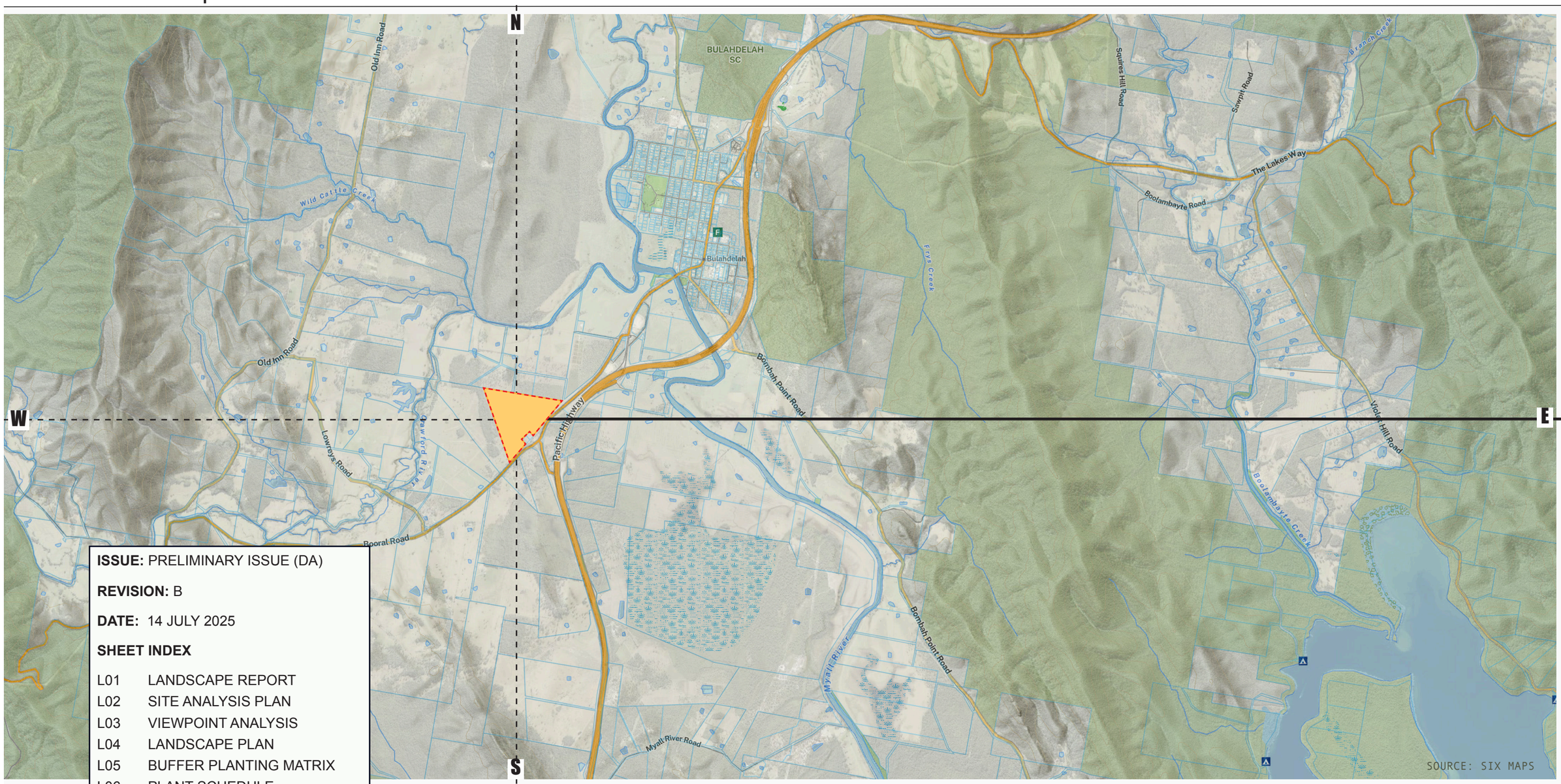
Lot 130 Booral Road, BULADELAH

Lot 130 / DP1220336

Worimi Country

Landscape Documentation



ISSUE: PRELIMINARY ISSUE (DA)

REVISION: B

DATE: 14 JULY 2025

SHEET INDEX

GREEN SPACE PLANNING Co.

BOORAL ROAD, BULADELAH
Lot 130 / DP1220336
LGA: Mid Coast Council

PROPOSAL:
The project proposes to install a solar farm, along with supporting infrastructure including a depot style building, at grade car parking and driveway access, storm water infrastructure and landscaping. Access to the site is proposed from Booral Road to the south-east of the site. The landscape documentation attached is in support of the Development Application.

EXISTING SITE:
The project site is situated on a single irregular shaped lot, which is currently vacant. Booral Road adjoins the site to the south-east. Topographically the site could be considered generally flat. The site is affected in a bushfire prone area.

SOIL TYPE:
Kurosol (natric) classified soil which presents as sandy loam topsoil with clay base. Soil is moderately to highly acidic (pH 5.5). (SEED Mapping, NSW Government). Amelioration prior to any landscape works would be beneficial with the addition of lime to help balance the pH of the soil. Organic matter incorporation may help to improve structural stability and moisture holding capacity.

ENDEMIC VEGETATION: *Vegetation communities identified on site include PCT 3435: Hunter Coast Lowland Flats Damp Forest, PCT 3998: Lower North Creek flat Mahogany Swamp Forest, PCT 4006 Northern Paperbark-Swamp Mahogany Saw-sedge Forest, PCT 3582 Hunter Coast Lowland Apple-Bloodwood Forest.*
Most of the site aligns with PCT 3435 - Hunter Coast Lowland Flats Damp Forest due to the presence of Angophora costata, Eucalyptus globoidea, Melaleuca sp. and Eucalyptus resinifera, some of which are hollow-bearing. This habitat is predominantly cleared or underscrubbed, with mostly native grasses and sedge regeneration with few exotic species. The northern boundary of the site has a dense strip of PCT 3998 – Lower North Creekflat Mahogany Swamp Forest as determined by the presence of Eucalyptus resinifera and Melaluca sieberi. (BDAR)

BUSHFIRE REQUIREMENTS (APZ):
An 'Asset Protection Zone' (APZ) has been determined around the proposed development within the site (refer Site Analysis Plan). Within this zone landscaping is to comply with the principles of Appendix 4 of 'Planning for Bush Fire Protection 2019' and should be designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind driven embers to cause ignitions. In this regard:
Trees
- *tree canopy cover should be less than 15% at maturity;*
- *trees at maturity should not touch or overhang the building;*
- *lower limbs should be removed up to a height of 2m above the ground;*
- *tree canopies should be separated by 2 to 5m; and*
- *preference should be given to smooth barked and evergreen trees.*

Shrubs
- *create large discontinuities or gaps in the vegetation to slow down or break the progress of fire towards buildings should be provided;*
- *shrubs should not be located under trees;*
- *shrubs should not form more than 10% ground cover; and*
- *clumps of shrubs should be separated from exposed windows and doors by a distance of at least twice the height of the vegetation.*

Grass
- *grass should be kept mown (as a guide grass should be kept to no more than 100mm in height); and*
- *leaves and vegetation debris should be removed.*

MID COAST DEVELOPMENT CONTROL PLAN:
Relevant sections of the DCP considered:

VOLUME 7 - INDUSTRIAL DEVELOPMENT
SECTION 7.4 LANDSCAPING
Objectives
(a) To improve the visual quality and amenity of industrial areas through the provision of low maintenance landscaping.
Controls
1. All areas within setbacks which adjoin public areas are to be landscaped, except for approved access driveways and car parking spaces.
2. A landscaped garden bed with a minimum width of 2.5m is to be provided between any car parking spaces and the front boundary.
3. Landscape design must be integral with water sensitive design elements, car parking and access driveway design. Landscape works are to provide adequate screening from the street whilst maintaining good pedestrian sightlines through a combination of low planting and trees.
4. Landscape design should use low maintenance plant species. Council recommends the use of predominantly local indigenous species.
5. A landscape plan showing the location of trees, shrubs and other groundcovers, including the species name and pot size is to be submitted with the development application.

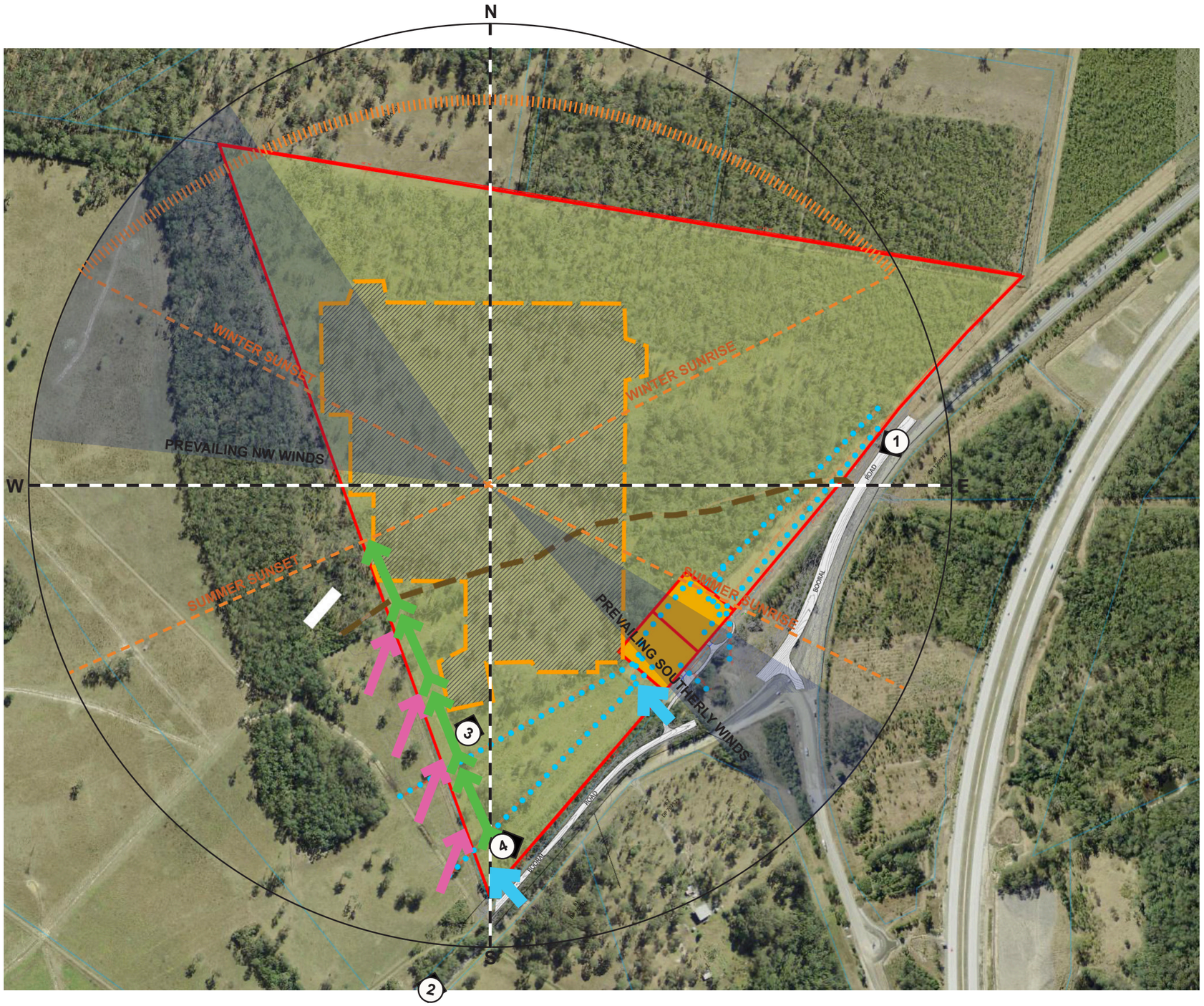
PROPOSED LANDSCAPE APPROACH
Proposed landscaping to the site aims to visually soften the bulk and scale of the development and improve the greening outcome for the site. Bushfire safety requirements across the site have constrained the extent of planting within the immediate vicinity of the proposed buildings. Landscaping has aimed to address the primary concern of visual impact without compromising bushfire safety.

The following general principles include:
- Preserve existing trees where possible, including the mature trees and vegetation along the boundaries and riparian zone of the creek line.
- Proposed dense buffer planting of a mix of shrubs and trees of all varying heights, which relate to the building scale and will assist in mitigating any visual impact to areas where an opportunity exists for additional planting.
- Provide adequate areas for planting to support growth of mass mixed planting and trees.
- Provide landscaping to the boundaries to enable screening and mitigate visual impact to neighbouring properties and public places.
- Address bushfire safety requirements for all new planting across the site and choose species within the APZ that have low flammability characteristics.
- Use of local endemic plant species (in accordance with DCP list) to reinforce commitment and respect to Country;
- Utilise a planting palette of proven performing plants; chosen for being fast growing, low maintenance and suited to the local climatic conditions. The proposed species are hardy, whilst also easily managed and maintained.
- Incorporate a diverse planting palette that utilises several species for each application, to allow for a consistent level of amenity in the instance one species under-performs.

ESD INITIATIVES:
Considerations include:
- At least 70% (by area/canopy cover) of each category of new plants (shrubs and trees) are native and climate resilient.
- Retain existing mature trees where possible

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED):
Considerations include:
- Ensure landscaping reduces opportunities for concealment within the site.
- Avoid vegetation which conceals the entrances to the buildings from the surrounding streets.
- Large trees should not be planted next buildings, to limit access to the building.
- The selective planting of prickly vegetation can restrict access to the building.

CONNECTION TO COUNTRY:
In light of the fact the existing landscape has substantially changed from the pre-contact landscape, there is an opportunity to reawaken the memory of place and Connect with Country through the proposed design approach. This includes incorporating local endemic plant species and supporting biodiversity by attracting pollinators and providing habitat for local fauna and fauna.



LEGEND

- Property Boundary
- Buladelah Zone Substation
- Asset Protection Zone
- Informal Access Track
- Existing stands of vegetation
- Site Access Point
- Visual Opportunities into site
- Opportunities for additional planting to provide visual screen
- (#) Refer Viewpoints L03

Project:	BOORAL ROAD, BULADELAH	**Reference:**	GSP240503	**Scale:**	@ A3	NOT FOR CONSTRUCTION
Drawing:	L02 / SITE ANALYSIS PLAN	**Revision:**	B	**Date:**	JULY 2025	**GREEN SPACE PLANNING Co.**

1

< *View on Booral Road looking south-west towards the site. Dense vegetation lining the verge and boundary can be seen in the foreground. The vegetation completely obscures any views into the site from this viewpoint.*

2

< *View on Booral Road looking north towards the site across the adjoining lot. Vegetation lining the verge is scattered and affords views into the site. Proposed vegetation screening along the south-western boundary of the site will be needed to mitigate any potential visual impact from the development.*

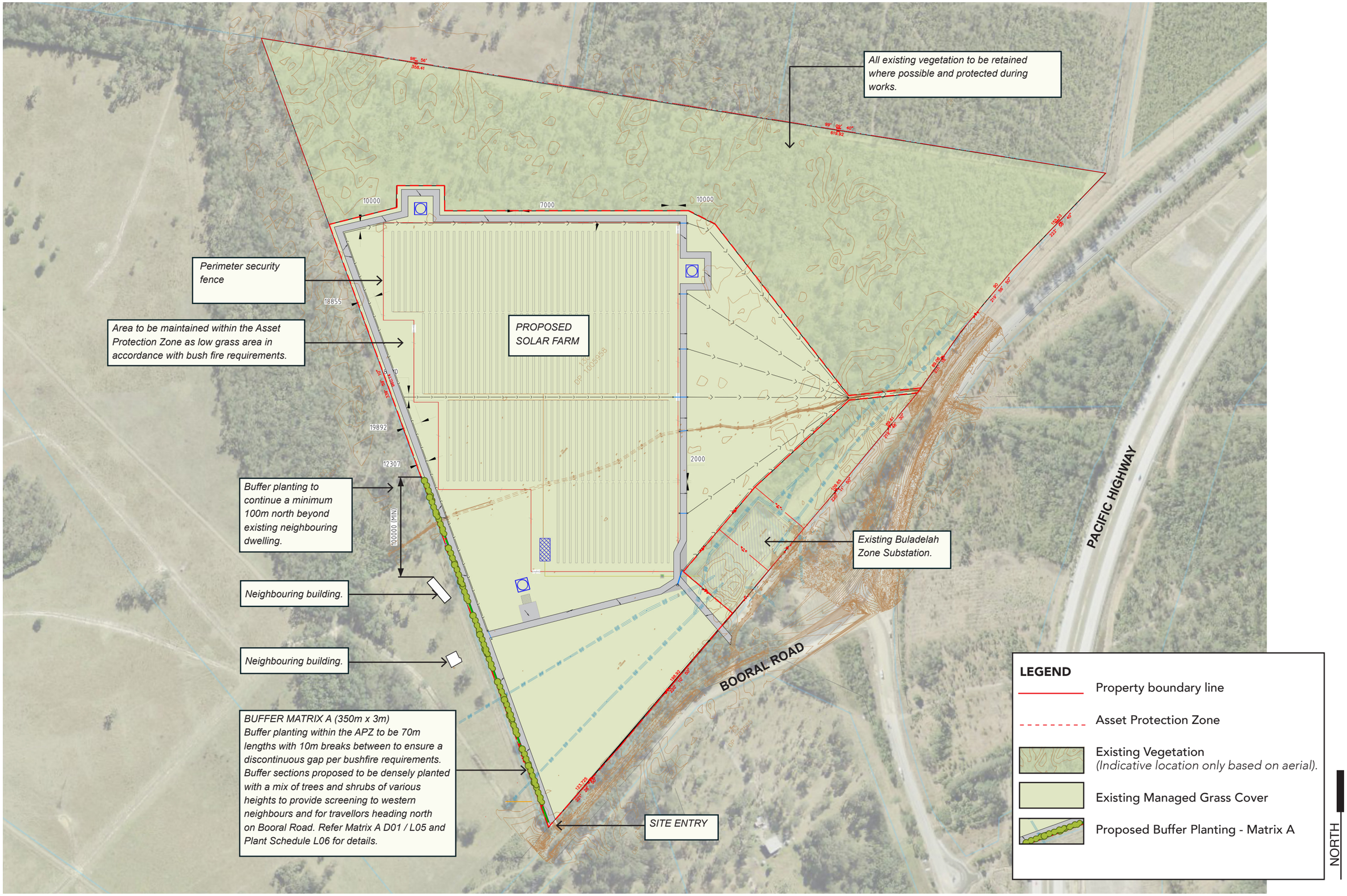
3

< *View from within the site on the south-western boundary looking north.*

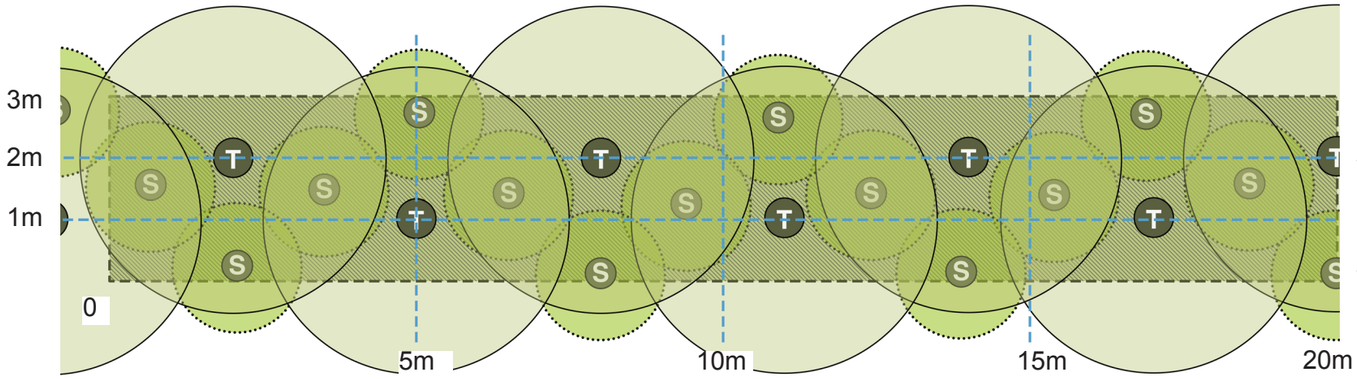
4

< *View from within the site looking north-east along the inside of the Booral Road frontage.*

Project:	BOORAL ROAD, BULADELAH	**Reference:**	GSP240503	**Scale:**	@ A3	NOT FOR CONSTRUCTION	
	L03 / VIEWPOINT ANALYSIS	**Revision:**	B	**Date:**	JULY 2025	**GREEN SPACE PLANNING Co.**	



Project:	BOORAL ROAD, BULADELAH	**Reference:**	GSP240503	**Scale:**	1:4000 @ A3	NOT FOR CONSTRUCTION
Drawing:	L04 / LANDSCAPE PLAN	**Revision:**	B	**Date:**	JULY 2025	**GREEN SPACE PLANNING Co.**



REFER PLANTING NOTES ON L06 AND PROVIDE 75MM OF PEBBLE MULCH TO BASE OF BUFFER PLANTING BED.

TREES (T) TO BE PLANTED AT 3M CTS IN A STAGGERED LINE THROUGH MIDDLE SECTION OF BUFFER ZONE. ALLOW FOR SEVEN TREES FOR EACH 20M SECTION. MAX. 3 OF EACH SPECIES IN A CONTINUOUS LINE.

SHRUBS (S) TO BE STAGGERED THROUGH BUFFER ZONE SURROUNDING TREES. ALLOW FOR FOURTEEN TALL SHRUBS TREES FOR EACH 20M SECTION. MIX SPECIES IN GROUPS OF 3-5.

INSTALL NON-COMBUSTIBLE EDGE (CONCRETE/ BRICK/METAL) TO INSIDE EDGE OF PROPERTY TO ENABLE MOWING AND RETAIN MULCH.

D01 VEGETATION BUFFER ZONE - PLANTING MATRIX A (TYPICAL 3M X 20M)

THE PROPOSED MIX OF TREES AND SHRUBS OF VARYING HEIGHTS AND TEXTURES WILL ESTABLISH TO PROVIDE A DENSE SCREEN, TO ASSIST IN MITIGATING ANY VISUAL IMPACT FROM THE PROPOSAL.

D01 VEGETATION BUFFER ZONE - TYPICAL ELEVATION (GRAPHIC ILLUSTRATION)

Project:	**BOORAL ROAD, BULADELAH**	**Reference:**	GSP240503	**Scale:**	@ A3	NOT FOR CONSTRUCTION	
Drawing:	L05 / VEGETATION BUFFER ZONE PLANTING	**Revision:**	B	**Date:**	JULY 2025	**GREEN SPACE PLANNING Co.**	

BUFFER PLANTING SCHEDULE

Key	Botanical Name	Common Name	Pot Size	Mature Height	Mature Spread	Quantity
MATRIX A						
TREES (T)						
T1	Acmena smithii ^#	Lilly Pilly	5L	6m	3m	40
T2	Angophora costata *^	Sydney Red Gum	5L	20m	10m	20
T3	Eucalyptus sideroxylon 'Rosea' ^	Red-flowering ironbark	5L	18m	12m	20
T4	Elaeocarpus reticulatus ^#	Blueberry Ash	5L	9m	4m	25
MEDIUM SHRUBS (S)						
S1	Bursaria spinosa subsp. Spinosa *^#	Sweet Bursaria	Tube	4m	3m	85
S2	Persoonia linearis *^#	Narrow-leaved Geebung	Tube	5m	2m	80
S3	Westringia fruiticosa ^#	Coastal Rosemary	Tube	2m	4m	80

Key	*Classification*
*	*PCT 3435: Hunter Coast Lowland Flats Damp Forest*
^	*Low Flammability Characteristics*
#	*Midcoast Council Development Control Plan - Recommended Native Species List*

Note:
In the event particular plant species are unavailable, substitutions shall be made from this list only.

PLANT IMAGES

NATIVE PLANTING SPECIFICATION

TUBESTOCK IS THE PREFERRED METHOD OF RE-VEGETATION, CARRIED OUT USING HAND TREE PLANTING TOOLS WITH THE FOLLOWING METHOD:

1. RAKE AWAY AREA TO EXPOSE SOIL;
2. DIG HOLE AT LEAST TWICE SIZE OF POT;
3. DISTURB THE SURROUNDING SUBSTRATE (UP TO 100MM) TO AVOID 'CLEAN' SIDES AND BASE OF HOLE;
4. WHERE REQUIRED ADD A SLOW RELEASE FERTILISER AND WETTING AGENT TO THE BASE OF THE HOLE. COVER WITH EXISTING SOIL TO ENSURE THE PLANT ROOTS DO NOT COME IN DIRECT CONTACT WITH THE FERTILISER AND WETTING AGENT;
5. PLACE THE PLANT IN THE HOLE SLIGHTLY BELOW SOIL LEVEL AND BACK-FILL THE HOLE;
6. REPLACE MULCH AND MAINTAIN SPACE AROUND BASE OF PLANT SO IT IS KEPT CLEAR OF MULCH;
7. FOR LARGER SHRUBS AND TREES, ERECT 'GROW TUBE' AROUND EACH PLANT. REMOVE 'GROW TUBES' WHEN THE PLANTS ARE 1.5 TIMES THE HEIGHT OF THE 'GROW TUBE';
8. WOODEN STAKES IDEALLY SHOULD BE PLACED NEXT TO ALL TREE AND LARGE SHRUB SPECIES, TO PREVENT INCIDENTAL DAMAGE TO PLANTS DURING MAINTENANCE ACTIVITIES. TREE GUARDS SHOULD BE PLACED OVER THE NEWLY PLANTED SEEDLINGS TO PROVIDE PROTECTION FROM GRAZING ANIMALS DURING THE PLANT ESTABLISHMENT PERIOD.
9. WATER PLANTS THOROUGHLY WITHING 1 HOUR OF PLANTING.
10. SPRING IS THE PREFERRED TIME FOR PLANTING TO ALLOW FOR STRONG ESTABLISHMENT OF THE ROOT STRUCTURE AND PROMOTE GOOD PLANT GROWTH.

VEGETATION BUFFER MAINTENANCE PROGRAM

MAINTENANCE IS REQUIRED REGULARLY AFTER COMPLETION OF FINAL PLANTING.
MAINTENANCE WORKS AT A MINIMUM WILL INCLUDE:

- A DEDICATED WEED REMOVAL AND MONITORING PROGRAM, INVOLVING QUARTERLY MANAGEMENT OF WEED THROUGHOUT THE BUFFER AREA;
- QUARTERLY MONITORING OF ANY SUBSEQUENT PLANTINGS; AND
- MAINTENANCE OF ANY PLANTINGS WHICH ARE UNDERTAKEN, AND THE REPLACEMENT OF ANY PLANT MORTALITIES TO MAINTAIN A MINIMUM 90 % SUCCESS RATE (I.E. 90 % OF THE ORIGINAL NUMBER OF PLANTINGS).

Project:	BOORAL ROAD, BULADELAH	**Reference:**	GSP240503	**Scale:**	@ A3	NOT FOR CONSTRUCTION
Drawing:	L06 / PLANT SCHEDULE	**Revision:**	B	**Date:**	JULY 2025	**GREEN SPACE PLANNING Co.**