

Name of Work: Construction of Market Shed for PRIs in Assam under Thirteenth Finance Commission.

Estimated Amount: ₹25, 00,000.00

(Rupees twenty five lakhs) only

Name of work :-

Construction of market shed at

year 2011-12.

under SGSY for the

Name of District : I

Estimated Cost : Rs. 25,00,000.00

REPORT

This estimate amounting to Rs. 25,00,000.00 (Rupees Twenty Five Lakhs) only has been prepared by the Junior Engineer, . probable cost for Construction of market shed at Ramesuburi Market under SGSY for the year 2011-12.

The following provision are provided in this estimate

1/ Construction of Market shed

2/ Earth filling

In the estimate rates are accepted as per Schedue of Rate for P.W.D. Building for all divisions under Assam P.W.D. 2010-11.

All Work will be carried out as per general specification cureent in the state of Assam.

NAME OF SCHEME: Construction of market shed at year 2011-12.

ABSTRACT

(Rupees T	wenty	Five Lakhs) Only
Say,	Rs.	25,00,000.00
Grand Total =	Rs.	24,99,942.75
Add 1% for contingency =	Rs.	24,751.91
Total =	Rs.	24,75,190.84
Deduction 10% for Contractor's Profit =	Rs.	2,75,021.21
Total =	Rs.	27,50,212.05
2. Cost of Earth Filling	Rs.	9,42,775.68
Cost of Market Shed	Rs.	18,07,436.37

Name of work :-

Construction of market shed at Ramesuburi Market under SGSY for the year 2011-12.

(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.

Column	31 x 1.00 x	1.00 x 1.30 =	40.30 m^3
	31 x 0.90 x	$0.90 \times 1.00 =$	25.11 ,,
Under Wall	4 x 18.00 x	$0.30 \times 0.75 =$	16.20 "
	2 x 13.00 x	$0.30 \times 0.75 =$	5.85 "
	2 x 16.60 x	$0.30 \times 0.75 =$	7.47 "
	2 x 16.60 x	$0.30 \times 0.75 =$	7.47 "
	31 x 2.10 x	$0.30 \times 0.75 =$	14.65 "
	4 x 3.30 x	$0.30 \times 0.75 =$	2.97 ,,
		Total =	120.020 m ³

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

(a) In Ordinary Soil:

@ Rs 64.67 / Cum

s 7,761.69

(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.

2 x 4 x 1 x	1.90 x 2.70 x 1.50 x 20.00 x 16.50 x	1.90 = 0.90 = 1.50 =	7.22 ,, 10.26 ,, 5.40 ,, 30.00 ,, 24.75 ,,
2 x 4 x	2.70 x 1.50 x	1.90 = 0.90 =	10.26 5.40
2 x	2.70 x	1.90 =	10.26
2 x	1.90 x	1.90 =	7.22 ,,
4 x	2.20 x	1.90 =	100.32 ,,
4 x	3.30 x	0.30 =	3.96 ,,
1 x	2.10 x	0.30 =	19.53 ,,
2 x	16.60 x	0.30 =	9.96 ,,
2 x	16.60 x	0.30 =	9.96 ,,
2 x	13.00 x	0.30 =	7.80 ,,
4 x	18.00 x	0.30 =	21.60-,,
1 x	0.90 x	0.90 =	25.11 "
1 x	1.00 x	1.00 =	31.00 m ²
	1 x 4 x 2 x 2 x 2 x 1 x 4 x	1 x 0.90 x 4 x 18.00 x 2 x 13.00 x 2 x 16.60 x 2 x 16.60 x 1 x 2.10 x 4 x 3.30 x	1 x 1.00 x 1.00 = 1 x 0.90 x 0.90 = 4 x 18.00 x 0.30 = 2 x 13.00 x 0.30 = 2 x 16.60 x 0.30 = 2 x 16.60 x 0.30 = 1 x 2.10 x 0.30 = 4 x 3.30 x 0.30 = 4 x 2.20 x 1.90 =

@ Rs 286.37 / Sqm

s 87,878.36

(3)2.1.1 Plain cement concrete works with coarse aggregate of sizes 13mm to 32 mm in foundation bed for footting, 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.) (1:3:6)

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2.325 m<sup>3</sup>
                               31 \times 1.00 \times 1.00 \times 0.075 =
Col. Footing
                               31 \times 0.90 \times 0.90 \times 0.075 =
                                                                             1.883 "
                                4 \times 18.00 \times 0.30 \times 0.075 =
                                                                             1.620 .,
 Under Wall
                                                                             0.585 "
                                2 \times 13.00 \times 0.30 \times 0.075 =
                                                                             0.747 ,,
                                2 \times 16.60 \times 0.30 \times 0.075 =
                                2 \times 16.60 \times 0.30 \times 0.075 =
                                                                             0.747 ,,
                                                                             1.465 ,,
                               31 \times 2.10 \times 0.30 \times 0.075 =
                                                                             0.297 ,,
                                4 \times 3.30 \times 0.30 \times 0.075 =
        Ramp
                                                                             0.405 "
                                4 \times 1.50 \times 0.90 \times 0.075 =
                                                                            10.074 m<sup>3</sup>
                                                            Total =
                                                                                                        37,612.59
                                                                                             Rs
                  @ Rs 3733.63 / Cum
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(4)18.1. 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).

Column 12mm Φ		31 x	$4 \times 5.10 =$	632.40 Rm
Column		31 x	$4 \times 3.80 =$	471.20
Post plate 12mm Φ		2 x	$4 \times 20.50 =$	164.00 "
rost plate 1211		2 x	$4 \times 15.10 =$	120.80 "
* *			Total =	1388.40 Rm
			=	12.36 Qntl.
ColumnJali 10mmФ	31 x	2 x	$7 \times 1.00 =$	434.00 Rm
Columbus	31 x	2 x	$6 \times 0.90 =$	334.80 "
			Total =	768.80 Rm
			=	4.77 Qntl.
				pt.
Stirrups Column		31 x	$8 \times 0.85 =$	210.80 Rm
6mm	•	31 x	$25 \times 0.84 =$	651.00 "
		31 x	$6 \times 0.85 =$	158.10 "
		31 x	$14 \times 0.84 =$	364.56 "
Post plate		2 x	$133 \times 0.70 =$	186.20 ,,
		2 x	$100 \times 0.70 =$	140.00 ,,
			Total =	1710.66 Rm
			-	3.76 Qntl.

- (5)3.1.1 Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and proping etc hight of proping 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 25mm thick plank

Column	31 x	4 x 1.00	x = 0.10 =	12.40 m ²
	31 x	4 x 0.23	x = 1.50 =	42.78 ,,
	31 x	4 x 0.90	x = 0.10 =	11.16 ,,
	31 x	4 x · 0.23	x 1.20 =	34.22 ,,
			Total =	100.56 m ²

@ Rs 157.05 / Sqm -

Rs 15,792.95

19,145.65

2. Columns , pillars , posts & strut (i) Using 25mm thick plank

3. Sides and soffits of beams beam haunching, cantilever, girders bressumers lintelsand horizontal ties. (i) Using 25mm thick plank

Post Plate $2 \times 2 \times 0.20 \times 20.00 = 16.00 \text{ m}^2$ $2 \times 2 \times 0.20 \times 15.00 = 12.00$, Total = 28.00 m² @ Rs 179.52 / Sqm

Rs 5,026.56

26,321.87

Rs

- (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	31 x	1.00 x	1.00 x	0.10 =	3.100 m ³	
Column	31 x	0.23 x	0.23 x	1.50 =	2.460	
	31 x	0.90 x	0.90 x	0.10 =	2.511 "	
	31 x	0.23 x	0.23 x	1.20 =	1.968 ,,	
			•	Total =	5.560 m ³	•
@ Rs	4734.15/0	Cum			-	Rs

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

Column 31 x 0.20 x 0.20 x 3.30 = 4.092 m³ 31 x 0.15 x 0.15 x 2.30 = 1.604 ,, 2 x 0.15 x 0.20 x 20.00 = 1.200 ,, 2 x 0.15 x 0.20 x 15.00 = 0.900 ,, Total = 7.796 m³

@ Rs 4875.71 / Cum - - - Rs 38,011.04

(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

@ Re	4423 20 / 6			Total =	82.407 m^3
	4 x	1.5 x	$0.23 x_{2}$	0.90 =	1.242 ,,
Ramp		0.9 x			1.987 ,,
D		2.10 x			22.460 ,,
				1.50 =	11.454 "
				1.50 =	11.454 "
				1.50 =	8.970 "
Wall				1.50 =	24.840 m ³

@ Rs 4423.20 / Cum

Rs 3,64,502.64

(8) 4.1.7112mm 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 .

> Wall $2 \times 18.00 \times 1.50 =$ 54.00 m² $2 \times 13.00 \times 1.50 =$ 39.00 " $29 \times 2.10 \times 1.50 =$ 91.35 " Total = @ Rs 518.62 / Sqm Rs 95,607.60

(9) 6.2. 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
$$2 \times 18.60 \times 1.50 = 55.80 \text{ m}^{2}$$

$$2 \times 14.40 \times 1.50 = 43.20 \text{ ,}$$

$$29 \times 2.10 \times 1.50 = 91.35 \text{ ,}$$

$$31 \times 0.80 \times 1.60 = 39.68 \text{ ,}$$

$$31 \times 0.60 \times 0.60 = 11.16 \text{ ,}$$

$$Total = 241.19 \text{ m}^{2}$$

@ Rs 76.48 / Sqm

Rs 18,446.21

15mm thick cement plaster in single coat on rough side of single or half (10)6.2.2. 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
$$2 \times 18.60 \times 1.50 = 55.80 \text{ m}^2$$

 $2 \times 14.40 \times 1.50 = 43.20$,
 $29 \times 2.10 \times 1.50 = 91.35$,
 $\boxed{\text{Total}} = 190.35 \text{ m}^2$
@ Rs 95.10 / Sqm

(11) Providing fitting, hoisting and fixing of roof trusses including purlins fabricated 18.3.1. 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 drawings as directed.

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Kg/m
        Tie (76.1 OD)
                                                                             519.680 Kg
                                        1 x
                                                16 \times 5.60 \times 5.80 =
     Rafter (76.1 OD)
                                        2 x
                                                16 \times 3.60 \times 5.80 =
                                                                             668.160 ,,
     Purlin (42.4 OD)
                                        4 x
                                                 4 \times 17.25 \times 2.59 =
                                                                              714.840 ..
 Tie inclined (33.7 OD)
                                        2 x
                                                16 \times 0.80 \times 2.01 =
                                                                               51.456 ,,
                                                16 \times 0.95 \times 2.01 =
                                        2 x
                                                                               61.104 .,
                                       2x
                                                16 \times 1.16 \times 2.01 =
                                                                               74.611 ...
 Struts (33.7 OD)
                                       2 x
                                                16 \times 0.35 \times 2.01 =
                                                                               22.512 ..
                                       2 x
                                                16 \times 0.68 \times 2.01 =
                                                                               43.738 ,,
                                       2 x
                                                16 \times 0.95 \times 2.01 =
                                                                               61.104 "
                                                16 \times 1.30 \times 2.01 =
                                        1 x
                                                                               41.808 ,,
Gusset plate (10 mm) 2 \times 16 \times 3 \times 0.08 (Area) \times 78.50 =
                                                                             602.880 ,,
                           2 \times 16 \times 2 \times 0.120 (Area) \times 78.50 =
                                                                             602.880 .,
                           2 \times 8 \times 1 \times 0.123 (Area) \times 78.50 =
                                                                             154.488 "
                           2 \times 8 \times 1 \times 0.170 (Area) \times 78.50 =
                                                                             213.520 ,,
                           2 \times 16 \times 1 \times 0.070 (Area) \times 78.50 =
                                                                             175.840 ,,
  Base plate (12 mm) 1 \times 16 \times 1 \times 0.023 (Area) \times 94.20 =
                                                                               33.912 ,,
                                                                 Total =
                                                                           4042.533 Kg
                                                                                40.43 Qtnl.
                          @ Rs 5875.00 / Otnl
                                                                                              Rs
                                                                                                      2,37,498.80
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(12) Providing galvd, iron ridging of TATA Shaktee /SAIL including supplying and 8.1.4. fixing necessary galvd, screws / washers etc. complete as directed. (C) 0.60 mm thick, 150mm laping

(13) Providing corrugated galvd. Iron sheet roofing of TATA Shaktee /Sail 8.1.2 including fitting and fixing necessary galvd.J or L hooks, bolts and nuts 8mm dia with bitumen washer 25mm dia x 3mm thick 1nd 1.6 mm thick limpet washer complete excluding cost of roof truss, purlin etc. (roof trusses and purlin etc. to be measured and paid seperately). (d) 0.63 mm thick.

$$2 \times 3.60 \times 19.40 = 139.68 \text{ m}^{2}$$

$$2 \times 3.60 \times 16.10 = 115.92 \text{ ,}$$

$$\text{Total} = 255.60 \text{ m}^{2}$$

$$\text{@ Rs } 425.09 / \text{Sqm}$$

$$\text{Rs} 1,08,653.00$$

(14) Providing , fitting and fixing A.C. building board in celing with necessary 7.2.1. nails,wood screws including lst class local wood 50 mm x 12 mm (hollock / bonsum / sundi) beading including painting two coats to timber beads complete as directed (celling joist to be measured and paid separately). (6 mm thick)

			6 x	5.60 x 2 5.60 x 1	0.00 =	672.00 m ²		
					otal =			
		@ Rs 292.15 /	Sqm		otai -	834.40 m ²	Rs	2 42 760 00
(15)1	Tax and other d river sand or sill loading and unloa	age, watering, ing payment of I uties and taxes a: (predominently ading.	raming et and compe s may be n non plast	c. completensation , lecessary. ic) by tru	ete as Forest R	directed an Royalty , Sale	g d s	2,43,769.96
	Flo		x 2.20 x	1.90 x	0.50 =	100.320 m ³		
			x 1.90 x x 2.70 x			7.220 ,,		
	Rar		x 1.50 x			10.260 ,,		
	Passa		x 20.00 x			5.400 ,, 30.000 ,,		
		-	x 16.50 x			24.750 ,,		
				********	otal =	177.950 m ³		
		@ Rs 322.75 /	Cum				Rs	57,433.36
(16)	65mm thick cem							07,400.00
	25mm down) and (1cement : coars and finished with slurry for boad complete as direct	a floating coat 2.75Kg Per	e agg. Of of neat lo	size 10mr ement fir	n down l	laid in panels		
	Flo		24 x	2.20 x 1	.90 =	100.32 m ²		
				1.90 x 1		7.22 ,,		
	_			2.70 x 1		10.26 "		
	Ram	*		1.50 x 0		5.40 "		
	Passag	ie.		20.00 x 1		30.00 "		
			1 X I	6.50 x 1		24.75 ,,		
		@ Rs 449.48 / S	Sam	10	tal =	177.95 m ²	_	
		C. 10.107.	odm	_	-	-	Rs	79,984.97
(17) 13.2.1.	(a) Colour washing priming coat of brooming the surfamatter.	white washing to	o givean	even sha	ofte abo	r thoroughb.		
	(Building -A+B)	From Sl No 9	& 10	`	***************************************	431.54 m ²		
		@ Rs 21.40 / Sq			_	431.34 m	Do	0.224.00
							Rs	9,234.96
	Add for Services :				-	Total =	Rs	15,85,470.50
	1	/ For internal elec	trification @	@ 9% of C	ivil Cost		Rs.	1,42,692.35
	2	For normal prep	aration of s	site @ 1%	of Civil (Cost	Rs.	15,854.71
	3.	For external election of Civiline @ 4% of Civiline	ctrification v	with substa	ation and	L.T./H.T.	Rs.	63,418.82
						Total =	Rs.	18,07,436.37

ESTIMATE OF EAW IN FILLING

Name of work :-

Construction of market shed at Ramesuburi Market under SGSY for the year 2011-12.

(1) 1.4. Raising low site around the building with approved soil obtained from outside by truck carriage including breaking clods, dressing etc. complete including paying necessary 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 8.00 km.(forest royalty shall be reimbursed on production of necessary certificate from the forest authority duly countersigned by D.F.O. concerned) .

i) Other than Guwahati municipality area

 $1 \times 110.0 \times 70.0 \times 0.48 =$ 3696.00 m³ Deduct 12.5% shrinkage = -462.00 ,, Total = 3234.00 m³

@ Rs 205.52 / Cum

Rs 6,64,651.68

(B) Loading unloading of approved soil-Qty. = 3234.00 Cum

@ Rs 86.00/Cum.

2,78,124.00 Total = Rs 9,42,775.68



