



GENERAL NOTES

ADVERTISED PLAN

- Legend**
- Fence/Site Boundary
 - Property Boundaries
 - Overhead Line 66kV
 - Overhead Line 11kV
 - Veg. Avoidance Area
 - Tree Protection Zone

PROJECT NAME:
Maffra - VIC

DRAWING TITLE:
Maffra Existing Site Conditions

DRAWN BY:
A. YOUNG

CHECKED BY:
-

APPROVED BY:
-

DATE:
29/03/2023

Company:
BNRG Renewables Ltd.
Solar Projects Developer.
Unit 1b, Custom House Plaza 3,
Harbourmaster Place, Dublin 1
IRELAND.
CONTACT NO-
E-MAIL :



PROJECT NO:
-

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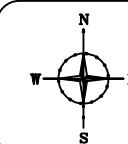
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A3

DRAWING NO:
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SHEET NO:
01

REVISION:
-

UNIT:
-





Maffra Solar Farm Vegetation in Study Area

Legend

Project Area

Subject Land

Study Area

Roads

Ecological Vegetation Class and Habitat Zones

- 55 Plains Grassy Woodland 1a
- 55 Plains Grassy Woodland 1b
- 55 Plains Grassy Woodland 1c
- 55 Plains Grassy Woodland 1d
- 55 Plains Grassy Woodland 1e
- 55 Plains Grassy Woodland 1f
- 55 Plains Grassy Woodland 2a
- 55 Plains Grassy Woodland 2b
- 55 Plains Grassy Woodland 2c
- 55 Plains Grassy Woodland 2d
- 55 Plains Grassy Woodland 2e

Trees

- Large Scattered Tree
- Large tree in a patch

Exotic and Planted Vegetation

- Exotic Grassland
- Planted Native Vegetation

Data Attribution

© NGH 2023
© BNRG 2023
© Data VIC 2023
© ESRI & QGIS 2023

Ref: 22-151 Maffra Solar Farm Biodiversity \ Native Vegetation
Author: Michelle Patrick
Date created: 13.04.2023
Datum: Vic Grid 94

0 50 100 m



NGH

**ADVERTISED
PLAN**



GENERAL NOTES

System Description:

Site Area: 26.9 Acres

PV Area 18.7 Acres

ADVERTISED PLAN

Legend

PV Panels

Inverter/Transformer

MV Switchgear

BESS

Roads

Fence/Site Boundary

Property Boundaries

Overhead Line

Underground Line

Hydrology

10m Fire Break

Veg. Avoidance Area

Lay Down Area

Tree Protection Zone

Removed Trees

PROJECT NAME:

Maffra - VIC

DRAWING TITLE:

Maffra Site Context

DRAWN BY:

A . YOUNG

CHECKED BY:

-

APPROVED BY:

-

DATE:

28/03/2023

Company:

BNRG Renewables Ltd.

Solar Projects Developer.

Unit 1b, Custom House Plaza 3,

Harbourmaster Place,Dublin 1

IRELAND.

CONTACT NO-

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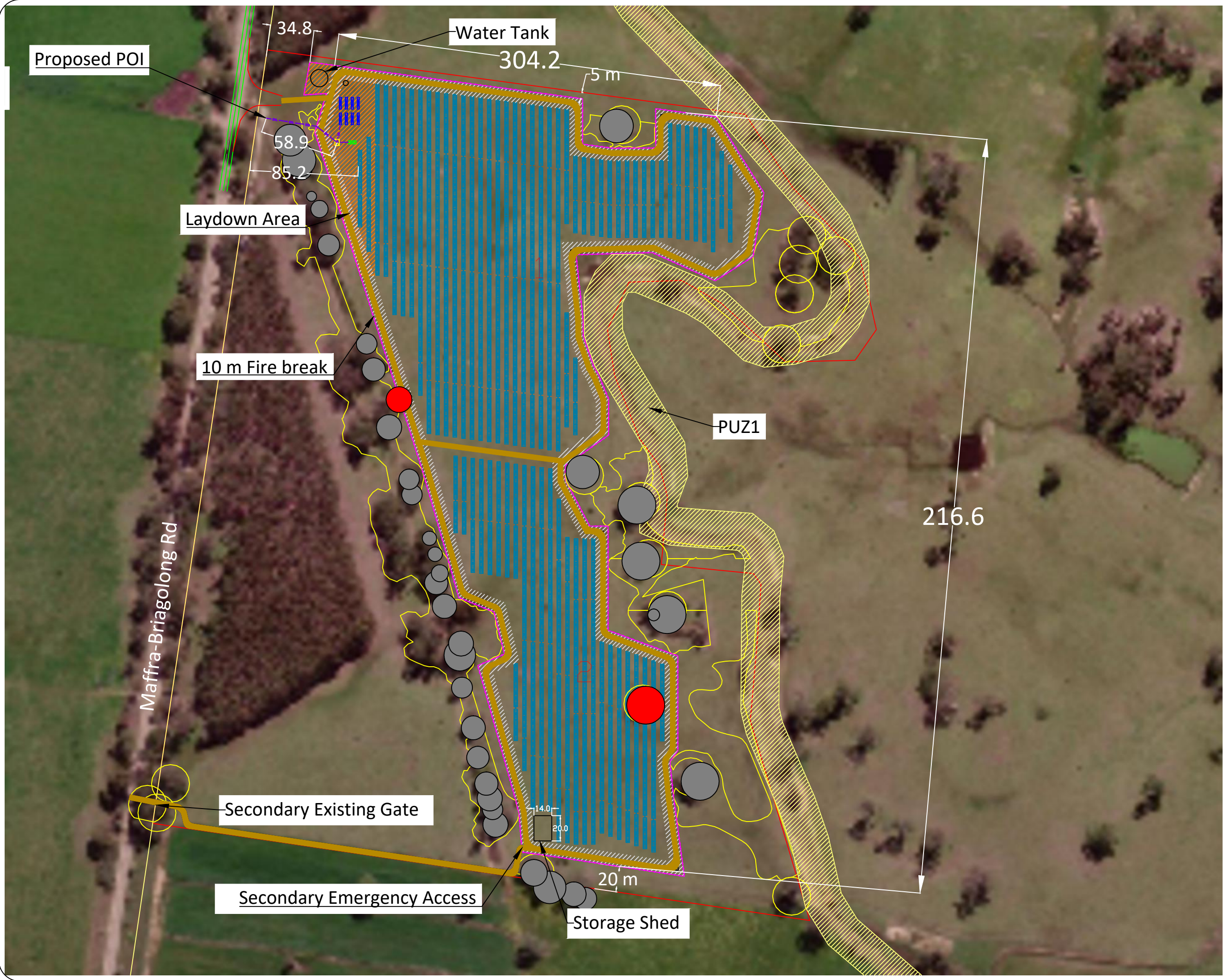
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GENERAL NOTES

ADVERTISED PLAN

- Legend**
- PV Panels
 - Inverter/Transformer
 - MV Switchgear
 - BESS
 - Roads
 - Fence/Site Boundary
 - Property Boundaries
 - Overhead Line
 - Underground Line
 - Hydrology
 - 10m Fire Break
 - Veg. Avoidance Area
 - Lay Down Area
 - Tree Protection Zone
 - Removed Trees

PROJECT NAME:
Maffra - VIC

DRAWING TITLE:
Maffra Site Layout

DRAWN BY:
A. YOUNG

CHECKED BY:
-

APPROVED BY:
-

DATE:
18/04/2023

Company:
BNRG Renewables Ltd.
Solar Projects Developer.

Unit 1b, Custom House Plaza 3,
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IRELAND.
CONTACT NO-
E-MAIL :

PROJECT NO:
-

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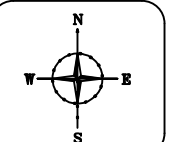
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01

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UNIT:
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GENERAL NOTES

ADVERTISED PLAN

Legend

PV Panels

Inverter/Transformer

MV Switchgear

BESS

Roads

Fence/Site Boundary

Property Boundaries

Overhead Line

Underground Line

Hydrology

10m Fire Break

Veg. Avoidance Area

Lay Down Area

Tree Protection Zone

Removed Trees

PROJECT NAME:

Maffra - VIC

DRAWING TITLE:

Maffra Section Drawing

DRAWN BY:

A . YOUNG

CHECKED BY:

-

APPROVED BY:

-

DATE:

18/04/2023

Company:

BNRG Renewables Ltd.

Solar Projects Developer.

Unit 1b, Custom House Plaza 3,

Harbourmaster Place,Dublin 1

IRELAND.

CONTACT NO-

E-MAIL :

PROJECT NO:

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SHEET NO:

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REVISION:

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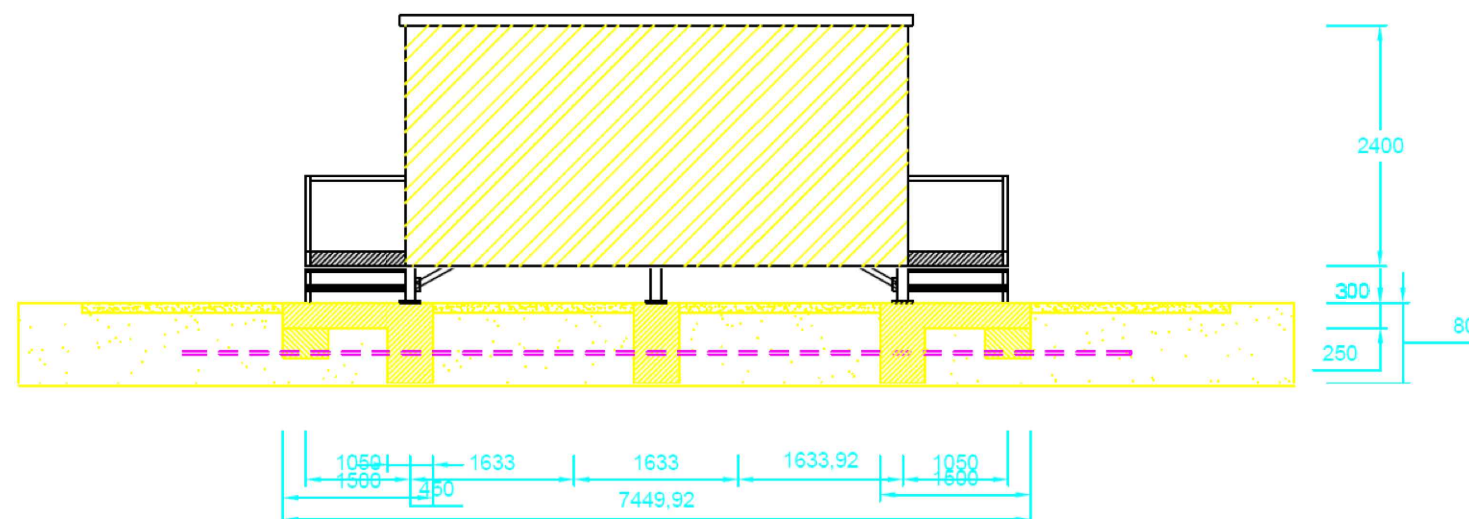
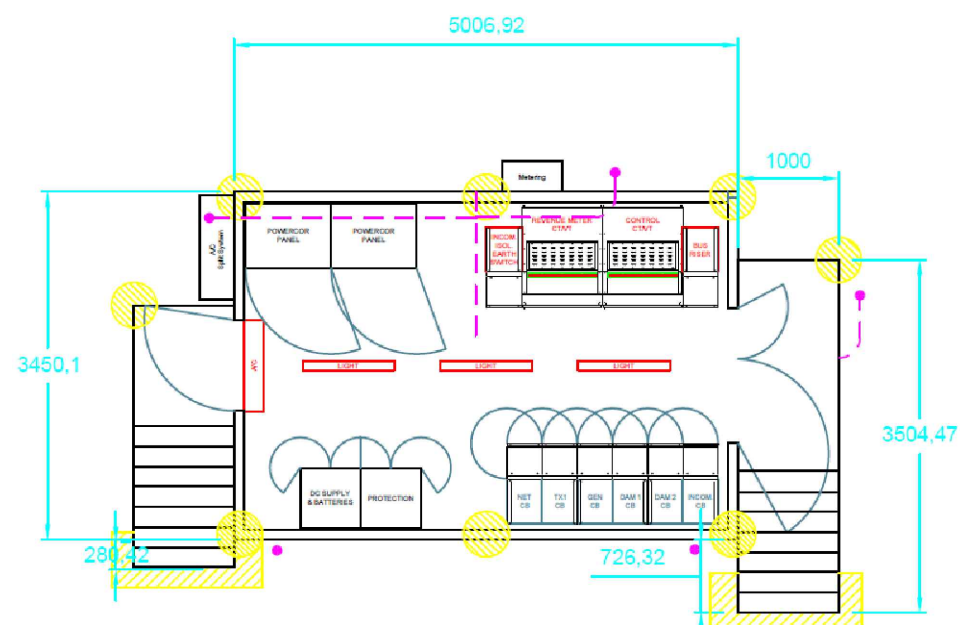
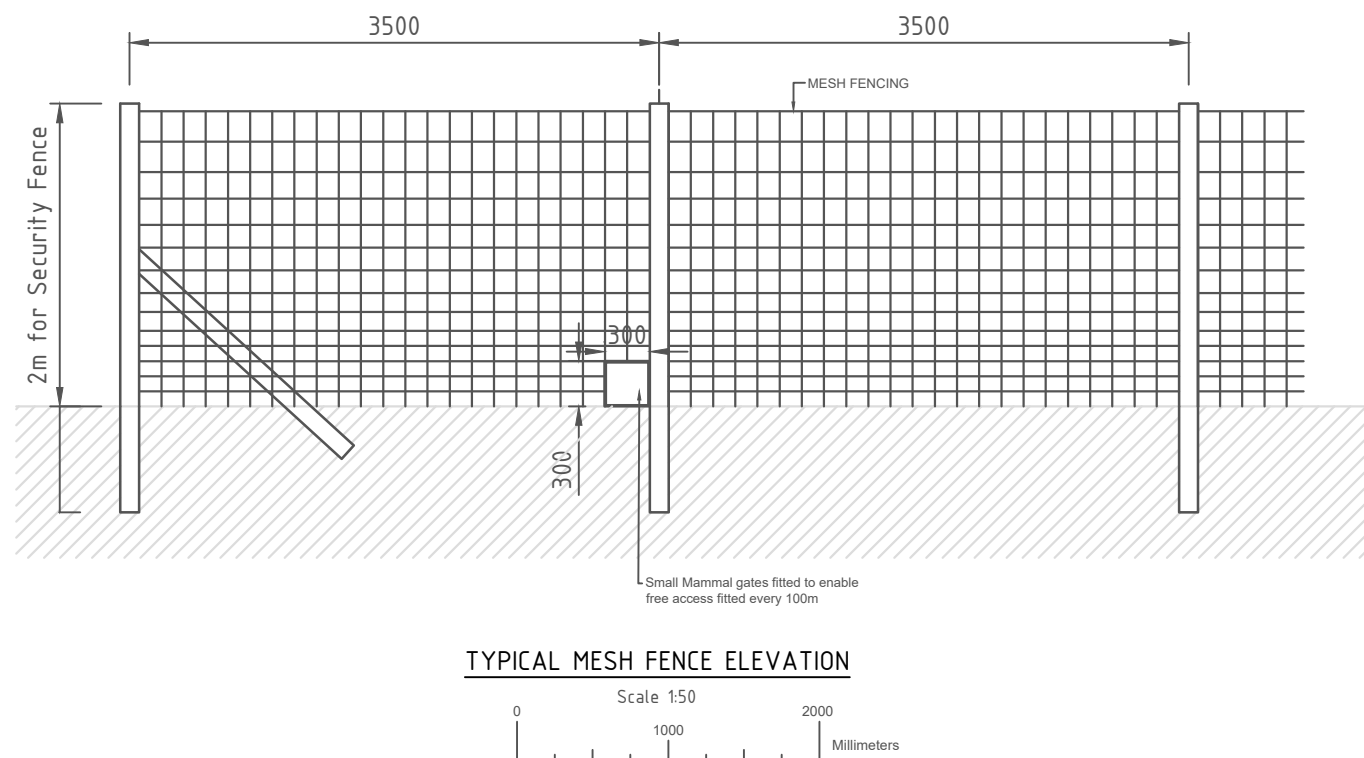
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UNIT:
Millimeters unless
noted

ISSUE	APPROVED BY	DATE	AMENDMENT
A	M-RD&SSE	12/21	REVISED PAVEMENT DETAILS AND GENERAL NOTES 1, 2, 3, 4, & 5

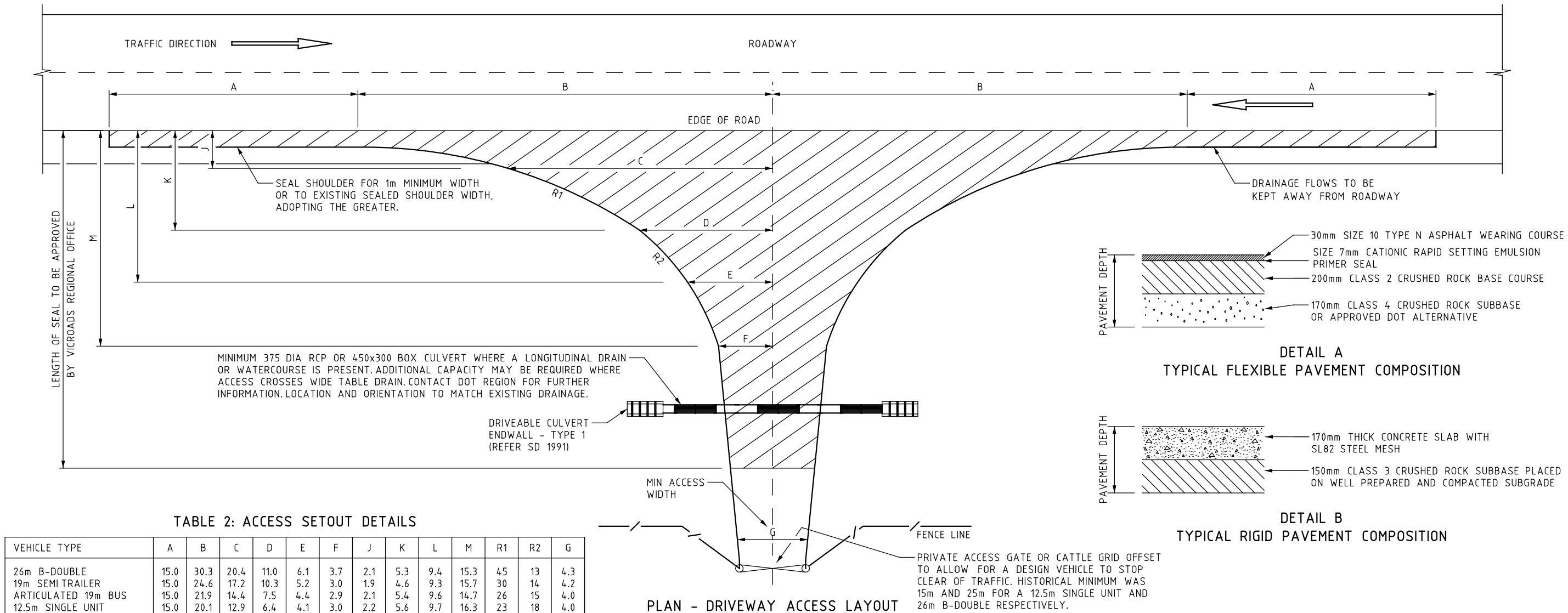
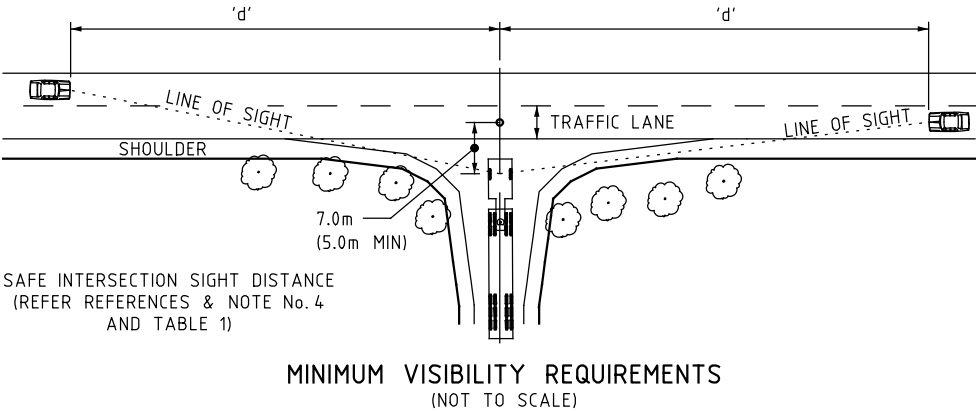


TABLE 2: ACCESS SETOUT DETAILS

VEHICLE TYPE	A	B	C	D	E	F	J	K	L	M	R1	R2	G
26m B-DOUBLE	15.0	30.3	20.4	11.0	6.1	3.7	2.1	5.3	9.4	15.3	45	13	4.3
19m SEMI TRAILER	15.0	24.6	17.2	10.3	5.2	3.0	1.9	4.6	9.3	15.7	30	14	4.2
ARTICULATED 19m BUS	15.0	21.9	14.4	7.5	4.4	2.9	2.1	5.4	9.6	14.7	26	15	4.0
12.5m SINGLE UNIT	15.0	20.1	12.9	6.4	4.1	3.0	2.2	5.6	9.7	16.3	23	18	4.0
TRUCK + 3 AXLE TRAILER	15.0	18.3	11.8	6.2	4.0	3.0	2.2	5.7	9.8	14.2	18	18	4.0
TRUCK + 4 AXLE TRAILER	15.0	19.2	12.2	6.0	4.0	3.0	2.3	5.9	9.8	14.0	20	17	4.0
8.8m SERVICE VEHICLE	15.0	12.6	8.7	5.4	4.1	3.5	1.8	4.1	6.7	9.6	10	13	4.0
PASSENGER VEHICLE	5.0	9.3	3.8	1.8	-	-	2.2	7.5	-	-	7.5	-	3.6

SETOUT DETAILS TO BE BASED ON THE DESIGN VEHICLE SELECTED.
CHECK VEHICLE MAY ENCR OACH ON TO OPPOSING TRAFFIC LANE IN <80KM/H SPEED ZONE FOR LOW VOLUME ROADS WITHOUT A CENTRAL BARRIER.



ADVERTISED PLAN

TABLE 1: SIGHT DISTANCES

DESIGN SPEED (Km/h)	'd' SAFE INTERSECTION SIGHT DISTANCE (m)	CORRECTION (m)							
		ROADWAY UPGRADE				ROADWAY DOWNGRADE			
		2%	4%	6%	8%	2%	4%	6%	8%
60	123	-2	-4	-6	-7	2	5	8	11
70	151	-3	-5	-8	-10	3	7	11	15
80	181	-4	-7	-10	-13	4	9	14	20
90	226	-5	-9	-13	-16	5	11	18	25
100	262	-6	-11	-16	-20	6	14	22	31
110	300	-7	-13	-19	-24	8	17	26	38

THE DESIGN SPEED IS ASSUMED TO BE 10km/h GREATER THAN THE POSTED SPEED LIMIT FOR RURAL HIGHWAYS AND ROADS

- GENERAL NOTES:
- THE DIAGRAM IS A GUIDE FOR A TYPICAL LAYOUT OF A DRIVEWAY ACCESS FOR A RURAL PROPERTY FOR VEHICLES AS SPECIFIED IN TABLE 2. THIS GUIDE WAS DEVELOPED IN THE INTEREST OF ROAD SAFETY AND TO PROTECT THE ARTERIAL ROAD PAVEMENT AT THE ACCESS LOCATION.
 - SLIGHT VARIATIONS MAY OCCUR AFTER SITE INSPECTION, ANALYSIS AND APPROVAL OF THE LOCATION.
 - THE PAVEMENT COMPOSITION SHALL BE IN ACCORDANCE WITH THAT SHOWN IN DETAIL A. THE PAVEMENT TYPE SHOWN IN DETAIL B IS ONLY SUITABLE FOR INFREQUENT HEAVY VEHICLE TRAFFIC. AN ALTERNATIVE PAVEMENT COMPOSITION WILL REQUIRE APPROVAL BY THE DEPARTMENT OF TRANSPORT. NEW PAVEMENT MUST BE KEYED INTO EXISTING PAVEMENT AND CRACK SEALED.
 - ANY PROPOSED ALTERNATIVE PAVEMENT DESIGNS SHALL BE UNDERTAKEN IN ACCORDANCE WITH VICROADS CODE OF PRACTICE RC 500.22 SELECTION AND DESIGN OF PAVEMENTS AND SURFACINGS AND AUSTROADS GUIDE TO PAVEMENT TECHNOLOGY PART 2 PAVEMENT STRUCTURAL DESIGN.
 - PAVEMENT MATERIALS AND EARTHWORK LAYERS NEED TO BE IN ACCORDANCE WITH DOT STANDARD SECTIONS AND/OR LOCAL GOVERNMENT SPECIFICATION REQUIREMENTS.
 - A PLANNING PERMIT IS REQUIRED FOR A NEW ACCESS OR ALTERATION TO AN EXISTING DRIVEWAY AND MAY BE REQUIRED FOR THE REMOVAL OF NATIVE VEGETATION.
 - A TRAFFIC MANAGEMENT PLAN MUST COMPLY WITH THE ROAD MANAGEMENT ACT AND APPLICABLE CODES IN RELATION TO ANY WORKS UNDERTAKEN WITHIN THE ROAD RESERVE.
 - TRUCK WARNING SIGNS & GUIDE POSTS SHOULD BE INSTALLED IN ACCORDANCE WITH AUSTROADS GUIDE TO TRAFFIC MANAGEMENT & VICROADS SUPPLEMENTS.
 - THE DRIVEWAY ACCESS CONSTRUCTION AND MAINTENANCE IS THE RESPONSIBILITY OF THE PROPERTY OWNER. MAINTENANCE ALSO INCLUDES ASSOCIATED DRAINAGE WORKS.

- SIGHT DISTANCE:
- A DRIVER, WHEN LOCATED 7.0M (5.0M MIN) FROM THE CONFLICT POINT TAKEN AS THE CENTRE OF THE TRAFFIC LANE, NEEDS TO SEE A VEHICLE APPROACHING IN EITHER DIRECTION. REFER TABLE 1 FOR APPROPRIATE SIGHT DISTANCES.
 - TREE CANOPIES, BUSHES OR OTHER OBJECTS SHALL BE REMOVED TO PROVIDE GOOD VISIBILITY. ANY TREE CANOPIES OVERHANGING THE PATH OF A TRUCK SHALL BE A MINIMUM OF 5.0M ABOVE THE GROUND SURFACE.
 - SIGHT LINES MUST ACHIEVE THE MINIMUM SAFE INTERSECTION SIGHT DISTANCE BASED ON AN EYE HEIGHT OF 1.1M TO AN OBJECT HEIGHT OF 1.25M.

- NOTES:
- ALL DIMENSIONS ARE IN METRES, UNLESS SHOWN OTHERWISE
 - THIS DRAWING FORMS PART OF THE VRS TO AGRD PART 4 AND SHOULD BE READ IN CONJUNCTION WITH THOSE REFERENCES

REFERENCES:

AUSTROADS GUIDE TO ROAD DESIGN PART 4
AUSTROADS GUIDE TO ROAD DESIGN PART 4A
AUSTROADS GUIDE TO ASSET MANAGEMENT PART 5
AUSTROADS GUIDE TO PAVEMENT TECHNOLOGY PART 2
AUSTROADS GUIDE TO TRAFFIC MANAGEMENT
VICROADS SUPPLEMENTS TO AUSTROADS GUIDES

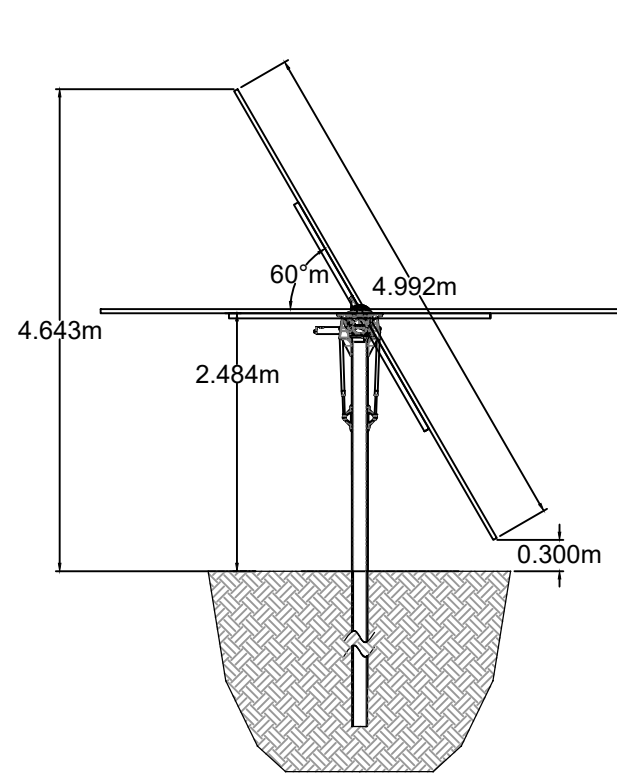
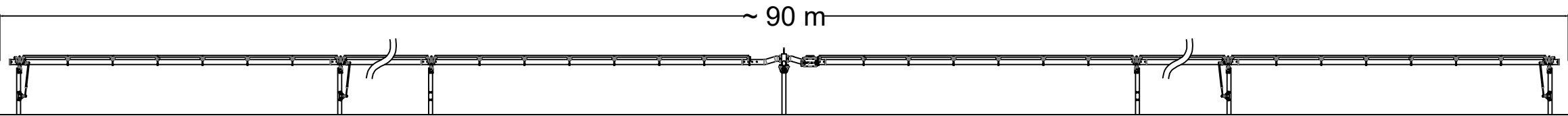
VICROADS CODE OF PRACTICE RC 500.22
- SELECTION AND DESIGN OF PAVEMENTS AND SURFACINGS
SD 1991 DRIVEABLE CULVERT ENDWALLS (TYPE 1)

vicroads
GUIDELINE DRAWING

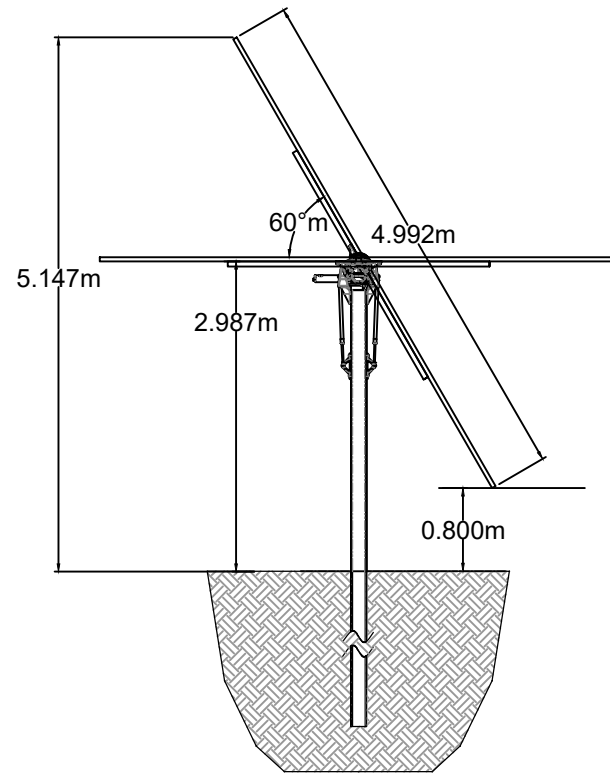
AGRD PART 4

TYPICAL ACCESS TO RURAL PROPERTIES

NOT TO SCALE	APPROVED M-SSE	GD NO. GD4010	ISSUE A
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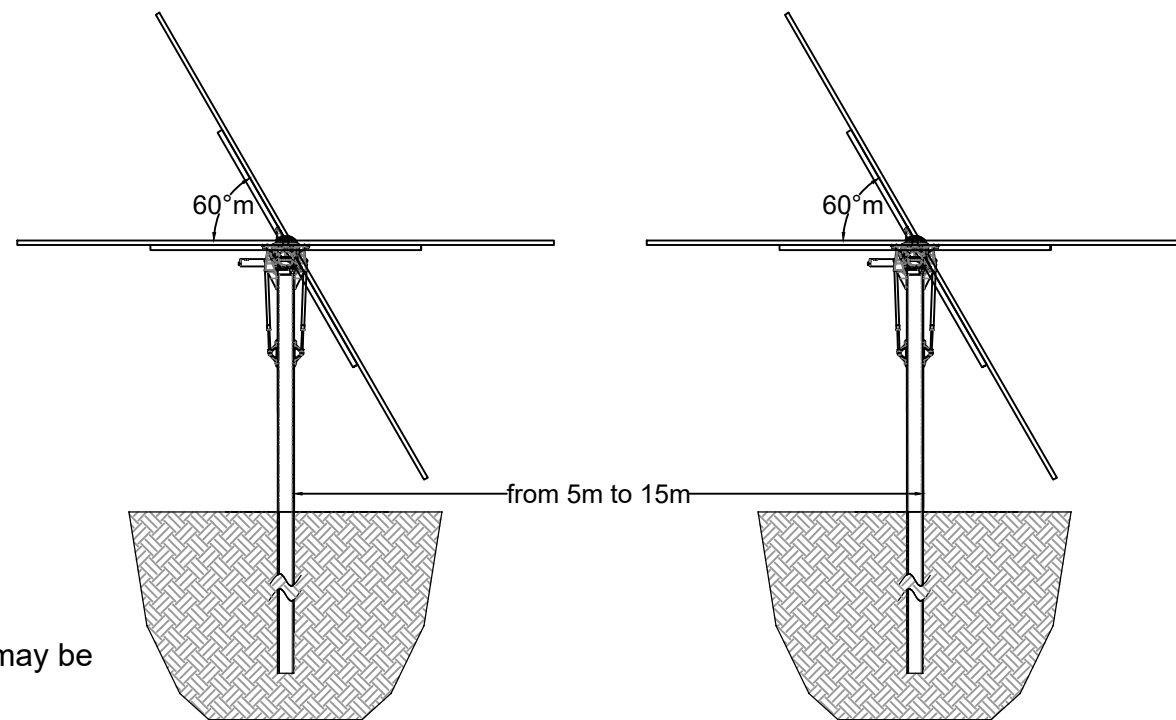


Min Height



Max Height

**ADVERTISED
PLAN**



Note:
1. The layout drawing is for reference. There may be partial adjustments in the detailed design.

GENERAL NOTES

PROJECT NAME:

DRAWING TITLE:
Tracker Elevation

DRAWN BY:
A. Lopes

CHECKED BY:

APPROVED BY:

DATE:
19/07/2022

Company:
BNRG Renewables Ltd.
Solar Projects Developer.
Unit 1b, Custom House Plaza 3,
Harbourmaster Place, Dublin 1
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CONTACT NO:
E-MAIL :



PROJECT NO:

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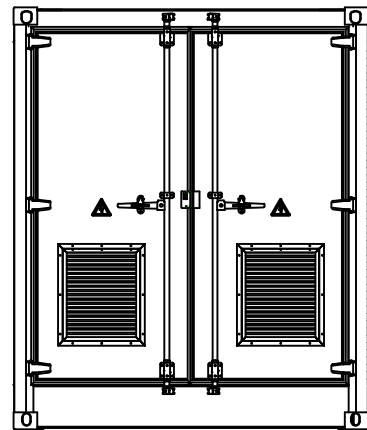
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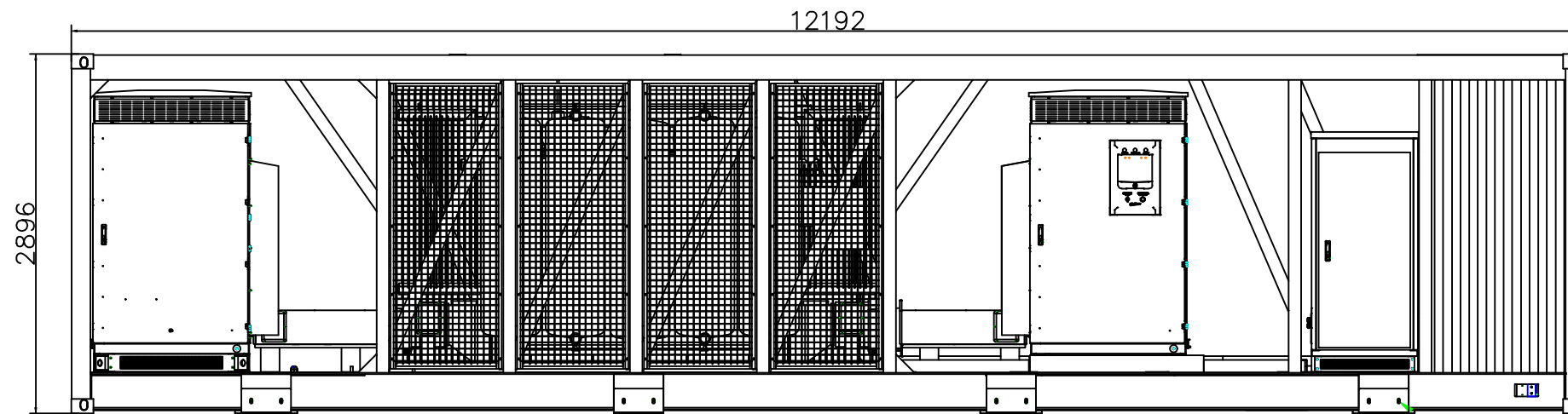
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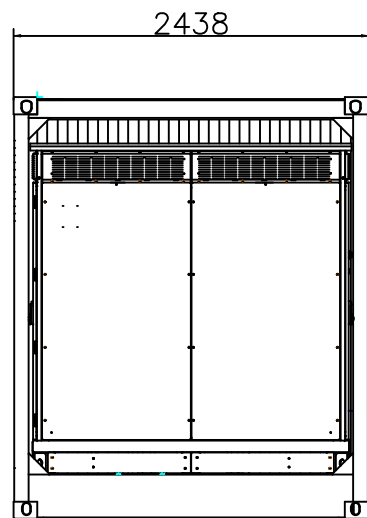
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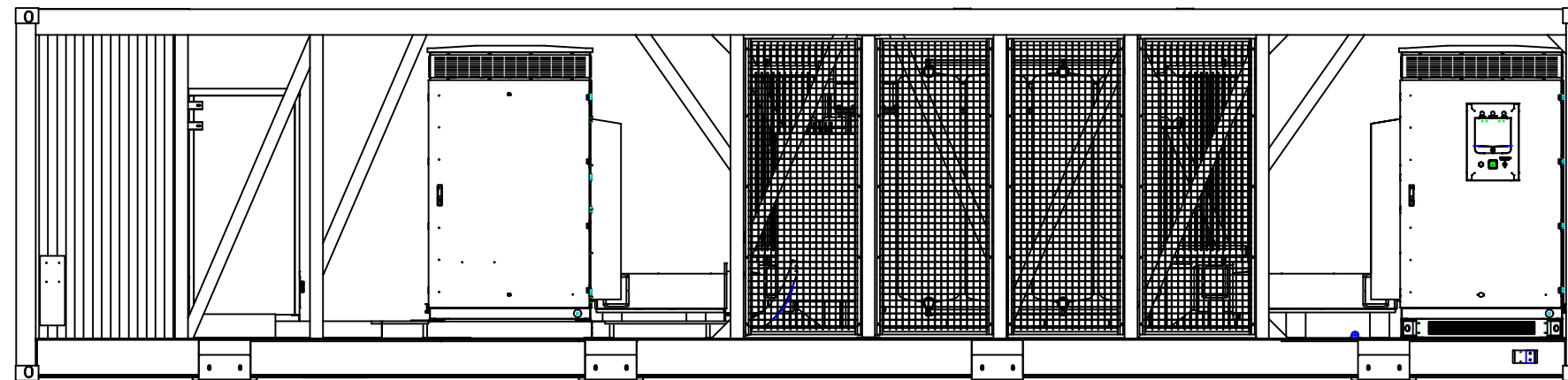
Right View



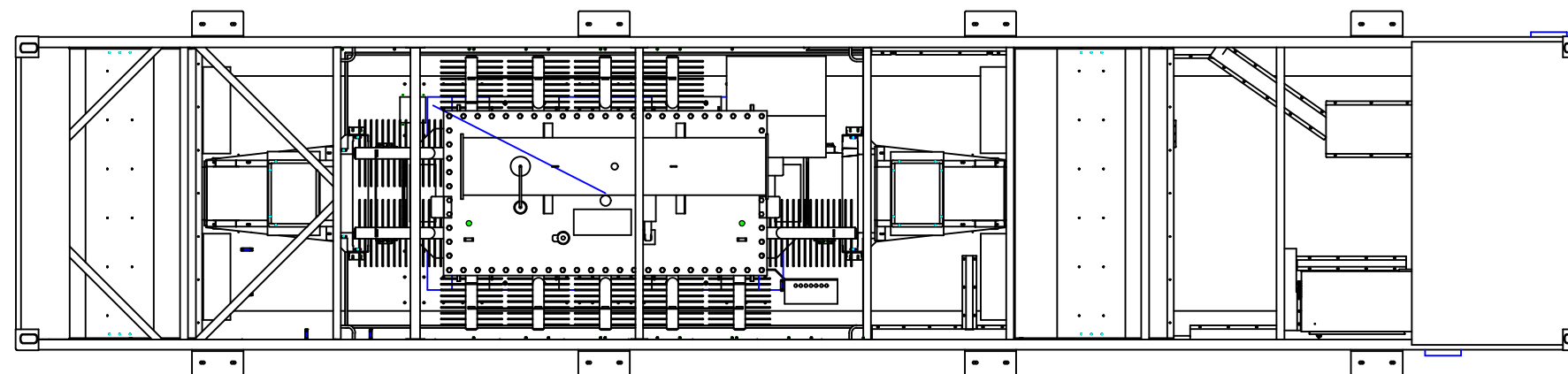
Front View



Left View



Back View



Top View

**ADVERTISED
PLAN**

- Note:
1. The layout drawing is for reference. There may be partial adjustments in the detailed design.
 2. Size: 12192mm×2896mm×2438mm (W×H×D)

GENERAL NOTES

PROJECT NAME:

DRAWING TITLE:
SG4950HV-MV Elevation

DRAWN BY:
A. Lopes

CHECKED BY:

APPROVED BY:

DATE:
24/06/2022

Company:

BNRG Renewables Ltd.
Solar Projects Developer.

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CONTACT NO: +353 1 791 7882
E-MAIL : dmloney@bnrg.ie



PROJECT NO:

SCALE:

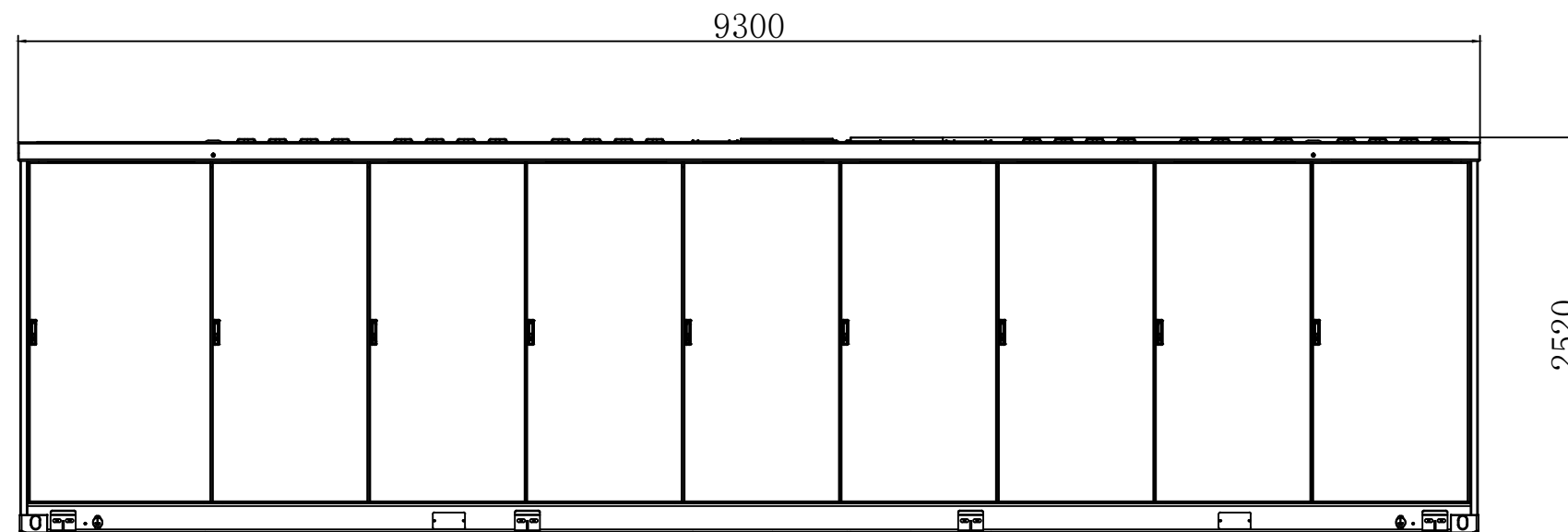
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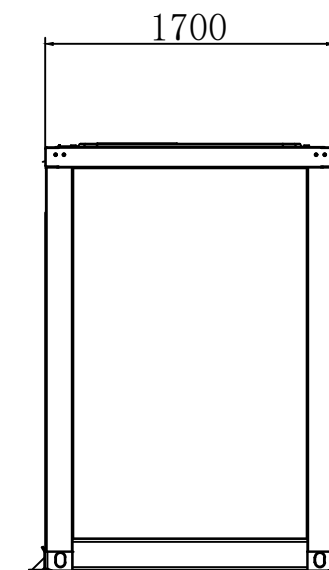
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REVISION:
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UNIT:
Millimeters

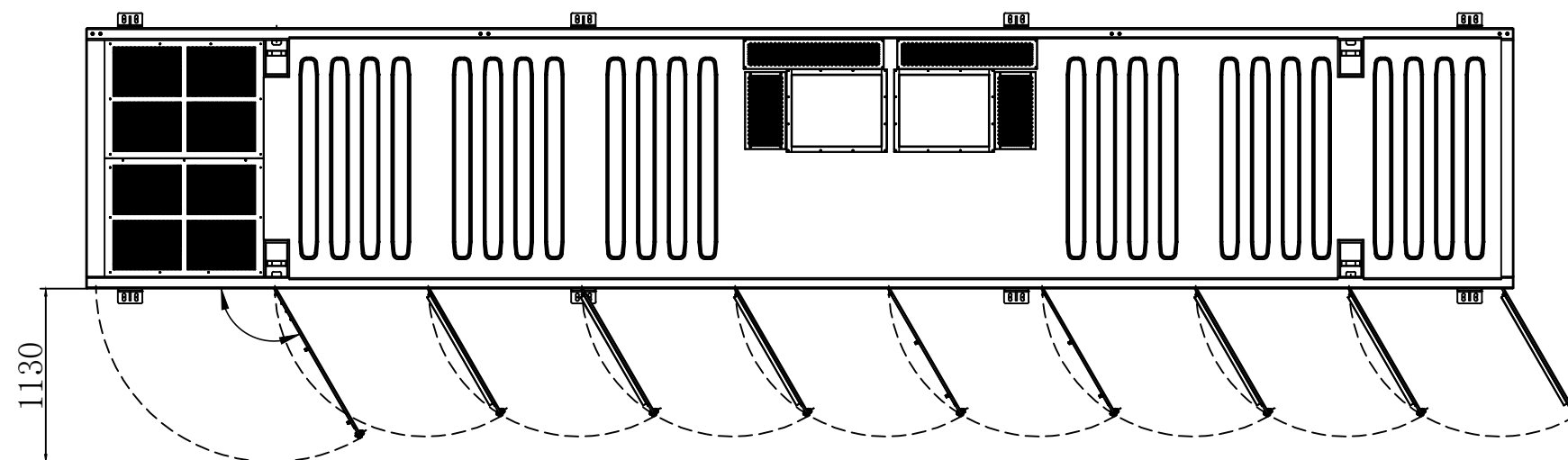


Front View



Side View

ADVERTISED PLAN



Top View

Note:

1. The layout drawing is for reference. There may be partial adjustments in the detailed design.
2. Size: 9300mm×2520mm×1700mm (W×H×D)

GENERAL NOTES

PROJECT NAME:

DRAWING TITLE:
BESS Elevation

DRAWN BY:
A. Lopes

CHECKED BY:

APPROVED BY:

DATE:
23/06/2022

Company:

BNRG Renewables Ltd.
Solar Projects Developer.

Unit 1b, Custom House Plaza 3,
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E-MAIL : dmloney@bnrg.ie

PROJECT NO:

SCALE:

SHEET SIZE:
A3

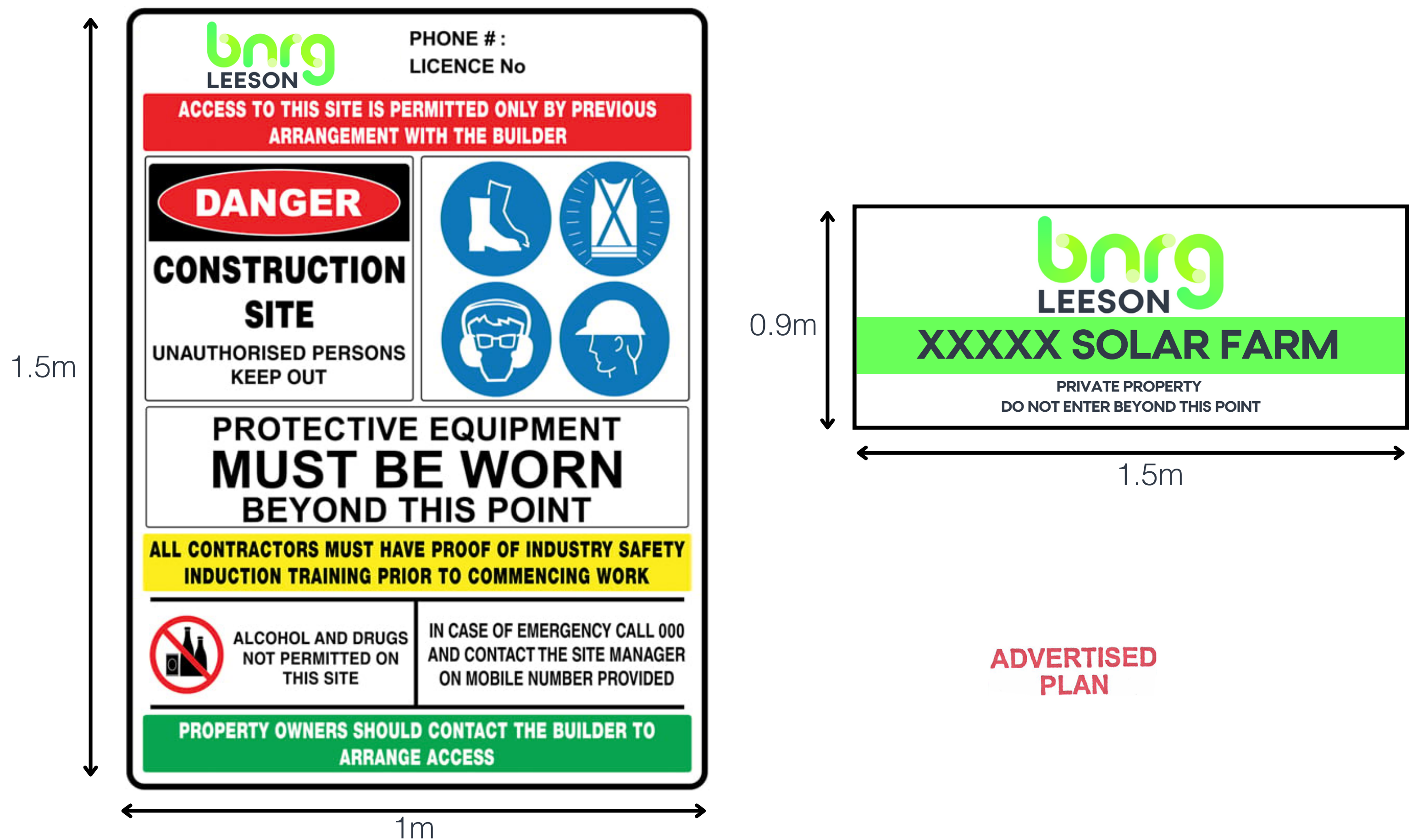
DRAWING NO:

SHEET NO:
01

REVISION:
1.0

UNIT:
Millimeters

BNRG Leeson Solar Farm - Site Signage Dimensions



**ADVERTISED
PLAN**

Note: Text is indicative.