

**FABRICATED MEMBERS (G.I. ANGLES) INCLUDING STUB & CLEAT****(a) Tower Members:**

Sl.No	Type of Tower	No. of Tower	Wt. per Tower (MT)	Total wt. in MTs	Unit Rate (inclusive of Taxes)	Amount
1	Type- (D + 6 )	1	10.297051	10.297051		
					Total:	

**(b) Templates and Stubs & Cleats**

## Template:

Sl. No.	Type of Tower	No. of Templates	Wt. per Tower (MT)	Total wt. in MTs	Unit Rate (inclusive of Taxes)	Amount
1	Type- (D + 6 )	1	0.927	0.927		

## Stubs &amp; Cleats:

Sl.No.	Type of Tower	Stubs & Cleats	Wt. per Tower (MT)	Total wt. in MTs	Unit Rate (inclusive of Taxes)	Amount
1	Type- (D + 6 )	1	0.537147	0.537147		
					Total of (b)	

**(c) NUTS & BOLTS,SP WASHER,PACK WASHERS & STEP BOLTS, D - SHACKLE**

## For Tower Members:

Sl.No.	Type of Tower	No. of Tower	Wt. per	Total wt. in	Unit Rate	Amount
1	Type- (D + 6 )	1	473.696	0.473696		
For templates:						
1	D Type	1	37.836	0.037836		
For Stubs & Cleats:						
1	D Type	1	2384	2.384		
			Total:	2.895532		

**TOWER ACCESSORIES**

<b>Sl.No.</b>	<b>Items</b>	<b>Unit</b>	<b>Quantity</b>	<b>Unit Rate (inclusive of Taxes)</b>	<b>Amount</b>
1	Earthing of Tower: Earthing Maetrial- C.I. Earthing Pipe 6' x 3'' with G.I. Flat 5mm x 50mm x 6mm(with supply of salt, charcoal, etc.)	set	1		
2	Danger plates	Nos	1		
3	Phase Plates (set of 3)	Set	1		
4	Number Plates	Nos	1		
5	Anti Climbing Device (Barbed wire)	kg	100		
6	Mid span jointing sleeve	set	2		
7	Repairing sleeve for Panther Conductor	Nos	6		
<b>Total</b>					

Annexure-III

**EXCAVATION WORK FOR TOWER FOUNDATION  
INCLUDING DEWATERING & BACK FILLING AFTER CASTING WORK**

Sl.No.	Type of Tower/soil classification	Volume in Metre cube	Unit Rate (inclusive of Taxes)	Amount
1	D-Type/Normal soil	303.831		
			Total	

**CONCRETE WORK FOR TOWER FOUNDATION - PCC & RCC**  
**IN PROP 1:1:5:3 WITH MAXIMUM SIZE OF AGGREGATE 38mm-PCC TO 20mm**  
**RESPECTIVELY INCLUDING ALL LABOUR, MATERIAL AND TRANSPORTATION EXCEPT**  
**CEMENT.**

Sl.No.	Type of Tower/Concrete	Volume in metre cube	Unit Rate (inclusive of Taxes)	Amount
1	D-Type/PCC	8.649		
2	D-Type/RCC	37.308		
			<b>Total:</b>	

STUB SETTING INCLUDING TRANSPORTATION				
Sl.No.	Type of Tower	No. of Tower	Unit Rate (inclusive of Taxes)	Amount
1	D Type	1		
Total:				

EARTHING OF TOWER LEGS INCLUDING SUPPLY OF SALT, CHARCOAL, ETC & TRANSPORTATION:			
Sl.No.	No. of Locations	Unit Rate (inclusive of Taxes)	Amount
1	1		

<b>RETAINING WALL WITH MAXIMUM SIZE OF BOULDER OF 1500mm INCLUDING MORTAR IN PROP 1:6 MATERIAL, TRANSPORTATION, ETC, EXCEPT CEMENT</b>							
Sl.No.	Type of Tower	No. of Location for R/Wall	Volume in metre cube		Total Volume in metre cube	Unit Rate (inclusive of Taxes)	Amount
			Per location	Total for each type			
1	D Type	1	85	85	85		
						Total	

**TOWER ERECTION INCLUDING TRANSPORTATION OF MATERIALS:** *Erection of various type of towers, tower parts and tower extension complete with bolts & nuts, including tack welding and supply and application of zinc rich primer and two coats of enamel paints.*

Sl.No.	Type of Tower	No. of Tower	Wt. per Tower in MTs	Total (MT)	Unit Rate	Amount
1	D + 6	1	10.297051	10.297051		
					Total:	

**STRINGING WORK INCLUDING LAYING, STRINGING, TENSIONING, CLAMPING, JOINTING, JUMPERING, HOISTING OF INSULATORS, ETC, & TRANSPORTATION:**

Sl.No.	Particulars	Length of line		Unit Rate	Amount
1	ACSR Panther Conductor	1.08	Ckt-km		
2	OPGW (kms)	0.54	km		
				Total:	

**DETAILS OF FITTING AND FIXING OF TOWER ACCESSORIES INCLUDING TRANSPORTATION, ETC:**

Sl.No.	Item of work	Quantity in location	Unit Rate (inclusive of Taxes)	Amount
1	Fixing of Danger Plate- One No. Per tower	1		
2	Fixing of Phase Plate - Three Nos. Per tower	1		
3	Fixing of Number plate- One per tower	1		
4	Fixing of Anti climbing device of Barbed wire	1		
5	Punching of Bolts	1		
			Total:	

TOWER DISMANTLING INCLUDING TRANSPORTATION OF MATERIALS:					
Sl.No.	Type of Tower	Quantity		Unit Rate (Inclusive of Taxes)	Amount
1	Opening out of ACSR Panther Conductor the existing Tower Loc. No. 4 of LILO	1.08	Ckt-km		
2	Releasing of OPGW from the existing tower Loc. No. 4 of LILO	0.54	km		
3	Unloading of insulator, Hardware fittings from the estimated 1 no. of Tower	1	No.		
4	C + 6 Type	7.74641	MT		
				Total:	

**THEODOLITE & PROFILE SURVEY**

<b>Sl.No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate (Incl. GST)</b>	<b>Amount</b>
1	Theodolite & Profile Survey: Detail survey GPS, total work station, long range scanner & digital theodilite of reasonable accuracies including profile along the selected route with plan details ,fixing of concrete post and pegging of tower location along the line route.	km	0.54		
				Total:	



**CONDUCTOR AND CONDUCTOR ACCESSORIES MATERIALS**

<b>Item No.</b>	<b>Particulars</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
1	ACSR Panther Conductor	km	0.73		
2	Conductor Accessories				
	i) Single Tension HW Fittings for Panther Conductor	set	6		
	ii)Vibration Damper for Panther Conductor	No.	6		
	iii) Repairing Sleeve for Panther Conductor	No.	6		
	iv) Mid Span compression joint for Panther Conductor	set	6		
	v) 120 kN disc insulator	No.	120		
Total					

**ABSTRACT**

**BILL OF QUANTITIES FOR RE-ALIGNMENT AND RE-LOCATION OF DAMAGED  
132KV DOUBLE CIRCUIT LILO TOWER LOCATION NO. 4 DUE TO FLASH FLOOD OF 2014 AND  
RECENT CYCLONE AT VILLAGE SOKSAN, MENDIPATHAR, NORTH GARO HILLS, MEGHALAYA.**

Sl. No.	Particulars		Amount	Reference
1	Tower Materials, i/c:			Annexure- I
	a	G.I. Members:		
	b	Template:		
	c	Stubs & Cleats:		
	d	Nuts & Bolts:		
2	Tower Accessories:			Annexure-II
3	Conductor accessories:			Annexure- IX
4	Construction Costs:			
	a	Theodolite		Annexure- VII
	b	Excavation work		Annexure-III
	c	C.C/P.C.C. + R.C.C.		Annexure-IV
	d	Stub setting		Annexure-V
	e	Earthing of Towers		Annexure-V
	f	Protection R/Wall		Annexure-V
	g	Towers Erection		Annexure-VI
	h	Stringing work		Annexure-VI
	i	Fitting & Fixing work		Annexure-VI
	j	Dismantling of Tower etc.		Annexure-VII
Grand Total				