

Name of Work: Construction of 2 storied Guest House at Duenmang Tsachu under Nangkor Gewog

Location: Nangkor Gewog, Zhemgang Dzongkhag

BOQ-A

Sl.No.	Description of item	Quantity	Unit	Rate(Nu.)	Rate in words	Amount(Nu.)
1	Dismantling of one storied old building (19' X 40.1') plinth area	1	each			
2	Earth work in excavation overareas, depth >300mm, width >1.5m, area >10 Sq.m in plan, incl. disposal of excavated earth within 50m lead & 1.5m lift and disposed soil to be neatly dressed. Ordinary rocks with or without blasting	259.8	cu.m			
3	Excavation in foundation trenches or drains, not exceeding 1.5m in width or area 10 sq.m on plan incl. dressing & ramming, disp. of surplus soil within 50m lead & 1.5m lift: Ordinary rock with or without blasting	92.61	cu.m			
4	Filling of trenches, sides of foundations etc. in layers <200mm using selected excavated earth, ramming etc. within lead 50 m & lift 1.5m	56.11	cu.m			
5	Providing and laying hand packed stone soling or filling with stones .	23.24	cu.m			
6	Proving & laying dry earth bedding, including consolidating each deposited layer by watering, ramming & dressing.	32.11	cu.m			
7	Providing and laying in position plain cement concrete excluding the cost of centering and shuttering - All work upto plinth level - 1:3:6 (1 cement : 3 sand : 6 graded crushed rock 20 mm nominal size) - lean concrete	12.23	cu.m			
8	Providing & laying Random Rubble Masonry with hard stone in found'n & plinth: In cement mortar 1:5	18.60	cu.m			
	FOOTING					
9	Providing & laying in position R.C.C excluding the cost of centering, shuttering and reinforcement, all works upto plinth level. 1:2:4 (1cement : 2 sand : 4 graded crush rock 20 mm nominal size)	19.6	cu.m			
10	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete - 10mm dia @ 0.62 kg/m	902.72	kg			
11	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	44.8	sq.m			
	COLUMN					
12	Providing & laying in position R.C.C work in plinth and skirting courses, fillets, columns, pillars, posts, and struts upto floor fivel level excluding the cost of centering, shuttering and reinforcement. 1:1:2 (1cement : 1 sand : 2 graded crush rock 20 mm nominal size)	6.71	cu.m			

13	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	1371.16	kg			
14	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	87.64	sq.m			
PLINTH BEAM						
15	Providing & laying in position reinforced cement concrete excluding the cost of centering, shuttering and reinforcement - all work upto plinth level - 1:2:4 (1 cement : 2 sand : 4 graded crushed rock 20 mm nominal size)	6.2	cu.m			
16	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	566.33	kg			
17	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	52.51	sq.m			
FIRST FLOOR BEAM						
18	Providing & laying in position R.C.C work in beams, lintels, bands, plain window sills, strair cases, spiral staircases upto floor fivel level excluding the cost of centering, shuttering and reinforcement. 1:1.5:3 (1cement : 1.5 sand : 3 graded crush rock 20 mm nominal size)	9.9	cu.m			
19	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	1264.52	kg			
20	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	102.45	sq.m			
ROOF BEAM						
21	Providing & laying in position R.C.C work in beams, lintels, bands, plain window sills, strair cases, spiral staircases upto floor fivel level excluding the cost of centering, shuttering and reinforcement. 1:1.5:3 (1cement : 1.5 sand : 3 graded crush rock 20 mm nominal size)	6.2	cu.m			
22	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	1058.73	kg			

23	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	56.08	sq.m			
FIRST FLOOR SLAB						
24	Providing & laying in position R.C.C work in suspended floor, roof having slope up to 15*, landings, balconies, shelves and chajjas upto floor five level excluding the cost of centering, shuttering and reinforcement. 1:1.5:3 (1cement : 1.5 sand : 3 graded crush rock 20 mm nominal size)	12.23	cu.m			
25	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	1077.93	kg			
26	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	103.93	sq.m			
ROOF SLAB						
27	Providing & laying in position R.C.C work in suspended floor, roof having slope up to 15*, landings, balconies, shelves and chajjas upto floor five level excluding the cost of centering, shuttering and reinforcement. 1:1.5:3 (1cement : 1.5 sand : 3 graded crush rock 20 mm nominal size)	9.33	cu.m			
28	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	1240.72	kg			
29	Providing & fixing centering and shuttering (formwork), including strutting, propping etc. and removal of formwork - Columns, pillars, post, struts etc.	80.74	sq.m			
TRADITIONAL CORNICE						
30	Bhutan type Traditional Cornices in R.C.C 1:2:4, 20 mm aggregate including cost of formwork including finishing with 6mm thick plaster on the exposed surface with cement mortar 1:3, excluding reinforcement & decorative painting cost as per standard design (Measurement to be taken along the cornice and wall junction) - Multi -Storied building.. at all middle floor levels (excluding the cost of phana)	23	m			
	Phana	25	m			
31	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	1013.46	kg			

32	Extra for providing and mixing water-proofing materials in proportion recommended by the manufacturers - 15mm plaster in C.M 1:3	34.5	sq.m			
33	Providing, preparing and applying Dangtshon washable painting -Rab	37.5	sq.m			
RCC STAIR CASE						
34	Providing & laying in position R.C.C work in beams, lintels, bands, plain window sills, strair cases, spiral staircases upto floor five level excluding the cost of centering, shuttering and reinforcement. 1:1.5:3 (1cement : 1.5 sand : 3 graded crush rock 20 mm nominal size)	0.56	cu.m			
35	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	72	kg			
36	Providing & laying 15mm cement plaster on rough side of single or half -brick wall - C.M 1:3	9.75	sq.m			
37	Extra for providing and mixing water-proofing materials in proportion recommended by the manufacturers - 15mm plaster in C.M 1:3	9.75	sq.m			
38	Finishing wall with Water-Proof Cement Paint - New work, three coats	9.75	sq.m			
RAILING						
39	Steel work welded, in built up sections, trusses, frame - works including cutting, hoisting, fixing and appl. priming coat of red lead paint - In Tubular sections	109.14	kg			
40	P&f. M.S. round or square bars in railing 20mm dia.	591.6	kg			
41	Providing and applying finishing coats, with :- Aluminium paint, two coats on new work	46	sq.m			
ROOF TRUSS						
42	Steel work welded, in built up sections, trusses, frame - works including cutting, hoisting, fixing and appl. priming coat of red lead paint - In Tubular sections	1658	kg			
43	Steel work in single section including cutting, hoisting, fixing and applying priming coat of red lead paint - In Flats (WEIGHT (KGS) = LENGTH (MM) X WIDTH (MM) X 0.0000785 X THICKNESS)	202.20	kg			
44	Providing & fixing M.S. round hold-down bolts with nuts and washer plates - (WEIGHT (KGS) = 3.14 X 0.00000785 X ((diameter / 2)X(diameter / 2)) X LENGTH)	79.52	kg			
45	Providing & laying in position reinforced cement concrete excluding the cost of centering, shuttering and reinforcement - all work upto plinth level - 1:2:4 (1 cement : 2 sand : 4 graded crushed rock 20 mm nominal size)	0.84	cu.m			

46	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	298.37	kg			
47	Providing & fixing Eaves board (225x25mm) with moulding fitted and fixed with necessary screws - Mixed Conifer	56.95	m			
ROOFING						
48	Providing & fixing pre-painted Galvanised steel Corrugated roofing sheet including bolts, hooks and nuts 8mm dia. with bitumen and G.I limpetwashers filled with white lead for connection, excluding the cost of purlins, rafter and trusses - 24g	9.8	sq.m			
49	Providing & fixing 600mm ridges or hips in pre painted steel sheets, including bolts, hooks and nuts 8mm dia G.I limpet and bitumen washers for connection - 24g	12	m			
RCC LINTEL						
50	Providing & laying in position reinforced cement concrete excluding the cost of centering, shuttering and reinforcement - all work upto plinth level - 1:2:4 (1 cement : 2 sand : 4 graded crushed rock 20 mm nominal size)	2.03	cu.m			
51	Providing & fixing Thermo-Mechanically Treated reinforcement bar (Yield Strength 500 MPa) for R.C.C work including cutting, bending, binding and placing in position complete	235.82	kg			
FLOORING						
52	Applying a coat of hot bitumen (maxphalt) 80\100 or equivalent using 1.7 kg per sq.m including the surface cleaning	26.95	sq.m			
53	P&l cement concrete flooring 1:2:4, finished with floating coat of neat cement: 20mm agg, 50mm thick GF	80.28	sq.m			
54	P&l cement concrete flooring 1:2:4, finished with floating coat of neat cement: 12mm agg, 25mm thick FF	80.28	sq.m			
STRUCTURE WALL						
55	Providing & laying Coursed Rubble Masonry with hard stone in fdn.& plinth: In cement mortar 1:4	114.54	cu.m			
56	Extra, for C.R. masonry with hard stone in superstructure above plinth, below & including floor 2 level.	114.54	cu.m			
57	Providing & laying Concrete block Half-brick Masonry (125 mm) in superstructure below floor 2 level - In cement mortar 1:4	14.03	sq.m			
58	Providing & laying 15mm cement plaster on rough side of single or half -brick wall - C.M 1:3 - inside	112.24	sq.m			
59	Finishing wall with Water-Proof Cement Paint - New work, three coats	114.54	sq.m			

60	P&l. 20mm cement plaster : C.M 1:4	357.33	sq.m			
61	Vinyl plastic emulsion paint, for cement, masonry, plaster, two coats on new work	357.33	sq.m			
62	Providing and laying 6mm cement plaster (in ceilings) 1:3	172.43	sq.m			
ROOF OVER HANG						
63	Providing & fixing in position dressed wood work in frames of doors, windows, clerestory windows and other frames, wrought and framed - Mixed Conifer	0.67	cu.m			
64	Providing and fixing to frames (wall or ceiling) Gypsum plaster board including finishing of joints smooth complete (excluding cost of frame) - 10 mm thick	149.60	sq.m			
PLINTH PROTECTION & DRAINAGE						
65	Earthwork in Excavation in foundation trenches or drains including dressing of sides and ramming of bottom, disposal of surplus excavated soil within 50m lead - Ordinary Soil	100.70	cu.m			
66	Providing and laying 50mm thick Plinth Protection and grouted with fine sand mix including well rammed, finishing the top smooth - With cement concrete 1:3:6, 20mm aggregates, laid over 75mm thick layer of compacted gravel (40mm)	87.45	sq.m			
67	Constructing second class brick masonry open surface drain in cement mortar 1:4 including earth work in excavation 100 mm thick concrete bed 1:5:10, 40mm aggregate and 25mm thick cement concrete 1:2:4, 12 mm aggregate for filling haunches including 12mm cement plastering 1:4 with a floating coat of neat cement and disposal of surplus earth etc. complet - 150mm x 200mm depth	65.5	m			
PLUMBING WORK						
68	Providing & fixing Indian-type vitreous china w.c squatting pan, including 100 mm H.C.I P or S trap, 10 lit low level vitreous china cistern & fittings, repair walls - 580mm, white Orissa-model	4	each			
69	Providing & fixing white vitreous china wash basin, including C.I brackets, 15mm C.P. brass pillar taps, c.p. chain & rubber plug, 32mm pvc waste, 32mm dia. trap & union, repair walls - Flat back wash basin 630x450mm with single 15mm c.p. brass pillar taps	2	each			
70	Providing & fixing soap dish-recessed, ceramic, 150x150mm	4	each			
71	Providing & fixing toilet paper holder-c.p brass	4	each			

72	Providing & fixing c.p. towel ring	4	each			
73	Providing & fixing 600x450mm bevelled edge mirror (superior glass) incl. 4mm A.C Sheet base fixed to wooden cleat	4	each			
74	Providing & fixing c.p. brass bibcock - 15mm, standard vertical, c.p knob	7	each			
75	Providing & laying G.I. pipes including G.I. fittings (excluding trenching, refilling & thrust block) - 15mm	36	m			
76	Providing & fixing c.p. brass stop cock - 15mm, standard, c.p knob	8	each			
77	Providing & fixing P.V.C soil waste and vent pipes, single or double socketed, including pipe clip complete (excluding the cost of PVC fittings - 75mm dia	20	m			
78	Providing & fixing P.V.C Coupler - 75mm dia	4	each			
79	Providing & Fixing PVC plain bend-75mm dia	4	each			
80	Providing & fixing P.V.C soil waste and vent pipes, single or double socketed, including pipe clip complete (excluding the cost of PVC fittings - 110mm dia	48	m			
81	Providing & fixing P.V.C Pipe connector - 110mm dia	10	each			
82	Providing & fixing P.V.C Coupler - 110mm dia	10	each			
83	Providing & Fixing PVC door bend-110mm dia	6	each			
	WINDOW					
84	Providing and fixing window type W1 as per drawing complete including sumdang painting - ding, including cornice	10	each			
85	Providing & fixing 25mm thick Panelled or glazed Shutters for cup-boards etc. complete including hinges	33.78	sq.m			
86	P&f 40x3mm M.S. hold fast 400mm long, fixing to frame with 10mm bolts & nuts, plugs, concrete blocks 300x100x150mm with 1:3:6, 20mm aggregate	40	each			
87	Providing and fixing window type V1 as per drawing complete including sumdang painting - ding, with cornice	4.000	each			
88	Providing & fixing 25mm thick Panelled or glazed Shutters for cup-boards etc. complete including hinges	1.32	sq.m			
89	P&f 40x3mm M.S. hold fast 400mm long, fixing to frame with 10mm bolts & nuts, plugs, concrete blocks 300x100x150mm with 1:3:6, 20mm aggregate	12	each			
	DOOR					
90	Providing and fixing Door type D as per drawing complete including sumdang painting Ding	10	each			

91	P&f 40x3mm M.S. hold fast 400mm long, fixing to frame with 10mm bolts & nuts, plugs, concrete blocks 300x100x150mm with 1:3:6, 20mm aggregate	30	each			
92	Providing and applying Synthetic enamel, for steel & wood work, two coats on new work	25.20	sq.m			
93	Providing & fixing 44mm thick Panelled or glazed doors and windows Shutters etc. complete including hinges	20	sq.m			
94	TOILET DOOR					
95	Providing and fixing Door type D1 as per drawing complete including sumdang painting Ding	4	each			
96	P&f 40x3mm M.S. hold fast 400mm long, fixing to frame with 10mm bolts & nuts, plugs, concrete blocks 300x100x150mm with 1:3:6, 20mm aggregate	12	each			
97	Providing and applying Synthetic enamel, for steel & wood work, two coats on new work	9.6	sq.m			
98	Providing & fixing 44mm thick Panelled or glazed doors and windows Shutters etc. complete including hinges	9.6	sq.m			
	DOOR & WINDOW ACCESSORIES					
99	Providing & fixing M.S tower bolt (barrel type) with necessary screws etc. complete-150mm for W	46	each			
100	Providing & fixing M.S tower bolt (barrel type) with necessary screws etc. complete-250mm for D	14	each			
101	Providing & fixing M.S. sliding door bolt, bright finished, enamelled with necessary screws etc. complete-300mm for D1	10	each			
102	Providing & fixing M.S. sliding door bolt, bright finished, enamelled with necessary screws etc. complete-200mm	4	4			
103	Providing & fixing M.S. handle with necessary screws etc. complete-150mm	28	28			
104	Providing & fixing M.S. handle with necessary screws etc. complete-125mm	50	40			
105	Providing & fixing M.S. hook-and-eye with necessary screws etc. complete-150mm	46	46			
106	Providing & fixing 100x12mm, with 25mm dia. wooden curtain rod and brackets including M.S flats 25x3x100mm and plugs etc. complete	32	m			
107	Providing & fixing anodised aluminium kicking plate, 4mm thick with necessary aluminium screws etc.complete	4	sq.m			
108	Providing & laying in position reinforced cement concrete work in plain window sills upto floor five level excluding the cost of centering and shuttering and reinforcement 1:2:4	1.18	cu.m			
	WATER SUPPLY & SANITATION WORK					

109	Constructing Brick masonry manhole in cement mortar 1:5, R.C.C top slab with 1:2:4 20mm aggregates, foundation concrete 1:4:8 40mm aggregates, 12mm plaster in CM 1:3 finished with floating coat of neat cement and making channels in cement concrete 1:2:4 20mm aggregates, neatly finished complete - Inside dimension 900 x 800mm & 450mm deep including C.I. cover & frame (weight >38 kg)	2	each			
110	Providing & fixing P.V.C soil waste and vent pipes, single or double socketed, including pipe clip complete (excluding the cost of PVC fittings) - 110mm dia	20	m			
111	Providing & fixing P.V.C Pipe connector -75mm dia	6	each			
112	Providing & laying H.D.P.E pipes, pressure class 10kg/sq.m, including H.D.P.E fittings (excluding trenching, refilling & thrust block)	100	m			
113	Constructing Septic Tanks, in 2nd class brick masonry in cement mortar 1:4, including fittings, reinforced concrete slab 100mm thick 1:2:4 ratio, C.I cover with frame, 75mm thick concrete flooring (40mm aggregates) cement plaster concrete base in C.C 1:4:8 etc. complete as per standard design - 25 users	1	each			
114	Constructing soak pit Size 1200x1200x1200mm, filled with brick bats including 100mm SW drain pipe X 1200mm long	1	each			
115	Hand excavation and refilling in layers < 200mm, of trenches for pipes & sockets, cables, including dressing of sides/ ramming of bottom, depth upto 1.5m, disposal of surplus material within lead of 50m: All kinds of soil - Pipes, cables etc. 80mm < dia < 300mm	100	m			

Total Amount for civil work (A)in Figure.Nu.....

Civil Work (A) _____

Electrical Work(B) _____

Total (A+B) _____

Total Amount in Words(

Contractors seal sign