



Orientation		
	Size A3	
Scale	1 : 100	
XLBrng	267.00 deg.	
Date	25/01/2011 /Mg	
		Ln/XL 0.00 deg.
		Ln/AL 0.00 deg.

Load Diagrams		Load	Strength
Bending Moment	General	---	---
----- (kNm) 300	Seismic	---	---
Shear Force	General	---	---
----- (kN) 780	Seismic	---	---
Soil Pressure	30 Shear	---	---
----- (kPa) 80	Bearing	---	---

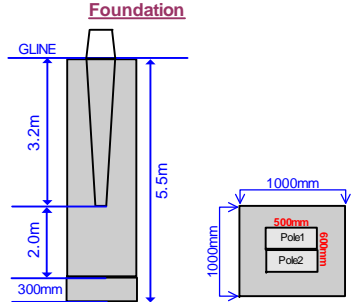
Notes

1) New pole design conforms to the required design standards
2)
3)
4)

Action
1) 2) 3) 4)

#	Target	Qty	Reference	Status	Description	Parameters	Inventory
1	P1	1	Line Pole	Erect New	Concrete(PS): Rctr(Dish) B13.65 Busck (12.9m)	L 13.65(m) : GLD 300 x 500(mm) : #OD 88(mm)	
2	P2	1	Line Pole	Erect New	Concrete(PS): Rctr(Dish) B13.65 Busck (12.9m)	L 13.65(m) : GLD 300 x 500(mm) : #OD 88(mm)	
3	M1	2	Cross Arm	Erect New	Wood(HHD): Rctr(Solid) 11kV/Arm	L 2.4(m) : MSX 100 x 100(mm) : Shaved/Natral	
4	M2	2	Cross Arm	Erect New	Wood(HHD): Rctr(Solid) 11kV/Arm	L 1.8(m) : MSX 75 x 100(mm) : Shaved/Natral	
5	M3	1	Cross Brace	Erect New	Steel(GMS): Angl(L)	L 1.8(m) : MSX 75 x 75(mm)	
6	M4	1	Cross Brace	Erect New	Steel(GMS): Angl(L)	L 1.8(m) : MSX 75 x 75(mm)	
7	M5	1	Platform(Gar)	Erect New	Steel(GMS): Channel(I) Term Supprt	L 1.8(m) : MSX 100 x 400(mm)	
8	M6	2	Cross Arm	Erect New	Steel(GMS): Rctr(Bus) 33kV 11kV Am	L 4(m) : MSX 100 x 100(mm)	
9	F1	1	Pole Pile	Erect New	Concrete(R): Round(Solid) Concrete Foundation	L 4.2(m) : MSX 1000 x 1000(mm) : #OD 416(mm)	
10	N1	3	Insulator (Line)	Erect New	Porcelain: Post (Standard)	Line Voltage Unit: 33 kV	
11	N2	3	Insulator (Apps)	Erect New	Composite: Strain(PDI) (Standard)33kV	Line Voltage Unit: 33 kV	
12	N3	3	Insulator (Line)	Erect New	Composite: Strain(PDI) (Standard)	Line Voltage Unit: 11 kV	
13	N4	3	Insulator (Line)	Erect New	Porcelain: Shackle (Standard)	Line Voltage / Unit: 0.4 kV	
14	N5	3	Insulator (Apps)	Erect New	Porcelain: Bushing (Standard) SurgeArrestors	Line Voltage Unit: 11 kV	
15	N6	3	Insulator (Line)	Erect New	Porcelain: Bushing (Standard) Termination Ends	Line Voltage Unit: 33 kV	
16	N7	3	Insulator (Apps)	Erect New	Porcelain: Bushing (Standard) SurgeArrestors	Line Voltage Unit: 11 kV	
17	N8	3	Insulator (Line)	Erect New	Porcelain: Bushing (Standard) SurgeArrestors	Line Voltage Unit: 11 kV	
18	C1	3	Conductor	As-Built (52 Yrs)	AAC:Cockroach(19/4.22) Bare 3kV 3Ph	Hr(%CBS) 5.6 (0 Jnts) : L(m) 46 : B(deg) 350 : S(deg) 0	
19	C2	3	Conductor	As-Built (42 Yrs)	AAC:Cockroach(19/4.22) Bare 1kV 3Ph	Hr(%CBS) 5.6 (0 Jnts) : L(m) 46 : B(deg) 350 : S(deg) 0	
20	C3	1	Conductor	As-Built (42 Yrs)	AAC:Kutu(7/3.00) PVC 04kV 1Ph	Hr(%CBS) 7.5 (0 Jnts) : L(m) 46 : B(deg) 350 : S(deg) 0	
21	C4	2	Conductor	As-Built (42 Yrs)	HCCC:7/16(7/1.70) PVC 0.23kV 1Ph+N	Hr(%CBS) 8 (0 Jnts) : L(m) 46 : B(deg) 350 : S(deg) 0	
22	C5	1	Cable	As-Built (42 Yrs)	NScreen(Al):16mm Trupr Comm Cable(7/1.70) 2Cr PVC 04kV Control	Hr(%CBS) 8 (0 Jnts) : L(m) 46 : B(deg) 350 : S(deg) 0	
23	L1	1	Cable(UnderGnd)	Erect New	Al(Alloy): 1Cr x (3/40) XLPE N.Screed 11kV	11kV 3Ph Power : L(m) 0 : B(deg) 270	
24	L2	1	Cable(UnderGnd)	Erect New	Al(Alloy): 1Cr x (3/40) XLPE N.Screed 11kV	11kV 3Ph Power : L(m) 0 : B(deg) 270	
25	L3	1	Cable(UnderGnd)	Erect New	Al(Alloy): 1Cr x (3/40) XLPE N.Screed 11kV	11kV 3Ph Power : L(m) 0 : B(deg) 270	
26	L4	1	Cable(UnderGnd)	Erect New	Al(Alloy): 1Cr x (1/800MM.) XLPE N.Screed 33kV	33kV 3Ph Power : L(m) 0 : B(deg) 0	
27	L5	1	Cable(UnderGnd)	Erect New	Al(Alloy): 1Cr x (1/800MM.) XLPE N.Screed 33kV	33kV 3Ph Power : L(m) 0 : B(deg) 0	
28	L6	1	Cable(UnderGnd)	Erect New	Al(Alloy): 1Cr x (1/800MM.) XLPE N.Screed 33kV	33kV 3Ph Power : L(m) 0 : B(deg) 0	

Tests	#	Target	Pty	Instruction	Comments	Requirements
	1	Pole P1.2	High	Erect New Heavier Pole(s)	Install new double 12.5m Poles	
	2	Site F1	Mod	Fit New Special	Install Foundation Dia 1000mmx1000mmx40mpa	



Reserved		Exposure			
Ref Site/Node		Px	Wind (Pa)		1,200.000
Distance (m)	0.00	Px	Snow (Pa)		0.000
Bearing (deg)	0.00	Px	Ice mm	LC Mx	0.00 1.00
Terrain	Bush/Urban		T-Amb (deg C)		15.00
Topography	Flat/Undulating		T-High T-Low		50.00 0.00
Class	Slope B1	0.00	Soil Class		Firm
Site Access	Good Land Vehicle Access (No Special Restrictions)				

Performance		Load (SLS)		S.I (SLS)	
Classification	I	General (kN)	XLine ↑	11.46	2.05
Nom. Hght (m)	10.45	ALine →		46.70	1.24
Seismic Ftr (z)	1.00	Seismic (kN)	XLine ↑	2.98	7.07
Ductility Rtr (u)	1.00		ALine →	5.93	8.14
VPeriod XL (s)	4.11	Foundation (kPa)	Lateral →	84.92	1.06
VPeriod AL (s)	3.23		Bearing ⊗	60.28	3.73
Axial Load (kN)	63.35	Calc Model Rf	IAMS/SL/BEST(2005)SLS/SICalc/101X		

BEST (LSE-Excel) Administration					
	Inspected	ABC01	27/07/2011	Structure Data Sheet (Termination Pole Design)	
	Modelled	ABC01	19/06/2012		
	Reviewed				
Power Company NZ		Site Address		Ntwk#	1000
85 Smith Street		North island		Node#	1