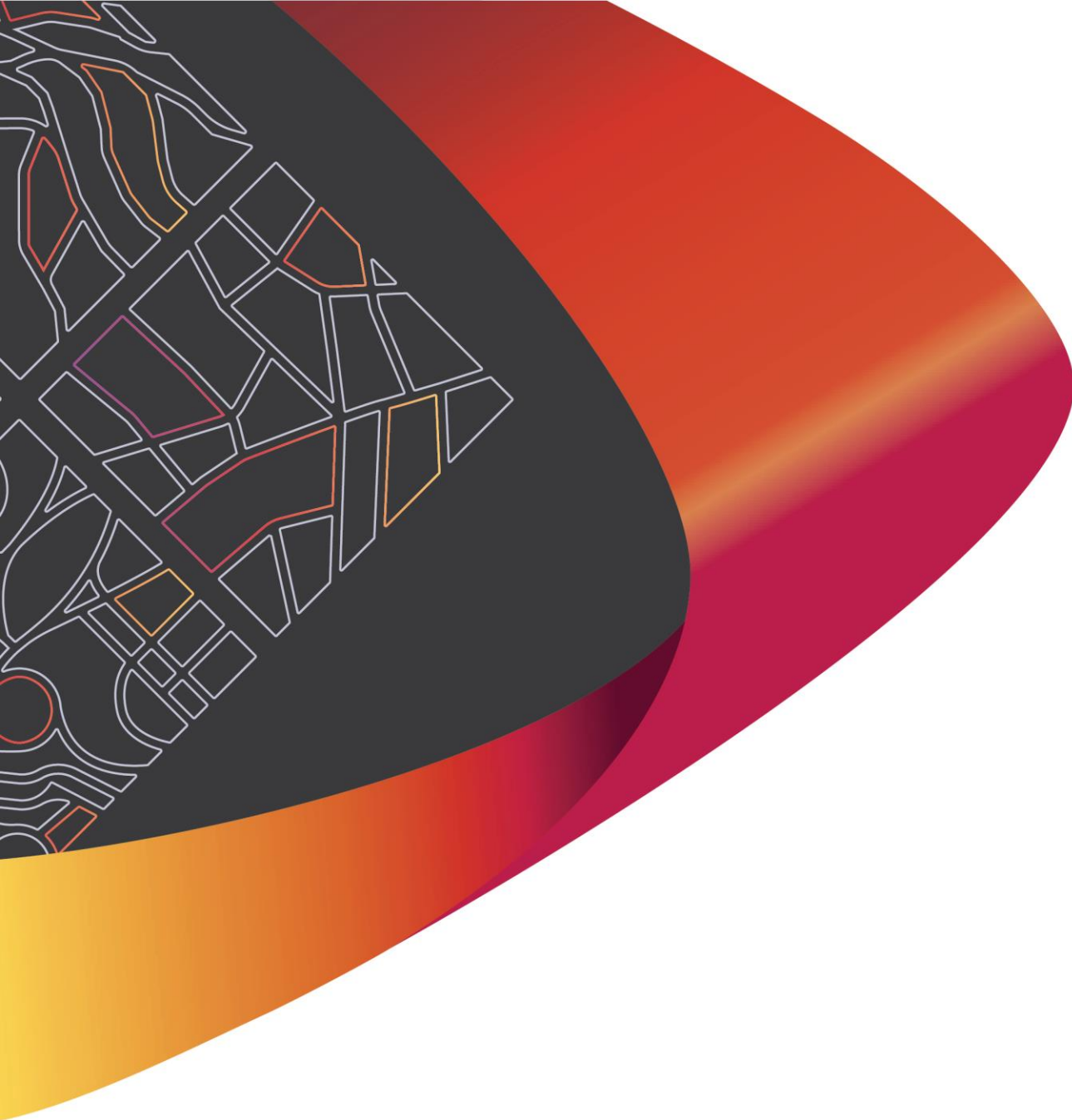




ACENERGY PTY LTD

Yanco Battery Energy Storage System

LAND USE CONFLICT RISK ASSESSMENT

Report No: 223155/LUCRA

Rev: 001H

7 November 2024



Premise

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ABBREVIATIONS

Abbreviation	Abbreviated term
AEP	Annual Exceedance Probability
AHD	Average Height Datum
AHIMS	Aboriginal Heritage Information Management System
ALUA	Agricultural Land Utility Assessment
ASC	Australian Soil Classification
BAR	Bushfire Assessment Report
BAM	Biodiversity Assessment Method
BDAR	Biodiversity Development Assessment Report
BESS	Battery Energy Storage System
BoM	Bureau of Meteorology
CEMP	Construction Environmental Management Plan
CH	Chromosols
CRM	Customer Relationship Manager
CRN	Country Regional Network
DMP	Decommissioning Management Plan
DPE	Former NSW Department of Planning and Environment
DPHI	NSW Department of Planning, Housing and Infrastructure
DPI	Department of Primary Industries
EEC	Endangered Ecological Communities

EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
FRGAR	<i>Flood Risk and Groundwater Assessment Report</i>
GDE	<i>Groundwater Dependent Ecosystem</i>
ha	hectares
km	kilometres
LGA	Local Government Area
LLEP	<i>Leeton Local Environmental Plan 2014</i>
LSC	Leeton Shire Council
LUCRA	Land Use Conflict Risk Assessment
m	metres
MW	Megawatt
NVIA	Noise and Vibration Impact Assessment
OEMP	Operational Environmental Management Plan
PCT	Plant Community Type
PHA	Preliminary Hazard Analysis
PSI	Preliminary Site Investigation
RAPs	Registered Aboriginal Parties
SEARs	Secretary's Environmental Assessment Requirements
SSD	State Significant Development
SSDA	State Significant Development Application

SHI	State Heritage Inventory
SIA	Social Impact Assessment
SREA	Samsung Renewable Energy Australia
STP	Sewage Treatment Plant
TAHE	NSW Transport Asset Holding Entity

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1. INTRODUCTION

1.1 Background

Premise has been commissioned by the proponent (ACEnergy Pty Ltd) to prepare a Land Use Conflict Risk Assessment (LUCRA) to support a State Significant Development Application (SSD 67478479) for a proposed Battery Energy Storage System (BESS) and associated works at 120 Houghton Road, Yanco, 2703. The proposed development is known as the Yanco BESS and is located within the Leeton Shire Council (LSC) Local Government Area (LGA).

The site is depicted in its regional context and local context in **Figure 1** and **Figure 2**.

1.2 Scope

This LUCRA has been prepared to address relevant requirements of the Secretary's Environmental Assessment Requirements (SEARs) issued for the project by the NSW Department of Planning, Housing and Infrastructure (DPHI) and to support the project Environmental Impact Statement (EIS). SEARs relevant to this LUCRA are provided in **Table 1**.

It should be noted that this LUCRA addresses the requirement to prepare a LUCRA but does not include a detailed consideration of site selection and suitability, zoning provisions or assessment of impacts; those matters are addressed in the EIS.

Table 1 – Relevant SEARs

Source	Requirement	Addressed
General Requirements	<i>a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including existing land use, other proposed or approved energy facilities, major projects, rural/residential development, Crown lands within and adjacent to the project site and subdivision potential);</i>	Section 3 -Land Use Conflict Risk Assessment Appendix A - Risk Assessment Note: The strategic justification of the development, it's permissibility and feasible alternatives are addressed within the EIS.
	<i>a detailed evaluation of the merits of the project as a whole having regard to:</i> <i>the requirements in Section 4.15 of the Environmental Planning and Assessment Act 1979, including the objects of the Act and how the principles of ecologically sustainable development</i>	As above.

	<i>have been incorporated in the design, construction and ongoing operations of the development;</i> <i>– the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and</i> <i>– feasible alternatives to the development and its key components, including siting and project design alternatives to avoid areas of biodiversity value and the consequences of not carrying out the development.</i>	
SEARS – Key Issues (Land)	<i>• a detailed justification of the suitability of the site and that the site can accommodate the proposed development having regard to its potential environmental impacts, land contamination, permissibility, strategic context and existing site constraints;</i>	Note: The suitability of the site with respect to environmental impacts land contamination, permissibility, strategic context and exiting site constraints, is detailed within the EIS.
	<i>• an assessment of the potential impacts of the development on existing land uses on the site and adjacent land, including:</i>	See below.
	<i>– agricultural land, flood prone land, nearby drinking water catchments, Crown lands, mining, quarries, mineral or petroleum rights (if relevant);</i>	Section 2.2- Nature of the locality
	<i>– a soil survey to determine the soil characteristics and consider the potential for salinity, acid sulfate soils and erosion to occur; and</i>	Note: Further detail on the completion of a soil survey, soil characteristics and the potential for soil hazards is addressed within the EIS and associated agricultural impact assessment.
	<i>– a cumulative impact assessment of nearby developments;</i>	Section 2.2 - Nature of the locality and within the EIS
	<i>• an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including:</i>	See below
	<i>– consideration of the zoning provisions applying to the land, including subdivision (if required);</i>	Section 2.2.1 – Land use zones

	– <i>completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's Land Use Conflict Risk Assessment Guide.</i>	Section 3 – Land Use Conflict Risk Assessment Appendix A – Risk Assessment
NSW Department of Primary Industry (DPI)	DPI has reviewed the draft SEARs and the commitments made in the Scoping Report. While the required assessment of potential agricultural impacts is supported as outlined, other specific requirements should include: • <i>Any proposed subdivision resulting in lots that is smaller than the minimum lot size should not create additional dwelling entitlements.</i> • <i>Any Rehabilitation and Decommissioning Strategy should include removal of all above and below ground infrastructure to allow greater opportunity for irrigated agricultural activities following decommissioning.</i> • <i>A Pest and Weed Management Plan should address specific biosecurity, weed and pest impacts relating to irrigated agriculture and the irrigation system in the vicinity of the proposal (not just impacts relating to Biodiversity).</i> • <i>The agricultural impact assessment should ensure consideration of historic irrigated land use at the site and in the vicinity.</i> • <i>Rehabilitation plans during and post construction should detail appropriate groundcover management using locally native species to limit dust and other land use conflict issues.</i>	Section 3 – Land Use Conflict Risk Assessment Appendix A – Risk Assessment Note: Further consideration of impacts to agricultural resources and production is provided in the EIS.

1.3 Methodology

This Land Use Conflict Risk Assessment (LUCRA) has been prepared in accordance with the *Land Use Conflict Risk Assessment Guide* (Department of Primary Industries 2011) (the LUCRA Guide).

The LUCRA is a system to identify and assess the potential for land conflict to occur between neighbouring land uses. Land use conflicts occur when one land user is perceived to infringe upon the rights, values or amenity of another. The LUCRA enables a systematic, consistent, and site-specific conflict assessment approach. Through evaluating land use compatibility and potential land use conflicts appropriate risk reduction management strategies can be identified.

As stated in the LUCRA Guide, a LUCRA aims to:

- > accurately identify and address potential land use conflict issues and risk of occurrence before a new land use proceeds or a dispute arises;

- > objectively assess the effect of a proposed land use on neighbouring land uses;
- > increase the understanding of potential land use conflict to inform and complement development control and buffer requirements, and
- > highlight or recommend strategies to help minimise the potential for land use conflicts to occur and contribute to the negotiation, proposal, implementation and evaluation of separation strategies.

The assessment process in the LUCRA Guide has been applied to achieve the above aims. These steps are provided in **Table 2**, including a reference column to the section where each step is addressed in this report.

Table 2 – LUCRA steps

Source	Requirement	Addressed
Step 1: Gather information	Describe the nature of the proposed land use change and the proposed development.	Section 2.1
	Describe and record the major activities associated with the land use change and their frequency. Include periodic and seasonal activities that have the potential to be a source of a complaint or conflict.	Section 2.1
	Appraise the topography, climate and natural features of the site and broader locality.	Section 2.2 Section 2.3
	Undertake a site history search, review the previous environmental assessments and approvals for the site.	Section 2.4
	Inspect the site and interview relevant owners/operators of adjacent properties.	Section 2.5 Section 2.6
	Describe and record the main activities of the adjacent properties and their frequency, include water-based activities that may be adversely impacted, such as oyster farming; and,	Section 2.2.3
	Compare and contrast the proposed and adjoining/surrounding land uses and activities for incompatibility and conflict issues	Section 2.7
Step 2: Evaluate the risk level for each activity	Each proposed activity is recorded, and potential land use conflict is evaluated in consideration of the: - Probability of occurrence; and, - Consequence of the impact The risk ranking matrix is utilised to determine a risk ranking for each activity and results are recorded into an initial risk evaluation table.	Section 3.2 Appendix A

Step 3: Risk reduction management strategies	Management strategies and mitigation measures that affect the probability and consequence of activities are identified. Revised risk rankings are calculated, and performance targets are set, detailing how the effectiveness of the strategy will be monitored. The objective of this step is to identify and define controls that lower the risk ranking score to 10 or below.	Section 3.3 Appendix A
Step 4: Record LUCRA results	Key issues, risk level and recommended management measures are recorded and summarised. This record provides a valuable planning document for managers and planners and should be included in any relevant management plan.	Section 6

1.4 Study areas

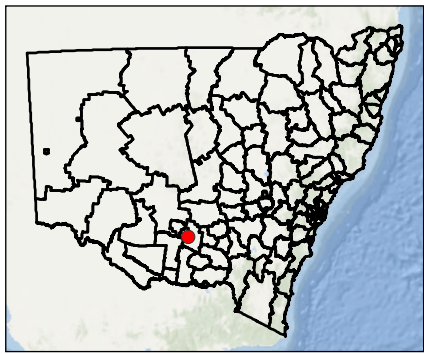
The study areas for this LUCRA includes the site and the locality. These terms are defined in **Table 3**.

The study areas were determined by considering surrounding land uses and the likely spatial extent of potential impacts that may cause land use conflict.

Table 3 – Study area terminology

Term	Meaning
Site	The area occupied by the development and associated infrastructure including: • The BESS which includes containerised lithium-ion type batteries that will be manufactured offsite and delivered for installation • Power conversion systems, switchgear and control rooms associated with the BESS. • Cabling and collector units, site office, storage area, internal access tracks, on-site parking, security fencing, and a temporary construction laydown area. • An underground or overhead 132kV transmission line to connect the BESS to the adjacent Yanco substation. The proposed electrical connection will transect part of the Hume Road road reserve, Lot 7350 DP1199551 and Lot 10 DP844961 to facilitate a connection to the substation. • A new site access arrangement installed to the northeast transecting the road reserves for Houghton Road and Hume Road. The new access arrangement will facilitate access to the site via Houghton Road and connect to Irrigation Road in the east. • An upgrade of the intersection of Houghton Road and Irrigation Way. This upgrade provides a basic left turn, and a basic right turn treatment which avoids the existing raised crossing.

	The site consists of land within the northern portions of Lot 516 DP7517415 and Lot 521 DP751745, together with portions of Lot 7350 DP1199551, Lot 10 DP844961 and road reserves for Houghton Road, Irrigation Way and Hume Road.
Locality	The locality consists of land within 1 kilometre (km) of the development footprint for the BESS. Please note that the intersection upgrade while forming part of the development footprint does not consist of a change in land use. No locality surrounding the development footprint for the intersection upgrade has therefore been provided. Section 2.2 of this LUCRA describes the nature of locality and land uses surrounding the proposed BESS.



State Context



Legend

- | | |
|--|--|
| ● Site Locality | — Watercourse |
| Development Footprint | NPWS Reserve |
| LGA Boundary | Renewable Energy Projects |
| — Road | ● Under Construction |
| — Railway | ● Approved |
| — Runway | |
| — Electricity Transmission Line | |
| — Water Body | |



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Figure 1
Regional Context

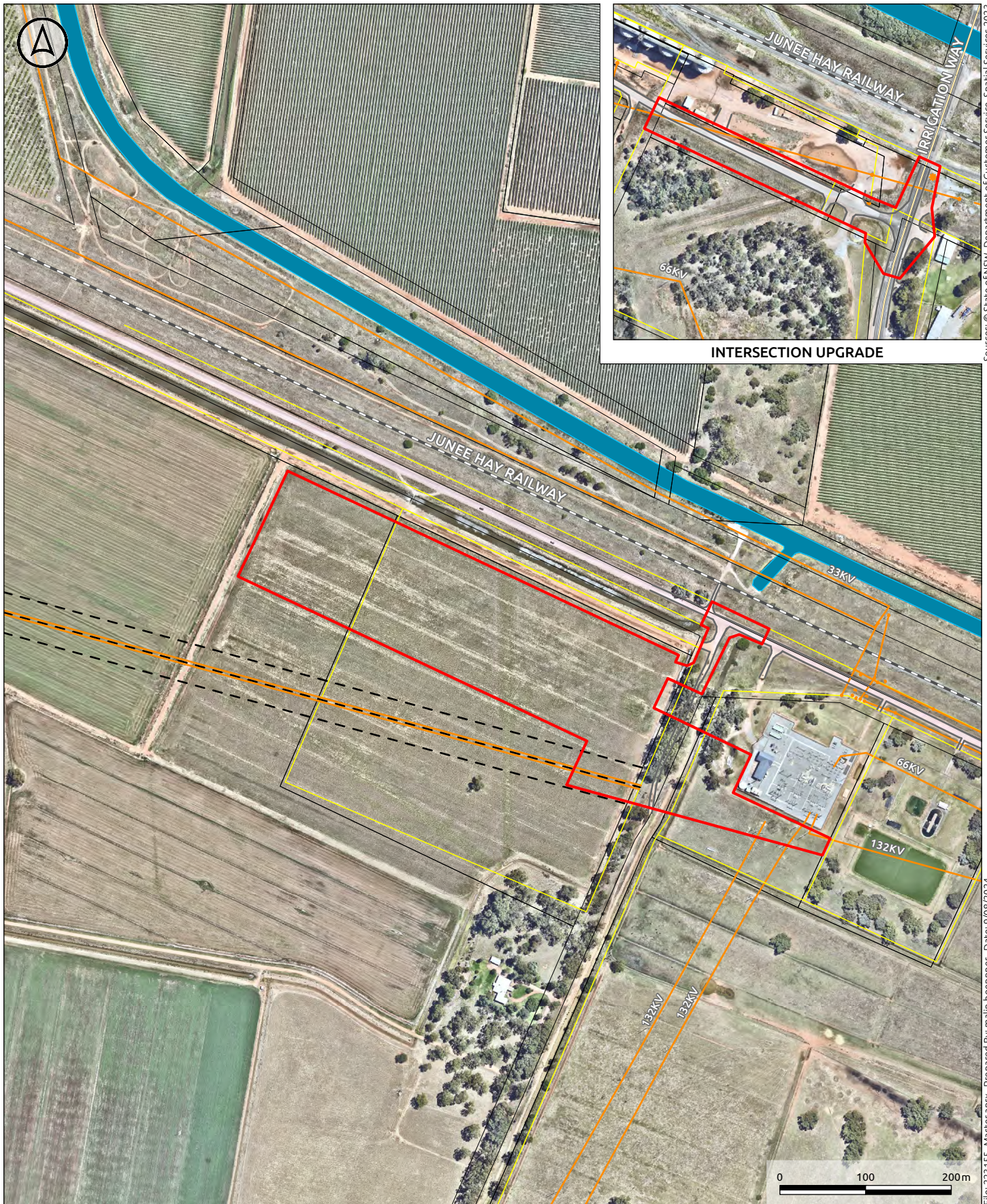


- Legend**
- Development Footprint
 - Cadastre
 - Road
 - Railway
 - Water Body
 - NPWS Reserve
 - Electricity Transmission Line



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Figure 2
Local Context



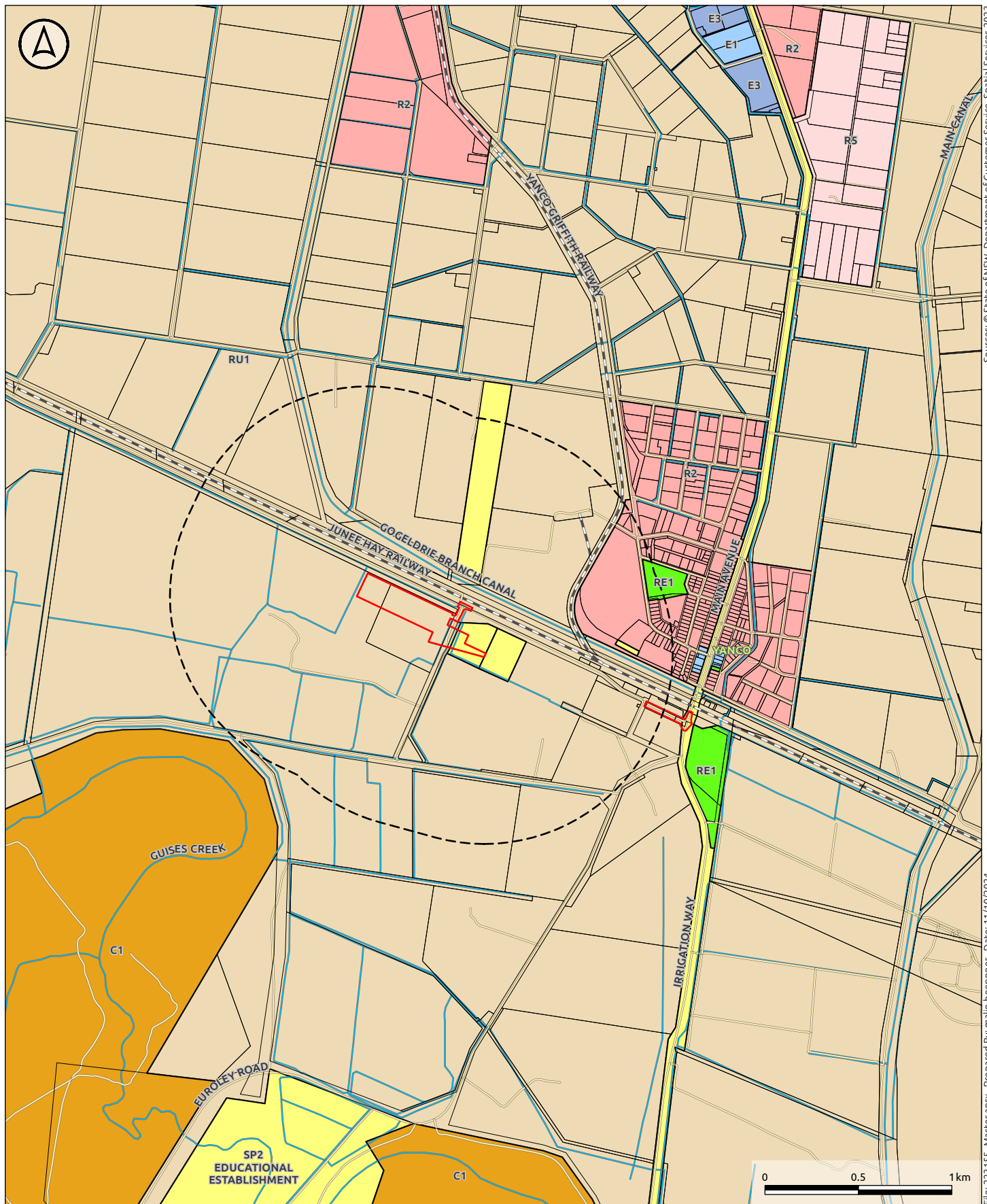
Legend

- Development Footprint
- Cadastre
- Surveyed Boundaries
- Railway
- Water Body
- Electricity Transmission Line
- Easement



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Figure 3
Subject Site and Development



Legend

- Development Footprint
- Locality
- Cadastre
- Road
- Railway
- Watercourse

Land Zoning (LZN)

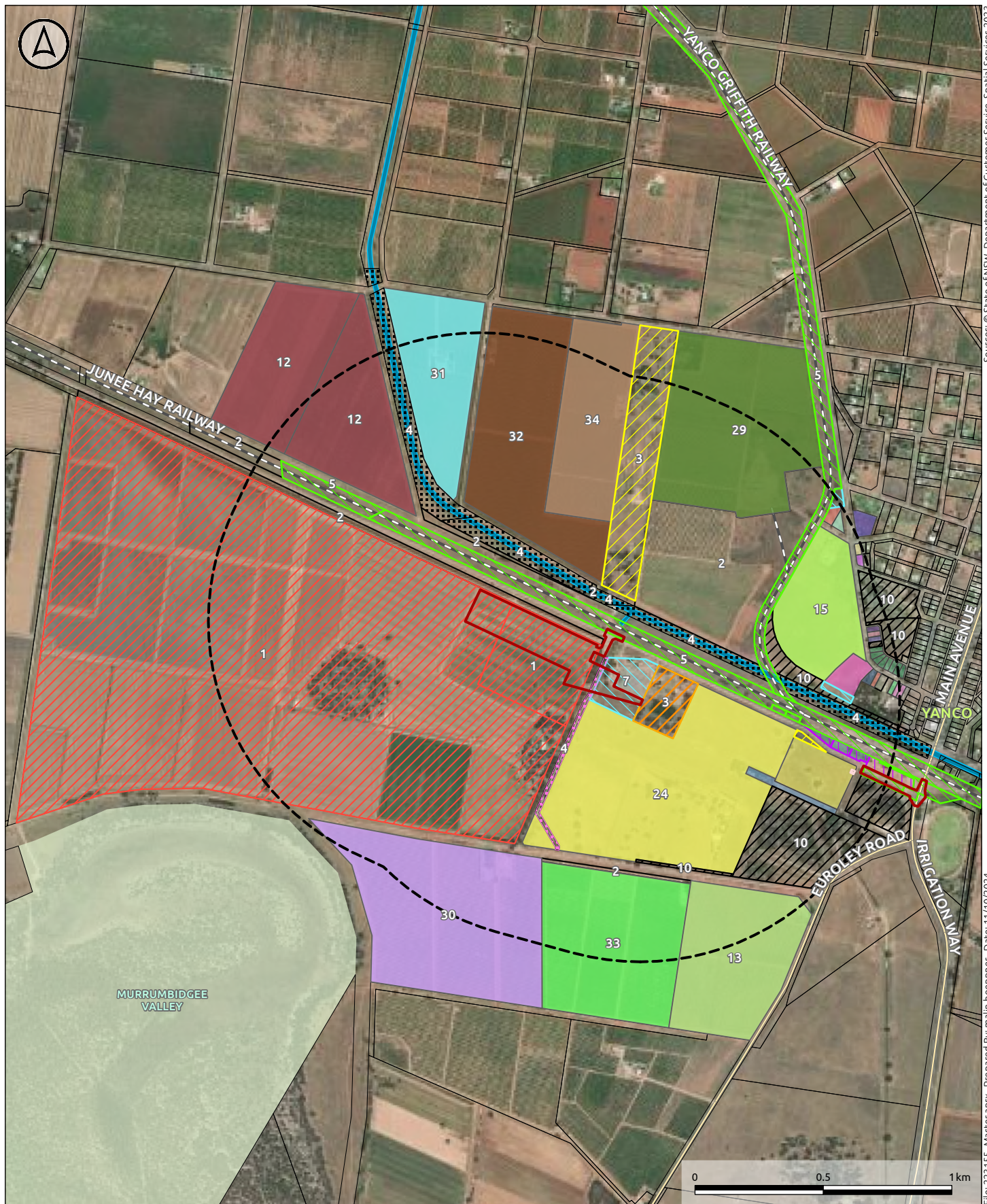
- C1
- E1
- E3
- R2
- R5
- RE1
- RU1

- SP2



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Figure 4
Land Zoning



Legend

- Development Footprint
- Cadastre
- Road
- Railway
- Water Body
- NPWS Reserve

Landholdings

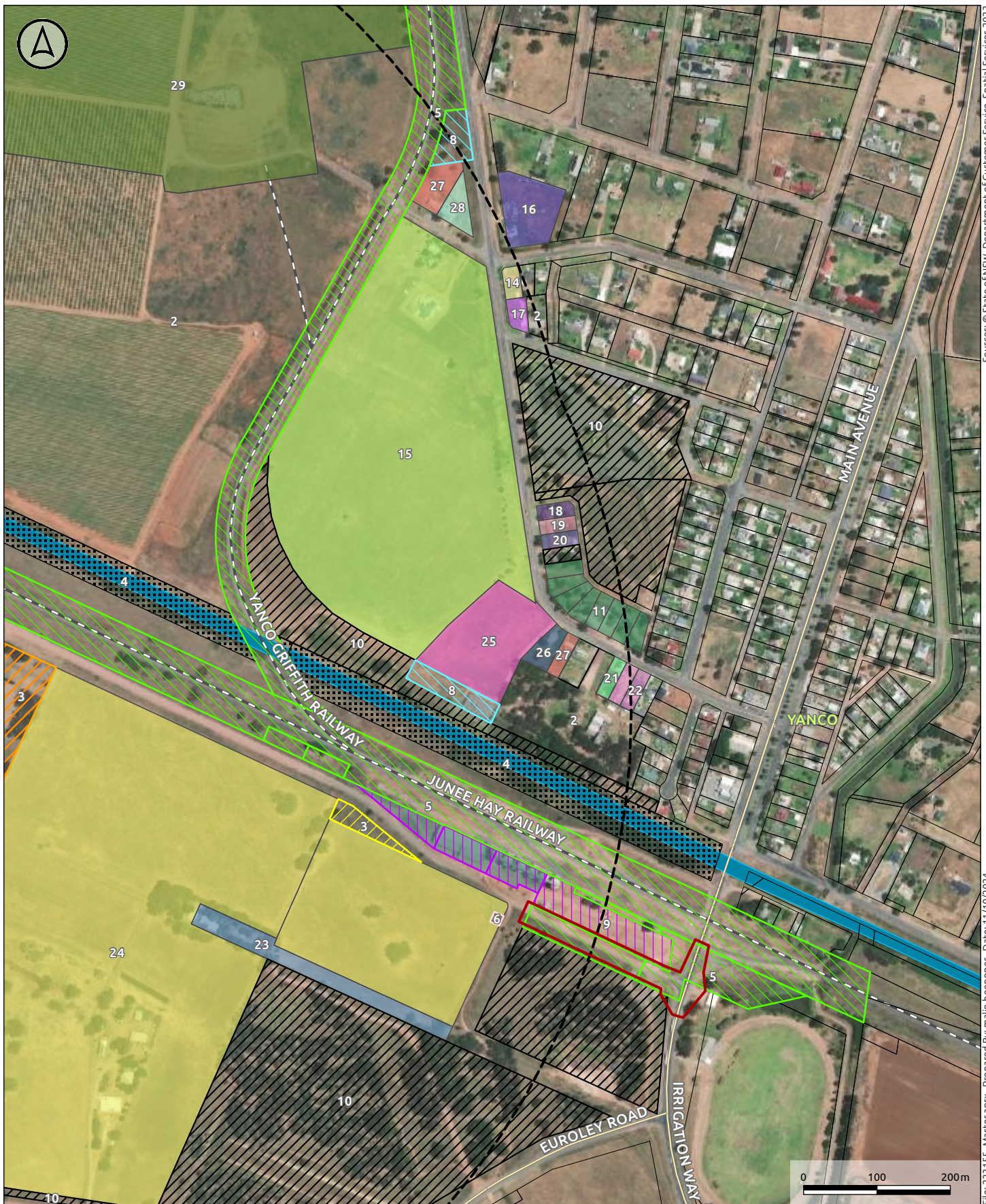
- Site Landowner
- NSW State Government
- Electricity Provider
- Grain Corp
- Leeton Shire Council
- Leeton Shire Council (unverified by Infotrack)

- Murrumbidgee Irrigation (unverified by Infotrack)
- Murrumbidgee Irrigation Ltd
- Telecommunications
- Transport Asset



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Figure 5
Land Ownership



Legend

- Development Footprint
- Locality
- Cadastre
- Road
- Railway
- Water Body

Landholdings

- NSW State Government
- Electricity Provider
- Grain Corp
- Leeton Shire Council
- Leeton Shire Council (unverified by Infotrack)
- Murrumbidgee Irrigation Ltd
- Telecommunications



Transport Asset



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Yanco Battery Energy Storage System

Figure 6
Land Ownership - Western Extent



Legend

- Development Footprint
- Locality
- Cadastre
- Road
- Railway
- Runway
- Water Body
- NPWS Reserve

Electricity Transmission Line

- 33kV
- 66kV
- 132kV

Watercourse

- Canal
- RIVER



- Yanco Substation
- Hospital



- Leeton Solar Farm - Under Construction



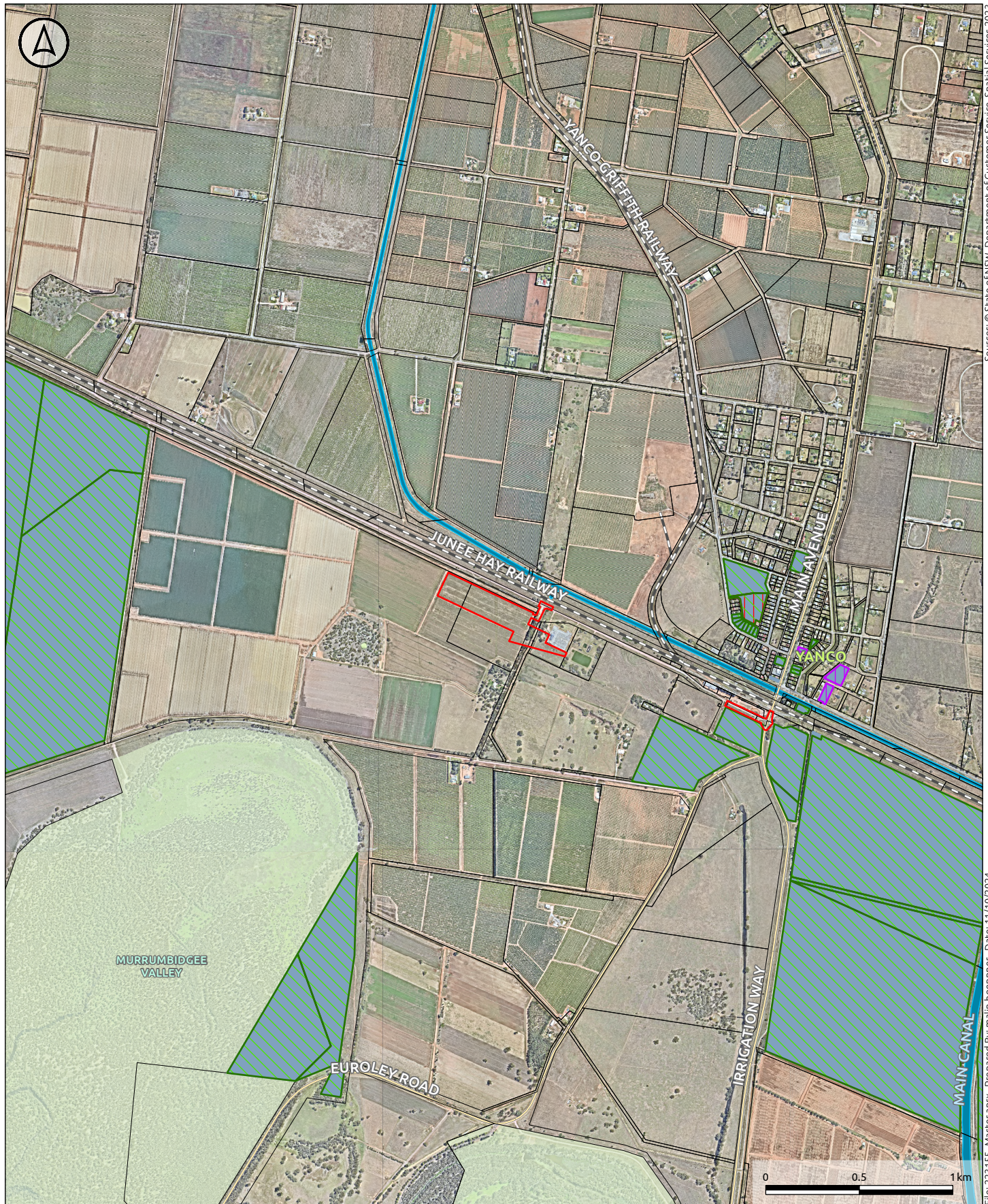
- Yanco Solar Farm - Approved



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Figure 7
Surrounding Development



Legend

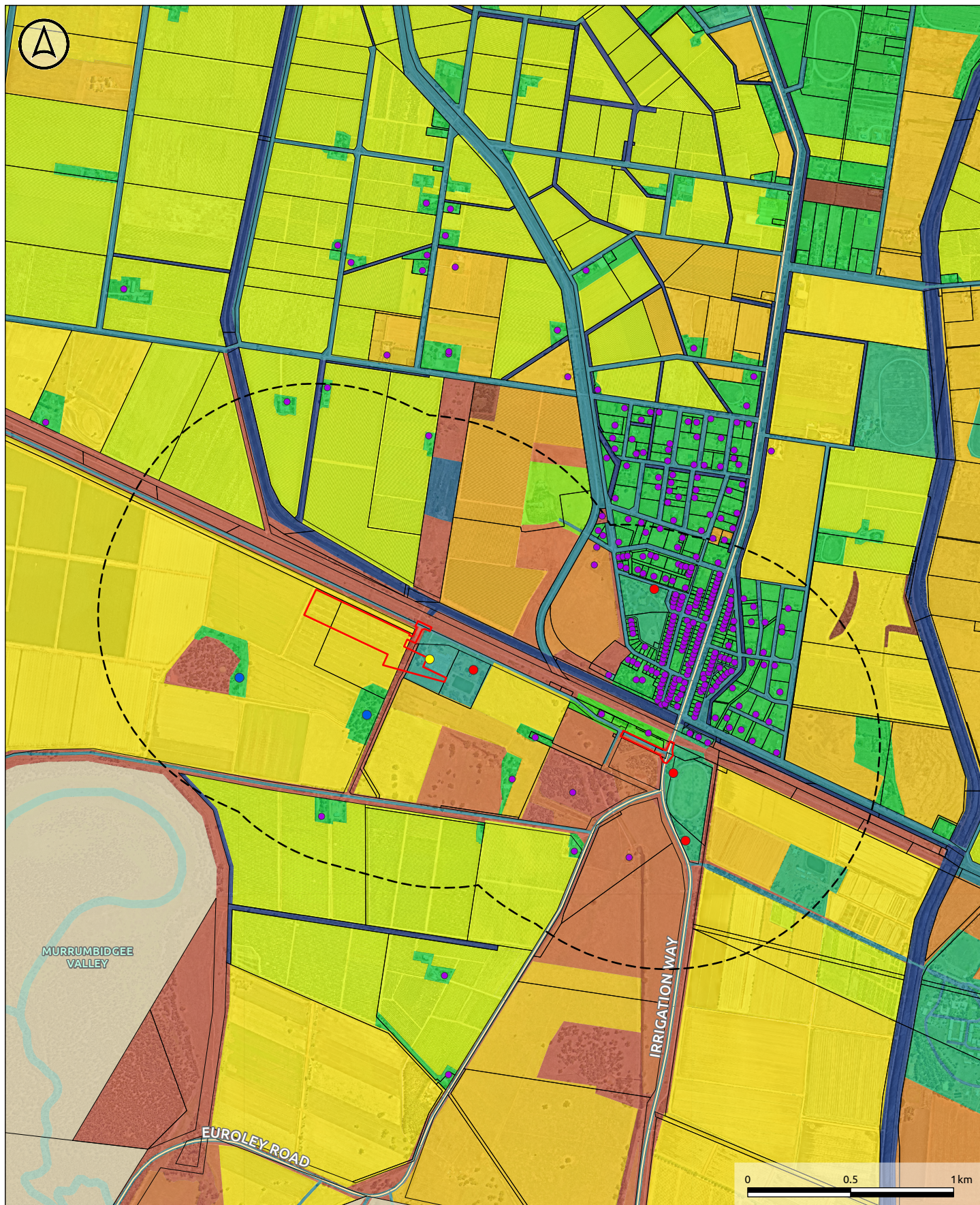
- Development Footprint
- Electricity Transmission Line
- Cadastre
- Road
- Railway
- Water Body
- Watercourse

- NPWS Reserve
- Crown Reserves
- Crown Licences
- Crown Leases
- Crown Land



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Figure 8
Crown Land



Legend

- Development Footprint
- Locality
- Cadastre
- Road

Receivers

- Associated Non-Residential
- Associated Residential

- Non-Associated Non-Residential
- Non-Associated Residential

Landuse 2017

- 1.1.0 Nature conservation
- 1.2.0 Managed resource protection
- 2.1.0 Grazing native vegetation

- 3.2.0 Grazing modified pastures
- 3.3.0 Cropping
- 3.4.0 Perennial horticulture
- 4.1.0 Irrigated plantation forests
- 4.2.0 Grazing irrigated modified pastures

- 4.3.0 Irrigated cropping
- 4.4.0 Irrigated perennial horticulture
- 5.2.0 Intensive animal production
- 5.3.0 Manufacturing and industrial
- 5.4.0 Residential and farm infrastructure

- 5.5.0 Services
- 5.6.0 Utilities
- 5.7.0 Transport and communication
- 5.9.0 Waste treatment and disposal
- 6.3.0 River
- 6.4.0 Channel/aqueduct

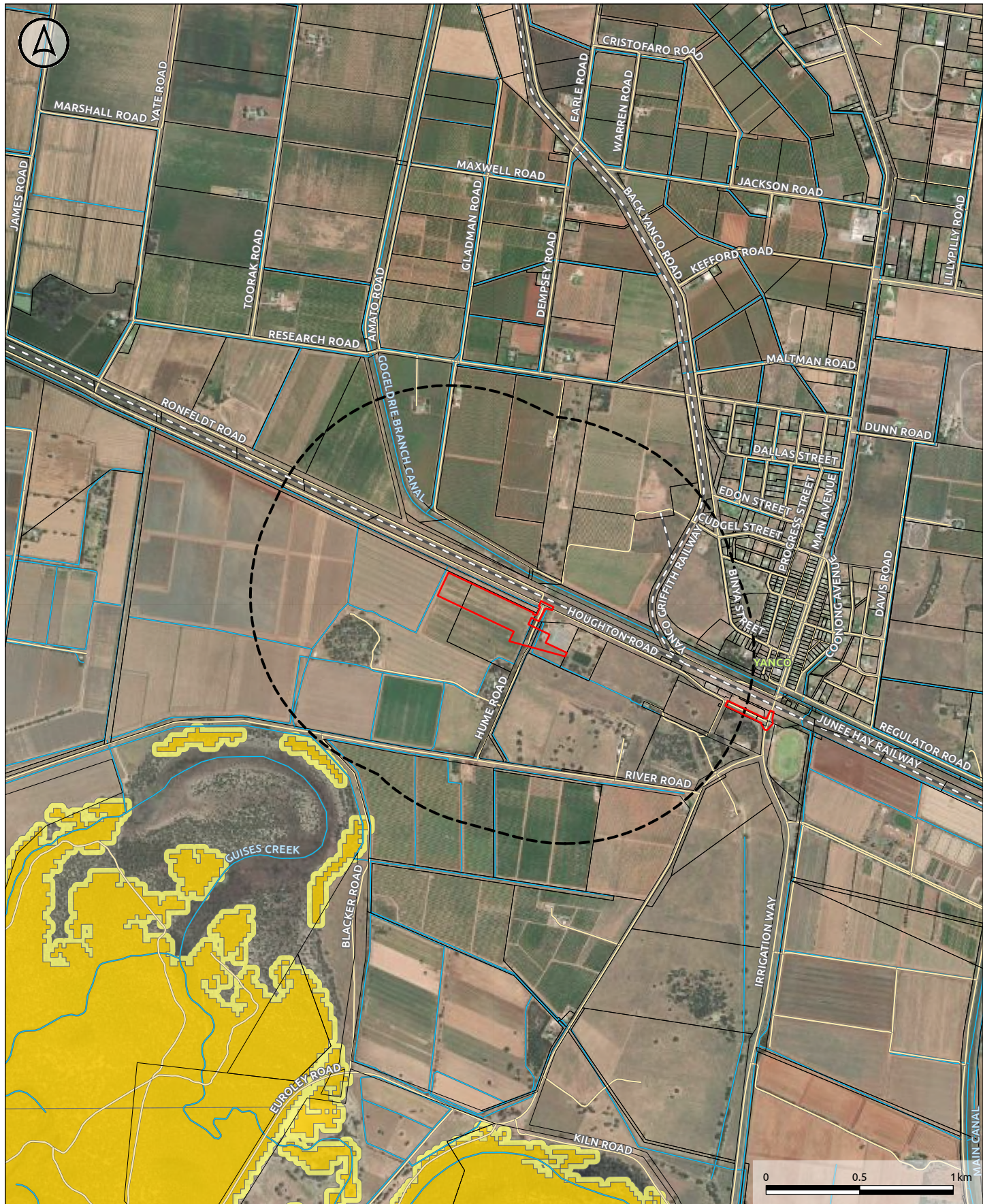


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Figure 9

Land Use and Receptors



Legend

- Development Footprint
- Locality
- Cadastre
- Road
- Railway
- Water Body
- Watercourse

Bushfire Prone Land

- Vegetation Buffer
- Vegetation Category 2



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Figure 10
Bushfire Prone Land



Legend

- Development Footprint
- Cadastre
- Road
- Railway
- Water Body
- Watercourse

EPI Heritage

- Conservation Area - General
- Item - General

State Heritage Register Curtilage

- State Heritage Register Curtilage

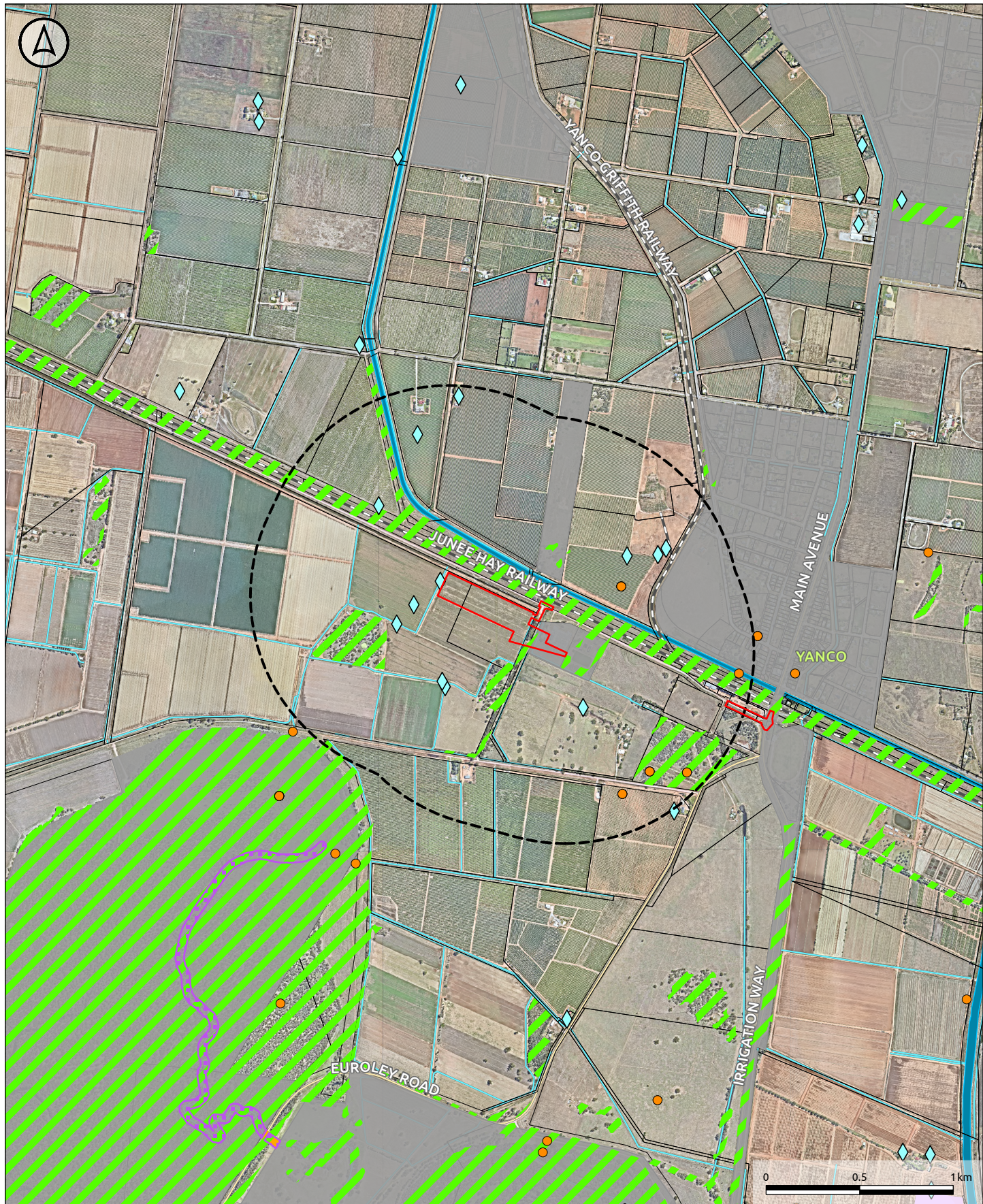
Aboriginal Heritage Sites

- Aboriginal Heritage Sites



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Figure 11
Heritage



Legend

- Development Footprint
- Locality
- Cadastre
- Road
- Railway
- Water Body
- Watercourse
- Strahler <3

Bionet Threatened Species Records

- Fauna
- ◆ Groundwater Bores
- Native Vegetation Regulatory Map**
- Vulnerable Regulated Land
- Sensitive Regulated Land
- Excluded Land

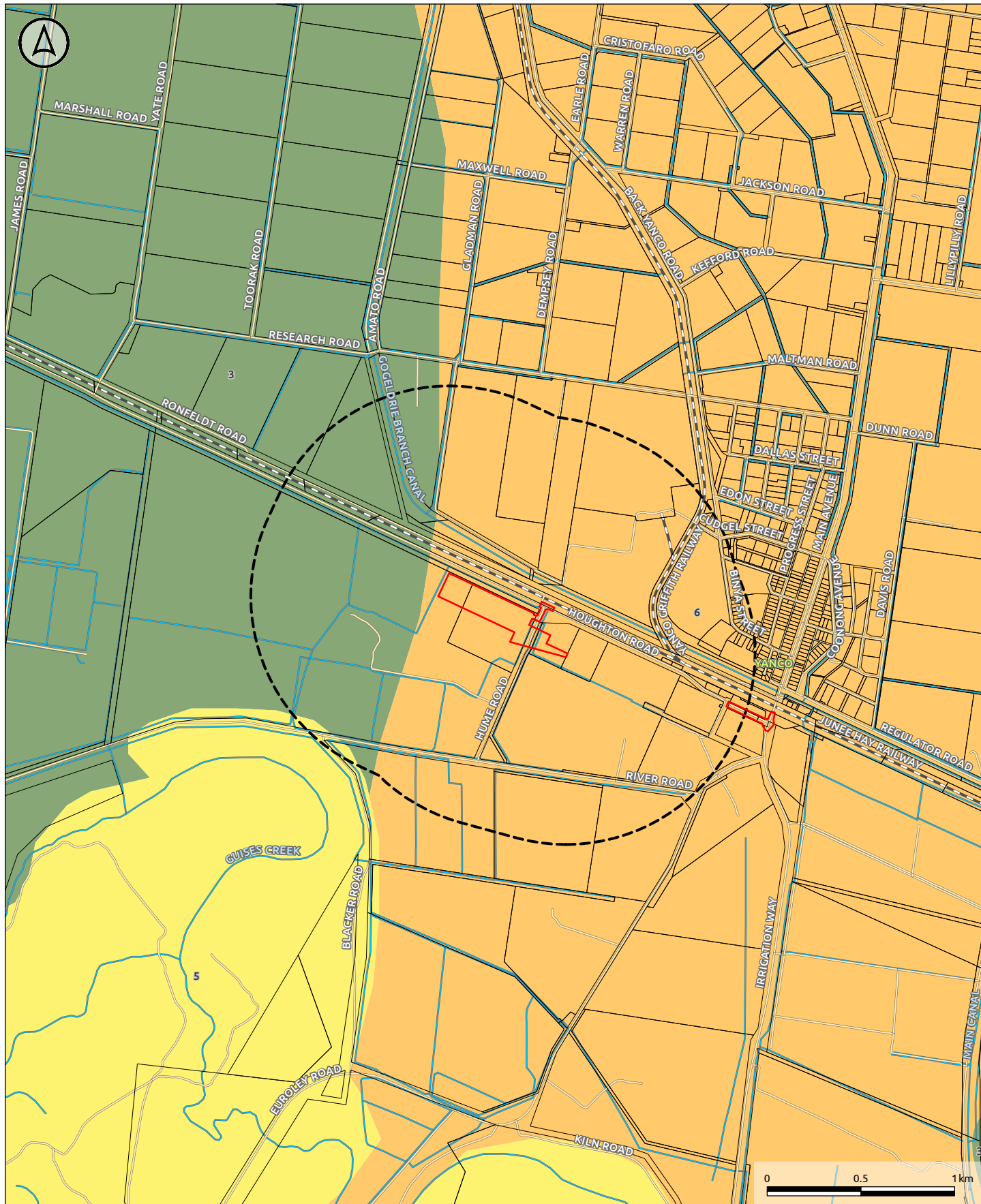
Biodiversity Values

- Biodiverse riparian land
- Terrestrial Biodiversity



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Figure 12
Environmental Features



Legend

- Development Footprint
- Locality
- Cadastre
- Road
- Railway
- Water Body
- Watercourse

Land Soil Capability (LSC)

- 3 - Moderate limitations
- 5 - Severe limitations
- 6 - Very severe limitations



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Figure 13
Land and Soil Capability

2. INFORMATION GATHERING

2.1 Nature of the land use change and development proposed.

2.1.1 THE SITE

The proposed development is located at 120 Houghton Road, Yanco, 2703 and is situated within the LSC LGA approximately 1.3 km southwest from the centre of Yanco.

The proposed development the subject of this SSD application covers a footprint of approximately 10.3 hectares (ha). The footprint transects the northern portions of Lot 516 DP7517415 and Lot 521 DP7517415 together with portions of Lot 7350 DP1199551, Lot 10 DP844961 and road reserves for Houghton Road and Hume Road. This area, hereafter referred to as the site, is to be occupied by the proposed approximate 250-megawatt (MW) BESS together with the site access arrangement and electrical connection routes.

The site is located on land zoned RU1 – Primary Production under the *Leeton Local Environmental Plan 2014* (LEP). It is generally flat and is currently in use for agricultural production, including irrigated cropping. Two (2) existing dwellings are located within Lot 516 DP7517415, including one (1) situated to the south of the site and the other situated to southwest of the site, central to Lot 516. No residential dwellings, farm infrastructure or watercourses, however, are located within the extent of the site or impacted by the footprint of the proposed development.

The site is generally cleared of vegetation due to historic cropping activities. Terrestrial biodiversity, however, is mapped within the development site and transects land along the alignment of Hume Road, approximately 130 m east of the BESS footprint. Other notable areas of vegetation within the locality include separate strands situated along the boundaries' road reserves, near Yanco Substation and the Yanco Sewage Treatment Plant (STP) to the east together with vegetation associated with the previously mentioned dwellings within Lot 516 DP7517415. A biodiversity assessment has been completed to identify vegetation within the site, including with respect to native trees and plant community types (refer to **Section 2.3.3**).

The development site features a frontage with (and encroaches into) Hume Road in the east and Houghton Road in the north. A new access arrangement is to be installed along the eastern boundary of Lot 521 and will form the dedicated point of access for the construction and operational phases of the proposed development. The existing access arrangement for the property, provided via an unnamed dirt road, transects through unrelated land to the north of the site near Hume Road (Lot 5340 DP1199456) and is not proposed to be utilised. The boundary of the development site includes the proposed access arrangement and extends northwards covering the intersection between Hume Road and Houghton Road.

Houghton Road extends in a general west to east alignment, connecting to Irrigation Way approximately 1.1 km east of the site. The southern boundary of Lot 516 is adjoined by River Road which extends in a general west to east alignment, linking with the southern extent of Hume Road before extending further east to connect to Irrigation Way via Earley Road, approximately 1.2 km to the southeast.

The proposed BESS would connect to the Yanco Substation which is situated directly east of the site along Houghton Road within Lot 10 DP844961. Approximately eight (8) electricity transmission lines run from the Yanco substation and extend throughout the locality ranging from 33 kV to 132 kV of power. The Yanco

Sewage Treatment Plant (STP) is located along Houghton Road further east of the development within Lot 1 DP630502.

The Junee Hay Railway is located north of Houghton Road, approximately 35 m north of the development site and approximately 120 m north of the BESS footprint. This railway provides connections to surrounding townships between Hay approximately 142 km west of the site and Junee approximately 114 km east of the site. A connection between the Junee Hay Railway and Yanco Griffith Railway is provided approximately 750 m east of the site. The Yanco Griffith Railway extends approximately 48 km northwest of the site to connect to Griffith. A railway crossing of the Junee Hay Railway is located to the north of the development site near the intersection of Hume Road and Houghton Road.

Gogeldrie Branch Canal extends in a general east to west alignment further north of this railway crossing, meandering to the north towards Leeton and providing a connection to Main Canal to the east. Three unnamed irrigation channels transect the eastern extent of the site with several others scattered on agricultural land throughout the locality (refer to **Section 2.2.3.3.6**). The Murrumbidgee River is located approximately 3.2 km south of the development site at its nearest point. No watercourses are located within the extent of land impacted by the proposed development. The eastern extent of the site, however, features land mapped with groundwater vulnerability (refer **Figure 6**).

The project site and development footprint are depicted in **Figure 2**.

2.1.2 DEVELOPMENT PROPOSED

The Yanco BESS includes the following key infrastructure:

- > Enclosed lithium-ion batteries;
- > Power conversion systems including associated switchgear, protection and control equipment, transformers and enclosures for housing equipment;
- > Underground power and fibre optic cabling interconnecting the equipment;
- > Grid connection equipment including switchgear, protection and control equipment, metering, reactive power equipment, filtering equipment, auxiliary/earthing transformers, control rooms, and enclosures/buildings for housing equipment;
- > An underground or overhead transmission line of up to connect the BESS to the Yanco substation;
- > Earthing and lightning protection systems;
- > Site office, storage area/enclosure, internal access tracks, on-site parking, security fencing, CCTV, and temporary construction laydown area;
- > Landscaping Plantings;
- > A 10,000L water supply dedicated for firefighting purposes;
- > Acoustic barriers; and,
- > The installation of a new site access arrangement and an intersection upgrade developed in consultation with TfNSW and Council to meet relevant Austroads standards .

The site for the proposed development is depicted in **Figure 3**. The final layout is subject to detailed design.

Construction of the BESS is estimated to take up to 8 months (including a peak period of 4.5 months.) and will include site clearing and earthworks. The proposed development is expected to have a life span of approximately 23 years, however, infrastructure may be upgraded to extend the operational life. Alternatively, the proposed development may be decommissioned sooner, subject to technology and project viability.

2.1.3 NATURE OF LAND USE CHANGE

The construction and operation of the BESS would change the existing land use of the western portion of the development footprint (mapped via the NSW Landuse 2017 v1.5 dataset) from agriculture (irrigated cropping) to electricity generating works.

Areas within the locality are expected to continue to support their existing land use where practicable. The existing agricultural land use of the BESS footprint is likely to return following decommissioning.

2.2 Nature of the locality

2.2.1 LAND USE ZONES

Land use zones within the locality are detailed in **Table 4** and depicted in **Figure 4**.

The site is partially zoned RU1 – Primary Production and SP2 – Infrastructure (Electricity Transmission and Distribution) via the LEP. The justification of the proposed development and its permissibility is addressed within the EIS.

The following is noted within respect to land use zoning in the locality:

- > *SP2 – Electricity Transmission and Distribution* zoned land is located immediately adjacent to the eastern boundary of the site within Lot 10 DP844961 and approximately 750 m northeast of the site within Lot 1 DP598417. Lot 10 DP844961 contains part of the development site and hosts the TransGrid Yanco Substation.
- > *SP2 – Sewerage Systems* zoned land is located immediately adjacent to the eastern boundary of the site and is confined to Lot 1 DP630502 which hosts the Yanco STP.
- > *SP2 – Waste or Resource Management Facility* zoned land is located approximately 160 m north of the site, on the opposite side of Gogeldrie Branch Canal, and is confined to Lot 570 DP751745.
- > *RE1 – Public Recreation* zoned land is located on land approximately 950 m northeast of the site and is occupied by McCaughey Bicentennial Park within Lott 7010 DP1027093.
- > *R2 – Low Density Residential* zoned land is located approximately 400 m northeast of the site at its closest point/ R2 land extends further northeast from the locality across the urbanised area of Yanco
- > The remainder of the locality is zoned *RU1 – Primary Production*.

Table 4 –Land use zones and objectives

Zone	Objectives
RU1	<i>To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.</i> <i>To encourage diversity in primary industry enterprises and systems appropriate for the area.</i> <i>To minimise the fragmentation and alienation of resource lands.</i> <i>To minimise conflict between land uses within this zone and land uses within adjoining zones.</i> <i>To provide opportunities for intensive and extensive agriculture in appropriate locations consistent with the environmental capability of the land and access to irrigation water.</i> <i>To allow the development of processing, service and value-adding industries related to agriculture and primary industry production.</i> <i>To protect and enhance the water quality of receiving watercourses and groundwater systems so as to reduce land degradation.</i>
SP2	<i>To provide for infrastructure and related uses.</i> <i>To prevent development that is not compatible with or that may detract from the provision of infrastructure.</i>
RE1	<i>To enable land to be used for public open space or recreational purposes.</i> <i>To provide a range of recreational settings and activities and compatible land uses.</i> <i>To protect and enhance the natural environment for recreational purposes.</i> <i>To encourage the development of public open spaces in a way that addresses the community's diverse recreation needs.</i>
R2	<i>To provide for the housing needs of the community within a low density residential environment.</i> <i>To enable other land uses that provide facilities or services to meet the day to day needs of residents.</i> <i>To ensure that a high level of residential amenity is achieved and maintained.</i>

2.2.2 LAND OWNERSHIP

Land holdings within the locality (within 1 km of the site) are depicted in **Figure 5**. In summary:

- > Land within the site boundary is under the ownership of a private agricultural landholding, TransGrid and Leeton Shire Council. TransGrid own and operate the Yanco Substation which is situated immediately northeast of the site within Lot 10 DP844961. Leeton Shire Council are associated with the management of road reserves for Houghton Road and Hume Road located within the extent of the site.
- > Land ownership to the north, south and west is comprised of a mixture of privately owned agricultural and residential holdings.

- > Leeton Shire Council own land associated with the Yanco STP to the east of the site and land associated with waste management to the north of the site.
- > Grain Corp own land to the west of the site near the intersection of Houghton Road and Irrigation way.
- > Murrumbidgee Irrigation own land to the north of the site along the alignment of Gogeldrie Branch Canal.
- > The NSW Government own several land parcels throughout the locality, including crown land parcels to the north and east of the site, together with land along the alignment of Junee Hay Railway which is managed by the NSW Transport Asset Holding Entity (TAHE)

Future land uses may alter existing ownership in the locality (refer to **Section 2.2.4**).

2.2.3 EXISTING LAND USES

A review of the NSW Landuse 2017 v1.5 mapping from the DPIE SEED Portal identified a range of land uses in the locality. Land uses within the site and locality (1 km radius of the site) are outlined in **Table 5** and **Figure 9**.

The host lots on which the development will be located have an area of approximately 240.5 ha. Of this area, approximately 6.6 ha has historically been used (by reference to the 2017 land use spatial data) for grazing, with approximately 6.3 ha characterised as residential and farm infrastructure. The remainder of the site, approximately 227.6 ha (~95%), has been used for irrigated cropping. All of the area of the development site that will host the proposed BESS has historically been used for irrigated cropping.

Other notable land uses in the locality include residential and farm infrastructure, irrigated perennial horticulture, channel/aqueduct, utilities and grazing irrigated modified pastures land uses.

Table 5 – Land uses within the site and locality

Land Use	Area (ha)	%
2.1.0 Grazing native vegetation	67.57	13.5
3.2.0 Grazing modified pastures	32.08	6.4
3.3.0 Cropping	14.39	2.9
3.4.0 Perennial horticulture	32.79	6.5
4.2.0 Grazing irrigated modified pastures	12.99	2.6
4.3.0 Irrigated cropping	152.08	30.3
4.4.0 Irrigated perennial horticulture	118.52	23.6
5.2.0 Intensive animal production	7.90	1.6
5.3.0 Manufacturing and industrial	3.06	0.6
5.4.0 Residential and farm infrastructure	17.84	3.6
5.5.0 Services	1.89	0.4

Land Use	Area (ha)	%
5.6.0 Utilities	9.38	1.9
5.7.0 Transport and communication	12.35	2.5
5.9.0 Waste treatment and disposal	4.19	0.8
6.4.0 Channel/aqueduct	15.01	3.0
TOTAL	502.04	100%

2.2.3.1 Residential and farm infrastructure

There are no residential dwellings or farm infrastructure located within the site.

There are several groundwater bores within the locality (refer to **Section 2.3.5**).

As shown in **Figure 9**, there are approximately thirty-two (32) receivers located within the locality of the development site, including:

- > One (1) associated non-residential receiver and two (2) associated residential receivers situated within lots hosting the development site.
- > One (1) non-associated non-residential receiver located to the east, and
- > Twenty-eight (28) non-associated residential receivers located throughout the locality.

The closest residential dwelling to the site consists of an associated receiver situated approximately 300 m to the south within the eastern extent of Lot 516 DP751745.

A farm dam is located within the central portion of Lot 516 DP751745, approximately 470 m southwest of the site. This farm dam occupies an area of approximately 680 m².

2.2.3.2 Agriculture

The NSW Landuse 2017 v1.5 mapping dataset identifies land use within the site for irrigated cropping and residential and farm infrastructure (see **Figure 9**).

Agriculture is the dominant land use in the locality, with irrigated cropping land use occupying the entirety of the site, together with the majority of the land to the northwest, west and south.

Other agricultural land use within the locality includes:

- > Grazing of native vegetation, located approximately 200 m north of the site.
- > Grazing of irrigated modified pastures, located approximately 250 m east of the site.
- > Irrigated perennial horticulture land uses, located approximately 500 m southeast of the site.
- > Perennial horticulture land uses, located approximately 220 m northeast of the site.

The project is situated within the Riverina Murray Region and Western Riverina Subregion of NSW (DPI, 2020). DPI's Agricultural Industry Snapshot for Planning – Western Riverina Subregion identifies the gross value of agricultural production of this region at over \$1,885 million for the year between 2015 and 2016

(DPI, 2020). The gross value of agricultural production (GVP) of the Leeton Shire LGA is \$132.3 million, with the top three (3) commodities comprising of \$53.57 million in fruit/nuts, \$35.35 million in broadacre crops and \$22.51 million in beef.

The site and locality is not mapped as containing any land identified via Strategic Regional Land Use Policy including Strategic Agricultural Land -Biophysical (otherwise referred to as 'BSAL').

2.2.3.3 Infrastructure

An overview of infrastructure impacting the site and locality is provided below. These features are depicted in **Figure 7**.

2.2.3.3.1 Roadways

Key roads that would be utilised during the construction and operation of the BESS include:

- > Internal access roads, including the installation of a new access arrangement provided along the eastern boundary of Lot 521 DP7517415 connecting to Hume Road. The boundary of the site includes the intersection between Hume Road with Houghton Road, which would be developed in consideration of the requirements of TfNSW and Council to provide suitable access to the project
- > Houghton Road, which extends in a general east to west alignment to the north of the site, south of the Junee Hay Railway. Houghton Road extends eastwards from an intersection with Hume Road. Providing a connection to Irrigation way approximately 1.1 km to the east.
- > Irrigation Way, which extends in a general northeast to southwest alignment through the centre of Yanco. Irrigation Way is connected to the Newell Highway and Sturt Highway near Narrandera approximately 21.6 km southwest of the site.

The expected transportation route for construction materials has been assessed via a Route Study prepared by Rex J Andrews (2024) with vehicles travelling from Port Kembla via the Hume, Newell and Sturt Highways to arrive at the development site.

A review of NSW Road Network Classification map provided by Transport for NSW (TfNSW, 2024a) and Schedule of classified roads and State and Regional roads (TfNSW 2024b) identifies the Newell Highway as a State Classified Road (HW17). Hume Road, Houghton Road and Irrigation Way are local roads not classified under the *Roads Act 1993*.

Ongoing consultation with TfNSW has occurred in relation to the preparation of the project traffic impact assessment and this is outlined in the project Traffic Impact Assessment (TIA). Measures to reduce risk to the traffic environment should form part of the application and are anticipated to reduce the likelihood of significant land use conflicts.

2.2.3.3.2 Rail corridors

The Junee Hay Railway is situated approximately 90 m north of the site boundary and extends in a general east to west alignment south of Ronfeldt Road and Gogeldrie Branch Canal. This railway provides connections to surrounding townships between Hay approximately 142 km west of the site and Junee approximately 114 km east of the site. A connection between the Junee Hay Railway and Yanco Griffith

Railway is provided approximately 580 m east of the site. The Yanco Griffith Railway extends approximately 47 km northwest of the site to connect to Griffith.

The Junee Hay railway corridor is under the ownership of TAHE and forms part of the Country Regional Network (CRN) currently managed by UGL Regional Linx (UGLRL, 2024). The track extending from Yanco to Hay is mapped as corridor 'S80' under the CRN Network Map and is currently identified as non-operational.

A railway crossing along Research Road is located approximately 2.1 km northwest of the site. No alteration to the existing railway crossings or the railway corridor for the Junee Hay Railway is proposed. Additional consultation with TAHE and UGL will be undertaken closer to construction phase of the development in relation to the land surrounding the railway corridor including the use of Houghton Road and Irrigation Way.

2.2.3.3.3 Substation

The Yanco Substation occupies an area of approximately 4.1 ha and is located adjacent to the development site. It is situated within the northern extent of Lot 10 DP844961 approximately 40 m to the north of the development site boundary (refer to **Figure 3**). The proposed development would connect into this electrical infrastructure via a new transmission line.

The approximate location of the sub-transmission line has been identified but would be subject to detailed design considerations in consultation with TransGrid.

2.2.3.3.4 Electrical infrastructure

As shown in **Figure 7**, there are several transmission lines throughout the locality. These include:

- > Eight (8) transmission lines connected to the existing Yanco Substation, including:
 - Two (2) sets of Essential Energy owned 132 kV transmission lines which extend southwards from the substation, transecting River Road and the Murrumbidgee River. These lines separate southwards of the Murrumbidgee River providing connections to Darlington Point in the west and Uranquity Switching Station near Wagga Wagga in the east.
 - One (1) set of Essential Energy owned 132 kV transmissions lines which extend westward from the southern side of the substation, transecting land to the south of the site within Lot 521 prior to facilitating connections in the west near Whitton and in the northwest near Griffith.
 - One (1) set of Essential Energy owned 132 kV transmissions lines which extend eastward from the southern side of the substation, transecting Euroley Road and the Murrumbidgee River. This transmission line transects land further southwest of the site providing a connection to the south of Wagga Wagga.
 - Two (2) sets of Essential Energy owned 33 kV overhead transmission lines which extend from the northern side of the substation, transecting Houghton Road and the Junne Hay Railway prior to extending in a westward alignment to the north of the site. These lines separate to the northwest of the set extending northwards to provided connections near Leeton and westwards to connect to land near Whiton.
 - Two (2) sets of Essential Energy owned 33 kV overhead transmission lines which extend from the northern side of the substation, prior to extending in an eastward alignment to the northeast of

the site. The alignment of these lines separates to the east of Grain Corps operation along Houghton Road. One line extends northwards providing connections to the east of Yanco and to the southeast of Leeton with the remaining line extending further eastward transecting Irrigation Way and providing connections to land near Yanco Agricultural Institute.

- One (1) set of Essential Energy owned 66 kV overhead transmission lines which extend from the northern side of the substation, prior to extending eastwards across the site of the Yanco STP prior to transecting land near Irrigation way and the Sturt Highway to provide connections to the west of Wagga Wagga.
- > Additional sets of 11 KV lines owned by Essential Energy transect land to the east and south of the site providing intermittent connections to low voltage overhead and underground lines associated with Yanco STP and exiting dwellings to the south, including within Lot 516.

2.2.3.3.5 Servicing infrastructure s

A Before You Dig Australia (BYDA) search has identified servicing infrastructure throughout the locality of the BESS footprint. Ongoing liaison with service providers would occur through detailed design to ensure that any impacts to infrastructure, both within the development footprint and locality, are limited and managed to the satisfaction of the provider.

2.2.3.3.6 Drainage infrastructure

Gogeldrie Branch Canal is owned by Murrumbidgee Irrigation and is located approximately 180 m north of the development site. The canal is mapped via the NSW Landuse 2017 mapping with a land use of 'Channel/aqueduct' and runs generally parallel to Houghton Road extending in a general east to west alignment past the northern boundary of the development site. The canal extends to the northwest transecting land to the west of Yanco and Leeton. From Leeton the canal meanders in a general westward alignment along the southern side of Irrigation Way, terminating near the intersection of Wilga Road and Black Road approximately 22.3 km to the northwest. The portion of the Gogeldrie Branch Canal to the east of the development site passes underneath the Yanco Griffith Railway and Irrigation Way prior to connecting to Main Canal approximately 2.62 km to the east.

Connections to other forms of drainage infrastructure including irrigation channels, farm dams and ponds are provided throughout the locality facilitating surrounding agricultural, waste and recreational land uses. These include:

- > A total of approximately twenty-two (22) unnamed irrigation channels within the locality, including:
 - Three (3) which transect land within the eastern extent of the site extending along the alignment of Hume Road, impacting land to the east and south.
 - Twelve (12) other channels which provide connections across agricultural land use within Lot 516 DP751745.
 - One (1) which transects land adjacent to the northern boundary of the site travelling in a general east to west alignment within Lot 5340 DP1199456
 - One (1) connected to Gogeldrie Branch Canal transecting agricultural land to the north of the development site.
 - Four (4) which transect agricultural land to the south of the site near River Road.

- One (1) which extends land to the southeast of the site along the northern side of River Road South of the Yanco STP.
- > One (1) farm dam situated to the southwest of the site within the centre of Lot 516 and
- > Two (2) ponds including one associated with the operation of the Yanco STP with the other situated within recreation land for McCaughey Bicentennial Park.

A BYDA search has been completed for the project and has not identified any underground water pipes or underground drainage infrastructure within the extent of the BESS footprint. An updated BYDA search must be completed by all contractors prior to commencing earthworks on site.

Ongoing liaison with Murrumbidgee Irrigation would occur through detailed design to ensure that any impacts to drainage infrastructure is limited and managed to the satisfaction of the provider.

2.2.3.4 National parks and nature reserves

There are no parks or reserves located within the development site. The closest parks or reserves include:

- > The Murrumbidgee Valley National Park, situated approximately 250 m to the south of the site at its closest point; and,
- > The South West Woodland Nature Reserve, situated approximately 19 km southwest of the site at its closest point

2.2.3.5 Reservoirs and dams

No reservoirs or dam land uses were identified within the locality via NSW Land Use 2017 mapping. The closest land mapped with this land use is situated approximately 9 km west of the site and consists of a single reservoir/dam occupying an area of approximately 9.83 ha.

As detailed in **Section 2.3.4**, a review of satellite imagery has identified several irrigation channels and farm dams throughout the site and locality.

2.2.3.6 Rivers

A review of the NSW Landuse 2017 dataset did not identify any areas within the site or locality as containing rivers. The closest river to the site is the Murrumbidgee River located approximately 3.2 km south of the development site.

2.2.3.7 Waste management

The Yanco STP is located in an adjacent lot, approximately 230 m east of the development site.

A waste treatment and disposal commodities land use area is mapped 550 m north of the development site at its nearest point.

2.2.3.8 Industrial land uses

The GrainCorp Yanco industrial site is located on the northern side of Houghton Road, approximately 855 m east of the development site and immediately northwest of the intersection between Houghton Road and Irrigation Way,

2.2.4 FUTURE LAND USES

A review of LSC's website and the major project website has not identified any future developments planned within the locality of the development.

The closest development applications detailed via the LSC website include:

- > A 5 MW BESS located at 649 Ronfeldt Road approximately 1.6 km west of the development site; and,
- > A development application addressing the future use of a shed under construction at 39 Main Avenue Yanco.

A review of the NSW major projects planning portal application tracker has identified that the approved Yanco Solar Farm is located approximately 1.8 km north of the development site.

A recent consultation notice issued by the Samsung Renewable Energy Australia (SREA) on 5 July 2024, has identified an intent to install a separate BESS development with an approximate capacity of 150 MW within Lot 763 DP257321. This neighbouring project is situated approximately 200 m south of the Yanco BESS site. SREA have identified that this project will also represent SSD and that a Scoping Report will soon be submitted to seek SEARS for the project. Consultation with SREA would occur during the detailed design construction and operational phases of the Yanco BESS project, minimising the potential for significant cumulative impacts and potential land use conflicts.

Other existing land uses surrounding the site are expected to continue into the future. As detailed via the EIS the project design has been refined to limit impacts to surrounding land uses.

The development is not expected to prevent the establishment of other future land uses. The site would be able to support a variety of future land uses after decommissioning such as agriculture, or other developments subject to the attainment of development consent. The majority of infrastructure associated with the proposed BESS would be removed at the end of the project life. A determination during project decommissioning would be made in regard to the retention of any site infrastructure.

2.2.5 LAND TENURE

2.2.5.1 Crown land

A review of the NSW ePlanning portal spatial viewer did not identify any crown land parcels contained within the development site.

The proposed access arrangement for the development site includes an upgrade to the intersection of Houghton Road and Irrigation Way. Two (2) Crown Land reserves, R68769 and R68244, are located in proximity to this intersection.

As detailed via the Strategic Design provided within the TIA, the proposed intersection upgrade seeks to introduce a minor redesign the exiting intersection to accommodate a basic right turn treatment and to avoid existing raised crossing. The extent of this upgrade will impact land immediately adjacent to the south of Houghton Road, within the southeastern extent of Lot 1 DP1072592. The closest crown land reserve, R68244, is confined to Lot 7005 DP1027092. No change to land within the extent of a crown land reserve is proposed and no requirement to attain a crown land reserve use permit for the construction of the development is therefore anticipated.

Ongoing consultation with Crown lands nevertheless would be provided during the refinement of detailed design and construction phase of the project to address potential impacts associated with construction traffic and access arrangements for Lot 7005 DP1027092.

Crown enclosure permits, licences, leases and reserves in the locality are summarised in **Table 6** and depicted in **Figure 8**. Crown Land mapped via the NSW ePlanning Portal without a dedicated enclosure permit, licence, lease or reserve is included as unidentified Crown land.

Table 6 – Crown Land

Type	Crown Land ID	Location description
Crown Enclosure Permits	-	No Crown Enclosure Permits were identified in the locality.
Crown Licences	385413	Approximately 940 m northeast of the site south of McCaughey Bicentennial Park. (associated with R751745)
Crown Leases	-	No Crown Leases were identified in the locality.
Crown Reserves	R68244	Approximately 900 m southeast of the site near the intersection of Irrigation Way and Euroley Road (associated with R751745)
	R68769	Approximately 620 m southeast of the site near the intersection of River Road and Euroley Road.
	R78327	Approximately 900 m northeast of the site near Binya Street/
	R751745	Approximately 940 m northeast of the site south of McCaughey Bicentennial Park.
	R90972	Approximately 980 m northeast of the site covering McCaughey Bicentennial Park.
Unidentified Crown Land	-	Approximately 200 m north of the site along the northern side of Gogeldrie Branch Canal.
	-	Approximately 930 m northeast of the site along the eastern extent of Cudgel Street near the Yanco Griffith Railway.

2.2.5.2 Mining and exploration titles

The site is not located within or near a mine subsidence district. A review of Minview identifies that no exploration or mining titles or applications currently apply to the site or the locality.

2.2.5.3 Native Title

Division 2 of the NSW *Aboriginal Lands Act 1983* (AL Act) provides conditions under which the NSW Aboriginal Land Council and Local Aboriginal Land Councils may make a formal claim for land to the Native Title Registrar.

A review of the National Native Title Tribunal's Native Title Register and Native Title Vision mapping on 8 July 2024 did not identify any Native Title claims or applications, or Indigenous Land Use Agreements applying to the site under the *Commonwealth Native Title Act 1993* (Native Title Act).

The closest Native Title determination is situated approximately 20 km north of the site (Tribunal No NND2021/001). No other Native Title claims have been made in the Leeton LGA.

2.3 Environmental features

2.3.1 TOPOGRAPHY

The site has a slight western aspect. The locality is predominantly characterised by flat agricultural land with undulating topography adjacent to watercourses and irrigation channels.

A review of elevation within the site via Google Earth Mapping identifies a high point of approximately 140 m Average Height Datum (AHD) to the east and a low point of 136 m AHD at the western extent of the site.

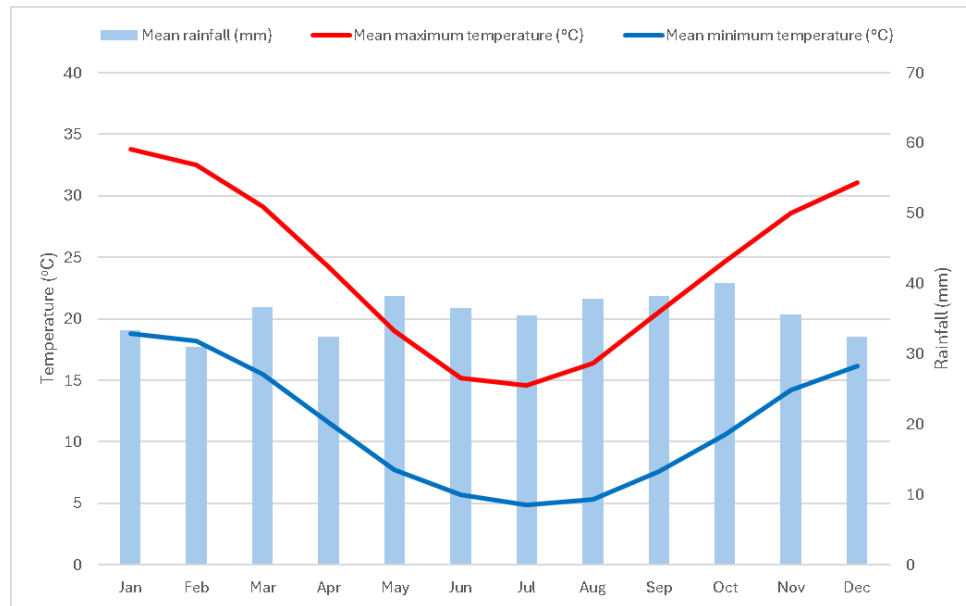
2.3.2 CLIMATE

The closest Australian Bureau of Meteorology (BoM) weather station with daily weather observations is the Yanco Agricultural Institute (Station 074037), located approximately 4 km southeast of the site. Other BoM weather stations are closer to the site but only provide daily rainfall and solar exposure statistics.

Summary climate statistics are provided below and depicted in **Figure 14**.

- > The mean annual maximum temperature is 24.1°C and the mean annual minimum temperature is 11.4°C. Records indicate that January is the warmest month, and July is the coldest (BoM, 2024).
- > Mean annual rainfall is 427.6 mm and records indicate monthly mean rainfall received at the site is highest in the March (BoM, 2024).

Figure 14 – Climate Statistics for the Locality



2.3.3 VEGETATION

The site and several areas in the locality are mapped as containing Terrestrial Biodiversity under the LEP (refer to **Figure 12**).

A Biodiversity Development Assessment Report (BDAR) prepared by Habitat Environmental Services (2024) accompanies the EIS. With respect to the site of the BESS including the intersection of Houghton Road with Hume Road and the route to provide an electrical connection to Yanco Substation the biodiversity assessment has determined that the majority of the area is vegetated with non-native vegetation (agricultural crops) with adjacent areas comprised of non-native grasslands (exotic Grassland) and small patches of native woodland. The intersection investigation area provided at the eastern extent of Houghton Road is predominantly composed of native woodlands with a floristic composition and structure indicating that several trees and shrubs are likely to have been planted. Two Plant Community Types (PCTs) have been identified with respect to the proposed development including:

- > PCT 74 – Yellow Box – River Red Gum tall grassy riverine woodland of NSW South Western Slopes Bioregion and Riverina Bioregion which impacts:
 - Land within the eastern extent of the site along the alignment of Hume Road, and
 - Land within the intersection investigation area at the eastern extent of Houghton Road.
- > PCT 26 – Weeping Myall open woodland of the Riverina Bioregion and NSW Western Slopes Bioregion which is located within the intersection investigation area.

The BDAR has detailed that the project occurs within an agricultural landscape with sparse occurrences of fragmented native vegetation. The native vegetation that is present is considered to exhibit a low diversity of vegetation species and lacks key habitat features for threatened species. Given the lack of native vegetation within the locality of the development site the biodiversity assessment has anticipated that the

clearing of native vegetation for the project will be less than 2 ha and that the Small Area Module of the BAM as a streamlined BDAR will be appropriate for assessment of the development.

Given the conclusions of the BDAR and subject to the implementation of appropriate mitigation measures, no significant impacts and/or land use conflicts associated with biodiversity are anticipated to occur as a result of the proposed development.

2.3.4 SURFACE WATER

There are no mapped surface water features located within the confines of the site.

As specified in **Section 2.2.3.3.6** water sources in proximity to the site are limited to several irrigation channels transecting the site and surrounding locality. A review of NSW ePlanning Spatial Viewer and Fisheries spatial data portal did not identify any mapped riparian land or key fish habitat within the site or locality.

Subject to the implementation of appropriate mitigation measures the proposed development is considered unlikely to result in any significant impact to any surrounding watercourses. The implementation of a soil and erosion management plan and other standard construction measures would limit the potential for the proposed development to result in adverse impacts to the surrounding water environment during the construction phase.

2.3.5 GROUNDWATER

The site is mapped as containing groundwater vulnerability via the Leeton LEP. The proposed development, however, is not anticipated to result in any significant impact to groundwater resources.

Battery units associated with the project will self-contained and designed to control potential leaks preventing the leaching of contaminants into the soil of the subject site. Potential contaminants where required will be stored and maintain in appropriately bunded areas to minimise the potential for contamination with site management plans detailing appropriate procedures for the clean-up of spills including the provision of spill kits and soil removal. As assessed via the Agricultural Land Utility Assessment (ALUA) prepared by Cadeema, the site is not considered to be susceptible to shallow water table induced salinity due to its moderate elevation in the landscape.

A review of the Water NSW groundwater bore mapping on 1 August 2024 did not identify any bores within the extent of the site (refer to **Figure 12**). A review of the locality identified twelve (12) bores which are detailed in **Table 7**. The closest bore, GW404798, is situated approximately 20 m west of the site. The average depth of bores in the locality is 23.9 m.

A Flood Risk and Groundwater Assessment Report (FRGAR) has been prepared by Water Technology (2024) and provides further assessment of groundwater impacts. Based on the understanding of the local hydrogeological regime and site operations during construction and operation, the FRGAR details that there is limited risk to groundwater or GDEs. The FRGAR details that the water table is unlikely to be encountered during construction and provides several recommendations including requirements to ensure bunding of battery and fuel storage areas together with additional investigations to verify lithology, depth to water and to attain baseline water quality (if the groundwater level is determined to be shallow). The implementation

of mitigation measures detailed in the FRGFAR and EIS is anticipated to minimise the potential for land use conflicts associated with groundwater resources.

Table 7 – Groundwater Bores with the Locality

Bore ID	Bore Depth (m)	Drill Date	Intended Purpose	Ownership	Direction from site	Distance from site (m)
GW404798	21.30	27/11/2008	Test bore	Private	West	20
GW402371	20.00	10/1/2003	Monitoring bore	N/A	Southwest	100
GW404797	36.50	15/10/2008	Test bore	Private	Southwest	200
GW402370	20.00	4/2/2003	Irrigation	Private	South	380
GW404796	21.00	15/10/2008	Test bore	Private	South	380
GW404340	25.0	10/08/2003	Stock, Domestic	Private	Southeast	310
GW402105	20.0	10/10/2002	Monitoring bore	N/A	Northwest	470
GW062639	11.30	01/05/1986	Domestic	Private	Northwest	700
GW416560	11.20	30/01/2007	Stock, Domestic	Private	North	950
GW416945	33.00	04/05/2018	Industrial, Irrigation	Private	Northeast	610
GW023499	33.80	01/04/1966	Industrial	Private	Northeast	650
GW062414	33.5	01/11/1987	Industrial	Private	Northeast	650

2.3.6 FLOODING

The site is not identified as being within a flood planning area via the Leeton LEP.

While no rivers or creeks have been identified in the locality of the project the site is situated on predominantly flat land between two watercourses including Murrumbidgee River approximately 4 km north of the Murrumbidgee River and Gogoldrie Branch Canal immediately to the north.

A review of the Leeton Flood Study prepared by (Engeny, 2015) has identified that the site contains patches of land categorised with a hazard of flood storage during a 1% Annual Exceedance Probability (AEP) flood event. It is understood that LSC have recently received funding from the NSW Government to review the existing flood study and that community information sessions were held in July 2024 inviting residents to contribute to the updated flood study. WMS Engineering have been engaged by Council to gather and review all available information regarding previous flooding events to support the preparation of the updated assessment. Ongoing Consultation with LSC would be provided during the refinement of detailed design ensuring that potential impacts associated with flooding risks are appropriately managed.

Given the size of the development site, separation distances to surrounding riverine land and proximity to surrounding infrastructure including the Yanco STP and Substation flooding is considered unlikely to significantly impact the site of the proposed development.

The FRGAR prepared by Water Technology (2024) provides further assessment of flooding risks and impacts. The analysis of flood depth, velocity and hazards estimated by flood modelling of the site has determined that the site is categorised as low risk to surface water flooding. The implementation of recommendations detailed in the FRGAR is anticipated to minimise the potential for land use conflicts with respect to flood potential.

Subject to the implementation of appropriate mitigation measures, including standard erosion and sediment controls during construction and compliance with the recommendations provided in the EIS, the proposed project is considered unlikely to result in any significant adverse impacts to surrounding watercourses or flooding behaviour.

2.3.7 BUSHFIRE

The site is not mapped as being bushfire prone land via the Leeton LEP.

Land immediately south of the site (in the Murrumbidgee Valley National Park) as well as land located approximately 4km northeast are mapped as being bushfire prone (see **Figure 10**).

A Bushfire Assessment Report (BAR) has been prepared by Cool Burn Pty Ltd (2024) and accompanies the EIS. The BFAR provides several recommendations to ensure that bushfire risks to the site and locality are minimised. The implementation of mitigation measures specified in the BAR is anticipated to minimise the potential for land use conflicts.

2.3.8 GEOLOGY AND SOIL

The site is located within the Riverina Bioregion lies in southeast NSW and further extends into the central north of the state of Victoria (NSW NPWS, 2003:91). The Riverina Bioregion includes outlying remnants of the Murray Darling Bioregion towards the western boundary as well as the Victorian Midlands Bioregion towards the south.

The upper catchment landscape of the Riverina Bioregion is a series of overlapping, low gradient alluvial fans while the lower tract of the river is a floodplain which has overflow lakes. Patterns of sediment deposition, soils, landscapes and vegetation are controlled by the discharge from past and present streams (NSWNPWS, 2003:92). The bioregion is dominated by river channels, swamps, lakes, floodplains, back plains and lunettes which are all of Quaternary age. The bioregion comprises three overlapping alluvial fans which are centred on the eastern half of the Murray Basin.

Modern river channels within the Riverina Bioregion consist mostly of sandy soils, whilst on higher terrace landforms that are rarely subject to flooding, saline soils and heavy grey and brown clays are found (National NSW NPWS, 2003:92). These red-brown and grey clays support grassland communities in the bioregion which are considered naturally significant. Similarly, Malle communities are supported in the Riverina by calcerous, sandy soils. Levees, old channels, dunes and lunettes are also formed by sandy soils.

The Australian Soil Classification (ASC) Soil Type map identifies that the BESS and proposed access roads are located on Chromosols (CH) soils. This landscape consists primarily of red-brown earths.

An Agricultural Land Utility Assessment (ALUA) assessment has been prepared for the site by Cadeema (2024). The ALUA has determined that soils within the site are moderately to poorly drained. Site drainage patterns, however, is assessed to be generally adequate with a sufficient slope to facilitate acceptable surface water drainage. Soil impacts may occur through traffic and infrastructure induced compaction with soil organic matter reduction, deterioration and /or erosion causing sediment mobilisation as part of the development. It is recommended that vegetation cover is maintained and maximised to protect the surface soil structure.

The assessment indicates that there will not be a significant loss in agricultural production with the transition of land from existing 'winter' cropping to a BESS site. There is limited agricultural suitability and productivity potential of the site. The temporary removal of agricultural production from this site would not have adverse impacts to agricultural land use or production on the site, in the locality or wider region.

2.3.9 CONTAMINATED LAND

A review of the NSW EPA Contaminated Land Record and List of NSW contaminated sites notified to the EPA (dated 11 June 2024) was conducted on the 8 July 2024 and identified the following:

- > One (1) previously recorded contaminated land site located within the Leeton Shire LGA.
 - Located at 14 Main Avenue, Yanco, approximately 1 km southwest of the site.
 - Two (2) former notices issued for this site.
- > Two (2) contaminated sites notified to the EPA located in Leeton.
 - Located at 108 Calrose Street, Leeton, approximately 8 km from the site
 - Located at 1 Belah Street, Leeton, approximately 9 km from the site.

The review of available records confirms that there are no known contaminated sites at or near the site. The site is unlikely to be contaminated due to significant distances from known contaminated sites listed under the NSW EPA contaminated land record and list of notified sites.

Further assessment of hazards including a Preliminary Site Investigation (PSI) undertaken by Cadeema (2024) did not identify any evidence of potentially land contaminating activities within the site. The historical use of the site for agricultural/horticultural land uses is not considered to present a significant risk of contamination.

2.3.10 HERITAGE

A review of the State Heritage Inventory (SHI) online database for the Leeton Shire LGA and Schedule 5 of the LEP was undertaken on the 8 July 2024. No items of local or state heritage significance were identified at or in the immediate vicinity of the subject site. The proposed development is therefore considered unlikely to result in any adverse impacts to European/historic heritage items.

A basic search of the Aboriginal Heritage Information Management System (AHIMS) was undertaken on 8 July 2024 to determine the potential for adverse impacts to Aboriginal heritage. The search identified one (1) previously recorded Aboriginal site adjacent to the northern boundary of the site (refer **Appendix D**).

An Aboriginal Cultural Heritage Assessment Report (ACHAR) has been prepared by Premise (2024) to identify the presence of any additional Aboriginal sites which may be impacted by the BESS development. This ACHAR involved a site inspection which did not identify any additional Aboriginal objects/sites or the previously recorded AHIMS site located adjacent to the site's northern boundary.

Consideration of Native title applications applying to the site and locality is provided within **Section 2.2.5.3**. The review of native title vision mapping did not identify any Native Title claims or applications, or Indigenous Land Use Agreements applying to the site of the proposed development.

Notwithstanding this, there is potential for unknown heritage remains to be discovered and encountered during the construction of the proposed activity. While the potential to discover items of heritage significance is considered low, a precautionary principle applies. Appropriate mitigation measures would be implemented during the construction phase of the project to minimise the potential for adverse impacts. No significant land use conflicts are anticipated following the implementation of appropriate mitigation measures.

2.3.11 LOCAL COMMUNITY

A Social Impact Assessment (SIA) has been prepared by bd infrastructure Pty Ltd and accompanies the EIS. The SIA provides an analysis of the local community and details feedback received from engagement undertaken during the scoping stage and preparation of the EIS. The SIA identifies that the proposed development has the potential to result in the following social impacts:

- > Potential positive impacts for
 - Livelihoods, including through business revenue and employment during construction and operation.
 - Community, including through the facilitating community benefit and the energy transition.
- > Potential negative impacts for
 - Way of Life, including through adverse impacts to amenity (noise, vibration, visual changes and traffic congestion) during construction and operation
 - Community, through considerations of adverse impacts associated with workforce accommodation and potential for social disruption caused by a transient population.
 - Accessibility, including through temporary disruption to local road network access and transport services.
 - Culture, through considerations of potential adverse impacts to aboriginal cultural heritage.
 - Health and Wellbeing, including through concerns raised regarding fire risks and EMF exposure.
 - Surroundings, through changes to the existing visual character of the landscape.

The SIA predicted that potential social and economic impacts would range from low to medium significance following the implementation of project enhancement and mitigation measures. The assessment of

potential negative impacts in the SIA has predicted that residual impacts would be restricted to low significance following the implementation of mitigation measures. The implementation of mitigation measures specified in the SIA is anticipated to minimise the potential for land use conflicts.

2.4 Site history

2.4.1 HISTORICAL CONTEXT

Extensive agricultural land use across the Leeton LGA has taken place since at least 1912 with the implementation of the Murrumbidgee Irrigation Area scheme. This included the construction of irrigation channels across the region and their utilisation for irrigation farming. The town of Leeton was purpose built and designed for the Murrumbidgee Irrigation Area project in 1914.

A summary of the history of Yanco, including indigenous populations and European settlement, is provided within the ACHAR prepared by Premise (2024).

2.4.2 HISTORICAL IMAGERY

A review of the NSW Government Historical Imagery Viewer (NSW Government, 2022) has confirmed the site has been used for agricultural production since at least 1967 (see **Figure 15**). The following is noted based on historical aerial imagery provided in **Figure 15** and **Figure 16**:

- > The site and locality have historically been comprised of rural agricultural land holdings with scattered residential dwellings and associated farm infrastructure, including sheds, farm dams and paddock fencing.
- > The extent of vegetation across the site and the wider locality reduced significantly between the 1967 and 1993. Existing vegetation and matures trees across the locality are consistent with imagery dating to 1993.
- > The existing dwelling in the southeastern extent of the site as well as farm infrastructure approximately 700m west, have been present since at least 1967.
- > The farm dam has been present on site since at least 1967.
- > The existing irrigation channels have remained consistent with no alterations from 1967 to present.

Figure 15 – Historic Aerial Imagery - 1967



Figure 16 – Historic Aerial Imagery - 1993



2.4.3 APPROVALS

A review of the LSC DA tracker on 1 August 2024 did not identify any development application currently impacting the site.

2.5 Site inspection

A site inspection was completed by Premise's Senior Town Planner on 7 May 2024. The inspection provided insight into the current nature, use and operation of land within the site and locality.

Representative photographs for built and environmental features, and land uses in the locality are provided in **Appendix B**.

2.6 Consultation

Engagement during the preparation of the EIS has included commitments and approaches to ongoing forms of consultation. A detailed overview of engagement activities for the project is provided in the EIS and details the implementation engagement tools including:

- > Host community drop in sessions
- > Infographic fact Sheet
- > One on One meetings and Stakeholder briefings
- > Ongoing media relations to drive community awareness
- > Ongoing monitoring of community phonenumber and email feedback
- > Project update newsletters
- > Project survey for the completion of a Social Impact Assessment
- > Project updates, FAQs and collateral uploaded to a dedicated website for the project
- > A Stakeholder Customer Relationship Manager (CRM) system to keep records of stakeholder consultation from the Scoping stage.

Feedback and concerns raised during engagement have been considered within the EIS and for the preparation of the risk assessment provided in **Section 3** of this report.

Consultation with regulatory authorities, the community and other relevant stakeholders will continue throughout project construction and operation, as required, to ensure that future concerns are appropriately identified and addressed.

2.7 Potential incompatibility and conflict issues

Potential conflict can arise from incompatibility of land uses or conflicting interests over the use of land by the land occupier, surrounding landowners or users, or other stakeholders with an interest in the site and locality. Without the implementation of appropriate mitigation measures, the proposed development has the potential to conflict with surrounding land uses, activities or environments.

To identify potential land use conflicts associated with surrounding land users and other potential stakeholders, the risk assessment in **Section 3** addresses the following:

- > **Surrounding land uses** determined via desktop and site information identified during the preparation of the LUCRA, including:
 - Agriculture
 - Industrial agricultural land uses
 - Infrastructure (including surrounding roadways, electrical assets and transmission lines)
 - Residential (including rural residential land uses)
 - Resource protection (included areas of vegetation any identified parks and reserves, riparian corridors and areas used for recreational purposes)
 - Waste management
 - Water storage and irrigation
- > **Stakeholders** – this includes those who may own, occupy, use the land (where known) or have an interest in the land. The following categories of stakeholders have been adopted for the risk assessment:
 - Private property owner
 - Business operator
 - Service providers (i.e., energy, irrigation and telecommunications)
 - Public authorities
 - Associations
 - Indigenous community
 - Individuals
- > **Conflict of interest** – this describes the potential conflict of interest each stakeholder has in relation to the proposed development. The following categories of potential conflicts have been adopted for the risk assessment:
 - Competing industries
 - Land ownership
 - Economic interest
 - Access and traffic
 - Environmental concern
 - Nuisance
 - Risk to property
 - Health and safety
 - Quality of life
 - Security and privacy
 - Amenity

Further detail on potential land uses risks associated with each surrounding land use is provided within **Appendix A**.

3. LAND USE CONFLICT RISK ASSESSMENT

3.1 Introduction

The LUCRA process evaluates the probability and consequence of potential land use conflicts and uses a matrix to estimate risk, provided in **Table 8**. Associated tables for determining probability and consequence are provided in **Table 9** and **Table 10**, respectively.

A risk ranking of 25 is the highest magnitude of risk; a highly likely, very serious event. A rank of 1 represents the lowest magnitude or risk an almost impossible, very low consequence event.

Risk Rankings have been categorised in terms of their probability and consequence as follows:

- > Low Risk, risk ranking between 1 and 10.
- > Moderate Risk, risk ranking between 11 and 19.
- > High Risk, risk ranking between 20 and 25.

Table 8 – Risk ranking matrix

CONSEQUENCE	PROBABILITY				
	A -Almost Certain	B - Likely	C - Possible	D - Unlikely	E - Rare
1- Severe	25	24	22	19	15
2 – Major	23	21	18	14	10
3 – Moderate	20	17	13	9	6
4 – Minor	16	12	8	5	3
5 - Negligible	11	7	4	2	1

Table 9 – Probability table

Level	Descriptor	Description
A	Almost Certain	Common or repeating occurrence.
B	Likely	Known to occur, or 'It has happened'
C	Possible	Could occur, or 'I've heard of it happening'
D	Unlikely	Could occur in some circumstances, but not likely to occur
E	Rare	Practically impossible

Table 10 – Measure of consequence

Level	Descriptor	Description
1	Severe	- Severe and/or permanent damage to the environment and community. - Irreversible. - Neighbours are in prolonged dispute and legal action involved.
2	Major	- Serious and/or long-term impact to the environment and community. - Long-term management implications. - Neighbours are in serious dispute.
3	Moderate	- Moderate and/or medium-term impact to the environment and community. - Some ongoing management implications. - Neighbour disputes occur.
4	Minor	- Minor and/or short-term impact to the environment and community. - Can be effectively managed as part of normal operations. - Infrequent disputes between neighbours.
5	Negligible	- Very minor impact to the environment and community. - Can be effectively managed as part of normal operations. - Neighbour disputes unlikely.

3.2 Risk assessment

The risk assessment identifies and evaluates potential land use conflicts associated with the proposed development.

A risk ranking is determined based on probability and consequence, and a revised risk ranking is determined based on implementation of identified management strategies. Additional detail on the identification of initial risks and risk reduction management strategies for the project is provided within **Section 3.3** and **3.3**.

A detailed risk assessment is provided in **Appendix A** and summarised in **Table 11**.

Table 11 – Summary of detailed risk assessment

Land Use	Stakeholders	Category	Initial Risk (Section 4)	Revised Risk (Section 5)
All Land Uses	All Stakeholders	Health and safety - EMF	14	10
		Risk to property - fire	18	14
		Risk to property - flood	18	9
Agriculture	Private property owners Individuals Business operators Associations	Competing industries – agricultural expansion	13	9
		Competing industries – land suitability	13	9
		Access and traffic - interaction	8	5
		Nuisance – livestock behaviour	8	5
		Nuisance – air quality	8	5
		Environmental concern - weeds	13	9
		Nuisance - waste	5	3
		Amenity - waste	8	5
Industrial Agricultural Land Uses	Public authorities Business operators	Competing industries –expansion of surrounding industries	13	9
		Access and traffic - interaction	17	13
		Nuisance – dust	8	2
		Nuisance – air quality	13	9
		Environmental concerns – cumulative impacts	17	9
		Economic interests - insurance	17	13

Infrastructure	Public Authorities Service Providers	Risk to property - infrastructure	13	9
		Land ownership – public authorities	17	8
		Access and traffic – access/services	17	13
		Competing industries – future project expansion	17	13
Residential	Private property owners Individuals (i.e. occupants of residential dwellings) Public authorities Service providers	Economic interest - demand	8	5
		Access and traffic - commute	8	5
		Access and traffic -access/services	8	5
		Nuisance - noise	17	9
		Nuisance - waste	5	3
		Quality of life	13	8
		Security	13	8
		Privacy	13	9
		Health and safety – air quality	8	5
		Nuisance – air quality	8	5
		Amenity - visual	13	8
		Land ownership - foreign	8	2
		Economic interest - insurance	17	13
Resource Protection	Public authorities Associations Individuals Indigenous community	Environmental concerns - heritage	13	9
		Environmental concerns - water	13	9
		Environmental concerns - biodiversity	13	9
Waste management	Public authorities Business operators	Competing industries - expansion	13	9
		Access and traffic - interaction	13	9
		Nuisance – air quality	8	5
		Nuisance - air quality	8	2
		Environmental concerns – cumulative impacts	13	9
		Health and safety - waste	17	9
		Economic interests - insurance	13	9
	Public authorities	Competing industries - expansion	13	9

Water Storage and Irrigation	Business operators	Health and safety - water	17	9
	Private property owners Indigenous Community	Economic interests - insurance	17	13
Average risk ranking			12.53	8.09

3.3 Risk reduction management strategies

Consistent with the LUCRA Guide, an objective of the LUCRA is to identify and define management strategies that lower the risk of each identified potential conflict to a risk ranking score of 10 or below. This is to be achieved through the implementation of

- > Management strategies developed to minimise the effects or potential for each land use conflict to occur and
- > Performance monitoring targets for each management strategy, detailing how the effectiveness of the strategy will be monitored (i.e., environmental management plans)

Management strategies and performance monitoring targets for managing the effectiveness of mitigation measure implementation are defined below and have been used to determine revised risk rankings within the full risk assessment table in **Appendix A**.

3.4 Performance monitoring

Performance monitoring is required to ensure management strategies minimise the risk of potential land use conflicts during all stages of the project.

Various management plans will be prepared and implemented during the construction, operational and decommissioning phases of the project, including:

- > Construction Environmental Management Plan (CEMP)
- > Operational Environmental Management Plan (OEMP)
- > Decommissioning Management Plan (DMP)
- > Any other management plan specified in the EIS or conditions of consent (if approved)

The management plans will address all requirements specified in the EIS and supporting documents, as well as any consent conditions (if approved). These plans will provide documented requirements for performance measures and monitoring during each stage of the project.

Performance will also be monitored through the outcomes of consultation during all phases of the project. Monitoring community feedback and concerns are key to assessing the performance of management strategies.

4. LIMITATIONS AND ASSUMPTIONS

This LUCRA has relied on the following information to evaluate potential land use conflicts:

- > Observations made via a site inspection.
- > Consultation with surrounding landowners and stakeholders.
- > Desktop research and mapping of the site and locality.
- > Information provided by the applicant.

The following limitations apply to this LUCRA:

- > Mitigation measures from the EIS and supporting impact assessments, where implemented effectively, are likely to reduce the risk of potential land use conflicts. However, the implementation of mitigation measures may not reduce the risk of all potential land use conflicts.
- > The identification of land uses and conflicts within this LUCRA may be limited by the detail and number of responses received during consultation. There is potential for other land uses and conflicts, not previously identified, to occur within the locality.

5. KEY DOCUMENTS

All documents reviewed as part of this LUCRA are provided in the references in **Section 7**.

6. CONCLUSION

This LUCRA has identified potential land use conflicts and evaluated their risk. The overall risk ranking (revised, to account for management strategies) for potential land use conflict ranges from low to moderate.

A total of 47 potential land use conflicts were identified.

The initial risk ranking identified 15 low risk, and 32 moderate risk conflicts. The revised risk ranking identified 39 low risk and 8 moderate risk conflicts.

The average risk ranking of all identified conflicts was reduced from an initial risk ranking of 12.53 (moderate risk) to a revised risk ranking of 8.09 (low risk). The average revised risk ranking for all identified land use conflicts is below 10 which is consistent with the LUCRA objective to lower the risk ranking to 10 or below.

Revised risk rankings identified low risk conflicts mostly related to access and traffic, nuisance and competing industries. Revised risk rankings identified moderate risk conflicts for the following:

- > All land uses
 - Risk to property, including fire risks.
- > Industrial Agricultural Land uses
 - Access and traffic including interactions during the construction phase and requirements to construct an intersection upgrade.

- Economic interests, including impacts to insurance premiums.
- > Infrastructure land use
 - Access and traffic including interactions with existing and future developments within the locality during the construction phase and requirements to construct an intersection upgrade
 - Competing industries, including the potential for future infrastructure development to impact the land surrounding the BESS site (e.g. SREA BESS Development).
- > Residential land use
 - Economic Interests, including impacts to insurance premiums.
- > Waste management land use
 - Economic interests, including impacts to insurance premiums
- > Water Storage and Irrigation,
 - Economic interests, including impacts to insurance premiums.

The effective implementation of management strategies (detailed in **Appendix A**) is likely to minimise the risk of potential land use conflicts.

7. REFERENCES

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Appendix A

Risk Assessment

Table 12 – Risk assessment

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
All Land Uses	All Stakeholders	Health and safety - EMF	Land users in the locality may be concerned about electro-magnetic fields (EMF) resulting from electrical infrastructure associated with the development.	D	2	14	- Consideration of EMF impacts resulting from the development has been undertaken as part of the EIS. EMF exposure levels are not expected to exceed the International Commission on Non-Ionizing Radiation Protection reference level for the general public. No adverse impacts to human health at the site or in the locality are therefore anticipated. On this basis, specific mitigation measures are not required. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	E	2	10	Performance targets will be determined via management plans specified by the EIS (and specialist impact assessments) and development consent conditions (if approved). Monitoring will be undertaken in accordance with those management plans.
		Risk to property - fire	Land users in the locality may be concerned about the risk of fires occurring at the site and their potential to spread to surrounding land.	C	2	18	- Consideration of potential bushfire impacts has been undertaken as part of a Bushfire Assessment Report (BAR) accompanying the EIS. Appropriate mitigation measures are specified within the BAR to minimise the risk of bushfire incidents including their risk to people and potential to damage surrounding land. - Consideration of potential risks of fire hazards arising from BESS has been undertaken as part of a Preliminary Hazard Analysis (PHA) accompanying the EIS. The PHA identifies those risks at the site boundary are not considered to exceed the acceptable risk criteria. - Compliance with mitigation measures specified in the BFAR, PHA and EIS are anticipated to reduce the risk of potential conflicts related to bushfires. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	2	14	As above
		Risk to property - flood	Land users in the locality may be concerned about the risk of flooding resulting from the development and their potential to spread and impact surrounding land.	C	2	18	- Consideration of potential flooding and hydraulic impacts has been undertaken as part a Flood Risk and Groundwater Assessment Report (FRGAR) accompanying the EIS. Appropriate mitigation measures are specified within the FRGAR to minimise the risk of flooding incidents including their risk to people and potential to damage surrounding land. - Compliance with mitigation measures specified in the FRGAR and EIS are anticipated to reduce the risk of potential conflicts related to water quality and flooding. - Ongoing consultation with stakeholders will identify and address concerns if they arise.	D	3	9	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
							Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
Agriculture	- Private property owners - Individuals - Business operators - Associations	Competing industries – agricultural expansion	The placement of the BESS on agriculturally viable land may cause conflict with surrounding agricultural operators interested in expanding their operations onto the site.	C	3	13	- The reversibility of the project would allow the site to be returned to its existing land use, therefore minimising potential for long term conflict and impacts to future agricultural activities. - Existing consultation and engagement for the project has not identified any intent for surrounding agricultural industries to expand operations onto the site. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Competing industries – land suitability	Stakeholders may have concerns that the construction and operation of the BESS may alter and disturb existing soil properties, undermining the suitability of the land for future agricultural production.	C	3	13	- Consideration of potential soil and land capability has been undertaken via the Agricultural Land Utility Assessment (ALUA). Appropriate mitigation measures are specified in the LSC assessment to minimise impacts to soils. - Compliance with mitigation measures specified in the ALUA is anticipated to reduce the risk of potential conflicts related to future land capability for agriculture. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Access and traffic - interaction	Use of surrounding roadways during construction of the BESS may cause conflict by interacting with agricultural transport activities.	C	4	8	- Consideration of potential traffic impacts has been undertaken via a Traffic Impact Assessment (TIA). Appropriate mitigation measures are specified within the TIA to minimise impacts to the traffic environment. - Compliance with mitigation measures specified within the TIA is anticipated to reduce the risk of conflict related to traffic for agricultural land users. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved)	D	4	5	As above
		Nuisance – livestock behaviour	Construction activity disturbances may affect livestock behaviour and/or breeding.	C	4	8	- Consideration of potential noise and vibration impacts has been undertaken as part of the EIS and within a Noise and Vibration Impact Assessment (NVIA) prepared by Assured Environmental (2024). Appropriate mitigation measures are specified within the EIS and NVIA to minimise noise and vibration impacts. - Based on the preliminary separation distances, the type of development and the mitigation proposed, adverse impacts from noise and vibration during construction and operation are not predicted.	D	4	5	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
							- Compliance with mitigation measures within the EIS and NVIA is anticipated to reduce the risk of conflict related to noise and vibration impacts on agricultural land users. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
		Nuisance – air quality	Excess dust generated by construction activities may cause conflict by impacting the operations and productivity of surrounding agricultural land	C	4	8	- Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk for dust to spread throughout the site and onto neighbouring land. - Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to air quality impacts. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	4	5	As above
		Environmental concern - weeds	Pedestrian and vehicle movements during construction may affect the distribution of weeds which could impact agricultural productivity at the site and locality.	C	3	13	- Consideration of impacts to biodiversity has been undertaken via a Biodiversity Development Assessment Report (BDAR). Appropriate mitigation measures are specified within the BDAR to minimise the risk for weeds to spread throughout the site and onto neighbouring land. - Compliance with mitigation measures specified with the BDAR is anticipated to reduce the risk of conflict relating to the spread of weeds - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Nuisance - waste	Waste generated by the development has the potential to enter surrounding agricultural; land.	D	4	5	- Consideration of waste related impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to ensure that waste is appropriately stored and disposed of. - Compliance with waste management measures specified within the EIS is anticipated to reduce the risk of conflict related to waste entering surrounding residential land. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	E	4	3	As above
		Amenity - waste	Waste generated by the development may increase the presence of pest animals and/or vermin which could impact agricultural productivity.	C	4	8	- Consideration of waste related impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of attracting pest animals and/or vermin. - Compliance with mitigation measures specified in the EIS is anticipated to reduce the risk of conflict related to pest animals and/or vermin - Ongoing consultation with stakeholders will identify and address concerns if they arise.	D	4	5	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
							Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
Industrial Agricultural Land uses	- Public authorities - Business operators	Competing industries – expansion of surrounding industries	The construction of the BESS on land which may be suitable for expanding existing industrial agricultural operations may cause conflict with surrounding business operators (e.g. Grain Corp) who may be interested in expanding their operations onto the site in the future.	C	3	13	- A review of documentation for surrounding industrial activities has not identified any intent for surrounding industries to expand operations onto the site. - Existing consultation and engagement for the project has not identified any intent for surrounding business operators to expand operations onto the site. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Access and traffic - interaction	Use of surrounding roadways during construction of the BESS may cause conflict by interacting with transport activities of surrounding industrial land uses.	B	3	17	- Consideration of potential traffic impacts has been undertaken via a Traffic Impact Assessment (TIA). Appropriate mitigation measures are specified within the TIA to minimise impacts to the traffic environment. - Compliance with mitigation measures specified within the TIA is anticipated to reduce the risk of conflict related to traffic for agricultural land users. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved)	C	3	13	As above
		Nuisance – dust	Dispersion of dust resulting from surrounding industrial operations, including operations at Grain Corp, may pose hazards to site infrastructure.	C	4	8	- Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of dust impacting the operation of the BESS. - Compliance with mitigation measures specified within the EIS together within the ongoing maintenance of BESS and site infrastructure, is anticipated to reduce the risk of conflict related to air quality impacts - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	5	2	As above
		Nuisance – air quality	Excess dust generated by construction activities may cause conflict by impacting the environmental monitoring and operations of surrounding industrial land use.	C	3	13	- Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of dust generation during construction. - Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to air quality impacts. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
		Environmental concerns – cumulative impacts	Public Authorities may have concerns regarding the potential for cumulative impacts arising from the proximity of developments.	B	3	17	- Consideration of potential cumulative impacts has been undertaken as part of the EIS. Appropriate mitigation measures (where required) are specified in the EIS to minimise the potential for cumulative impacts to occur at or near the site. - Compliance with management measures specified within the EIS is anticipated to reduce the risk of conflict related to cumulative impact. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Economic interests - insurance	The placement of the BESS in proximity to surrounding industrial operations may affect insurance premiums for business operators	B	3	17	- Consultation with The Insurance Council of Australia is to occur throughout the approval process. The results of this consultation will be shared with other relevant stakeholders, including surrounding landowners and business operators. - The construction of the project has the potential to generate traffic impacts associated with access to surrounding industrial land uses and requires the implementation of road upgrades. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	3	13	As above
Infrastructure	- Public Authorities - Service Providers	Risk to property - infrastructure	Stakeholders may have concerns that construction activities associated with the BESS may damage existing infrastructure (i.e., any identified telecom connections, transmission lines, gas pipelines).	C	3	13	- A consideration of potential impacts to surrounding service provider infrastructure has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of construction activities damaging existing infrastructure. - Compliance with construction management measures specified within the EIS is anticipated to reduce the risk of conflict related to damaging existing infrastructure. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Land ownership – public authorities	Public authorities may have concerns about the use of land they own or manage.	B	3	17	- Access to the site and the development footprint will transect portions of land managed by LSC and TfNSW. Consideration of impacts related to land ownership and tenure has been undertaken as part of the EIS. - Consultation with Crown lands has occurred to address the potential for land use conflicts associated with crown land near the access arrangement. A review of surrounding Crown land has been undertaken as part of this LUCRA and within the EIS. A consideration of the site boundary and the extent of works required for the intersection upgrade for Houghton Road and Irrigation Way has been provided with respect to surrounding crown land. No direct impact to land owned and managed by Crown Lands is anticipated as a result of the development.	C	4	8	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
							- Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
		Access and traffic – access/services	Altered traffic conditions during construction may impact on access arrangements for surrounding private properties and service providers.	B	3	17	- Consideration of potential traffic impacts has been undertaken via a TIA. Appropriate mitigation measures are specified within the TIA to minimise impacts to the traffic environment. - The construction of the project has the potential to generate traffic impacts associated with access to surrounding infrastructure and requires the implementation of road upgrades. - Compliance with mitigation measures specified within the TIA is anticipated to reduce the risk of conflict related to the traffic environment. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	3	13	As above
		Competing industries – future project expansion	The construction of the BESS may cause conflict with surrounding business operators and/or public authorities (e.g. LSC) who may be interested in expanding development onto the site in the future.	B	3	17	- A review of documentation for surrounding infrastructure managed by LSC and the NSW Government has not identified any intent for surrounding industries to expand operations onto the site. - The only known future development in proximity to the site has been identified via a recent consultation notice for a separate SSD BESS development issued by the Samsung Renewable Energy Australia (SREA) on 5 July 2024 (refer to Section 2.2.4). - Consultation with SREA would occur during the detailed design construction and operational phases of the Yanco BESS project, minimising the potential for significant cumulative impacts and potential land use conflicts - Existing consultation and engagement undertaken for the Yanco BESS project has not identified any intent for other stakeholders responsible for the management of surrounding infrastructure including roadways, irrigation channels, rail corridors, electrical infrastructure, sewage and waste treatment to expand operations onto the site. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	4	8	As above
Residential	- Private property owners - Individuals (i.e. occupants)	Economic interest - demand	Public authorities may be concern about the increased demand for services and infrastructure that may result from the development, including increased accommodation	C	4	8	Consideration of impacts related to the increased demand for surrounding services and infrastructure has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk for logistical issues associated with the increased demand for existing infrastructure and services.	D	4	5	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
	of residential dwellings) • Public authorities • <i>Service</i> providers		for workers, availability of medical facilities and capacity of surrounding waste facilities.				- Compliance with management measures specified within the EIS is anticipated to reduce the risk of conflict related to the availability of existing services and infrastructure. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
		Access and traffic - commute	Use of surrounding roadways for the proposed BESS may affect the commute of residents in the locality.	C	4	8	- Consideration of potential traffic impacts has been undertaken via a Traffic Impact Assessment (TIA). Appropriate mitigation measures are specified within the TIA to minimise impacts to the traffic environment. - Compliance with mitigation measures specified within the TIA is anticipated to reduce the risk of conflict related to the traffic environment. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	4	5	As above
		Access and traffic - access/services	Altered traffic conditions during construction may impact on access arrangements for surrounding private properties and service providers.	C	4	8	- Consideration of potential traffic impacts has been undertaken via a TIA. Appropriate mitigation measures are specified within the TIA to minimise impacts to the traffic environment. - Compliance with mitigation measures specified within the TIA is anticipated to reduce the risk of conflict related to the traffic environment. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	4	5	As above
		Nuisance - noise	Increased noise generated by construction activities and vehicle movements may be perceived as nuisance to surrounding residential properties.	B	3	17	- Consideration of potential noise and vibration impacts has been undertaken via an NVIA and as part of the EIS. Appropriate mitigation measures (where required) are specified within the EIS and NVIA to minimise noise and vibration impacts. - Compliance with mitigation measures specified in the EIS and NVIA is anticipated to reduce the risk of conflict related to noise and vibration impacts to residential land users. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Nuisance - waste	Waste generated by the development has the potential to enter surrounding residential land.	D	4	5	- Consideration of waste related impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to ensure that waste is appropriately stored and disposed of. - Compliance with waste management measures specified within the EIS is anticipated to reduce the risk of conflict related to waste entering surrounding residential land.	E	4	3	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
							- Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
		Quality of life	The presence of the BESS may affect the quality of life of a resident if they are, or perceived to be, impacted by the BESS.	C	3	13	- Consideration of potential impacts to surrounding residents including noise and visual impacts, has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the potential impact of the development on quality of life. - Compliance with visual and noise management measures specified within the VIA and EIS is anticipated to reduce the risk of conflicts related to impacts on quality of life. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	4	8	As above
		Security	The change in land use may attract people to the area who may not otherwise visit the area. This may be perceived to adversely affect a resident's security.	C	3	13	- Compliance with the following crime management measures is anticipated to reduce the risk of conflict related to the increased risk of vandalism and theft for surrounding residents: a. Maintenance of the existing key access point to ensure the delineation between private and public is clear; b. Existing boundary fencing is to be maintained and/or installed to ensure site access is controlled; c. Appropriate signage should be installed; d. Landscaping is to be maintained to remove opportunities for concealment. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	4	8	As above
		Privacy	The change in land use may be perceived to affect the privacy of a residential land user.	C	3	13	- Consideration of potential privacy related impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified in the EIS to minimise the potential for privacy issues to occur at or near the site. - Compliance with privacy management measures specified within the EIS is anticipated to reduce the risk of conflicts related to privacy issues for surrounding residential land users. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Health and safety – air quality	Dust generated by construction activities and by vehicle movements along access roads has the	C	4	8	Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk for dust to spread throughout the site and onto neighbouring land.	D	4	5	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
			potential to impact air quality and may have adverse health implications for residential land users within the locality.				- Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to air quality impacts. - Separation distances for dust originating from the development (if applicable) will be included as a management strategy. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
		Nuisance – air quality	Excess dust generated by construction activities and by vehicle movements along access roads has the potential to impact the cleanliness of residential land within the locality.	C	4	8	- Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk for dust to spread throughout the site and onto neighbouring land. - Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to air quality impacts. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	4	5	As above
		Amenity - visual	The change in visual amenity resulting from the BESS, including the visibility of any cleared vegetation and earthworks, may conflict with the interests of stakeholders who wish to maintain existing views of the locality.	C	3	13	- Consideration of visual impacts to surrounding amenity has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of altered amenity for surrounding residents within the locality. - Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to visual amenity. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	4	8	As above
		Land ownership - foreign	Stakeholders may have concerns regarding the ownership of the site i.e., whether it is a foreign-owned company.	C	4	8	- Engagement for the project has introduced the applicant and the BESS project to surrounding stakeholders. Notification to stakeholders outlined the applicant's ownership and consultation has provided an opportunity for stakeholders to provide feedback. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	5	2	As above
		Economic interest - insurance	The placement of the BESS in proximity to residential land may affect insurance premiums and land values for surrounding private property owners.	B	3	17	- Consultation with The Insurance Council of Australia is to occur throughout the approval process. The results of this consultation will be shared with other relevant stakeholders, including surrounding landowners and business operators. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	3	13	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
Resource protection	- Public authorities - Associations - Individuals - Indigenous community	Environmental concerns - heritage	Stakeholders may be concerned about impacts to heritage items or values at the site and locality.	C	3	13	- Consideration of impacts to heritage has been undertaken with the preparation of an Aboriginal Cultural Heritage Assessment Report (ACHAR). Appropriate mitigation measures are specified within the ACHAR to minimise impacts to heritage. - Compliance with mitigation measures specified within the ACHAR is anticipated to reduce the risk of conflict related to environmental features, culturally sensitive land and heritage - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Environmental concerns - water	Stakeholders may be concerned about potential changes to water quality, quantity and surface water flows that may affect the site and locality.	C	3	13	- Consideration of impacts to surrounding water courses and water quality has been undertaken with the EIS together with a ALUA and PHA. Appropriate mitigation measures are specified within the EIS to minimise impacts to watercourse health and quality. - Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to watercourse health and quality. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Environmental concerns - biodiversity	Stakeholders may be concerned about potential impacts to biodiversity within the site and locality	C	3	13	- Consideration of impacts to biodiversity has been undertaken via a Biodiversity Development Assessment Report (BDAR). Appropriate mitigation measures are specified within the BDAR to minimise risks to surrounding biodiversity. - Compliance with mitigation measures specified with the BDAR is anticipated to reduce the risk of conflict related to biodiversity. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
Waste Management	- Public authorities - Business operators	Competing industries - expansion	The construction of the BESS may cause conflict with surrounding public authorities (e.g. LSC) who may be interested in expanding their operations onto the site in the future.	C	3	13	- A review of documentation for surrounding waste management activities has not identified any intent for surrounding industries to expand operations onto the site. - Existing consultation and engagement for the project has not identified any intent for surrounding operators to expand operations onto the site. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Access and traffic - interaction	Use of surrounding roadways during construction of the BESS	C	4	8	Consideration of potential traffic impacts has been undertaken via a Traffic Impact Assessment (TIA). Appropriate mitigation measures are specified within the TIA to minimise impacts to the traffic environment.	D	4	5	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
			may cause conflict by interacting with waste management transport activities.				- Compliance with mitigation measures specified within the TIA is anticipated to reduce the risk of conflict related to traffic for agricultural land users. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved)				
		Nuisance – air quality	Dispersion of dust resulting from waste management activities on surrounding land may pose hazards to site infrastructure.	C	4	8	- Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of dust impacting the operation of the BESS. - Compliance with mitigation measures specified within the EIS together within the ongoing maintenance of BESS and site infrastructure, is anticipated to reduce the risk of conflict related to air quality impacts - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	5	2	As above
		Nuisance - air quality	Excess dust generated by construction activities may cause conflict by impacting the environmental monitoring and operations of surrounding Waste Management land use.	C	3	13	- Consideration of potential dust impacts has been undertaken as part of the EIS. Appropriate mitigation measures are specified within the EIS to minimise the risk of dust impacting the operation of the BESS. - Compliance with mitigation measures specified within the EIS together within the ongoing maintenance of BESS and site infrastructure, is anticipated to reduce the risk of conflict related to air quality impacts. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Environmental concerns – cumulative impacts	Public Authorities may have concerns regarding the potential for cumulative impacts arising from the proximity of developments.	B	3	17	- Consideration of potential cumulative impacts has been undertaken as part of the EIS. Appropriate mitigation measures (where required) are specified in the EIS to minimise the potential for cumulative impacts to occur at or near the site. - Compliance with management measures specified within the EIS is anticipated to reduce the risk of conflict related to cumulative impact. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Health and safety - waste	Public authorities wishing to expand operations may have concerns regarding the proximity of the BESS to waste management operations.	C	3	13	- A review of documentation for surrounding waste management activities has not identified any intent for surrounding industries to expand operations onto, or closer to, the site. - Existing consultation and engagement for the project has not identified any intent for surrounding business operators to expand operations onto the site.	D	3	9	As above

Land use	Stakeholders	Category	Potential Land Use Conflict	Initial risk ranking			Risk reduction management strategy	Revised risk ranking			Performance target and monitoring
				P*	C*	R*		P*	C*	R*	
							- Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).				
		Economic interests - insurance	The placement of the BESS in proximity to waste management operations may affect insurance premiums for public authorities managing waste facilities.	B	3	17	- Consultation with The Insurance Council of Australia is to occur throughout the approval process. The results of this consultation will be shared with other relevant stakeholders, including surrounding landowners and business operators. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	3	13	As above
Water storage and Irrigation	- Public authorities - Business operators - Private property owners - Indigenous Community	Competing industries - expansion	The construction of the BESS may cause conflict with surrounding public authorities (e.g. Murrumbidgee Irrigation) who may be interested in expanding their operations onto the site in the future.	C	3	13	- A review of documentation for surrounding irrigation activities has not identified any intent for surrounding industries to expand operations onto the site. - Existing consultation and engagement for the project has not identified any intent for surrounding operators to expand operations onto the site. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Health and safety - water	Stakeholders may be concerned about activities, associated with the BESS that may result in the sedimentation and contamination of surrounding watercourses.	B	3	17	- Consideration of impacts to surrounding water courses and water quality has been undertaken part of the EIS. Appropriate mitigation measures are specified within the EIA to minimise impacts associated with the sedimentation and contamination of surrounding water courses. - Compliance with mitigation measures specified within the EIS is anticipated to reduce the risk of conflict related to the sedimentation and contamination of surrounding watercourses. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	D	3	9	As above
		Economic interests - insurance	The placement of the BESS in proximity to irrigation infrastructure may affect insurance premiums for operators.	B	3	17	- Consultation with The Insurance Council of Australia is to occur throughout the approval process. The results of this consultation will be shared with other relevant stakeholders, including surrounding landowners and business operators. - Ongoing consultation with stakeholders will identify and address concerns if they arise. - Implement all measures specified in management plans identified in the EIS and/or consent conditions (if approved).	C	3	13	As above

Appendix B

Site Inspection Photos

BESS Footprint Near Existing Access – Looking North towards Houghton Road 	BESS Footprint Near Existing Access – Looking Northwest towards Houghton Road And Ronfeldt 	Houghton Road / Irrigation Way Intersection – Sculpture to Southwest 1 	Houghton Road / Irrigation Way Intersection – Sculpture to Southwest 2 
Houghton Road / Irrigation Way Intersection – Looking West 	Houghton Road / Irrigation Way Intersection – Looking East 	Bess Footprint Near Existing Access – Looking South along Hume Road 	Bess Footprint Near Existing Access – Looking West along Existing Access 
BESS Footprint Near Existing Access – Looking West along Existing Access and across BESS Development Footprint 	BESS Footprint Near Existing Access – Looking Northwest from Hume Road 	BESS Footprint Near Existing Access – Looking North from Hume Road towards Houghton Road 	BESS Footprint Near Existing Access – Looking South from Hume Road towards Houghton Road 

BESS Footprint Near Existing Access – Looking Southwest across BESS Development Footprint 1 	Junee Hay Railway Near BESS Footprint– Looking East, towards Substation and Irrigation Way 1 	Junee Hay Railway Near BESS Footprint– Looking West, towards Ronfeldt Road and Gogeldrie Branch Canal 	Junee Hay Railway Near BESS Footprint– Looking Northeast, towards Gogeldrie Branch Canal 
Junee Hay Railway Near BESS Footprint– Looking East, towards Substation and Irrigation Way 2 	Junee Hay Railway Near BESS Footprint– Looking North, along Ronfeldt Road and towards Gogeldrie Branch Canal 	BESS Footprint Near Existing Access – Looking Southwest across BESS Development Footprint 2 	BESS Footprint Near Existing Access – Looking Southwest across BESS Development Footprint 3 
BESS Footprint Near Existing Access – Looking Southwest across BESS Development Footprint 4 	BESS Footprint Near Existing Access – Looking South along Drainage Infrastructure to West of Hume Road 	BESS Footprint Near Existing Access – Looking Southwest across BESS Development Footprint 5 	BESS Footprint Near Existing Access – Looking Southwest across BESS Development Footprint 6 

Appendix C

AHIMS Search Results

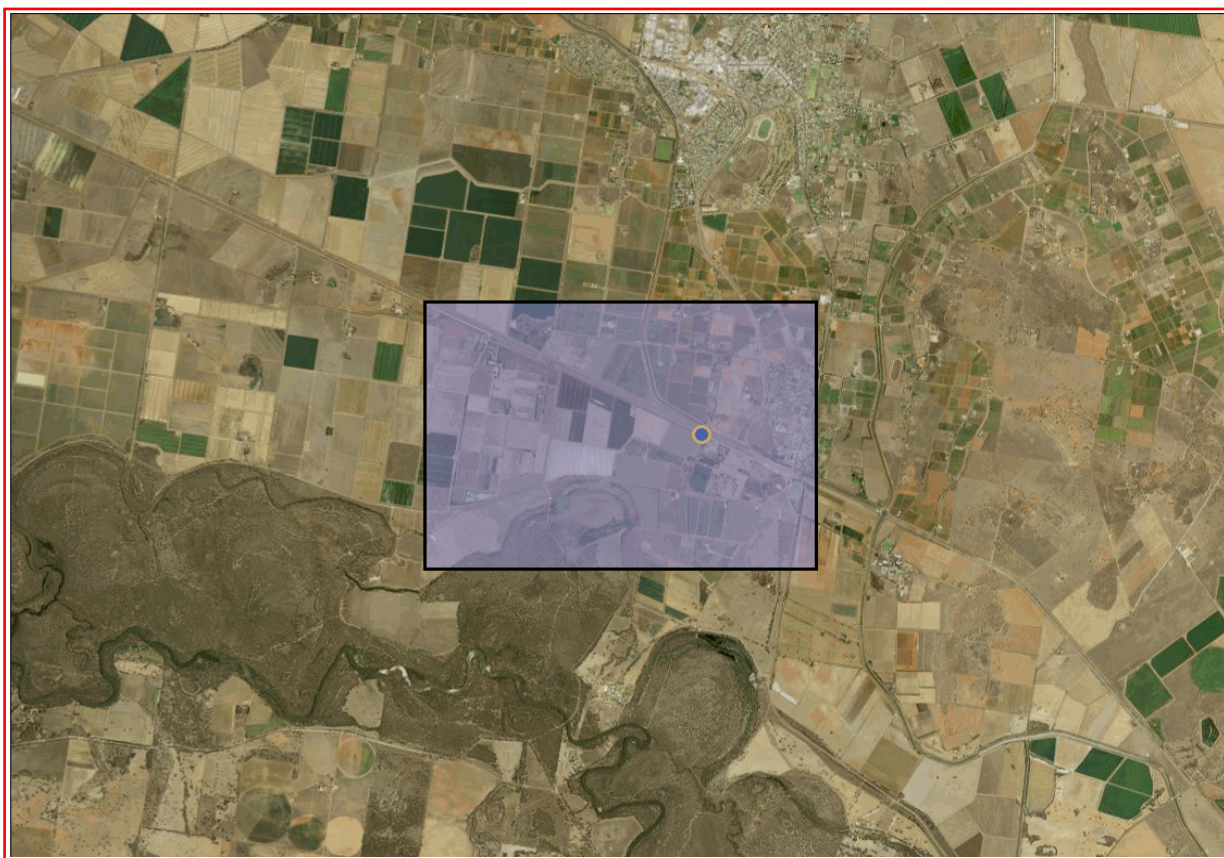
Premise Australia Pty Ltd
154 Peisley Street
Orange New South Wales 2800
Attention: Tamera Rudd
Email: tamera.rudd@premise.com.au

Date: 09 July 2024

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -34.6186, 146.3513 - Lat, Long To : -34.5832, 146.4131, conducted by Tamera Rudd on 09 July 2024.

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

1	Aboriginal sites are recorded in or near the above location.
0	Aboriginal places have been declared in or near the above location. *

If your search shows Aboriginal sites or places what should you do?

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

Important information about your AHIMS search

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.