

1 PLAN VIEW
S-03 MAST ARRANGEMENT

NOTES

REV	DESCRIPTION	DATE
C	LOCATION REVISED	17/02/23
B	REMOVED CONCRETE FROM FOOTINGS	02/12/22
A	ISSUED FOR APPROVAL	16/11/22



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CLIENT

PROJECT
ST PATRICKS PLAINS WIND FARM

SHEET TITLE
MAST PLAN

STATUS **INDICATIVE DESIGN**

SCALE PLOTTED AT A3
1:600

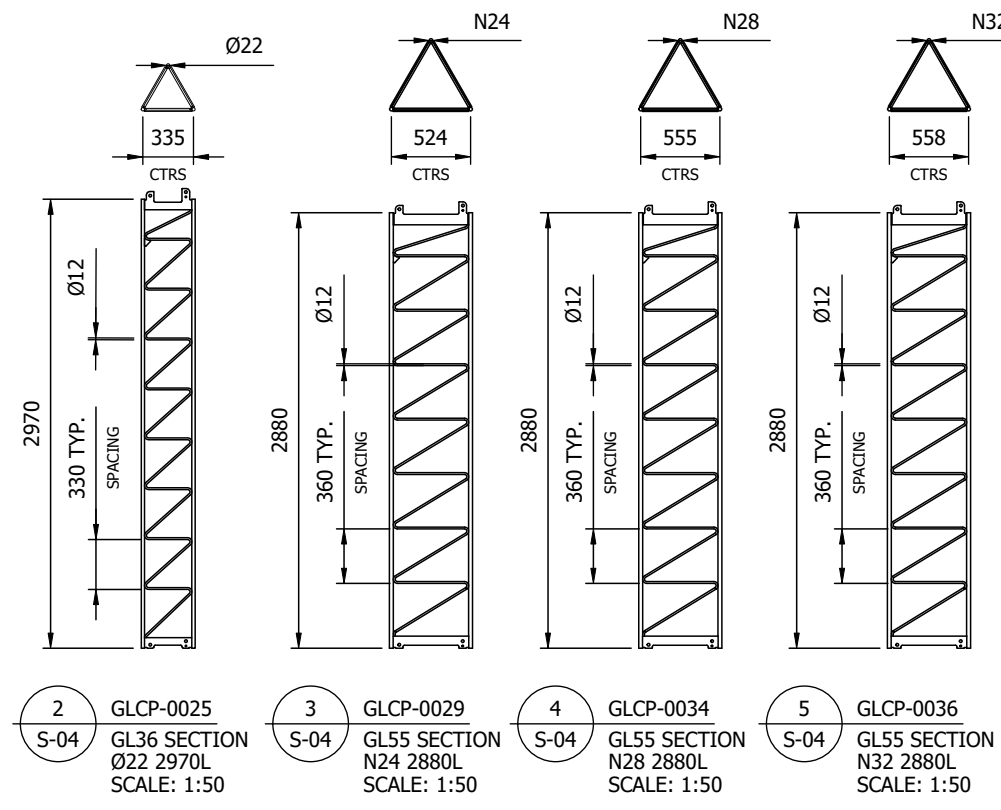
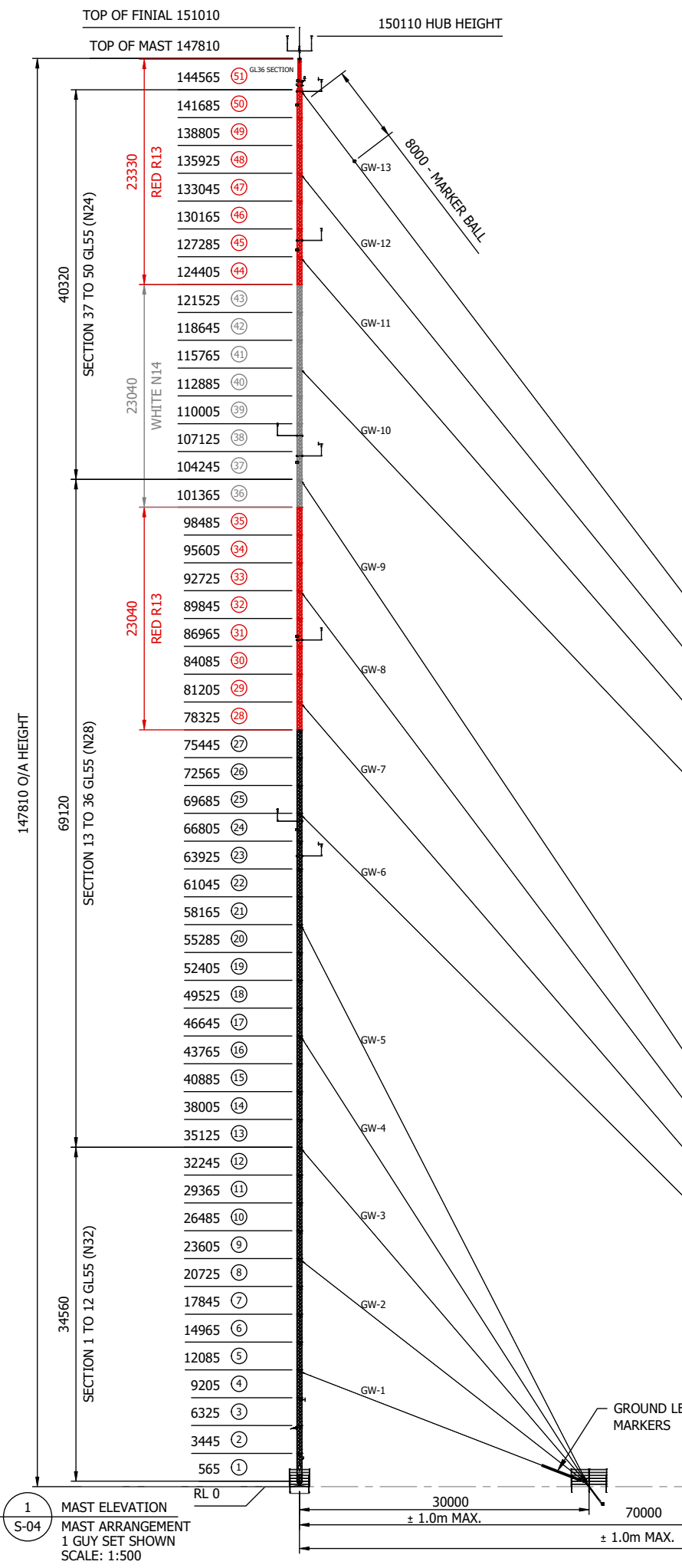
THIRD ANGLE PROJECTION

DRAWN CG	CHECKED HY	APPROVED AA	CO-ORDINATED AA
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DRAWING NUMBER ART-22690-DRG-0001	SHEET 3/9	ISSUE C
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GUY WIRE SCHEDULE (RIGGING EQUIPMENT TO AS 1138. AS 2319. AS 2714. AS 2759. AS 4991.)

MARK	DESCRIPTION	HEIGHT	LENGTH	RADIUS	SIZE	PRE-TENSION	BOW & 'D' SHACKLE GALV. (GRADE S)	FAN-WRAP GALV. (GRADE GFG 083)	THIMBLE GALV. (GRADE 3025)	
GW-1	GUY WIRE 1 - Ø8.25 (7/2.75) G1320	11820	58000	30000	Ø8.25	3.5kN	22mm		11mm	
GW-2	GUY WIRE 2 - Ø8.25 (7/2.75) G1320	23340	55000							
GW-3	GUY WIRE 3 - Ø8.25 (7/2.75) G1320	34860	63000							
GW-4	GUY WIRE 4 - Ø8.25 (7/2.75) G1320	46380	70000	70000				19mm		
GW-5	GUY WIRE 5 - Ø8.25 (7/2.75) G1320	57900	80000							
GW-6	GUY WIRE 6 - Ø8.25 (7/2.75) G1320	69420	130000							
GW-7	GUY WIRE 7 - Ø8.25 (7/2.75) G1320	80940	135000	110000	Ø10	5kN	16mm	10mm	14mm	
GW-8	GUY WIRE 8 - Ø8.25 (7/2.75) G1320	92460	143000							
GW-9	GUY WIRE 9 - Ø8.25 (7/2.75) G1320	103980	153000							
GW-10	GUY WIRE 10 - Ø10 (19/2.00) G1320	115500	208000							
GW-11	GUY WIRE 11 - Ø10 (19/2.00) G1320	127020	215000							
GW-12	GUY WIRE 12 - Ø10 (19/2.00) G1320	135660	220000							
GW-13	GUY WIRE 13 - Ø10 (19/2.00) G1320	144300	225000							



- NOTES
- REFER TO GENERAL NOTES (SHEET 2) FOR MAST SPECIFICATIONS AND ART PROPRIETARY PRODUCT DISCLOSURE.
 - REFER TO MAST ANCILLARY DETAILS (SHEET 5) FOR ANCILLARY DETAILS AND INFORMATION.
 - REFER TO MAST FOOTING DETAILS (SHEET 6) FOR FOOTING DETAILS AND INFORMATION.
 - GW-6, GW-8,: FROM THE CENTER OF THE INSTRUMENT TO GUY WIRE, CLEARANCE IS 1200mm.

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CLIENT
PROJECT
ST PATRICKS PLAINS WIND FARM

SHEET TITLE
MAST ELEVATION

STATUS
INDICATIVE DESIGN

SCALE PLOTTED AT A3
1:500

THIRD ANGLE PROJECTION

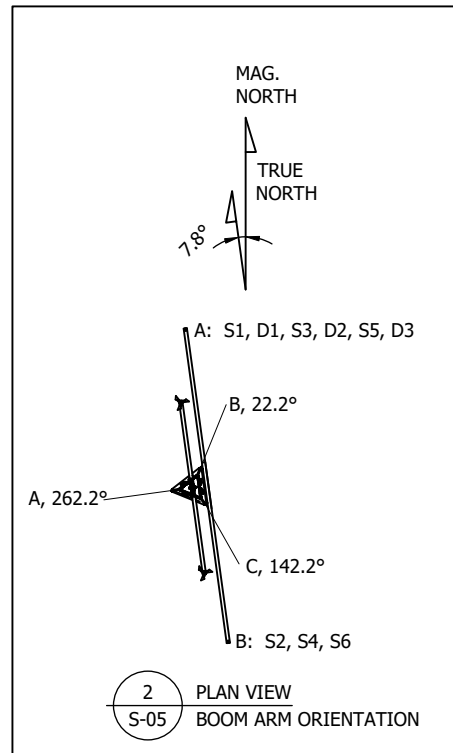
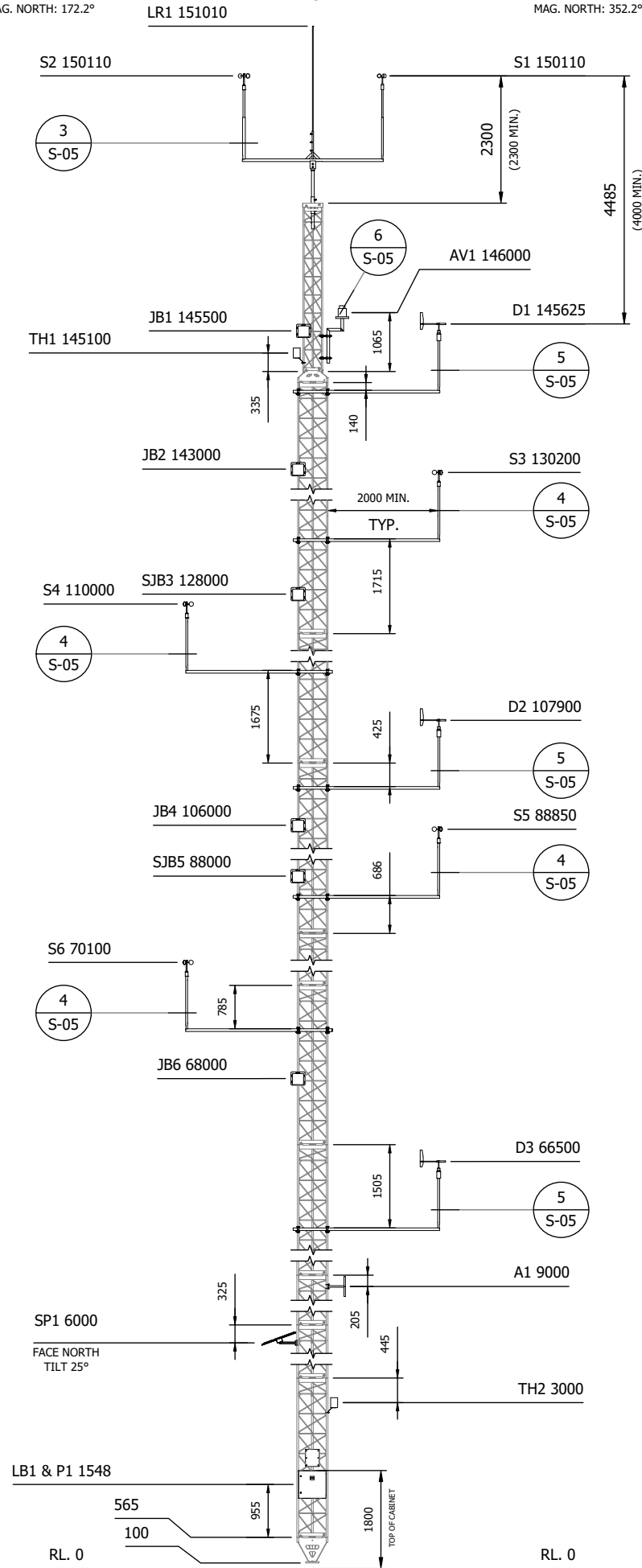
DRAWN CG	CHECKED HY	APPROVED AA	CO-ORDINATED AA
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SECONDARY (B)
TRUE NORTH: 180°
MAG. NORTH: 172.2°

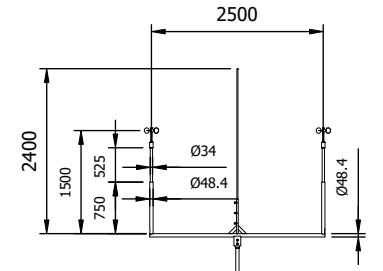
MAGNETIC DECLINATION:
7.8°

PRIMARY (A)
TRUE NORTH: 360°
MAG. NORTH: 352.2°

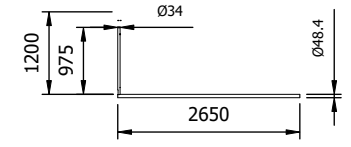


MAST ANCILLARY LOADING				
MARK	DESCRIPTION	HEIGHT	SECTION	ESA m ²
LR1	LIGHTNING ROD	151010	TOP	0.56
S1	ANEMOMETER THIES FCA2	150110		
S2	ANEMOMETER THIES FCA2			
JB1	JUNCTION BOX	145500	51	0.06
AV1	AVIATION LIGHT OL800 STANDARD	146000	51	0.02
D1	WIND VANE THIES FIRST CLASS	145625	50	0.2
TH1	TEMP. & HUMIDITY GALTEC MELA KPC	145100	51	0.02
JB2	JUNCTION BOX	143000	50	0.06
S3	ANEMOMETER THIES FCA2	130200	45	0.2
SJB3	JUNCTION BOX SMALL	128000	45	0.06
S4	ANEMOMETER THIES FCA2	110000	38	0.2
D2	WIND VANE THIES FIRST CLASS	107900	37	0.2
JB4	JUNCTION BOX	106000	37	0.06
S5	ANEMOMETER THIES FCA2	88850	31	0.2
SJB5	JUNCTION BOX SMALL	88000	31	0.06
S6	ANEMOMETER THIES FCA2	70100	24	0.2
JB6	JUNCTION BOX	68000	24	0.06
D3	WIND VANE THIES FIRST CLASS	66500	23	0.2
A1	ANTENNA OMNI COL7195	9000	3	0.02
SP1	SOLAR PANEL SOLARWAT 50w	6000	2	0.33
TH2	TEMP. & HUMIDITY GALTEC MELA KPC	3000		0.02
LB1	CAMPBELL SCIENTIFIC DATA LOGGER CR1000X	1548	1	0.27
P1	PRESSURE SENSOR VAISALA PTB110 (INSIDE LB1)			
TOTAL ESA m ²				3

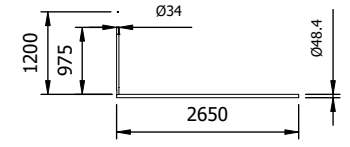
NOTES:
1. STRUCTURAL ALLOWANCE FOR BUNDLED CABLES DOWN MAST LEG(S).
2. ESA VALUES INCLUDE BOOM ARMS, BRACKETS AND INSTRUMENTS.



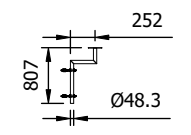
3 BAAS-002
S-05 TOP GOAL-POST
2x THIES FCA2/X



4 BA-040
S-05 BOOM ARM
ANEMOMETER
THIES FCA2/X



5 BA-069
S-05 WIND VANE
THIES FIRST CLASS



6 MOAS-0016
S-05 AVIATION LIGHT MOUNT
OL800 STANDARD

1 ELEVATION VIEW
S-05 MAST ANCILLARIES

NOTES

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PROJECT
ST PATRICKS PLAINS WIND
FARM

SHEET TITLE
MAST ANCILLARY DETAILS

STATUS **INDICATIVE DESIGN**

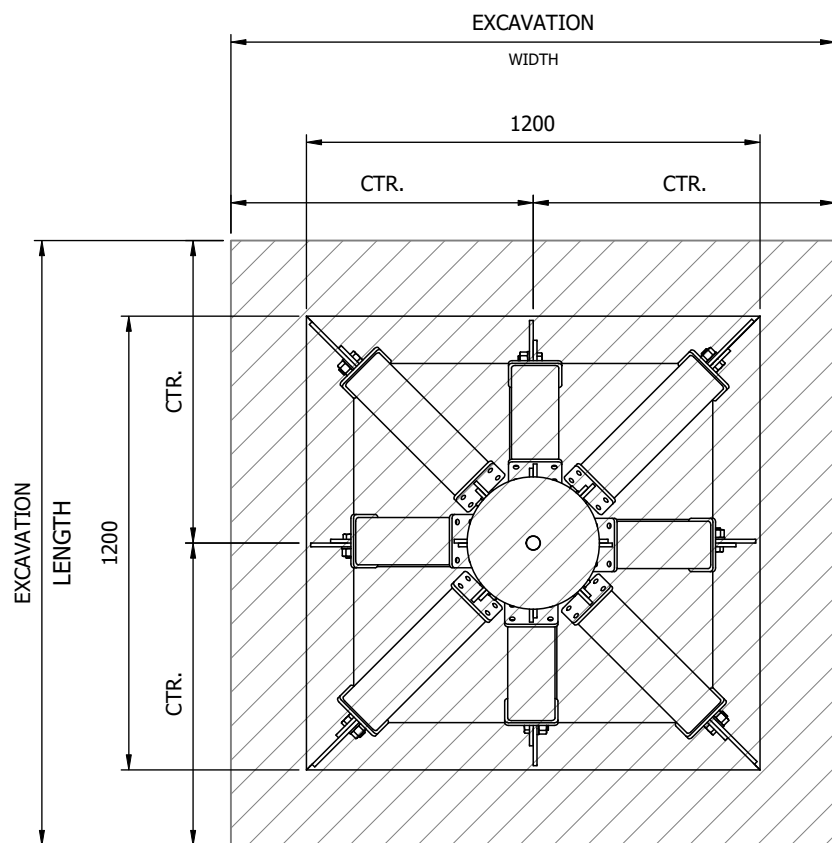
SCALE PLOTTED AT A3
1:100

THIRD ANGLE
PROJECTION

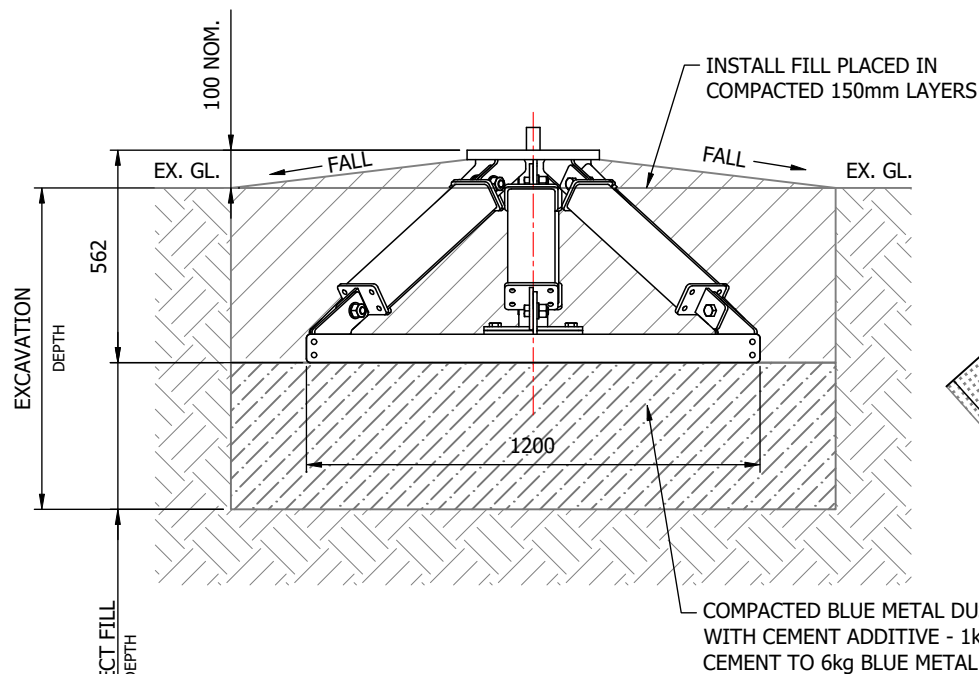
DRAWN CG	CHECKED PFB	APPROVED AA	CO-ORDINATED AA
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MAST BASE FOUNDATION					
EXCAV. WIDTH	EXCAV. LENGTH	EXCAV. DEPTH	SELECT FILL DEPTH	BLUE METAL VOL. (m ³)	CEMENT (kg)
2000	2000	1362	900	3.6m ³	870

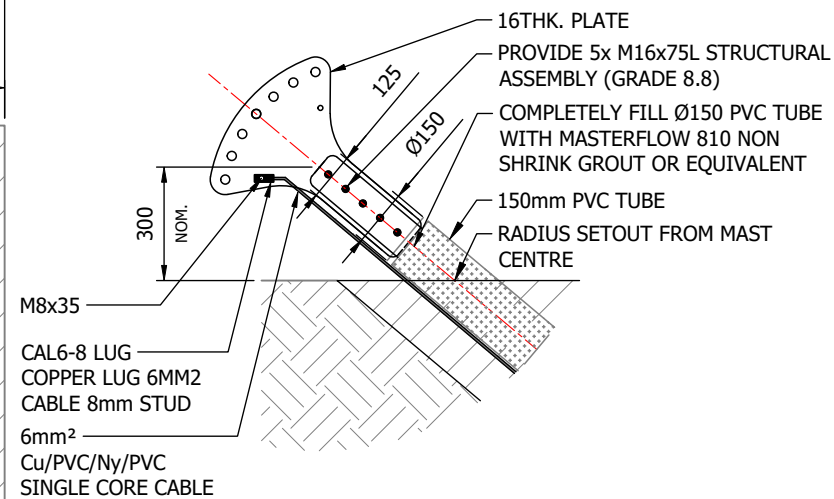


1 PLAN VIEW
S-06 BURIED STEEL MAST FOUNDATION
TYPICAL DETAIL

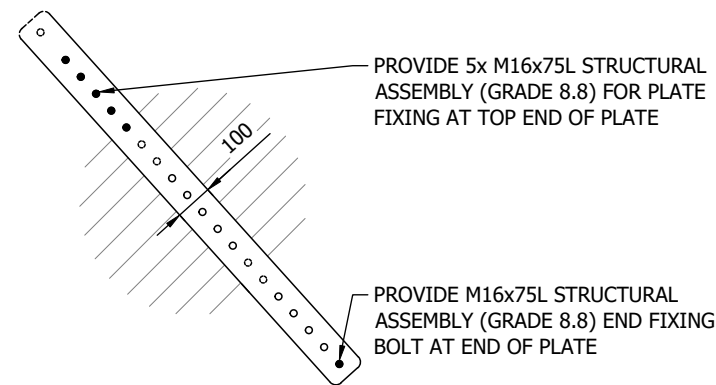


2 SECTION VIEW
S-06 BURIED STEEL MAST FOUNDATION
TYPICAL DETAIL

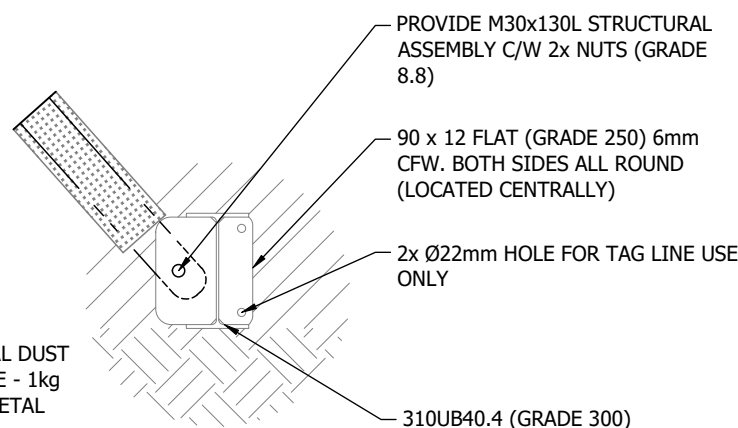
GUY ANCHOR FOOTING SCHEDULE														
FOOTING	RADIUS	No. GUYS	EXCAV. WIDTH	EXCAV. LENGTH	EXCAV. DEPTH	ANCHOR BEAM	ANGLE	DIM A	DIM B	DIM C	GROUT WEIGHT (kg)	PIPE LENGTH	ANCHOR HEAD	TURNBUCKLE GALV. (GRADE P)
INNER	30000	5	800	3400	2200	3000	53°	1593	400	2960	73	2600	7 HOLE	5/8"
INTERMEDIATE	70000	4	800	3400	2600	3000	54°	1755	400	3425	86	3100	7 HOLE	5/8"
OUTER	110000	4	800	3400	3400	3000	52°	2463	400	4495	116	4100	7 HOLE	7/8"



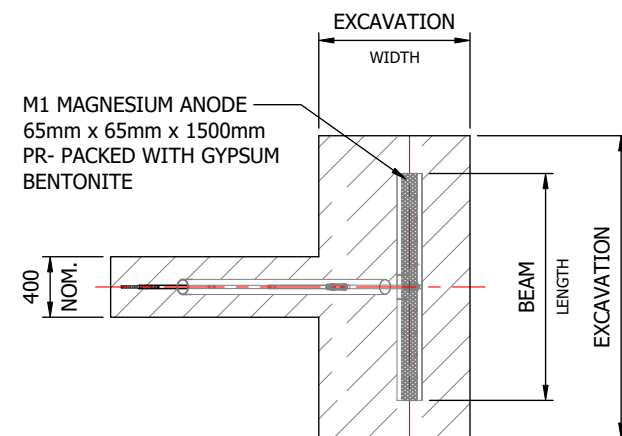
A DETAIL VIEW
S-06 ANCHOR HEAD ASSEMBLY
TYPICAL DETAIL



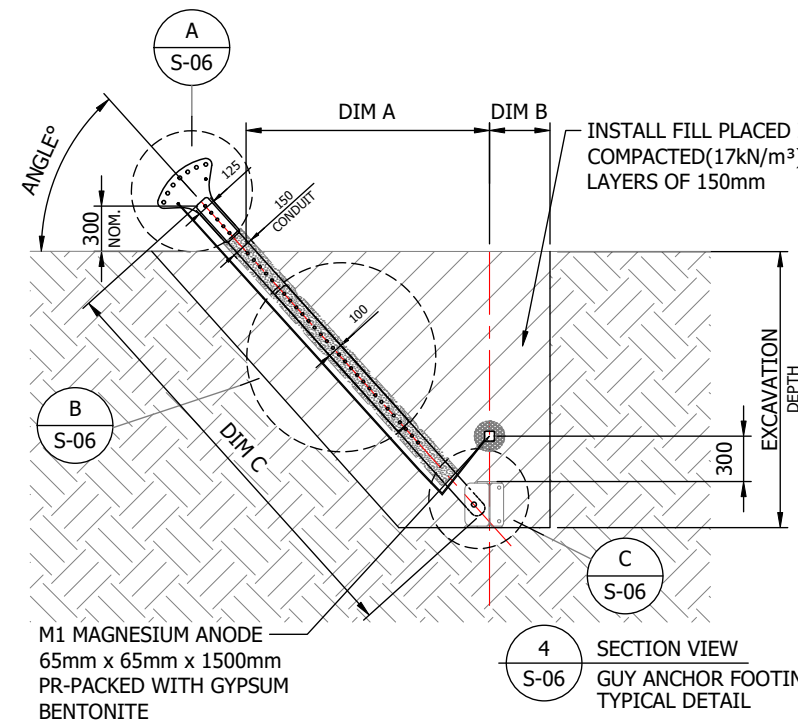
B DETAIL VIEW
S-06 ANCHOR ROD CONNECTION
PVC TUBE & EARTH NOT SHOWN FOR CLARITY
TYPICAL DETAIL



C DETAIL VIEW
S-06 ANCHOR BEAM ASSEMBLY
TYPICAL DETAIL



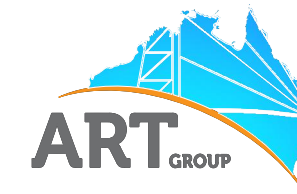
3 PLAN VIEW
S-06 GUY ANCHOR FOOTING
TYPICAL DETAIL



4 SECTION VIEW
S-06 GUY ANCHOR FOOTING
TYPICAL DETAIL

- NOTES
- REFER TO GENERAL NOTES (SHEET 2) GUY ANCHOR CONCRETE & COMPACTION SPECIFICATIONS.
 - OUTER GUY ANCHOR WILL REQUIRE AN ADDITIONAL: ANPA-0046_01 - ANCHOR BOLTED ARM - CENTRE PLATE TO ACHIEVE THE DEPTH.

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PROJECT
ST PATRICKS PLAINS WIND
FARM

SHEET TITLE
MAST FOOTING DETAILS - BURRIED

STATUS **INDICATIVE DESIGN**

SCALE PLOTTED AT A3
N.T.S. THIRD ANGLE PROJECTION

DRAWN CG	CHECKED HY	APPROVED AA	CO-ORDINATED AA
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DRAWING NUMBER ART-22690-DRG-0001	SHEET 6/9	ISSUE C
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