GOVERNMENT OF CHHATTISGARH
PUBLIC WORKS DEPARTMENT

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

ESTIMATED COST – Rs. 19.66LACS

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 G-**Type Quarter.**
2 AMOUNT OF ESTIMATE	: **Rs.** 19.66 ~~(Rs. Seventeen Lacs Sixty Four Thousand Five Hundred Only)~~
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 H-Type quarter.
5 PROVISION	: Following provision have been made in the estimate :

Foundation: Framed structure with 2.1m footing depth
Superstructure : Brick Masonery in C.M. 1:6
Door & Window : i) Door frames of pressed steel profile and 30 mm thick flush door shutters.
ii) Window will be of pressed steel frame & 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
Flooring : 1) In general terrazzo tile Flooring has been provided. In W.C., Bath and kitchen provision of Ceramic glazed tiles has been taken.
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.-2,
Raipur

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

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

GENERAL ABSTRACT FOR CONSTRUCTION OF TWINE G-TYPE QUARTER

S.No.	Description	No. of Units	Total Amount (in Rs.)
	PART "A"		
1	**Cost of 2G type quarter**	2	1403722.00
2	**Cost of staircase**	1	99100.00
		(A)	**1502822.00**
3	**Add 2% for External water supply**		60112.88
4	**Add 9% for Electrification**		300564.4
5	**Cost of saptic tank**	1	36600.00
		(B)	397277.28
		Total(A)+(B)	1900099.28
6	**Add 3.5% for work charge & contangencies**		66503.47
		Total Rs. -	1966602.75
			Say Rs. 1966603.00

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
RAIPUR (C.G.)

TAILED MEASUREMENTS FOR CONSTRUCTION OF G-TYPE Quarter AT RAIPUR

S.No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
1.	1.1	Excavation for all Types & sizes of fdn, trenches and drain or for any othe purpose including disposal of ex. stuff upto 1.5m, lift and leadupto 50m. including dressing & leveling								
	1.1.1	In all types of soil								
		column footing	13	1.5	1.5	2.10	61.42	cum	112.80	6948.48
		steps	01	1.20	0.75	0.20	0.18			
							61.60			
2.	1.6	Extra for every add. lift of 1.5m.								
	1.6.1	All type of soil								
		col. footing	13	1.50	1.50	0.60	17.55			
3.	1.18	providing & filling in plinth with sand/morum under floor in layers not exceed 20cm depth ramming, watering Oversite/	1	3.00	1.80	0.20	1.08	cum	15.30	285.03
							18.63			
		column footing	13	1.50	1.50	2.10	61.42	cum		
		Below floor	01	10.10	7.80	0.60	42.26			
		Deduction for internal wall.	04	7.80	0.20	0.60	3.74			
			01	10.10	0.20	0.60	1.21			
			01	7.80	0.20	0.60	0.93			
		Deduction for footing & column,	13	1.20	1.20	0.30	5.61			
			13	0.20	0.30	0.90	0.70			
		PCC	13	1.40	1.40	0.15	3.82			
							(+) 99.43			
4.	1.17	filling from available ex. stuff in trenches plinth etc. Lead 50m & Lift 1.5m.							316.75	31,494.45
		Lump sum 15% of excavation.	—	—	—	—	12.03	cum	38.15	458.94
5.	3.10	providing & laying flow mod mix cc include cost of form work								
	3.1.3	1:3:6 cc 40mm nom.								
		column footing	13	1.50	1.50	0.15	4.38			
		Bare compacted Verandah	01	3.80	1.80	0.10	0.68	cum	2310.85	19180.05
		Living room	01	3.60	3.00	0.10	1.08			6,308.62 *
		Bed room	02	3.60	3.0	0.10	2.16			
		Kitchen	01	3.60	2.70	0.10	8.30			
		Back floor	01	3.80	2.20	0.10	.97			
		W/c Bath Room	01	3.60	2.60	0.10	.83			
							.98			

Particulars	Measurements NO.	L	B	D	Quantity	unit	Rate	Amount
3.4 providg & layig N-Mix RCC with crushed stone indudg cost of farm work and reinforcement.								
3.4.2 1:1½:3 CC with 20mm size metal.								
Column footg	13	1.20	1.20	0.40	7.48			
col. upto PL	13	0.30	0.20	2.10	1.63			
col. upto slab	13	0.30	0.20	3.30	2.57			
plinth Beam PB_1	07	3.60	0.20	0.30	1.51			
PB_2	06	3.00	0.20	0.30	1.08			
Lintel LB_1	06	1.80	0.20	0.20	0.43			
LB_2	06	1.80	0.20	0.20	0.43			
chhojjg	06	1.80	0.60	0.10	0.64			
	03	2.20	0.60	0.10	0.39			
Kitchen lablr	01	2.70	0.60	0.10	0.16			
slab beam SB_1	07	3.60	0.20	0.30	1.51			
SB_2	06	3.00	0.20	0.30	1.08			
slab	01	10.10	7.80	0.12	9.45			
Kitchen platform	01	2.70	0.60	0.20	0.32			
					28.74	cum.	3290.9	94,580.46
3.14 providg & placig in position reinforcemt for RCC wak, includg cuttig, bendig, bindig etc.								
3.14.1 Thermo mechanically trasted bar @ 110 Kg/ RCC wak.	←	110 × 28.71		→	3158.10	Kg.	46.80	1,47,799.08
2.1 providg & fixing farm wak includg cuttig, shuttig etc.								
2.1.1 Fandation footig etc.								
Footg	13×4	1.20	—	0.40	24.96			
PB_1	7×4	3.60	—	0.30	30.24			
PB_2	6×4	3.0	—	0.30	21.60			
Steps.	04	1.20	—	0.15	0.72	sqm	73.80	5720.97

	Particulars	Measurements NO.	L	B	D	Quantity	unit	Rate	Amount
10.									
2.1.6	Columns, pillars, piers and square/ Rect. shape.								
	Col. upto PL	13X2	0.30	–	2.10	16.38			
		13X2	0.20	–	2.10	10.92			
	Col. upto slab	13X2	0.30	–	3.30	25.74	sqm		
		13X2	0.20	–	3.30	17.16			
						70.20		183.50	12,881.70
2.1.8	suspended floors, roofs, access platform, balconies etc.								
	Kitchen side slab	1	2.70	0.60	–	4.32			
		1X2	0.60	–	0.10	0.12			
	kitchen platform	1	2.70	0.60	–	1.62			
		1	2.70	–	0.10	0.27			
	slab	01	10.10	7.80	–	78.78			
						85.11	sqm.	147.35	12,540.95
2.1.9	Beams, Cintels, cantilever & walls,								
	Lintel Beam LB_1	6X2	3.60	–	0.20	8.64			
	LB_2	6X2	3.0	–	0.20	7.20			
	slab beam SB_1	7X2	3.60	–	0.30	15.12			
		6X2	0.20	–	0.30	0.72			
	SB_2	6X2	3.00	–	0.30	10.80			
		6X2	0.20	–	0.30	0.72			
						43.20	sqm	136.75	5,907.60
3/1	2.1.14 suspended floors chajja. W_1	06	1.50	–	0.10	0.90			
		06	1.50	0.60	–	5.40			
		6X2	0.60	–	0.10	0.72			
	W_5	1	1.20	–	0.10	0.12			
		1	1.20	0.60	–	0.72			
		1X2	0.60	–	0.10	0.12			
						7.98	sqm.	136.75	1091.26
1/2	7.2.0 Brick work with Modular wall burnt clay Bricks.								
	7.2.2 CM 1:6, Below plinth	07	3.60	0.20	0.60	3.02			
		06	3.00	1.20	0.60	12.96		2479.60	39,971.15
	steps	02	1.20	0.30	0.20	0.14	cum.		
						16.12			

No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
14.	7.5	Brickwork in super structure.								
	7.5.1	Above plinth and upto floor level,								
		Bedroom. 2	02	3.60	0.20	3.30	9.50			
			2x2	3.0	0.20	3.30	7.92			
		living.	2	3.60	0.20	3.30	4.75			
			1	3.00	0.20	3.30	1.98			
		kitchen,	1	3.60	0.20	3.30	2.37			
			1	2.70	0.20	3.30	1.78			
		verandah	1	3.80	0.20	3.30	2.50			
			1	1.80	0.20	3.30	1.18			
		Toilet	02	1.20	0.10	3.30	0.79			
			01	0.40	0.10	3.30	0.13			
							32.90			
		Deduction for openg								
		D1	04	1.00	0.20	2.00	1.60			
		D2	4	0.90	0.20	2.00	1.44			
		D3	02	0.80	0.20	2.00	0.64			
		W1	4	1.50	0.20	1.20	1.44			
		W2	2	0.90	0.20	1.20	0.43			
						⊖	27.35	Cum.	270.25	73,879.13
15.	7.9	Half Brick M/C B/w								
	7.9.2	cement Mortar 1:4								
		Partition wall,								
		shelves,	2	2.50	—	3.30	16.50			
			1	0.60	—	3.30	1.98			
		Toilet	2	1.20	—	3.30	7.92			
			1	0.40	—	3.30	1.32			
		kitchen	1	2.70	—	3.30	8.91			
							36.63			
		Deduction for openg.								
		D3	2	0.80	—	2.00	3.20			
		V	2	0.80	—	0.60	0.96	Sqm.	283.70	9211.73
						⊖	32.47			

No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
16.	3.17	providg & laying DPC, with 1:2:4.								
		2x16.16 + 2x7.80 = 35.80	1	35.80	0.20	0.05	0.35	Cum.	3321.70	1,162.60
17.	3.19	Applying a coat of hot Bitumen 30/40 Using @ 1.71kg/sqm on DPC,								
		2x16.16 + 2x7.80 = 35.80	01	35.80	0.20	—	7.16	sqm	78.85	564.56
18.	9.13	providg & fixing in position doors & windows, ventilator, made of cold rolled pressed steel sheet, ---- etc.								
	9.13.3	Single Rebate 100mm x 50mm size 1.25 mm thick sheet.								
		D_1	04	5.0	—	—	20.00			
		D_2	04	4.9	—	—	19.60			
		D_3	02	4.80	—	—	9.60	m	344.05	16,927.26
							49.20			
19	9.13.5	Double Rebate 115mmx 50mm size 1.6mm thick sheet.								
		V_1	04	5.40	—	—	21.60			
		W_5	02	4.20	—	—	8.40			
		V	2	2.80	—	—	5.60	m.		
							35.60		469.75	16,723.10
20.	8.11	Providg and fixing flush door shutters ---- etc.								
	8.11.3	30mm thick (single leaf)								
		D_1	4	1.00	—	2.00	8.00			
		D_2	4	0.90	—	2.00	7.20	sqm	1542.35	28,379.24
		D_3	2	0.80	—	2.00	3.20			
							18.40			

S.No.	S.O.R. Item No.	PARTICULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
21.	8.158,	Providig & fixing 30mm thick factory made panel PVC door shutter, cons. of frame made of M.S. tubes ——— — — shall be provided either side.								
	8.158.1	PVC Door shutter								
		D_3	02	0.80	—	2.00	3.20	sqm.	2096.90	6,710.08
22.	8.60	Providig & fixing 30mm thick panelled & glazed or Panelled ——— — — — for Doors excludig hinges and Panelling								
	8.6.2	Bija, Sal, benteak Ichair, holdu.,								
		W_1	4	15	—	1.20	7.20			
		W_5	2	0.90	—	1.20	2.16			
		V	2	0.80	—	0.60	0.96	sqm.	561.80	5797.77
							10.32			
23.	8.9	providig and fixing glass Panes in glazed or panelled and glazed shutters of doors and windows								
	8.9.1	4 mm thick								
		W_1	4	1.50	—	1.20	7.20			
		W_5	2	0.90	—	1.20	2.16	sqm		
		V	2	0.80	—	0.60	0.96			
							10.32		235.70	2432.42
24.	8.10)	Pro. & fixing MS bright finished or Black enamelled ——— screws								
	8.10).1	300×16 mm	1	—	—	—	01	each	64.35	64.35
	8.10)2	250×16 mm	4	—	—	—	04	each	59.95	239.80

No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
25.	8.108	providig & fixing MS bright finished or Black enamelled door catch — screws.								
	8.108.2	250 X 20 X 6 mm								
		D	10	—	—	—	10	each	41.75	417.50
26.	8.110	providig & fixing MS bright finished or Black enameled tower bolts — screws								
	8.110.1	250 mm.								
		D	10X1	—	—	—	10	each		
		W	6X3	—	—	—	18 28	each	28.70	803.60
	8.110.3	150 mm								
		SW	Cover	—	—	—	04	each.	18.90	75.60
		V	2X2							
27.	8.111	providig & fixing MS bright finished or black enameled handles with heeney iron screws.								
	8.111.1	125 mm								
		D	10X2	—	—	—	20	each		
		W	6X2	—	—	—	12	each		
							32		42.40	1356.80
28	9.10	providig & fixing MS grill of approved pattern made of MS flats as square or round bars welded to steel frame of windows etc. including Applying 9 priming coat of red oxide								
		W_1	4	1.50	—	1.20	7.20			
		W_2	2	0.90	—	1.20	2.16			
		V	2	0.80	—	0.60	0.96			
		Lump sum 30kg/sqm					10.32 309.60	sqm kg	60.70	18792.72

S.No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
29.	11.1	6mm thick cement. plaster of mix.								
	11.1.2	9m cement Mata 1:4 CM.								
		Bed room	02	3.60	3.00	—	21.60			
		Living Room	01	3.60	3.0	—	10.80			
		Kitchen	01	3.60	2.70	—	9.72			
		Almirah	02	2.50	0.60	—	3.00			
		W/C.	2	1.20	3.30	—	7.92			
		Bath room	01	0.40	3.30	—	1.32			
		Verandah.	01	3.80	1.80	—	6.84			
		Chajja	06	1.80	0.60	—	6.48			
30.	11.2.4	12 mm thick plaster of cement Mortar 1:6 CM.	03	2.20	0.60	—	3.96			
							71.64	sqm.	70.55	5,054.20
		Living Room	2	3.60	—	3.30	23.76			
			2	3.0	—	3.30	19.80			
		Bed Room	2x2	3.60	—	3.30	47.52			
			2x2	3.0	—	3.30	39.60			
		Kitchen	2	2.70	—	3.30	17.82			
		Verandah	1	1.80	—	3.30	5.94			
		Almirah.	2	2.50	—	3.00	15.00			
			2x2x2	0.60	—	3.00	14.40			
		Bath room.	2	1.20	—	3.30	7.92			
		W/C.	1x2	0.40	—	3.30	2.64			
							194.4			
		*Deduction for opening								
		D_1	4	1.0	—	2.0	8.00			
		D_2	4	0.90	—	2.0	7.20			
		D_3	2	0.80	—	2.0	3.20			
		W_1	4	1.5	—	1.20	7.20			
		W_5	2	0.90	—	1.2	2.16			
		V	2	0.80	—	0.60	0.96	sqm.		
							⊕ 165.68		68.40	11,332.51

SR No.	Particulars	Measurement ND	L	B	D	Quantity	Unit	Rate	Amount
11.3	15mm thick cement plaster on the rough side of wall brick wall of Mix.								
11.3.1	CM 1:6, W/C.	01	0.40	—	3.30	1.32			
	Bath.	02	1.20	—	3.30	7.92			
	outer wall.	2X●	10.10	—	3.80	76.76			
		2	7.80	—	3.80	59.28			
	Almirah	2	0.60	—	3.80	4.56			
	steps	1	0.60	—	0.40	0.24			
						150.08			
	Deduction for openings							* deduction for brick. (Item No. 33)	
	D_1	2	1.00	—	2.00	4.00			
	D_2	—	0.90	—	2.00	1.80			
	D_3	04	0.80	—	2.00	6.40			
	W_1	4	1.50	—	1.20	7.20			
	W_5	4	0.90	—	1.20	4.32			
	V	2	0.80	—	0.60	0.96			
2. 12.2	cement concrete					⊕ 125.40	sqm.	79.20	9,931.68
	Floors with 1:2:4 CC.				*	⊖ 19.14	sqm.	79.20	⊖ 1515.88
12.2.2	50mm thick	01	3.80	2.20	—	8.36	sqm.	197.25	1,649.07 (-) * omitted this item
3. 12.6,	Providing & fixing ceramic glazed tiles wall tiles — 12mm thick Bed of CM 1:3.								
	Bath.	2	1.20	—	1.50	3.60			
		2	1.80	—	1.50	5.40			
	W/C	2	1.40	—	1.50	4.20			
		2	1.20	—	1.50	3.60			
	kitchen.	1	2.70	—	0.60	1.62			
		2	0.60	—	0.60	0.72			
						19.11	sqm.	532.35	10,189.18

Item No.	Particulars	Measurements. ND	L	B	D	Quantity	Unit	Rate	Amount
P. 12.7	providing & laying ceramic glazed floor tiles, 300X300mm.								
	---- to IS 15622 ----								
	------ mixed with matching pigment.								
12.7.1	on all colours except white, Ivory, grey, fume, Red Brown,								
	Kitchen.	1	2.70	3.6	—	9.72			
		2	2.70	—	0.15	0.81			
		2	3.60	—	0.15	1.08			
						11.61			
	Deduction for D2	1	0.90	—	0.15	0.13			
	Bath	1	0.80	—	2.00	1.60			
	W.C.	1	0.80	—	2.00	1.60			
						⊕ 8.28			
P. 12.28	Precast Terrazzo tile 25mm thick with graded white or Black						sqm.	637.10	5,275.18
	------ including rubbing & polishing complete with Pre-Cast tiles of								
12.28.2	Medium shade (Appx. 50% white cement & 50% ordinary cement)								
	Living Room	1	3.60	3.0	—	10.80			
	Bedroom	2	3.60	3.0	—	21.60			
	steps	2	1.20	0.30	—	0.72			
	verandah	1	3.80	1.80	—	6.84			
						39.96	sqm.	561.30	22,429.54

	Particulars	Measurements NO	L	B	D	Quantity	Unit	Rate	Amount
12.3	Precast Terrazzo tiles 25mm Thick with marble chips of size upto 6mm skirting and ——— cement plaster 1:3 CM finishing rubbing and polishing complete with tiles of								
12.30.2	Medium shade using approx. 50% white cemt. & 50% ordinary cement.								
	Living Room	02	3.60	—	0.15	1.08			
		2	3.0	—	0.15	0.90			
	Bed room	2	3.60	—	0.15	1.08			
		2	3.0	—	0.15	0.90			
	Steps	3	1.20	—	0.15	0.54			
		3	0.9	—	0.20	0.54			
		4	0.80	—	0.20	0.64			
						5.68			
	Deduction for openings								
	D_1	4	1.00	—	0.15	0.60			
	D_2	4	0.90	—	0.15	0.54			
	D_3	2	0.80	—	0.15	0.24			
						(A) 4.30	sqm.	568.90	2,446.27
7.6.3	providing & fixing both side polished 30 mm thick Rajim sand Stone shelves fixed in ——— finishing complete,								
	Almirah.	2X3	1.15	—	0.60	4.14			
		3	1.3	—	0.60	2.34			
						6.48	sqm.	289.55	1876.28
38 13.3	15mm Thick Marble work for Kitchen Platform, ——— moulding to give high glass finish.								
13.35	Udaipur green Marble								
	Platform.	1	2.70	—	0.60	1.62			
	side	1	2.70	—	0.15	0.40			
						2.07	sqm.	1521.31	3,073.02

S.No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
39.	14.11	Finishg walls with water proofing cemen paint. to give an event shade.								
	14.11.1	on new walc (two or mare coat) quantity same as item NO. (27).31	—	—	—	—	125.40	sqm	24.95	3,128.73
40.	14.5,	Distemperg with acrylic washable distemper								
	14.5.1,	on new wall (two or mare coat. total quality of plaster as abore item NO. (25), (23) 29, 30, 31	(71.64 + 165.68)			=	237.32	sqm.	29.75	7060.23
41.	14.18	painty on new wall (two or mare coat) to giveran even shade with.								
	14.18.2	Premimum synthetic enamel paint (2nd top most approved branded quality) to given an even.								
		D_1	4X2	1.0	—	2.0	16.00			
		D_2	4X2	0.90	—	2.0	14.40			
		D_3	2X2	0.80	—	2.0	6.40			
						6.0				
		taky multiply Factor 1.2, →			✓ (+)	7.20		sqm.		
		W_1	4X2	1.50	—	1.20	14.40			
		W_3	4X2	0.90	—	1.20	8.64			
		V	2X2	0.80	—	0.60	1.92			
						3.00				
		taky multiply factor 0.80 M.S. grill			✓ (+)	2.40				
		Same as item X 0.22	—	—	—	10.32	10.32			
		multiply factor 1,			→	(+) 10.32		sqm	34.75	2,504.76
					(+)	(+) 72.08				

S.No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
42.	19.42	providig & plac on tervale polyethylene Wotes storage tank — — — — — matig Necessay holes for inlet, outlet.	01	—	—	—	1000.00	Litre	5.35	5,350.00
43.	19.7	providig & fixing on wall surface GI pipes medium class Complete with GI fittings and Clamps — — — — joints complete.								
	19.7.1	15mm dia Nominal bore	—	—	—	—	10.00	m	118.75	118.50
	19.7.2	20mm — " —	—	—	—	—	10.00	m	147.90	1479.00
	19.7.3	25mm — " —	—	—	—	—	10.00	m.	197.90	1979.00
44.	18.1	providig & fixing W.C — — — — — — fixtures Complete includig.								
	18.1.3	white orissa pattern W C pan of size 580 mm X 440 mm	01	—	—	—	01	each	2918.40	2918.40
45.	18.16	providig & fixing vitreous China wash Basin — — — — — — — making good the wills wherever required -								
	18.16.3	White size 450X350	01	—	—	—	01	each	1042.00	1042.00
46.	18.24	providig & fixig on wall face UPV stabilised PVC pipes — — — thermal Expansion.								
	18.24.1	75mm ϕ pipe	—	—	—	—	10.0	m	121.15	1211.56
	18.24.2	110 mm ϕ pipe	—	—	—	—	5.00	m	234.40	1172.00

SOR Item No.	Particulars	Measurements NO.	L	B	D	quantity	Unit	Rate	Amount
18.35	providing & fixing on wall face U/V stabilised -- PVC -- -- -- joining with seal ring confirming to IS - 5382 leaving 10mm gap for therma.								
18.35.1	coupler								
18.35.1.1	75 mm.	—	—	—	—	02	each	65.55	131.10
18.35.1.2	110 mm	—	—	—	—	02	each	90.55	181.10
18.35.2	Single T with door								
18.35.2.1	75mm x 75 mm x 75	—	—	—	—	02	each	104.60	209.20
18.35.2.2	110 x 110 x 110 mm	—	—	—	—	02	each	196.75	393.50
18.35.5	plain bend								
18.35.5.1	75mm bend	—	—	—	—	02	each	146.75	293.50
18.35.5.2	110mm bend	—	—	—	—	02	each	183.45	366.90
18.35.6	vent cowel								
18.35.6.1	75mm	—	—	—	—	02	each	29.65	59.30
18.35.9	Alamb wrap 110 x 75 mm	—	—	—	—	03	each	100.70	302.40
19.13	providing & fixing 15mm nominal bore Brass bib/ stop cock of approved quality and weighing not less than 400 gm.								
19.13.1	Bib Cock	—	—	—	—	4.00	each	230.15	920.60
19.13.1	stop Cock	—	—	—	—	2.00	each.	230.15	460.30

No.	S.O.R. Item No.	PARTICDULARS	MEASUREMENTS No.	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
48.	20.1.b	providj, laying and jointj glazed stone ware pipes — — — — CM 1:1 gnedidj testj of joints etc.								
	20.1.1	100 mm ϕ	—	—	—	—	10.00	m.	125.95	1259.50
49.	20.2,	providj and laying cement concrete 1:5:10, 999.40mm nominal size — — — 150 mm thick as per sladad desijn								
	20.2.1	100mm dia. SW pipe	—	—	—	—	10.00	m	272.80	2728.00
50.	20.3.	providj & fixing square mouth SW gully trap gnade A complete with CI — — — — CI cover with 300X300 mm size.								
	20.3.1	100X100mm size/type	03.	—	—	—	3.	each.	1158.35	3,475.05.
51.	20.2)	providj and construdj brick masay chamber for underground CI gnspection chamber — — — CI cover								
	20.2).1	gnside dims. 455x610 mm and 45 CM Deep for single pipe line.	5	—	—	—	5	each	359.95	1,799.75
52.	—	fan (hump Semi) Clamp.	04	—	—	—	04.	each.	~~1000.00~~ 74.00	~~4000.00~~ 296.00
								GT		7,01,861.18
								SOP		7,01,861.00

Rs. (Seven Lakhs one Hundred eight / Hundreds Sixty one only)

10/8/10 SVE

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

Executive Engineer
P.W.D. Divn. No. 2
Raipur (C.G.)

DETAILED MEASUREMENTS FOR CONSTRUCTION OF STAIR CASE & PARAPET Of G TYPE Quarter

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								
		front steps	1	2.40	0.60	0.10	0.144	cum		
		for Ground beam	3	2.40	0.40	0.20	0.576	cum		
2							**0.576**	**cum**	**112.80**	**64.97**
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).								
		front steps	1	2.40	0.60	0.10	0.144			
		for Ground beam	3	2.40	0.40	0.10	0.288			
		below floor	1	2.40	6.35	0.10	1.524			
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					**1.956**	**cum**	**2310.85**	**4520.02**
	3.4.2	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).								
		GB	3	2.40	0.20	0.30	0.432	cum		
		landing and floor beam	3	2.40	0.20	0.30	0.432	cum		
		lintel beam	2	2.40	0.20	0.20	0.192	cum		
		chajja	1	2.40	0.60	0.08	0.108	cum		
			1	1.20	0.60	0.08	0.054	cum		
		waist slab 1	2	1.20	2.70	0.15	0.972	cum		
		slab 1st landing	1	2.40	1.20	0.15	0.432	cum		
		steps	18x.5	1.20	0.25	0.15	0.405	cum		
		Lobby slab	1	2.40	2.65	0.15	0.954	cum		
		column	4	2.40	0.20	0.30	0.576	cum		
							4.557	**cum**	**3290.90**	**14996.63**
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								
		110.0 kg of RCC work					**501.27**	**kg**	**46.80**	**23459.44**
6	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:								
	2.1.6	Suspended floors, roofs, access platform, balconies (plain surfaces) and shelves (cast in situ)								
		Lobby slab	1	2.40		2.65	6.360	sqm		
			1	1.2	0.15		0.18	sqm		
							6.54	**sqm**	**147.35**	**963.67**
	2.1.16	Stair cases of all types excluding spiral and folded plate type, including risers and landings								
		waist slab	2	1.20	2.70		6.480	sqm		
			2	2.70		0.15	0.810	sqm		
		slab 1st landing	1	2.40	1.20		2.880	sqm		
		steps	18	1.20		0.17	3.672	sqm		
			18x0.5	0.25		0.17	0.383	sqm		
							14.225	**sqm**	**163.8**	**2329.97**

S.N	S.O.R. ITEM No.	PARTICULARS	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
	2.1.6	Columns, Pillars, Piers and likes- rectangular or square in shape								
		Columns,	4x2	2.4		0.20	3.840	sqm		
			4x2	2.4		0.30	5.760	sqm		
							9.600	**sqm**	**183.5**	**1761.60**
	2.1.14	Weather shade, chhajja, Cornices and mouldings								
		front chhajja	1	2.40	0.60		1.440	sqm		
			1	2.40		0.08	0.180	sqm		
		back chhajja	1	1.20	0.60		0.720	sqm		
			1	1.2		0.08	0.090	sqm		
			2	0.6		0.08	0.090	sqm		
							2.52	**sqm**	**190.7**	**480.56**
	2.1.9	Beams, lintels, cantilevers & walls								
		GB	3x2	2.40		0.30	4.320	sqm		
		landing and floor beam	3x2	2.40		0.30	4.320	sqm		
			3x1	2.4	0.2		1.44	sqm		
								sqm		
		lintel beam	2	2.40	0.20		0.000	sqm		
			1	2.40		0.20	0.480	sqm		
			3	2.40		0.30	2.160	sqm		
							8.880	**sqm**	**136.75**	**1214.34**
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:								
	7.5	Extra for brick work in superstructure:								
	7.5.1	Above plinth and upto floor five level.								
		outer parapet	2	16.90	0.20	0.75	2.535	cum		
			2	6.75	0.20	0.75	1.013	cum		
		stair case room	2	3.90	0.20	2.40	1.872	cum		
			1	2.40	0.20	2.40	1.152	cum		
			1	2.40	0.20	1.65	0.792	cum		
		BW	2	2.40	0.20	3.30	1.584	cum		
							8.948	cum		
		CG	1	2.40	0.20	2.10	1.008	cum		
		v	1	0.80	0.20	0.60	0.096	cum		
							7.844	cum		
							7.844	**cum**	**2701.25**	**4278.78**
8	11.1	6mm thick cement plaster of mix:								
	11.1.2	In Cement mortar 1:4 (1 cement : 4 fine sand)								
		stair	1	4	1.20		4.800	sqm		
			1	1.5	1.20		1.800	sqm		
		landing	1	2.4	1.20		2.880	sqm		
			1	1.2	2.00		2.400	sqm		
			1	2.4	1.65		3.960	sqm		
		front chhajja	1	2.40	0.60		1.440	sqm		
			1	2.40		0.08	0.180	sqm		
		back chhajja	1	1.20	0.60		0.720	sqm		
			1	1.2		0.08	0.090	sqm		
			2	0.6		0.08	0.090	sqm		
							18.360	**sqm**	**70.55**	**1295.30**
9	11.2	12mm thick cement plaster of mix:								
	11.2.4	In cement Mortar 1:6 (1 cement : 6 fine sand)								
		B.W & stair case	3.00	2.40		3.30	23.76	sqm		
		CG	1	2.40		2.10	5.040	sqm		
		v	1	0.80		0.60	0.480	sqm		
							18.24	**sqm**	**68.40**	**1247.62**
10	3.2.2	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).								
		outer parapet	2	16.90	0.20	0.05	0.338	cum		
			2	6.75	0.20	0.05	0.135	cum		
							0.47	**cum**	**2,860.95**	**1353.23**

S.N	S.O.R. ITEM No.	PARTICULARS	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
11	11.3	15mm thick cement plaster on the rough side of single or half brick wall of mix:								
	11.3.1	In cement Mortar 1:6 (1 cement : 6 fine sand)								
		outer parapet	2x2	16.90		0.75	50.700	cum		
			2x2	6.75		0.75	20.250	cum		
		back wall stair	1	2.40		3.30	7.920	sqm		
							78.87	**sqm**	**79.20**	**6246.50**
12	10.13	Providing asbestos cement 6mm thick corrugated or semi corrugated sheets roofing fixed with galvanized J or L hooks, bolts and nuts 8mm dia G.I. plain bitumen washers complete excluding the cost of purlins, rafters and trusses.								
		a.c	1	4.56	3.11		**14.18**	**sqm**	**335.65**	**4760.05**
13	9.6	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.								
		collapsible	1	2.4	0.1		**0.24**	**sqm**	**2,355.95**	**565.43**
14	9.31	Providing and fixing approved pipe hand rail by welding to iron railing including applying a priming coat of red oxide zinc chromate primer.								
	9.31.1	M.S Pipe								
		at the rate of 5.1 kg /m	2	2.8			**28.56**	**kg**	**65.5**	**1870.68**
15	9.3	Steel work in tubular 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 primer.								
	9.3.1	Hot finished welded tubes								
		quantity same as item no13					**28.56**	kg	65.85	1880.68
	9.4	Extra for hoisting trusses and placing in position over height above 5m for every 2.5 m height or part thereof.								
		quantity same as item no13					**28.56**	kg	2.1	59.98
16	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.)								
		steps trade	18	1.2	0.28		6.05	sqm		
		riser	19	1.2		0.18	4.10	sqm		
								sqm		
		front steps trade	2	2.4	0.3		1.44	sqm		
		riser	3	2.4		0.18	1.30	sqm		
							12.89	**sqm**	**650.1**	**8378.49**
17	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)								

S.N	S.O.R. ITEM No.	PARTICULARS	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
		landing	1	2.4	1.2		2.88	sqm		
		flooring	1	2.4	6.75		16.20	sqm		
		deduction	1	1.2	0.25		0.30	sqm		
							18.78	**sqm**	**584.65**	**10979.73**
	12.47	Extra for nosing in steps and treads of kota stone slab.								
		steps	18	1.2			21.60	RM		
		front steps trade	2	2.4			4.80	RM		
							26.40	metre	**45.9**	**1211.76**
18	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								
		floor of stair case room	1	2.40	6.75		16.20	sqm		
							16.20	**sqm**	**197.25**	**3195.45**
19	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 outer plaster								
		quantity same as item no.10					**78.87**	**sqm**	**24.95**	**1967.81**
20	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.								
		quantity same as item no. 8 + item no. 9								
		3.14*0.05m diameter	2	2.8			**0.88**	**sqm**	**34.75**	**30.5522**
21	14.5	Distempering with acrylic washable distemper to give an even shade.								
	14.5.1	On new work (Two or more coats)								
		total quantity of plaster as above - item no.8+9=52.47+15.84+=68.31					**68.31**	**sqm**	**29.75**	**2032.22**
									TOTAL	**99082.68**
									GRAND TOTAL	**99,100.00**

SUB-ENGINEER

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

EXECUTIVE ENGINEER
P.W.D., DIVISION No.2
RAIPUR (C.G.)

DETAILED MEASUREMENTS FOR CONSTRUCTION OF SEPTIC TANK

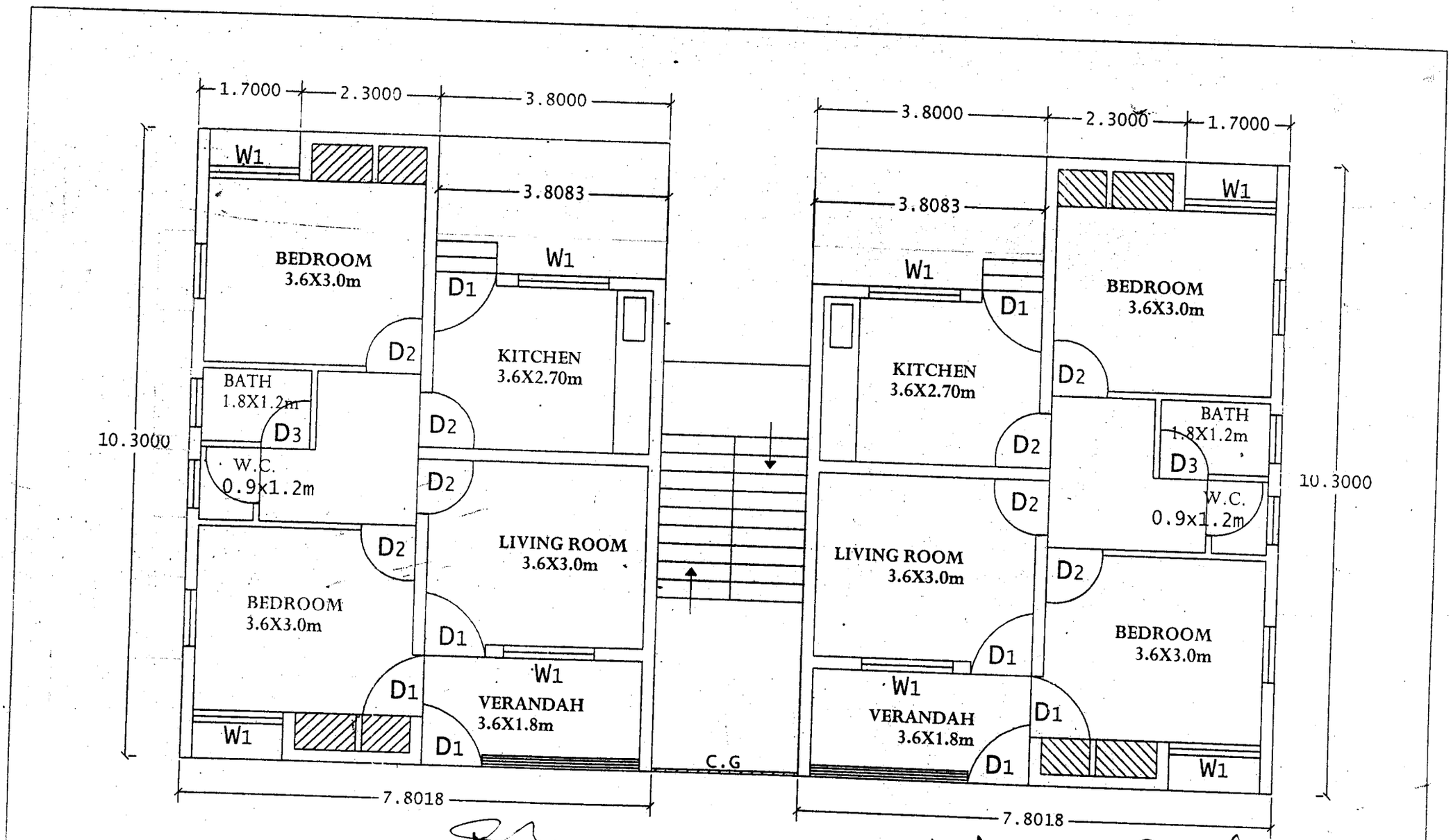
S.N	S.O.R. ITEM No.	PARTICULARS	MEASUREMENTS No	L	B	D	QUANTITY	UNIT	RATE	AMOUNT
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including 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								
10	2.1	Providing and fixing formwork including centering, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:					81.18	kg	46.80	3799.22
	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

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.)



G Type Quarter

गणना प्रमाण-पत्र

प्रमाणित किया जाता है कि **TWIN "G"** टाईप क्वार्टर का मानक प्राक्कलन संलग्न मानचित्र के अनुसार बनाया गया है। [redacted] की गणना भवन एस.ओ.आर., दिनॉक 01.06.2009 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.)