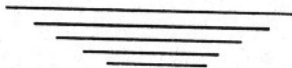Name of Work :   **Const. of Community Hall at different approved places of Nalbari Zilla Parishad under General Performance Grant under the Award of 13th Finance Commission (At Doulasal , Bhangnamari, Pakowa Belsor and Bahjani ZPC area)**

FOR THE YEAR 2011-12

NAME OF ZILLA PARISHAD   :   NALBARI ZILLA PARISHAD

ESTIMATED AMOUNT   : Rs. 8,00,000.00 (Rupees eight lakh) only

NALBARI ZILLA PARISHAD
NALBARI, ASSAM

ESTIMATE
A.P.W.D. (B) –SOR 10-11

Name of Work: Const. of Community Hall at different approved places of Nalbari Zilla Parishad under General Performance Grant under the Award of 13th Finance Commission (At Doulasal , Bhangnamari, Pakowa Belsor and Bahjani ZPC area)

Item No. 01 1.1	Earth work in excavation for foundation trenches of wall's retaining walls, footings of columns steps, septictia ect. Compl. as directed. 2.00 m below GL. a) In ordinary soil Post = 18 x 1.20 x 1.20 x 1.20 = 31.104 m^3 Step = 1 x 6.90 x 1.40 x 0.30 =2.898 m^3 ------------------------- Total = 34.002 m^3 @ Rs. 64.67/m^3……………………………………	Rs. 2199.00
Item No. 02 4.1.1	Providing Brick soling in foundation and under floor with stone/ best quality picket jhama bricks etc. as directed. a) Brick on flat soiling Under post = 18 x 1.20 x 1.20 = 25.92 m^2 Under P Beam = 2 x 20.00 x 0.23 = 9.20 m^2 = 2 x 6.90 x 0.23 = 3.17 m^2 Under floor = 19.89 x 6.79 = 135.05 m^2 Under Step = 6.90 x 1.38 x = 9.52 m^2 Net Qty = 182.86 m^2 @ Rs. 286.37/m^2…………………………………………	Rs. 52366.00
Item No. 03 3.1	Providing form work of ordinary timber planking so as to give a rough finished including centering shuttering etc. as directed. In substructure up to plinth ii) Foundation base of column, tie etc. ii) 25 mm thick Plinth Beam = 2 x 0.25 x 20.00 = 10.00 m^2 = 2 x 0.25 x 6.90 = 3.45 m^2 Total = 13.45 m^2 @ Rs. 191.27/m^2 ………………………………………… ii) 25 mm thick Post : = 18 x 2 x 0.60 x 0.90 = 19.44 m^2 = 18 x 2 x 0.60 x 0.65 = 14.04 m^2 = 18 x 2 x 0.60 x 0.60 = 12.96 m^2 = 18 x 2 x 0.60 x 0.65 = 14.04 m^2 = 18 x 2 x 1.20 x 0.15 = 6.48 m^2 = 18 x 2 x 1.20 x 0.20 = 8.64 m^2 Total = 75.60 m^2 @ Rs. 140.84/m^2………………………………………… ii) In super structure 25 mm thick. ii) Post = 18 x 2 x 3.30 x 0.15 = 17.82 m^2 = 18 x 2 x 3.30 x 0.20 = 23.76 m^2	Rs. 2573.00 Rs. 10648.00

	$= 2 \times 2 \times 1.50 \times 0.15 = 0.90 \ m^2$
	$= 2 \times 2 \times 1.50 \times 0.20 = 1.20 \ m^2$
	             Total $= 43.68 \ m^2$
	@ Rs. 213.73/ m^2……………………………………………
	25 mm thick
	ii) Lintel P/P $= 2 \times 2 \times 20.00 \times 0.15 = 12.00 \ m^2$
	            $= 2 \times 2 \times 20.00 \times 0.20 = 16.00 \ m^2$
	            $= 2 \times 2 \times 6.90 \times 0.15 = 4.14 \ m^2$
	            $= 2 \times 2 \times 6.90 \times 0.20 = 5.52 \ m^2$
	            Total $= 37.66 \ m^2$
	@ Rs. 163.01/m^2………………………………………………
		Rs.9336.00
		
		Rs. 6139.00

Item No. 04
18.1
	Supplying fitting and fixing in position r/f bars conforming to relevant is code for RCC work including straightening, clearing, cutting and bending to proper shape and length as per details design complete.
	b) Torsteel ISI approved i) TATA/SAIL
	  Ialli (12 mmϕ)
	  Under Post $= 18 \times 2 \times 11 \times 0.90 \times 0.89 = 3.172$ Qtl.
	                                        -------------------- 	
	                               T $= 3.172$ Qtl.
	  Plinth Beam (12 mmϕ) $= 2 \times 4 \times 20.00 \times 0.89$ $= 1.424$ Qtl.
	                               $= 2 \times 4 \times 6.90 \times 0.89$ $= 0.491$ Qtl.
	   Post (12 mmϕ) $= 18 \times 4 \times 5.70 \times 0.89$ $= 3.653$ Qtl.
	                               $= 2 \times 4 \times 1.50 \times 0.89$ $= 0.107$ Qtl
	  Lintel
	    Post/Plate(12 mmϕ) $= 2 \times 2 \times 4 \times 20.00 \times 0.89 = 2.848$ Qtl.
	                     $= 2 \times 2 \times 4 \times 6.90 \times 0.89$ $= 0.983$ Qtl.
	                                        _____
	                                      Total $= 9.506$ Qtl.
	   Stirrups 25 % $= 9.506 \times 25\%$ $= 2.377$ Qtl.
	   Extra (12 mmϕ) = $= 1 \times 53.8 \times 0.89$ $= 0.479$ Qtl
	                                          _____
	                                   Total $= 15.534$ Qtl.
	   Add 5% for cutting and buinding losses $= 0.777$ Qtl.
	                                         _____
	                                 G. Total $= 16.311$ Qtl.
	@ Rs. 5290.40/ Sqft ……………………………………
		
		Rs. 86292.00

Item No. 05 2.1.1	Plaint cement concrete works with course aggregate of sizes 13 mm to 32 mm in foundation bed etc. compl. as directed b)Prop 1:4:6 Under post $= 18 \times 1.20 \times 1.20 \times 0.05 = 1.296 \ m^3$ @ Rs. 3398.10/m^3………………………………………………………..	 Rs. 4404.00

Item No.06
2.2.1
	Providing and laying RCC works cement with coarse sand & 18 mm graded stone aggregate including dewatering if necessary curing etc. as directed.
	    A) Substructure a) Prop 1:2:4
	      i) Foundation
	      Jalli $= 18 \times 1.20 \times 1.20 \times 0.08 = 2.074 \ m^3$
	      P. Beam $= 2 \times 20.00 \times 0.30 \times 0.30 = 3.60 \ m^3$
	                 $= 2 \times 6.90 \times 0.30 \times 0.30$ $= 1.242 \ m^3$
	      Posts $= 18 \times 0.80 \times 0.80 \times 1.20 = 13.824 \ m^3$
	                 $= 18 \times 1.20 \times 0.15 \times 0.15 = 0.486 \ m^3$
	
	                               _____	

	Total = 21.226 m³
	@ Rs. 4734.15/m³…………………………………….
	II) a) Super Structure
	     Lintel
	     Post/ Plate = 2 x 2 x 20.00 x 0.15 x 0.15 = 1.80 m³
	             = 2 x 2 x 6.90 x 0.15 x 015 = 0.621 m³
	     Post = 18 x 3.30 x 0.15 x 0.15 = 1.337 m³
	             = 2 x 1.50 x 0.15 x 0.15 = 0.068 m³
	
	                 Total = 3.826 m³
	@ Rs.4929.24/m³ ……………………………………………..
		Rs. 100487.00
		
		Rs.18859.00

Item No. 07
4.1.4
	Brick work in cement mortar with 1st class brick including racking out joints and dewatering if necessary and curing compl. as directed
	 a) Prop 1 : 4
	   Sub structure
	   In Plinth = 2 x 20.00 x 0.90 x 0.112 = 4.032 m³
	            = 2 x 6.90 x 0.90 x 0.112 = 1.391 m³
	     Step = 6.90 x 0.23 x 0.15 = 0.238 m³
	            = 6.90 x 0.46 x 0.15 = 0.476 m³
	            = 6.90 x 0.69 x 0.15 = 0.714 m³
	            = 6.90 x 0.92 x 0.15 = 0.952 m³
	            = 6.90 x 1.15 x 0.15 = 1.19 m³
	            = 6.90 x 1.385 x 0.20 = 1.911 m³
	
	               Total = 10.904 m³
	@ Rs. 4632.29/m³……………………………………
	Wall = 2 x ½ x 6.90 x 1.50 x 0.112 = 1.159 m³
	      = 2 x 20.00 x 0.61 x 0.112 = 2.733 m³
	      = 1 x 6.90 x 0.61 x 0.112 = 0.943 m³
	
	         ---------------------- 	
	         Total = 4.835 m³
	@ Rs. 4632.29/m³……………………………………
		
		Rs. 50510.00
		
		Rs. 22397.00

Item No. 08
2.1.3
	Providing and laying 25 mm thich DPC with cement concrete in prop 1:1.5:3 with graded stone agg etc. as directed
	Area = 2 x 20.00 x 0.23 = 9.20 m²
	       = 2 x 6.90 x 0.23 = 3.17 m²
	
	         Total = 12.37 m²
	@ Rs. 150.00/m²……………………………………………..
		
		Rs. 1856.00

Item No. 09
1.3
	Providing Earth filling in plinth in layers not more than 150 m thick including necessary carriage, watering, ramming etc. complete as directed and specified including payment of land compensation, forestry Royalty, sales Tax and other duties and taxes as may be necessary.
	   e) E/F in plinth by cart carrying
	   Vol ᵐ =20.00 x 6.90 x 1.20 = 165.60 m³
	     @ Rs. 322.75/ m³ ……………………………………
		
		Rs. 53447.00

Item No. 10
5.1.11
	Providing red oxide plaster skirting with top layer of 5 mm thick cement plaster of cement mix 3.5 kg red oxide etc. completed as directed.
	   i) 18 mm thick red oxide skirting
	     Area = 2 (20.00 + 6.90) x 1.20 = 64.56 m²	

	@ Rs. 285.06/m^2 ……………………………………………	Rs. 18403.00
Item No. 11 5.1.4	65 mm cement concrete floor consisting of 50 mm under layer of cement concrete in prop 1:3:6 and 15 mm thick wearing coat etc as directed. 　　　Floor = 20.00 x 6.90 = 138.00 m^2 　　　　　　 = 6.90 x 1.20　= 8.28 m^2 　　　　　　　　$\overline{\text{Total} = 146.28 \text{ m}^2}$ 　　　@Rs. 449.48/m^2 …………………………………………..	Rs. 65750.00
Item No. 12 6.2.2	15 mm thick cement plaster in single coat on rough side of single or half brick wall etc. as directed. 　　　Exterior　side 　　　 b) 1:4 　　　Wall = 2 x 20.00 x 2.10　　　 = 84.00 m^2 　　　　　 = 4 x 2 x ½　x 6.90 x 1.50 = 41.40 m^2 　　　　　 = 1 x 6.90 x 2.10　　　 = 14.49 m^2 　　　　　　　　$\overline{\text{Total} = 139.89 \text{ m}^2}$ 　　　@ Rs. 111.25/m^2 ……………………………………………	Rs. 15563.00
	b)Interior side Prop 1:4 　　　Post　= 18　x 0.60 x 2.70　　= 29.16 m^2 　　　　　 = 2 x 1.50 x 0.60　　 = 1.80 m^2 　　　P/P, lintel　= 2 x 53.80 x 0.60 = 64.56 m^2 　　　　　　　$\overline{\text{Total} = 95.52 \text{ m}^2}$ 　　　@ Rs. 110.21/m^2 ………………………………………….	Rs. 10528.00
Item No.13 18.3.1	Providing, fitting hoisting and fixing of roof trusses including purline fabricated out of MS black tube conforming to relevant IS code etc. completed as directed. 60.30 mm OD – 3.65 mm thick Tie　　= 7 x 6.90 x 5.10　 = 246.33 Kg Rafter　= 9 x 2 x 4.65 x 5.10 = 426.87 Kg . 48.30 mm OD- 3.25 mm thick Vertical = 7 x 2 x 2.13 x 3 x 3.61 = 322.95 Kg 　　　 = 7 x 2 x 1.60 x 3 x 3.61 = 242.59 Kg 　　　 = 7 x 2 x 1.00 x 3 x 3.61 = 151.62 Kg Runner　= 3 x 20.00 x 3.61　　 = 216.60 42.40 mm OD – 3.25 mm thick Purline　= 2 x 5 x 21.20 x 3.15 = 667.80 Kg. 　Strut　 = 7 x 3 x 2 x 1.30 x 3.15 = 171.99 Kg 　　　　　--------------------- 　　　　　　Total = 2446.75 Kg = 24.4675 Qtl. 　　Add nut & bolt, cleats, angles, base plate etc. = 1.40 Qtl. 　　　　　　　　 ---------------------------- 　　　　　　　 G. Total　 = 25.8676 Qtl. 　　　@ Rs. 5875.00/Qtl. …………………………………………..	Rs.151972.00

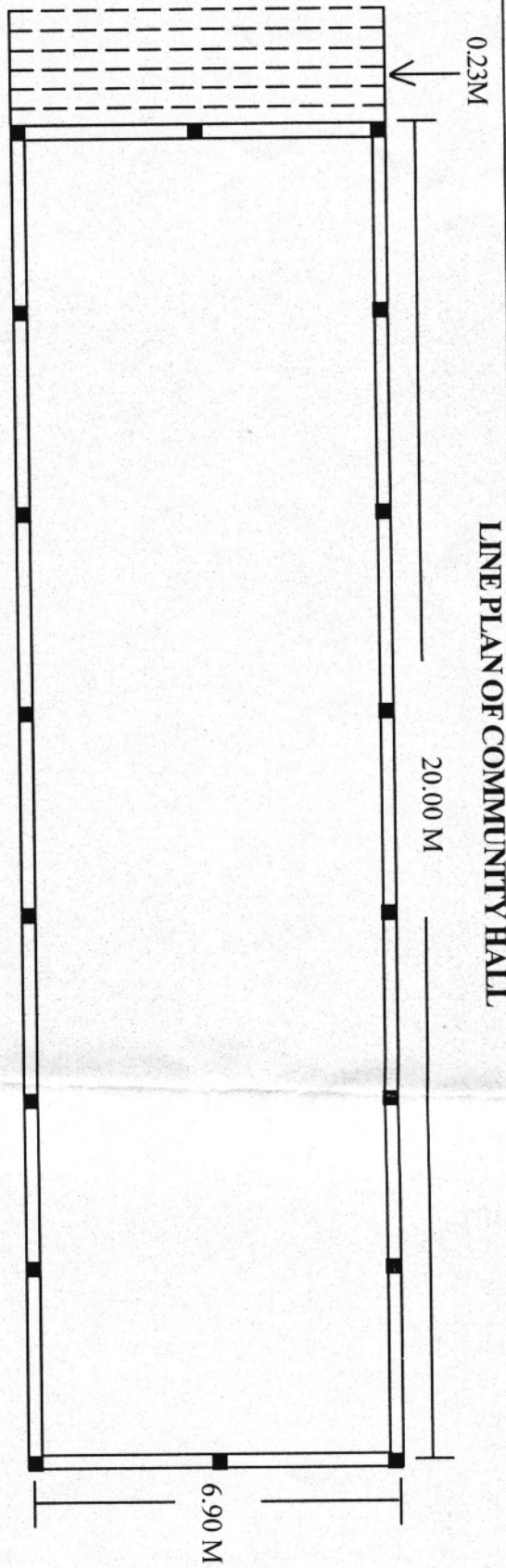|		
Item No. 14 8.1.36	Providing Pre Painted Galvanized Iron Sheet Roofing (PPGI) at all levels including fitting and fixing with self drilling, self tapping screws completed as directed. e)0.63 m thick (24G) Qty. = 2 x 21.18 x 4.65 = 197.16m² @ Rs. 811.15/m²	
Item No. 15 8.1.37	Providing Pre Painted Galvanized Iron Sheet (PPGI) accessories (Ridges/Valley) (Dyna roof/Sathyam) at all levels including fitting and fixing with self drilling, self tapping screws completed as directed. e) i) 0.63 m thick 150 mm lapping b) 0.63 mm thick 230 mm lapping Length = 21.18 .M. @ Rs. 484.89/ R.M.	Rs.159926.00 ✓

Item No. 16
13.2.3
	Providing applying one coat cement primer of approved brand and manufacture on new wall surface etc. completed as directed.
	Lintel
	P/P = 2 x 53.80 x 0.60 = 64.56 m²
	Wall = 2 x 20.00 x 1.30 = 52.00 m²
	     = 1 x 6.90 x 1.30 = 8.97 m²
	Post = 18 x 0.60 x 2.70 = 29.16 m²
	Wall = 4 x 2 x ½ x 6.90 x 1.50 = 41.40 m²
	
	           Total = 196.09 m²
	@ Rs. 32.63/ m² ....
		10270.00
		Rs. 10280.00

Item No. 17 13.9.3	Finishing new wall with water proofing weather coat paint on wall surface...................... Compl. Area = Same as item No. 16 = 196.09 m² @ Rs.136.68/m²	Rs. 6398.00 ✓
	Deduct 10% for contractor profit .... Total	Rs. 26802.00 ✓
		Rs.887122.00 887110.00
	Total	Rs. 88712.00 88711.00
Item No. 18	Supply fitting fixing of sign-board cop as directed and specified Qty – 1 No. @ Rs. 1800/ No. Total	Rs.798410.00 798399.00
		Rs. 1800.00
	G. Total	Rs. 800210.00 800199.00
	Say	Rs. 8,00,000.00

(Rupees Eight Lakh) only

Technically Approved for
Rs. 8,00,000-00 (Rupees eight lakh) only
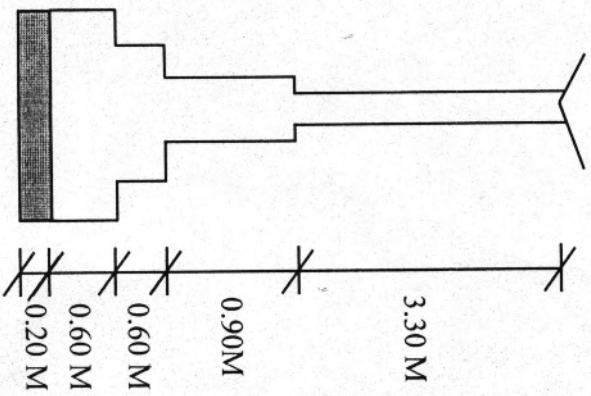
Chief Executive Office
Nalbari Zilla Parishad
Nalbari

Superintending Engineer, P.W.D.
Nalbari Roads Circle, Nalbari
2/8/12

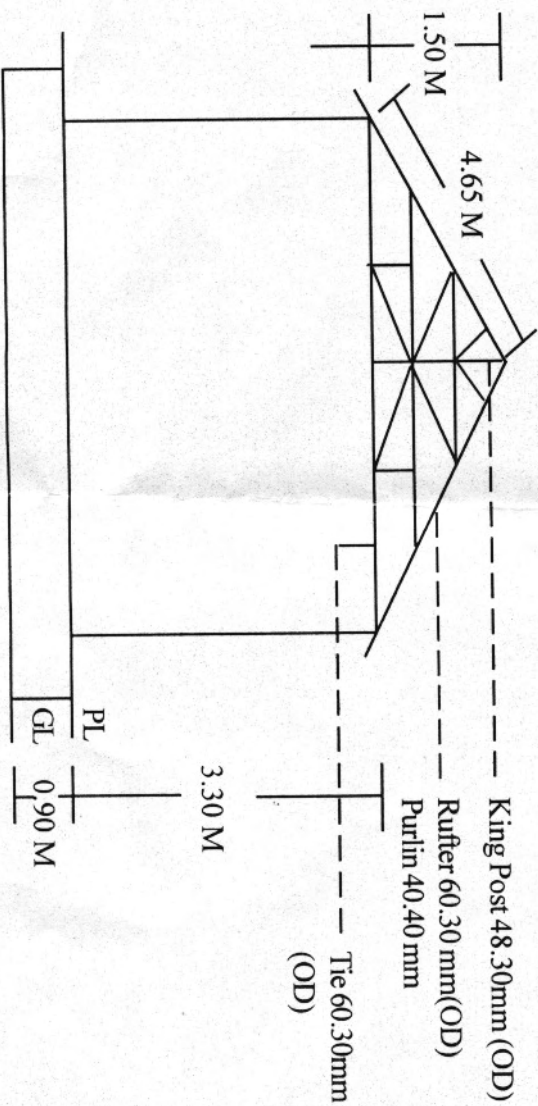Junior Engineer
Nalbari Zilla Parishad
Nalbari

LINE PLAN OF COMMUNITY HALL

0.23M

20.00 M

6.90 M

COLUMN (Not to Scale)

3.30 M

0.90M

0.60 M

0.60 M

0.20 M

PLAN (Not to Scale)

1.50 M

4.65 M

King Post 48.30mm (OD)

Rufter 60.30 mm(OD)

Purlin 40.40 mm

Tie 60.30mm (OD)

3.30 M

ELEVATION (Not to Scale)

PL

GL

0.90 M

Plinth Area = 20.00 x 6.90 = 138.00 m²

Junior Engineer
Nalbari Zilla Parishad
Nalbari