



Premise

ACENERGY PTY LTD

Yanco Battery Energy Storage System

SCOPING REPORT



Report No: 223155/REP

Rev: 001C

1 February 2024

© Premise 2024

This report has been prepared by Premise Australia for ACEnergy Pty Ltd; may only be used and relied on by ACEnergy Pty Ltd; must not be copied to, used by, or relied on by any persons other than ACEnergy Pty Ltd without the prior written consent of Premise. If ACEnergy Pty Ltd wishes to provide this Report to a third party recipient to use and rely upon, the recipient agrees: to acknowledge that the basis on which this Report may be relied upon is consistent with the principles in this section of the Report; and to the maximum extent permitted by law, Premise shall not have, and the recipient forever releases Premise from, any liability to recipient for loss or damage howsoever in connection with, arising from or in the respect of this Report whether such liability arises in contract, tort including negligence.

DOCUMENT AUTHORISATION				
Revision	Revision Date	Report Details		
A	01/12/23	Draft for Review		
B	08/12/23	Updated draft for issue		
C	01/02/24	For issue		
Prepared By		Reviewed By		Authorised By
Nicholas Allatt		Lucy McDermott		David Walker
				

CONTENTS

1.	INTRODUCTION	1
1.1	OVERVIEW	1
1.2	APPLICANT	8
1.3	PLANNING FRAMEWORK.....	8
1.4	REPORT STRUCTURE	8
2.	STRATEGIC CONTEXT	9
2.1	POLICY	9
2.2	LOCAL CONTEXT	12
2.3	SITE DESCRIPTION	15
3.	PROJECT DESCRIPTION	19
3.1	PROPOSED DEVELOPMENT OVERVIEW.....	19
3.2	PROJECT PHASES.....	21
3.3	CUMULATIVE IMPACTS.....	23
4.	STATUTORY CONTEXT	24
4.1	STATE ENVIRONMENTAL PLANNING POLICIES.....	26
4.2	OTHER ENVIRONMENTAL PLANNING INSTRUMENTS.....	29
5.	ENGAGEMENT	31
5.1	ENGAGEMENT APPROACH	31
5.2	COMMUNITY AND STAKEHOLDER IDENTIFICATION	32
5.3	EARLY ENGAGEMENT ACTIVITIES.....	34
5.4	LEVEL OF INTEREST FROM COMMUNITY MEMBERS AND ORGANISATIONS.....	38
5.5	COMMUNITY AND STAKEHOLDER VIEWS.....	39
5.6	PROPOSED ONGOING ENGAGEMENT	41
6.	PROPOSED ASSESSMENT OF IMPACTS	44
6.1	INTRODUCTION	44
6.2	ACCESS	45
6.3	AIR.....	46
6.4	AMENITY	46
6.5	BIODIVERSITY.....	48
6.6	BUILT ENVIRONMENT	50
6.7	ECONOMIC	51
6.8	HAZARD AND RISKS	51
6.9	HERITAGE.....	55
6.10	LAND USE	57
6.11	SOCIAL IMPACT	58
6.12	WATER	60
7.	REFERENCES	62

FIGURES

Figure 1 - Regional context	5
Figure 2 - Local context	6
Figure 3 – Materials transport route	7
Figure 4 - Receiver locations.....	14
Figure 5 - Biodiversity (LEP).....	16
Figure 6 - Groundwater.....	17
Figure 7 - Topography.....	18
Figure 8 - Development site/layout	20
Figure 9 - Land zoning	30
Figure 10 - Bushfire prone land.....	53
Figure 11 - Surface water	54
Figure 12 - Heritage	56
Figure 13 - Land and Soil Capability.....	61

TABLES

Table 1 – Impact minimisation strategy	2
Table 2 – Project summary	3
Table 3 – Cumulative Impact Assessment Level Definitions	23
Table 4 – Statutory requirements for a project	24
Table 5 – Engagement principles.....	31
Table 6 – Key stakeholders	32
Table 7 – Summary of early engagement.....	34
Table 8 – Table of community and stakeholder views	39
Table 9 – Engagement to be carried out during EIS phase of the project	42
Table 10 – References.....	62

APPENDICES

APPENDIX A SCOPING REPORT SUMMARY TABLE
APPENDIX B PRELIMINARY BIODIVERSITY ASSESSMENT
APPENDIX C PROTECTED MATTERS SEARCH TOOL (PMST) RESULTS
APPENDIX D PRELIMINARY VISUAL IMPACT ASSESSMENT
APPENDIX E AHIMS SEARCH RESULTS
APPENDIX F PRELIMINARY SOCIAL IMPACT ASSESSMENT

1. INTRODUCTION

1.1 Overview

ACEnergy Pty Ltd (The Applicant) is proposing to develop an approximately 250 Megawatt AC (MW_{AC}) Battery Energy Storage System (BESS) on land known as Lots 516 and 521 DP 751745 at 120 Houghton Road in Yanco, NSW, 2703 (hereafter referred to as 'the development site').

The development site is located in the Leeton Shire Council (LSC) Local Government Area (LGA) in the locality of Yanco. The development site is located across two lots (Lots 516 and 521 DP 751745), with a combined total area of approximately 107 hectares, accessible from the east via Hume Road (also referred to as Hulme Road). The BESS development site has a total area of approximately 8 hectares and will be located towards the northeastern boundary of the host lots. The development site is currently used for agricultural activities and primary production.

This scoping report has been prepared by Premise to support a request to Department of Housing, Planning and Infrastructure (DHPI), formerly Department of Planning and Environment (DPE), for the Secretary's Environmental Assessment Requirements (SEARs). The SEARs will inform preparation of an Environmental Impact Statement (EIS) submitted under Part 4 of the *Environmental Planning and Assessment Act 1979* (the EP&A Act). A Scoping Summary Table is provided in **Appendix A**.

ACEnergy's approach for selecting locations for large-scale battery storage projects begins with investigation of existing and potential renewable energy generators, proximity to and available capacity of terminal stations, and the grid's physical characteristics, utilising publicly available information and site surveys. AEnergy conduct extensive internal environmental due diligence on a site before proceeding with land acquisition. Consideration is given to each site's environmental impacts and overlays, distance to neighbouring dwellings, topographical location, access rights, current easements and encumbrances. AEnergy's in-house design team produces concept plans supporting dynamic due diligence assessments.

The proposed Yanco BESS includes:

- Installation of containerised lithium-ion batteries with a capacity of up to approximately 250 MWAC and 1,100 MW-hours, with associated power conversion systems, switchgear and a control building;
- An underground or overhead transmission line to connect the BESS to the Yanco substation with two options up to approximately 450 metres long for the longest option;
- Cabling and collector units, site office, storage area, internal access tracks, on-site parking, security fencing, and temporary construction laydown area; and
- Utilisation of existing site access arrangements via Houghton and Hume Roads.

The proposed BESS, associated infrastructure and development footprint will align with, and be contained within, the development site shown in **Figure 8**. A conceptual layout of the BESS and associated infrastructure will be detailed in the Environmental Impact Statement (EIS) for the project.

The proposed development site would be leased from the landholder via a lease of premises.

It is expected that augmentation work within the substation would be required to facilitate connection of the BESS. These works would be managed as an ancillary component of the project and addressed in the EIS or managed directly by Transgrid via Part 5 of the *Environmental Planning and Assessment Act 1979*. To ensure all impacts of the project are understood, the upgrade works would be assessed in the EIS.

The project is an SSD as declared by Section 2.6(1)(b) and under Section 20, Schedule 1 of *the State Environmental Planning Policy (Planning Systems) 2021 (Systems SEPP)*. The applicable consent authority for the proposal is the NSW Minister for Planning or the Minister’s delegate.

A core objective of the project is to ensure a complete understanding of site sensitivities and to prioritise a strategy of avoid, minimise and offset. Strategies for key impact areas in this respect are as follows:

Table 1 – Impact minimisation strategy

Key impact areas	Avoid	Minimise	Offset
Access	Prioritise the use of existing road infrastructure, subject to agreement with the roads authorities	Where impacts cannot be avoided, negotiate with regulators to ensure that designs minimise impact where possible	Any residual impacts (such as to native vegetation associated with road works) would be assessed via the project BDAR and residual liability would be discharged prior to works commencing.
Amenity, building environment and land use	The positioning of the facility has been carefully conceived to avoid impacts to nearby unassociated receivers.	Residual impacts would be identified through detailed assessment and measures taken to avoid and minimise these.	Where impacts cannot be avoided or minimised to an acceptable extent, agreements with neighbours would be negotiated to offset residual impacts.
Biodiversity	Prioritise development of lands that have been cleared of native vegetation	Where impacts cannot be avoided, negotiate with regulators to ensure that designs minimise impact where possible	Any residual impacts (such as to native vegetation associated with road works) would be assessed via the project BDAR and residual liability would be discharged prior to works commencing.
Economic	Economic impacts are largely positive.	Harm is minimised through ensuring the adoption of best practise principles in construction and operation.	No residual impacts requiring offsetting are predicted.
Hazard and Risks	Avoidance and minimisation of the risks of hazard would be delivered through a strong understanding of project risks, through specialist investigations, and adoption of key recommendations.		No residual impacts requiring offsetting are predicted.
Aboriginal Heritage	Known sites of Aboriginal significance will be avoided. Sufficient investigations will be completed to identify any previously unidentified sites and these would also be	Where avoidance cannot be achieved, impacts would be minimised through discussion with Registered Aboriginal Parties to agree to acceptable methods of minimisation. This will be	Any unavoidable impacts (not expected) would be assessed and agreed with RAPs and Heritage NSW in advance and documented in the project ACHA.

Key impact areas	Avoid	Minimise	Offset
	avoided where possible.	delivered through the project ACHA.	
Social Impact	A clear understanding of potential social impacts would be determined through effective, proactive and genuine engagement with community stakeholders. Once these issues are clearly understood, strategies will be adopted via the project EIS to ensure avoidance and minimisation.		To the extent that residual impacts are identified, impacts would be offset by the overarching positive benefit associated with the delivery of the project, to meet the State and Federal goals around decarbonisation of the energy industry.
Water	Impacts to surface water are avoided through ensuring appropriate offsets between project infrastructure and mapped waterways.	Harm minimisation would be delivered through adoption of best practise principles outlined in adopted DPE Water riparian corridor guidelines	Offsetting, if required, would be completed in accordance with the average rule outlined in the DPE Water riparian corridor guidelines
Air quality	Impacts to air quality would be avoided/minimised through adopting standard mitigation measures, to be outlined in a project CEMP.		No residual impacts requiring offsetting are predicted.
Historic heritage	Site selection has avoided/minimised direct impacts through ensuring adequate separation to sites of historic heritage importance.		No residual impacts requiring offsetting are predicted.

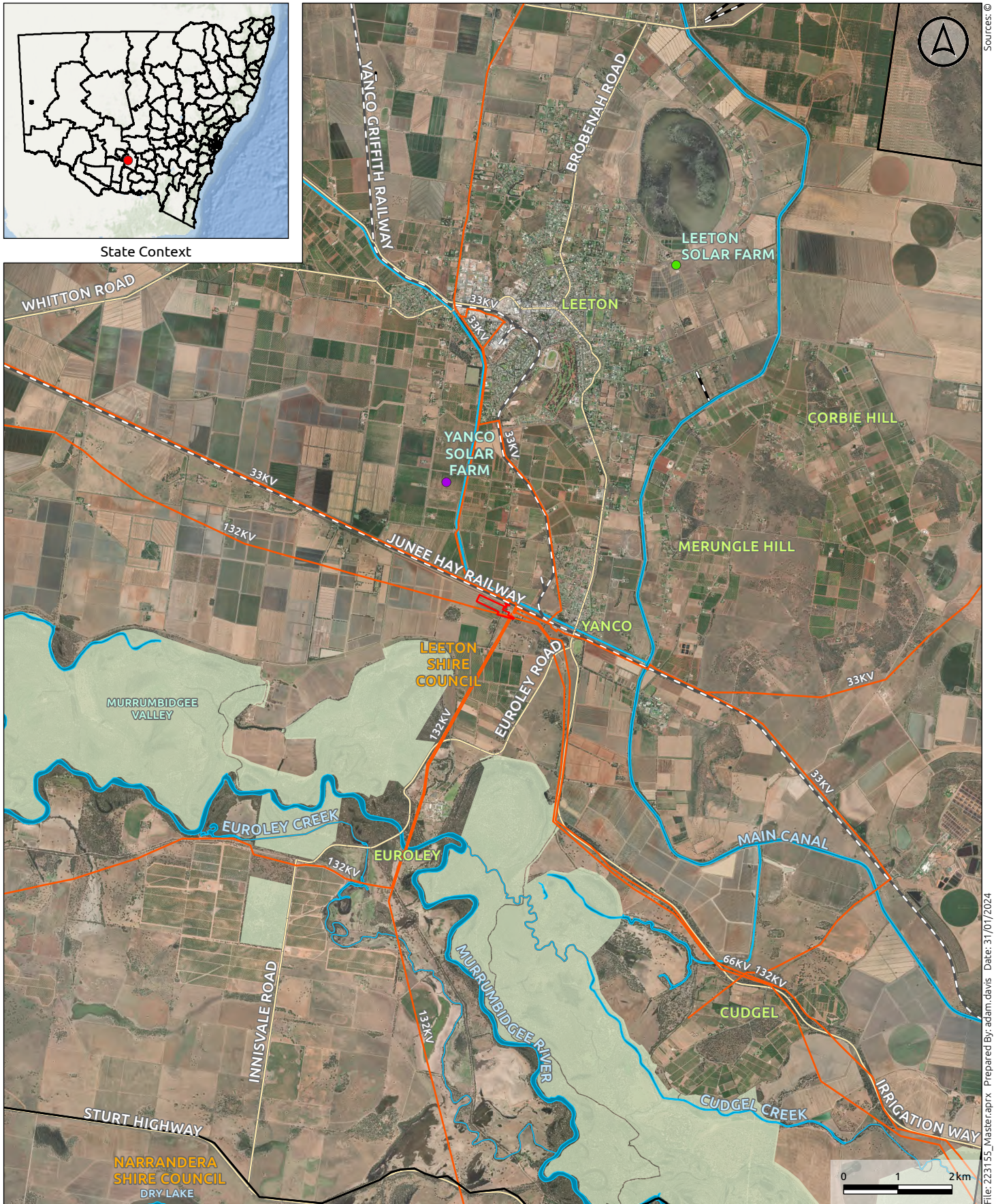
Key features of the project are summarised in **Table 2**. Regional context is reflected in **Figure 1** and the local context and site constraints are reflected in **Figure 2**.

Table 2 – Project summary

Project element	Summary of the project
Host lots and development site	Host lots: approximately 107 ha Development site: approximately 8 ha
Site details	120 Houghton Road, Yanco (Lots 516 and 521 DP751745)
Development site	The development site of the BESS and associated operational and construction infrastructure, the transmission line to connect to grid infrastructure and any necessary road upgrade works.
Battery storage capacity and duration	approximately 250MW/1,100MWh
Project lifespan	Up to 40 years, with the possibility of upgrades to extend the operational life
Infrastructure	<ul style="list-style-type: none"> An approximately 250MW, 4 hour BESS (approximately 1,100 MW-hours) in the northern extent of the development site;

Project element	Summary of the project
	<ul style="list-style-type: none"> • Underground cabling connecting BESS and MVPS; • A 33/132kV substation; • An underground or overhead transmission line of up to approximately 450 metres long connecting the BESS substation to the Yanco Transgrid substation; • Temporary construction compound including material laydown areas, site offices, vehicle parking, and amenities; • Construction of a new property access from Hume Road; • Chain-link/barbed-wire security fence up to 1.8 metres in height; and • Specific native vegetation screening from identified visual impact locations if required.
Site Access	<ul style="list-style-type: none"> • Provide a site access from Hume Road – to be assessed via the project traffic impact assessment
Access route	<ul style="list-style-type: none"> • Vehicles would access the site via Hume Highway, Irrigation Way, Houghton Road and Hume Road, utilising a proposed access location. • It is anticipated that project infrastructure would be delivered to either the Port of Botany or Port Kembla and transported to the site via roads approved for heavy vehicle use and then the existing access driveway (refer Figure 3 and Figure 8).
Construction	<ul style="list-style-type: none"> • Construction is expected to commence in mid-2025 and occur over an 8 month period, including a peak period of 4.5 months. • Construction would occur during standard construction hours. However, it is anticipated that some activities that are inaudible, and would not result in amenity impacts to surrounding receivers, may be required to occur outside of standard hours in accordance with an Out-of-Hours Construction Protocol.
Operations and maintenance	<p>The project would be operated remotely with occasional maintenance activities generally be undertaken by up to five (5) personnel.</p>
Decommissioning and rehabilitation	<ul style="list-style-type: none"> • The development site would be progressively rehabilitated during the decommissioning period, including removal of the temporary construction facilities. • At the end of operational life, components above ground and below ground (with depth subject to agreement with landowner) would be removed and land rehabilitated to pre-development conditions.
Workforce	<p>Up to 70 construction jobs and 5 operational jobs</p>
Hours of Operation	<p>24 hours, 7 days a week</p>

Figure 1 - Regional context



- Legend**
- Site Locality
 - Development Site
 - LGA Boundary
 - Road
 - Railway
 - Runway
 - Electricity Transmission Line
 - Water Body

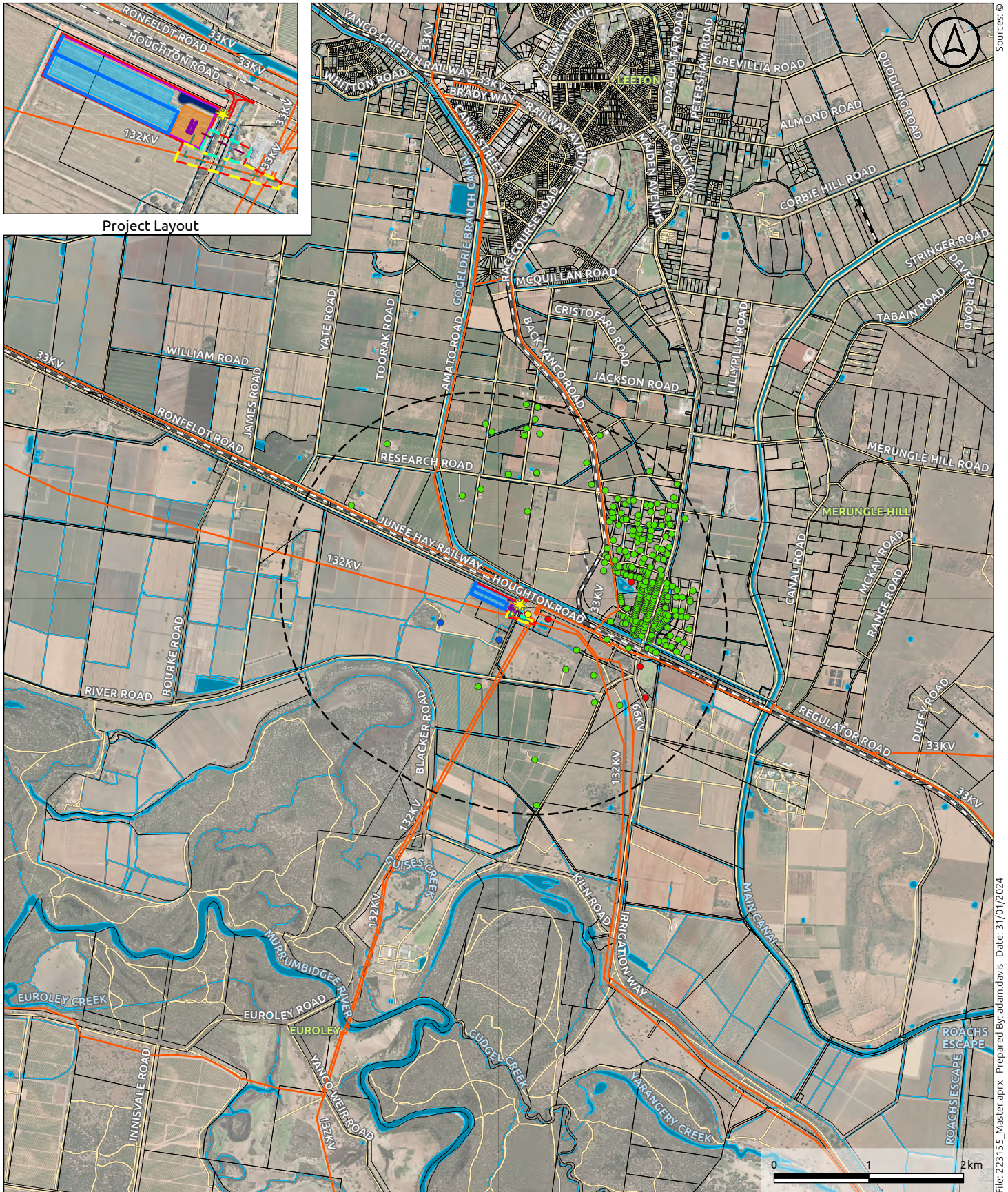
- Watercourse
 - NPWS Reserve
- Renewable Energy Projects**
- Under Construction
 - Approved



ACENERGY PTY LTD
Yanco Battery Energy Storage System

Sources: © File: 223155_Master.aprx Prepared By: adam.davis Date: 31/07/2024

Figure 2 - Local context

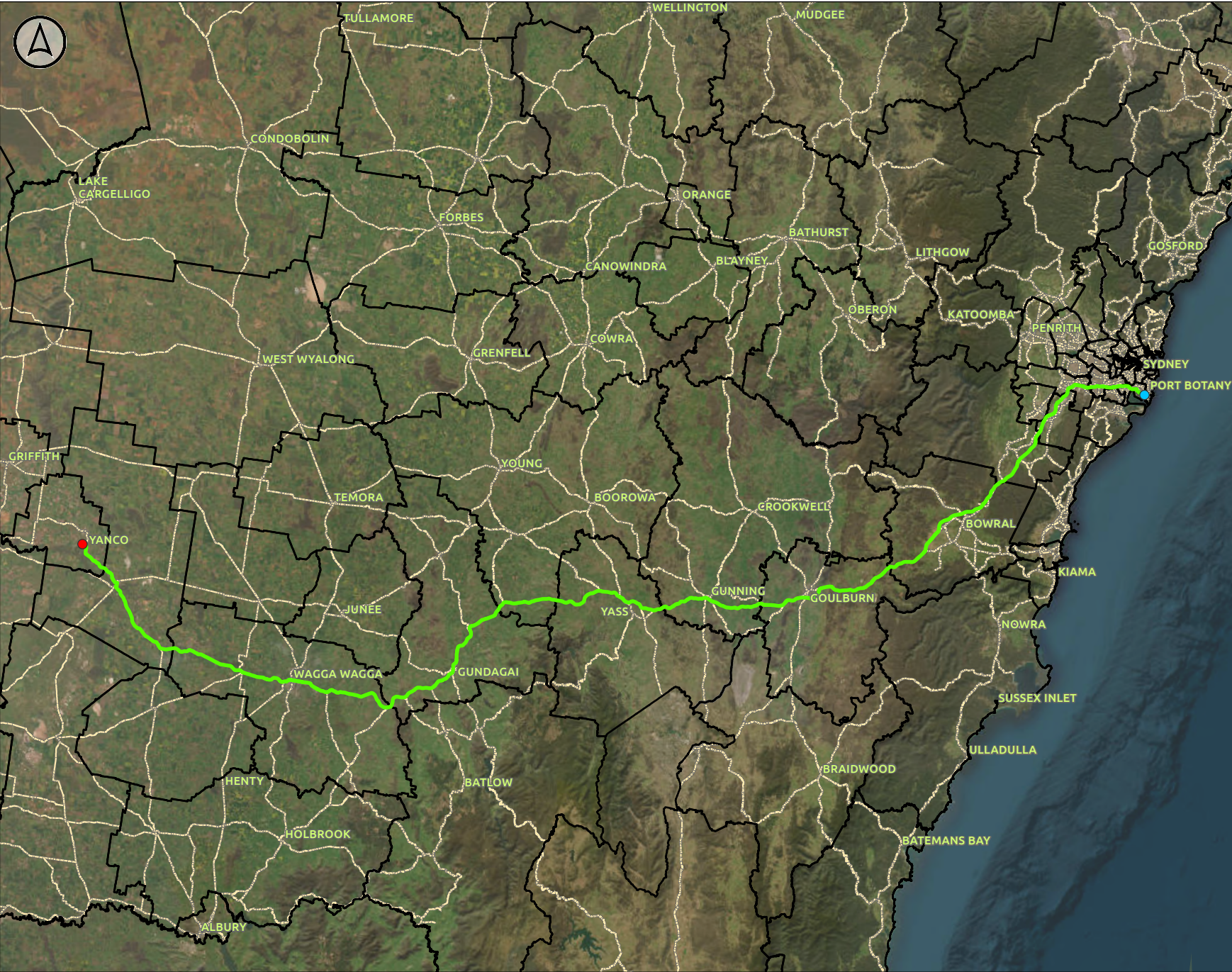


Sources: ©
File: 223155_Master.aprx Prepared By: adam.davis Date: 31/01/2024

Legend		Receivers			
	Development Site		Associated Non-Residential		Indicative BESS Area
	Development Site 2km Buffer		Associated Residential		Indicative Connection Asset
	Site Access		Non-Associated Non-Residential		Indicative 4.2 m Noise Wall
	Cadastre		Non-Associated Residential		Indicative 4.5 m Noise Wall
	Road				Indicative ETL Connection Option 1
	Railway		Indicative Access Road		Indicative ETL Connection Easement Option 1
	Runway		Indicative Landscaping		Indicative ETL Connection Option 2
	Water Body		Indicative Security Fence		Indicative ETL Connection Easement Option 2
	Watercourse		Indicative Gates		
	Electricity Transmission Line		Indicative Hardstand Area		

Figure 3 – Materials transport route

Sources: © State of NSW, Department of Customer Service, Spatial Services 2023
ESRI 2023



ACENERGY PTY LTD

Yanco Battery Energy Storage System

Legend

- Local Government Area
- Major Road
- Development Site
- Port Botany
- Proposed Materials Transport Route

0 25 50km

File: 223155_Master.aprx Prepared By: adam.davis Date: 30/01/2024

1.2 Applicant

ACEnergy was founded out of the growing demand for renewable energy developments across Australia. ACEnergy's goal is to develop high quality utility-scale Solar Farm and Battery Energy Storage Systems (BESS) projects which will work towards a future of decarbonization.

ACEnergy have experience and capabilities in development of land and site acquisition, project planning and management, grid connections, design and engineering, offtake agreements and financial services. ACEnergy is based in Melbourne, Victoria, its head office is located at Level 3, 689 Burke Road, Camberwell, 3124, VIC and its ABN is 628 883 447.

1.3 Planning Framework

The proposed BESS is defined as *electricity generating works* under the *Leeton Local Environmental Plan 2014* (the LLEP 2014) as it is:

"A building or place used for the purpose of—

(a) making or generating electricity, or

(b) electricity storage."

The proposed BESS development is a State Significant Development (SSD), pursuant to Section 20, Schedule 1 of the Systems SEPP as it is for the purposes of electricity generating works with a capital investment value (CIV) of more than \$30 million, and it is permitted with consent.

As the proposed development contains a BESS with a capacity of greater than 30 MW, the development represents designated development by reference to Section 7 of Schedule 3 of the EP&A Regulations. However, Section 4.10(2) of the EP&A Act provides that state significant development is not designated development. In any event, the requirement in relation to the designated development is to prepare an EIS in support of the DA. This is also a requirement of the SSD process, and thus there is no demonstrable difference in the approach.

1.4 Report Structure

Consistent with the requirements of the *State Significant Development Guidelines – Preparing a Scoping Report* (DPIE 2022), the report is structured as follows:

- **Section 1** introduces the site, its location, the proposed development and the planning framework.
- **Section 2** details the development's strategic context.
- **Section 3** provides a description of the proposed project.
- **Section 4** provides the statutory context.
- **Section 5** provides details of community engagement completed during the scoping phase.
- **Section 6** provides a summary of the proposed level of assessment of project impacts in the project EIS.

2. STRATEGIC CONTEXT

2.1 Policy

2.1.1 NSW 2021 PLAN (NSW GOVERNMENT 2011) AND RENEWABLE ENERGY ACTION PLAN (NSW GOVERNMENT 2013)

The NSW 2021 plan, released in 2011, sets state-wide priorities for action and guides resource allocation. Goal 22 of this plan seeks to protect the natural environment and includes a specific target to increase renewable energy. The plan states:

“We will contribute to the national renewable energy target by promoting energy security through a more diverse energy mix, reducing coal dependence, increasing energy efficiency and moving to lower emission energy sources. Specific initiatives include:

- *Building the Moree solar power plant in partnership with the Commonwealth Government under the Solar Flagship Program*
- *Establishing a Joint Industry Government Taskforce to develop a Renewable Energy Action Plan for NSW to identify opportunities for investment in renewable energy sources.”*

Since release of the 2021 plan, the NSW Government has overseen the development of the NSW Renewable Energy Action Plan (REAP). The vision of the plan is a ‘secure, affordable and clean future for NSW’. Goal 1 of the REAP is to attract renewable energy investment, including to ‘support mid-scale solar PV to enable an uptake of solar technologies where they are most cost effective’.

The proposed BESS sits comfortably within this state-led objective and is consistent with the goal and intent of the REAP. Large scale battery systems represent a fundamental component of the REAP, facilitating greater flexibility in electrical generation and stabilising the grid such that further deployment of renewables can be made possible.

Through assisting the expansion of renewable forms of electrical generation, the proposed BESS further supports the *NSW Government’s Climate Change Policy Framework* (NSW, 2016). This framework is committed to effective action on climate change, outlining long term objectives to achieve net-zero emissions by 2050 and to make New South Wales more resilient to a changing climate. The achievement of net zero emissions by 2050 is reliant on transitions towards more sustainable and renewable forms of electrical production.

The project supports this objective by improving the reliability and stability of the electrical grid. The ability of the proposed BESS system to balance electrical demand and supply assists the management of variations in electrical demand and supply which are expected to increase with transitions to more sustainable and renewable forms of electrical production. The proposed development is consequently consistent with the objective of the *NSW Government’s Climate Change Policy Framework* (NSW, 2016), supporting transitions toward lower emissions and improving the resilience of NSW to a changing climate.

2.1.2 NSW ELECTRICITY STRATEGY (NSW GOVERNMENT 2019)

The NSW Electricity Strategy 2019 is a state-wide plan to ensure a reliable, affordable and sustainable electricity future. The purpose of the NSW Electricity Strategy is to:

“Improve the efficiency and competitiveness of the NSW electricity market and encourage investment in new price reducing generation and energy saving technology.”

The strategy is underpinned by the following four important principles:

- *New market-driven electricity generation should drive down prices and help protect the environment. This is because firmed renewables are the cheapest form of new reliable generation and cheaper than the current wholesale price*
- *As electricity is an essential service, state and Commonwealth governments are ultimately responsible for reliable electricity*
- *Government action should limit costs to households, businesses and taxpayers*
- *Government action should be consistent with the nature of the national electricity system and NSW policy objectives.*

In relevance to meeting the State’s Energy Security Target the Electricity Strategy also states that:

NSW is projected to experience its tightest reserve conditions in 2023-2024 after the Liddell power station closes in April 2023.

The proposed BESS project supports the objectives of NSW Electricity Strategy, improving the reliability and affordability of electricity through its ability to balance electrical supply and demand. Large-scale energy storage is a core component of the NSW Electricity Strategy due to its ability to enhance the dispatchability of renewable energy generation and provide firming capacity to the broader NSW market.

2.1.3 NSW ELECTRICITY INFRASTRUCTURE ROADMAP (DPIE 2020)

DPIE released the NSW Electricity Infrastructure Roadmap in November 2020. Key actions from the Roadmap include:

- Renewable Energy Zones (REZs);
- Transmissions development scheme;
- Electricity Infrastructure Investment Safeguard;
- Pumped Hydro Recoverable Grants Program; and
- Internationally competitive NSW industries.

Five REZs are at various stages of development including in the Central West-Orana, New England, South-West, Hunter-Central Coast and Illawarra, selected based on the availability of resources and existing connecting infrastructure. The development site is not located within any of the current REZs however the project is considered to provide significant strategic value given the proximity to the town of Leeton and the development of nearby renewable energy projects in the locality.

2.1.4 ENERGY SECURITY SAFEGUARD (NSW GOVERNMENT 2020)

The Energy Security Safeguard is part of the NSW Electricity Strategy and legislation to establish the Safeguard was passed by Parliament in May 2020 with an objective to improve the affordability, reliability and sustainability of energy through the creation of financial incentives for energy activities.

Under the *Electricity Supply Amendment (Peak Demand Reduction Scheme) Regulation 2021*, the Government will establish a new Peak Demand Reduction Scheme (PDRS) to support activities that reduce demand at peak times, including flexible demand response.

Coupled with the Energy Saving Scheme (ESS), the PDRS is expected to deliver a net economic benefit for New South Wales of \$1.2 billion.

The proposed BESS project supports the objectives of the Energy Security Safeguard by providing capacity to reduce peak demand during summer periods and assists NSW in meeting its peak demand reduction targets, especially with the scheduled closure of Liddell Power Station in 2023.

2.1.5 DRAFT ENERGY POLICY FRAMEWORK

The Draft Energy Policy Framework was released for comment in November 2023 and is on exhibition until 29 January 2024. The guide to the proposed framework does not specifically address the delivery of battery storage however BESS projects are consistent with the intent of the draft framework, which seeks to support the transition to renewable energy, reduce emissions and secure an affordable supply of electricity for the people of NSW. The development of battery storage projects sits comfortably within this framework, as these assist to provide firming capacity to the network and improve the uptake of renewable forms of energy, particularly solar.

The draft framework includes draft documents to assist with agreeing benefit sharing and neighbour agreements. Given the changing situation with the benefit sharing position, it is proposed to continue engaging with Council on this matter to reach a point of alignment that can be clearly articulated in the project EIS.

2.1.6 RIVERINA MURRAY REGIONAL PLAN 2041

The Riverina Murray Regional Plan 2041 is the NSW Government's strategy for guiding land use planning decisions for the Riverina Murray Region (Regional Plan) for the next 20 years. The Regional Plan acknowledges the following key renewable energy focussed outcomes:

"Capitalise on a changing regional economy and catalyst projects such as the Wagga Wagga Special Activation Precinct, Albury Regional Job Precinct, Inland Rail, South-West Renewable Energy Zone (South West REZ) and multiple Murray River bridge projects

Support the transition to a net zero carbon emission State by 2050, including enabling the establishment of the South-West REZ"

The proposed development site is outside the confines of the South West REZ, however would give effect to objective 13, being to support the transition to net zero by 2050.

The proposed BESS project supports objective 13 and intended renewable energy outcomes of the Riverina Murray Regional Plan 2041 by providing capacity to reduce the Region's reliance on fossil fuels and increase electricity storage for reuse during peak consumption periods.

2.1.7 LEETON SHIRE COUNCIL LOCAL STRATEGIC PLANNING STATEMENT

LSC adopted the *Leeton Shire Local Strategic Planning Statement (LSPS)* in June 2020. The LSPS sets out eight (8) planning priorities for the Leeton Shire LGA to support the Leeton LSPS Mission, which is to:

“strengthen and protect our agriculture, manufacturing, education, heritage, and environmental assets.”

The eight (8) planning priorities aim to improve the social, environmental and economic development of the Leeton Shire. These planning priorities include agriculture, employment, tourism, retail, housing, community, environment and heritage and Aboriginal cultural heritage.

Planning Priority seven is relevant to the proposed development:

“Protect the regions environmental assets and increase resilience to natural hazards and climate change.”

Via planning priority seven, the LSC are committed to embracing technologies and practices which reduce carbon emissions such as the development of BESS. This planning priority aligns with the LSC Community Strategic Plan 2030 which promotes alternative energy and renewable energy projects in the region to help tackle climate change.

Via planning priority eight, LSC are committed to recognising and respecting both historic heritage and Aboriginal cultural heritage values through the protection of Aboriginal sites and places.

The development is consistent with the vision of planning priorities seven and eight under the Leeton LSPS.

2.1.8 LEETON SHIRE COMMUNITY STRATEGIC PLAN

The *Liveable Leeton 2035 Community Strategic Plan* (CSP) identifies five focus areas the Leeton community and Council want to achieve for the future. These five focus areas are:

- Focus Area 1: a connected, inclusive and enriched community.
- Focus Area 2: a safe, active and healthy community.
- Focus Area 3: a thriving regional economy.
- Focus Area 4: a quality environment.
- Focus Area 5: strong leadership and civic participation.

Outcome EN2 under Focus Area 4 is relevant to the proposed development. The community seeks to live sustainably and to use their resources responsibly and to adapt to climate change in the future. This includes a goal to mitigate the impacts of climate change by reducing carbon emissions and applying sustainable energy solutions.

Focus Area 1 refers to the communities desire to value and celebrate their local history and diversity including Aboriginal and historic heritage.

The development is consistent with the objectives of Focus Area 4 and 1 under the Leeton CSP.

2.2 Local Context

The development site is located in Yanco which is situated approximately 7km south of Leeton and 25km northwest of Narrandera in southwestern New South Wales. Yanco is situated within the Leeton Local Government Area (LGA) and is a part of the Riverina region. In 2021, Yanco had a total population of 744 people (Australian Bureau of Statistics).

The Yanco CBD is located approximately 1.5km northeast of the development site and includes residential properties, a public school, hotels, a museum, a number of business and retail properties as well as the Yanco train station.

Yanco is a major agricultural centre located in the Murrumbidgee Irrigation Area. The Yanco Agricultural Institute is located approximately 4 km southeast of the development site and is comprised of over 813 ha of farmland (mix of both dry and irrigation farmlands), which is researched by the agricultural institute. The focus is on the sustainable production of crops under irrigation such as rice, cotton, canola, soybean and pulses as well as cereal.

The Murrumbidgee Valley National Park is situated approximately 3.5 km south of the development site along the Murrumbidgee River.

The Yanco Solar Farm (approved) is located approximately 1.8 km north of the development site and the Leeton Solar Farm located approximately 7 km north, is currently under construction.

There is one associated non-residential receiver located to the east of the development site (the Yanco Transgrid substation), two associated residential receivers to the south, one non-associated non-residential receiver located to the east (the Yanco Sewerage Treatment Plant) and approximately five (5) non-associated residential properties located within 800m of the proposed BESS location. Seven (7) non-associated residential are located within 1km of the development site. The closest zoned residential land is located approximately 650 metres to the north-east of the development site. The land at 35-37 Cudgel Street features two dwellings (including a recently constructed dwelling – R9).

Receiver locations are depicted in **Figure 4**.

Figure 4 - Receiver locations



Key:

- | | | | | | | |
|--|----------------------------|--|------------------------------|--|----------------|-------------------------------------|
| | Site boundary | | Existing transmission lines: | | Contour (2m) |
0 100 200 300 400 500
Metres |
| | BESS development footprint | | 132 kV | | Contour (0.5m) | |
| | Dwellings | | 66 kV | | | |
| | Infrastructure (SP2) | | 33 kV | | | |

2.3 Site Description

The development site is located at 120 Houghton Road in Yanco, 2703, being Lots 516 and 521 DP 751745, and within the Houghton Road, Hume Road and Irrigation Way road reserves. The development site is bound by Houghton Road in the north, Hume Road in the east and agricultural lands to the south and west. The development site is located on land zoned as RU1: Primary Production under the *Leeton Local Environmental Plan* (LEP) 2014 and is used primarily for agricultural activities such as irrigated cropping. The development site has an area of approximately 8 ha and is located within the northeastern extent of the host lots.

The development site is generally cleared of vegetation due to historic cropping activities. Elsewhere in the host lots is dense vegetation, located towards the centre of the landholding, farming infrastructure and a farm dam. This vegetation and infrastructure would not be impacted by the project. Land in the east of the development site features dense vegetation, including the areas lining Hume Road. Via the preliminary biodiversity assessment it is noted, due to the composition and position of vegetation, that much of this is likely to be planted. The eastern extent of the host lots is mapped as containing sensitive terrestrial biodiversity (refer **Figure 5**) and as being groundwater vulnerable (refer **Figure 6**).

Host Lot 516 contains two existing (associated) dwelling houses, one in the east in proximity to Hume Road and one to the south-west.

The Junee Hay Railway is located to the north of the development site with Ronfeldt Road situated approximately 40m north of the railway. 60m north of Ronfeldt Road (towards the northeastern development site boundary) is the Gogeldrie Branch Canal which meanders further north and towards the Main Canal in the east. The Murrumbidgee River is located approximately 3.2 km south of the development site at its nearest point.

Located directly to the east of the development site, along Houghton Road is the Yanco Transgrid substation and the Yanco Sewerage Treatment Plant. The Yanco substation is bordered by Hume Road and a line of vegetation/trees to the east.

Approximately eight (8) electricity transmission lines run from the Yanco substation to the east ranging from 33 kV to 132 kV of power.

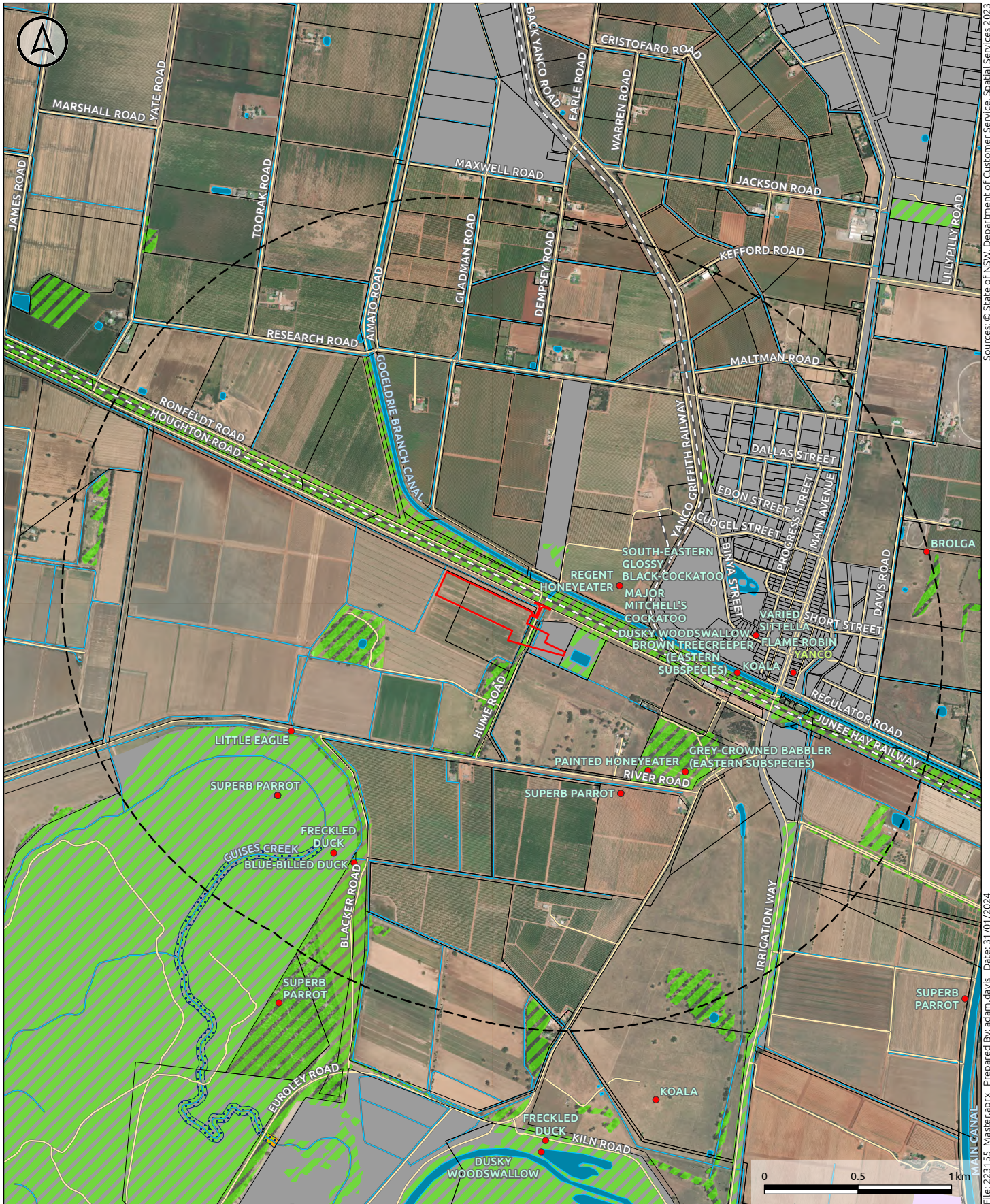
The development site has a frontage to (and encroaches into) Hume Road in the east, which will be the point of access for construction and operation via a new access point. The current access to the property crosses unrelated land to the north and therefore cannot be utilised without the consent of that landowner.

The land is generally flat, as reflective of its historic use for irrigated cropping (refer **Figure 7**).

A review of the land titles for the development site confirms the following restrictions and easements:


- Easement affecting Lots 516 and 521 for electricity transmission vested in the NSW electricity transmission authority.

Figure 5 - Biodiversity (LEP)



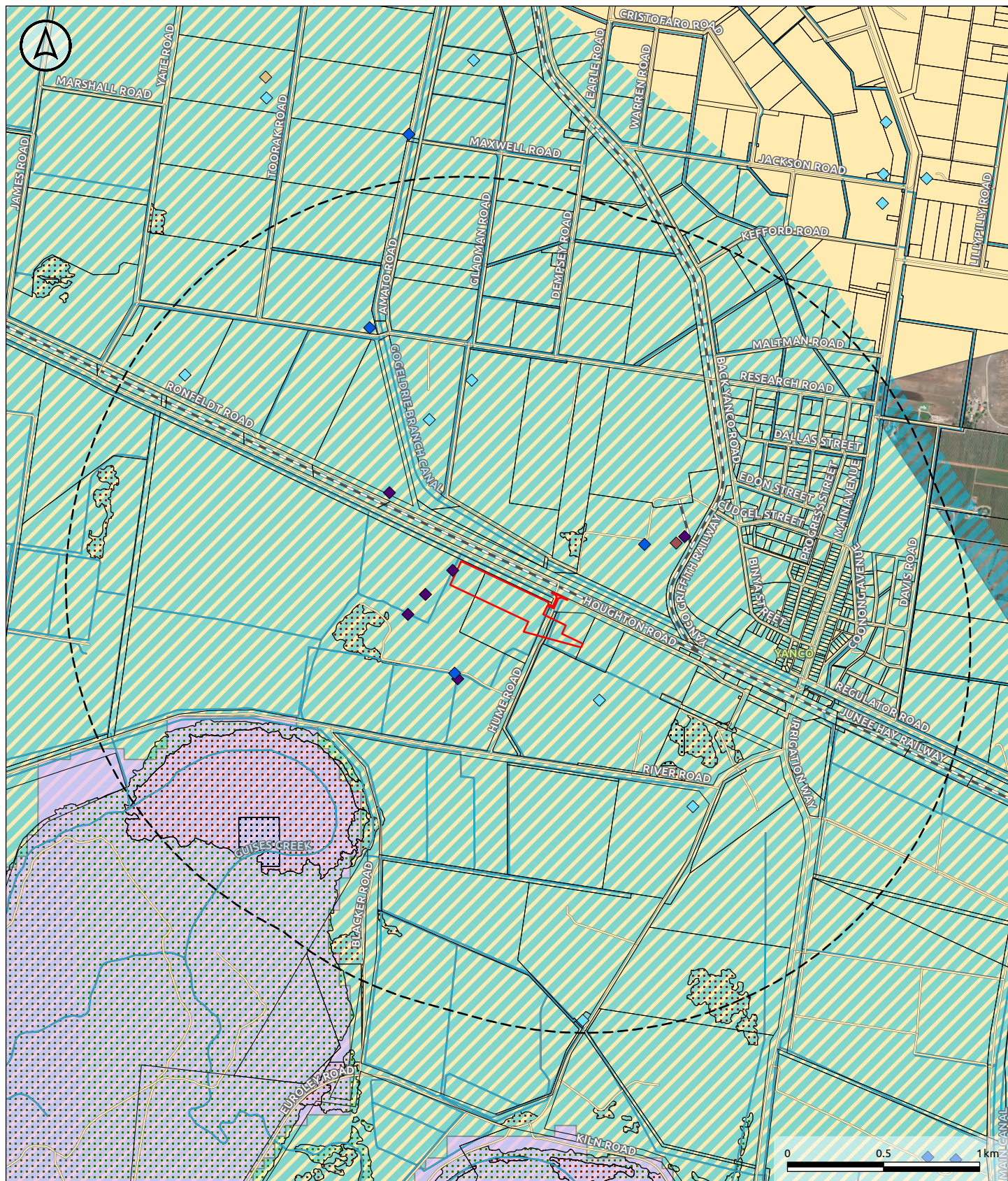
- Legend**
- Development Site
 - Development Site 2km Buffer
 - Cadastre
 - Road
 - Railway
 - Water Body
 - Watercourse

- Terrestrial Biodiversity
- Vulnerable Regulated Land**
- Vulnerable Regulated Land
- Sensitive Regulated Land
- Excluded Land
- Biodiversity Values**
- Biodiverse riparian land
- Threatened Species**
- Fauna


Premise
ACENERGY PTY LTD
Yanco Battery Energy Storage System

Sources: © State of NSW, Department of Customer Services, Spatial Services 2023.
 © State of NSW, Department of Planning and Environment 2023; © ESRI 2023
 File: 223155_Master.aprx Prepared By: adam.davis Date: 31/01/2024

Figure 6 - Groundwater



Legend

- Development Site
- Development Site 2km Buffer
- Cadastre
- Road
- Railway
- Watercourse
- Groundwater Vulnerability
- Upper Shepparton Formation Aquifer

- Terrestrial Groundwater Dependent Ecosystem**
- High potential GDE - from regional studies
 - Low potential GDE - from regional studies
 - Moderate potential GDE - from regional studies
- Aquatic Groundwater Dependent Ecosystem**
- Low potential GDE - from national assessment

- Groundwater Bore**
- ◆ Commercial and Industrial
 - ◆ Dewatering
 - ◆ Irrigation
 - ◆ Monitoring
 - ◆ Water Supply



ACENERGY PTY LTD
Yanco Battery Energy Storage System


Figure 7 - Topography



- Legend**
- Development Site
 - Development Site 2km Buffer
 - Cadastre
 - Road
 - Railway
 - Runway
 - Water Body
 - Watercourse

Elevation (m)	
	<140
	140 - 150
	150 - 160
	160 - 170
	170 - 180
	180 - 190
	190 - 205

- Natural Contours (5m Interval)
- Electricity Transmission Line



Premise

ACENERGY PTY LTD
Yanco Battery Energy Storage System

Sources: © State of NSW, Department of Customer Services, Spatial Services 2023; © State of NSW, Department of Planning and Environment 2023; © ESRI 2023
 File: 223155_Master.aprx Prepared By: adam.davis Date: 31/07/2024

3. PROJECT DESCRIPTION

3.1 Proposed Development Overview

The proposed BESS will align with and be contained within the development site as shown in **Figure 8**. A BESS is a type of energy storage system which makes use of batteries to store and then distribute energy in the form of electricity. The batteries are charged through the storage of excess energy created in nearby wind or solar farms or through grid connections.

The proposed development includes an approximately 250 MW/1,100 MWh BESS, as well as on-site energy storage containers, MVPS containers, and a connection station including control rooms. The BESS will connect to the Yanco Transgrid substation located adjacent to the development site (in the east) via an underground or overhead transmission line of up to approximately 450 metres long. The development site will have an area of approximately 8 hectares.

The development site entrance and an access road will be located at the northeastern corner of the development site entering from Houghton and Hume Roads. A security fence will be constructed around the development site along with two rows of landscaping outside of the fence to screen the BESS from nearby receivers.

The Yanco BESS will comprise of the following key components:

- Enclosed lithium-ion batteries;
- Power conversion systems including associated transformers;
- 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 transformers and enclosures/buildings for housing equipment;
- An underground or overhead transmission line of up to approximately 450 metres long 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;
- Vegetation screening;
- Provision of a new site access from Hume Road to the east.

The primary components associated with the installation of the BESS are as follows:

- Site investigations, vegetation clearing, levelling, access way construction, drainage system installation and installation of foundations/supports to install equipment on;
- Transport to site and installation of equipment;
- Testing and commissioning of the equipment;
- Operation and maintenance.

Figure 8 - Development site/layout



Sources: © State of NSW, Department of Customer Service, Spatial Services 2023 © Nearmap 2023
File: 223155_Master.aprx Prepared By: adam.davis Date: 31/07/2024

- Legend**
- Development Site
 - Site Access
 - Cadastre
 - Road
 - Railway
 - Water Body
 - Watercourse
 - Electricity Transmission Line

- Indicative Access Road
- Indicative Landscaping
- Indicative Security Fence
- Indicative Gates
- Indicative Hardstand Area
- Indicative BESS Area
- Indicative Connection Asset

- Indicative 4.2 m Noise Wall
- Indicative 4.5 m Noise Wall
- Indicative ETL Connection Option 1
- Indicative ETL Connection Easement Option 1
- Indicative ETL Connection Option 2
- Indicative ETL Connection Easement Option 2

Premise
ACENERGY PTY LTD
Yanco Battery Energy Storage System

3.2 Project Phases

3.2.1 CONSTRUCTION

The construction period is estimated to be 8 months and is expected to commence mid-2025. Duration of peak construction period is approximately 4.5 months.

Construction or upgrading activities would occur during standard construction hours (7 am to 6 pm Monday to Friday, 8 am to 1 pm Saturdays; and at no time on Sundays and NSW public holidays.)

Some construction and upgrading activities that are inaudible and would not result in amenity impacts to surrounding receivers may be undertaken outside of standard hours in accordance with construction noise protocol.

A security fence will be installed on the development site boundary and access tracks will be constructed. Construction will require the use of water trucks, graders, flatbed trucks, skid steers, front end loaders, roller compactors, trenchers, backhoes, gravel trucks and aerial lifts.

Batteries required for the development would be manufactured offsite and delivered for installation following completion of concrete footing installation. Deliveries of other equipment will be made via flatbed trucks on the approved route and via the approved site entrances. Nominated routes are as follows:

1. Port Kembla > Military Road > Hume Highway > Sturt Highway > Newell Highway > Irrigation Way > Houghton Road > Hume Road.
2. Port Botany > Friendship Road > Hume Highway > Sturt Highway > Newell Highway > Irrigation Way > Houghton Road > Hume Road.

Given the generally flat nature of the development site and lack of vegetation, minimal preparation is required in advance of installing the BESS.

Seven key construction stages (stages 3, 4, 5, 6 overlap during the 4.5 month peak construction period):

1. Establishment, drainage, roads & fencing
2. Footing installation
3. Delivery and installation of cabling
4. Steel platform installation
5. MVPS & BESS delivery & installation, including electrical installation
6. Control room, transformer & switchgear delivery & installation
7. Commissioning & demobilisation

The primary components associated with the installation of the BESS are as follows:

- Off-site manufacture of the BESS equipment.
- Vegetation clearing to provide a constructable site.
- Installation of fencing and gates to secure the development site, connection station and BESS.
- Levelling the development site as needed.
- Installation of concrete footings and steel platforms on which to install the BESS and MVPS containers.
- Delivery and installation of approximately 250 MW/1,100MWh BESS.
- Underground cabling and construction of earthing system.

- Auxiliary power protection, indication and control systems.
- Lighting inside BESS and MVPS containers to provide illumination for operation and/or maintenance, when needed, at night.
- Control rooms and connection station.
- Ancillary high voltage equipment, such as circuit breakers, switching equipment, filters, transformers and other electrical protection equipment.
- Connection of the BESS to the Yanco Substation to east on Hulme Road.
- Testing and commissioning.

The project is expected to generate up to 70 Full Time Equivalent (FTE) jobs during construction.

3.2.2 OPERATION

It is anticipated that the BESS would be operational for a period of up to 40 years, operating 24 hours and day, seven days a week. The area of the BESS would be leased for the duration of the development from the associated landowners.

Once operational the BESS will be operated by site-based staff whose routine work generally involves:

- Monitoring, testing and maintenance of onsite equipment;
- Receipt of goods;
- Removal of waste; and
- Other general site maintenance (e.g. vegetation management).

The above activities are expected to generate up to five (5) FTE jobs during operation, associated with operation, maintenance, and vegetation management.

The remainder of the development site could continue to be used for agricultural purposes surrounding the BESS development site, such as livestock grazing or cropping. This would assist to control fuel loads surrounding the development and maximise economic output from the subject land.

3.2.3 DECOMMISSIONING

It is anticipated that the BESS would be operational for a period of up to 40 years after which time the existing BESS would be removed and the development site would be decommissioned. Upon decommissioning, the following indicative steps would occur:

- BESS and associated infrastructure would be unbolted from concrete slabs and removed by crane onto transporters. All site infrastructure would be taken away from the development site for resale or to an appropriate recycling or waste facility;
- Underground services would be cut back to below ground level and capped, with the agreement of landowners; and
- The development site would then be landscaped to a safe, clean and stable state enabling it to return to an unimpeded use for agricultural or other permissible purpose.

It is possible that the infrastructure may be upgraded rather than decommissioned and the lifespan extended, subject to necessary approvals and agreements with landowners. It is also possible that the site may be decommissioned sooner, subject to technology and project viability.

3.3 Cumulative Impacts

Cumulative impacts, as defined by the *Cumulative impact assessment guideline* (DPIE, 2022) (the ‘CIA guideline’), are a result of incremental, sustained and combined effects of human action and natural variations over time and can be both positive and negative.

The development of any project has the potential to lead to an accumulation of impacts, either associated with the nature of construction or operation activities occurring on site, or in conjunction with other projects being developed in the locality or region.

An initial review of renewable SSD projects within 50km, registered via the Major Projects Portal (NSW DHPI, 2024), has been conducted to determine the scope for potential for cumulative impacts. This review has identified one (1) other SSD project, known as the Yanco Solar Farm (SSD-9515), which was approved on 16 July 2020. In addition, the newly constructed Leeton Solar Farm located along Fivebough Road, although not listed as an SSD on the DHPI major projects website, provides for a further 14.52MWdc electricity into the local network. No other BESS developments were identified within the defined area.

Cumulative impact assessment levels for each assessment matter, as defined by the CIA guideline, are reproduced in **Table 3**.

Table 3 – Cumulative Impact Assessment Level Definitions

Assessment Level	Description (refer to Appendix B of the CIA Guidelines (DPIE 2022))
Detailed assessment (D)	<p>The project may result in significant impacts on the matter, including cumulative impacts. Detailed assessment is characterised by:</p> <ul style="list-style-type: none"> • Potential overlap in impacts between a future project (e.g. Project A) and the proposed project • Potential for significant cumulative impacts as a result of the overlap, requiring detailed technical studies to assess the impacts • Sufficient data is available on the future project to allow a detailed assessment of cumulative impacts with the proposed project for the relevant matter <p>Uncertainties exist with respect to data, mitigation, assessment methods and criteria</p>
Standard assessment (s)	<p>The project is unlikely to result in significant impacts on the matter, including cumulative impacts. Standard assessments are characterised by:</p> <ul style="list-style-type: none"> • Impacts are well understood • Impacts are relatively easy to predict using standard methods • Impacts are capable of being mitigated to comply with relevant standards or performance measures <p>The assessment is unlikely to involve any significant uncertainties or require any detailed cumulative impact assessment.</p>
No applicable (N/A)	<p>No potential overlap in impacts between a future project (e.g. Project A) and the proposed project that would warrant any consideration in the cumulative impact assessment.</p>

Initial cumulative impacts are anticipated to be minor and would only occur should the timing of construction occur simultaneously. There are no other known renewable or BESS developments in Leeton and thus cumulative impacts not anticipated. The proposed BESS would provide storage capacity for the used of electricity generated by the neighbouring Yanco and Leeton solar farms.

Further consideration of impacts on agricultural productivity and visual amenity would be addressed in detail within the EIS.

4. STATUTORY CONTEXT

The key statutory requirements for the project are set out in **Table 4**.

Table 4 – Statutory requirements for a project

Matter	Comment
Power to grant consent	<p>Section 4.5 of the EP&A Act provides that the consent authority is the Independent Planning Commission (if the development is of a kind for which the Commission is declared the consent authority by an environmental planning instrument) or the Minister (if the development is not of that kind). Section 4.36(2) of the EP&A Act provides that a State Environmental Planning Policy may declare any development, or any class or description of development, to be State significant development.</p> <p>Section 2.6(1) of the Systems SEPP provides that development is declared to be State significant for the purposes of the EP&A Act if:</p> <ul style="list-style-type: none"> • the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the EP&A Act; and • The development is specified in Schedule 1 or 2 of the SEPP. <p>The consent authority for the proposed development is likely to be the Minister:</p> <ul style="list-style-type: none"> • On the grounds that the proposed development satisfies: <ul style="list-style-type: none"> – Section 2.6(1)(a) of the Systems SEPP on the grounds that it is permitted with consent under Section 2.361(b) of the Infrastructure SEPP; and – Section 2.6(1)(b) of the Systems SEPP on the grounds that it is for the purposes of electricity generating works that has a capital investment value of more than \$30 million in accordance with Section 20 of Schedule 1 of the SEPP. • Unless it is the Independent Planning Commission if, in accordance with Section 2.7(1) of the Systems SEPP: <ul style="list-style-type: none"> – The council of the area in which the development is to be carried out (RVC) has duly made a submission by way of objection under the mandatory requirements for community participation in Schedule 1 of the EP&A Act; – At least 50 unique submissions (other than from a council) have duly been made by way of objection under the mandatory requirements for community participation in Schedule 1 to the Act; and

Matter	Comment
	<ul style="list-style-type: none"> – The development application is made by a person who has disclosed a reportable political donation under section 10.4 to the Act in connection with the development application.
Permissibility	<p>Electricity generating works are prohibited in the RU1 Primary Production zone applying to the development site under the relevant local environmental plan (LLEP 2014).</p> <p>Notwithstanding the above, the development is permitted with consent on the following grounds:</p> <ul style="list-style-type: none"> • The proposed development satisfies Section 2.6(1)(a) of the Systems SEPP as electricity generating works are permitted with consent within prescribed rural zones under Section 2.36(1)(b) of <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (the Infrastructure SEPP). Under Section 2.35 of the Infrastructure SEPP, prescribed rural zones include the RU1 Primary Production zone which applies to the development site under the LLEP 2014. A proposed power line connection to the Yanco Transgrid substation is permissible as an ancillary component of an electricity generating works. • The proposed development satisfies Section 2.6(1)(b) of the Systems SEPP on the grounds that it is for the purposes of electricity generating works which have a capital investment value (CIV) of more than \$30 million in accordance with Section 20, Schedule 1 of the Systems SEPP.
Other approvals	Commonwealth approvals may be required for the following reasons:
Pre-existing conditions to exercising the power to grant consent	<ul style="list-style-type: none"> • A search for potential matters of national environmental significance (MNES) that may trigger the need for referral to the Australian Department of Climate Change, Energy, the Environment and Water (DCCEEW) via the online Protected Matters Search Tool (PMST) - (results shown in Appendix C): <ul style="list-style-type: none"> – Identified no World Heritage Properties or National Heritage Places protected by the Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act). – Identified five (5) Wetlands of International Importance (Ramsar Wetlands). – Identified thirty-seven (37) threatened species which may be present in or within proximity to the development site. – Identified five (5) threatened ecological communities with the potential to occur in or within proximity to the development site. – Identified ten (10) migratory bird species which may be present in or within proximity to the development site. • A review of the National Native Title Tribunal’s Native Title Register did not identify any Native Title claims or applications, or Indigenous Land Use Agreements applying to the development site under the <i>Commonwealth Native Title Act 1993</i> (the Native Title Act).
Mandatory matters for consideration	Pursuant to Section 4.15 of the EP&A Act, the following mandatory matters for consideration apply:

Matter	Comment
	<ul style="list-style-type: none"> • Relevant environmental planning instruments, including: <ul style="list-style-type: none"> – <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> (the Hazards SEPP): <ul style="list-style-type: none"> • Chapter 3 Hazardous and offensive development; and • Chapter 4 Remediation of land. – <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (the Infrastructure SEPP): <ul style="list-style-type: none"> • Chapter 2 Infrastructure. – <i>State Environmental Planning Policy (Planning Systems) 2021</i> (the Systems SEPP): <ul style="list-style-type: none"> • Chapter 2 State and regional development. – <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i> (the Biodiversity SEPP): <ul style="list-style-type: none"> • Chapter 3 Koala habitat protection 2020 – LLEP 2014. • The relevant Development Control Plan (DCP) (the Leeton DCP 2022). It should be noted that the application of a DCP is excluded from SSD under Section 2.10 of the Systems SEPP. • The likely impacts of the development including environmental impacts on natural and built environments and social and economic impacts in the locality. • The suitability of the development site for the development. • The public interest.

4.1 State Environmental Planning Policies

4.1.1 STATE ENVIRONMENTAL PLANNING POLICY (RESILIENCE AND HAZARDS) 2021

The *State Environmental planning Policy (Resilience and Hazards) 2021* (the Hazards SEPP) commenced on 1 March 2022, repealing and replacing:

- State Environmental Planning Policy (Coastal Management) 2018;
- State Environmental Planning Policy No 33 – Hazardous and Offensive Development; and
- State Environmental Planning Policy No 55 – Remediation of Land.

4.1.1.1 Chapter 3 Hazardous and offensive development

Section 3.7 of the Hazards SEPP requires the consideration of current circulars or guidelines prepared by the Department of Planning in determining whether a development is:

- hazardous storage establishment, hazardous industry or other potentially hazardous industry; or
- offensive storage establishment, offensive industry or other potentially offensive industry.

The current and most recent guidelines prepared by the Department of Planning, the *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (Applying SEPP 33 Guideline; Department of Planning

2011), includes the screening tests to be used to determine whether a development is potentially hazardous development. If the screening tests indicate that a development is potentially hazardous development, a preliminary hazard analysis (PHA) is required to be provided as part of the DA. The type of screening test to be used is dependent upon the class, as categorised under the Australian Dangerous Goods Code (ADG; National Transport Commission 2020) of dangerous goods proposed to be accommodated on-site.

The dangerous good associated with BESS are lithium batteries which are a class 9 dangerous good under the ADG Code. Class 9 goods do not exceed the screening thresholds under the guidelines under the Applying SEPP 33 Guideline as they “pose little threat to people or property” (Department of Planning 2011, p. 33).

Notwithstanding, a Preliminary Hazard Analysis (PHA) would be prepared to support the project EIS to consider risks associated with the batteries.

4.1.1.2 Chapter 4 Remediation of Land

Section 4.6(1) of the Hazards SEPP states that a consent authority must not consent to the carrying out of development unless it has considered whether the land is contaminated. If the land is contaminated, the consent authority must not consent to the carrying out of development unless it is suitable for the proposed use in its contaminated state or will be suitably remediated before the land is used for that purpose.

A search of the NSW EPA Contaminated land record was completed for contaminated land within the Leeton Shire LGA on 9 November 2023. One (1) site is noted within the LGA however is located approximately 3km east of the development site.

The history of the use of the development site has been for agricultural purposes and therefore there is some limited potential for contamination on site.

Based on the above, the project EIS will contain a preliminary contamination investigation to assessment and advise on potential contamination impacts on the development.

4.1.2 STATE ENVIRONMENTAL PLANNING POLICY (TRANSPORT AND INFRASTRUCTURE) 2021

The *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Infrastructure SEPP) commenced on 1 March 2022, repealing and replacing:

- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy (Educational Establishments and Childcare Facilities) 2017;
- State Environmental Planning Policy (Major Infrastructure Corridors) 2020; and
- State Environmental Planning Policy (Three Ports) 2013.

Development for the purposes of electricity generating works is prohibited in the RU1 zone applying to the development site under the LLEP 2014. However, Section 2.36(1)(b) of the Infrastructure SEPP permits electricity generating works in prescribed rural zones, including the RU1 zone.

The development is therefore permitted with consent via the Infrastructure SEPP.

4.1.2.1 Section 2.42

Section 2.42 states that development consent must not be granted for a state or regionally significant development for the purposes of electricity generating works, where the project is located in close proximity

to a regional city. As per the Regional Cities Map contained within the Infrastructure SEPP, neither Yanco nor Leeton are considered a regional city.

4.1.3 STATE ENVIRONMENTAL PLANNING POLICY (PLANNING SYSTEMS) 2021

The State Environmental Planning Policy (Planning Systems) 2021 (the Planning Systems SEPP):

- *identifies State or regionally significant development, State significant Infrastructure, and critical State significant infrastructure.*
- *provides for consideration of development delivery plans by local Aboriginal land councils in planning assessment.*
- *allows the Planning Secretary to elect to be the concurrence authority for certain development that requires concurrence under nominated State environmental planning policies.*

Chapter 2 of the Planning Systems SEPP relates to SSD, Chapter 3 relates to Aboriginal Land and Chapter 4 relates to concurrences and consents.

Schedule 1 provides a summary of project and project specific triggers that meet the general requirements of SSD.

Section 20 of Schedule 1 confirms that electricity generating works and heat or co-generation projects with a capital investment value of more than \$30 million (or more than \$10 million where located on an environmentally sensitive area of state significance) is an SSD project. As the project CIV exceeds \$30 million, the project is SSD.

4.1.4 STATE ENVIRONMENTAL PLANNING POLICY (BIODIVERSITY AND CONSERVATION) 2021

The *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (the Biodiversity SEPP) commenced on 1 March 2022, repealing and replacing:

- State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017;
- State Environmental Planning Policy (Koala Habitat Protection) 2020;
- State Environmental Planning Policy (Koala Habitat Protection) 2021;
- Murray River Regional Environmental No 2 – Riverine Land;
- State Environmental Planning Policy (Bushland in Urban Areas) 2019;
- State Environmental Planning Policy 50 – Canal Estate Development;
- State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011;
- Sydney Regional Environmental Plan 20 – Hawkesbury-Nepean River No. 2 1997;
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
- Greater Metropolitan Regional Environmental Plan No 2 – Georges River Catchment; and
- Willandra Lakes Regional Environmental Plan No 1 – World Heritage Property.

4.1.4.1 Chapter 3: Koala Habitat Protection 2020

Under Section 3.3(1) of the Biodiversity SEPP, the SEPP applies to land within the RU1 Primary Production, RU2 Rural Landscape and RU3 Forestry and equivalent zones in an LGA not marked with a '*' in Schedule 2 of the SEPP. A three-step process applies where the SEPP applies and the development site (including adjoining land in the same ownership) has an area of more than one hectare.

The development site is located within the RU1 zone and therefore, Chapter 3 applies to the proposed development. The preliminary biodiversity assessment did not identify likely Koala habitat on site however more detailed analysis would be completed in relation to the project Biodiversity Assessment Report (BDAR) and provided as part of the EIS to address any potential impacts to Koala.

4.2 Other Environmental Planning Instruments

4.2.1 THE LEETON SHIRE LOCAL ENVIRONMENTAL PLAN 2014

4.2.1.1 Zone Objectives and Land Use Table

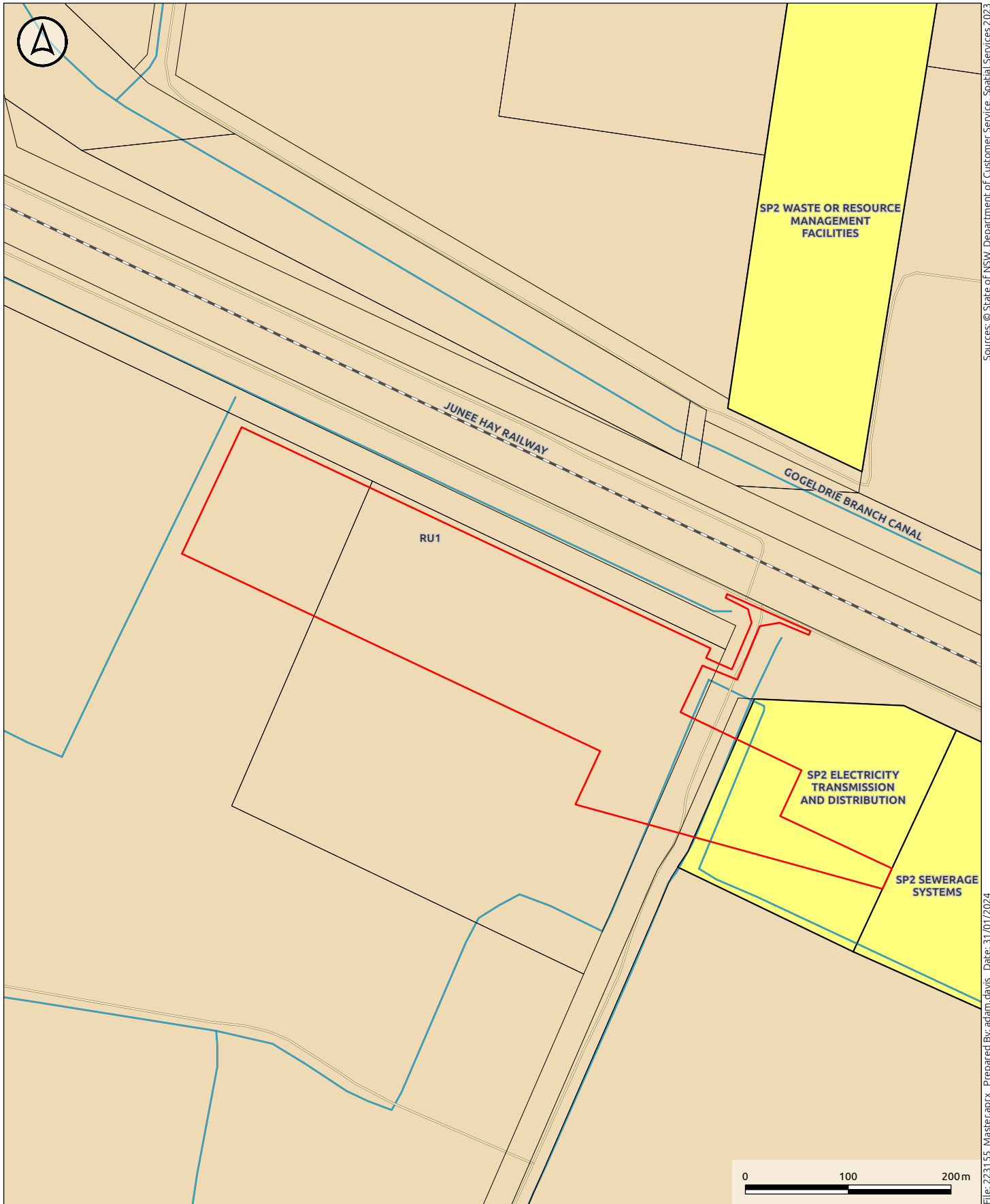
The development site is located within the RU1 Primary Production zone pursuant to the LLEP 2014. Within the RU1 zone, electricity generating works are prohibited. However, pursuant to Section 2.36 of the Infrastructure SEPP, electricity generating works are permitted with consent in a prescribed rural zone, including the RU1 zone. The Infrastructure SEPP prevails over the LEP to the extent of any inconsistency and thus the development is permissible with consent.

The objectives of RU1 zones under the LLEP 2014 is to:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To provide opportunities for intensive and extensive agriculture in appropriate locations consistent with the environmental capability of the land and access to irrigation water.*
- *To allow the development of processing, service and value-adding industries related to agriculture and primary industry production.*
- *To protect and enhance the water quality of receiving watercourses and groundwater systems so as to reduce land degradation.*

The project is not inconsistent with these objectives on the basis that it provides for the development of a permissible use in the zone, will be supported by appropriately scoped assessments to consider all impacts, and will ensure that residual impacts that cannot be avoided are appropriately mitigated.

Figure 9 - Land zoning



Sources: © State of NSW, Department of Customer Service, Spatial Services 2023 © State of NSW, Department of Planning and Environment 2023
File: 223155_Master.aprx Prepared By: adam.davis Date: 31/07/2024

- Legend**
- Development Site
 - Cadastre
 - Road
 - Railway
 - Watercourse

- Land Zoning (LZN)**
- RU1
 - SP2



ACENERGY PTY LTD
Yanco Battery Energy Storage System

5. ENGAGEMENT

5.1 Engagement Approach

Given the Department of Housing, Planning and Infrastructure’s (DHPI) requirement for genuine engagement to inform robust assessment of social impacts, we have proposed an approach that is underpinned by recent research from the Institute for Infrastructure in Society who found that: ¹

- perceived project benefits, relationship quality (based on trust), and quality of community engagement are key predictors of community acceptance
- regional communities’ trust in developers is driven by their perception of whether a project is beneficial to their community as well as their understanding of the development process, reflecting “possible wariness of new developments and the need for a sound rationale for community benefit and accessible, understandable planning and participation processes”
- communities experiencing multiple projects feel overwhelmed and unheard, and those impacted by four or more projects perceive more project risk, which decreases relationship quality and influences overall project acceptance.

The project team adopted an early engagement methodology that was cost efficient, meets the expectations of DHPI and helps build relationships with ACEnergy’s stakeholders and local community. The engagement approach addressed the core principles of the *Undertaking Engagement Guidelines for State Significant Projects* (2021), as listed in **Table 5**.

Table 5 – Engagement principles

Principles	Approach
Open and inclusive	Our communications are clear and concise, easy to understand and supported by engaging visual content.
Easy to access	Our approach allows for targeted one-on-one engagement and broader consultation via accessible online and in person tools and communications.
Relevant	We clearly identify elements of the project that can be influenced or shaped by stakeholders and the community and align our communications with their interests.
Timely	We engage early in the SIA development, allowing time for feedback to be considered in the assessment.
Meaningful	We work with community members to close the loop on feedback, clearly articulating how feedback has been addressed and why.

The engagement approach was developed in accordance with relevant guidelines, and specifically responds to the requirements, recommendations, and expectations for engagement and social impact assessment as outlined in the following DPE guidelines:

- *Undertaking Engagement Guidelines for State Significant Projects, November 2022* (DPE 2022)
- *Social Impact Assessment Guideline for State Significant Projects, November 2023* (DPE 2023)
- *Section 3.5 of the “State Significant Development Guidelines – Preparing A Scoping Report”* (DPE 2022)

¹ Institute for Infrastructure in Society 2022, Cumulative Impacts, Canberra, ACT.

- *Aboriginal Cultural Heritage Consultation Requirements for Proponents'* (DECCW 2010).

5.1.1 ENGAGEMENT OUTCOMES

The engagement plan for the Yanco Battery Energy Storage System (the project) works to achieve the following objectives:

1. **Awareness and understanding:** Ensure that the community has a clear understanding of the project, its benefits, and its impacts so they can make informed decisions and commentary.
2. **Feedback and input:** Gather feedback, concerns, and suggestions from the community. This information can help shape the project to better fit local expectations and address any conflicts that arise within community through clear, factual information and opportunities to discuss issues.
3. **Transparency and Trust:** Maintain transparency throughout the project to build trust within the community.
4. **Regulatory Compliance:** Ensure that the project meets all local, state, and federal regulations, and that any concerns related to compliance are addressed with the community.
5. **Risk Management:** Communicate how risks are being managed, including environmental risks, visual impacts, and any potential disruptions during construction.
6. **Legacy and Social Value:** Work to leave a positive legacy in the community and identify opportunities for mutually beneficial outcomes.

5.2 Community and stakeholder identification

Identifying and understanding the relevant stakeholders for the project is pivotal to the engagement process. **Table 6** outlines the individuals, groups and organisations that were identified as having a vested interest or that may be impacted by the project. Comprehensive stakeholder mapping ensures that all voices are heard and considered, forming the bedrock of an inclusive and transparent engagement strategy.

The engagement approach considers the International Association of Public Participation' (IAP2) public participation spectrum to guide appropriate levels of engagement for each stakeholder group.²

Table 6 – Key stakeholders

Group	Stakeholder	Description	IAP2 Level of Engagement
Community and individuals	Landholder	<ul style="list-style-type: none"> • Host of the project 	<ul style="list-style-type: none"> • Collaborate
	Nearby residents	<ul style="list-style-type: none"> • Yanco town residents living between 1.3-2km from the development site <ul style="list-style-type: none"> – 487 residents living at 297 residential addresses – 17 businesses – 230 of which have deliverable letterboxes 	<ul style="list-style-type: none"> • Involve

² For more information please visit: <https://iap2.org.au/resources/spectrum/>

² "Anyone affected by or interested in State significant projects in NSW, including individuals, community groups, Aboriginal and Torres Strait Islander communities, culturally and linguistically diverse communities, peak bodies, businesses." *Undertaking Engagement Guidelines for State Significant Projects, November 2021 (DPE 2021), Glossary*

Group	Stakeholder	Description	IAP2 Level of Engagement
		<ul style="list-style-type: none"> Residents living on rural properties within 2km radius of the development site <ul style="list-style-type: none"> 34 residents living at 66 residential addresses (although these may be vacant or agricultural lots) 4 businesses 10 of which have deliverable letterboxes This includes two landowners who were consulted in the project feasibility stage to as potential landowners, but an agreement was never reached 	
	Community groups	<ul style="list-style-type: none"> A range of social and environmental interest groups representing interests within the Yanco area. Murrumbidgee Landcare Yanco Public School Yanco Powerhouse Museum Yanco Agricultural High School Yanco Agricultural Institute Yanco Town Improvement Committee Yanco Creek and Tributaries 	<ul style="list-style-type: none"> Involve
	Local businesses	<ul style="list-style-type: none"> Businesses operating within 2km of the development site where operations are likely to interact with the project. Graincorp Murrumbidgee Irrigation 	<ul style="list-style-type: none"> Involve
	Aboriginal communities	<ul style="list-style-type: none"> Leeton & District Local Aboriginal Land Council – Wiradjuri 	<ul style="list-style-type: none"> Involve
	Elected representatives (state)	<ul style="list-style-type: none"> Member for Farrer - Hon Sussan Ley MP State Member for Murray - Mrs Helen Jennifer Dalton MP 	<ul style="list-style-type: none"> Inform
Others	Infrastructure owners, Utilities, relevant bodies and service providers	<ul style="list-style-type: none"> Transgrid/Lumea Ausgrid Clean Energy Council Yanco Solar Farm 	<ul style="list-style-type: none"> Inform

Group	Stakeholder	Description	IAP2 Level of Engagement
	Media	<ul style="list-style-type: none"> The Irrigator Newspaper The Daily Advertiser Newspaper Narrandera Argus Newspaper ABC Riverina 106.5 radio station 	<ul style="list-style-type: none"> Inform
Regulators	Local Council	<ul style="list-style-type: none"> Leeton Shire Council 	<ul style="list-style-type: none"> Involve
	State Agencies	<ul style="list-style-type: none"> DPE Biodiversity and Conservation Division (BCD) DPE Heritage NSW Department of Primary Industries – Agricultural Land Use (DPI) Fire and Rescue NSW NSW Rural Fire Service Transport for NSW (TfNSW) 	<ul style="list-style-type: none"> Involve

5.3 Early engagement activities

Table 7 outlines the engagement activities that were undertaken between February 2023 and November 2023 as part of the scoping phase of the project.

Table 7 – Summary of early engagement

Engagement Tool	Description and timing	Community and stakeholder group targeted	Reach
Stakeholder database	A database for stakeholders has been established and is being maintained, which captures their feedback, concerns, and inquiries, along with the responses and commitments made to them.	<ul style="list-style-type: none"> All stakeholders 	<ul style="list-style-type: none"> Internal only
Project website	Project specific website with key information and contact details, ongoing since October 2023.	<ul style="list-style-type: none"> All stakeholders 	<ul style="list-style-type: none"> The website is updated with relevant collateral and project information.
Project introduction newsletter	A project update was sent out on 28 November 2023. A newsletter was also hand delivered to nearby residents within 2km of the project boundary on 6 and	<ul style="list-style-type: none"> Landholders Nearby residents 	<ul style="list-style-type: none"> 30 properties received a hand delivered newsletter. 230 distributed by post. 80 distributed via PO boxes.

Engagement Tool	Description and timing	Community and stakeholder group targeted	Reach
	7 November 2023 during the door knock.		<ul style="list-style-type: none"> 50 were left with the local Post Office / General store with the owner actively offering them to customers
Project introduction emails	Emails introducing the Yanco Bess project and an offer of an online or in-person briefing were sent to community groups, business groups, Aboriginal communities and Local council in early November 2023. This included the project introduction newsletter as an attachment.	<ul style="list-style-type: none"> Community groups Business groups Aboriginal communities Local Council 	<ul style="list-style-type: none"> 10 project update emails were sent out to stakeholders
Door knocking	<p>Early stage door knocking was conducted on Tuesday 7 November 2023 to have discussion with community in-person and hand-deliver the project introduction newsletter. This was attended by a bd infrastructure and ACenergy representative.</p> <p>The purpose of door knocking was to introduce the project, start to build trust with most affected receivers and to understand community sentiment towards BESS projects within the area.</p> <p>Given the large number of receivers within the 2km radius for nearby residents (defined above) and the very early stage of the project, the engagement team focused on receivers who may experience direct, tangible impacts such as</p>	<ul style="list-style-type: none"> Landholders Nearby residents 	<ul style="list-style-type: none"> One-on-one discussions with 8 rural neighbours and residents and 10 Yanco town residents. Left sorry we missed you note and contact details with 12 close neighbours and Yanco town residents.

Engagement Tool	Description and timing	Community and stakeholder group targeted	Reach
	<p>noise, visual and access. This included:</p> <ul style="list-style-type: none"> • Residents living on rural properties surrounding the development site • Yanco residents living in the Southwest of Yanco Town, as this area is physically closest to the project and includes the main street and general store area. Aside from properties with a possible view of the development site, the sample for door knocking was chosen as random. Streets include: <ul style="list-style-type: none"> – Cudgel Street – Binya Street – Main Avenue – Short Street – Coonong Avenue – Research Road <p>While data states there are 66 residential addresses within the 2km radius of the development site, many of these are vacant land or for agricultural purposes only. The engagement team used aerial imagery (through Nearmaps) of the area surrounding the development site to visually identify potential residents to approach for door knocking.</p>		
Meetings	Meetings held with one stakeholder group at a time to introduce the project and understand the views of stakeholder or the	<ul style="list-style-type: none"> • Local council • Aboriginal communities • State agencies 	<ul style="list-style-type: none"> • In person meeting with the manager for Manager Planning, Building and Health at Leeton Shire

Engagement Tool	Description and timing	Community and stakeholder group targeted	Reach
	<p>communities they represent.</p> <p>Meetings have been held with Local council and State agencies.</p> <p>An interest in having a meeting with the Leeton & District Aboriginal Land Council was discussed in November 2023 but stakeholder has since not responded to set a date.</p>		<p>Council on 9 November 2023</p> <ul style="list-style-type: none"> • A pre-scoping meeting was held with the Department of Planning and Environment on 27 September 2023.
Community Information Session – online	<p>An online community information session was held on Tuesday 28 November and attended by one bd infrastructure and two ACEnergy representatives.</p>	<ul style="list-style-type: none"> • Community groups • Business groups 	<ul style="list-style-type: none"> • Three participants attended the session as representatives from Murrumbidgee Irrigation and Yanco Powerhouse Museum
Email input	<p>Where stakeholders did not feel it was necessary to attend a live briefing, they provided initial thoughts through direct email responses.</p> <p>Relevant State agencies were emailed with a request for information for the scoping report in early November.</p>	<ul style="list-style-type: none"> • Community groups • Business groups 	<ul style="list-style-type: none"> • Two community group stakeholders felt it was too early in the planning process to be involved but wanted to be kept up to date via email. • TfNSW provided email response to a request for information on 27 November 2022. • Heritage NSW declined to provide input via email on 14 November 2023, and will wait for the official request for SEARs to comment. • The DPI provided email response to a request for information on 16 November 2023. • Conversations with GrainCorp where had through November 2023 to discuss overlapping traffic requirements.

Engagement Tool	Description and timing	Community and stakeholder group targeted	Reach
			<ul style="list-style-type: none"> RFS provided email response to request for information on 24 November 2023.
Community email address	A project email address used in all collateral for inquiries or feedback on the project, ongoing since October 2023.	<ul style="list-style-type: none"> All stakeholders 	<ul style="list-style-type: none"> So far, no emails have been received.
Community 1800 phone number	A project phone number used in all collateral for inquiries or feedback on the project, ongoing since October 2023.	<ul style="list-style-type: none"> All stakeholders 	<ul style="list-style-type: none"> So far, no calls have been received.
Stakeholder database	A database for stakeholders has been established and is being maintained, which captures their feedback, concerns, and inquiries, along with the responses and commitments made to them.	<ul style="list-style-type: none"> All stakeholders 	<ul style="list-style-type: none"> Internal only

5.4 Level of interest from community members and organisations

At this initial stage of the project, an assessment of community interest is determined to be relatively low for the following reasons:

- 100% of community members spoken to who live within the Yanco town were either completely disinterested as they did not believe the project impacted them or felt positively about the potential renewable energy benefits of the project for Yanco residents and the broader NSW community.
- The most interested parties are direct or very close neighbours to the development site living on rural properties outside of Yanco town. The primary point of interest for these residents was the potential to do something similar on their own land or pure curiosity around the project timeline.
- Project introduction newsletters were either hand delivered or posted to 310 letterboxes and PO boxes, however ACenergy has not received any communications regarding the project through the free phone line, website or email address identified on that newsletter.
- Only two local businesses/community organisations attended the online information session. Both saw the project in a positive light and were interested in partnering together in the future (either for business or to support a community interest group).
- A number of elected members and community businesses or organisations are choosing to wait until the project has further details and technical reports to provide feedback or take interest.

5.5 Community and stakeholder views

Table 8 outlines the variety of views raised by different community members and stakeholder groups during the early engagement activities. These views relate to potential positive benefits and negative impacts.

In summary, the community provided positive feedback that the switch to renewable energy had important environmental and economic benefits for the local and broader Australian context. They also highlighted the local benefits of the project, such as increased job opportunity and a contribution to community facilities through local council. In terms of issues or concerns, the nearby residents mainly had questions around decommissioning, recycling, and how they could ensure any community benefits contributions were spent on the Yanco local community, rather than broader local government area.

Local businesses and regulatory stakeholders again focused on providing questions or areas of focus they would like to see answered through more information or technical assessments further into the planning process. All appreciated the early engagement opportunity to contribute. Overall, members who raised these concerns were open and satisfied with the mitigation strategies suggested by ACenergy or the agreement to provide more information as planning and design develops.

The feedback has been categorised based on DPE's *State significant development guidelines – preparing a scoping report (2022)*. The categories include strategic context, alternative designs, statutory issues, community engagement, additional assessment and issues out of scope of the project.

Table 8 – Table of community and stakeholder views

Category	Sub-category	Comments	Stakeholders
Strategic context	Transition to renewable energy	<ul style="list-style-type: none"> Significant positive feedback was received from residents and stakeholders about the switch to renewable energy and the positive environmental and economic benefits for the local and broader Australian context. 	<ul style="list-style-type: none"> Nearby residents Local council
	Land use	<ul style="list-style-type: none"> The community values keeping land free for agricultural purposes. 	<ul style="list-style-type: none"> Local council
		<ul style="list-style-type: none"> Further understanding of how the project will impact irrigated agriculture production in the vicinity of the development site. 	<ul style="list-style-type: none"> State agency: DPI
		<ul style="list-style-type: none"> No additional dwelling entitlements from any proposed subdivision 	<ul style="list-style-type: none"> State agency: DPI
Alternative designs		N/A	
Statutory issues		N/A	
Categories to address in EIS	Hazards	<ul style="list-style-type: none"> Both community and stakeholders have a perception that BESS increases the risk of fire. Stakeholders wanted 	<ul style="list-style-type: none"> Nearby residents Local businesses

Category	Sub-category	Comments	Stakeholders
		<p>reassurance that the correct fire authorities were consulted and regulations were being applied to the project</p> <ul style="list-style-type: none"> While the development site is not currently mapped as bush fire prone, it is within an area classified as Category 3 (grassland) hazards. RFS recommended a bush fire assessment to address the aims & objectives of Planning for Bush Fire Protection 2019 and the specific matters within section 8.3.5 – Wind and Solar Farms 	<ul style="list-style-type: none"> State agency - RFS
	Visual amenity	<ul style="list-style-type: none"> The surrounding wall may impact the visual amenity for one neighbour who rents a home on the project land (associated) 	<ul style="list-style-type: none"> Nearby residents
	Traffic	<ul style="list-style-type: none"> Concern around the cumulated impact of a number of renewable energy and other large-scale projects on the OSOM road networks. Information regarding route analysis and the identification of ancillary infrastructure such as Electricity Transmission Lines that are crossing the state classified road network or rail infrastructure within TfNSW remit must be provided in the EIS (post SEARS). 	<ul style="list-style-type: none"> State agency: TfNSW
		<ul style="list-style-type: none"> Concern around the cumulated impact on traffic if the construction phases of the Yanco Solar Farm and the Yanco BESS project overlap. Cumulated impact on traffic could also be had with GrainCorp who operate within the area. Consultation with local GrainCorp representatives indicate that their busiest period is November to December, with the majority of traffic heading east along Houghton Road to Irrigation Way. 	<ul style="list-style-type: none"> Local Council
	Biodiversity	<ul style="list-style-type: none"> Request for a Pest and Weed Management Plan addressing specific biosecurity, weed and pest impacts as they relate to irrigated agriculture and 	<ul style="list-style-type: none"> State agency: DPI

Category	Sub-category	Comments	Stakeholders
		the irrigation system in the vicinity of the project	
	Reticulation and local grid stability	<ul style="list-style-type: none"> Further understanding of how the Yanco community will benefit from a more stable grid through this project (as opposed or in addition to the wider region/state) 	<ul style="list-style-type: none"> Nearby residents Local council
	Waste management	<ul style="list-style-type: none"> Further understanding as to how waste and recycling will be managed during the construction and installation phase. Concern is that it will end up in local landfill. 	<ul style="list-style-type: none"> Local council
	Decommissioning and rehabilitation	<ul style="list-style-type: none"> Further information required as to what will happen to the battery and associated materials at the end of the project. Stakeholders want to understand the recycling plan. Issue raised as to the commitment to return the land to agricultural use after decommissioning. 	<ul style="list-style-type: none"> Nearby residents Local council
		<ul style="list-style-type: none"> Rehabilitation and decommissioning should include removal of all above and below ground infrastructure 	<ul style="list-style-type: none"> State agency: DPI
	Economic benefits	<ul style="list-style-type: none"> Stakeholders were in favour of the economic benefit for local contractors in terms of local jobs and associated accommodation and amenities. 	<ul style="list-style-type: none"> Nearby residents Local council
	Community benefit	<ul style="list-style-type: none"> Request to share more information about community benefits scheme or contribution to Council as it is agreed. Concern that any contribution to local Council will not make its way back to the Yanco community but rather be invested into the bigger Leeton town. 	<ul style="list-style-type: none"> Nearby residents Local business
Out of scope issues		N/A	N/A

5.6 Proposed ongoing engagement

5.6.1 RATIONALE FOR EIS ENGAGEMENT APPROACH

It is a requirement of the scoping report to outline the level of community engagement necessary for the preparation of the EIS. The level of engagement must be proportionate to the scale and likely impacts of the project.

The indicative impacts of the project have been summarised in **Section 6** of the Scoping Report under Proposed Assessment of Impacts and associated technical reports within the Scoping Report Appendices. All potential impacts requiring further investigation in the EIS require a standard level of assessment³. This means that the project is unlikely to result in significant impacts relating to the issues as the impacts are relatively easy to understand, predict and mitigate with standard measures.

Table 9 summarises the recommended approach for engagement during the project’s EIS preparation, taking into account this ‘Standard’ level of assessment. As such, the community and stakeholder engagement activities proposed aim to meet the following objectives:

- To ensure all community and stakeholders have access to factual, ‘plain English’ and up-to-date information in which to make informed decisions regarding the project.
- To further explore a number of initial concerns or ideas raised by community and regulatory stakeholders in early engagement activities.
- To provide the perspectives of the people affected by the project to balance out the technical and specialist advice.
- To work with community and regulatory stakeholders to mitigate remaining concerns, enhance opportunities for benefits and manage remaining impacts.

The engagement methodology will provide community and regulatory stakeholders the opportunity to receive relevant information and provide input through a variety of methods, thereby increasing the quality and representation of the responses and data.

5.6.1.1 Alignment with DPE guidelines

As with the early engagement, consultation to inform the EIS preparation will be undertaken in accordance with the following guidelines:

- *Undertaking Engagement Guidelines for State Significant Projects* (DPE 2022);
- *Social Impact Assessment Guideline for State Significant Projects* (DPE 2023);
- *Section 3.6 of the ‘State Significant Development Guidelines – Preparing an Environmental Impact Statement’* (DPE 2022); and
- *Aboriginal Cultural Heritage Consultation Requirements for Proponents’* (DECCW 2010).

5.6.2 ENGAGEMENT PLAN FOR EIS

Table 9 – Engagement to be carried out during EIS phase of the project

Engagement tool	Community and stakeholder group targeted	Use and objective of engagement approach
Host community ‘drop-in session’	<ul style="list-style-type: none"> • Landholders • Nearby residents • Community groups • Business groups 	Online and / or in person information sessions will be used to provide community members and stakeholder groups with an opportunity to meet the project team, learn more and ask questions.

³ As detailed in Appendix D of the State Significant Development Guidelines – Preparing A Scoping Report (DPE 2022)



Engagement tool	Community and stakeholder group targeted	Use and objective of engagement approach
	<ul style="list-style-type: none"> Aboriginal communities 	
Infographic Fact Sheet	<ul style="list-style-type: none"> Landholders Nearby residents Community groups Business groups Aboriginal communities Infrastructure owners 	<p>To supply objective and factual information about BESS projects in general to provide community members with materials that enable them to engage with the project.</p> <p>The infographic is visual and interactive in nature to encourage conversation and interaction between families, friends, neighbours and colleagues.</p> <p>The fact sheet would link back to a survey to capture concerns, issues, impacts, and values of community members.</p>
One-on-one meetings and stakeholder briefings	<ul style="list-style-type: none"> Landholders Nearby residents Community groups Business groups Aboriginal communities Elected Representatives Infrastructure owners Local council State agencies 	<p>Briefings will be used to provide targeted and tailored information to a specific stakeholder or stakeholder group and gather feedback. Briefings are typically, invitation only forums.</p>
Ongoing media relations into the future to drive community awareness around the project	<ul style="list-style-type: none"> All stakeholders 	<p>Advertising (local paper) will be used to promote project wide communications and engagement materials, such as the project specific website, information sessions and community surveys.</p>
Ongoing monitoring of community phonenumber and email feedback.	<ul style="list-style-type: none"> All stakeholders 	<p>Ongoing monitoring of calls and emails and providing an access point for information and feedback on the project.</p>
Project update newsletters	<ul style="list-style-type: none"> All stakeholders 	<p>Project updates sent via email or post will be used to keep stakeholders up to date as the project progresses. Updates include design developments or changes notice of upcoming engagement opportunities.</p>
Project survey that acts as the key	<ul style="list-style-type: none"> Landholders Nearby residents 	<p>An online survey will be used to identify social and economic impacts associated with the project and</p>

Engagement tool	Community and stakeholder group targeted	Use and objective of engagement approach
interface between SIA and engagement	<ul style="list-style-type: none"> Community groups Business groups Aboriginal communities 	understand community views and aspirations for the project.
Project updates, FAQs and collateral uploaded to project website	<ul style="list-style-type: none"> All stakeholders 	The website will act as a central repository of information relating to the project, including publicly available documents and communications materials prepared by the proponent. The information on the website will be kept up to date throughout the project with updates at milestones and six-month intervals as a minimum.
Stakeholder Customer Relationship Manager (CRM)	<ul style="list-style-type: none"> All stakeholders 	<p>A stakeholder tracker will be used to keep a record of contact with stakeholders during all engagement phases.</p> <p>This will include an analysis of stakeholder sentiment and also provide a record of key stakeholder concerns, issues and follow up actions required by the wider project team.</p> <p>This is an important part of the project’s ongoing approach to continuous evaluation and improvement.</p>

6. PROPOSED ASSESSMENT OF IMPACTS

6.1 Introduction

An initial review of information has been completed to provide a summary of matters requiring assessment at EIS preparation stage and the level of assessment required for each issue. By reference to the DPIE Scoping Report Guidelines (DPIE 2021), a number of factors have been considered through this process, including:

- the scale and nature of the likely impact of the project and the sensitivity of the receiving environment;
- whether the project is likely to generate cumulative impacts with other relevant future projects in the area; and the ability to avoid, minimise and/or offset the impacts of the project, to the extent known at the scoping phase.

The following sections provide details on specific assessment areas. A summary table is provided at **Appendix A** categorising these areas as per the Scoping Report Guidelines. By reference to Appendix D of the guidelines, the level of assessment is either detailed, standard or ‘matters requiring no further assessment in the EIS’. Detailed assessment is for those impacts likely to have a significant impact, including cumulative impacts. A standard assessment is unlikely to result in significant impacts. A standard assessment may still include technical specialists however impacts in this category are likely to be well understood and easy to predict.

The level of assessment is identified as standard and is summarised as follows:

- Standard

- Access
- Amenity
- Biodiversity
- Built Environment
- Economic
- Hazard and Risks
- Aboriginal Heritage
- Land Use
- Social Impact
- Water
- Matters requiring no further assessment in the EIS are as follows:
 - Air quality
 - Historic heritage.

6.2 Access

A preliminary review of potential traffic impacts has been completed to inform the scoping report.

6.2.1 VEHICLE ACCESS

Access to the development site is expected to be via Houghton Road from Irrigation Way. Irrigation Way links with the Hume Highway to provide access to either Port Botany or Port Kembla.

The constructed alignment of Houghton Road from Irrigation Way passes through Crown land owned by Transport Asset Holdings Entity NSW (TAHE) on behalf of Transport for New South Wales (TfNSW) and managed by UGL as the Rail Infrastructure Manager (RIM). Ongoing discussions are occurring with UGL to confirm that the current alignment can be utilised, noting that the eastern portion of Houghton Road that passes through the TAHE land is a gazetted b-double route. Whilst the use of b-doubles is not proposed, if there were to be proposed for use at a later time, this route would need to be temporarily extended to connect to the development site.

In the event agreement/licence cannot be reached with TAHE/UGL, the gazetted alignment of Houghton Road connects with Euroley Road in the south and would be constructed from Euroley Road to connect to the remainder of the Houghton Road alignment.

Once vehicles are on Houghton Road, they would turn south into Hume Road and then immediately west to enter the development site via a new property access.

The project TIA will provide a detailed analysis of the two alternatives, subject to ongoing liaison with TAHE/UGL, and would provide the preferred route. Any required upgrades along the alignment, if any, would be determined through this analysis and assessed in detail in the project EIS. As reflected by the preliminary biodiversity assessment, there is limited native vegetation in the gazetted road alignment of Houghton Road and thus the impacts associated with this more extensive construction are not expected to be significant.

6.2.2 INTERSECTION OPERATION

The Irrigation Way and Houghton Road intersection is part of a gazetted b-double route for vehicles up to 26 m and is currently used by grain vehicles delivering to the Yanco rail siding to the north of Houghton Road.

A preliminary inspection of the intersection confirms that this intersection performs safely for b-double vehicles and is therefore considered able to accommodate traffic associated with this project, including oversize and overmass vehicles.

The intersection of Houghton Road and Hume Road will require some adjustment and upgrade including the possible installation of hard stand areas and the provision of site access gates that are wide enough to enable the largest vehicle (oversize overmass) to navigate the intersection and enter the development site.

The TIA in support of the EIS will consider this arrangement in detail and provide recommendations around any necessary upgrades.

6.2.3 TRAFFIC GENERATION

It is understood that peak traffic generation would occur during the construction phase of the project with an anticipated peak hour volume of 25 light vehicles and one (1) heavy vehicle. The construction phase is expected to take approximately 8 months to complete.

During the operation phase of the development, the peak hour volumes are expected to be up to five (5) light vehicles.

These volumes are expected to be able to be safely accommodated by the local traffic road network. This will be considered in more detail in the project TIA

6.2.4 CARPARKING

There is limited guidance for car parking rates for BESS facilities provided under the RTA Guide. The TIA will provide a practical assessment on car parking demand for the proposed BESS.

There is sufficient room within the development site to accommodate required car parking.

6.3 Air

Air quality impacts arising from dust generation and vehicle emissions during construction are of a limited nature and relatively easily predicted. Once the project is operational, impacts to air quality are expected to be of a limited nature.

It is not proposed to assess this matter in the EIS.

Implementation of appropriate mitigation measures via a construction environmental management plan (CEMP) would be expected to address any potential air quality impacts.

6.4 Amenity

6.4.1 VISUAL IMPACT

An initial review of the potential for visual impacts has been prepared by Iris Visual and Planning and is provided as **Appendix D**.

The installation of the BESS on generally flat land with minor undulations surrounded by rural countryside framed by scattered vegetation and built structures has the potential to result in visual impacts. The greatest potential for visual impact is expected to be within areas in close proximity to the development site, including views of motorists travelling along Hulme Road and Houghton Road. Only a small number of scattered

residential dwellings in the vicinity of the development site have the potential for a view to the project. Dwellings within the township are unlikely to be experience substantial visual impacts given the separation distance to the project and intervening elements.

Land to the north-east is zoned for low density residential but is not developed for this purpose. There is the potential for future dwellings

The preliminary assessment has reviewed potential views to the project from publicly accessible locations include roadways, railways rivers and surrounding recreational areas, community and tourist places. The assessment has identified the potential for views from publicly accessible locations from the following locations:

- *Houghton Road and Ronfeldt Road to the north of the site*
- *Research Road about one kilometre to the north of the site*
- *Hulme Road to the east of the site*
- *Views from River Road to the south of the site, and*
- *Rourke Road over 1.5 kilometres to the west of the site.*

The assessment provides the following with respect to views from private dwellings:

Yanco is located around 1.5 kilometres east of the site, with the closest non associated receiver located around 950 metres to the north-east of the site, along Binya Street (refer to R9, Figure 3). This dwelling is located in a large area of partially developed land extending between the Yanco-Griffith railway line and Binya Street, on the western outskirts of Yanco, zoned R2: Low Density Residential. The closest part of this R2 zoned land is around 650 metres from the site, which may contain dwellings in the future. Elsewhere, there are unlikely to be views to the project from dwellings in the town of Yanco, due to the distance, landform and existing vegetation around the site, within fields, gardens and road reserves (refer to Figure 3).

Closer to the site, there are several rural dwellings to the east of the site between Houghton, Hulme and River roads. However, these dwellings are outside of the potential visual catchment of the project (refer to Figure 3) due to intervening terrain. There are also a small number of dwellings to the north, south and west of the site, that are within the potential visual catchment of the project, including dwellings along Research, River and Rourke roads (refer to Figure 3).

There are also a small number of dwellings to the north, south and west of the site, that are within the potential visual catchment of the project, including dwellings along Research, River and Rourke roads (refer to Figure 3). These will also be reviewed during a detailed assessment, for potential views to the Project.

Note: Figure 3 of the Iris Visual assessment has been reproduced and is provided as **Figure 4** of this Scoping Report.

With respect to the construction and operational phases of the project, Iris Visual and Planning note the potential for visual impacts:

During construction, caused by:

- *The presence of construction activity on the site*
- *Construction vehicle movements along surrounding roads*

- *Temporary construction facilities including:*
- *construction compounds and laydown areas*
- *site office and vehicle parking*
- *construction access tracks*
- *stormwater and sediment controls for the project area.*

During operation, attributed to the potential visibility of the following infrastructure associated with the project:

- *Electrical infrastructure including battery modules, power inverters, transformers and switchgear, overhead transmission lines connecting the BESS to the existing substation and electricity transmission network*
- *Other permanent ancillary infrastructure including small buildings (site office, operation and maintenance facility and control room)*
- *Car parking, internal access tracks, security fencing, signage.*

A detailed Visual Impact Assessment (VIA) would be provided as part of the EIS to further analyse the potential visual impact of the project. The detailed VIA will include an assessment of the likely visual and landscape impacts of the project on surrounding residences, including field verification of the visibility analysis and an assessment of representative viewpoints. Both private and public vantage points would be assessed in the VIA to identify the potential visual impacts of the project.

Where relevant, the VIA will identify appropriate measures to help minimise the potential for the project to visual amenity. As detailed via Iris visual this will include the preparation of a concept landscape plan to provide detail the proposed screening vegetation.

6.4.2 NOISE AND VIBRATION

Noise and vibration impacts are expected to occur during both construction and operation of the project. In relation to construction activities this would include preparatory earthworks, delivery, and assembly of the BESS infrastructure. During operation this would include operation of the BESS and noise from associated vehicles. A preliminary review of noise impacts for eight non-associated receivers within 1 km confirms that compliance with noise criteria is expected to be achieved subject to the implementation of attenuation measures.

The potential noise and vibration impact of the construction and operation BESS on nearby sensitive receivers would be considered in a Noise and Vibration Impact Assessment to be provided as part of the EIS. The Noise and Vibration Impact Assessment will be prepared in accordance with the:

- *NSW Interim Construction Noise Guideline (DECC 2009);*
- *NSW Noise Policy for Industry (EPA 2017);*
- *NSW Road Noise Policy (DECCW 2011); and*
- *Assessing Vibration: A Technical Guideline (DECC 2006).*

6.5 Biodiversity

6.5.1 METHODS

A preliminary biodiversity assessment has been completed by Habitat Environmental Services – refer **Appendix B**. Preliminary biodiversity values have been assessed through a combination of desktop searches and site survey.

6.5.1.1 Desktop review

Desktop searches consisted of:

- NSW State Vegetation Type Map (DPE 2023a) for Plant Community Type (PCT) Mapping within the development site and locality
- NSW BioNet Vegetation Classification (DPE 2023b) for Plant Community Type Information
- The BioNet Atlas of NSW Wildlife (DPE 2023c) for previous records of threatened species, populations and ecological communities (as listed under the NSW *Biodiversity Conservation Act 2016* (BC Act)) within a 5 km radius of the development site
- The *Department of Climate Change, Energy, the Environment and Water* (DCCEEW 2023a) Protected Matters Search Tool, which involved a search for matters of national environmental significance within a 5 km radius of the development s development site.

6.5.1.2 Site visit

A preliminary site visit was conducted on the 9th and 10th September 2023 by Principal Ecologist Dr. Gilbert Whyte that investigated both the project development site together with the intersection of Houghton Road and Irrigation Way. The purpose of the site visit was to provide a preliminary understanding of potential impacts associated with the development of the project and any associated intersection upgrades, if required.

Vegetation community types were assigned to the closest Plant Community Type (PCT) from those listed on the BioNet Vegetation Classification Database. Sampling was completed in accordance with Section 4.3 of the NSW Biodiversity Assessment Method.

6.5.2 RESULTS

The majority of the development site is dominated with non-native vegetation consisting of irrigated agricultural crops. Areas adjacent to the development site are predominantly non-native grasslands and small patches of native woodland. Species diversity within the midstory and groundcover of the woodland areas is low, with the upper storey dominated by Yellow Box and River Redgum. The similarity of age and locations of trees suggested they are likely to have been planted.

The woodland is commensurate with PCT 74 Yellow Box - River Red Gum tall grassy riverine woodland of NSW Southwestern Slopes Bioregion and Riverina Bioregion.

The intersection investigation area is predominantly vegetated with native woodland consisting of Yellow Box, River Redgum, Poplar Box, Red Box, Kurrajong and White Cypress Pine. This area is commensurate with two PCTs, namely:

- PCT 74 - Yellow Box - River Red Gum tall grassy riverine woodland of NSW South Western Slopes Bioregion and Riverina Bioregion
- PCT 26 – Weeping Myall open woodland of the Riverina Bioregion and NSW Western Slopes Bioregion.

PCT 26 is commensurate with Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Penepplain, Murray-Darling Depression, Riverina and NSW South western Slopes bioregions, which is listed as an Endangered Ecological Community (EEC) under the NSW BC Act.

The structure of the community varies from low woodland and low open woodland to low sparse woodland or open shrubland, depending on site quality and disturbance history. The tree layer grows up to a height of 10

metres and invariably includes *Acacia pendula* (Weeping Myall) as one of the dominant species or the only tree species present. This EEC is unlikely to be impacted by the proposed development.

6.5.3 HABITAT FEATURES

The woodland vegetation adjacent to the development site and within the Intersection Investigation Area is fragmented and lacks habitat connectivity. All areas of woodland were found to contain a low diversity of native plant species and no hollow-bearing trees were detected. Habitat features are limited to the following:

- Small amounts of woody debris and leaf litter are present that may provide shelter and refugia for terrestrial fauna groups, such as invertebrates, amphibians and reptiles
- Native trees and shrubs may provide limited shelter, refugia and foraging resources for several fauna groups
- The grasslands adjacent to the woodlands may also provide foraging resources for fauna species that typically occur in agricultural landscapes such as birds (cockatoos and parrots), macropods (wallabies and kangaroos) and rodents (mainly non-native species).

6.5.4 THREATENED SPECIES ASSESSMENT

No threatened plant species were identified during assessment and, due to the low levels of diversity and the lack of threatened species records, it is unlikely that populations of threatened plant species occur within the project development site.

During the site survey, several individuals of Superb Parrot were observed foraging in the intersection assessment woodland areas. The Superb Parrot is listed as vulnerable under the NSW BC Act and the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

6.5.5 NEXT STEPS

The following fieldwork is required to inform the BDAR:

- Further sampling of the vegetation adjacent to the development site is required to meet the minimum number of survey plots to fulfil the requirements of the NSW Biodiversity Assessment Method (DPIE 2020).
- Further surveys for hollow-bearing trees within the areas adjacent to and surrounding the investigation areas, is also recommended to confirm the locations of potential breeding trees for the Superb Parrot.

Based on the limited extent of native vegetation within the locality of the development site, it is likely that the clearing of native vegetation for the project will be less than 2 ha. As such, the Small Area Module of the BAM (DPIE 2020) is likely to be appropriate. As such, preparation of a Streamline BDAR is proposed.

6.6 Built Environment

The development site is situated within a rural setting with two associated residential receivers located with a 500m buffer distance of the proposed development. The land is primarily surrounded by agricultural land used for cropping purposes with the addition of the Yanco substation and sewerage treatment plant located immediately to the east of the development site. Existing 132 kV powerlines run north south along the adjoining Hume Road to the east and east-west through the development site, providing an indication of infrastructure within the locality. A grain receival and train loading operation is located on the eastern end of Houghton Road, which is consistent with the nature of built development in the locality.

There is the potential that the BESS and associated noise walls may introduce additional visual features into the local environment and this will be addressed via the project visual impact assessment.

6.7 Economic

The proposed development is likely to have a net positive economic impact derived from creating local employment opportunities during the construction, operation and decommissioning phases, as well as by contributing to electricity supply from renewable sources and stability (due to the battery component). Improved electricity supply and stability are expected to contribute towards downward pressure on electricity prices paid by residents of the local area, as well as by users of the broader electricity network.

Whilst impacts to land values are not a material planning consideration, any perceived economic impacts to property prices of local residents as a consequence of air, visual, noise and vibration, hazard, land use, social or water impacts will be mitigated through mitigation measures such as the implementation of a construction management plan, landscaped buffers and adequate buffers to associated and non-associated dwellings.

Opportunities for community benefit sharing will be investigated.

Opportunities will be investigated through local procurement to engage local people and engage with local businesses throughout the construction phase. This will be detailed in the project economic assessment.

Preliminary scoping assessment of these impacts is provided throughout **Section 6**. Each of these impacts is to be considered in greater detail in the EIS.

6.8 Hazard and Risks

6.8.1 HAZARDOUS AND OFFENSIVE DEVELOPMENT

Impacts from an electromagnetic field (EMF) may be generated by transmission lines and underground cables. EMF risks are expected to be below the International Commission on Non-Ionizing Radiation Protection (ICNIRP) guidelines (adopted by the Australian Radiation Protection and Nuclear Safety Agency, ARPANSA).

Nevertheless, there is a perception that components of the proposed development, primarily the inclusion of a switching station and BESS, may significantly alter the EMF within a locality and thereby cause harm to residents and the environment.

Lithium batteries are identified as Class 9 under the *Australian Dangerous Goods Code* (National Transport Commission 2020). Under the *Hazardous and Offensive Development Application Guidelines – Applying SEPP 33* (Department of Planning 2011) given effect under Section 4.14 of *State Environmental Planning Policy (Resilience and Hazards) 2021*. Class 9 goods do not exceed the screening thresholds as they “pose little threat to people or property” (Department of Planning 2011, p. 33).

A Preliminary Hazard Analysis (PHA) is to be provided as part of the EIS and will assess EMF levels associated with the proposed infrastructure.

The potential for cumulative impacts associated with the operation of the project would also be considered as discussed in **Section 3.3**.

6.8.2 BUSHFIRE

The development site is not mapped as bushfire prone land pursuant to the NSW Planning Portal Spatial Viewer. Notwithstanding, woody native vegetation exists along the eastern boundary of the property and the

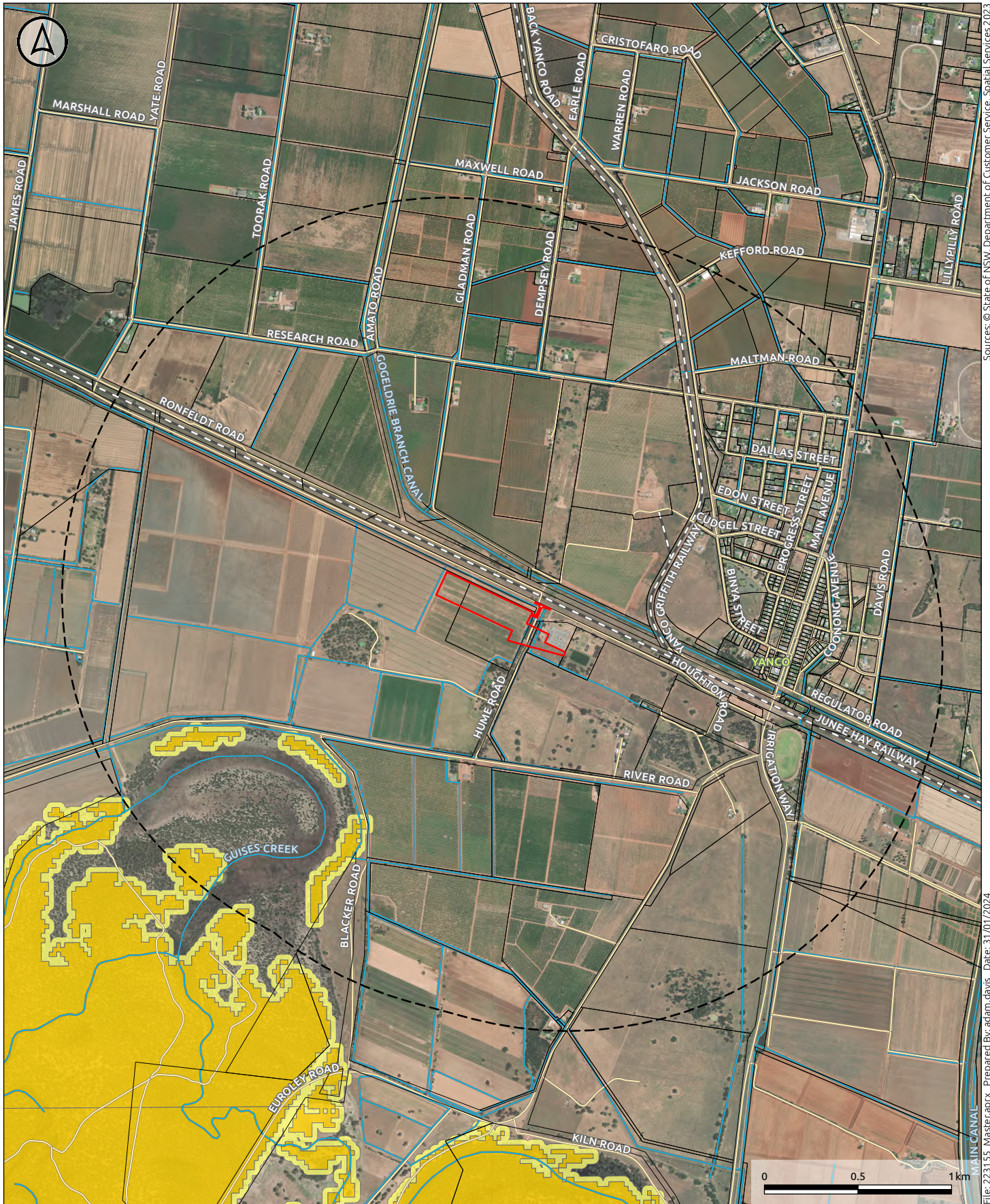
surrounding lands farmed for agricultural purposes. Council have also indicated that the Leeton Bushfire Prone Land Map has not been updated to include category 3 vegetation.

A bushfire assessment would be provided as part of the EIS to ensure consistency of the development with the NSW Rural Fire Service (RFS) guidelines, *Planning for Bushfire Protection 2019*.

6.8.3 FLOODING

The development site is not mapped as flood prone land and includes flood free access into the development site. With this considered, there are two watercourses in proximity to the development site which run along the north, west and east of the property. Potential flood impacts resulting from these watercourses along with pre and post development flood scenarios would be addressed as part of the EIS. This would include a flood impacts assessment.

Figure 10 - Bushfire prone land



- Legend**
- Development Site
 - Development Site 2km Buffer
 - Cadastre
 - Road
 - Railway
 - Watercourse

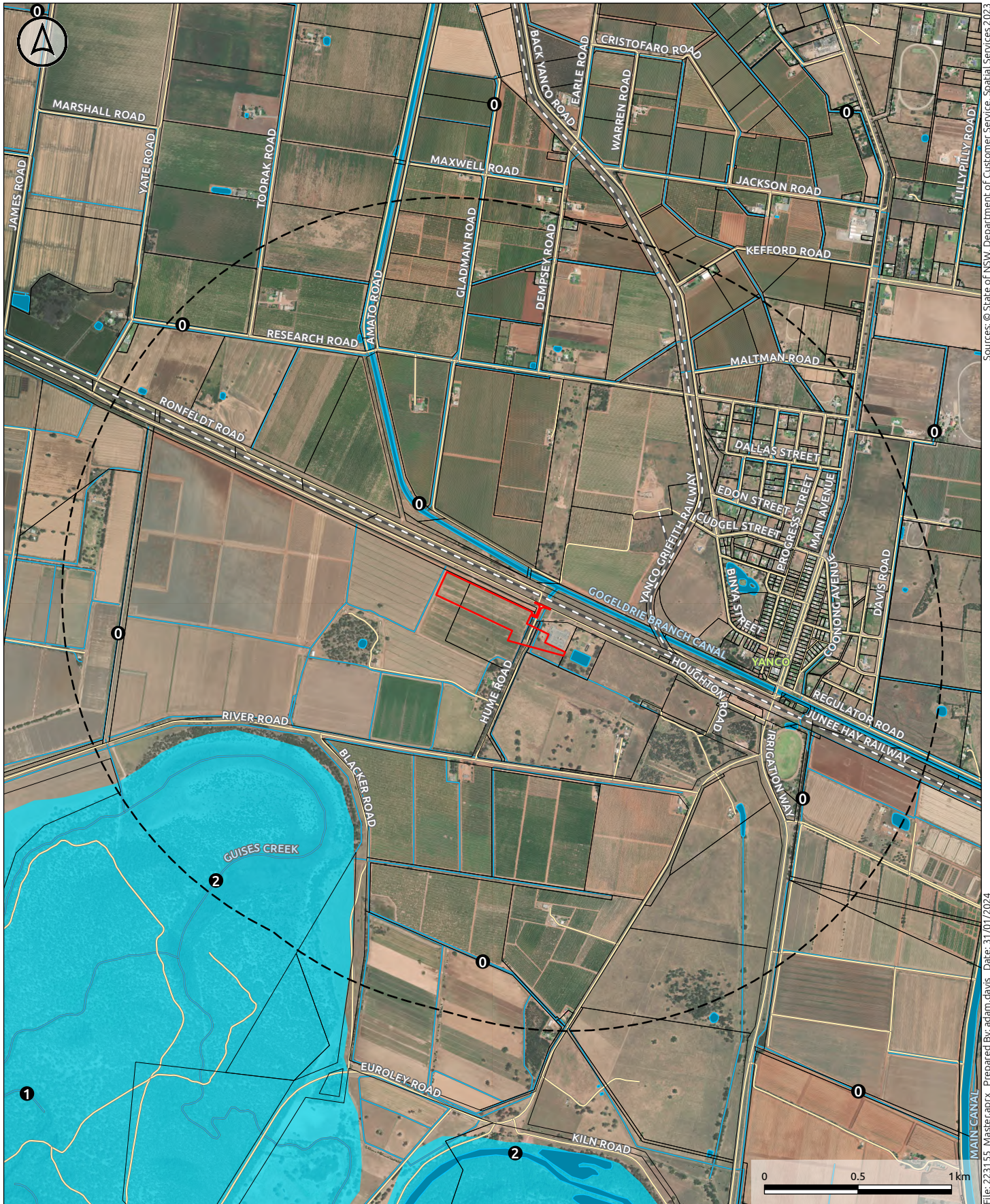
- Bushfire Prone Land**
- Vegetation Buffer
 - Vegetation Category 2



ACENERGY PTY LTD
Yanco Battery Energy Storage System


Sources: © State of NSW, Department of Customer Services, Spatial Services 2023; © State of NSW, Department of Planning and Environment 2023; © ESRI 2023
 File: 223155_Master.aprx Prepared By: adam.davis Date: 31/01/2024

Figure 11 - Surface water



Sources: © State of NSW, Department of Customer Services, Spatial Services 2023.
 © State of NSW, Department of Planning and Environment 2023; © ESRI 2023
 File: 223155_Master.aprx Prepared By: adam.davis Date: 31/07/2024

- Legend**
- Development Site
 - Development Site 2km Buffer
 - Cadastre
 - Road
 - Railway
 - Flood Planning
 - Watercourse (Strahler Stream Order)

 **Premise**
ACENERGY PTY LTD
Yanco Battery Energy Storage System

6.9 Heritage

6.9.1 EUROPEAN HERITAGE

A review of the State Heritage Inventory (SHI), Schedule 5 of the LLEP 2014 and of the DCCEE Australian Heritage Database was conducted on 17 November 2023 to identify any state or local heritage listed items located at, or within proximity to the development site. The following local heritage listed sites under the LLEP are recorded as being located within 2km of the development site:

- Yanco Powerhouse Museum (#I94) located approximately 1.1km northeast.
- Hotel Yanco (#I109) located approximately 1.4km northeast.
- Yanco School of Arts (former) (#I100) located approximately 1.4km northeast.
- Water Trough (#I108) located approximately 1.4km northeast.
- Yanco Post Office (former) (#I99) located approximately 1.4km northeast.
- Yanco Water Tower (#I95) located approximately 1.5km northeast.
- St Mary's Anglican Church (former) (#I96) located approximately 1.5km northeast.
- St Patricks Catholic Church (#I110) located approximately 1.6km northeast.
- Catholic Convent (#I97) located approximately 1.6km northeast.
- Yanco Agricultural Institute (includes various listings including #I103, #I104, #I105, #I106 and #I107) located approximately 2km east.

The Yanco Heritage Conservation Area is also listed under the LLEP and is located approximately 1.5km northeast of the development site, encompassing the southern portion of the town of Yanco, along Main Avenue and Short Street (**Figure 12**).

The Yanco Agricultural High School (#02021) located approximately 3km south of the development site, is listed as a state heritage item under the SHI.


Due to the proximity of these heritage items and the heritage conservation area from the development site, it is not likely that the proposed development will affect historic heritage significance. Further consideration and assessment of the potential for impacts to historic heritage is not required and is not proposed to be assessed in the EIS.

Figure 12 - Heritage



- Legend**
- Development Site
 - Development Site 2km Buffer
 - Cadastre
 - Road
 - Railway
 - Water Body
 - Watercourse

- EPI Heritage**
- State Heritage Register Curtilage
 - Conservation Area - General
 - Item - General


Premise

ACENERGY PTY LTD
Yanco Battery Energy Storage System

Sources: © State of NSW, Department of Customer Services, Spatial Services 2023; © State of NSW, Department of Planning and Environment 2023; © ESRI 2023
 File: 223155_Master.aprx Prepared By: adam.davis Date: 31/07/2024

6.9.2 ABORIGINAL CULTURAL HERITAGE

A basic search of the Aboriginal Heritage Information Management System (AHIMS) was conducted on 16 November to identify the presence of any previously recorded Aboriginal cultural heritage sites or places within the study area. The search included the development site with a buffer of approximately 1km (**Appendix E**). The search results have identified one Aboriginal site or place.

This Aboriginal site is recorded as being located adjacent to the impact area, on the northeastern boundary of Lot 521 DP 751745 (refer **Figure 12**). An extensive search of the AHIMS database has identified this recorded Aboriginal cultural site as being an artefact. Although this artefact is recorded as being located adjacent to the proposed development site, proposed works will be designed and managed to minimise impact on the item.

A review of the National Native Title Tribunal register has identified that there are no Native Title Determination Areas at or in proximity to the development site.

An Aboriginal Cultural Heritage Assessment (ACHA) will be provided to support the EIS to identify and assess potential impacts to the recorded Aboriginal artefact and address the necessary management and mitigation measures.

6.10 Land Use

There are no existing exploration or mining titles or applications applying to the development site.

The development site is zoned as RU1- Primary Production under the LLEP and is classed as LSC Class 6- Low Capability Land by the NSW Land and Soil Capability Assessment Scheme (2012) – refer **Figure 13**. However, the land that is immediately adjacent to the development site is classified as LSC Class 3- High Capability Land and high value horticultural crops are grown in the region and throughout the LSC Class 6 land. The land is also mapped on the draft state significant agricultural land map.

In addition, preliminary advice has been sought from the Department of Primary Industries (DPI). This advice included the following requirements:

- A detailed justification of the suitability of the development site and that the development site can accommodate the proposed development having regard to its potential environmental impacts, land contamination, permissibility, strategic context and existing site constraints;
- An assessment of the potential impacts of the development on existing land uses on the development site and adjacent land, including:
 - flood prone land, Crown lands, mining, quarries, mineral or petroleum rights; and
 - a soil survey to determine the soil characteristics and consider the potential for salinity, acid sulfate soils and erosion to occur;
 - a cumulative impact assessment of nearby developments.
- an assessment of the compatibility of the development with existing land uses, during construction, operation and after decommissioning, including:
 - consideration of the zoning provisions applying to the land, including subdivision (if required);
 - completion of a Land Use Conflict Risk Assessment in accordance with the Department of Industry's Land Use Conflict Risk Assessment Guide.
- Any proposed subdivision resulting in lots that are smaller than the minimum lot size should not create additional dwelling entitlements.

- Any Rehabilitation and Decommissioning Strategy should include removal of all above and below ground infrastructure.
- A Pest and Weed Management Plan should address specific biosecurity, weed and pest impacts relating to irrigate agriculture and the irrigation system in the vicinity of the proposed (not just impacts relating to Biodiversity).

The matters raised above will be addressed in the EIS, including the required soil survey and assessment of the agronomic capability of the development site.

6.11 Social Impact

6.11.1 APPROACH

A preliminary social impact assessment (SIA) has been conducted for the project – as attached in **Appendix F**. The aim of the assessment is to identify likely social impacts before considering suitable refinements or other early responses. The findings in the scoping phase will inform the level of community engagement and SIA analysis required for the next phases of the planning approvals process, i.e. preparation of the environmental impact statement (EIS).

The assessment has been informed by a variety of data sources, including a review of existing social or administrative data such as the latest Australian Bureau of Statistics (ABS) Census, targeted stakeholder and community engagement, field observations from a site visit, initial technical assessments for the project and the use of desktop research in the form of findings and experience from similar projects already in operation. All social impacts are considered from the point of view of the affected people, rather than the project itself.

The assessment has been conducted in accordance with the relevant guidelines provided by the NSW Department of Housing, Planning and Infrastructure (DHPI), formerly the Department of Planning and Environment (DPE), and seeks to align with international leading practice as outlined by the International Association for Impact Assessment (IAIA).

6.11.2 EXISTING ENVIRONMENT

The development site sits in the suburb of Yanco, a major agricultural centre in Western NSW. The Yanco CBD is located approximately 1.5km northeast of the development site. The Yanco CBD includes residential properties, a public school, hotels, a museum, a number of business and retail properties as well as the Yanco train station.

Yanco has a small population of 744 people with a strong skew towards a younger generation (median age of 25 years). While there is little diversity in terms of international countries of birth, Yanco does have a higher-than-average population of people who identify as an Aboriginal and/or Torres Strait Islander person. Even compared with surrounding suburbs and regions Yanco has a high proportion of labourers and machinery operators/drivers, which aligns with the agricultural industries operating within the region.

The Yanco suburb sits in the second lowest 10% of areas in NSW in terms of socio-economic advantage and disadvantage. Communities in the second decile typically have more disadvantage and less advantage in terms of socio-economic factors such as income, employment, education, and housing conditions, compared to areas with higher decile rankings. In terms of wealth, Yanco residents have a median weekly income that is 31% lower than the NSW median, and median weekly mortgage payments are 50% below state median. While rentals are also over 50% below the state median, housing occupancy sits at 0% indicating a stress on available accommodation and housing for any new residents.

The Yanco population have low levels of formal educational attainment, with 21.4% of the population not progressing past Year 9 at secondary school and a further 25.5% to Year 10. As a result, tertiary level degrees are well below the State average, however Certificate level III and IV sit just over the State average.

The town is relatively new to renewable energy infrastructure. There are currently two proposed solar farms in the area: one State Significant Development project, known as the Yanco Solar Farm (SSD-9515), which was approved on 16 July 2020; and the newly constructed Leeton Solar Farm located along Fivebough Road, at a smaller scale. The early engagement activities uncovered a favourable opinion of contributing to the renewable energy transition, and in receiving local benefits from a more stabilised energy grid. However, the town are also proud of their agricultural identity and believe rural land should be primarily used for agricultural purposes.⁴

6.11.3 POTENTIAL SOCIAL IMPACTS AND MATTERS REQUIRING FURTHER ASSESSMENT

The preliminary SIA is detailed in **Appendix F**, including the Social Impact Scoping Worksheet required by the NSW DHPI.

Key potential benefits identified include:

- Contributing towards the renewable energy transition
- Greenhouse gas emissions reduction
- Peak shaving and load management for electricity grid
- A more stabilised and reliable electricity network
- Lower electricity prices
- Local procurement and economic opportunities during construction of the project including workforce, short-term accommodation, construction materials and amenities.
- Investments in community facilities through a contribution to Leeton Shire Council

Key potential impacts identified include:

- Noise, vibrations, dust and visual impacts for close neighbours both during construction and operation
- Pressure on housing during construction, where short-term accommodation is not available
- Impacts on Aboriginal cultural heritage, including the potential for intangible harm through a loss of connection to Country through an identified Aboriginal artifact on the development site
- Impacts to property access and business operations due to construction related traffic
- Impacts to community cohesion or character when values are challenged

The above predicted benefits and impacts require further research and refinement during the EIS phase of the project in response to design development, detailed environmental assessment, engagement outcomes, and to align with the requirements of the SEARs.

Detail of mitigation or enhancement strategies will be detailed in a complete SIA to be provided as part of the EIS in accordance with the *Social Impact Assessment Guidelines 2023* (DPIE 2023). This assessment will be proportionate with the scale, complexity and likely impacts and benefits of the project.

⁴ Values identified in discussions with Leeton Shire Council and require verification through further community engagement in EIS phase.

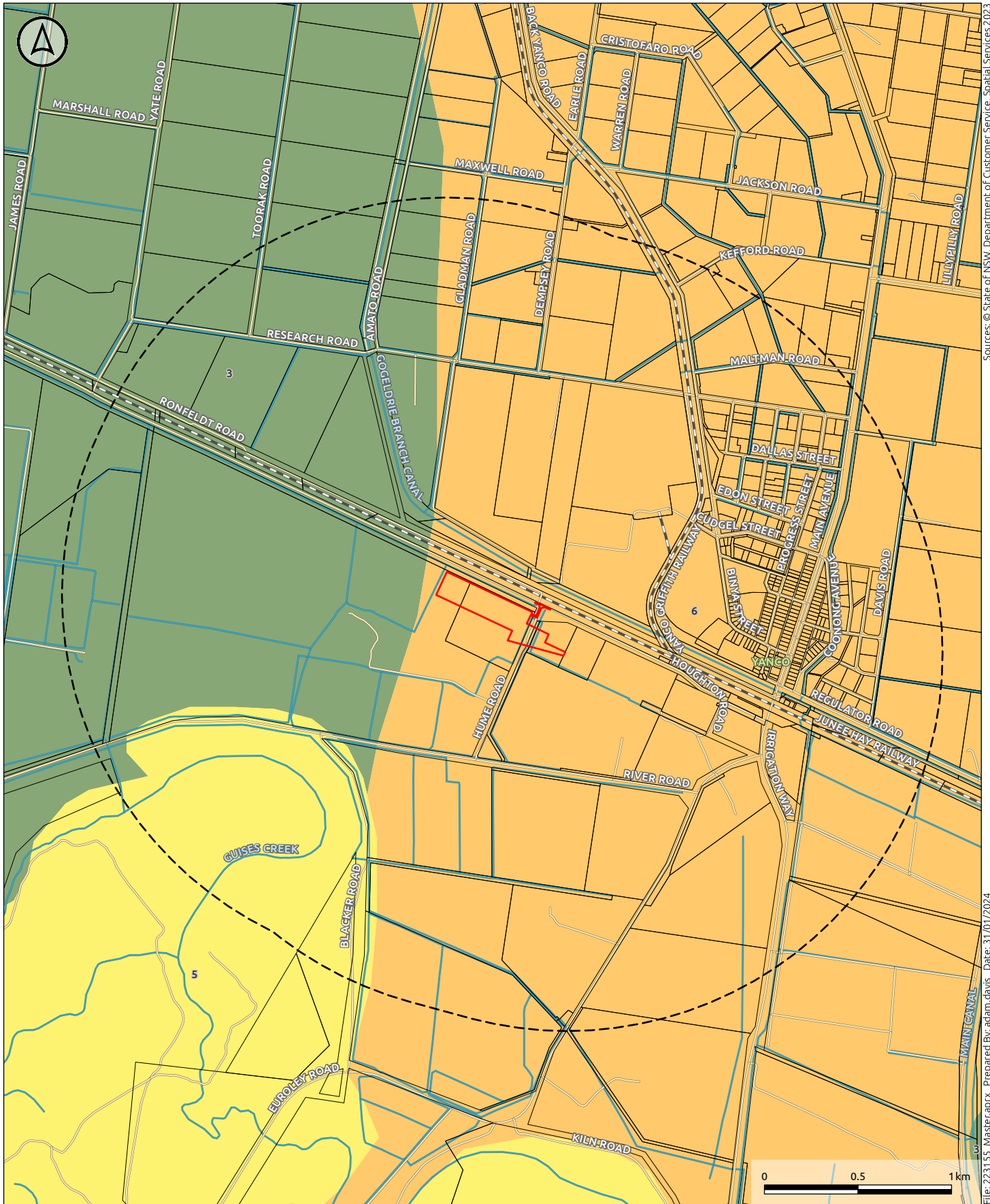
6.12 Water

The development site is mapped in the groundwater vulnerability mapping in the LEP. A groundwater assessment will be undertaken and provided as part of the EIS.

Flooding is discussed in **Section 6.8.3**.

Impacts to surface waters are not predicted, noting the separation to mapped waterways. Standard measures would be implemented via the project CMP.

Figure 13 - Land and Soil Capability



- Legend**
- Development Site
 - Development Site 2km Buffer
 - Cadastre
 - Road
 - Railway
 - Water Body
 - Watercourse

- Land Soil Capability (LSC)**
- 3 - Moderate limitations
 - 5 - Severe limitations
 - 6 - Very severe limitations



ACENERGY PTY LTD
Yanco Battery Energy Storage System

Sources: © State of NSW, Department of Customer Services, Spatial Services 2023
 © State of NSW, Department of Planning and Environment 2023; © ESRI 2023
 File: 223155_Master.capr. Prepared By: adam.davis Date: 31/01/2024

7. REFERENCES

Table 10 – References

References
Australian Bureau of Statistics (2021). <i>Yanco Census All persons QuickStats</i> , accessed 16/10/2023 at: https://abs.gov.au/census/find-census-data/quickstats/2021/SAL14478
Australian Government Department of the Environment (DoE). (n.d.). <i>Australian Heritage Database</i> . Retrieved from: http://www.environment.gov.au/topics/heritage/publications-and-resources/australian-heritage-database
Leeton Shire Council (2020). Local Strategic Planning Statement.
Leeton Shire Council. Liveable Leeton 2035 Community Strategic Plan.
Leeton Shire Council (2022). Leeton Development Control Plan.
NSW Commonwealth Department of Agriculture, Water and the Environment (2023). <i>Species Profile and Threats Database</i> . Website: http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl (Accessed: November 2023). Commonwealth Department of Climate Change, Energy, the Environment and Water, Canberra.
NSW Department of Planning and Environment (2022b). <i>BAM – Important Areas viewer</i> . Web page: https://webmap.environment.nsw.gov.au/Html5Viewer291/index.html?viewer=BAM_ImportantAreas . Accessed November 2023.
NSW Government (2023a). SEED: The central resource for Sharing and Enabling Environmental Data in NSW. Available via URL: https://www.seed.nsw.gov.au/ .
NSW Government (2022i). Historical Imagery Viewer. NSW Government Spatial Services, Bathurst. Available via URL: https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccdda8075238cb .
NSW Department of Planning and Environment (DPIE). (2016). <i>Community Consultative Committee Guidelines</i> .
NSW Department of Planning, Industry and Environment (2018). <i>Koala habitat and feed trees</i> . Web page: http://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/native-animal-facts/koala/koala-habitat . (Accessed: January 2023). Department of Planning and Environment, Sydney.
NSW Department of Planning and Environment (DPIE). (2022). <i>Large-Scale Solar Energy Guideline for State Significant Development</i> .
NSW Department of Planning and Environment (DP&E). (2023). <i>Riverina Murray Regional Plan 2041</i> . Retrieved from: https://www.planning.nsw.gov.au/sites/default/files/2023-03/riverina-murray-regional-plan-2041.pdf
NSW Department of Planning and Environment (2022a). <i>NSW Bionet Threatened Biodiversity Profile Data Collection</i> . https://data.bionet.nsw.gov.au/ . Accessed November 2023.
NSW Department of Planning and Environment (DPIE). (2022). <i>Undertaking Engagement Guidelines for State Significant Projects</i> .
NSW EPA. (n.d.). <i>Contaminated Land Record</i> . Retrieved from: https://apps.epa.nsw.gov.au/prclmapp/searchregister.aspx

References
NSW EPA. (n.d.). <i>List of NSW contaminated sites notified to EPA</i> . Retrieved from: https://www.epa.nsw.gov.au/your-environment/contaminated-land/notified-and-regulated-contaminated-land/list-of-notified-sites
NSW Office of Environment and Heritage (OEH). (n.d.). <i>Aboriginal Heritage Information Management System (AHIMS)</i>
NSW Office of Environment and Heritage (OEH). (n.d.). <i>State Heritage Register</i> .



APPENDIX A

SCOPING REPORT SUMMARY TABLE

Level of Assessment	Matter	CIA	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report Reference
Standard	Social Impact	Y	Specific	Social Impact Assessment Guidelines for State Significant Projects (Department of Planning Industry and Environment, 2023) Environmental Planning and Impact Assessment Practice Note: Socio-economic Assessment (Roads and Maritime Services, 2013).	6.11
Standard	Land Use	N	Specific	Surface Development Guideline 5 – Active Mining Areas – Moderate Predicted Subsidence Impact (Subsidence Advisory NSW, 2018) Development Application – Merit Assessment Policy (Subsidence Advisory NSW, 2018) Department of Industry's <i>Land Use Conflict Risk Assessment Guide</i>	6.10
Standard	Heritage	N	Specific	NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998) Criteria for the Assessment of Excavation Directors (NSW Heritage Council, 2011).	6.9
Standard	Hydrogeology	N	Specific	Acid Sulphate Soils Assessment Guidelines (Department of Planning, 2008) Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (Department of Urban Affairs and Planning and Environment Protection Authority, 1998) Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008) Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (Department of Environment and Climate Change, 2008) Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC / ARMCANZ, 2000) Using the ANZECC Guidelines and Water Quality Objectives in NSW (Department of Environment and Conservation, 2006)	6.12

				Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom 2004) and Volume 2 (A. Installation of Services; B. Waste Landfills; C. Unsealed Roads; D. Main Roads; E. Mines and Quarries) (DECC 2008) NSW Government's Floodplain Development Manual (2005)	
Standard	Biodiversity	Y	Specific	Refer to Section 6.5 of the Scoping Report.	6.5
Standard	Bushfire	N	Specific	Planning for Bushfire Protection 2019	6.8.2
Standard	Access and Traffic	Y	Specific	Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2013) Guide to Traffic Generating Developments Version 2.2 (RTA, 2002)	6.2
Standard	Visual Impact	Y	General	Refer to Section 6.4.1 of the Scoping Report.	6.4.1
Standard	Noise and Vibration	Y	General	Construction Noise Strategy (Transport for NSW, 2012) Interim Construction Noise Guideline (Department of Environment, Climate Change and Water, 2009) NSW Industrial Noise Policy (Environment Protection Authority, 2000) NSW Road Noise Policy (Environment Protection Authority, 2011) Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006) German Standard DIN 4150-3: Structural Vibration – Effects of Vibration on Structures Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006) Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration (Australian and New Zealand Environment Council, 1990).	6.4.2
Not assessed	Air Quality	Y	General	The Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016) NSW's Sustainable Design Guidelines (Version 3.0) (Transport for NSW, 2013)	6.3

				Greenhouse Gas Inventory Guide for Construction Projects (Transport for NSW, 2012).	
Standard	Waste	N	General	Waste Classification Guidelines (DECCW, 2009)	6.8.3
Standard	Hazard	N	General	<p>Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP 2011)</p> <p>International Standard (ISO / IEC 31010) Risk Management – Risk Assessment Technique</p> <p>Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition) (National Transport Commission, 2007)</p> <p>Storage and Handling of Dangerous Goods Code of Practice (WorkCover, 2005).</p>	6.8



APPENDIX B

PRELIMINARY BIODIVERSITY ASSESSMENT



APPENDIX C

PROTECTED MATTERS SEARCH TOOL (PMST) RESULTS



APPENDIX D

PRELIMINARY VISUAL IMPACT ASSESSMENT



APPENDIX E

AHIMS SEARCH RESULTS



APPENDIX F

PRELIMINARY SOCIAL IMPACT ASSESSMENT



Premise

premise.com.au