

**OFFICE OF THE ZILLA PARISHAD, MORIGAON**

**Name of work: Construction of Market Complex**

**Name of Programme: 13th Finance Commission Basic Grant, 2012-13**

**Estimated Amount: Rs. 25,00,000.00**

**Name of ZP: Zilla Parishad, Morigaon**

**MORIGAON :: ASSAM**

**Name of Work** : **Model Estimate for construction of market complex under different places of Morigaon District**

**Head** : **Thirteenth Finance Commission Basic Grant, 2012-13**

**Estimated Amount** : **Rs. 25,00,000.00 (Rupees twenty five lakhs) only.**

### **REPORT**

This estimate amounting to Rs. 25,00,000.00 (Rupees twenty five lakhs) only has been framed to show the probable cost construction of market shed under different places of Morigaon District under Thirteenth Finance Commission Basic Grant for the year 2012-13

This detailed estimate has been prepared as per the instruction of the Director, Finance (Economic Affairs) Department, Dispur, Guwahati vide W.T. Message No. FEA (SFC) 165/2010/Pt./82, dated 16/10/2012.

The provision for stalls like scientific Sloghter house (mutton), scientific Sloghter house (chicken), fish stall, vegetable stall, grocery stall, stationary stall, tea stall, cloth stall, Offset Press, Book stall, parlour electrical goods etc. has been made for the unemployed persons in the market complex.

The following provisions has been made in this estimate: -

1. Earth work in excavation
2. PCC Work
3. RCC Work
4. Wood Work in ceiling
5. Brick Work
6. Plastering, flooring
7. Colouring
8. Rolling shutter
9. Tabular roof trush
10. Toilet set
11. Electrification

The rates considered in this estimate as per A.P.W.D. schedule of rates for Civil Works (Bldg.) for 2010-11 and analysis rates on the prevailing market price as on when necessary and 10% less for Contractor's Profit.

All works will be carried out as per the A.P.W.D. specification and relevant I.S. code in practice which are current in the state.

Joint Director (Tech.)  
Office of the Commissioner,  
Panchayat & Rural Development, Assam  
Juripar, Panjabari, Guwahati

Junior Engineer  
Zilla Parishad, Morigaon

**MODEL ESTIMATE FOR CONSTRUCTION OF MARKET COMPLEX UNDER  
GENERAL BASIC GRANT OF 13<sup>TH</sup> FINANCE COMMISSION BASIC GRANT FOR THE YEAR 2012-13 (1<sup>ST</sup> INSTALMENT)**

Item No.	Description of work	Rate	Amount (Rs.)
1	1.1 Earth work in excavation for foundation trances 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 remming etc. and removal of surplus earth with all lead and lifts as directed and specified.  (A) Up to a depth of 2.00m below the existing ground level a) In ordinary soil Post: 40 x 0.90 x 0.90 x 1.00 = 32.40 m <sup>3</sup> Step: 1 x 42.00 x 1.00 x 0.20 = 8.40 m <sup>3</sup> <hr/> 40.80 m <sup>3</sup>	Rs. 64.67	Rs. 2,638.54
2	1.4 Raising low site or toe side around the building with approved soil obtained from out side by truckcarriage including breaking clods, dressing etc. complete including paying land compensation, Municipal gate fees, if any monopoly duty etc. (Profile measurement to be taken and 12.5 % deduction for shrinkage to be made from total quantity) etc. complete as directed and specified including forest royalty within a distance of 8.00km (Forest royalty shall be reimbursed on production of necessary certificate from the forest Authority duly countersigned from DFO concerned  Other than Guwahati 1 x 30.00 x 18.00 x 0.30 = 162.00 m <sup>3</sup>	Rs. 205.52	Rs. 33,294.24
3	4.1.1 Providing soling in foundation and under floor at all level in cluding all cost of labour and materials complete a) Brick flat soiling Post: 40 x 1 x 1.00 x 1.00 = 40.00 m <sup>2</sup> Step: 1 x 1 x 42.00 x 1.00 = 42.00 m <sup>2</sup> Under floor: 1 x 1 x 20.60 x 12.00 = 247.20 m <sup>2</sup> <hr/> A = 329.20 m <sup>2</sup>	Rs. 286.37	Rs. 94,273.00
4	2.1.1 Providing and laying PCC work in foundation b) In prop. 1:4:8 Post: 40 x 1.00 x 1.00 x 0.075 = 3.00 m <sup>3</sup> Step: 1 x 42.00 x 1.00 x 0.075 = 3.15 m <sup>3</sup> <hr/> 6.15 m <sup>3</sup>	Rs. 3,398.10	Rs. 20,898.32
5	18.1.1 Supplying fitting and fixing reinforcement bars conforming to IS for RCC work including straightening, cutting and bending to proper shape and length upto 1st floor level. b) ISI approved super ductile TMT bars i) TATA/SAIL 12mm dia Post: 30 x 4 x 5.50 x 0.89 = 587.40 kg. 10 x 4 x 4.50 x 0.89 = 160.20 kg. T/Beam 1 x 4 x 99.00 x 0.89 = 352.44 kg. Lintel 1 x 4 x 181.00 x 0.89 = 644.36 kg. P/Plate 1 x 4 x 89.20 x 0.89 = 317.55 kg. 8mm dia Jalli 40 x 12 x 1.00 x 0.39 = 187.20 kg. <hr/> 2249.15 kg. = 22.49 Qtl.	Rs. 5,290.41	Rs. 1,18,989.36

Item No.	Description of work						Rate	Amount (Rs.)	
	6mm dia								
	Post	30 x	43 x	1.10 x	0.22 =	312.18 kg.			
		10 x	33 x	1.10 x	0.22 =	79.86 kg.			
	T/Beam	1 x	1301 x	1.20 x	0.22 =	343.46 kg.			
	Lintel	1 x	1206 x	0.80 x	0.22 =	212.26 kg.			
	P/Plate	1 x	595 x	0.90 x	0.22 =	117.81 kg.			
						1065.57 kg.			
					=	10.66 Qtl.	Rs. 5,241.78	Rs. 55,854.84	
6	3.1.1	Providing from work of ordinary timber planking so as to give a rough finish. In sub structure upto plinth							
	3.1.1.1	Foundation footing, bases of Column, tie and the like up to plinth level ii) Using 25mm thick plank.							
		Post	40 x	4 x	0.80 x	0.15 =	19.20 m <sup>2</sup>		
			40 x	4 x	0.52 x	0.15 =	12.48 m <sup>2</sup>		
			40 x	4 x	0.25 x	1.90 =	76.00 m <sup>2</sup>		
						107.68 m <sup>2</sup>	Rs. 140.84	Rs. 15,165.65	
	3.1.1.2	Sides of tiebeam, planth beam, grade beam etc. at or below plinth level ii) Using 25mm thick plank							
		Tie Beam	1 x	2 x	199.00 x	0.25 =	99.50 m <sup>2</sup>	Rs. 191.27	Rs. 19,031.37
	3.1.1.3	Column pillars, post and struts. a) Square, rectangular, polygonal in plan or any shape like Tee/L etc.having plan vertical face ii) Using 25mm thick plank							
			30 x	4 x	0.25 x	3.20 =	96.00 m <sup>2</sup>	Rs. 213.73	Rs. 20,518.08
	3.1.1.4	Sides and soffits of beam, beam haunching cantilever girder, bressumers, lintels and horizontal ties a) for depth not exceeding 1.0m ii) Using 25mm thick plank							
		Lintel	1 x	2 x	181.00 x	0.15 =	54.30 m <sup>2</sup>		
		P/Plate	1 x	2 x	89.20 x	0.20 =	35.68 m <sup>2</sup>		
						89.98 m <sup>2</sup>	Rs. 163.01	Rs. 14,667.64	
7	2.2.1	Providing and laying plain/reinforced cement concrete works in prop 1:2:4:(1cement:2 coarse sand :4 graded stone aggregate, 20mm down) including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work. a) In substructure upto plinth level Foundation, footing, columns with basetie and plinth beam, pile cap, base slab, retaining wall, walls of septic tank, inspectionpit and the like, and other works not less than 100mm thickup to plinth level							
		Column	40 x	0.80 x	0.80 x	0.15 =	3.84 m <sup>3</sup>		
			40 x	0.52 x	0.52 x	0.15 =	1.62 m <sup>3</sup>		
			40 x	0.25 x	1.90 x	0.15 =	2.85 m <sup>3</sup>		
			1 x	199.00 x	0.25 x	0.25 =	12.44 m <sup>3</sup>		
						20.75 m <sup>3</sup>	Rs. 4,734.15	Rs. 98,233.14	

Item No.	Description of work	Rate	Amount (Rs.)
	b) In super structure from plinth level up to 1st floor level.		
	ii) Columns, pillars, posts, struts, suspended floor, roof, landing, shelf and support, balcony, lintel, sill band, beam, girder, bressumer, cantilever, staircase including preparing the top surface and finishing of nosing.		
	Post	30 x 3.60 x 0.25 x 0.25 = 6.75 m <sup>3</sup>	
		10 x 2.40 x 0.25 x 0.25 = 1.50 m <sup>3</sup>	
	Lintel	1 x 181.00 x 0.13 x 0.15 = 3.53 m <sup>3</sup>	
	P/Plate	1 x 89.20 x 0.15 x 0.20 = 2.68 m <sup>3</sup>	
		14.46 m <sup>3</sup>	
8	4.1.4 Brick work in cement mortar with 1st class brick including racking out joint and dewatering if necessary, curing complete as directed in sub-structure upto plinth level.	Rs. 4,929.24	Rs. 71,254.63
	d) In prop 1:6		
		1 x 65.20 x 0.250 x 0.90 = 14.67 m <sup>3</sup>	
		1 x 133.80 x 0.125 x 0.90 = 15.05 m <sup>3</sup>	
	Step:	1 x 42.00 x 0.900 x 0.20 = 7.56 m <sup>3</sup>	
		1 x 42.00 x 0.600 x 0.15 = 3.78 m <sup>3</sup>	
		1 x 42.00 x 0.300 x 0.15 = 1.89 m <sup>3</sup>	
		42.95 m <sup>3</sup>	
9	2.1.3 Providing and laying 25mm thick damp proof coarse with cement concrete in prop 1:1.5:3 with graded stone aggregate of 10mm down nominal size including providing approved damp proof admixture in proportion as recommended by the manufacturer including etc. complete as directed.	Rs. 150.00	Rs. 3,880.50
10	1.3 Earth/Sand filling in plinth in layers not more than 15cm 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 may be necessary.		
	C) With riversand or silt by truck carriage including loading and unli/oading		
	Under floor:	1.00 x 20.60 x 12.00 = 247.20 m <sup>3</sup>	
11	4.1.7 112mm thick 1st class brick nogged wall in cement mortar including racking out joints and curing complete as directed in super structure above plinth upto 1st floor level (Protruding MS rod/torsteel of column to be embeded in cement mortar and will be measured and paid separately)	Rs. 322.75	Rs. 79,783.80
	a) In prop 1:5		
	Walls	1 x 3 x 17.00 x 3.60 = 183.60 m <sup>2</sup>	
		1 x 2 x 12.00 x 3.60 = 86.40 m <sup>2</sup>	
	Top Wall	1 x 1 x 82.00 x 1.20 = 98.40 m <sup>2</sup>	
	Gabble	2 x 0.5 x 17.00 x 3.00 = 51.00 m <sup>2</sup>	
		419.40 m <sup>2</sup>	
12	11.1.1 Providing fitting and fixing anodised aluminium windows and ventilators of standard sections without horizontal glazing bars, jointsmitred and welded fitted with 6mm X 3.15mm lugs 100mm long embeded in CC blocks handles, friction stays, joining cleat, bolting device, locking arrangement, spring catch as required complete as specified and directed for all levels.(cement concrete to be measured and paid separately).	Rs. 499.76	Rs. 2,09,599.34
	a) Side hung and top hung windows and ventilators		
	i) 6mm clear glass		
	V:	1 x 18 x 1.00 x 0.50 = 9.00 m <sup>2</sup>	
		Rs. 4,640.30	Rs. 41,762.70

Item No.	Description of work	Rate	Amount (Rs.)
13	17.3.1 Providing fitting hoisting and fixing of roof trusses including purlins fabricated out of MS black tubes conforming to IS code as per approved design and drawing including providing MS cleats, base plates, bolts and nuts and one coat of red oxide primer as directed.  17.00M 80.30mm OD @ Wt. 7.92kg/m Tie Beam 1 x 5 x 17.00 x 7.92 = 673.20 kg. 60.30mm OD @ Wt. 5.10kg/m Rafter 2 x 5 x 10.50 x 5.10 = 535.50 kg. 2 x 8 x 2.00 x 5.10 = 163.20 kg. 48.30mm OD @ Wt. 4.33kg/m Purlin 2 x 6 x 13.00 x 4.33 = 675.48 kg. V/Purlin 2 x 3 x 13.00 x 4.33 = 337.74 kg. Vertical 2 x 1 x 3.00 x 4.33 = 25.98 kg. 2 x 1 x 2.10 x 4.33 = 18.19 kg. 2 x 1 x 1.80 x 4.33 = 15.59 kg. 2 x 1 x 1.50 x 4.33 = 12.99 kg. 2 x 1 x 1.20 x 4.33 = 10.39 kg. 2 x 1 x 0.85 x 4.33 = 7.36 kg. Slant 2 x 1 x 3.50 x 4.33 = 30.31 kg. 2 x 1 x 2.66 x 4.33 = 23.04 kg. 2 x 1 x 2.10 x 4.33 = 18.19 kg. 2 x 1 x 1.68 x 4.33 = 14.55 kg. 2 x 1 x 1.38 x 4.33 = 11.95 kg. 2 x 1 x 0.95 x 4.33 = 8.23 kg. <hr/> 2581.88 kg. = 25.82 Qtl.		
		Rs. 5,875.00	Rs. 1,51,685.17
14	8.1.2 Providing GCI sheet roofing of TATA Shaktee/SAIL including fitting and fixing of J or L hooks, bolts and nuts with bitumen washer 25mm dia, limpet washer 1.60mm thick excluding cost of roof truss, purlin etc.  Main bldg. 2 x 13.00 x 10.50 = 273.00 m <sup>2</sup> Verandah: 2 x 13.00 x 2.10 = 54.60 m <sup>2</sup> <hr/> 327.60 m <sup>2</sup>		
		Rs. 359.88	Rs. 1,17,896.69
15	8.1.4 Providing Galvd. Iron ridging of TATA Shaktee/ SAIL including supplying and fixing necessary Galvd. Screws and washer etc. complete as directed. b) 0.50mm thick i) 150mm lapping 14.00 RM		
		Rs. 112.23	Rs. 1,571.22
16	9.3.1 Providing wood work in frames of false ceiling, partition etc. sawn, wrough framed hoisted and fixed in position with splkes, nails, MS flats, angle/ cleatswith bolts and nuts complete including kiricide oilling two coats to unexposed surface of timber (MS flats, angle, cleats, bolts and nuts etc. shall be measured and paid separately.  b) Hollock/Bansum/Sundi 16 x 4 x 3.60 x 0.05 x 0.075 = 0.86 m <sup>3</sup> 16 x 4 x 3.00 x 0.05 x 0.075 = 0.72 m <sup>3</sup> 1 x 3 x 12.50 x 0.05 x 0.075 = 0.14 m <sup>3</sup> 1 x 13 x 2.60 x 0.05 x 0.075 = 0.13 m <sup>3</sup> <hr/> 1.85 m <sup>3</sup>		
		Rs. 29,812.40	Rs. 55,193.93

Item No.	Description of work	Rate	Amount (Rs.)
17	7.2.1 Providing fitting and fixing AC building board in ceiling with necessary nails, wood screws including 1st class local wood 50mm x 12mm (Hollock/Bonsum/Sundi) beadings including paintings to timber beads complete as directed (ceiling joist will be measured and paid superately) a) 4.00mm thick		
	1 x 17.00 x 12.00 = 204.00 m <sup>2</sup>	Rs. 269.44	Rs. 54,965.76
18	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.		
	66.00 RM	Rs. 224.81	Rs. 14,837.46
19	5.1.5 65mm thick C.C. floor of 53 mm under layer of CC in prop. 1:3:6 and 12mm thick wearing coarse of cement and plastering in prop. 1:2 laid in panels and finished with a floating coat of neat cement finish.		
	1 x 12.00 x 20.60 = 247.20 m <sup>2</sup>	Rs. 435.43	Rs. 1,07,638.30
20	6.2.2 15mm thick cement plaster in single coat on rough side of single or half brick wall for interior plastering upto 1st floor level including arises, internal rounded angles not exceeding 80mm girth, including curing complete as directed.  c) In cement mortar 1:6		
	2 x 2 x 12.00 x 3.60 = 172.80 m <sup>2</sup>		
	2 x 3 x 14.40 x 3.60 = 311.04 m <sup>2</sup>		
	2 x 82 x 1.20 x 3.60 = 708.48 m <sup>2</sup>		
	Step 1 x 1 x 42.00 x 1.00 = 42.00 m <sup>2</sup>		
	1 x 2 x 42.00 x 0.30 = 25.20 m <sup>2</sup>		
	Upto plinth 1 x 1 x 53.20 x 0.90 = 47.88 m <sup>2</sup>		
	<u>1307.40 m<sup>2</sup></u>	Rs. 95.10	Rs. 1,24,333.74
21	13.2.2 (f) Distemping with dry distemper approved brand and manufacture (two Coats) and of required shade on new wall surface to give an even shade over and including priming coat of white primer after thoroughly brushing the surface free from mortar droppings and other foreign matter and including preparing the surface even and sand papered smooth		
	1307.40 m <sup>2</sup>	Rs. 62.42	Rs. 81,607.91
22	13.6.3 Applying priming coat over new wood based surface over 100mm in width/girth after and including preparing the surface by thoroughly cleaning oil, grease, dirt and foreign matter, sand papering and knotting. b) With ready mixed paint, wood primer (White)		
	Rolling Shutter 8 x 3.60 x 2.50 = 72.00 m <sup>2</sup>		
	8 x 3.00 x 2.50 = 60.00 m <sup>2</sup>		
	4 x 2.50 x 2.50 = 25.00 m <sup>2</sup>		
	Berge board 1 x 67.00 x 0.25 = 16.75 m <sup>2</sup>		
	Ceiling 1 x 1 x 17.00 x 12.00 = 204.00 m <sup>2</sup>		
	<u>377.75 m<sup>2</sup></u>	Rs. 30.91	Rs. 11,676.25

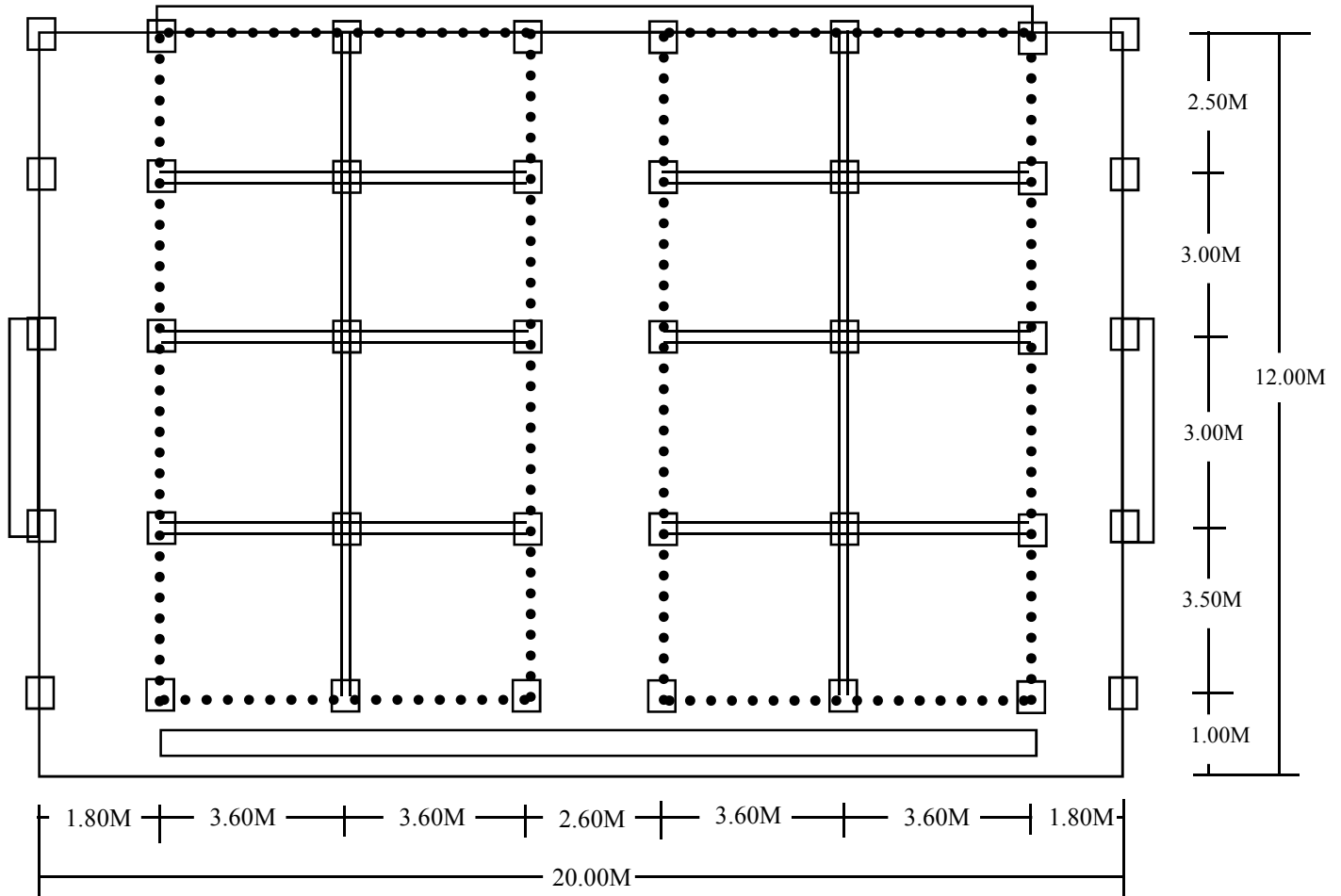
Item No.	Description of work	Rate	Amount (Rs.)
23	18.4.2 Providing roller shutter including necessary hooks, nuts etc. completed as directed		
	8 x 3.60 x 2.50 =	72.00 m <sup>2</sup>	
	8 x 3.00 x 2.50 =	60.00 m <sup>2</sup>	
	4 x 2.50 x 2.50 =	25.00 m <sup>2</sup>	
		<u>157.00 m<sup>2</sup></u>	
		Rs. 2,563.10	Rs. 4,02,406.70
		Total	Rs. 22,12,716.70
	Deduction 10% for contractor's profit		Rs. 2,21,271.67
			<u>Rs. 19,91,445.03</u>
	Add 10% internal and external electrification		Rs. 2,21,271.67
			<u>Rs. 22,12,716.70</u>
	Add contingency and site preparation	L/S	Rs. 29,284.00
			<u>Rs. 22,42,000.70</u>
	Providing toilet block (estimate enclosed)		Rs. 2,58,000.00
		Net	Rs. 25,00,000.70
		Say	Rs. 25,00,000.00

Joint Director (Tech.)  
Office of the Commissioner,  
Panchayat & Rural Development, Assam  
Juripar, Panjabari, Guwahati

Junior Engineer  
Zilla Parishad, Morigaon



**PLAN**  
**FOR CONSTRUCTION OF MARKET COMPLEX UNDER**  
**GENERAL BASIC GRANT OF 13TH FINANCE COMMISSION FOR THE YEAR**  
**2012-13 (1ST INSTALMENT)**

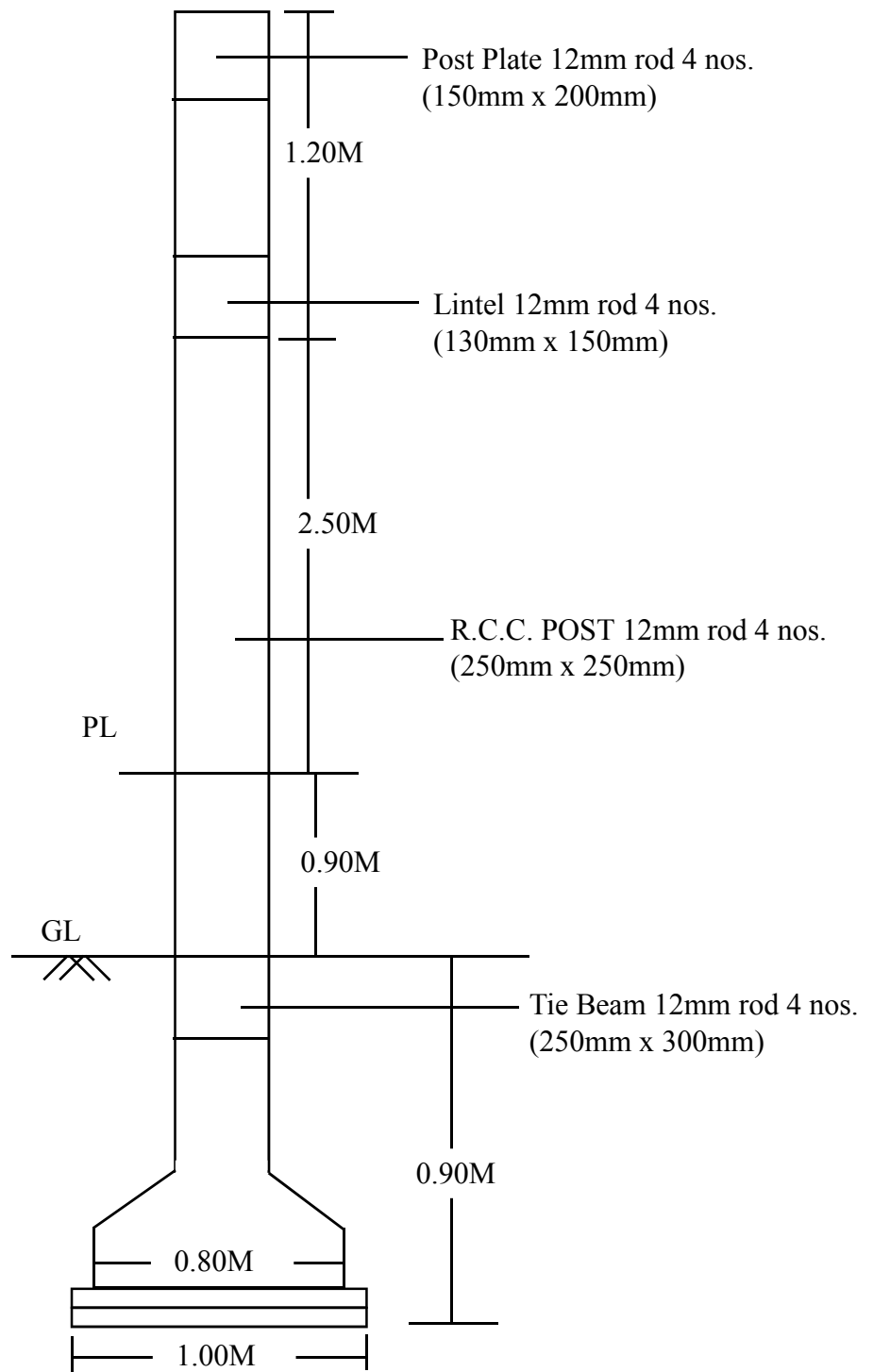


**PLAN**  
**NOT TO SCALE**

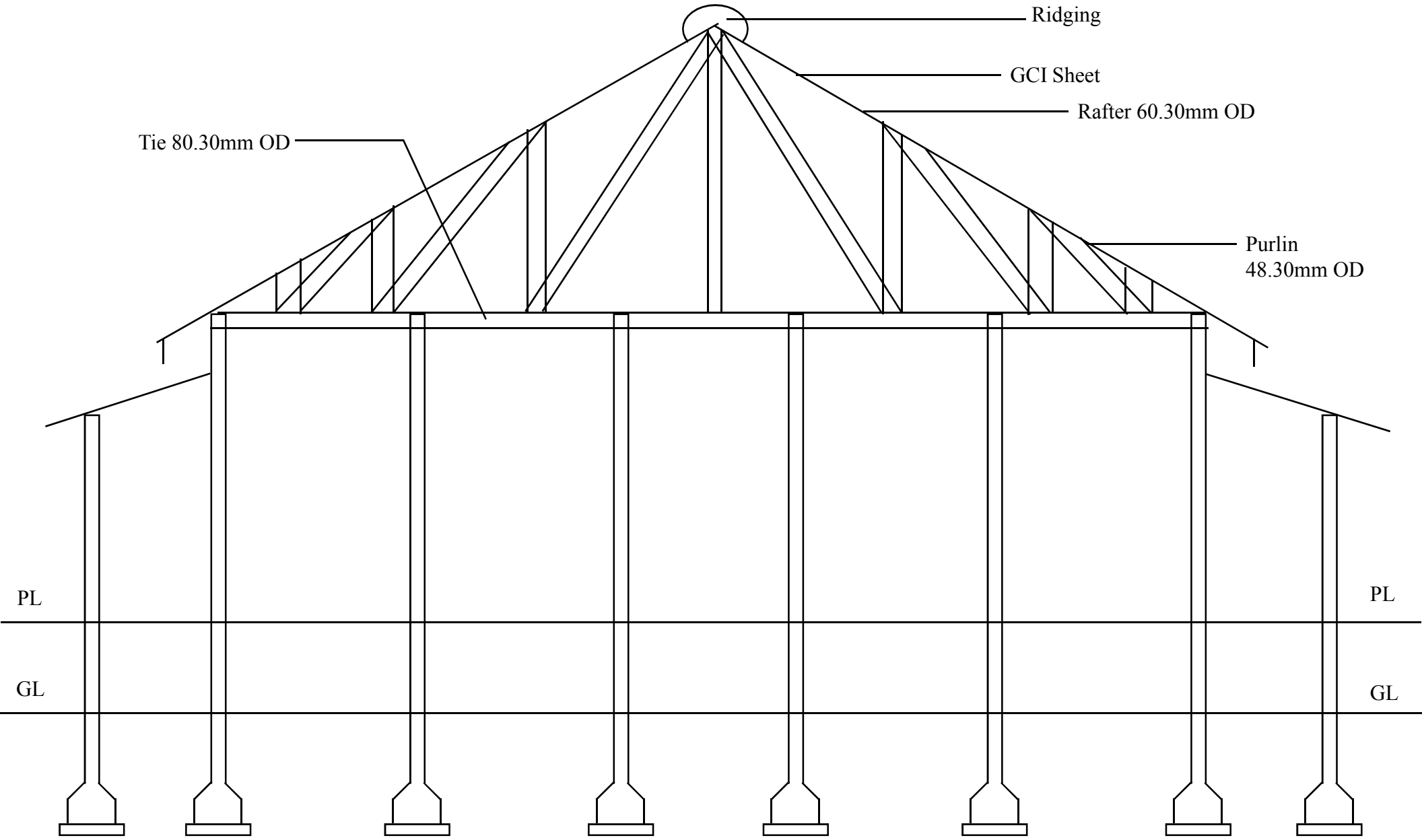
Joint Director (Tech.)  
 Office of the Commissioner,  
 Panchayat & Rural Development, Assam,  
 Juripar, Panjabari, Guwahati

Junior Engineer,  
 Zilla Parishad, Morigaon

**CONSTRUCTION OF MARKET COMPLEX UNDER  
GENERAL BASIC GRANT OF 13TH FINANCE COMMISSION FOR THE  
YEAR 2012-13 (1ST INSTALMENT)**



**DETAILS OF COLUMN FOOTING  
NOT TO SCALE**



**SECTION AT AA**  
**NOT TO SCALE**

Name of work :- Detailed estimate for the construction of Toilet Block

- (1)1.1 Earth work in excavation for foundation trenches of walls, retaining walls, footings of columns, steps and septic tank etc. including refiling (return filling) the quantity as necessary after completing of work, breaking clods in return filling dressing, watering and ramming etc and removal of surplus earth with all lead & lift as directed and specified in following classification of soils including bailing out water where necessary as directed and specified.

Column	6 x	1.20 x	1.20 x	1.50 =	12.960 m <sup>3</sup>
Tie Beam	2 x	4.82 x	0.30 x	0.30 =	0.868 „
	3 x	2.65 x	0.30 x	0.30 =	0.716 „
Under Wall	2 x	2.60 x	0.30 x	0.30 =	0.468 „
	2 x	1.80 x	0.30 x	0.30 =	0.324 „
				<u>Total =</u>	<u>15.336 m<sup>3</sup></u>

(A) Up to depth of 2.0 m below the existing G.L

(a) In Ordinary Soil:

@ Rs 64.67 / Cum                                -                                -                                -                                Rs                                992.00

- (2)4.1.1. Providing brick work soiling in foundation and under floor with stone / best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (a) Brick on flat soling

Col. Footing	6 x	1.20 x	1.20 =	8.64 m <sup>2</sup>
Tie Beam	2 x	14.40 x	0.30 =	8.64 „
	2 x	4.82 x	0.30 =	2.89 „
Under Wall	2 x	2.60 x	0.30 =	1.56 „
	2 x	1.80 x	0.30 =	1.08 „
Floor	2 x	1.50 x	1.80 =	5.40 „
	2 x	1.50 x	1.20 =	3.60 „
	1 x	1.00 x	2.60 =	2.60 „
			<u>Total =</u>	<u>34.41 m<sup>2</sup></u>

@ Rs 286.37 / Sqm                                -                                -                                -                                Rs                                9,854.00

- (3)2.1.1. Plain cement concrete works with coarse aggregate of sizes 13mm to 32 mm in foundation bed for footing, steps, walls, brick works etc. as directed and specified including dewatering if necessary, and curing complete (Shuttering works where necessary shall be measured and paid separately.)

(a) In prop.1:3:6 (1 Cement : 3 Coarse sand : 6 Coarse agg. by volume (Using mixture machine)

Col. Footing	6 x	1.20 x	1.20 x	0.075 =	0.648 m <sup>3</sup>
Under Wall	2 x	2.60 x	0.30 x	0.075 =	0.117
	2 x	1.80 x	0.30 x	0.075 =	0.081
			<u>Total =</u>	<u>0.648 m<sup>3</sup></u>	

@ Rs 3733.63 / Cum                                -                                -                                -                                Rs                                2,419.00

- (4)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 bending to proper shapes and length as per details, supplying and binding with 20 G annealed black wire and placing in position with proper blocks, supports chairs, spacers etc. complete (upto 1st floor level).

16mm Φ                                Col<sup>n</sup>.                                6 x                                4 x                                5.40 =                                129.60 Rm

	PB	Main	2 x	4 x	6.38 =	51.04 „
			3 x	4 x	3.98 =	47.76 „
	FB	Main	2 x	4 x	6.38 =	51.04 „
			3 x	4 x	3.98 =	47.76 „
				<u>Total</u>	=	327.20 Rm
12mm $\Phi$	FB	Extra Top	2 x	2 x	1.36 =	5.44 Rm
			2 x	2 x	1.62 =	6.48 „
			3 x	2 x	1.42 =	8.52 „
				<u>Total</u>	=	20.44 Rm
10mm $\Phi$	Lintel		3 x	4 x	6.10 =	73.20 Rm
			3 x	4 x	3.48 =	41.76 „
			2 x	4 x	1.85 =	14.80 „
				<u>Total</u>	=	129.76 Rm
8mm $\Phi$	<i>Stirrups</i>					
	Col <sup>n</sup> .		6 x	38 x	1.26 =	287.28 Rm
	PB		2 x	42 x	1.01 =	84.84 „
			3 x	21 x	1.01 =	63.63 „
	FB		2 x	42 x	1.01 =	84.84 „
			3 x	21 x	1.01 =	63.63 „
	Slab		1 x	34 x	4.08 =	138.72 „
			1 x	54 x	6.48 =	349.92 „
				<u>Total</u>	=	1072.86 Rm
6mm $\Phi$	Lintel		3 x	32 x	0.55 =	52.80 Rm
			3 x	19 x	0.55 =	31.35 „
			2 x	10 x	0.55 =	11.00 „
				<u>Total</u>	=	95.15 Rm

16mm $\Phi$ :	=	516.98 Kg.
12mm $\Phi$ :	=	18.19 „
10mm $\Phi$ :	=	79.15 „
8mm $\Phi$ :	=	418.42 „
	<u>Total</u>	= 1032.74 Kg.
	=	10.33 Qntl.
6mm $\Phi$ :	=	20.93 „
	=	0.21 Qntl.

(b)(ii) ISI approved - HYSD bar = 10.33 Qntl.  
@ Rs 4746.44 / Qntl - - - Rs 49,031.00

(c) ISI approved - M.S. Rod. = 0.21 Qntl.  
@ Rs 5241.78 / Qntl - - - Rs 1,101.00

(5)3.1.1 Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc height of propping and centering below supporting floor to floor to ceiling not exceeding 4.0 m and removal of the same for in situ reinforced concrete and plain concrete work.

1. Foundation , footings , bases of columns , pile cap , raft and mass concrete works etc. (i)  
Using 38mm thick plank

Column	6 x	4 x	1.20 x	0.25 =	7.20 m <sup>2</sup>
	6 x	4 x	0.25 x	1.70 =	10.20 „
				Total =	17.40 m <sup>2</sup>
				@ Rs 157.05 / Sqm	Rs 2,733.00

2 Sides of tie beams , plinth beams , grade beams etc. at or below plinth level (i) Using  
38mm thick

PB	2 x	2 x	0.30 x	4.78 =	5.74 m <sup>2</sup>
	3 x	2 x	0.30 x	2.63 =	4.73 „
				Total =	10.47 m <sup>2</sup>
				@ Rs 206.67 / Sqm	Rs 2,164.00

3. Columns , pillars , posts & strut (i) Using 38mm thick plank

Column	6 x	4 x	0.25 x	2.65 =	15.90 m <sup>2</sup>
				Total =	15.90 m <sup>2</sup>
				@ Rs 233.94 / Sqm	Rs 3,720.00

4. Sides and soffits of beams , beam haunching , cantilever , girders , bressumers lintels and

Lintel	3 x	2 x	0.15 x	2.38 =	2.14 m <sup>2</sup>
	3 x	2 x	0.15 x	4.78 =	4.30 „
	2 x	2 x	0.15 x	1.80 =	1.08 „
FB	2 x	2 x	0.35 x	4.78 =	6.69 „
	3 x	2 x	0.35 x	2.63 =	5.52 „
				Total =	19.73 m <sup>2</sup>
				@ Rs 179.52 / Sqm	Rs 3,542.00

5. Flat surfaces such as soffits of suspended floors , roofs , landing , cantilever slabs , chajjas ,  
balconies and the like. (i) Using 38mm thick plank

Slab	1 x	6.48 x	4.08 =	26.44 m <sup>2</sup>	
			Total =	26.44 m <sup>2</sup>	
				@ Rs 259.52 / Sqm	Rs 6,862.00

(6) 2.2.1 Providing & laying reinforcement cement concrete works in prop 1:2:4 (1 cement : 2 coarse sand : 4 coarse aggregate 20mm down) 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)

(a) In Sub-Structure up to plinth level

Column Base	6 x	1.20 x	1.20 x	0.25 =	2.160 m <sup>3</sup>
Column	6 x	0.25 x	0.25 x	1.70 =	0.638 „
PB	2 x	0.25 x	0.30 x	4.78 =	0.717 „
	3 x	0.25 x	0.30 x	2.63 =	0.592 „
				Total =	4.107 m <sup>3</sup>
				@ Rs 4734.15 / Cum	Rs 19,443.15

(b) In Super Structure from plinth level up to 1st floor level.

Column	6 x	0.25 x	0.25 x	3.00 =	1.125 m <sup>3</sup>
--------	-----	--------	--------	--------	----------------------

FB	2 x 0.25 x 0.25 x 4.78 =	0.598 „
	3 x 0.25 x 0.25 x 2.63 =	0.493 „
Lintel	3 x 0.15 x 0.15 x 2.38 =	0.161 „
	3 x 0.15 x 0.15 x 4.78 =	0.323 „
	2 x 0.15 x 0.15 x 1.80 =	0.081 „
Slab	1 x 6.48 x 4.08 x 0.10 =	2.644 „
	<b>Total =</b>	<b>5.425 m<sup>3</sup></b>

@ Rs 4929.24 / Cum

- - -

Rs

26,741.13

- (7) 4.1.4. Brick work in cement mortar with 1st class brick including racking out joints and dewatering if necessary, and curing complete as directed in sub-structure up to plinth level. Prop. 1:5

Wall	2 x 0.23 x 0.60 x 4.78 =	1.319 m <sup>3</sup>
	2 x 0.23 x 0.60 x 2.63 =	0.726 „
	2 x 0.12 x 1.05 x 5.28 =	1.331 „
	2 x 0.12 x 1.05 x 1.80 =	0.454 „
Step	2 x 1.20 x 0.15 x 0.90 =	0.324 „
	2 x 1.20 x 0.15 x 0.60 =	0.216 „
	2 x 1.20 x 0.15 x 0.30 =	0.108 „
	<b>Total =</b>	<b>4.478 m<sup>3</sup></b>

@ Rs 4423.20 / Cum

- - -

Rs

19,807.09

- (8) 4.1.7 112mm thick 1st class brick nogged wall in cement mortar including racking out joints and curing complete as directed in super structure above plinth up to 1st floor (protruding M.S. Rod / Tor Steel of collumn to be embedded in cement mortar and will be measured and paid for separately .(b) In Prop. 1:5

Wall	3 x 2.65 x 2.38 =	18.92 m <sup>2</sup>
	1 x 2.65 x 4.78 =	12.67 „
	2 x 2.20 x 4.78 =	21.03 „
	2 x 2.20 x 1.80 =	7.92 „
	<b>Sub Total =</b>	<b>60.54 m<sup>2</sup></b>
Deduct	D= 4 x 0.70 x 2.10 =	5.88 m <sup>2</sup>
	Opening= 2 x 1.10 x 2.10 =	4.62 „
	V= 4 x 0.60 x 0.45 =	1.08 „
	<b>Sub Total =</b>	<b>11.58 m<sup>2</sup></b>
	<b>Total =</b>	<b>48.96 m<sup>2</sup></b>

@ Rs 499.76 / Sqm

- - -

Rs

24,468.25

- (9) 6.2.1. 10mm thick cement plaster in single coat on fair side of brick / concrete wall for interior plastering upto 1st floor level including arrises, internal rounded angle not exceeding 80mm in girth and finished even and smooth including curing complete as directed. (c) In cement mortar 1:6

Wall	3 x 2.90 x 2.63 =	22.88 m <sup>2</sup>
	1 x 2.65 x 5.03 =	13.33 „
	2 x 2.20 x 5.03 =	22.13 „
	2 x 2.20 x 1.80 =	7.92 „
	<b>Sub Total =</b>	<b>66.26 m<sup>2</sup></b>

Deduct	D=	4 x	0.70 x	2.10 =	5.88 m <sup>2</sup>
	Opening =	2 x	1.10 x	2.10 =	4.62 „
	V=	4 x	0.60 x	0.45 =	1.08 „
				<u>Sub Total =</u>	<u>11.58 m<sup>2</sup></u>
				Total =	54.68 m <sup>2</sup>

@ Rs 76.48 / Sqm

- - - Rs 4,181.93

- (10) 6.2.2. 15mm thick cement plaster in single coat on rough side of single or half brick wall for interior plastering upto 1st floor level including arrises, internal rounded angle not exceeding 80 mm in girth and finished even and smooth including curing complete as directed. (c) In cement mortar 1:6

Wall		3 x	2.65 x	3.13 =	24.88 m <sup>2</sup>
		1 x	2.65 x	5.53 =	14.65 „
		2 x	2.20 x	5.03 =	22.13 „
		2 x	2.20 x	1.80 =	7.92 „
				<u>Sub Total =</u>	<u>69.58 m<sup>2</sup></u>

Deduct	D=	4 x	0.70 x	2.10 =	5.88 m <sup>2</sup>
	Opening =	2 x	1.10 x	2.10 =	4.62 „
	V=	4 x	0.60 x	0.45 =	1.08 „
				<u>Sub Total =</u>	<u>11.58 m<sup>2</sup></u>
				Total =	58.00 m <sup>2</sup>

@ Rs 95.10 / Sqm

- - - Rs 5,515.80

- (11) 12.4. Providing, fitting and fixing PVC Door shutters of Duroplast DPS 3720 make made from extruded PVC stiles and rails made from rigid PVC multicavity hollow chamber section of size 90mm x 37mm ( Tolerance +\_ 1mm ) . The corners of the stiles and rails shall be metred out and fixed to each other with the help of solid plastic L- shaped brackets or M.S. rectangular tubular galvanised two nos of size 200mm x 100mm and 100mm x 100mm at each corner by self tapping steel crews . PVC multicavity hollow section of size 105mm x 37mm shall be fixed in the middle by aluminium cleat and steel screws as lock rail .The section frame shall then be filled with PVC panels of approved colour of size 100mm x 20mm . The two numbers of bright steel rods of 6mm diameter shall be inserted horizontally through stiles and panels with two numbers of checknuts and washers all omplete as specified and directed at all levels . ( Door fixtures and fittings to be measured and paid seperately ) .

D=		4 x	0.70 x	2.10 =	5.88 m <sup>2</sup>
----	--	-----	--------	--------	---------------------

@ Rs 1221.30 / Sqm

- - - Rs 7,181.24

- (12)1.3 Earth/Sand filling in plinth in layer not more than 150mm thick including necessary, carriage, watering, raming 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 (predominently non plastic) by truck carriage including loading and unloading.

		2 x	2.64 x	2.88 x	0.60 =	9.124 m <sup>3</sup>
--	--	-----	--------	--------	--------	----------------------

@ Rs 322.75 / Cum

- - - Rs 2,944.77



- (13) 65mm thick cement concrete floor consisting of 50mm under layer of cement concrete 1 : 3 : 6 (1cement : 3 coarse sand : 6 coarse agg. Of size 25mm down) and 15mm thick wearing layer in cement concrete 1 : 1 : 2 (1cement : coarse sand : 2 coarse agg. Of size 10mm down laid in panels and finished with a floating coat of neat cement finish ( using cement slurry for boad @ 2.75Kg Per sq.m of floor area) including curing etc. complete as directed.

$$2 \times 2.64 \times 2.88 = 15.21 \text{ m}^2$$

@ Rs 449.48 / Sqm - - - Rs 6,836.59

- (14) Pre construction anti-termite treatment with aqueous emulsion having concentration 1:19 with chloropirophose solution ( tricel or equivalent ) and water .This provides emulsion containing 1% chloropirophose solution (by weight) applying in the junction of wall, column with the floor before laying floor and after opration of item no.-26.1.3. above making a channel 30mmx30mm all over the wall and making rod holes @ 1l litre per square meter of vertical plinth wall surface the building so as to soak the soil with emulsion up to the ground level and refill the holes and channel with the original materials obtained in making channels. (supplying of necessary tools and accessories by the contractor) as per the direction of the Department complete.

$$\text{From Sl No.- 21} = 15.21 \text{ m}^2$$

@ Rs 167.20 / Sqm - - - Rs 2,543.11

- (15) 5.7.1.2 Providing Ceramic tiles of approved quality size , shape and thickness not less than 8 mm of Johnson brand on floors , wall , skirtings , risers and treads of steps over cement mortar 15mm thick in prop 1:3 ( 1 cement : 3 coarse sand ) including cutting where necessary finished with flush pointing with Fix A Tile ( Choksey / Sika / Pedelite /Rouf)/ BalEndura , white cement slurry mixed with approved pigment to match shade of tiles complete at all levels as specified and directed . (Cement plastering will be measured and paid seperately). ( The contractor will have to use the brand approved by the Department . Coloured pigment should be in conformity with colour of tiles and as approved and directed by the Department ). (Walls mean both interior and exterior walls).

a) Normal Range (Sizes 200 mm x 200 mm and above)

	Wall	3 x 1.50 x 2.63 =	11.84 m <sup>2</sup>		
		1 x 1.50 x 5.03 =	7.55 „		
		2 x 1.50 x 5.03 =	15.09 „		
		2 x 1.50 x 1.80 =	5.40 „		
		Sub Total =	39.88 m <sup>2</sup>		
Deduct	D=	4 x 0.70 x 2.10 =	5.88 m <sup>2</sup>		
	Opening =	2 x 1.10 x 2.10 =	4.62 „		
		Sub Total =	10.50 m <sup>2</sup>		
		Total =	29.38 m <sup>2</sup>		
		@ Rs 526.37 / Sqm - - -		Rs	15,464.75

- (16) (a) Applying one coat of cement primer of approved brand and manufacture on new wall surface after thoroughly brooming the surfaces free from mortar droppings and other foreign matter and including preparing the surface even and sand papered smooth .

$$\text{Deduct} = (54.68 + 58.00) - 29.38 = 83.30 \text{ m}^2$$

$$\text{Total} = 83.30 \text{ m}^2$$

@ Rs 32.63 / Sqm - - - Rs 2,718.08

- (17) (b) Finishing wall with water proofing cement paint of approved brand and manufacture and of required shade on new wall surface (two coats ) to give an even shade after thoroughly all dirt and remains of loops powered materials.

From Above = 83.30 m<sup>2</sup>  
 @ Rs 40.83 / Sqm - - - Rs 3,401.14

- (18) 15.2. Supplying , fitting , fixing anodised 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 ( anodised to bright natural matt & satin finished)

(a) Sliding door bolts

(ii) 250mm x 16mm = 4 Nos  
 @ Rs 240.37 / nos - - - Rs 961.48

(b) Tower bolts

(ii) 250mm x 12mm = 8 Nos  
 @ Rs 119.59 / nos - - - Rs 956.72

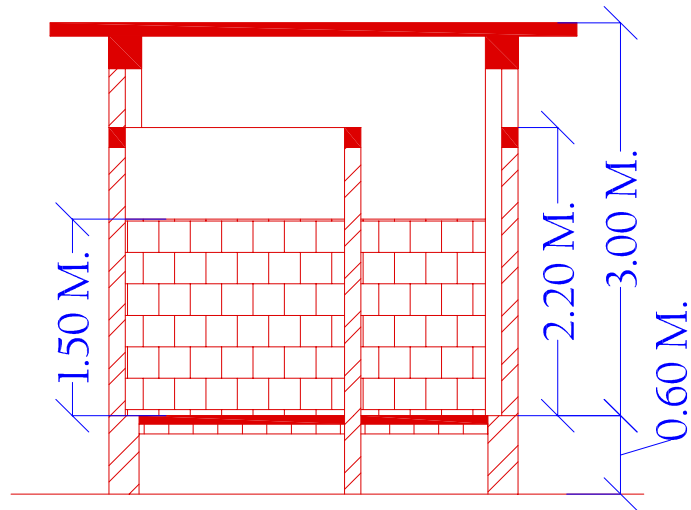
(c) Door handles

(ii) 150mm = 8 Nos  
 @ Rs 75.37 / nos - - - Rs 602.96

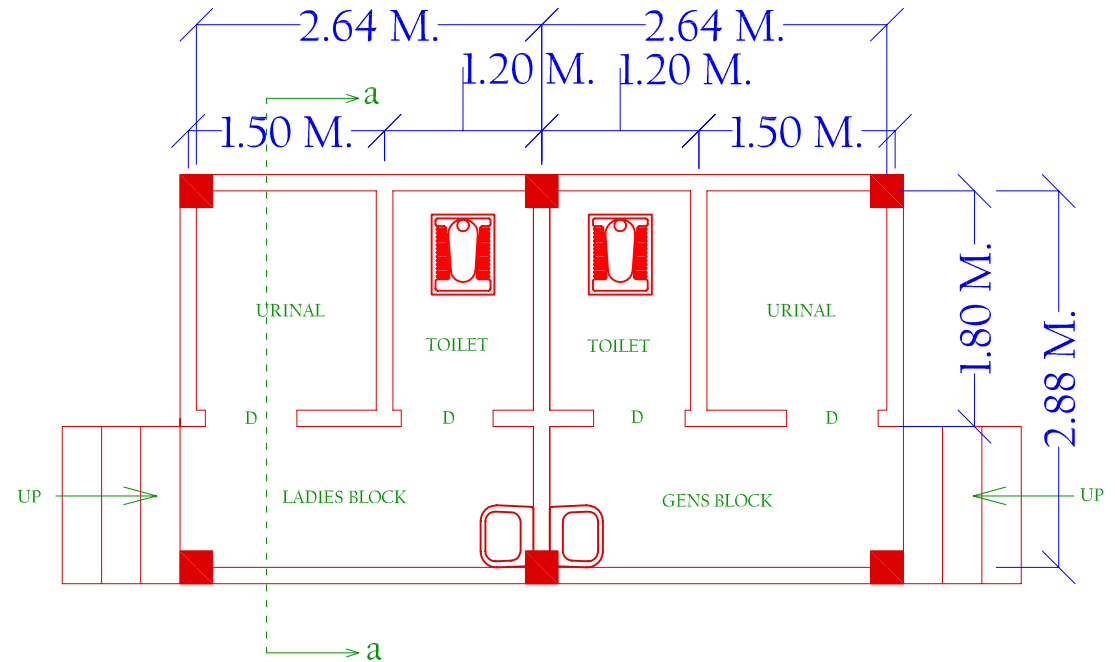
(19). Sanitary Fittings (L/S) Rs 19,000.00

Total =	Rs	2,45,186.19
Less 10% Contractor' Profit =	Rs.	24,518.62
Cost of Civil works =	Rs.	2,20,667.57
Internal Electrification (4 % cost of civil work)	Rs.	8,826.70
Sanitation (8 % cost of civil work)	Rs.	17,653.41
Water Supply (5 % cost of civil work)	Rs.	11,033.38
Total =	Rs.	2,58,181.06
Say =	Rs.	2,58,000.00

# PLAN AND SECTION OF TOILET BLOCK



**SECTION THROUGH A-A**



**PLAN**

## DETAILS

1. FOOTING OF ALL COLUMN = 1.20 X 1.20 M.
2. ALL COLUMN SIZE = 0.25 X 0.25 M.  
REINF. = 4-16 Ø AND 8 Ø STIRRUPS
3. PLINTH BEAM SIZE = 0.25 X 0.30  
REINF. = 4-16 Ø AND 8 Ø STIRRUPS
4. FLOOR BEAM SIZE = 0.25 X 0.35  
REINF. = 4-16 Ø AND 8 Ø STIRRUPS
5. LINTEL SIZE = 0.15 X 0.15  
REINF. = 4-10 Ø AND 6 Ø STIRRUPS