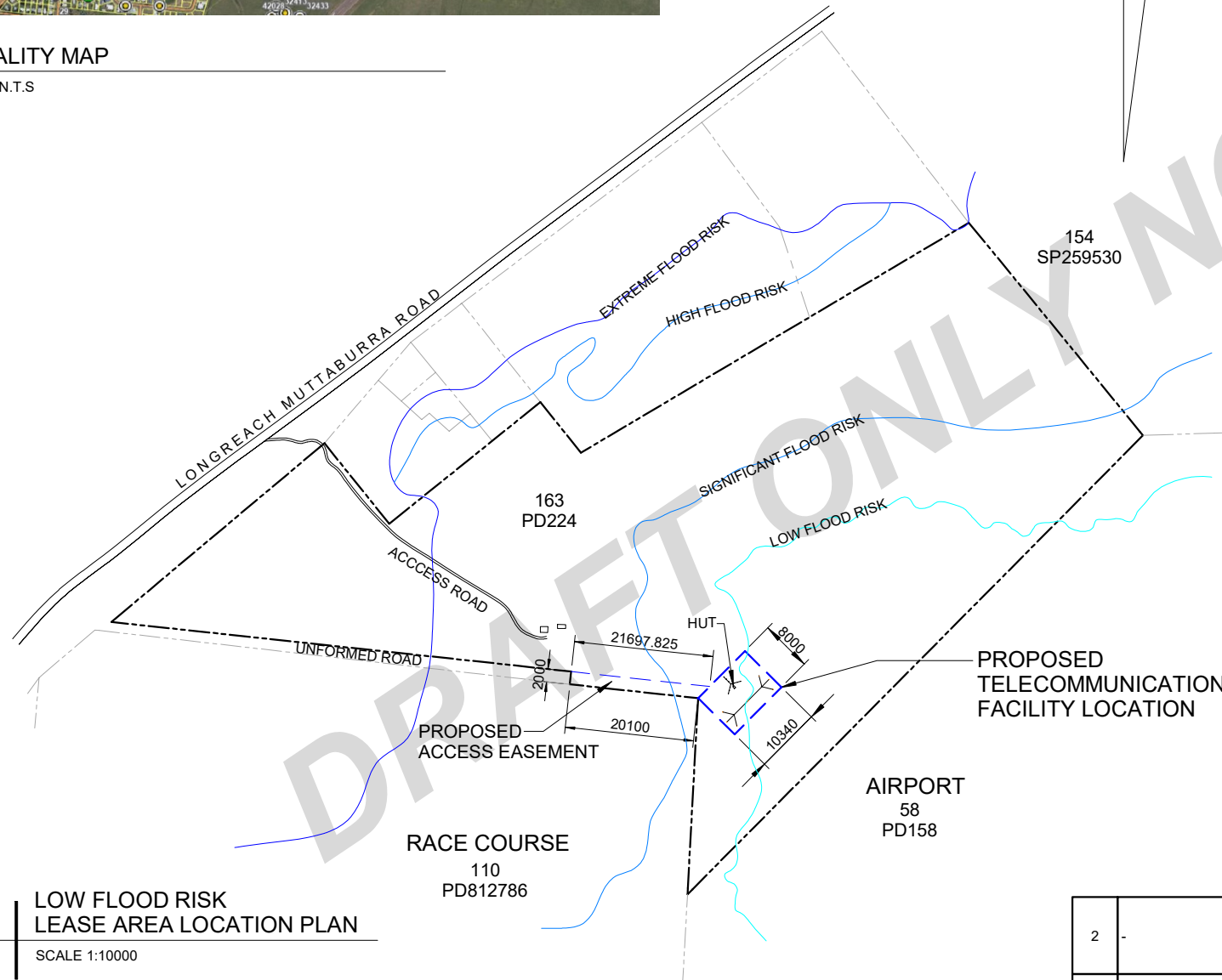


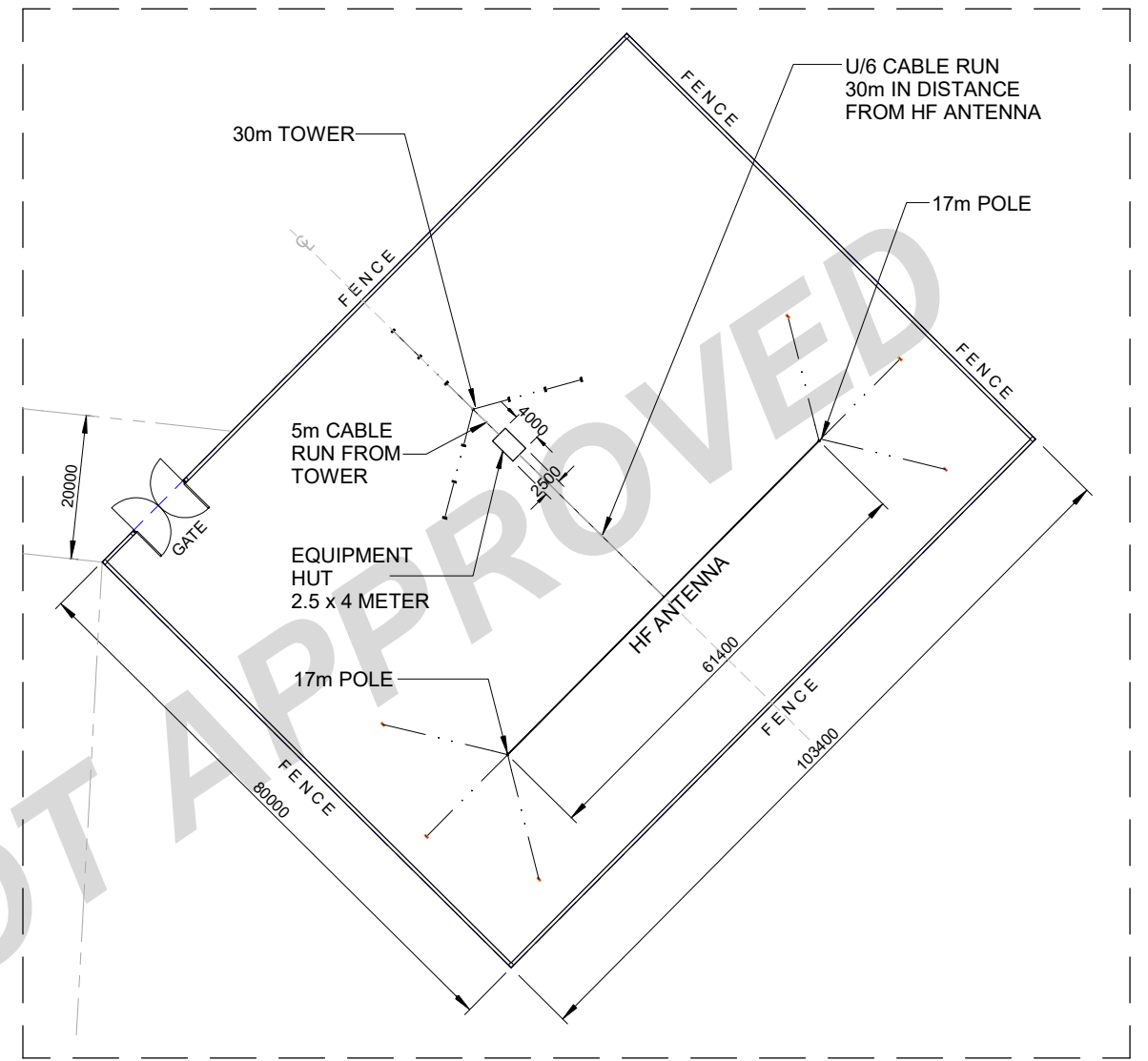


PROPOSED
TELECOMMUNICATION
FACILITY LOCATION

1 LOCALITY MAP
SCALE N.T.S



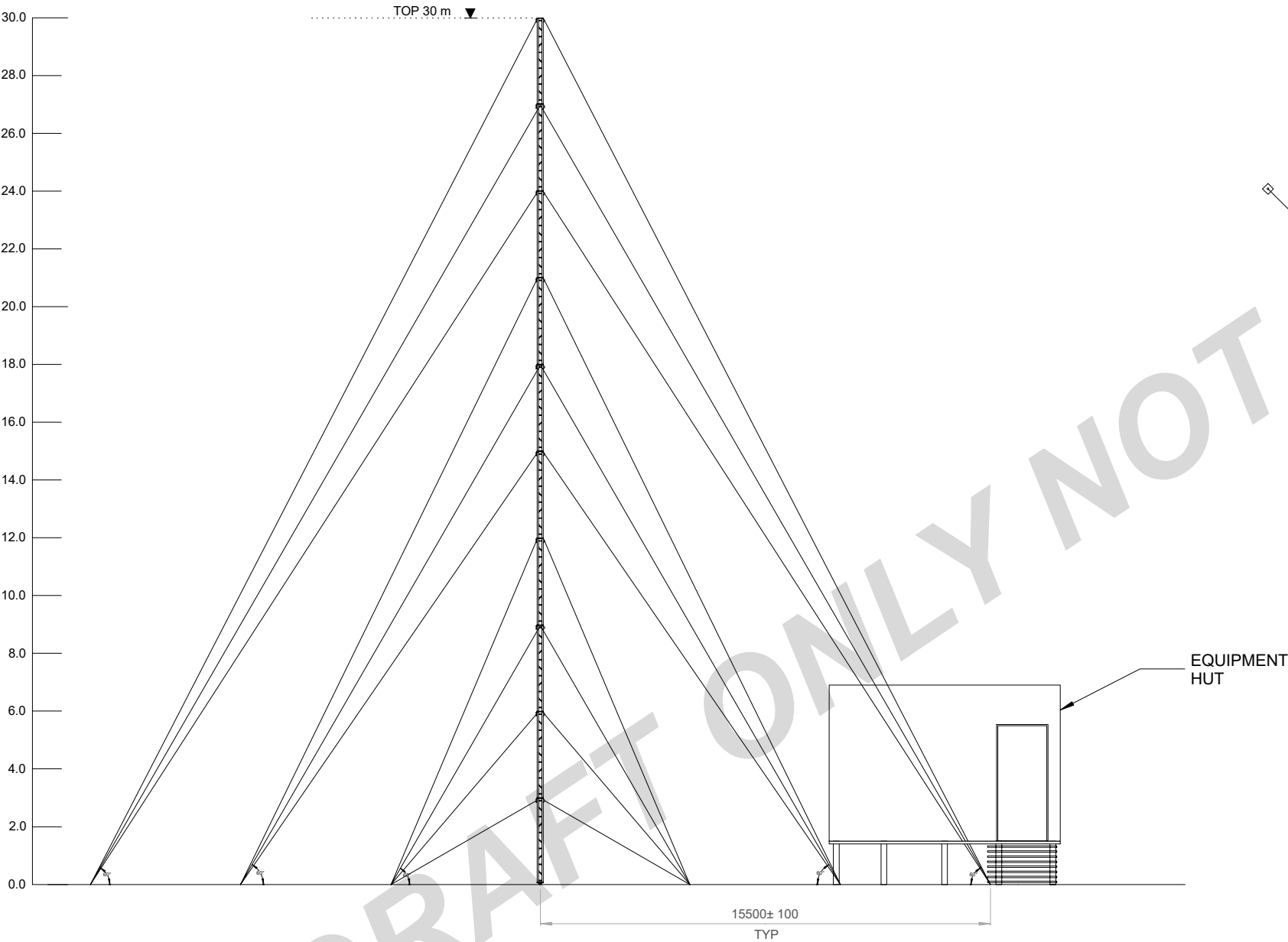
2 LOW FLOOD RISK
LEASE AREA LOCATION PLAN
SCALE 1:10000



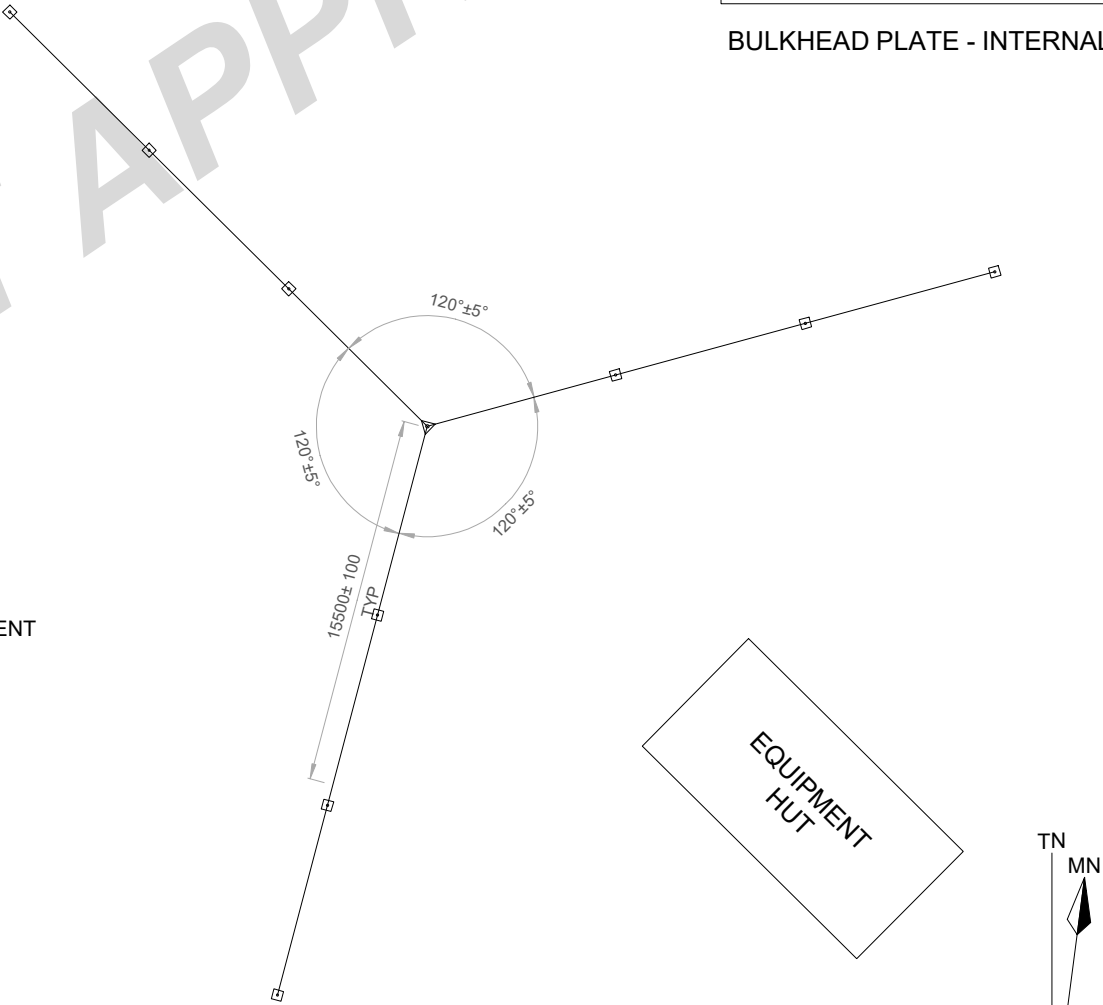
3 PROPOSED TELECOMMUNICATION FACILITY
SITE PLAN
SCALE 1:1000

								TITLE				0924
2	-	-	-	-	-	-	-	QPS LONGREACH MUTTABURRA ROAD SITE PLAN - LOW FLOOD RISK				
1	ORIGINAL	GS	01/AUG/25	-	-	-	-	DRAWING No.		00000-AFPS0-SIT-001.00-01		
ISSUE	ALTERATION	ORIG	DATE	CHKD	DATE	APPD	DATE	SCALE	AS SHOWN	DRAWN	EE	FRONTLINE & DIGITAL DIVISION SHARED SERVICES PLANNING AND DESIGN UNIT
								SIZE	A3	OFFICIAL		

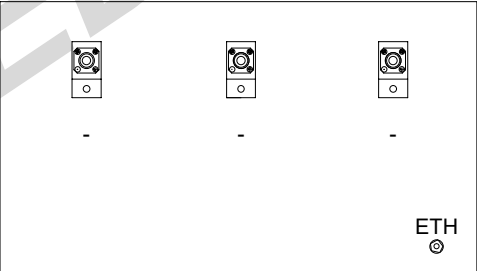
ANTENNA DETAILS								
ANT No	FEED No	ANTENNA DESCRIPTION	FEED TYPE	MOUNTING HEIGHT (m)	ANTENNA HEIGHT (m)	POL	BEARING (°T)	PURPOSE



1 SOUTH ELEVATION PLAN
SCALE 1:100



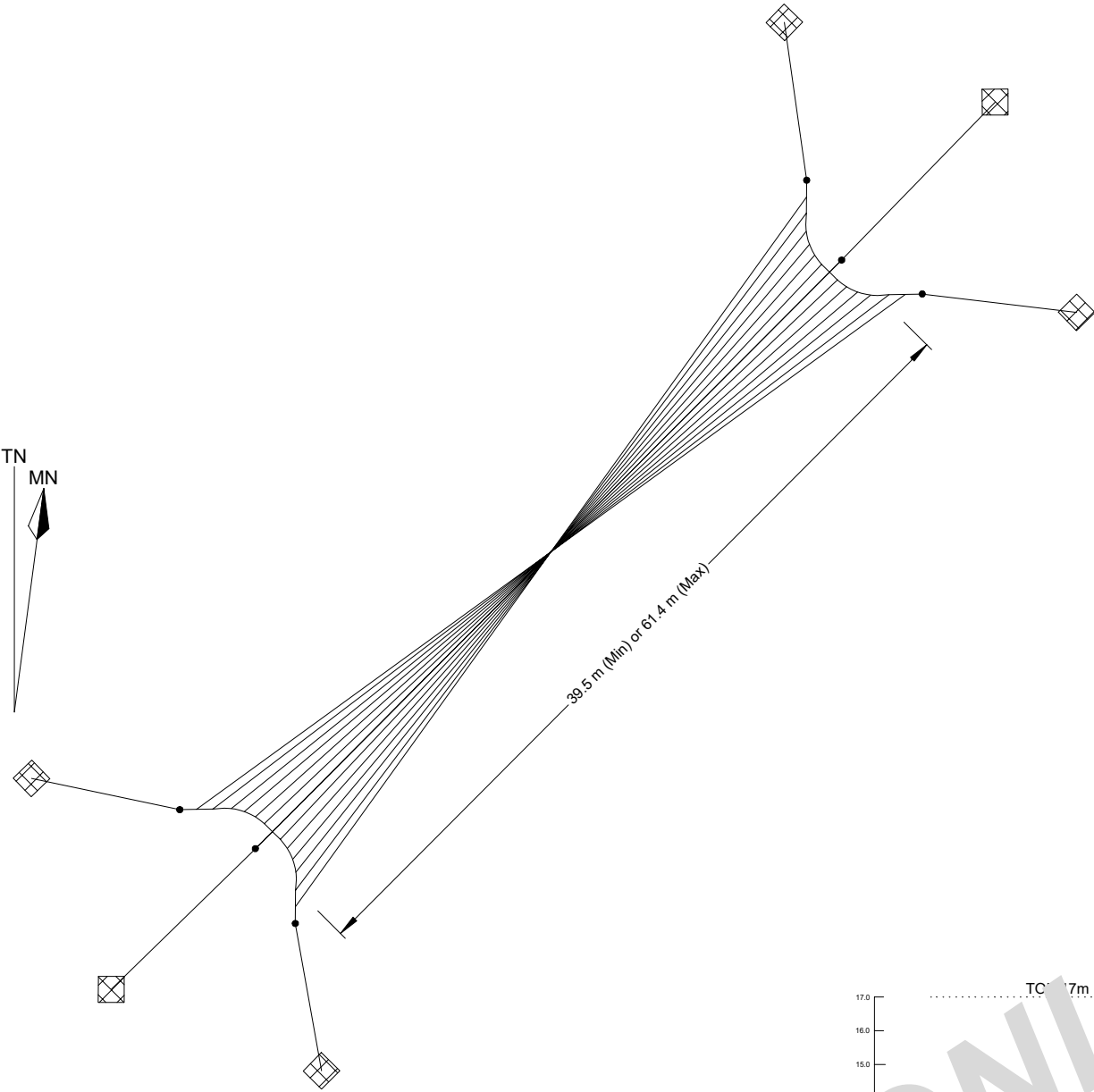
2 TOWER PLAN VIEW
SCALE 1:100



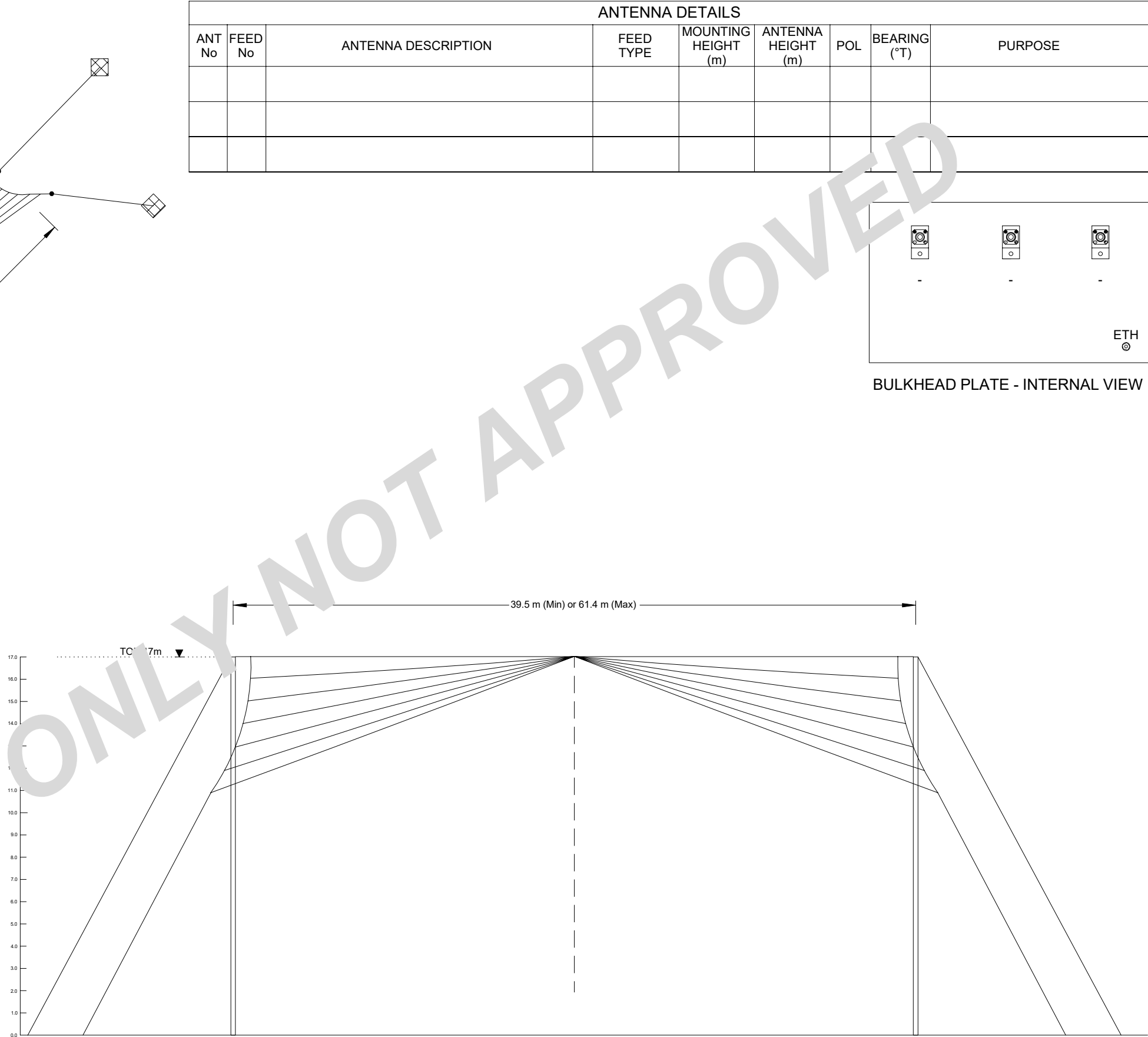
BULKHEAD PLATE - INTERNAL VIEW

NOTES:
* REFER TO SITE DETAILS DRAWING FOR FURTHER INFO.
* MAGNETIC DECLINATION +11°1' 24-JUL-25

2	-	-	-	-	-	-	-	TITLE	QPS RADIO SITE PROPOSAL LOT 163, LONGREACH MUTTABURRA ROAD 30 m ANTENNA TOWER ANTENNA DETAILS				0924
1	ORIGINAL	XX	XX-XXX-XX	-	-	-	-	DRAWING No.	00000-AFPSM-ANT.001.00-00				
ISSUE		ALTERATION	ORIG	DATE	CHKD	DATE	APPD	DATE	SCALE	NTS	DRAWN	GS	FRONTLINE & DIGITAL DIVISION SHARED SERVICES PLANNING AND DESIGN UNIT

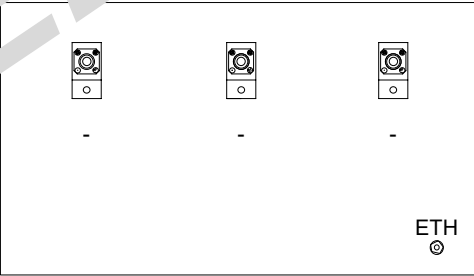


2 | VIEW PLAN
SCALE 1:100



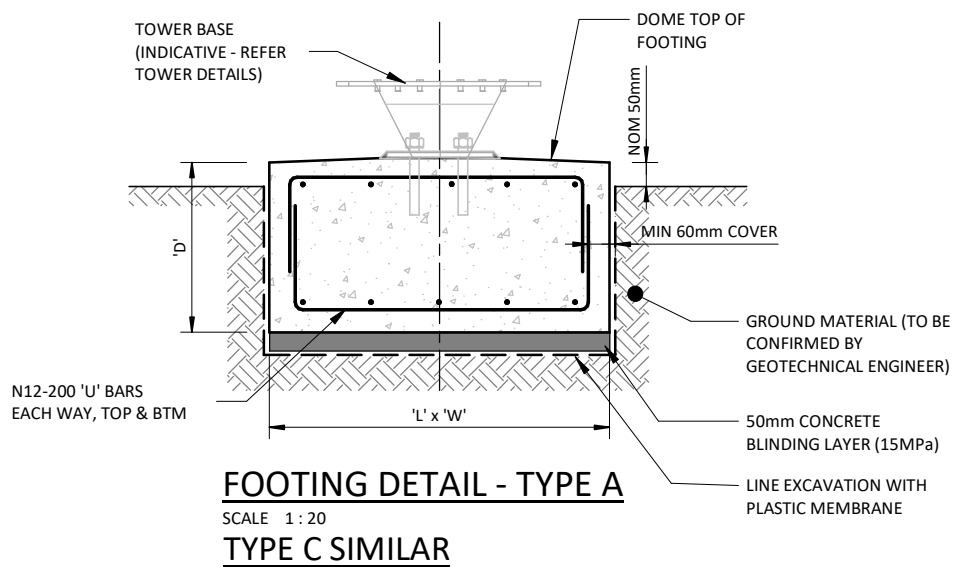
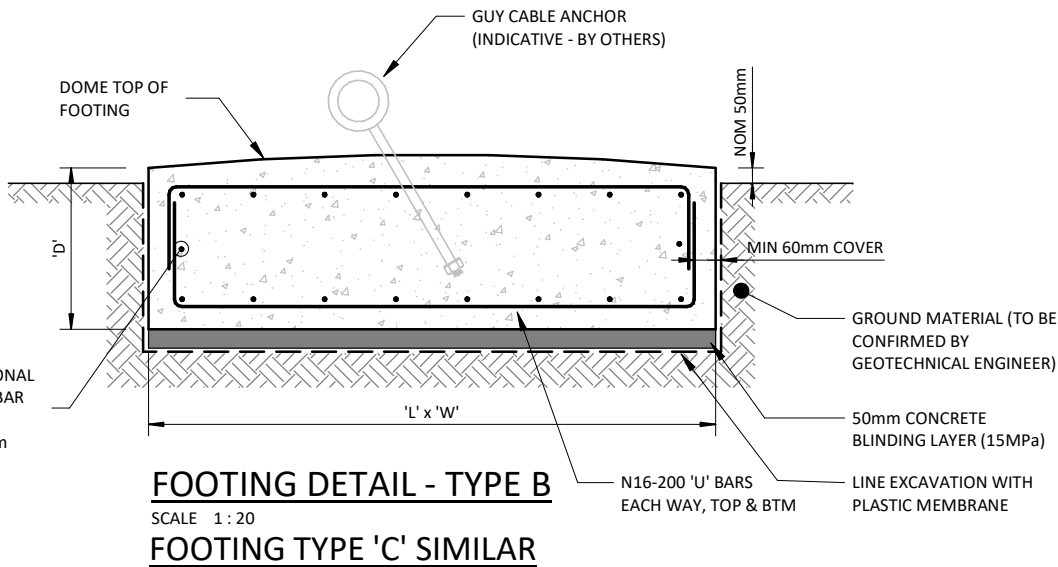
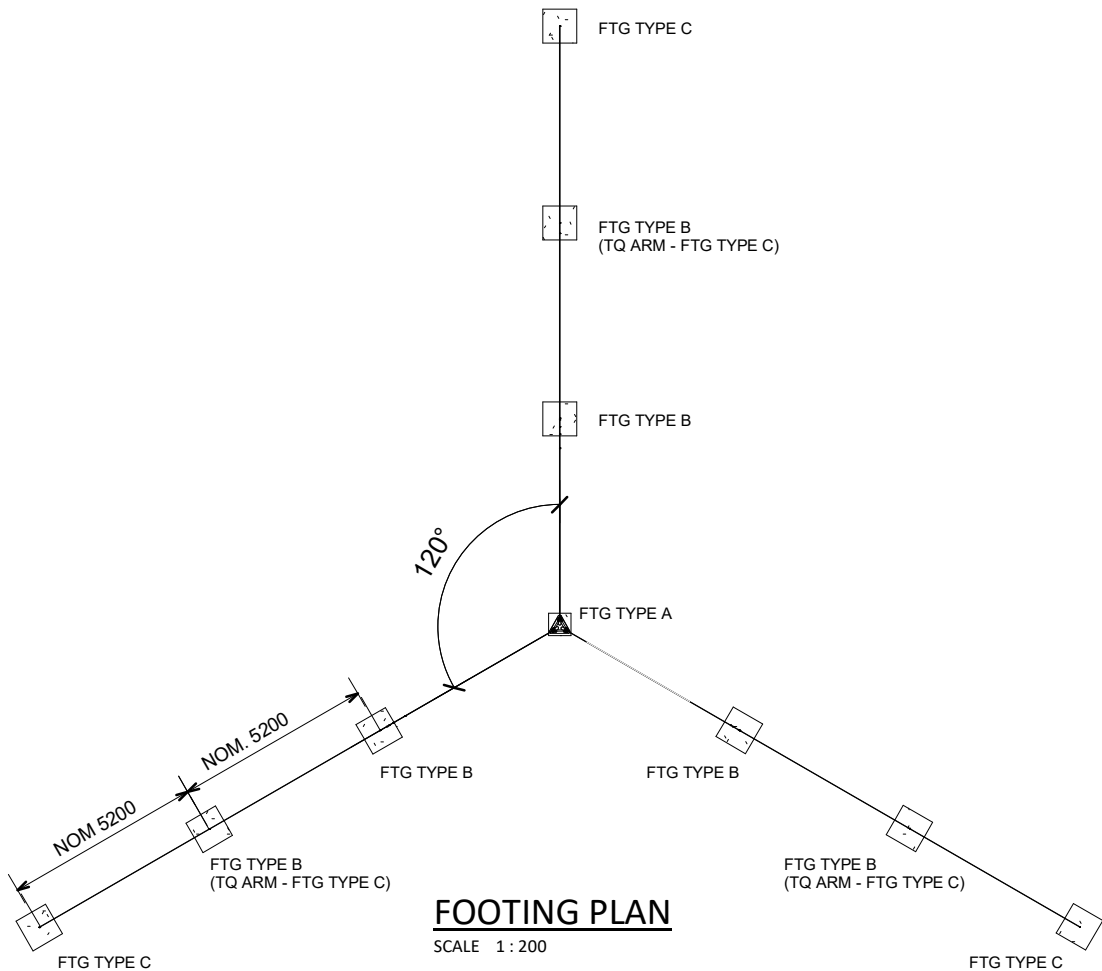
1 | SOUTHEAST ELEVATION PLAN
SCALE 1:100

ANTENNA DETAILS								
ANT No	FEED No	ANTENNA DESCRIPTION	FEED TYPE	MOUNTING HEIGHT (m)	ANTENNA HEIGHT (m)	POL	BEARING (°T)	PURPOSE



BULKHEAD PLATE - INTERNAL VIEW

2	-	-	-	-	-	-	-	TITLE	QPS RADIO SITE PROPOSAL LOT 163, LONGREACH MUTTABURRA ROAD 17m HF ANTENNA ANTENNA DETAILS				
1	ORIGINAL	XX	XX-XXX-XX	-	-	-	-	DRAWING No.	00000-AFPSM-ANT-002.00-00				
								SCALE	NTS	DRAWN	GS	FRONTLINE & DIGITAL DIVISION SHARED SERVICES PLANNING AND DESIGN UNIT	
ISSUE	ALTERATION	ORIG	DATE	CHKD	DATE	APPD	DATE	SIZE	A3	OFFICIAL			



CONCRETE

- C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600.
- C2 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN THE TRUE PROJECTION.
- C3 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN ON THE STRUCTURAL DRAWINGS OR AS OTHERWISE APPROVED BY THE ENGINEER.
- C4 REINFORCING BAR AND FABRIC LAPS SHALL BE IN ACCORDANCE WITH THE FOLLOWING TABLE AND DETAIL SHOWN, U.N.O.

BAR	ALL LAPS U.N.O.
N10	500
N12	650
N16	950
N20	1300
N24	1600

- C5 ALL REINFORCEMENT SHALL BE SUPPORTED IN ITS CORRECT POSITION SO AS NOT TO BE DISPLACED DURING CONCRETE PLACEMENT.
- C6 CONCRETE STRENGTH GRADE SHALL BE AS FOLLOWS, U.N.O. ON DRAWINGS:
- | EXPOSURE CLASSIFICATION | CONCRETE STRENGTH | CONCRETE GRADE |
|--------------------------------------|-------------------|----------------|
| NON-AGGRESIVE SOILS | 25 MPa | N25 |
| NEAR COASTAL (1-50km FROM COASTLINE) | 32MPa | N32 |
- C7 HIGHER CONCRETE STRENGTH MAY BE REQUIRED FOR ACID SULPHATE SOILS
- C8 ALL CONCRETE SHALL BE PROPERLY COMPACTED IN PLACE. ALL EXPOSED SURFACES CURED IN AN APPROVED METHOD.
- C10 PIPES, CONDUITS AND OTHER CAST-IN ELEMENTS SHALL BE POSITIONED TO ALLOW WET CONCRETE TO FLOW AROUND ALL REINFORCEMENT. DO NOT TIE CONDUITS ALONGSIDE REINFORCEMENT.

FOUNDATION NOTES

- F1 WHERE THE CONTRACTOR / INSTALLER HAS UNCERTAINTY OF THE SOIL TYPE AND STRENGTH, IT IS RECOMMENDED TO ENGAGE A QUALIFIED ENGINEER OR UNDERTAKE A GEOTECHNICAL INVESTIGATION TO COFIRM THE SOIL PARAMETERS.
- F2 THE RESPONSIBILITY RESTS WITH THE CONTRACTOR / INSTALLER TO ENSURE THE SOIL CONDITIONS ARE SUITABLE FOR THE FOOTING DESIGN BASED ON THE CRITERIA BELOW UNLESS THIS RESPONSIBILITY HAS BEEN ASSIGNED TO A QUALIFIED STRUCTURAL/CIVIL ENGINEER
- F3 REMOVE ALL TOPSOIL FROM THE PROPOSED FOUNDATION AREA AND ENSURE NO RESIDUAL VEGETATION EXISTS BELOW THE FOUNDATION SOIL
- F4 REMOVE SOFT GROUND MATERIAL THROUGHOUT THE PROPOSED FOUNDATION AREA. SOFT SPOTS/AREAS SHOULD BE EXCAVATED AND REPLACED WITH ROAD BASE (MIN CBR 15), COMPACTED IN LAYERS MAX 300mm THICK OR 15MPa CONCRETE
- F5 MAINTAIN THE EXCAVATION IN A DRY CONDITION. WHERE THE FOUNDATION IS WITHIN A WATER TABLE THEN SEEK ADVISE FROM A QUALIFIED STRUCTURAL / CIVIL ENGINEER.

FOOTING SIZE

FOOTING - TYPE A

SOIL TYPE	LENGTH	WIDTH	DEPTH
POOR	1300	1300	450
AVERAGE	950	950	400
GOOD	750	750	350

FOOTING - TYPE B

SOIL TYPE	LENGTH	WIDTH	DEPTH
POOR	1500	1500	600
AVERAGE	1500	1500	600
GOOD	1500	1500	600

FOOTING - TYPE C

SOIL TYPE	LENGTH	WIDTH	DEPTH
POOR	1700	1700	600
AVERAGE	1700	1700	600
GOOD	1700	1700	600

SOIL CLASSIFICATION (AS/NZS 4676, APPENDIX I)

TYPE	POOR	AVERAGE	GOOD
CLASS	VERY SOFT/SOFT	FIRM	VERY FIRM/HARD
SOIL DESCRIPTION	SILTY CLAYS & SANDS; LOOSE DRY SANDS; WET CLAYS, SILTY LOAMS; WET OR LOOSE SANDS	DAMP CLAYS; SANDY CLAYS; DAMP SANDS	DRY CLAYS; CLAYEY SANDS; COURSE SANDS; COMPACT SANDS; GRAVELS; DRY CLAYS
STENGTH (fb) kPa	fb > 60	fb > 100	fb > 150

FOUNDATION NOTES:

- FOUNDATION DESIGNS SHALL NOT BE USED FOR SITES BUILT ON FILL
- FOUNDATION DESIGNS ARE NOT SUITABLE FOR SITES WITH SLOPES GREATER THAN 10°
- FOUNDATION DESIGNS SHALL NOT BE USED FOR AREAS ABOVE OR ADJACENT TO UNDERGROUND SERVICES
- THESE FOUNDATIONS ARE LIMITED FOR THE USE OF THE TOWER STRUCTURE IN DRAWING 718-S02
- FURTHER ENGINEERING WILL BE REQUIRED WHERE CONDITIONS OR LOADS ARE OUTSIDE THE DESIGN SCOPE

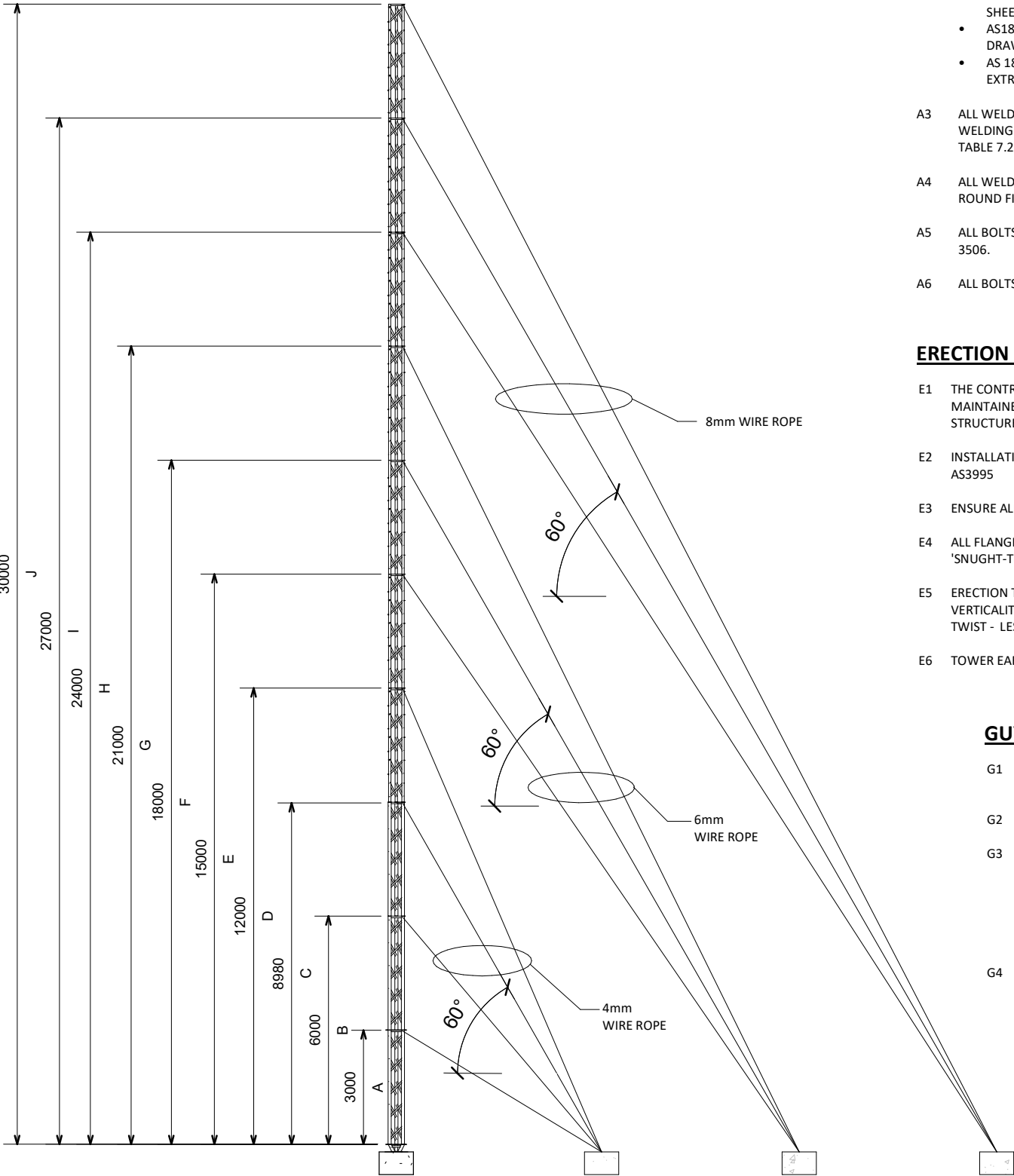
USE FIGURED DIMENSIONS IN PREFERENCE TO SCALE. REPORT DISCREPENCIES PRIOR TO FABRICATION OR CONSTRUCTION.

IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPLIANCE WITH RELEVANT CODES AND REGULATIONS IS MAINTAINED AT ALL TIMES.



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REV	DATE	ISSUE / AMMENDMENT	BY	PROJECT	CLIENT	DRAWING NAME
				30m TOWER & FOOTING	TELCO ANTENNAS	FOUNDATION PLAN & DETAILS
				AUSTRALIAN WIND REGIONS A, B & C	DATE JAN 2018	PROJECT NO 718
					SCALE AS SHOWN SHEET A3	DRAWING NO S01
					DRAWN ZY CHECKED LS	ISSUE



TYPICAL ELEVATION

SCALE 1 : 150



MODCOGROUP

Engineering Services | Building Projects

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Registered Professional Engineers

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ALUMINIUM WORK NOTES

- A1 ALL ALUMINIUM WORK TO BE IN ACCORDANCE WITH AS1664 - ALUMINIUM STRUCTURES
- A2 UNLESS NOTED OTHERWISE, ALL ALUMINIUM SHALL BE IN ACCORDANCE WITH
- AS1734 ALUMINIUM AND ALUMINIUM ALLOYS - FLAT SHEET, COILED SHEET AND PLATE
 - AS1865 ALUMINIUM AND ALUMINIUM ALLOYS - DRAWN WIRE, ROD BAR AND STRIP
 - AS 1866 ALUMINIUM AND ALUMINIUM ALLOYS - EXTRUDED ROD, BAR, SOILD AND HOLLOW SHAPES
- A3 ALL WELDING TO BE IN ACCORDANCE WITH AS1665 WELDING CONSUMABLES TO BE IN ACCORDANE WITH TABLE 7.2 OF AS 1664.
- A4 ALL WELDS SHALL BE 6mm STRUCTURAL PURPOSE ALL ROUND FILLET WELDS UNLESS NOTED OTHERWISE.
- A5 ALL BOLTS TO BE STAINLESS STEEL COMPLYING WITH ISO 3506.
- A6 ALL BOLTS TO BE Ø10mm STAINLESS STEEL U.N.O.

ERECTION NOTES

- E1 THE CONTRACOR / INSTALLER IS TO ENSURE THE TOWER IS MAINTAINED IN A STABLE CONDITION AND THAT NO PART OF THE STRUCTURE IS OVERSTRESSED DURING CONSTRUCTION.
- E2 INSTALLATION OF TOWER TO BE ERECTED IN ACCORDANCE WITH AS3995
- E3 ENSURE ALL BOLT HEADS & NUTS SIT FLAT ON FLANGES
- E4 ALL FLANGES MUST MAKE FULL CONTACT AT EACH BOLT PRIOR TO 'SNUGHT-TIGHT' BOLTS. ADVISE DESIGNER IF THIS IS NOT ACHIEVED.
- E5 ERECTION TOLERANCES SHALL BE LIMITED TO:
VERTICALITY - LESS THAN H/360
TWIST - LESS THAN 2° PER MODULE
- E6 TOWER EARTHING DESIGNED & SPECIFIED BY OTHERS

GUY CABLE NOTES

- G1 ALL GUY CABLES TO TO BE IN ACCORDANCE WITH AS3569 - STEEL WIRE ROPES - PRODUCT SPECIFICATION
- G2 GUY CABLES TO BE CLASS 6x7, GRADE 1570
- G3 MINIMUM BREAKING STRENGTH
- | ROPE DIAM | MIN BREAKING FORCE (kN) |
|-----------|-------------------------|
| 4 | 8.4 |
| 6 | 18.8 |
| 8 | 33.4 |
- G4 ALL CABLE JOINS AND ATTACHMENTS TO BE IN ACCORDANE WITH AS2759 - STEEL WIRE ROPE - USE, OPERATION AND MAINTENANCE

MEMBER SCHEDULE

MODULE	MEMBER	DESCRIPTION	GRADE
MODULES A TO C	COLUMN	82.55 x 5.2 CHS	ALUMINIUM 6063-T5
MODULES A TO C	HOR. & DIAG. WEB	40 x 4 CHS	ALUMINIUM 6063-T5
MODULES D TO G	COLUMN	63.5 x 3.9 CHS	ALUMINIUM 6063-T5
MODULES D TO G	HOR. & DIAG. WEB	40 x 3 CHS	ALUMINIUM 6063-T5
MODULES H TO J	COLUMN	60 x 3 CHS	ALUMINIUM 6063-T5
MODULES H TO J	HOR. & DIAG. WEB	40 x 3 CHS	ALUMINIUM 6063-T5
	STEP MEMBER	32 x 2.3 CHS	ALUMINIUM 6063-T5

TOWER ACCESS & CLIMBING NOTES

- A1 THIS TOWER IS A CLASS C STRUCTURE IN ACCORDANCE WITH AS3995
- A2 ONLY EXPERIENCED AND QUALIFIED PERSONNEL WITH APPROPRIATE TRAINING ARE TO CLIMB THIS STRUCTURE
- A3 THE TOWER HORIZONTAL AND DIAGONAL MEMBERS SHALL NOT BE USED FOR THE PURPOSE OF AN ANCHOR OR CLIMBING LANYARD.
- A4 CLIMBER MAY PLACE THE LANYARD CLIP AT THE LOWER END OF A DIAGONAL MEMBER AGAINST THE TOWER COLUMN. THIS IS ONLY ALLOWABLE FOR CLIMBING. NOT SUITABLE FOR ANCHORING OR POSITIONING.
- A5 CLIMBING SIGNAGE SHOULD BE PROVIDED IN ACCORDANCE WITH AS1891.4

ANTENNA LIMIT

ANTENNA	QTY	EFF. AREA	HEIGHT
300Ø DISH	3	0.08m²	28,29,30m
600Ø DISH	2	0.29m²	29, 30m
900Ø DISH	1	0.64m²	30m
YAGI OR SIMILAR	< 5	VARIES	25-30m

CONTACT DESIGNER FOR INSTALLATION OF OTHER ANTENNAS OR CONFIGURATION

TOWER DESIGN CRITERIA - AS3995 & AS1170.2

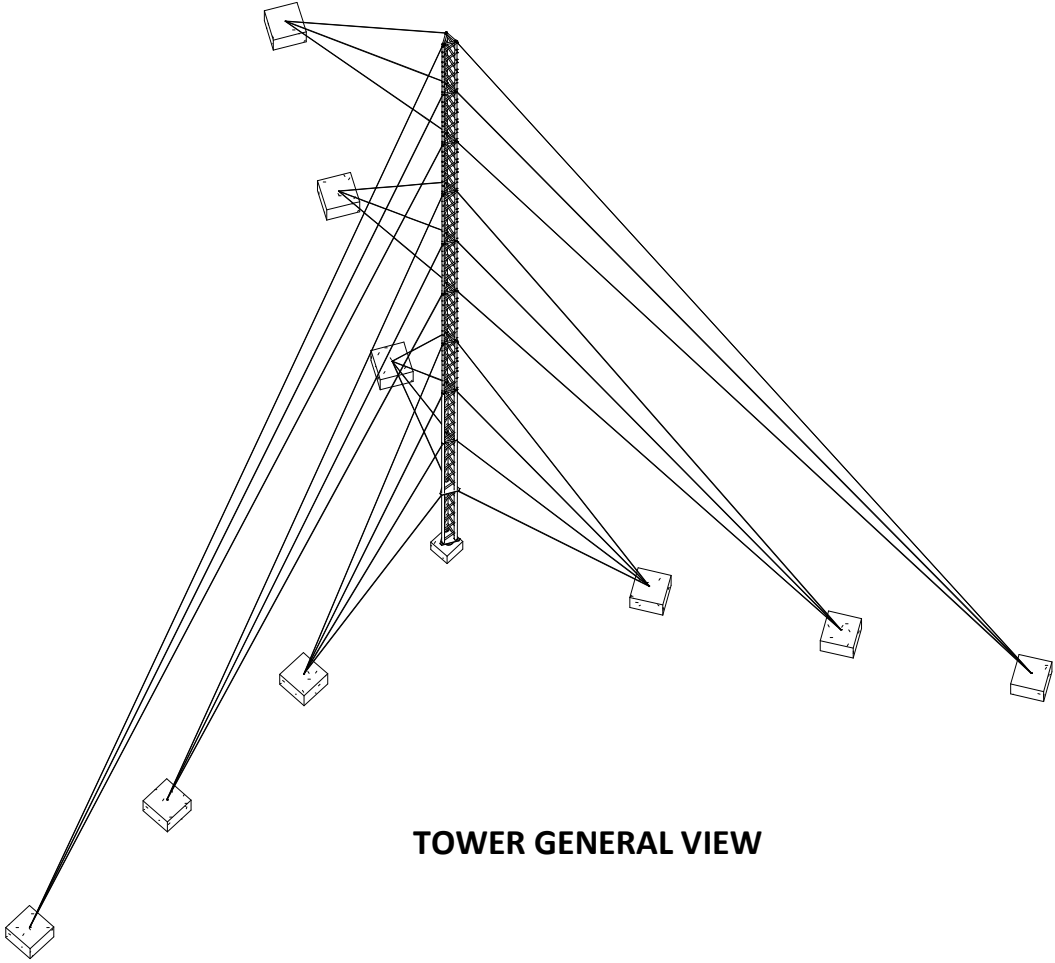
WIND REGION	WIND SPEED (Vu)
A	50 m/s
B	60 m/s
C	70 m/s

TOPOGRAPHIC (Mt) = 1.0
TERRAIN CATEGORY = 2.0
STRUCTURE CLASSIFICATION PER AS3995 IS TYPE II

a. the danger to life in case of collapse may be negligible and adequate warning arrangements are incorporated to ensure the general public is not unduly endangered; and

b. the loss of the services provided is not critical, e.g. where alternative means of communication can be provided.

NOTE:
TOWER DESIGN CRITERIA EXCLUDES LOCATIONS SUCH AS:
AT OR NEAR TOP OF HILL, RIDGE OR ESCARPMENT AND WITHIN 150M FROM HILL EDGE AND SLOPES GREATER THAN 5%.
TOWER DESIGN WORKING LIFE: 25 YEARS
THE TOWER STRUCTURE HAS NOT BEEN DESIGNED FOR SNOW LOAD OR ICE CONDITIONS

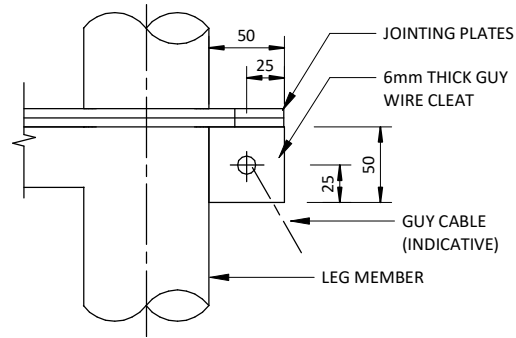


TOWER GENERAL VIEW

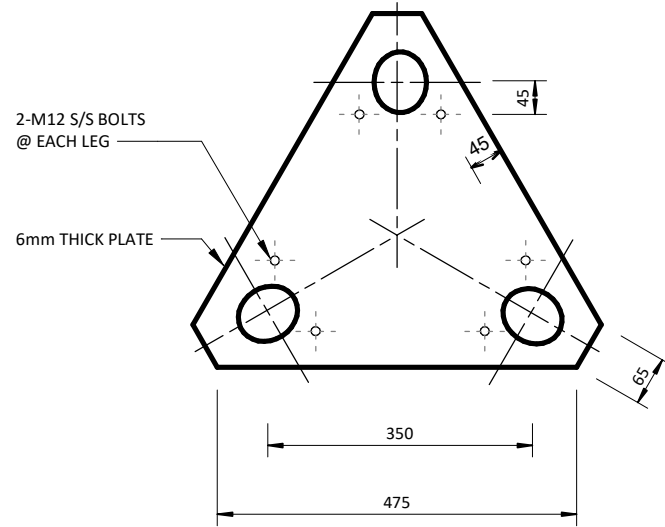
USE FIGURED DIMENSIONS IN PREFERENCE TO SCALE. REPORT DISCREPENCIES PRIOR TO FABRICATION OR CONSTRUCTION.

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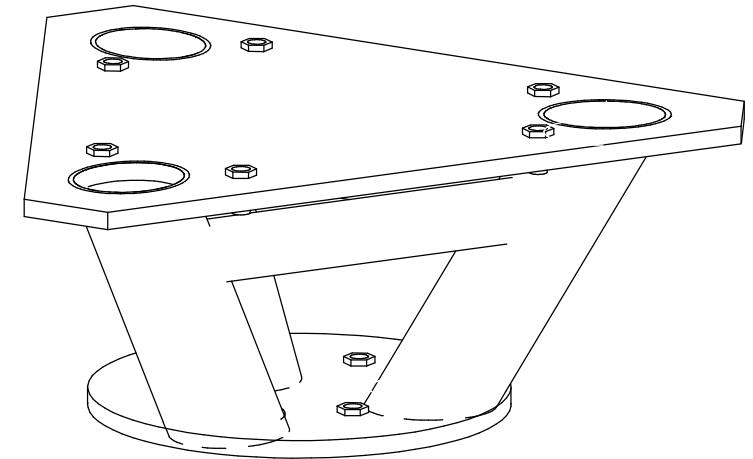
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				SCALE	DATE JAN 2018	PROJECT NO 718
				AUSTRALIAN WIND REGIONS A, B & C	SCALE AS SHOWN SHEET A3	DRAWING NO S02
					DRAWN ZL CHECKED LS	ISSUE



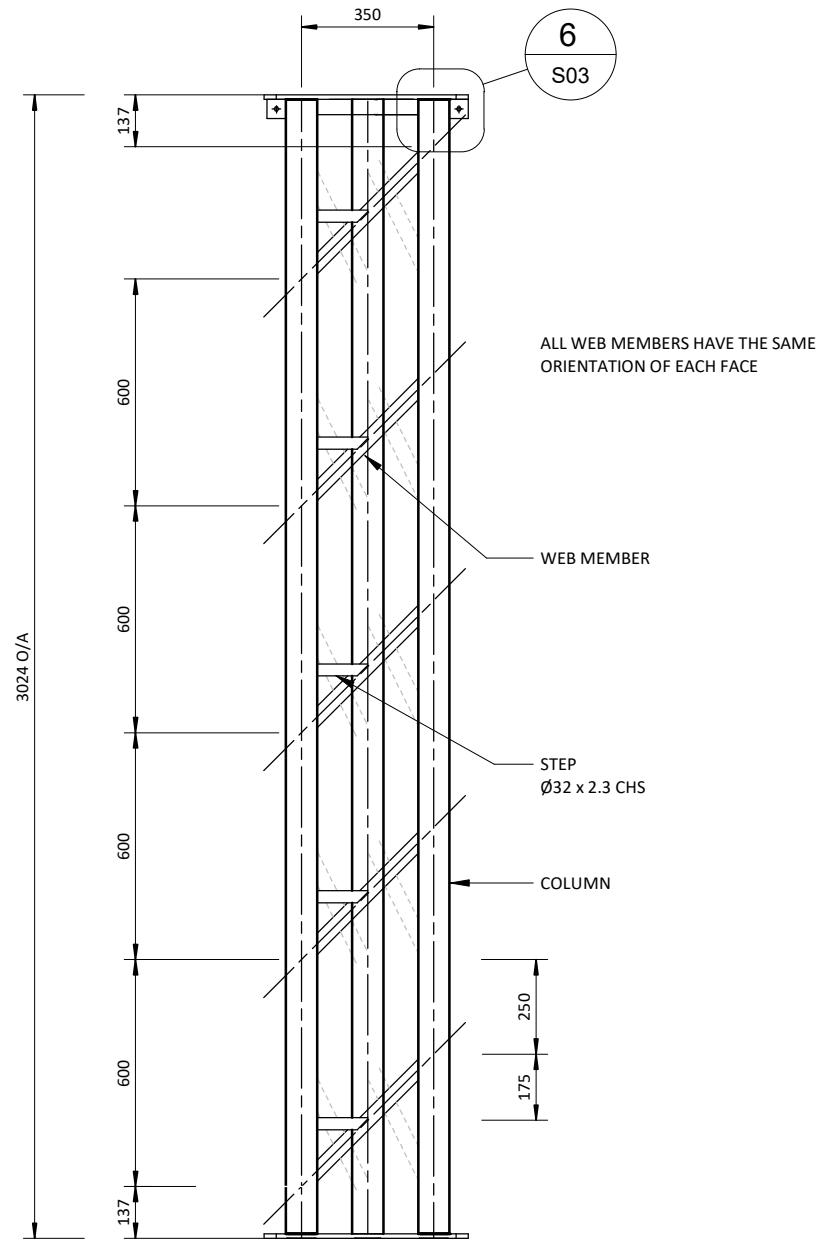
6 GUY CABLE CLEAT
SCALE 1:5



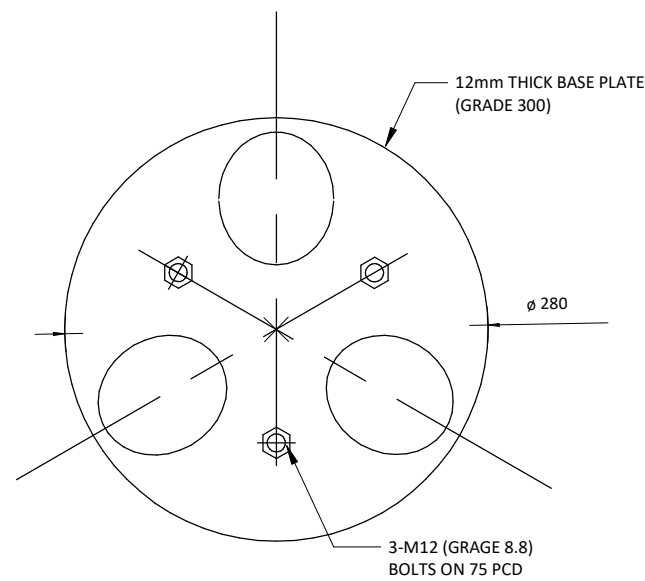
JOINING PLATE - TYPICAL
SCALE 1:10



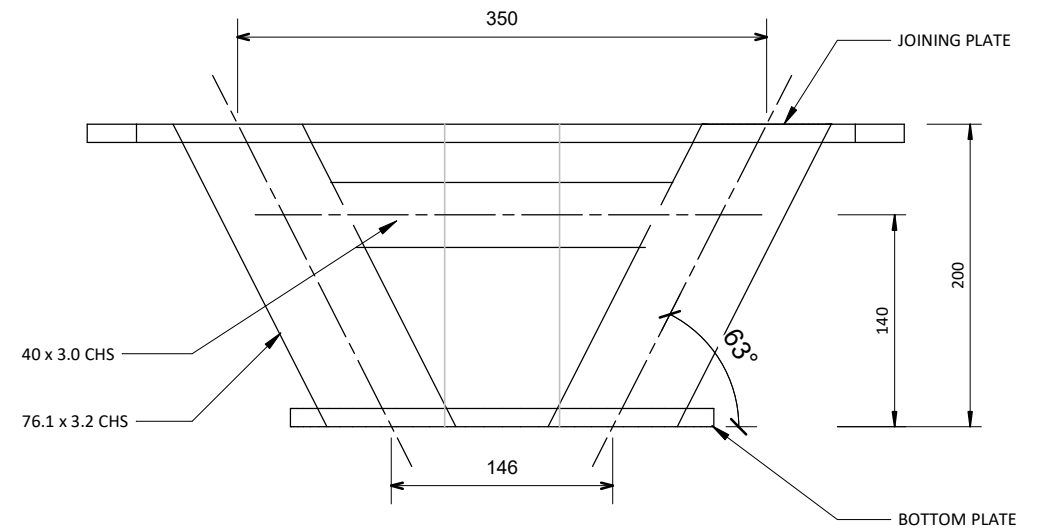
TOWER BASE
SCALE



TYPICAL MOUDULE FACE
SCALE 1:20



BASE BOTTOM PLATE
SCALE 1:5



TOWER BASE ELEVATION
SCALE 1:5

USE FIGURED DIMENSIONS IN PREFERENCE TO SCALE. REPORT DISCREPANCIES PRIOR TO FABRICATION OR CONSTRUCTION.

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				AUSTRALIAN WIND REGIONS A, B & C	DATE JAN 2018	PROJECT NO 718
					SCALE AS SHOWN SHEET A3	DRAWING NO S03
					DRAWN Author CHECKED LS	ISSUE

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