

THIS DRAWING IS THE EXCLUSIVE PROPERTY OF ESKOM AND MAY NOT, WITHOUT ESKOM CONSENT BE UTILIZED OR COPIED, REPRODUCED TRANSMITTED OR COMMUNICATED TO A THIRD PARTY.

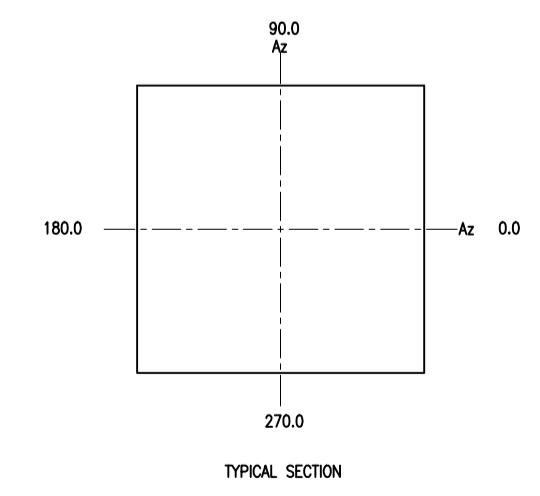
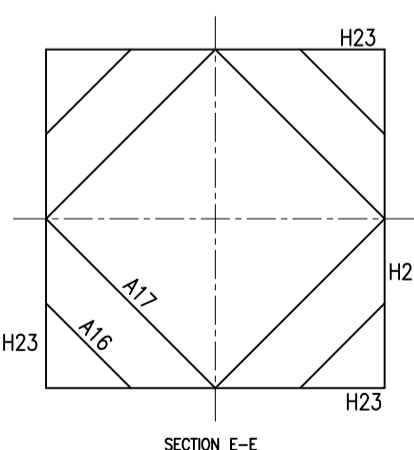
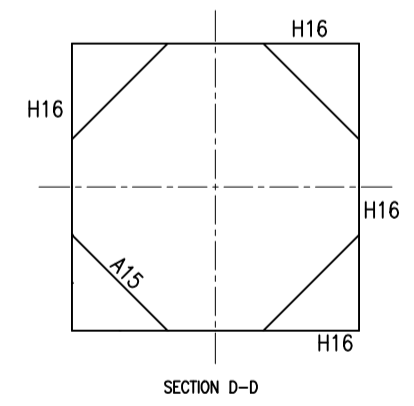
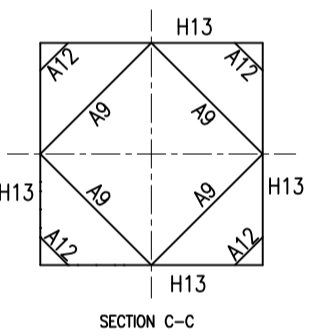
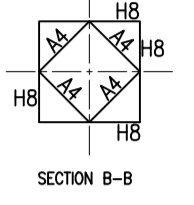
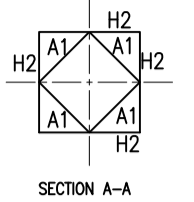
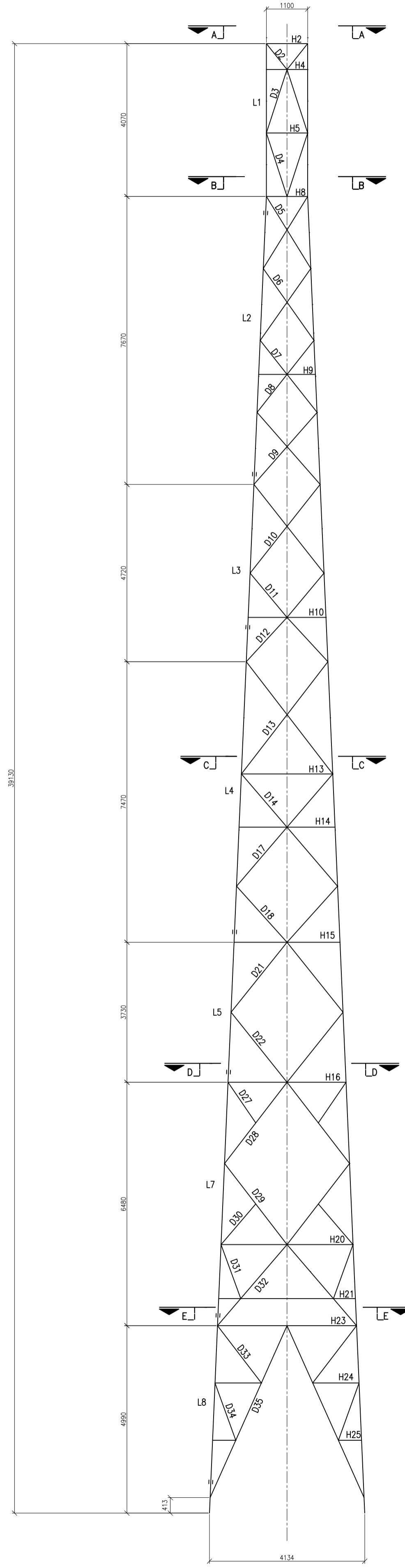
SECTION NO.	1	2	3	4	5	6	7
SECTION NAME	L1	L2	L3	L4	L5	L7	L8
PANEL TYPE	Straight Sec.	Tapped	Tapped	Tapped	Tapped	Tapped	Tapped
PANEL HEIGHT	5.1	7.67	4.72	7.47	3.73	6.48	4.99
LEGS	90X90X6	100X100X8	120X120X8	120X120X8	120X120X10	150X150X10	150X150X10
DIAGONALS	50X50X4	50X50X4, 60X60X4	60X60X4, 70X70X6	70X70X6, 80X60X6	90X65X6	50X50X4, 90X65X6, 100X75X6, 60X60X5, 70X70X6	60X60X4, 100X75X6
HORIZONTALS	50X50X4, 60X60X4, 60X60X8	65X50X6	65X50X6	60X60X4, 80X60X6, 100X65X8	100X75X6, 70X70X6	90X90X6, 60X60X4	90X65X6, 60X60X4, 50X50X4

POS	DESCRIPTION	QTY	EL(m)	SIZE(m²)	AZIMUTH	STATUS
1	3m-2stack	1	39	0.15	0	P
2	3m-2stack	1	39	0.15	0	P
3	5m-4stack	1	39	0.3	0	P
4	6mOmni	1	39	0.54	0	P
5	6mOmni	1	39	0.54	0	P
6	6mOmni	1	39	0.54	0	P
7	6mOmni	1	39	0.54	0	P
8	2.4mSD	1	35	4.524	45	P
9	0.6mSD	1	35	0.283	-45	P
10	2.4mSD	1	29	4.524	45	P
11	1.2mGD	1	23	1.131	45	P
12	1.2mGD	1	20	1.131	45	P
13	1.2mGD	1	20	1.131	-45	P
14	3mSD	1	39	7.069	135	F
15	3mSD	1	39	7.069	45	F
16	3mSD	1	39	7.069	225	F
17	3mSD	1	39	7.069	-45	F

STATUS: E-EXISTING, F-FUTURE, P-PROPOSED

WORKING PLATFORMS	
POS	EL(m)
1	15
2	30
3	37

1 DESIGN NOTES	
DESIGN STANDARD : TIA 222 - G	
BASIC WIND SPEED IS 40m/s(3 - SEC GUST)	
WIND LOAD FACTOR FOR SERVICEABILITY LIMIT STATE : 1	
WIND LOAD FACTOR FOR ULTIMATE LIMIT STATE : 1.6	
TOPOGRAPHY : 1	
EXPOSURE CAT : C	
STRUCTURE CLASS : I	
SITE ALTITUDE : 1040 m	
MEAN WIND RETURN : 1 :50	
ARTIFICIAL BASE HEIGHT : 0m	
MAXIMUM DEFLECTION : AS PER TIA 222 - G	
2 MATERIAL	
GRADE FOR ALL TOWER MEMBERS : S355JR	
GRADE FOR ALL BOLTS : 8.8	
GRADE FOR ALL NUTS : 8	
GRADE FOR ALL WASHERS : S275JR	
GRADE FOR ANCHORING BOLTS: 4.6	
3 ANTENNA AND TRANSMISSION LINES:	
AS PER CLIENT SPECIFICATION, SEE LOADING TABLE IN DRAWING	
FEEDER, CAT LADDER & WAVE GUIDE : AS PER ESKOM SPECIFICATION	
4 FUTURE LOADING	
AS INDICATED	



GENERAL NOTES:
 1. ALL BOLTS TO BE M16.
 2. ALL DIMENSIONS ARE ON THE CENTROID.
 3. REDUNDANT MEMBERS SHORTER THAN 1500mm USE 45x45x3 WITH ONE BOLT.
 4. REDUNDANT MEMBERS LONGER THAN 1500mm BUT LESS THAN 2000mm USE 50x50x4 WITH ONE BOLT.
 5. UNEQUAL MEMBERS TO BE SHORT BOLTED.

5					
4					
3					
2					
1	K. GASA	17/04/2020	AMENDED DESIGN DATA AND NUMBER OF DISHES	NM	NM
0	K. GASA	13/04/2020	FIRST ISSUE	NM	NM
REV	DRAWN BY:	DATE:		AUTH. BY	CHKD.
CLIENT:			TITLE:		
Eskom			39m TOWER OUTLINE ESTON RS		
DRAWN: K. GASA	DATE: 13/04/2020	CHECKED: N. MUTHADI	DRAWING No.:	SHEET 1	REV 1
SCALE: 1 : 50		APPROVED: N. MUTHADI	39m	OF 1	SIZE: A1