Model Estimate

Name of scheme: Construction of Community Hall under 13th Finance Commission

Estimated Amount : Rs. 8,00,000.00
(Rupees Eight Lakh) only

Name of work : Construction of Community Hall under 13th Finance Commission Award
Estimated cost : Rs. 8.00 Lakh (Rupees Eight Lakh) only

REPORT

Necessity: To strengthen the infrastructure at the Gaon Panchayat level, the Government has released ₹ 8.00 Lakhs under 13th Finance Commission Award. Accordingly a Model Estimate for Construction of Community Hall at Gaon Panchyat Level has been prepared to serve the following purposes.

- Enabling Meetings, Assemblies, Gaon Sabhas
- Enabling social audits
- Training and Capacity Building

Provision: The major functional elements considered for Community Hall at Gaon Panchayat level are as follows:

- Meeting / Training hall
- Office space
- Toilet for male & female

SoR followed: The estimate has been prepared on the basis of APWD(Building) SoR/2010-11 to arrive at the probable cost of the proposed construction of Community Hall. However, 10% Contractors' Profit has been deducted as per norms.

Services considered: The following services has been considered.

- Sanitary Installation.
- Internal Electrification.
- HTW for water facility.

The work is to be executed as per APWD specifications and Rural Development norms currently being followed in the state of Assam.

Detail estimate for construction of Community Hall

(The estimate has been prepared on the basis of APWD(Building) Schedule of Rates for the year 2010-11)

Sl. No.	Description of works	Unit	Qty	Rate(Rs.)	Amount(Rs.)
1	2	3	4	5	6
1/1.1	Earthwork in excavation for foundation treanches of wall, retaining walls, footings of column, steps, septic tank etc. including refilling (return filling) the quantity as necessary after completion of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. (i) Up to a depth of 2.0m below the existing ground level. (a) In ordinary soil Footing 23 x 1.20 x 1.20 x 1.20 = 39.74 m^3	m^3	39.74	64.67	2569.99
2/1.3	Earth/sand filling in plinth in layer not more than 150mm thick including necessary carriage, watering, ramming etc. complete as directed and specified, including payment of land compensation, forest royalty, sales tax and other duties and taxes as may be necessary. (c) With river sand or silt (predominantly non-plastic) obtained by truck carriage including loading and unloading. Plinth filling 1 x 8.50 x 9.10 x 0.60 = 46.410 m^3 1 x 1.50 x 3.60 x 0.60 = 3.240 m^3 Ramp 0.5 x 2.75 x 1.50 x 0.60 = 1.238 m^3 50.89 m^3	m^3	50.89	322.75	16424.75
3/4.1.1	Providing soling in foundation and under floor at all levels with/best quality jhamma bricks , sand packed and laid to level and in panel after preparing sub-grade as directed including all labour and materials complete. (a) Brick flat soling : Footing 23 x 1.200 x 1.200 = 33.12 m^2 Floor 1 x 8.50 x 9.10 = 77.35 m^2 1 x 1.50 x 3.60 = 5.40 m^2 Ramp 1 x 1.50 x 3.50 = 5.25 m^2 121.12 **m^2**	m^2	121.12	286.37	34685.13
4/2.1.1	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing , steps , walls , brickworks etc. as directed and specified including curing complete. (Shuttering where necessary will be measured and paid separately.) (a) In prop 1:3:6 Footing 23 x 1.20 x 1.20 x 0.075 = 2.48 m^3	m^3	2.48	3733.63	9259.40
6/2.2.1	Providing and laying plain/reinforced cement croncrete works cement with coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately) I) Using mixture machine A) In substructure up to plinth level				

1	2										3	4	5	6
	Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining walls, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level a**)** **M15 or Prop. 1:2:4**													
	Footing	23	x	1.20	x	1.20	x	0.150	=	4.97 m^3				
		20	x	$\frac{1.20^2 + 0.25^2}{2}$			x	0.150	=	2.25 m^3				
	Column	23	x	0.25	x	0.25	x	0.750	=	1.08 m^3				
		23	x	0.25	x	0.25	x	0.300	=	0.43 m^3				
	Tie beam	3	x	8.50	x	0.25	x	0.300	=	1.91 m^3				
		2	x	9.10	x	0.25	x	0.300	=	1.37 m^3				
		4	x	3.60	x	0.25	x	0.300	=	1.08 m^3				
		1	x	3.00	x	0.25	x	0.300	=	0.23 m^3				
		2	x	1.50	x	0.25	x	0.300	=	0.23 m^3				
										13.54 m^3	m^3	13.54	4734.15	64100.39
	(B) In super structure from plinth level upto 1st floor level (ii) Columns, Pillars, Posts, Struts, suspended floors, roof, landing shelf and support, balcony, lintel sill band, Beam, girder, bressumer, cantilever, staircase including top surface and finishning of nosing **a)** **M15 or Prop. 1:2:4**													
	Column	20	x	0.13	x	0.13	x	3.15	=	1.06 m^3				
		3	x	3.14	x	0.10^2	x	3.15	=	0.30 m^3				
	Lintel	3	x	8.50	x	0.130	x	0.200	=	0.66 m^3				
		2	x	9.10	x	0.130	x	0.200	=	0.47 m^3				
		3	x	3.60	x	0.130	x	0.200	=	0.28 m^3				
		1	x	3.00	x	0.130	x	0.200	=	0.08 m^3				
		2	x	1.50	x	0.130	x	0.200	=	0.08 m^3				
	Post Plate beam													
		3	x	8.50	x	0.130	x	0.150	=	0.50 m^3				
		2	x	9.10	x	0.130	x	0.150	=	0.35 m^3				
		2	x	1.50	x	0.130	x	0.150	=	0.06 m^3				
		1	x	3.60	x	0.130	x	0.150	=	0.07 m^3				
	Chajja													
		2	x	8.50	x	0.450	x	0.075	=	0.57 m^3				
		2	x	9.10	x	0.450	x	0.075	=	0.61 m^3				
		2	x	1.50	x	0.450	x	0.075	=	0.10 m^3				
										5.20 m^3	m^3	5.20	4929.24	25632.05
7/3.1	3.1.1 Providing formwork of ordinary timber planking so as to give rough finish including centering , shuttering, struting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4.0m & removal of the same for in situ reinforced concrete and plain concrete work in													
	3.1.1.1 Foundation, footing, bases of columns, pile cap, raft and mass concrete works etc. (ii) Using 25mm thick plank													
	Footing	4	x	23	x	0.225	x	1.200	=	24.84 m^2				
	Column below PL													
		23	x	4	x	0.250	x	1.350	=	31.05 m^2				
										55.89 m^2	m^2	55.89	140.84	7871.55
	3.1.1.3 Columns, pillars, posts & strut (a) Square, rectangular, polygonal in plan or any shape like Tee/ L etc. having plane vertical face. (ii) Using 25mm thick plank													
	Column above PL													

1	2										3	4	5	6
		20	x	4	x	0.13	x	3.150	=	32.76 m^2				
		20	x	2	x	0.35	x	4.200	=	58.80 m^2				
		20	x	2	x	0.50	x	4.200	=	84.00 m^2				
										175.56 m^2	m^2	175.56	213.73	37522.44
	3.1.1.3 Columns, pillars, posts & strut													
	b) Circular or curved in plan (Using 38mm thick plank)													
	3 x	2	x	3.14	x	0.10	x	3.150	=	5.93 m^2	m^2	5.93	311.15	1845.12
	3.1.1.2 Sides of tie beams, plinth beams, grade beams etc. at or below plinth below													
	(ii) Using 25mm thick plank													
	Tie beam	3	x	2	x	8.500	x	0.300	=	15.30 m^2				
		2	x	2	x	9.10	x	0.300	=	10.92 m^2				
		4	x	2	x	3.60	x	0.300	=	8.64 m^2				
		1	x	2	x	3.00	x	0.300	=	1.80 m^2				
		2	x	2	x	1.50	x	0.300	=	1.80 m^2				
										38.46 m^2	m^2	38.46	191.27	7356.24
	3.1.1.4) Sides and soffits of beams, beam haunchings, cantilever girders, bressumers, lintels and horizontal ties.													
	(a) For depth not exceeding 1.0M													
	(ii) Using 25mm thick plank													
	Post Plate beam													
		3	x	2	x	8.50	x	0.15	=	7.65 m^2				
		2	x	2	x	9.10	x	0.15	=	5.46 m^2				
		2	x	2	x	1.50	x	0.15	=	0.90 m^2				
		1	x	2	x	3.60	x	0.15	=	1.08 m^2				
	Lintel	3	x	2	x	8.50	x	0.20	=	10.20 m^2				
		2	x	2	x	9.10	x	0.20	=	7.28 m^2				
		4	x	2	x	3.60	x	0.20	=	5.76 m^2				
		1	x	2	x	3.00	x	0.20	=	1.20 m^2				
		2	x	2	x	1.50	x	0.20	=	1.20 m^2				
										40.73 m^2	m^2	40.73	163.01	6639.40
	3.1.1.5) Flat surfaces such as soffits of suspended floors, roofs, landings, cantilever slabs, chajjas, balconies and the like.													
	(a) Floors etc. upto 200mm in thickness.													
	(ii) Using 25mm thick plank													
	Chajja			2	x	8.50	x	0.45	=	7.65 m^2				
				3	x	9.10	x	0.45	=	12.29 m^2				
				2	x	1.50	x	0.45	=	1.35 m^2				
										21.29 m^2	m^2	21.29	243.80	5190.50
8/4.1.4	Brickwork in cement mortar with 1st class brick including racking out joints and dewatering if necessary, and curing complete as directed in sub-structure upto plinth level.													
	(b) In prop 1:4													
	Plinth	3	x	8.50	x	0.25	x	0.300	=	1.91 m^3				
		2	x	9.10	x	0.25	x	0.300	=	1.37 m^3				
		4	x	3.60	x	0.25	x	0.300	=	1.08 m^3				
		1	x	3.00	x	0.25	x	0.300	=	0.23 m^3				
		2	x	1.50	x	0.25	x	0.300	=	0.23 m^3				
	Steps	1	x	3.60	x	0.90	x	0.150	=	0.49 m^3				
		1	x	3.60	x	0.60	x	0.150	=	0.32 m^3				
		1	x	3.60	x	0.30	x	0.150	=	0.16 m^3				
	Ramp	0.5	x	3.50	x	0.25	x	0.600	=	0.26 m^3				
										6.04 m^3	m^3	6.04	4632.29	27979.03

1	2												3	4	5	6
9/4.1.7	112mm thick 1st class brick nogged wall in cement mortar including racking out joints and curing complete as directed in superstructure above plinth up to 1st floor level (protruding MS rod/Tor steel of column to be embeded in cement mortar and will be measured and paid separately)															
	(a) in cement mortar in prop 1:4 (1 cement: 4 sand)															
				3	x	8.5	x	3.15	=	80.33	m^2					
				2	x	9.1	x	3.15	=	57.33	m^2					
				3	x	3.60	x	3.15	=	34.02	m^2					
				1	x	3.00	x	3.15	=	9.45	m^2					
	Extra verandah			2	x	1.5	x	1.05	=	3.15	m^2					
				1	x	3.6	x	1.05	=	3.78	m^2					
	Gable Wall	2	x	0.5	x	1.7	x	9.10	=	15.02	m^2					
										203.07	m^2					
	Deduction:															
	Posts			20	x	3.15	x	0.13	=	8.19	m^2					
	Lintel			Length,		25.7	x	0.20	=	5.14	m^2					
	Doors, Windows & Ventilators															
		D		2	x	1.00	x	2.10	=	4.20	m^2					
		D_1		5	x	0.75	x	2.10	=	7.88	m^2					
		W		9	x	1.00	x	1.35	=	12.15	m^2					
		V		12	x	1.0	x	0.45	=	5.40	m^2					
										42.96	**m^2**					
						Net quantity =				**160.12**	**m^2**		m^2	160.12	518.62	83041.43
10/18.1.1	Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S Code for R.C.C. work/R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete(upto 1st floor level).															
	b) ISI approved super ductile TMT bar (ii) Other ISI marked															
	Footing			**10mm dia**												
	Jali	23	x	2	x	8	x	1.20	=	441.60	RM					
	Lintel			3	x	4	x	8.50	=	102.00	RM					
				2	x	4	x	9.10	=	72.80	RM					
				4	x	4	x	3.60	=	57.60	RM					
				1	x	4	x	3.00	=	12.00	RM					
				2	x	4	x	1.50	=	12.00	RM					
	Postplate			3	x	4	x	8.50	=	102.00	RM					
				2	x	4	x	9.10	=	72.80	RM					
				2	x	4	x	1.50	=	12.00	RM					
				1	x	4	x	3.60	=	14.40	RM					
	Column			**12mm dia**												
				23	x	4	x	4.90	=	450.80	RM					
	Tie Beam			3	x	4	x	8.50	=	102.00	RM					
				2	x	4	x	9.10	=	72.80	RM					
				4	x	4	x	3.60	=	57.60	RM					
				1	x	4	x	3.00	=	12.00	RM					
				2	x	4	x	1.50	=	12.00	RM					
	Total Length							**12mm**	=	707.20	RM					
								10mm	=	899.20	RM					
	Total Weight		**12mm**		@	0.89	Kg/RM		=	629.41	Kg					
			10mm		@	0.62	Kg/RM		=	390.23	Kg					
										1019.64	Kg					
									=	10.20	Qtl		Qtl	10.20	4746.44	48413.69

1	2										3	4	5	6
	c) ISI approved - M.S. Rod													
	Stirrup	**6mm dia**												
	Post upto PL	23	x	11	x	0.90	=	227.70	RM					
	Post above PL	23	x	21	x	0.45	=	217.35	RM					
	Tie Beam	3	x	57	x	1.00	=	171.00	RM					
		2	x	61	x	1.00	=	122.00	RM					
		4	x	24	x	1.00	=	96.00	RM					
		1	x	20	x	1.00	=	20.00	RM					
		1	x	20	x	1.00	=	20.00	RM					
	Lintel	3	x	57	x	0.55	=	94.05	RM					
		2	x	61	x	0.55	=	67.10	RM					
		4	x	24	x	0.55	=	52.80	RM					
		1	x	20	x	0.55	=	11.00	RM					
		1	x	20	x	0.55	=	11.00	RM					
	Postplate	3	x	57	x	0.45	=	76.95	RM					
		2	x	61	x	0.45	=	54.90	RM					
		2	x	20	x	0.45	=	18.00	RM					
		1	x	24	x	0.45	=	10.80	RM					
								1270.65	RM					
	Total Weight		@	0.22	Kg/RM		=	279.54	Kg					
							=	2.80	Qtl		Qtl	2.80	5241.78	14676.98
11/9.1.2	Providing wood work in frame (chowkhats) of door , window , clerestory window and similar works wrought , framed and fixed in position in contact with C.C. or brick masonry walls including supplying, fitting and fixing with MS flat hold fast (40mmx3mmx25mm) as per design and embedded in cement concrete block in prop 1:1:4 and with two coats of kiricide oiling to the timber faces in contact with C.C. and masonry as directed and specified.													
	(a) Sal wood													
	Doors, D													
	2	x	2	x	0.15	x	0.075	x	2.10	=	0.09	m^3		
	2	x	1	x	0.15	x	0.075	x	1.00	=	0.02	m^3		
	Doors, D_1													
	5	x	2	x	0.15	x	0.075	x	2.10	=	0.24	m^3		
	5	x	1	x	0.15	x	0.075	x	0.75	=	0.04	m^3		
											0.40	m^3	m^3	0.40	55200.04	22080.02
12/9.9.3	Providing, fitting and fixing factory made wooden panelled doors with panel inserts of 75mm to 0.50mm width and 12mm to 20mm thickness, joined together with continuous tongue and groove joints glued together with Movicol or other approved adhesive leaving a vertical groove of 7.5mm to 15mm between the inserts, the edges of panel inserts being feather tongue into styles and rails including providing three pairs of oxidised M.S butt hinges (100mm x 75mm x 3.55mm) and furnishing with moulded timber beading of size 25mm x15mm around the panels complete as per drawing (moulded timber bead and all fittings except hinges to be paid separately).													
	b).With 1st class local wood(Hollock / Bola/ Bonsum)													
	II) 35mm thick with panel inserts of 20mm thickness													
	Door	D	2	x	2.00	x	0.90	=	3.60	m^2				
		D_1	5	x	2.00	x	0.65	=	6.50	m^2				
									10.10	m^2	m^2	10.10	1783.01	18008.40

1	2											3	4	5	6
13/11.1.2	Providing, fitting and fixing anodised aluminium sliding windows and ventilators of standard sections without horizontal glazing bars, joints mitred and welded (manufactured to relevant IS specifications) and providing and fixing handles, angle cleat, rub														
	(a) 2 Track sliding window														
	(i) 6mm glass	W	9	x	1.00	x	1.35	=	12.15	m^2					
		V	12	x	0.45	x	1.00	=	5.40	m^2					
									17.55	m^2		m^2	17.55	3793.85	66582.07
14/6.2.2	15mm thick cement plaster in single coat on rough side of single or half brick wall for interior plastering up to 1st floor level including arises internal rounded angles not exceeding 80mm in girth and finished even and smooth including curing complete as directed.														
	(b) In cement mortar 1:4														
	Area same as in Item No. 9/4.1.7							=	160.12	m^2		m^2	160.12	111.25	17813.35
15/6.2.3	15mm thick cement plaster in single coat on fair side of brick / concrete wall for interior plastering up to 1st floor level including arises internal rounded angles not exceeding 80mm in girth and finished even and smooth including curing complete as directed.														
	(b) In cement mortar 1:4														
	Quantity same as in Item No.14/6.2.2 =								**160.12**	**m^2**					
	Add Plinth Wall														
		1	x	2	x	36.0	x	0.65	=	46.80	m^2				
		1	x	2	x	10.9	x	0.65	=	14.11	m^2				
										221.02	m^2				
	Deduction Gable Wall								=	15.02	m^2				
								Net Qty	=	206.01	m^2	m^2	206.01	110.21	22704.36
16/6.2.7	Extra over item no 6.2.1 to 6.2.5 for plastering on celling and soffits of stairs up to 1st floor level (instead of plastering on walls) including curing complete as directed.														
	Chajja	2	x	2	x	8.5	x	0.45	=	15.30	m^2				
		2	x	2	x	9.1	x	0.45	=	16.38	m^2				
		2	x	2	x	1.50	x	0.45	=	2.70	m^2				
										34.38	m^2	m^2	34.38	15.05	517.42
17/13.6.3	Applying priming coat over new wood based surfaces over 100 mm in width/girth after and including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter, sand papering and knotting.														
	(b) With ready mixed paint, wood primer (white).														
	Shutters:														
	Door D	2	x	2	x	2.00	x	0.90	=	7.20	m^2				
	D1	2	x	5	x	2.00	x	0.65	=	13.00	m^2				
										20.20	m^2	m^2	20.20	30.91	624.38
18/13.6.4	Applying priming coat over new wood based surfaces up to 100 mm in width and girth after and including preparing the surface by thoroughly cleaning oil, grease, dirt and other foreign matter, sand papering and knotting.														
	(b) With ready mixed paint, wood primer (white).														
	Door frame: D														
	2	x	1	x	2	x	2	x	2.10	=	16.80	M			
	2	x	1	x	1	x	2	x	2.0	=	8.00	M			
	2	x	1	x	1	x	2	x	1.00	=	4.00	M			
	2	x	1	x	1	x	1	x	0.80	=	1.60	M			
	Door frame: D_1														
	5	x	1	x	2	x	2	x	2.1	=	42.00	M			

1	2												3	4	5	6
	5	x	1	x	1	x	2	x	2.0	=	20.00	M				
	5	x	1	x	1	x	2	x	1.00	=	10.00	M				
	5	x	1	x	1	x	1	x	0.65	=	3.25	M				
										T =	105.65	M	M	105.65	3.29	347.59
19/13.6.5	Painting two coats (excluding priming coat) on new wood and wood based surfaces with enamel paint to give an even shade including cleaning the surfaces of dirt, dust and other foreign materials, sand papering and stopping. (i) Surfaces over 100 mm width/girth. (a) General purpose(Asian paint/Berger paint/ICI paint/J & N paint/Nerolac) Quantity same as in Item No.17/13.6.3 = 20.20 m^2												m^2	20.20	45.80	925.16
	(ii) Surfaces up to 100 mm width/girth. (a) General purpose(Asian paint/Berger paint/ICI paint/J & N paint/Nerolac) Quantity same as in Item No.18/13.6.4 = 105.65 M												M	105.65	5.08	536.70
20/13.2.1	[c] Cement washing with portland cement slurry on wall surface (one coat) to give a smooth bodied opaque finish including thouroughly brooming the surface to remove all dirt, dust, mortar drops and other Quantity same as in Item No.14/6.2.3 = 160.12 m^2 Add for chajja = 34.38 m^2 194.50 m^2												m^2	194.50	6.70	1303.15
21/13.3.1	Providing surface preparation of walls, ceiling etc. using average 1.50 mm thick plaster of paris including clearing, rubbing with sand paper, filling gaps, depression etc. where necessary, with chalk powder and plaster of paris paste, making the surface even and smooth complete at all levels as specified and directed. Quantity same as in Item No.15/6.2.2 = 160.12 m^2 Deduct for Gable Wall = 15.02 m^2 Net qty = 145.10 m^2												m^2	145.10	47.42	6880.64
22/13.2.2	[c] Applying one coat of distemper primer of approved brand and manufacture on wall surface after thouroughly brushing the surface free from mortar dropings and other foreign matter and including preparing the surface even and sand papered smooth. Quantity same as in Item No.21/13.3.1 = 145.10 m^2												m^2	145.10	29.69	4308.02
23/13.2.2	[g] Distempering with distemper of approved brand and manufacture (two coats) and of required shade on new wall surface to give an even shade, after thouroughly brushing the surface free from mortar droppings and other foreign matter and including surface even and sand papered smooth. Quantity same as in Item No.22/13.2.2 = 145.10 m^2												m^2	145.10	39.51	5732.90
24/5.1.4	65 mm thick cement concrete floor consisting of 50 mm under layer of cement concrete in prop. 1:3:6 (1cement : 3 coarse sand : 6 coarse aggregate of 25mm and down) and 15 mm thick wearing layer in cement concrete in prop. 1:1:2 (1cement :1 coarse sand : 2 coarse aggregate of size 10mm down) laid in panels and finished with a floating coat of neat cement finish (using cement slurry for bond @ 2.75 kg. per square metre of floor area) including curing etc. complete as directed.															
				1	x	9.10	x	8.50	=	77.35	m^2				
				1	x	1.50	x	3.60	=	5.40	m^2				
	Ramp			1	x	1.50	x	3.50	=	5.25	m^2				
										88.00	m^2		m^2	88.00	449.48	39554.24

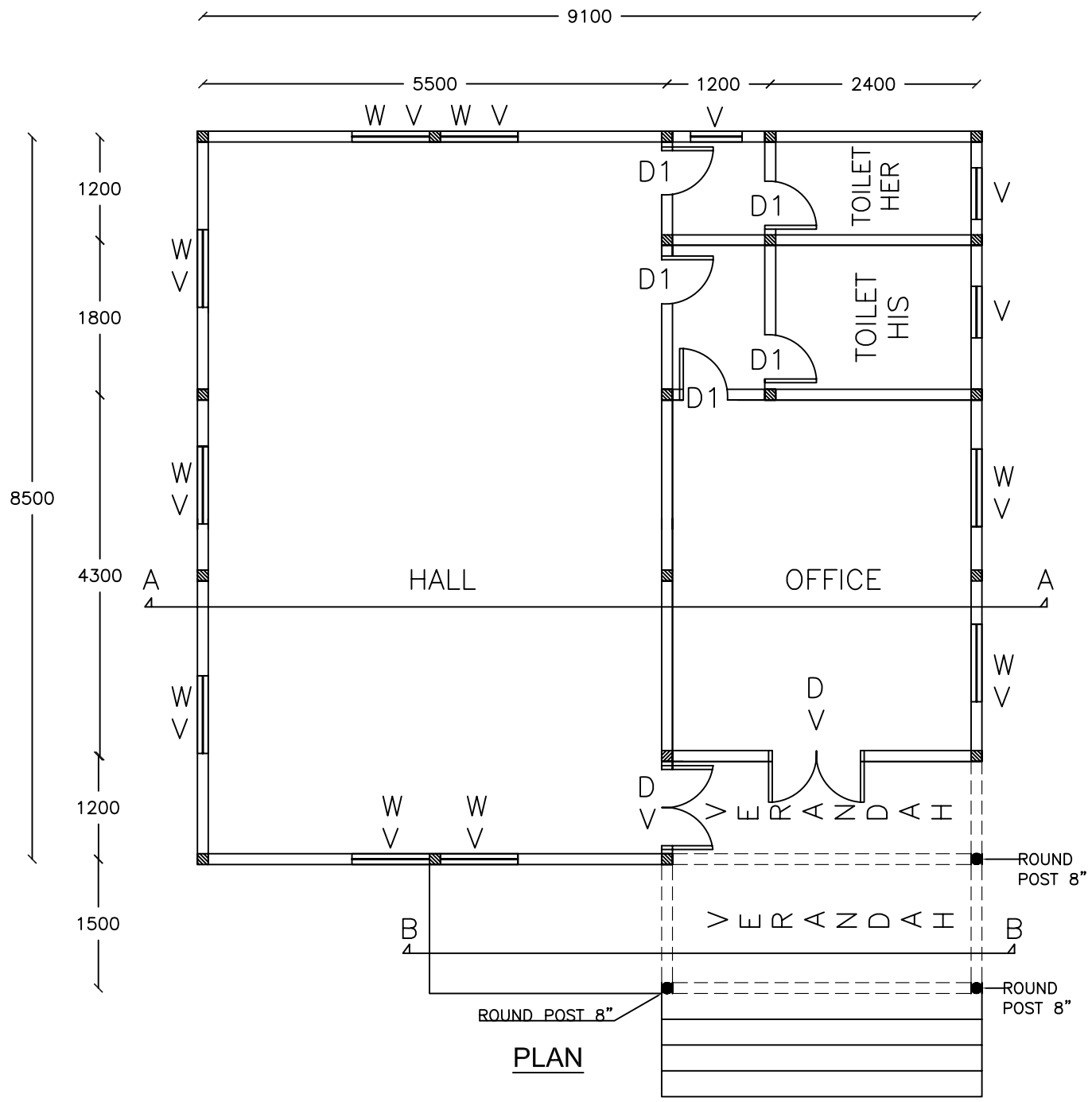
1	2									3	4	5	6
25/18.3.1	Providing fitting, hoisting and fixing of roof trusses including purlins fabricated out of M.S. black-tubes conforming to relevant I.S. code, as per approved design and drawings including providing M.S. cleats, base plates, bolts and nuts and one coat of red oxide Zinc Chromate primer and two coats of approved enamel paints complete including fitting necessary cleats etc. for fixing ceiling joists as per design and drawing as directed.												
	Section-AA												
	65mmm dia(L)-Tata												
	Rafter	2	x	4	x	5.50	=	44.00	m				
	Tie	1	x	4	x	9.10	=	36.40	m				
	Bottom runner	1	x	3	x	8.50	=	25.50	m				
								105.90	m				
							A) =	**604.69**	**Kg**				
	50mmm dia(M)-Tata												
	King Post	1	x	4	x	1.65	=	6.60	m				
							B) =	**33.20**	**Kg**				
	40mmm dia(M)-Tata												
	Strut	2	x	4	x	1.20	=	9.60	m				
		2	x	4	x	2.08	=	16.64	m				
		2	x	4	x	1.45	=	11.60	m				
	Puriln	2	x	5	x	10.00	=	100.00	m				
								137.84	m				
							C) =	**445.22**	**Kg**				
	Section-BB												
	32mm dia (L)-Tata												
	Rafter	2	x	2	x	2.20	=	8.80	m				
	Tie	1	x	2	x	3.60	=	7.20	m				
	K-Post	1	x	2	x	0.68	=	1.35	m				
	Strut	2	x	2	x	0.975	=	3.90	m				
	Purlin	2	x	3	x	1.800	=	10.80	m				
								32.05	m				
							D) =	**81.41**	**Kg**				
						Total Weight = A+B+C+D	**=**	1164.52	Kg				
							=	11.65	Qtl	Qtl	11.65	5875.00	68443.75
26/8.1.2	Providing corrugated galvenised Iron sheet roofing of TATA SHAKTEE / SAIL including fitting and fixing necessary galvenised J or L hooks, bolts and nuts 8 mm dia with bitumen washer 25 mm dia x 3 mm thick and 1.6 mm thick limpet washer complete excluding cost of roof truss, purlin etc. (Roof trusses and purlin etc.to be measured and paid separately).												
	(a) 0.45 mm thick												
	Sec-AA	2	x	9.40	x	5.50	=	103.40	m^2				
	Sec-BB	2	x	1.95	x	2.35	=	9.17	m^2				
								112.57	m^2	m^2	112.57	335.27	37741.34
27/8.1.4	Providing galvd iron ridging of TATA SHAKTEE / SAIL including supplying and fixing necessary galvd screws/washers etc. complete as directed.												
	(a) 0.45 mm thick												
	Sec-AA			1	x	9.40	=	9.40	m				
	Sec-BB			1	x	1.95	=	1.95	m				
								11.35	m	m	11.35	108.62	1232.84

1	2												3	4	5	6
28/9.3.1	Providing wood work in frame of false ceiling partitions etc.sawn, wrought, framed hoisted and fixed in positon with spikes, nails, M.S flat,angle/ cleats with bolt and nuts complete including kiricide oiling two coats to unexposed surfaces of the timber (M.S flats, angle cleats, and bolt and nuts required for flat, angle cleats wherever necessary shall be measured and paid separately). (a) With sal wood															
	1	x	10	x	8.50	x	0.075	x	0.05	=	0.32	m^3				
	1	x	10	x	9.10	x	0.075	x	0.05	=	0.34	m^3				
	1	x	2	x	3.60	x	0.075	x	0.05	=	0.03	m^3				
	1	x	4	x	1.50	x	0.075	x	0.05	=	0.02	m^3				
											0.71	m^3	m^3	0.71	42229.17	29982.71
29/7.2.1	Providing ,fitting and fixing A.C. building board in ceilling with necessary nails, wood screws including 1st class local wood 50mm x 12mm (hollock/bonsum/sundi) beading including paint ing two coats to timber beads complete as directed (ceilling joist to be measured and paid separately).															
					1	x	9.10	x	8.50	=	77.35	m^2				
					1	x	1.50	x	3.60	=	5.40	m^2				
											82.75	m^2	m^2	82.75	269.44	22296.16
30/10.2	Providing, fitting and fixing M.S. grill of required pattern for windows/ clerestory windows/ openingwith M.S. flats at required spacing in frame all round, squre or round M.S. bars with round headed bolts and nuts or screws. (c) Fixed to Brickwork/P.C.C/R.C.C.															
	Window				1	x	9	x	10.00	=	90.00	Kg				
	Ventilator				1	x	12	x	6.00	=	72.00	Kg				
											162.00	Kg	Kg	162.00	65.55	10619.10
31/9.4.1	Providing barge board of size 200mm x 20mm with 1st class local Hollock/ Bonsum timber including fitting and fixing with necessary wood screws etc. complete.															
							2	x	10.00	=	20.00	RM				
							4	x	5.50	=	22.00	RM				
							2	x	1.50	=	3.00	RM				
							4	x	2.20	=	8.80	RM				
											53.80	RM	RM	53.80	224.81	12094.78
32/15.2.1	Supplying, fitting, fixing annodised aluminium fittings of approved make, reasonably smooth, free from sharp edges and corners, flaws and other defects and with counter sunk holes for screws including necessary aluminium screws etc. complete. (annodised to bright natural matt & satin finished)															
	(a) Sliding door bolts															
	(i) 300mm x 16mm :				D		2	x	1	=	2	Nos.				
					D_1		5	x	1	=	5	Nos.				
											7	Nos.	Each	7	290.34	2032.38
	(b) Tower bolt															
	i) 300mm x 12mm				D		2	x	2	=	4	Nos.				
					D_1		5	x	2	=	10	Nos.				
											14	Nos.	Each	14	142.43	1994.02
	v) 100mm x 10mm				W		9	x	2	=	18	Nos.	Each	18	62.47	1124.46

1	2							3	4	5	6
	(c) Door handle										
	(i) 100mm	W	9	x	1	=	9 Nos.	Each	9	61.09	549.81
	iii) 150mm	D	2	x	2	=	4 Nos.				
		D_1	5	x	2	=	10 Nos.				
							14 Nos.	Each	14	75.37	1055.18
											790293.03
										Deduct 10% Contractors' Profit =	79029.30
											711263.72
										Add for 20 users Septik Tank =	27348.00
										Add for HTW with C.C. platform =	10000.00
										Add for internal electrification (5%) of CW =	35563.19
										Add for sanitary installation LS =	15000.00
										GT =	799174.91

SAY, 800000.00

Rupees Eight Lakh only



General Note:

1. All dimensions are center to center and in mm unless otherwise specified.
2. Drawings are to be read, not scaled.
3. Relevant IS Code is to be followed wherever required.

Doors

D - 1.00mx2.10m

D1 - 0.75mx2.10m

Windows (Aluminium Casement)

W - 1.00mx1.35m

Ventilators (Aluminium Casement)

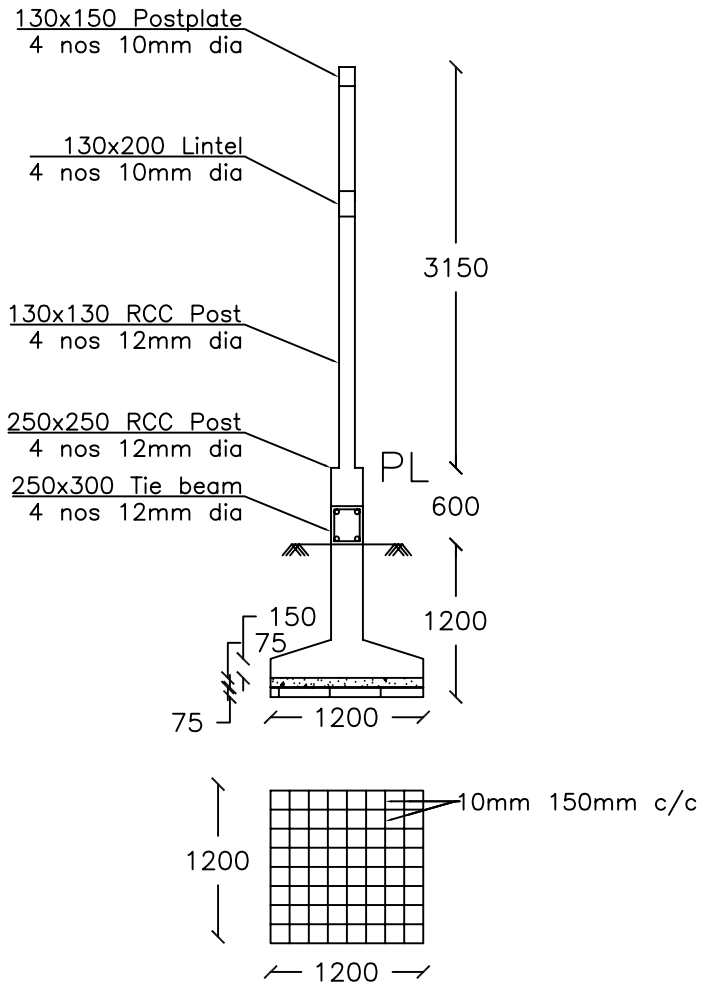
V - 1.00mx0.45m

Drawing Plate 1/3

Construction of Community Hall

Drawn By

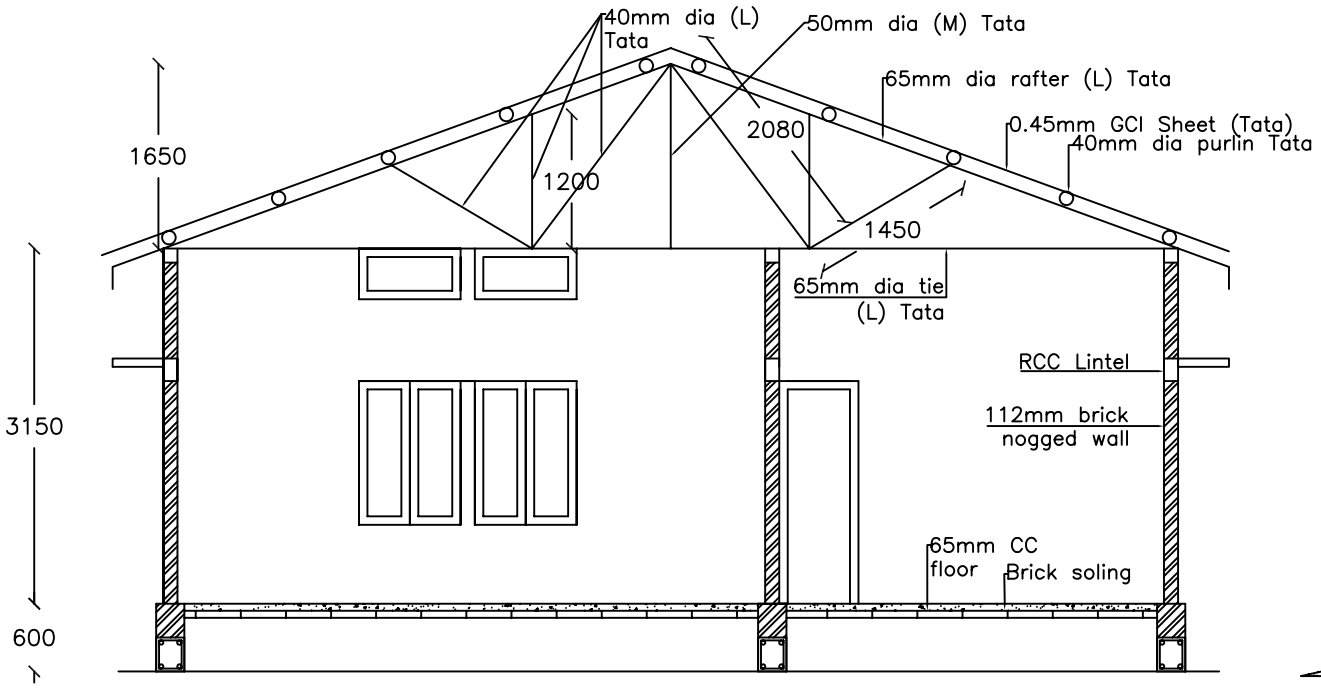
ELEVATION



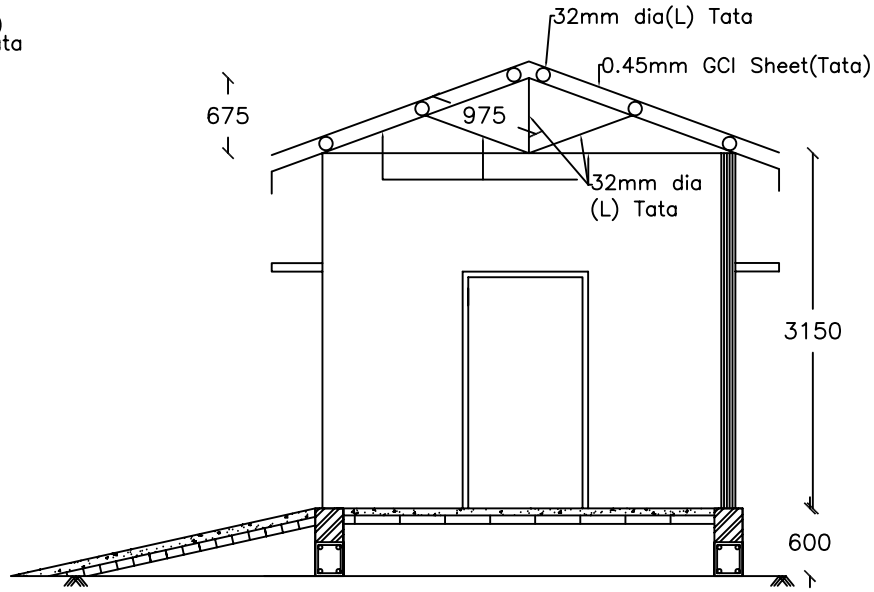
COLUMN & FOOTING

Drawing Plate 2/3

Construction of Community Hall



SECTION AT A–A



SECTION AT B–B

Drawing Plate 3/3

Construction of Community Hall

HAND TUBE WELL

Estimate for installation of HTW with HP No. 6 & C.C Platform & Drain
(As per APHED S.O.R./2008-09 & APWD(Water Supply & Sanitary) S.O.R./2010-11)

ANNEXURE – A

LABOUR CHARGE

Sl No.	Item of work	Unit	Qnty	Rate, Rs.	Amount, Rs.
1	2	3	4	5	6
1/2.1.1	Labour charge for making bore hole of 40 mm dia G.I. pipe up to required depth below ground level and collecting sample of soil at every 3.0 m depth or wherever there is a change of strata in sample boxes with the distinguishing marks including arranging and carriage of necessary boring materials / tools etc. and withdrawing the pipe for lowering well assembly etc. all complete as directed	m	23.00	53.90	1,239.70
2/2.2.1	Labour charge for sinking, lowering, fitting, fixing in position 40 mm dia G.I. pipe with 40 mm dia strainer placed in potable water bearing layer with40 mm dia cone at the bottom of the tube well,washing the bore well etc. and supplyingnecessary jointing materials cutting and threadingthe pipe complete including carriage of materialsand cleaning and priming the tube well allcomplete as directed.	m	18.00	12.50	225.00
3/2.5.1	Labour charge for fitting, fixing force and lift/shallow well hand pump with necessary clamps, nuts, bolts etc firmly on the top of the pedestal including cutting, threading the pipe as necessary with local carriage of materials and commissioning the pump all complete as directed.	Each	1	48.40	48.40
4/2.11.1	Construction of plate form of conventional tube well with cement concrete works in proportion 1:2:4 of 1.50m dia (outside to outside) in two layers with a base layer of concrete of proportion 1:4:8 as per approved drawing No. C.E.(PHE)- 03/05 including necessary earth work and refilling after completion of work all complete as directed.	Each	1	1,929.80	1,929.80
5/2.11.5	Construction of drain with cement concrete works in proportion 1:2:4 in slope 1:50 with a base layer of concrete of proportion 1:4:8 as per respective approved drawings including necessary earth work and refilling after completion of work allcomplete as directed.	m	1.0	282.00	282.00
				Rs.	3,724.90

ANNEXURE – B

COST OF MATERIALS

Sl No.	Item	Unit	Qnty	Rate	Amount
1	Maya hand Pump Hand Pump No. 6 for 40mm dia tube well with all accessories (as per PWD rate)	Each	1	Rs. 1,794.99	Rs. 1,794.99
2	40 mm dia GI Pipe (as per PHE rate)	m	18.0	Rs. 195.30	Rs. 3,515.40
3	40 mm dia BJ Strainer (as per PHE rate)	Each	1	Rs. 911.10	Rs. 911.10
4	40 mm dia C.I. Cone	Each	1	Rs. 20.00	Rs. 20.00
			Total =		Rs. 6,241.49

ABSTRACT OF COST FOR 1(ONE) NO. OF HTW

(a) Labour Charge (Annexure-A) ---------- Rs. 3,724.90

(b) Cost of materials (Annexure-B) ---------- Rs. 6,241.49

Total = Rs. 9,966.39

SAY, Rs. 10,000.00

Rupees Ten Thousand only

SEPTIC TANK

ANNEXURE - C

Detailed Estimate for the Septic Tank 20 Users

(Schedule of Rates for PWD Building (Civil works) 2010-11)

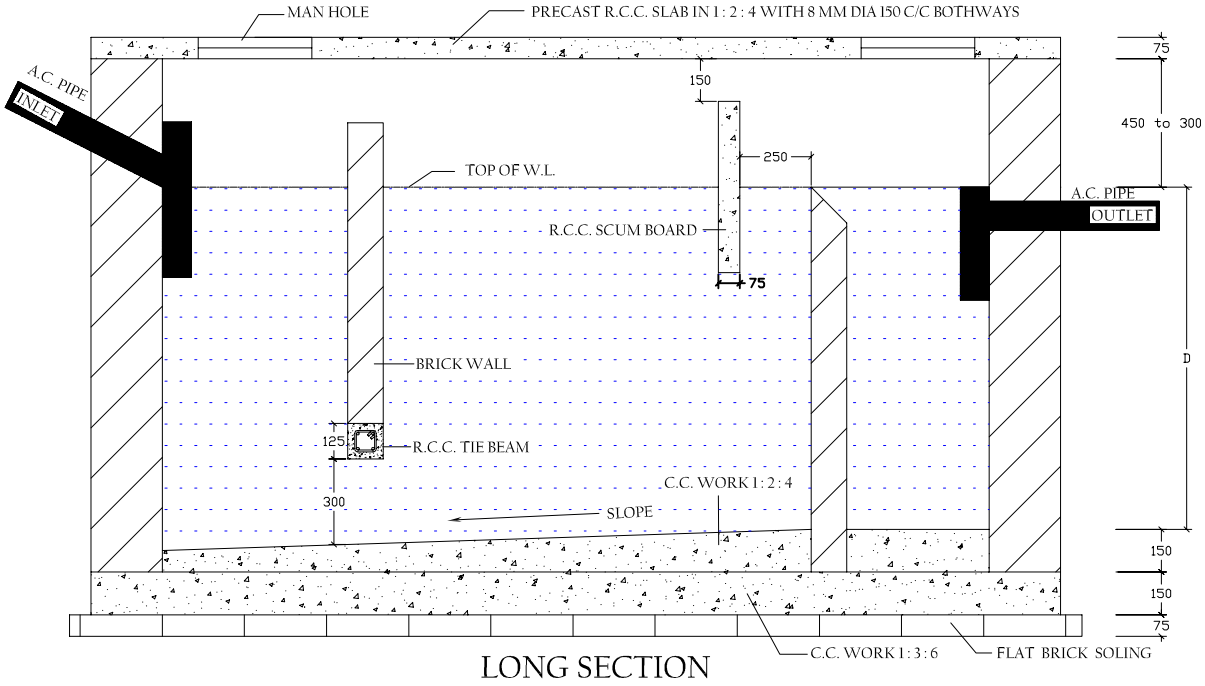
1	1.1	Earth work in excavation for foundation trenches of wall, retaining wall, column etc. including refilling the quantity as necessary after completion of the work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified	Rs.64.67	**Rs.415.18**
2	4.1.1	Providing soiling in foundation and under floor with stone / best quality picked jhama brick, sand packed and laid to level and in panel after preparation of sub gradeas directed including all cost of labour and materials and if necessary dewatering complete a) Brick flat soling 1x 3.65 x 1.60 = 5.84 m2	Rs.286.37	**Rs.1,672.40**
3	2.1.1	Plain cement concrete works with coarse aggregate of sizes 13mm to 32mm in foundation bed for footing steps, walls, brick work etc. as directed and specified including dewatering if necessary, and curing complete (shutterin where necessary shall be measured and paid separately) a) In prop. 1:3:6 1x 3.65 x 1.60x 0.10 = 0.58 m3	Rs.3,733.00	**Rs.2,165.14**
4	2.2.1	Providing and laying plain/ reinforced cement concrete work in prop. 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate, 20mm down) including dewatering if necessary, and curing compelte but excluding cost of form work and reinforcement for reinforced cement concrete work. a) In Substructure upto plinth level Foundation, footing, columns with base tie and plinth beam, pile cap, base slab, retaining wall, walls of septic tank, inspection pit and the like and other works not less than 100mm thick up to plinth level 1x 2.70x 0.90x 0.065 = 0.16 m3 1x 1.00x 0.15x 0.15 = 0.02 m3 T = 0.18 m3	Rs.4,734.15	**Rs.852.15**
5	4.1.4	Brick work in cement mortar with 1st class brick including racking ut joint and dewatering if necessary, curing complete as directed in sub-structure utpo plinth level b) In prop. 1:4 2x 3.45x 0.25x 1.35 = 2.33 m3 2x 0.90x 0.25x 1.35 = 0.61 m3 1x 0.90x 0.125x 1.05 = 0.12 m3 1x 0.90x 0.125x 1.05 = 0.12 m3 = 3.17 m3	Rs.4,401.57	**Rs.13,952.98**
6	6.2.2	15mm thick cement plater in single coat on rough side of single or half brick wall for interrior plastering upto 1st Floor level including arises, internal rounded angles not exceeding 80mm girth, including curing complete as directed. b) In Cement mortar 1:4 01.04 2x 1x 3.65x 0.30 = 2.19 m2 2x 1x 1.40x 0.30 = 0.84 m2 = 3.03 m2	Rs.95.10	**Rs.288.15**
7	25.12	Providing precast RCC slab in prop. 1:2:4 reinforced with 10mm bars @ 150mm cement both ways tying with 20 gauge annealed wire with necessary shuttering including fixing b) 75mm thick slab 1 x 1x 3.45x 1.40 = 4.83 m2	Rs.1,085.06	**Rs.5,240.84**

8	5.1.10	Cement plaster skirting with cement mortar 1:3 finished with a floating coat of neat cement including rounding of junction with floor						
		a) 15mm thick						
			2 x	1x	2.70x	1.35	= 7.29 m2	
			3 x	2x	0.90x	1.20	= 6.48 m2	
			1 x	1x	2.70x	0.90	= 2.43 m2	
							16.20 m2	Rs.170.47 **Rs.2,761.61**

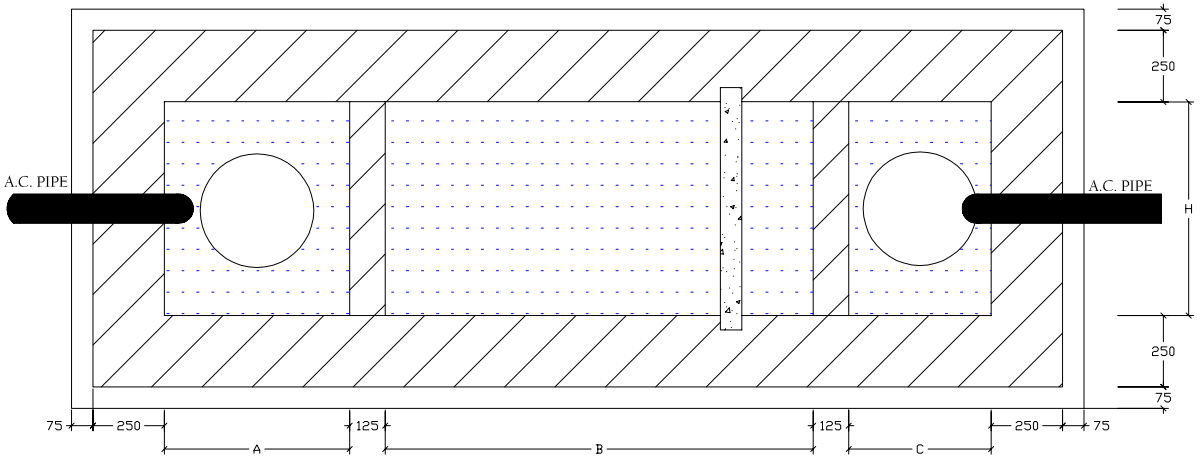
Total Cost = Rs.27,348.45

(Rupees Twenty even Thousand Three Hundred Forty Eight & Paise forty five only)

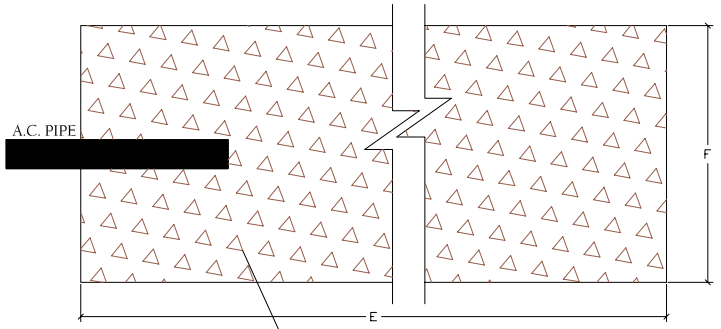
SEPTIC TANK WITH SOAK PIT



LONG SECTION

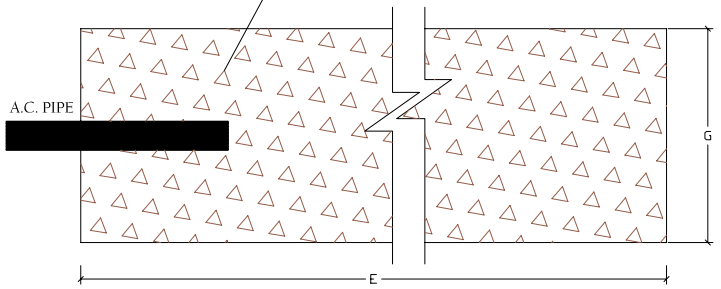


PLAN



SOAK PIT SECTION

BRICK BATS OR DRY CHARCOAL



SOAK PIT PLAN

DRAWN BY
Dhrubajyoti Sarmah
Jr. Engineer
Pachim KAliabor Development Block
Missa : Nagaon : Assam

* ALL DIMENSIONS ARE IN MM