4.00	3.50		28.00			
		Toilet	2	1.35	2.10		5.67			
			2	2.10	1.50		6.30			
		Lobby	2	2.10	1.50		6.30			
		Stair Lobby	1	2.20	1.65		3.63			
			1	1.20	0.90		1.08			
		Back Verandah	2	2.50	1.40		7.00			
		Wash Space	2	3.95	1.10		8.69			
							206.22	sqm	**147.35**	**30386.52**
D	2.1.9	Beams, lintels, cantilevers & walls								
		Lintel Beam Sides L.Wall	1x2	18.60		0.20	7.44			
			4x2	4.20		0.20	6.72			
			2x2	4.00		0.20	3.20			
			2x2	7.60		0.20	6.08			
			1x2	2.20		0.20	0.88			
			2x2	1.80		0.20	1.44			
			1x2	14.80		0.20	5.92			
		X.Wall	2x2	8.25		0.20	6.60			
			5x2	3.30		0.20	6.60			
			2x2	1.10		0.20	0.88			
			2x2	4.00		0.20	3.20			
			2x2	6.45		0.20	3.72			
			2x2	1.70		0.20	1.36			
		Back Verandah	2x2	2.20		0.20	1.76			
			2x2	1.90		0.20	1.52			
		Wash Space	1x2	8.00		0.20	3.20			
			2x2	1.20		0.20	0.96			
			1x2	1.10		0.20	0.44			
		Kitchen P.F.	2	5.35		0.05	0.54			
		Shelves	2x2	3.05		0.05	0.61			
			2x2	1.35		0.05	0.27			
		Lintel Beam Bottom Stair Lobby	1	2.20	0.20		0.44			
		D1	4	1.00	0.20		0.80			
		D2	10	0.90	0.10		0.90			
		D3	4	0.75	0.10		0.30			
		W1	2	2.40	0.20		0.96			
		W2	6	1.80	0.20		2.16			
		W3	2	0.90	0.20		0.36			
		W4	2	0.90	0.20		0.36			
		WK	2	1.00	0.20		0.40			
		Openings	2	1.50	0.20		0.60			
			2	1.90	0.10		0.38			
		Shelves	2	2.95	0.60		3.54			
			2	1.35	0.45		1.22			
			2	2.65	0.45		2.39			
			4	0.70	0.60		1.68			
			4	0.65	0.60		1.56			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			4	0.425	0.60		1.02			
		Kitchen P.F.	2	4.90	0.60		5.88			
		Slab Beam Sides L.Wall	1x2	18.60		0.28	10.42			
			4x2	4.20		0.18	24.19			
			2x2	4.00		0.18	2.88			
			1x2	17.40		0.18	6.26			
			2x2	1.80		0.28	2.02			
			1x2	14.80		0.28	8.29			
		X.Wall	2x2	8.25		0.28	9.24			
			5x2	3.30		0.18	5.94			
			2x2	6.85		0.18	4.93			
			2x2	6.45		0.18	4.64			
		Shelves	4x2	1.90		0.18	2.74			
			4x2	1.85		0.18	2.66			
			4x2	1.525		0.18	2.20			
		Back Verandah	2x2	2.20		0.18	1.58			
			2x2	0.60		0.18	0.43			
			1x2	0.20		0.18	0.07			
		Wash Space	3x2	1.20		0.28	2.02			
			3x1	0.20		0.28	0.17			
		Slab Beam Bottom Vent.	4	0.90	0.20		0.72			
							179.68	**sqm**	**136.750**	**24570.56**
E	2.1.5	Edge of slab, breaks in floor and walls upto 200mm.								
		Slab sides	2	21.00			42.00			
			2	12.95			25.90			
			12x2	0.60			14.40			
							82.30	**mt.**	**20.20**	**1662.46**
F	2.1.16	Stair cases of all types excluding spiral and folded plate type, including risers and landings								
		Stair case Beam	1	1.00	0.30		0.30			
			2	1.00		0.34	0.68			
			1	2.20		0.34	0.75			
		1st flight	1	4.25	1.00		4.25			
			1	4.25		0.12	0.51			
		Landing	1	2.20	1.20		2.64			
		2nd flight	1	2.75	1.00		2.75			
			1	2.75		0.12	0.33			
		steps	22	1.00		0.15	3.30			
			22x1/2	0.30		0.15	0.50			
							16.00	**sqm**	**163.8**	**2621.29**
G	2.1.14	Weather shade, chhajja, Cornices and mouldings								
		Chhajja bottom	2	2.40	0.60		2.88			
			4	1.80	0.60		4.32			
			2	1.20	0.60		1.44			
		Sides	9x2	0.60		0.062	0.67			
							9.31	**sqm**	**190.7**	**1775.42**
H	2.1.4	Window sills, anchor blocks, string course, bends, copings, bed plates and like.								
		G1	2x2	4.00		0.05	0.80			
		G2	1x2	2.20		0.05	0.22			
		G3	2x2	2.20		0.05	0.44			
		G4	2x2	2.00		0.05	0.40			
		G5	2x2	4.00		0.05	0.80			
		W1	2x2	2.80		0.05	0.56			
		W2	6x2	2.20		0.05	1.32			
		W3 & W4	4x2	1.30		0.05	0.52			
		WK	2x2	1.40		0.05	0.28			
							5.34	**sqm**	**138.15**	**737.72**
7	7.2	Brick work with modular well burnt clay bricks of crushing strength not less than 25 kg/sqcm and water absorption not more than 20% in foundation and plinth in:								
	7.2.2	Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)								
		Upto Plinth L.Wall	1	18.60	0.20	0.15	0.56			
			4	4.20	0.20	0.25	0.84			
			2	4.00	0.20	0.25	0.40			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			1	17.40	0.20	0.25	0.87			
			2	1.80	0.20	0.15	0.11			
			1	14.80	0.20	0.15	0.44			
		X.Wall	2	8.25	0.20	0.15	0.50			
			5	3.30	0.20	0.25	0.83			
			2	6.85	0.20	0.25	0.69			
			2	6.45	0.20	0.25	0.65			
		Shelves	4	1.90	0.20	0.25	0.38			
			4	1.85	0.20	0.25	0.37			
			4	1.525	0.20	0.25	0.31			
		Back Verandah	2	4.10	0.20	0.25	0.41			
		Wash Space	2	4.60	0.20	0.25	0.46			
			1	1.00	0.20	0.25	0.05			
		Steps 1-	2	1.20	0.90	0.35	0.76			
			2	1.20	0.60	0.15	0.22			
			2	1.20	0.30	0.15	0.11			
		Steps 2-	1	2.60	0.90	0.35	0.82			
			1	2.60	0.60	0.15	0.23			25,044=00
			1	2.60	0.30	0.15	0.12			
							10.10	**cum**	**2479.60**	
8	7.2	Brick work with modular well burnt clay bricks of crushing strength not less than 25 kg/sqcm and water absorption not more than 20% in foundation and plinth in:								
	7.2.2	Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)								
	7.5	Extra for brick work in superstructure:								
	7.5.1	Above plinth and upto floor five level.								
		L.Wall	1	18.60	0.20	2.70	10.04			
			2	4.00	0.20	2.80	4.48			
			1	2.20	0.20	2.80	1.23			
			2	1.80	0.20	2.70	1.94			
			1	14.80	0.20	2.70	7.99			
		X.Wall	2	8.25	0.20	2.70	8.91			
			2	1.10	0.20	2.80	1.23			
			1	3.30	0.20	2.80	1.85			
			2	2.50	0.20	2.80	2.80			
			2	6.45	0.20	2.70	6.97			
			4	1.90	0.20	2.10	3.19			
			4	1.85	0.20	2.10	3.11			
			4	1.125	0.20	2.10	1.89			
			2	0.60	0.20	2.80	0.67			
		Deduction for openings Stair Lobby	1	2.20	0.20	2.10	-0.92			
		Grill G1	2	1.80	0.20	1.20	-0.86			
		Door D1	4	1.00	0.20	2.10	-1.68			
		D2	4	0.90	0.20	2.10	-1.51			
		Window W1	2	2.40	0.20	1.20	-1.15			
		W2	6	1.80	0.20	1.20	-2.59			
		W3 & W4	4	0.90	0.20	1.20	-0.86			
		WK	2	1.00	0.20	1.20	-0.48			
		Shelves	4	0.70	0.20	2.10	-1.18			
			4	0.65	0.20	2.10	-1.09			
			4	0.425	0.20	2.10	-0.71		2479.60	
		Vent. V	4	0.90	0.20	0.60	-0.43		+ 221.65	
							42.83	**cum**	2701.25	**115689.14**
9	7.9	Half brick thick brick masonry with modular well-burnt clay bricks of crushing strength not less than 25 kg/sqcm and water absorption not more than 20% in superstructure above plinth level upto floor five level.								
	7.9.2	Cement Mortar 1:4 (1 cement : 4 coarse sand)								
		L.Wall	4	4.20		2.80	47.04			
			2	7.60		2.80	42.56			
			2	2.10		2.98	12.52			
		X.Wall	2	3.30		2.80	18.48			
			2	0.90		2.80	5.04			
			4	1.50		2.80	16.80			
		Back Verandah	2	4.10		2.80	22.96			
		Wash Space	1	8.00		2.98	23.84			
			1	1.10		2.70	2.97			
		Shelves	2	2.55		2.98	15.20			
			2	3.65		2.98	21.75			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			4	0.40		2.10	3.36			
		Kitchen P.F.	4	0.60		0.90	2.16			
		Stair Case	1	2.20		1.35	2.97			
		Deduction for openings D2	8	0.90		2.10	-15.12			
		D3	4	0.75		2.10	-6.30			
		Grill G2	1	1.00		0.30	-0.30			
		G3	2	2.00		1.20	-4.80			
		G4	2	0.90		1.20	-2.16			
		G5	2	2.40		1.20	-5.76			
		Openings for LOBBY	1	1.50		2.10	-3.15			
			1	1.90		2.10	-3.99			
							196.07	sqm	**283.70**	**55624.49**
10	7.10	Extra for providing and placing in position hopping 25x1.60 mm or 2 Nos 6mm dia MS bars reinforcement at every third course of half brick masonry.								
		Qty. same as item no.-9					**196.07**	sqm	**49.05**	**9617.23**
11	3.17	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 formwork.								
		L.Wall	1	18.60	0.20	0.05	0.19			
			4	4.20	0.20	0.05	0.17			
			2	4.00	0.20	0.05	0.08			
			1	17.40	0.20	0.05	0.17			
			2	1.80	0.20	0.05	0.04			
			1	14.80	0.20	0.05	0.15			
		X.Wall	2	8.25	0.20	0.05	0.17			
			5	3.30	0.20	0.05	0.17			
			2	6.85	0.20	0.05	0.14			
			2	6.45	0.20	0.05	0.13			
		Shelves	4	1.90	0.20	0.05	0.08			
			4	1.85	0.20	0.05	0.07			
			4	1.525	0.20	0.05	0.06			
		Back Verandah	2	4.10	0.20	0.05	0.08			
		Wash Space	2	4.60	0.20	0.05	0.09			5912 -20
			1	1.00	0.20	0.05	0.01			
							1.78	cum	**3,321.70**	
12	3.19	Applying a coat of hot bitumen 30/40 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.								
		L.Wall	1	18.60	0.20		3.72			
			4	4.20	0.20		3.36			
			2	4.00	0.20		1.60			
			1	17.40	0.20		3.48			
			2	1.80	0.20		0.72			
			1	14.80	0.20		2.96			
		X.Wall	2	8.25	0.20		3.30			
			5	3.30	0.20		3.30			
			2	6.85	0.20		2.74			
			2	6.45	0.20		2.58			
		Sheives	4	1.90	0.20		1.52			
			4	1.85	0.20		1.48			
			4	1.525	0.20		1.22			
		Back Verandah	2	4.10	0.20		1.64			
		Wash Space	2	4.60	0.20		1.84			
			1	1.00	0.20		0.20			
							35.66	sqm	**78.85**	**2811.79**
13	3.2	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of form work.								
	3.2.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).								
		Window sills Ent. Verandah	2	4.00	0.20	0.05	0.08			
		Back Verandah	2	4.50	0.10	0.05	0.05			
		Wash Space	2	4.00	0.10	0.05	0.04			
		W1	2	2.80	0.20	0.05	0.06			
		W2	6	2.20	0.20	0.05	0.13			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
		W3 & W4	4	1.30	0.20	0.05	0.05			12 58 20
		WK	2	1.40	0.20	0.05	0.03			
		Stair case Grill	1	2.20	0.10	0.05	0.01			
							0.44	cum	2,860.95	
14	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								
		Qty same as item no. 1					**168.69**	**cum**	**38.15**	**6435.52**
15	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.								
		Column Trench	35	1.60	1.40	0.20	15.68			
			35	1.60	1.40	1.75	137.20			
		Under Floor Ent. Verandah	2	4.00	1.65	0.50	6.60			
		Dining/ Living	2	4.00	5.80	0.50	23.20			
		Bed room	2	4.20	2.90	0.50	12.18			
		Bed room	2	4.20	2.85	0.50	11.97			
		Bed room	2	3.50	3.50	0.50	12.25			
		Kitchen	2	3.90	3.50	0.50	13.65			
		Toilet	2	1.80	2.00	0.50	3.60			
		Toilet with Lobby	2	4.20	1.50	0.50	6.30			
		Staircase Lobby	1	2.20	7.65	0.50	8.42			
		Back verandah	2	2.40	1.30	0.50	3.12			
		Wash Space	2	3.90	1.00	0.50	3.90			
		Shelves	4	0.70	0.40	0.50	0.56			
			4	0.65	0.40	0.50	0.52			
			4	0.40	0.425	0.50	0.34			
		Deduct Qty. of item (14)					-168.69			
		Deduct Qty. of item (A)					-26.16			
		(R.C.C. upto G.L.)					**64.64**	**cum**	**316.75**	20473.14
16	9.13	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.								
A	9.13.4	Single rebate 100mmx50mm size, 1.6mm thick sheet.								
		Door D1	2	5.20			10.40			
		D2	12	5.10			61.20			
							71.60	metre	421.15	30154.34
B	9.13.5	Double rebate 115mmx50mm size, 1.6mm thick sheet								
		Door D1	2	5.20			**10.40**	metre	469.75	**4885.40**
17	9.5	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.								

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
	9.5.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.								
		Window W1	2	2.40		1.20	5.76			
		W2	6	1.80		1.20	12.96			
		W3 & W4	4	0.90		1.20	4.32			
		WK	2	1.00		1.20	2.40			
		Grill G1	2	1.80		1.20	4.32			
		G2	1	1.00		1.20	1.20			
		G3	2	2.00		1.20	4.80			
		G4	2	0.90		1.20	2.16			
		G5	2	2.40		1.20	5.76			
		Vent. V	4	0.90		0.60	2.16			
							45.84	Sqm.		
				Take@25Kg./Sqm.			**1146.00**	Kg	49.00	**56154.00**
18	8.154	Providing and fixing factory made UPVC door frame made of UPVC profile section having an overall dimension as below (tolerance ± 1mm) with wall thickness 2.0mm ± 0.2mm, corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19mm and 1mm ± 0.1mm wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-charge								
	8.154.2	Extruded section Profile size 42x50 mm.								
		Door D3	4	4.95			**19.80**	metre	179.30	**3550.14**
19	8.155	Providing and fixing factory made PVC door shutters of specified thickness made of styles and rails of a UPVC hollow section of specified size 59x24 mm and wall thickness 2 mm ± 0.2 mm with inbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws.								
	8.155.2	30 mm thick door shutters with styles and rails of size 60x30 mm								
		Door D3	4	0.75		2.10	**6.30**	sqm	2,248.45	**14165.24**
20	8.11	Providing and fixing flush door shutters, interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges.								
(A)	8.11.2	35 mm. thick (single leaf)								
		Door D1	4	0.95		2.075	7.89			
		D2	12	0.85		2.075	21.17			
							29.05	sqm	1,619.95	**47059.55**
(B)	8.11.5	25 mm. thick (double leaf for cupboard shutters with piano type hinges								8325.20
		Shelves	2	1.45		1.95	**5.66**	sqm	1,470.90	
21	11.1	6mm thick cement plaster of mix:								
	11.1.2	In Cement mortar 1:4 (1 cement : 4 fine sand)								
		Ceiling Ent. Verandah	2	4.00	1.65		13.20			
		Dining/Living	2	4.00	5.90		47.20			
		Bed Room	2	4.20	3.00		25.20			
		Bed Room	2	4.30	3.05		26.23			
		Bed Room	2	3.60	3.05		21.96			
			2	0.45	2.10		1.89			
		Kitchen	2	4.00	3.50		28.00			
		Toilet	2	1.35	2.10		5.67			
		Toilet	2	2.10	1.50		6.30			
		Lobby	2	2.10	1.50		6.30			
		Stair case Lobby	1	2.20	1.75		3.85			
			1	1.20	0.90		1.08			
		Shelves	4	0.70	0.60		1.68			
			4	0.65	0.60		1.56			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			4	0.60	0.43		1.02			
			2	2.95	0.60		3.54			
			2	1.35	0.45		1.22			
			2	2.65	0.45		2.39			
		Back Verandah	2	2.50	1.40		7.00			
		Wash Space	2	3.95	1.10		8.69			
		Stair case 1st flight	1	4.25	1.00		4.25			
		Landing	1	2.20	1.20		2.64			
		2nd flight	1	2.75	1.00		2.75			
							223.61	—	21(A)	
		Kitchen P.F.	2	4.90	0.60		5.88			
		Chhajja	2	2.40	0.60		2.88			
			4	1.80	0.60		4.32			
			2	1.20	0.60		1.44			
							238.13	sqm	70.55	**16800.07**
22	11.2	12mm thick cement plaster of mix:								
	11.2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		Inner side Ent. Verandah	2x2	4.00		3.03	48.48			
			2x2	1.65		3.03	20.00			
		Dining/Living	2x2	5.90		3.03	71.51			
			2x1	4.00		3.03	24.24			
			2x2	0.60		3.03	7.27			
		Bed Room	2x2	4.20		3.03	50.90			
			2x1	3.00		3.03	18.18			
		Bed Room	2x2	4.30		3.03	52.12			
			2x1	3.05		3.03	18.48			
		Bed Room	2x1	3.60		3.03	21.82			
			2x1	3.50		3.03	21.21			
			2x1	1.00		3.03	6.06			
		Kitchen	2x2	4.00		3.03	48.48			
			2x2	3.50		3.03	42.42			
		Toilet	2x1	1.90		1.08	4.10			
			2x1	2.10		1.08	4.54			
		Toilet	2x2	1.50		1.08	6.48			
		Stair Lobby	1	2.20		1.08	2.38			
			1	2.20		1.35	2.97			
		Back Verandah	2x1	2.50		3.03	15.15			
			2x1	2.1		3.03	12.73			
		Wash Space	2x1	4.00		3.03	24.24			
			2x2	1.10		3.03	13.33			
		Shelves	4x2	0.60		1.95	9.36			
			4x2	0.60		1.95	9.36			
			4x2	0.60		1.95	9.36			
		Shelve Top	2x1	2.50		0.45	2.25			
			2x1	2.95		0.60	3.54			
			2x1	1.25		0.45	1.13			
		Deduction D1	4x1/2	1.00		1.95	-3.90			
		D2	12x1/2	0.90		1.95	-10.53			
		D3	2x1/2	0.75		1.95	-1.46			
		W1	2x1/2	2.40		1.20	-2.88			
		W2	6x1/2	1.80		1.20	-6.48			
		W3 & W4	4x1/2	0.90		1.20	-2.16			
		WK	2x1/2	1.00		1.20	-1.20			
		Grill G1	2x1/2	1.80		1.20	-2.16			
		G2	1x1/2	1.00		0.30	-0.15			
		G3	2x1/2	2.00		1.20	-2.40			
		G4	2x1/2	0.90		1.20	-1.08			
		G5	2x1/2	2.40		1.20	-2.88			
		Vent. V	4x1/2	0.90		0.60	-1.08			
		Opening for Lobby	2x1	1.50		1.95	-2.93			
			2x1	1.90		1.95	-3.71			
							527.08	sqm	68.40	**36052.51**
23	11.3	15mm thick cement plaster on the rough side of single or half brick wall of mix:								
	11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)								
		Inner side Dining/Living	2x1	4.00		3.03	24.24			
		Bed Room	2x1	3.00		3.03	18.18			
		Bed Room	2x1	3.05		3.03	18.48			
		Bed Room	2x1	3.60		3.03	21.82			
		Kitchen	2x1	2.50		3.03	15.15			
		Lobby	2x2	2.00		3.03	24.24			
			2x2	1.00		3.03	12.12			
		Toilet	2x1	1.90		1.08	4.10			
			2x1	2.10		1.08	4.54			

S.N	Item No.	Particulars		MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			Toilet	2x2	2.10		1.08	9.07			
			Lobby	2x2	2.10		3.03	25.45			
				2x2	1.50		3.03	18.18			
			Stair case Lobby	1	2.20		3.15	6.93			
				1	2.20		1.35	2.97			
				2	7.65		3.03	46.36			
			Back veradah	2x1	1.80		3.03	10.91			
				2x1	1.40		3.03	8.48			
			Wash space	2x1	4.00		3.03	24.24			
		Deduction	D1	2x1/2	1.00		1.95	-1.95			
			D2	6x1/2	0.90		1.95	-5.26			
			D3	2x1/2	0.75		1.95	-1.46			
			W4	2x1/2	0.90		1.20	-1.08			
			G2	1x1/2	1.00		0.30	-0.15			
			Openings	1x1	1.50		1.95	-2.93			
				1x1	1.90		1.95	-3.71			
								278.93	—	23(A)	
		Outer side	L.Wall	2	21.00		3.90	163.80			
			X.Wall	2	12.95		3.90	101.01			
			Shelves	12x2	0.60		2.75	9.90			
			Chhajja top	2	5.80		0.60	6.96			
				2	3.90		0.60	4.68			
				2	8.25		0.60	9.90			
		Deduction	D1	2x1/2	1.00		2.10	-2.10			
			W1	2x1/2	2.40		1.20	-2.88			
			W2	6x1/2	1.80		1.20	-6.48			
			W3	2x1/2	0.90		1.20	-1.08			
			G1	2x1/2	1.80		1.20	-2.16			
			G3	2x1/2	2.00		1.20	-2.40			
			G4	2x1/2	0.90		1.20	-1.08			
			G5	2x1/2	2.40		1.20	-2.88			
			Openings	1x1	2.20		2.10	-4.62			
			Steps	2	1.20		0.60	-1.44			
				1	2.60		0.60	-1.56			
			V	1x1/2	0.90		0.60	-1.08			
								545.42	sqm	79.20	43196.87
24	11.6	6mm thick cement plaster 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement and a thick coat of lime wash on top of wall when dry for bearing of R.C.C. slab and beam.									
		20 c.m. Wall	L.Wall	1	18.60	0.20		3.72			
				2	4.00	0.20		1.60			
				1	2.20	0.20		0.44			
				2	1.80	0.20		0.72			
				1	14.80	0.20		2.96			
			X.Wall	2	8.25	0.20		3.30			
				2	1.10	0.20		0.44			
				1	3.30	0.20		0.66			
				2	2.50	0.20		1.00			
				2	6.45	0.20		2.58			
			Shelves	4	1.90	0.20		1.52			
				4	1.85	0.20		1.48			
				4	1.125	0.20		0.90			
			Wash space	2	0.60	0.20		0.24			
		10 c.m Wall	L.Wall	4	4.20	0.10		1.68			
				2	7.60	0.10		1.52			
				2	2.10	0.10		0.42			
			Back verandah	2	4.50	0.10		0.90			
			Wash space	1	8.00	0.10		0.80			
				1	1.10	0.10		0.11			
			X.Wall	2	3.30	0.10		0.66			
				2	0.90	0.10		0.18			
				4	1.50	0.10		0.60			
								28.43	sqm	78.70	2237.44
25	9.32	Providing and fixing approved pipe hand rail to walls (ramps, stair cases) including cutting chases and repairing the same to original condition, applying a priming coat of red oxide zinc chromate primer.									
	9.32.1	M.S Pipe									
			Stair case railing								
		50 dia pipe (med)	Vert.	7	0.95	@	5.10	33.92			
			Horz	3	7.00	@	5.10	107.10			
								141.02	kg	57.95	8[illegible].82

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
26	9.45	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 and panelling to be paid for separately								
A	9.45.1	For fixed portion								
		Window W1	2	2.40		1.20	5.76			
		W2	6	1.80		1.20	12.96			
		W3 & W4	4	0.90		1.20	4.32			
		WK	2	1.00		1.20	2.40			
		Grill G1	2	1.80		1.20	4.32			
							29.76	Sqm.		
			Take @ 6.00 Kg./Sqm.				**178.56**	**kg**	**284.75**	**50844.96**
B	9.45.2	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).								
		Window W1	2	2.40		1.20	5.76			
		W2	6	1.80		1.20	12.96			
		W3 & W4	4	0.90		1.20	4.32			
		WK	2	1.00		1.20	2.40			
		Grill G1	2	1.80		1.20	4.32			
							29.76	Sqm.		
			Take @ 3.00 Kg./Sqm.				**89.28**	**kg**	290.10	**25900.13**
27	9.55	Extra for providing and fixing tinted glass panes								
	9.55.1	4 mm thickness								
		Window W1	2	2.40		1.20	5.76			
		W2	6	1.80		1.20	12.96			
		W3 & W4	4	0.90		1.20	4.32			
		WK	2	1.00		1.20	2.40		$71.30	5104 = 40
		Grill G1	2	1.80		1.20	4.32			
							29.76	**sqm**		
28	12.7	Providing and laying ceramic glazed floor tiles 300x300mm conforming to IS : 15622 of approved 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.								
	12.7.1	In all colours except White, Ivory, Grey, Fume Red Brown,								
		Ent. Verandah	2	4.00	1.65		13.20			
		Dining/Living	2	4.00	5.90		47.20			
		Bed room	2	4.20	3.00		25.20			
		Bed room	2	3.70	3.05		22.57			
		Bed room	2	3.60	3.50		25.20			
		Kitchen	2	4.00	3.50		28.00			
		Toilet	2	1.35	2.10		5.67			
			2	0.45	0.75		0.68			
		Toilet	2	2.10	1.50		6.30			
		Lobby	2	2.20	1.50		6.60			
		Back Verandah	2	2.50	1.40		7.00			
		Wash Space	2	3.95	1.10		8.69			
		Door Sills D1	4	1.00	0.20		0.80			
		D2	8	0.90	0.10		0.72			
		D2	4	0.90	0.20		0.72			
		D3	4	0.75	0.10		0.30			
		Openings	2	1.90	0.10		0.38			
		Shelves	4	0.70	0.60		1.68			
			4	0.65	0.60		1.56			
			4	0.60	0.425		1.02			
			2	1.45	0.60		1.74			
			2	1.50	0.60		1.80			

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
			2	1.25	0.45		1.13			
		Deduct	2	2.10	0.10		-0.42			
			2	0.60	0.10		-0.12			
							207.61	sqm	637.1	**132268.33**
29	12.6	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.								
		Skirtings Ent. Verandah	2x2	5.65		0.15	3.39			
		Dining/Living	2x2	9.90		0.15	5.94			
		Bed room	2x2	5.20		0.15	3.12			
		Bed room	2x2	6.75		0.15	4.05			
		Bed room	2x2	7.10		0.15	4.26			
		Kitchen	2x2	7.50		0.15	4.50			
		Lobby	2x2	2.90		0.15	1.74			
		Lobby	2x2	3.70		0.15	2.22			
		Back Verandah	2x2	3.90		0.15	2.34			
		Wash Space	2x2	5.05		0.15	3.03			
		Dado Toilet	2x2	3.90		2.10	32.76			
		Toilet	2x2	3.60		2.10	30.24			
		Deduction D1	2x3	1.00		0.15	-0.90			
		D2	6x4	0.90		0.15	-3.24			
		D3	2x2	0.75		0.15	-0.45			
			2x2	0.75		2.10	-6.30			
		Openings	2x2	1.90		0.15	-1.14			
			2x2	1.50		0.15	-0.90			
							84.66	sqm	532.35	**45068.75**
30	12.33	Chequerred precast cement concrete tiles 25mm 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) :								
	12.33.3	Dark shade using ordinary cement								
		Steps	3	2.60	0.30		2.34			
			4	2.60		0.15	1.56			
			6	1.20	0.30		2.16			
			8	1.20		0.15	1.44			
			6	0.30		0.15	0.27			
			4	0.30		0.30	0.36			
			4	0.30		0.45	0.54			
							8.67	sqm	451.8	**3917.11**
31	12.34	15mm thick Marble stone slab flooring over 18mm (Average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including grinding rubbing and polishing etc. complete. (Area of slab should be 0.50 sqm and above)								
	12.34.5	Udaipur green marble								
		Kitchen P.F.	2	3.30	0.60		4.20			
			2	1.85	0.60		2.22			
		Deduction for Sink	2	0.61	0.46		-0.56			
							5.86	sqm	1,346.40	**7888.29**
32	12.35	15mm thick Marble stone slab in, tread & risers of steps, skirting, dado, walls and pillars on 12mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) and jointed with grey cement slurry including matching pigment, 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).								
	12.35.5	Udaipur green marble								
		Kitchen P.F.	2	0.60		0.90	1.08			
			2	0.10		0.90	0.18			
			2	5.35		0.10	1.07			
							2.33	sqm	1,403.60	**3270.39**

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
33	12.45	25 mm thick KOTA stone slab flooring over 20mm (average) thick base of cement mortar 1:4 laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including grinding rubbing and polishing etc. complete (Area of slab to be over 0.20 sq.m and upto 0.50 sq.m)								
		Stair Lobby	1	2.20	7.85		17.27			
		Landing	1	2.20	1.20		2.64			
							19.91	**sqm**	**584.65**	**11640.38**
34	12.46	KOTA stone slab 25mm thick in risers and treads of steps, skirting dado and pillar laid in 12mm (average) thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete. (single stone is to be used for riser and treads of steps and the width of stone for skirting and dado shall be equal to the height of skirting/ dado with a minimum length of 1.0 M.)								
		Stair Case Risers	22	1.00		0.15	3.30			
		Treads	22	1.00		0.30	6.60			
		sides	1	7.00		0.12	0.84			
			22x1/2	0.30		0.15	0.50			
							11.24	**sqm**	**650.10**	**7303.87**
35	12.47	Extra for nosing in steps and treads of kota stone slab.								
		Stair Case	22	1.00			**22.00**	**metre**	**45.90**	**1009.80**
36	18.74	Providing and fixing on wall face UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS : 13592 (4kg/sqcm) including jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion.								
(A)	18.74.1	75 mm dia pipe.	4	5.00			**20.00**	**metre**	**121.15**	**2423.00**
(B)	18.74.2	110 mm dia pipe.	8	4.50			**36.00**	**metre**	**234.4**	**8438.40**
37	18.75	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.								
(A)	18.75.1	Coupler								
(i)	18.75.1.1	75 mm	10				**10.00**	**each**	**65.55**	**655.50**
(ii)	18.75.1.2	110 mm	20				**20.00**	**each**	**90.55**	**1811.00**
(B)	18.75.2	Single tee with door								
(i)	18.75.2.1	75x75x75 mm	8				**8.00**	**each**	**104.6**	**836.80**
(ii)	18.75.2.2	110x110x110 mm	8				**8.00**	**each**	**196.75**	**1574.00**
C	18.75.5	Plain bend								
(i)	18.75.5.1	75 mm bend	8				**8.00**	**each**	**146.75**	**1174.00**
(ii)	18.75.5.2	110 mm bend	16				**16.00**	**each**	**183.45**	**2935.20**
D	18.75.6	Vent covel								
(i)	18.75.6.1	75 mm	4				**4.00**	**each**	**29.65**	**118.60**
(ii)	18.75.6.2	110 mm	8				**8.00**	**each**	**32.8**	**262.40**
E	18.75.9	Nahani trap 110x75mm	12				**12.00**	**each**	**100.7**	**1208.40**
38	18.76	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.								

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
a	18.76.1	75 mm	20				**20.00**	**each**	50.15	**1003.00**
b	18.76.2	110 mm	40				**40.00**	**each**	51.70	**2068.00**
39	8.132	Providing and fixing powder coated aluminium sliding door bolts with 16mm rod, necessary M.S. nuts bolts and screws etc complete.								
	8.132.2	250x16mm	22				**22.00**	**each**	148.30	**3262.60**
40	8.133	Providing and fixing powder coated aluminium door latch with 12mm rod, necessary M.S. nuts bolts and screws etc complete.								
	8.133.2	250x12mm	18				**18.00**	**each**	53.10	**955.80**
41	8.134	Providing and fixing powder coated aluminium tower bolts (Barrel type) with necessary M.S. screws etc complete.								
	8.134.2	200 x10mm	20				**20.00**	**each**	59.20	**1184.00**
42	8.135	Providing and fixing powder coated aluminium door handles 2.5mm thick with necessary M.S. screws etc complete.								
	8.135.1	150 mm	40				**40.00**	**each**	31.15	**1246.00**
43	8.136	Providing and fixing hanging powder coated aluminium door stopper with necessary M.S. screws etc complete.								
	8.136.2	Double	16				**16.00**	**each**	37.70	**603.20**
44	14.5	Distempering with acrylic washable distemper to give an even shade.								
	14.5.1	On new work (Two or more coats)								
		Qty. same as item 21(A)					223.61			
		Qty. same as item 22					527.08			
		Qty. same as item 23 (A)					278.93			
							1029.62	**sqm**	29.75	**30631.20**
45	14.10	Providing and applying 2mm thick ready mix exterior grade putty (Birla wall care, Alltek Superfine W/R of (NCL), J.K. wall putty) on walls to make the surface smooth and even.								
		Qty. same as item 44					**1029.62**	**sqm**	42.65	**43913.29**
46	14.11	Finishing walls with water proofing cement paint to give an even shade.								
	14.11.1	On new work (Two or more coats)								
		Qty. same as item 23					545.42			
		Dedut Qty. of item 23 (A)					-278.93			
							266.49	**sqm**	24.95	**6648.93**
47	14.18	Painting on new work (two or more coats) to give an even shade with:								
	14.18.2	Premium synthetic enamel paint (2nd top most approved branded quality) to give an even shade.								
		G2	1	1.00		1.20	1.20			
		G3	2	2.00		1.20	4.80			
		G4	2	0.90		1.20	2.16			
		G5	2	2.40		1.20	5.76			
		Vent. V	4	0.90		0.60	2.16			
		D1	8x1.2	1.00		2.10	20.16			
		D2	24x1.2	0.90		2.10	54.43			
							90.67	**sqm**	34.75	**3150.78**
48	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:								
	19.9.5	40 mm dia. nominal bore	2	22.00			**44.00**	**metre**	244.05	**10738.20**
49	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:								
a	19.7.3	25 mm dia. nominal bore	2	15			**30.00**	**metre**	197.9	**5937.00**
b	19.7.4	32 mm dia. nominal bore	2	25			**50.00**	**metre**	245	**12250.00**

S.N	Item No.	Particulars	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
50	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:								
(a)	19.8.1	15 mm dia nominal bore	2	20.00			40.00	metre	147.35	5894.00
(b)	19.8.2	20 mm dia nominal bore	2	15.00			30.00	metre	175.45	5263.50
51	19.16	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end):								
(a)	19.16.2	32 mm nominal bore	2				2.00	each	850.8	1701.60
(b)	19.16.3	40 mm nominal bore	2				2.00	each	1,252.40	2504.80
52	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:								
(a)	19.14.1	Bib cock (450gms)	2x3				6.00	each	367.95	2207.70
(b)	19.14.2	Long nose bib cock (500gms)	2x3				6.00	each	439.7	2638.20
(c)	19.14.5	Stop cock (concealed) (600gms)	2x2				4.00	each	478.35	1913.40
(d)	19.14.13	Soap dish plate	2x2				4.00	each	153.65	614.60
(e)	19.14.14	Shower rose (revolving type) (150mm)	2x2				4.00	each	257.5	1030.00
(f)	19.14.15	Towel rail (600mm long x 20mm dia)	2x2				4.00	each	324.85	1299.40
53	19.42	Providing and placing on terrace (at all levels) polyethylene water storage tank ISI 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.	2	1000.00			2000.00	litre	5.35	10700.00
54	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 :								
	18.1.3	White Orissa pattern W.C. pan of size 580x440 mm	2				2.00	each	2,918.40	5836.80
55	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 :								
	18.4.1	White pedestal type	2				2.00	each	2,654.35	5308.70
56	18.16	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 :								
	18.16.2	White Size 550x400 mm	4				4.00	each	1,215.20	4860.80
57	18.21	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink without drain board as per IS 13983 with C.I. brackets and stainless steel plug 40 mm including painting of fittings and brackets, cutting and making good the walls wherever required :								
	18.21.2	610x460 mm bowl depth 200 mm.	2				2.00	each	5,584.55	11169.10
58	20.1	Providing, laying and jointing glazed stoneware pipes grade 'A' with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete :								
	20.1.2	150 mm diameter	2	15.00			30.00	metre	210.65	6319.50

S.N	Item No.	Particulars	MEASUREMENTS				QUANTITY	UNIT	RATE	AMOUNT
			No	L	B	D				
59	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:								
	20.2.2	150 mm diameter S.W. pipe	2	15.00			**30.00**	metre	333.6	**10008.00**
60	20.3	Providing and fixing square-mouth S.W. gully trap grade 'A" complete with C.I. grating brick masonry chamber with well burnt modular clay bricks crushing strength not less than 35kg/ cm^2 water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :								
	20.3.1	100x100 mm size P type	4				**4.00**	each	1,158.35	4633.40
61	20.27	Providing and constructing brick masonry chamber for underground C.I. inspection chamber and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm^2 in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) R.C.C. top slab with 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design :								
	20.27.2	Inside dimensions 500x700 mm and 45 cm deep for pipe line with one or two inlets :	6				**6.00**	each	3,944.30	23665.80
62	6.25	Providing and fixing both side polished 30 mm thick RAJIM SAND STONE shelves fixed in walls in cement mortar 1:3 (1 cement : 3 coarse sand) including finishing complete.								
		Shelves	4x3	0.90	0.60		6.48			
			4x3	0.80	0.60		5.76			
			4x3	0.575	0.60		4.14			
			2x3	1.55	0.60		5.58			
			2x3	1.60	0.60		5.76			
			2x3	1.35	0.45		3.65			
							31.37	sqm	289.55	9081.74
63	9.33	Providing and fixing M.S. fan clamp/ hook for ceiling fan made out of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop.	2x7				**14.00**	each	74.2	1038.80
64	8.1	Providing wood work in frames of doors, windows, clerestory windows and other frames wrought framed and fixed in position.								
	8.1.2	Sal, bijasal, benteak, khair, haldu								
		Shelves Dining room	2x2	0.10	0.025	2.15	0.021			
			2x2	0.10	0.025	1.65	0.017			
							0.038	cum	22,307.10	847.67

S.N	Item No.	Particulars	MEASUREMENTS				QUANTITY	UNIT	RATE	AMOUNT
			No	L	B	D				
65	8.11	Providing and fixing flush door shutters, interior grade, commercial type, core of block board construction with frame of first class hard wood and well matched commercial ply veneering with vertical grains, cross bands and face veneers on both faces of shutters excluding hinges.								
	8.11.5	25 mm. thick (double leaf for cupboard shutters with piano type hinges								8,325=0
		Shelves Dining room	2	1.45	1.95		**5.66**	sqm	1,470.90	
									Total	
									Say Rs.	20,16,269=0

Say Rs 20.16 Lacs

SUB-ENGINEER

SUB DIVISIONAL OFFICER
P.W.D. (B & R)Central Store SUB Dn.
RAIPUR (C.G.)

EXECUTIVE ENGINEER
P.W.D. (B & R) DIVISION No.2
RAIPUR (C.G.)

DETAILED MEASUREMENTS FOR CONSTRUCTION OF SEPTIC TANK

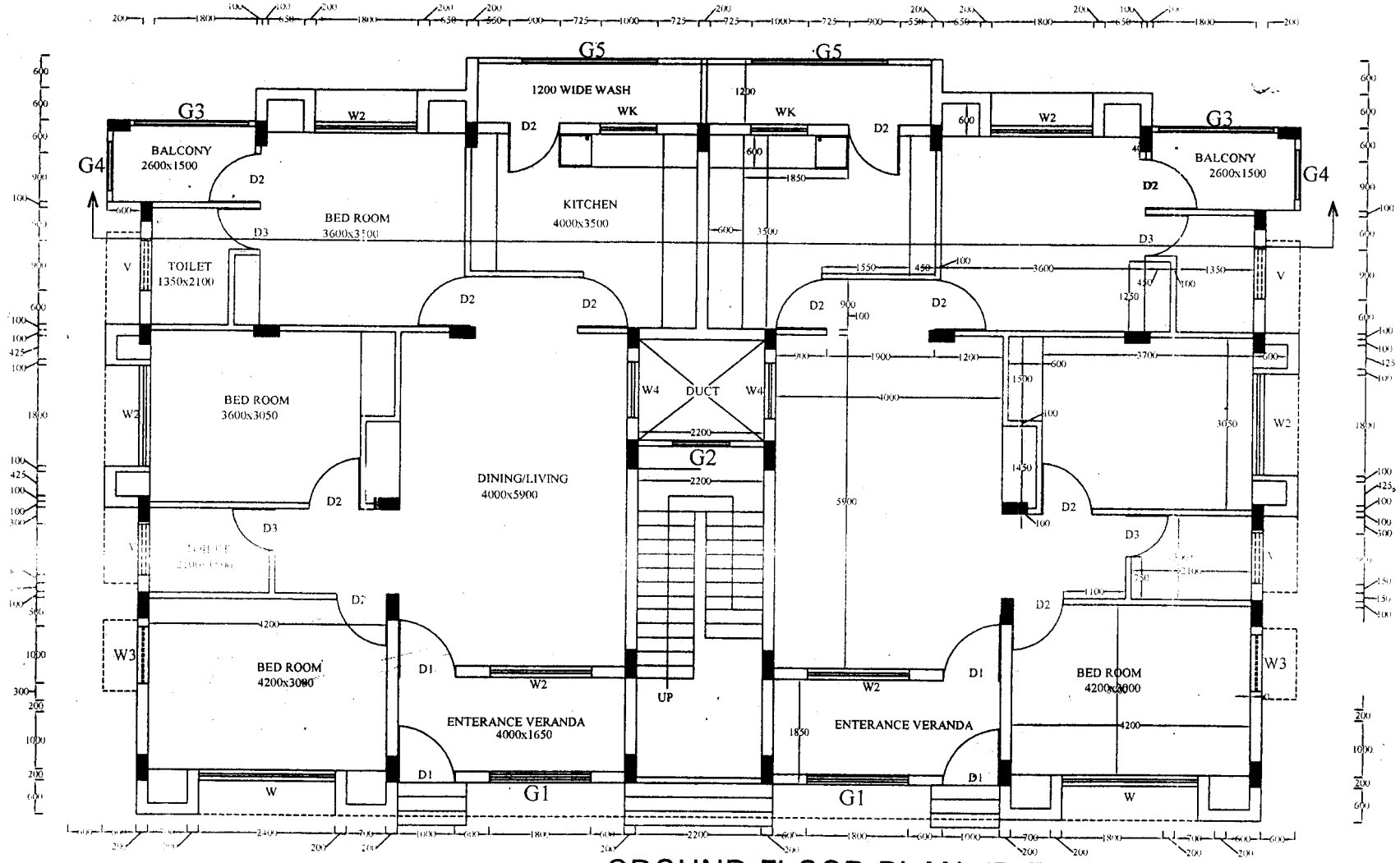
S.N	S.O.R. ITEM No.	PARTICULARS	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.								
	1.1.1	In all types of soil								
		septic tank	1	3.00	1.80	1.70	9.180	cum		
							9.180	**cum**	**112.80**	**1035.50**
2	1.6	Extra for every additional lift of 1.5 m or part thereof.								
	1.6.1	All types of soil								
			1	3.00	1.80	0.20	1.080			
							1.080	**cum**	**15.30**	**16.52**
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.								
		lum-sum					**2.000**	**cum**	**38.15**	**76.30**
4	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size).								
		septic tank	1	3.00	1.80	0.10	0.540	cum		
							0.540	**cum**	**2310.85**	**1247.86**
5	3.4	Providing and laying nominal mix reinforcement cement concrete with crushed stone aggregate using concrete mixer in all works upto floor five level excluding cost of reinforcement and form work.								
	3.4.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		septic tank buffale valve	1	1.6	0.10	0.60	0.096	cum		
		septic tank slab	1	2.80	1.60	0.15	0.672	cum		
							0.768	cum		
		deduction for manhole	1	0.45	0.45	0.15	0.030	cum		
							0.738	**cum**	**3290.90**	**2427.45**
6	3.1	Providing and laying nominal mix cement concrete with crushed stone aggregate using concrete mixer in foundation, plinth and at ground level excluding cost of form work.								
	3.1.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size).								
		septic tank	1	2.20	1.00	0.12	0.264	cum		
							0.264	**cum**	**2,800.90**	**739.44**
7	11.5	Neat Cement punning.								
		septic tank	1	2.20	1.00		2.200	sqm		
			2	2.2		2	8.800	sqm		
			2	1.00		2	4.000	sqm		
							15.000	**sqm**	**25.9**	**388.50**
8	20.15	Providing and fixing in position precast R.C.C. manhole cover and frame M D- 10 of required shape and approved quality								
	20.15.1	Square shape 450mm internal dimension	1				**1.000**	**each**	**930.1**	**930.10**
9	3.14	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire all complete:								

S.N	S.O.R. ITEM No.	PARTICULARS	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
	3.14.1	Thermo-Mechanically treated bars								
		110.0 kg of RCC work					81.18	kg	46.80	3799.22
10	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:								
	2.1.8	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)								
		septic tank	1x2	2.80		0.15	0.840	sqm		
			1x2	1.60		0.15	0.480	sqm		
			1	2.40	1.20		2.880	sqm		
							0.84	sqm	147.35	123.77
	2.1.9	Beams, lintels, cantilevers & walls								
		buffale wall	2	1.60		0.60	1.92	sqm		
			1	1.60	0.10		0.16	sqm		
							2.080	sqm	136.750	284.440
11	7.2	Brick work with modular well burnt clay bricks of crushing strength not less than 25 kg/sqcm and water absorption not more than 20% in foundation and plinth in:								
(a)	7.2.2	Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)								
		septic tank	2	2.80	0.20	1.00	2.240	cum		
			2	1.20	0.20	1.00	0.960	cum		
			2	2.8	0.30	1.00	3.360	cum		
			2	1	0.30	1.00	1.200	cum		
							7.760	cum	2479.60	19241.696
12	11.2	12mm thick cement plaster of mix:								
	11.2.1	In cement Mortar 1:3 (1 cement : 3 fine sand)								
		septic tank	2	2.20		2.00	8.80	sqm		
			2	1.20		2.00	4.80	sqm		
							13.60	sqm	87.90	1195.44
13	12.2	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..								
	12.2.2	50 mm thick								
		For Septic Tank	1	1.20	2.40		2.88	sqm		
							2.88	sqm	197.25	568.08
14	20.27	Providing and constructing brick masonry chamber for underground C.I. inspection chamber and bends with well burnt modular clay bricks crushing strength not less than 35kg/cm² in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light du								
	20.27.1	Inside dimensions 455x610 mm and 45 cm deep for single pipe line :	1				1	each	3519.95	3519.95
15	20.30	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.	1				1	each	999.00	999.00
									TOTAL	36593.28
									GRAND TOTAL	36,593.28
									say	36600.00

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RAIPUR (C.G.)



GROUND FLOOR PLAN (F-TYPE)

Sub-Divisional Officer
P.W.D. Central Store
Raipur (C.G.)

गणना प्रमाण-पत्र

प्रमाणित किया जाता है कि **TWIN "F"** टाईप क्वार्टर का मानक प्राक्कलन संलग्न मानचित्र के अनुसार बनाया गया है। [redacted] की गणना भवन एस.ओ.आर., दिनॉक 01.04.2009 के अनुसार की गई है।

अनुविभागीय अधिकारी
लोक निर्माण विभाग, सेंटल स्टोर उपसंभाग
रायपुर (छ.ग.)

कार्यपालन अभियंता
लोक निर्माण विभाग संभाग क्रं.–2
रायपुर (छ.ग.)