



Scoping Report

Holloway Battery Energy Storage System

SynCo Global Pty Ltd

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Document version history

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Acronyms and abbreviations

Term	Definition
ACHAR	Aboriginal cultural heritage assessment report
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AHIMS	Aboriginal Heritage Information Management System
ARC	Armidale Regional Council
Armidale Regional LEP	Armidale Local Environmental Plan 2012
ASS	acid sulfate soils
BC Act	<i>Biodiversity Conservation Act 2016</i> (NSW)
BDAR	biodiversity development assessment report
BESS	battery energy storage system
Biodiversity and Conservation SEPP	State Environmental Planning Policy (Biodiversity and Conservation) 2021
BoM	Bureau of Meteorology
BOS	Biodiversity Offset Scheme
BPL	bushfire prone land
BSAL	Biophysical Strategic Agricultural Land
CBD	central business district
CSEP	community and stakeholder engagement plan
Conveyancing Act	<i>Conveyancing Act 1919</i> (NSW)
DA	development application
DCP	development control plan
Disturbance Footprint	the area of land to be directly impacted during construction and/or operation of the Project
DPHI	NSW Department of Planning, Housing and Infrastructure
EDC	estimated development cost
EII	<i>Electricity Infrastructure Investment Act 2020</i> (NSW)
EIS	environmental impact statement
EMF	electromagnetic fields
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Cth)
EPI	environmental planning instruments
EPL	environment protection license
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
ESD	Ecologically Sustainable Development
EST	Energy Security Target
FM Act	<i>Fisheries Management Act 1994</i> (NSW)
FTE	full time equivalent
GDE	groundwater dependent ecosystem
GHG	greenhouse gas
GWh	gigawatt hours

Term	Definition
ha	hectares
IPC	Independent Planning Commission
kV	kilovolt
LGA	local government area
LSC	land and soil capability
LVIA	landscape and visual impact assessment
masl	metres above sea level
MNES	matters of national environmental significance
NEM	National Electricity Market
Net Zero Plan	NSW Government Net Zero Plan Stage 1: 2020–2030
NPW Act	<i>National Parks and Wildlife Act 1974</i> (NSW)
NT Act	<i>Native Title Act 1993</i> (Cth)
OEH	Office of Environment and Heritage
PBP	Planning for Bushfire Protection Guideline 2019
Planning Systems SEPP	State Environmental Planning Policy (Planning Systems) 2021
PHA	preliminary hazard analysis
POEO Act	<i>Protection of the Environment Operations Act 1997</i> (NSW)
RAP	registered Aboriginal parties
Resilience and Hazards SEPP	State Environmental Planning Policy (Resilience and Hazards) 2021
RET	renewable energy target
REZ	renewable energy zone
Roads Act	<i>Roads Act 1993</i> (NSW)
Scoping Report Guidelines	State Significant Development Guidelines – preparing a scoping report
SIA Guideline	Social Impact Assessment Guideline for State Significant Projects
SIA Technical Supplement	Technical Supplement for Social Impact Assessment
SIA Worksheet	SIA Scoping Worksheet
SDG	Sustainable Development Goals
SEARs	Secretary's Environmental Assessment Requirements
SSD	state significant development
SynCo Global	SynCo Global Pty Ltd
TfNSW	Transport for New South Wales
the Project	Holloway Battery Energy Storage System
the Study Area	BESS site: Part of Lot 843 of DP755808 Site access: ARC-owned easement off Eathorpe Road Transmission easement corridor: Within Transgrid-owned land including Lot 1 of DP1013556, Lot 847 of DP653684, Lot 8 of DP112694, Lots 1 and 2 of DP999496, and Lot 858 of DP755808 Eathorpe Road upgrade (including the intersection with Waterfall Way / Grafton Road): No Lot/DP associated, with ARC the road authority for Eathorpe Road and Transport for NSW the road authority for Waterfall Way / Grafton Road
TIA	traffic impact assessment
TRA	transport route assessment

Term	Definition
Transport and Infrastructure SEPP	State Environmental Planning Policy (Transport and Infrastructure) 2021
UN	United Nations
VPA	voluntary planning agreement
WAL	water access license
WM Act	<i>Water Management Act 2000</i> (NSW)

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1. Introduction

1.1. Project overview

SynCo Global Pty Ltd (SynCo Global) is proposing to construct, operate and decommission the Holloway Battery Energy Storage System (BESS) at 112 Eathorpe Road, Armidale within Lot 843 of DP755808 (the Project). The Project is located in the Armidale Regional local government area (LGA) in the New England North West Region of NSW, approximately 6 km south-east of Armidale (Figure 1.1).

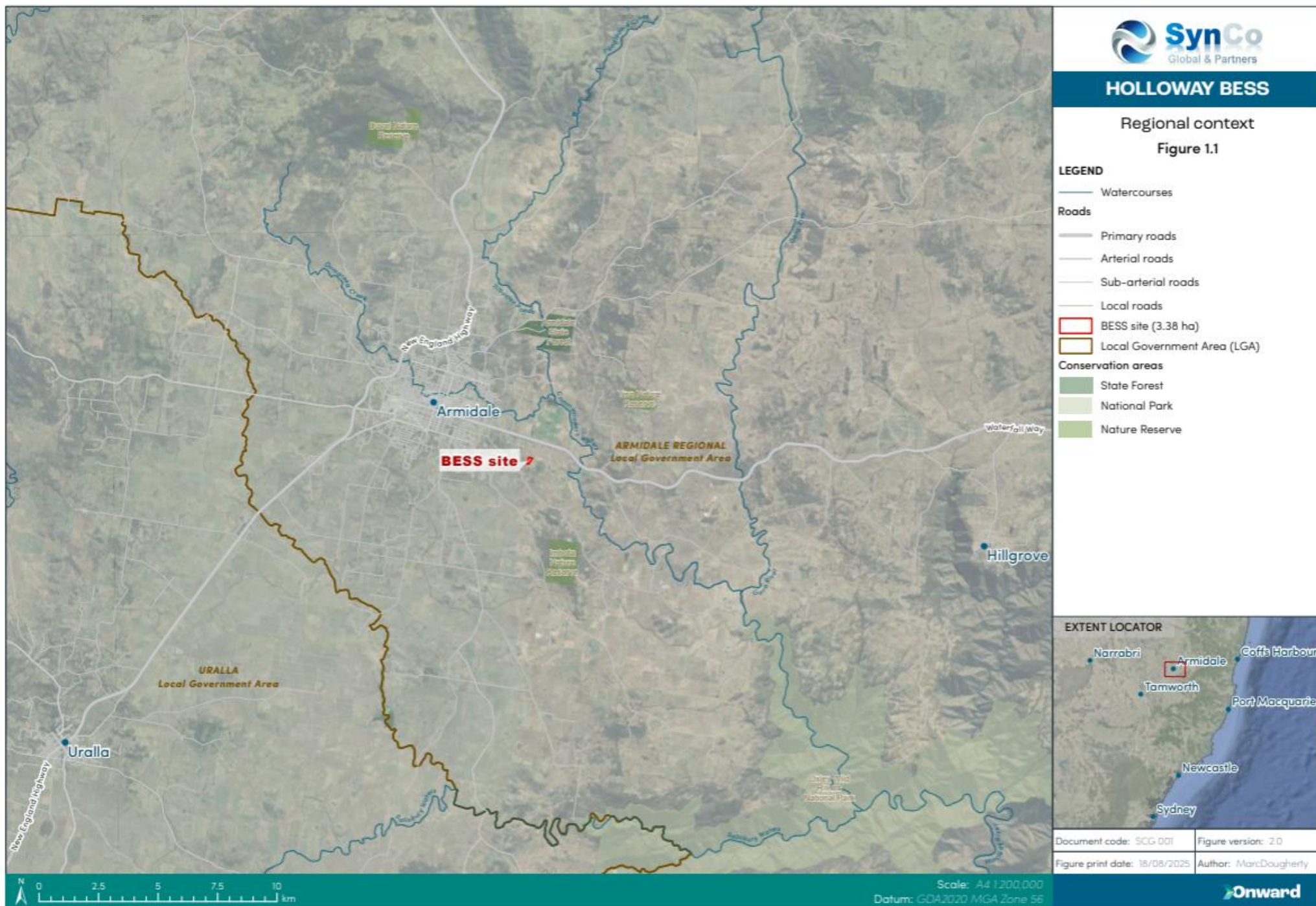
The Project would include the installation of lithium-ion batteries, inverters, transformers and a switching station, connection to the existing network, and other ancillary infrastructure and amenities required for construction and operation. Within the Study Area, the Project includes the following elements:

- BESS site, including:
 - BESS infrastructure (i.e. lithium-ion batteries, inverters, transformers and a switching station), with a capacity of up to 250 megawatts (MW) / 1,000 megawatt hours (MWh) (4-hour duration)
 - electrical reticulation network
 - internal access roads
 - perimeter security fencing
 - ancillary infrastructure, including site office and maintenance building, including amenities
 - temporary laydown and storage areas to facilitate construction
- Transmission easement corridor: Located approximately 650 m to the north-east of the BESS site, connection would be via an underground, or overhead, transmission line from the BESS site substation to Transgrid's Armidale Substation. The alignment and area impacted by the connection to Armidale Substation would be determined in consultation with Transgrid.
- Site access: Located within an Armidale Regional Council (ARC) owned easement off Eathorpe Road.
- Eathorpe Road upgrade: Potential upgrades works required to Eathorpe Road and the intersection with Waterfall Way / Grafton Road.

A summary of the key Project details is provided in Table 1.1, with a more detailed description of the Project provided in Section 3.

Table 1.1 Project details

Aspect	Detail
BESS site address	• 112 Eathorpe Road, Armidale, NSW, 2350
Project elements within the Study Area	• BESS site: Part of Lot 843 of DP755808 • Site access: ARC-owned easement off Eathorpe Road • Transmission easement corridor: Transgrid-owned land including Lot 1 of DP1013556, Lot 847 of DP653684, Lot 8 of DP112694, Lots 1 and 2 of DP999496, and Lot 858 of DP755808 • Eathorpe Road upgrade (including the intersection with Waterfall Way / Grafton Road): No Lot/DP associated, with ARC the road authority for Eathorpe Road and Transport for NSW the road authority for Waterfall Way / Grafton Road
LGA	• Armidale Regional
Land zoning	• BESS site, Site access and Eathorpe Road upgrade (including the intersection with Waterfall Way / Grafton Road): RU4 – Primary Production Small Lots • Transmission easement corridor: SP2 – Infrastructure



The Project is being developed to enhance the security and reliability of renewable energy supply for the domestic electricity market, especially during peak periods. The Project would contribute to NSW's renewable energy transition in accordance with international, Commonwealth, state and local emission reduction legislation and policies. The development of energy firming and storage infrastructure will help to reduce the reliance on fossil fuels for electricity generation and the adverse impacts of climate change on people and the environment.

The Project is a State Significant Development (SSD) pursuant to the State Environmental Planning Policy (Planning Systems) 2021 (NSW) (Planning Systems SEPP), and approval for the Project is required under Part 4, Division 4.7 of the *Environmental Planning and Assessment Act 1979* (NSW) (EP&A Act). As an SSD Project an environmental impact statement (EIS) is required.

The construction period is expected to be in the order of 12 to 18 months, with an operational life of approximately 30 years. Upon end of life, the Project would either be:

- decommissioned and rehabilitated, with a large percentage of the material used in the batteries to be reclaimed or recycled
- upgraded and lifespan extended, subject to relevant approvals and agreements with landowners

1.2. The applicant

SynCo Global is an Australian-owned renewable project developer working to advance the global renewable energy transition and help build a sustainable future. Key contact and information sources available for SynCo Global and the Project are provided in Table 1.2.

Table 1.2 Applicant details

Applicant details	
Applicant	SynCo Global Pty Ltd
ABN	44 649 597 839
Address	Unit 2, 80 Jephson Street, Toowong, QLD, 4066
Contact	+61 400 519 698
Email	hollowaybess@synco-global.org
Project website	https://www.hollowaybessproject.com/

1.3. Impact avoidance and minimisation strategies

In accordance with relevant Australian and NSW government requirements, the Project would be designed to avoid, minimise and/or mitigate, or offset impacts in consideration of the environmental values of the Site, including waterways, soil resources, important habitat, heritage values, and social values.

Community and stakeholder engagement activities have been undertaken during preparation of this Scoping Report (Section 5) in accordance with the Project's Community and Stakeholder Engagement Plan (CSEP) and Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024a). Community and stakeholder engagement activities would continue during preparation of the EIS and through the life of the Project.

This Scoping Report includes findings from preliminary environmental and social investigations including:

- Preliminary Biodiversity Assessment (Section 6.2)
- Preliminary Visual Impact Assessment (Section 6.3)
- Preliminary noise assessment (Section 6.4)
- Social Impact Assessment (SIA) Scoping Report (Appendix A and Section 6.5)
- Preliminary hazards and risk review (Section 6.8 and 6.9)

These preliminary environmental and social investigations have already informed design of the Project, which has included avoiding areas of potentially high biodiversity value and reduction of the size of the Project due to potential operational noise impacts.

The detailed assessment, including technical specialist assessments, for the Project's EIS would further provide for specific best-practice management measures to be implemented that would ensure impacts are avoided, minimised and/or mitigated, or offset.

1.4. Objectives

The objectives of the Project are to:

- Develop and deliver a means to firm up energy security and reliability for domestic electricity supply by way of storing renewable energy and enabling the charge and discharge of said energy as required by the electricity network and consumers.
- Supply renewable energy during peak periods, often occurring in the evening and during periods where renewable energy sources such as solar are not as abundant.
- Improve the sustainability of the electricity network via a proven and cost-effective technology.
- Capitalise on un-used capacity in existing transmission networks, helping to reduce consumer costs.
- Decrease the risk of black out events.
- Support the international, national, state and local governments policies and initiatives in relation to renewable energy and reducing greenhouse gas (GHG) emissions.

1.5. Purpose of this document

This Scoping Report has been prepared to support a request to the NSW Department of Planning, Housing and Infrastructure (DPHI) for the Secretary's Environmental Assessment Requirements (SEARs). The SEARs would guide the preparation of the EIS for the Project by identifying the relevant matters to be assessed and the level of assessment required.

This Scoping Report has been prepared in accordance with the following guidelines:

- State Significant Development Guidelines – preparing a scoping report (DPE, 2022a) (Scoping Report Guidelines)
- Social Impact Assessment Guideline for State significant projects (SIA Guideline) (DPHI, 2025a)
- 2025 SIA Scoping Worksheet (SIA Worksheet)
- Technical Supplement for Social Impact Assessment (SIA Technical Supplement) (DPHI, 2025b)
- Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2022b)
- Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024a)
- Significant Impact Guidelines 1.1 – Matters of National Environmental Significance (MNES) (DoE, 2013)

2. Strategic context

2.1. Alignment with policy and strategic goals

As part of international decarbonisation initiatives, Australia is transitioning to a low carbon economy, with various policies and frameworks identified at all levels (i.e. Commonwealth, state, regional, and local).

Increased adoption, reliability and storage of renewable energy produced within Australia would assist in the transition away from traditional fossil fuel energy production and use, which is linked to anthropogenic climate change, impacts to human health, and the pollution of the atmosphere, water, and land. Reducing fossil fuel emissions through the replacement of traditional energy sources with renewable energy would assist to minimise the adverse effects of anthropogenic climate change, benefitting current and future generations in-line with the principles of Ecologically Sustainable Development (ESD).

Due to the intermittent nature of renewable energy (i.e. peak energy production occurs during the day-time when solar radiation is at its maximum), and the necessity for it to be able to be stored and used in off-peak periods, or during outages, investment in energy storage systems is required to facilitate the renewable energy transition.

The Project supports various policies and frameworks, particularly the electricity generation sector, which is the largest individual contributor of GHG emissions in Australia, accounting for 45.84% of scope 1 emissions in the 2023-24 reporting year (Australian Clean Energy Regulator, 2025). The Project contributes to the decarbonisation of this emissions-intensive sector, by storing surplus renewable electricity and discharging it when needed, thereby reducing reliance on traditional thermal power generators, many of which are nearing the end of their operational lifespan.

An overview of key relevant policies, plans, and strategies, and the Project's alignment with each is provided in Table 2.1.

Table 2.1 Alignment of the Project with key strategic plans and policy frameworks

Plans and policies	Description	Project's alignment
International commitments		
The Paris Agreement	The Paris Agreement on climate change is a legally binding agreement adopted in 2015 by 196 countries at the Conference of Parties 21. The Paris Agreement aims to strengthen the global response to the threat of climate change, and to limit the increase in the global average temperature to 'well below 2°C' above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C.	As a signatory to the Paris Agreement, the Australian Government has committed to reduce GHG emissions by 43% below 2005 levels by 2030. The Project would contribute to meeting Australia's commitments under the Paris Agreement and plays a critical role in integrating renewable energy into the grid by storing excess generation and providing firming capacity to ensure reliable power supply. By stabilising the grid and reducing reliance on fossil-fuel energy generation, the Project would contribute to an annual reduction in GHG emissions.
United Nations Sustainable Development Goals	The United Nations (UN) 2030 Agenda for Sustainable Development includes global Sustainable Development Goals (SDGs) to build a more sustainable and resilient future. The 17 SDGs, and 169 individual targets, cover measures towards improvements to economic, social, and environmental sustainability. All Member States of the UN agreed to work towards achieving the SDGs by 2030.	The SDGs of relevance to the Project are: - Goal 7 'Ensure access to affordable, reliable, sustainable and modern energy for all', Target 7.2 states 'By 2030, increase substantially the share of renewable energy in the global energy mix' - Goal 11 'Sustainable Cities and Communities', Target 11.6 states: 'By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management' The Project would store excess generation and providing firming capacity to ensure reliable power supply, increasing the reliability of renewable energy generation in Australia. Further, it would assist to reduce reliance on fossil fuels for energy, resulting in reduction of GHG emissions and improved air quality.
Commonwealth Government commitments		
Renewable Energy Target	The Renewable Energy Target (RET) has been in operation since 2001. The RET operates two certified schemes: the Large-scale RET and Small-scale Renewable Energy Scheme. The Large-scale RET is designed to encourage renewable electricity generation and reduce the GHG emissions in the electricity sector (DCCEEW, 2025). Reforms were made to the RET in 2015 with a target for large-scale energy generation of 33,000 gigawatt hours (GWh) (23.5% of Australia's energy supply) by 2020. The target was met in September 2019, however, the scheme would continue to require high-energy users to meet their obligations under the policy until 2030.	The Project would allow renewable energy to be reliably stored and used, resulting in a potential benefit to the Australian community by reducing average household electricity bills and power disruptions. This strengthens the overall effectiveness of the Large-scale RET by ensuring that renewable energy is consistently and efficiently stored and dispatched to the grid when needed.
2024 Integrated System Plan	The 2024 Integrated System Plan (AEMO, 2024a) is a 20-year roadmap for Australia's energy transition. It outlines the optimal development path for generation, storage, and transmission to achieve net zero by 2050, ensuring reliability and affordability. The plan highlights the urgent need for new infrastructure, including renewables and storage, to maintain energy security.	The Project contributes to the optimal development path outlined in the 2024 Integrated System Plan by enhancing grid stability, reducing transmission congestion, and supporting energy security. In addition, it aligns with the goal of accelerating investment in low-emission technologies to meet Australia's net zero target by 2050.

Plans and policies	Description	Project's alignment
<i>Climate Change Act 2022</i> (Cth)	The <i>Climate Change Act 2022</i> (Cth) outlines Australia's GHG emissions reduction targets of a 43% reduction below 2005 levels by 2030 and reducing Australia's net GHG emissions to zero by 2050, aligning with Australia's Nationally Determined Contribution under the Paris Agreement.	The Project enables the reliable use and stoppage of renewable energy sources for Australia's electricity supply, providing a reduction in GHG emissions.
NSW State Government commitments		
<i>Climate Change (Net Zero Future) Act 2023</i> (NSW) (CC Act)	The CC Act establishes a legal framework for reducing GHG emissions and enhancing climate resilience. Passed with multi-party support on 30 November 2023, the CC Act sets ambitious emissions reduction targets for NSW including 50% reduction from 2005 levels by 2030, 70% reduction from 2005 levels by 2035 and net zero emissions by 2050. Additionally, the CC Act outlines guiding principles for climate action, emphasising the importance of considering impacts, opportunities, and the necessity for timely intervention in NSW.	The Project enhances renewable energy reliability through energy storage and dispatch, reducing reliance on fossil fuels, and contributes to NSW's emissions reduction targets of 50% by 2030, 70% by 2035, and net zero by 2050.
Net Zero Plan Stage 1: 2020-2030	The NSW Government Net Zero Plan Stage 1: 2020–2030 (DPIE, 2020a) (Net Zero Plan) sets the foundation for growing the economy, creating jobs and reducing emissions over the next decade. The Net Zero Plan aims to strengthen the prosperity and quality of life of the people of NSW, while helping to achieve the State's objective to deliver a 70% cut in emissions by 2035 compared to 2005 levels.	The Project would give effect to the Net Zero Plan, including the NSW Government's updated 2030 and 2035 targets by providing a reduction in GHG emissions.
NSW Electricity Strategy	The NSW Electricity Strategy (DPIE, 2019) is the NSW Government's plan for a reliable, affordable and sustainable electricity future that supports a growing economy. The Strategy aims to improve the efficiency and competitiveness of the NSW electricity market by reducing risk, cost, and government-caused delays, and to encourage investment in new price-reducing generation and energy saving technologies. Actions to support these objectives include supporting the deployment of utility-scale generation in NSW and enabling electricity generation to meet the EST which set the target capacity required to meet forecast NSW electricity demand during the summer period.	The Project provides renewable energy storage that, together with other renewable generation projects in the region and utilising the extensive existing state-significant electrical and transmission infrastructure, is expected to result in lower cost of energy in the National Electricity Market (NEM).
NSW Transmission Infrastructure Strategy	The NSW Transmission Infrastructure Strategy (DPIE, 2018) seeks to unlock private sector investment in priority energy infrastructure projects, which can deliver least-cost energy to customers. It forms part of the government's broader plan to make energy more affordable, secure investment in new power generation and network infrastructure and ensure new technologies deliver benefits for consumers. The transmission strategy seeks to help meet future energy needs by facilitating new transmission that could support up to 17,700 MW of new electricity generation. Other benefits include improved energy reliability, security, timely project delivery, increased affordability, and access to cheaper electricity.	The Project facilitates energy storage and firming capacity, and enhances grid stability, integrating renewable energy, and contributing to NSW's long-term energy security and emissions reduction goals.

Plans and policies	Description	Project's alignment
NSW Electricity Infrastructure Roadmap (the Road Map)	The Roadmap enabled by the <i>Electricity Infrastructure Investment Act 2020</i> (NSW) (EII Act), builds on the NSW Electricity Strategy and NSW Transmission Infrastructure Strategy. The Roadmap sets a 20-year plan for NSW to replace its ageing coal-fired power stations with a coordinated portfolio of generation, storage, and network investment. The EII Act, together with the Roadmap, is intended to (EnergyCo, 2025): • attract up to \$32 billion in private investment for regional energy infrastructure by 2030 • support 6,300 construction jobs and 800 ongoing jobs, mostly in regional NSW • save around \$130 a year on the average NSW household electricity bill • help reduce NSW electricity emissions by 90 million tonnes by 2030 The Roadmap focuses on developing REZs, expanding firming capacity such as BESS, upgrading transmission infrastructure, and attracting private investment to accelerate the transition.	Located in the New England renewable energy zone (REZ), the Project supports coal plant retirements by leveraging existing infrastructure, renewable resources, and a skilled workforce. The Project would enable reliable storage of clean energy for the NEM and connect to existing infrastructure identified for priority upgrade. With an anticipated capital investment value of \$375 million and the potential to create up to 80 full time equivalent (FTE) jobs during construction, and up to 3 FTE jobs during operations, the Project would contribute to the targeted investment under the EII Act and the Roadmap.
Climate Change Policy Framework	The NSW Climate Change Policy Framework was introduced in 2016, with an aspirational long-term objective of achieving net zero emissions by 2050. The NSW Renewable Energy Action Plan was also introduced in 2016, and the Project is consistent with the three goals of the plan which are: • attract renewable energy investment and projects • build community support for renewable energy • attract and grow expertise in renewable energy	The Project would enhance renewable energy reliability through energy storage and dispatch to the domestic market and allow for renewable energy to be supplied during peak periods of electricity use within Australia, which often fall in the evening period when renewable energy like solar is not available. The Project is also consistent with the current goals and targets for renewable energy in NSW. These include: • Contribute to growing the economy, creating jobs and reducing emission over the next decade in line with the Government's Net Zero Plan Stage 1: 2020–2030 grow the economy, create jobs and reduce emissions between 2020–2030. • Contribute to the national RET [i.e., 20% renewable energy supply] by promoting energy security through a more diverse energy mix, reducing coal dependence, increasing energy efficiency and moving to lower emission energy sources. • Contribute to achieving the NSW target of zero net emissions by 2050. • Be consistent with the NSW Electricity Strategy, that outlines the NSW Governments plan for reliable, affordable and sustainable electricity.
A 20-year Economic Vision for Regional NSW	A 20-year Economic Vision for Regional NSW (Department of Regional NSW, 2021) highlights how renewable energy development is crucial for diversifying local economies and creating new jobs in regional NSW. The vision recognises renewable energy as an industry that is driving the economic future of NSW, and that development of REZs would capitalise on the state's energy resources and further attract renewable energy project development.	The Project facilitates energy storage and firming capacity, and enhances grid stability, integrating renewable energy within the New England REZ, it would contribute to achieving the goals of the 20-year vision.

Plans and policies	Description	Project's alignment
Contributing to the National Electricity Market	The NEM is the largest national grid, covering much of the populated area of the south and east of Australia, extending from Port Douglas in Queensland to Port Lincoln in South Australia, and across to Tasmania (AEMC, 2025). Traditionally, Australian electricity needs have been met using coal-fired generation and some gas peaking power plants. In 2023, non-renewable fuels (coal, gas and oil) supplied 65% of the total electricity generated in Australia (DCCEEW, 2023a). While still the dominant source, coal's generation share in the NEM has declined markedly, constituting 68% a decade ago, and a historical peak around 84% in the late 1990s. Due to the scheduled closure of several coal-fired power stations in NSW by 2029, the Australian Energy Market Operator's (AEMO) 2022 Electricity Statement of Opportunity has forecasted shortfalls in electricity generation against the interim reliability measure to deliver sufficient power 99.9994% of the time, between 2025-26 and 2027 onwards. Furthermore, the Energy Security Target Monitor Report – October 2022 (AEMO, 2022) predicts shortfalls based on the NSW EST between 2025 and 2027 and beyond 2030. Risks of shortfalls are further compounded by failure increases of these power stations, decreasing reliability of the power system, and the delayed delivery of new renewable energy projects. The AEMO Integrated Systems Plan is a whole-of-system plan that provides an integrated roadmap for the efficient development of the NEM over the next 20 years and beyond (AEMO, 2024a). The Integrated Systems Plan states that given the imminent retirement of a significant portion of NSW coal fired power generation (the entire NEMs fleet are projected to retire by 2040), and the relative lower capacity factors of wind and solar compared to coal, the NEM must almost triple its capacity to supply energy by 2050 to replace coal-fired power stations (AEMO, 2024a). Firming capacity is forecasted to need to be quadrupled by 2050.	The Project would connect to the existing Transgrid Armidale Substation and would help meet firming capacity demands for the NEM. Therefore, the Project would augment the security and reliability of the electricity system in the NEM, through enabling renewable energy storage and supply, with benefits for peak periods, which typically fall during the evening periods when renewable energy is not as abundant.
Regional and local commitments		
New England North West Regional Plan 2041	The New England North West Regional Plan 2041 (DPE, 2022c) guides land use planning priorities and decision making in the regions for the next two decades. Objective 9 'Lead renewable energy technology and investment' addresses the region's goal in adapting to climate change and resilience to threats from it.	The Project would directly contribute to Objective 9 of the Regional Plan 'Lead renewable energy technology and investment' by: • contributing to the national RET • promoting energy security by enhancing renewable energy reliability through energy storage and dispatch, allowing renewable energy to be supplied during peak periods • taking advantage of the region's transmission infrastructure and exploring its potential to connect with the electricity network • increasing energy efficiency and moving to lower emission energy sources

Plans and policies	Description	Project's alignment
Armidale Regional Local Environmental Plan 2012 (Armidale LEP)	The Project is located within the Armidale Regional LGA and is therefore subject to the relevant provisions of the Armidale Regional LEP. The Armidale Regional LEP aims relevant to the Project include: • to facilitate development for a range of business enterprises and employment opportunities • to ensure that development is sensitive to both the economic and social needs of the community, including the provision of community facilities and land for public purposes, • to ensure that development has regard to the principles of ESD and to areas subject to environmental hazards and development constraints, • to provide for flexibility in applying certain development standards, where compliance with such standards may be unreasonable or unnecessary in the circumstances of a particular development, and there is sufficient justification for varying the standards on environmental planning grounds	Under Clause 2.36(1) of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (NSW) (Transport and Infrastructure SEPP), electricity generating works can be carried out with development consent on land within prescribed rural, industrial, or special use zones. The Project is located on land zoned RU4 - Primary Production Small Lot and SP2 – Infrastructure under the Armidale Regional LEP. The former is a prescribed rural zone, while the latter is an industrial zone, making the Project permissible with consent as per Clause 2.36(1) of the Transport and Infrastructure SEPP. In addition, Clause 2.35 of the Transport and Infrastructure SEPP defines the Project as 'electricity storage', which includes both electricity generation and electricity storage. Since the Project falls within the criteria of Clause 2.36(1)(b), it is permissible with consent on land within the RU4 and SP2 zones, as it is classified as a prescribed rural zone under the Transport and Infrastructure SEPP.
Advancing our region: Your Community Plan 2025-2034	The Advancing our region: Your Community Plan 2025-2034 (ARC, 2025) aims to clearly identify the community's main priorities and future aspirations, and the strategies required to achieve them. Renewable energy has been identified as a key opportunity for the Armidale region, with the ability to attract investment, create jobs, and improve the quality of life for all residents.	The Project would be consistent with the following strategic directions outlined in the plan: • Future Region (i.e. Goal 2: A clean, green, and responsible region): with respect to facilitating energy storage and dispatch, and integrating renewable energy within the New England REZ • Liveable Region (i.e. Goal 2: Proactive, responsible, and innovative regional planning that grows us sustainably): with respect to: ◦ enabling economic development to be supported by new initiatives, innovation and support for the agricultural sector. ◦ demonstrating that ARC has the strategic capacity to understand key issues for the region both currently and into the future.

2.2. Site setting and features

2.2.1. Site context

The Project is located in the Armidale Regional LGA, approximately 6 km south-east of Armidale, approximately 370 km north of Sydney, and 125 km west of Nambucca Heads. It is connected by three major roads being Waterfall Way / Grafton Road, the New England Highway, and the Pacific Highway.

The Armidale Regional LGA covers an area of approximately 8,621 km² and is bounded by:

- Glen Innes LGA to the north
- Uralla and Walcha LGAs to the south
- Kempsey and Bellingen LGAs to the east
- Inverell LGA to the west

The Project sits within the Armidale Local Aboriginal Land Council and the traditional custodians of the land are the Anaiwan people (State Library NSW, 2020).

In the 2021 Census, the Armidale Regional LGA had a population of 29,124, of which 2,205 or 7.6% identified as Aboriginal and/or Torres Strait Islander (ABS, 2022).

Key land uses within Armidale include agriculture, mining, forestry and tourism, with an abundance of natural resources, historic heritage places and several national parks. The Armidale region is also considered a tertiary education hub with the University of New England a major drawcard for students. Key economic contributors to the Armidale Regional LGA include tourism, and agriculture, forestry and fishing, contributing \$256.3 million and \$464 million to the economy in 2022/23 respectively (ARC, 2024b).

Being situated in the New England REZ, the Armidale region features a growing number of renewable energy projects. The region is expected to continue to grow with the expansion into the emerging renewables industry (ARC, 2024c).

2.2.1.1. Natural features

The Project is within the Macleay River catchment and is characterised by predominantly flat topography, ranging in elevation from approximately 970 metres above sea level (masl) to 1,030 masl. The surrounding land is mostly comprised of grazing modified pastures, as well as cropping and grazing in native vegetated areas.

There are a number of watercourses nearby the Project; however, none located within the Study Area, with the closest being Commissioner Waters approximately 1.4 km to the east. There are several man-made dams within and surrounding the Study Area.

National parks nearby to the Project include the Oxley Wild Rivers National Park, approximately 10 km to the south-east, and the Cathedral Rock National Park and New England National Park found approximately 40 km and 60 km to the east.

2.2.1.2. Built features

The Project is surrounded by major transport corridors including:

- the New England Highway to the west, which runs north to south connecting Newcastle to Queensland via Tamworth
- Waterfall Way / Grafton Road immediately north of the Project, running from west to east, connecting Armidale to the coastline nearby to Coffs Harbour
- the Oxley Highway to the south, running west to east, connecting Armidale to the coastline at Port Macquarie

Armidale Regional Airport is located approximately 8.5 km to the west. The closest built public features are found in the Armidale central business district. There are no gas, water or utilities within the Study Area; however, several transmission lines (66 kilovolt [kV], 132kV and 330kV) occur within the Study Area, running from / toward the Armidale Substation.

There are several other SSD energy projects found in proximity and within the broader region, that are either proposed, in construction or are operational. These include solar farms, wind farms and BESS. Further detail is provided in Section 2.4 and Section 6.11.

2.2.2. Study Area land use and ownership

The land use zone for the Study Area is RU4 – Primary Production Small Lots and SP2 – Infrastructure, except for the Armidale Substation. Current uses within the Study Area are generally for agricultural purposes (i.e. dryland grazing). Land use surrounding the Study Area consists of rural residential land to the south and west, and more intensive agricultural activities (e.g. cropping) located closer to watercourses in the north-east.

Surrounding the Study Area, there are several single-lane local roads extending into driveways for private properties, with the closest public local roads being Castledoye Road to the south and Eathorpe Road to the east. It is anticipated that Site access would be via an ARC-owned easement off Eathorpe Road, subject to final design and consultation with ARC.

Crown land located in the Study Area of the Project and with potential to be impacted is located across Lot 1 of DP1013556 and between Lots 847 and 848 of DP755808. In addition, Crown land is mapped at the intersection of Eathorpe Road and Waterfall Way / Grafton Road.

There are 109 private residences within 2 km of the Project, of which one is associated with the Project (Figure 2.1).

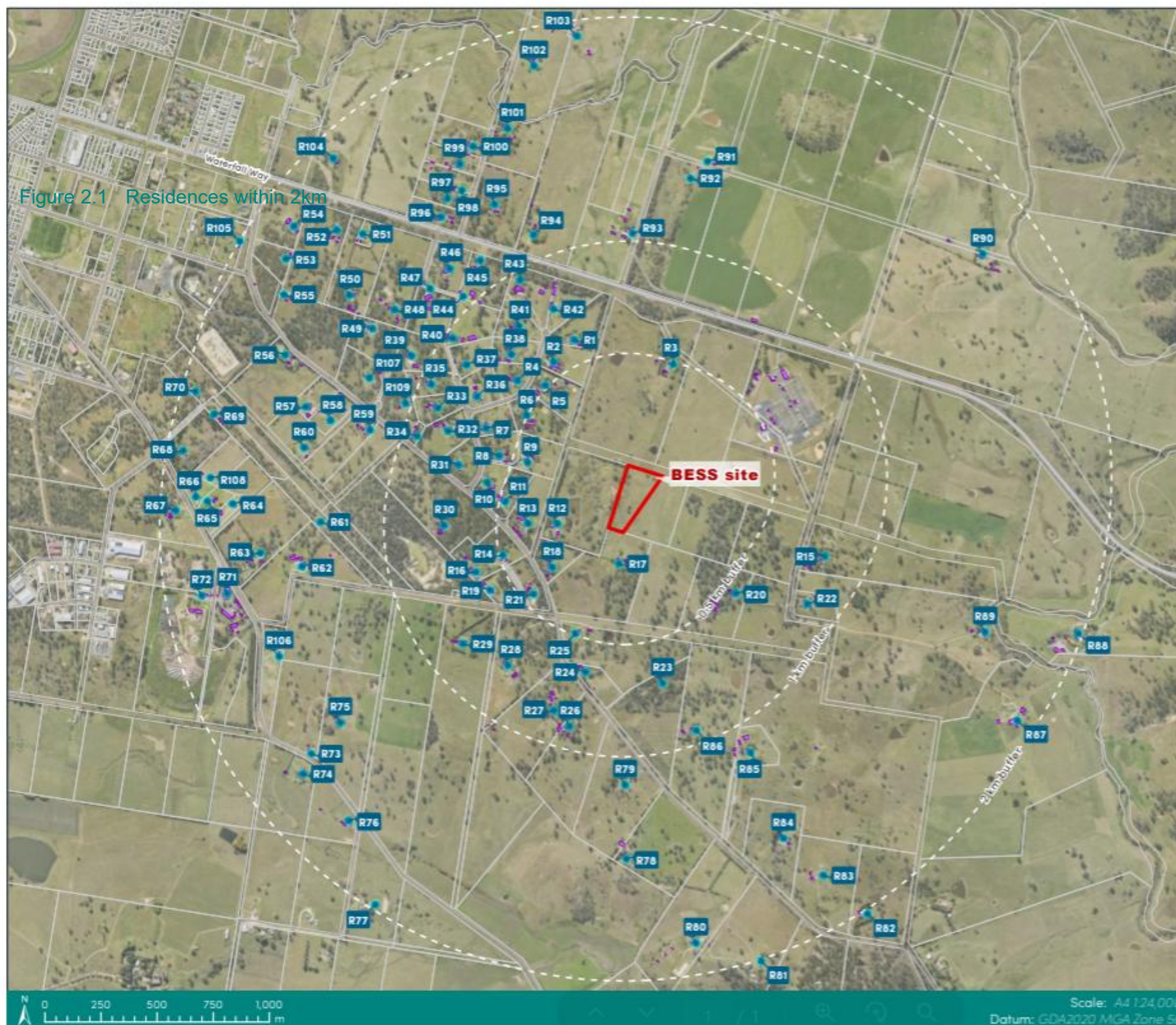
HOLLOWAY BESS

Residences within 2km of the Project

Figure 2.1

LEGEND

- Primary roads
- Arterial roads
- Local roads
- BESS site (3.38 ha)
- Lot and DP boundaries
- Building footprints
- Sensitive receivers within 2km of the project



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Figure print date: 18/08/2025	Author: Marc Dougherty

2.3. Agreements with other parties

2.3.1. Landowner agreement

Prior to commencement of construction of the Project, SynCo Global would take control of the land required for the Project, likely under a lease agreement and possibly combined with freehold purchase. Landowner agreements would be finalised during the EIS phase.

2.3.2. Other agreements

SynCo Global is considering the development of a community benefit sharing program as part of their voluntary planning agreement (VPA) to help ensure long-term financial support for the life of the Project. The VPA would be developed in accordance with the Benefit Sharing Guideline (DPHI, 2024e) and ARC's Renewable Energy Community Benefit Framework (ARC, 2024a).

ARC has indicated an expectation the Project would align with its Renewable Energy Community Benefit Framework.

Discussions with ARC have commenced and draft terms would be the subject of further consultation during development of the EIS.

Neighbour agreements may also be offered to eligible surrounding landholders based on the proximity of neighbours to the Project as well outcomes of the relevant specialist impact assessments.

2.4. Project justification

2.4.1. Project benefits

Socio-economic benefits of the Project would accrue through:

- assisting to decrease the cost of electricity over the mid to long term through enabling the secure and reliable supply of renewable energy
- supporting the transition towards renewable energy and the planned closure of coal-fired power stations in NSW
- helping to solidify Armidale's role in the New England REZ
- a reduction in GHG emission contributing to Net Zero policies and commitments
- providing diversification of land use and additional income streams within the rural economy
- providing employment and economic stimulus, primarily through the construction phase
- providing ongoing community benefits to spread the economic benefits of the Project beyond construction and through to the operational phase

Projects rooted in renewable energy help rural and regional areas to capitalise on the valuable natural resource base and provide a means for diversifying regional economies. Renewable projects such as BESS can be developed to have a minor and largely reversible impact on the agricultural capacity of the sites they occupy, while providing an additional income stream to associated landholders.

During construction, up to approximately 80 FTE jobs would be created along with up to 3 FTE jobs during operation, as well as ad-hoc works, as required. Due to this influx of workers, the Project would generate economic stimulus in the Armidale region, and surrounding areas including Uralla, Guyra, Walcha and Tamworth, with benefits potentially beyond these areas. These areas would provide accommodation, food, fuel and trade equipment and services, mostly during the construction phase. During operation of the BESS, economic benefits would include services relating to monitoring and inspections, maintenance, repair and upgrade of infrastructure, much of which is likely to be provided by local labour force.

The economic benefits of the Project would be realised by the host landholders, neighbours, surrounding community and broader region via:

- lease and option deed with the host landowner
- neighbour agreements
- a VPA in negotiation with ARC

The Australian Energy Market Commission's (AEMC) recent analysis indicated that renewable energy projects are also likely to put downward pressure on wholesale electricity prices, which has the potential to reduce electricity bills for households and businesses across NSW (AEMO, 2024b). The Project is a utility and grid scale renewable energy storage project and would contribute to lowering electricity prices for consumers.

2.4.2. Site suitability

SynCo Global has undertaken extensive research and analysis to identify the potential and actual constraints and opportunities for possible development sites across NSW. The Study Area is considered appropriate as:

- The Project is located within a REZ specifically created to foster and encourage the establishment of renewable energy projects. The Project would help to fulfil and achieve the targets of the legislation, policies and guidelines as outlined in Section 2.1 to 2.2.
- The land suitability of the Study Area, including:
 - Access to existing infrastructure, with the BESS site located in close proximity to:
 - the existing Armidale Substation and associated ancillary electrical infrastructure, making it ideal with regards to minimising disruption, construction, social and environmental impacts when compared to a site with a longer distance to the grid connection point
 - Waterfall Way / Grafton Road, providing ease of access to the wider road network, with limited local disruptions
 - No major environmental constraints, noting the BESS site is:
 - generally flat to gently sloping land
 - largely bare of native vegetation
 - no major or minor watercourses
 - no known Aboriginal or historic heritage items
 - is not located in flood prone or bushfire prone land (BPL); however, it is understood new BPL mapping is to be released in the near future, which will include the BESS site as BPL
 - Further discussion of environmental matters is provided in Section 6
- The Project provides a viable, economical use of the land, with the BESS site currently unoccupied.
- SynCo Global has entered into a long-term lease agreement for the Project, which would provide economic benefits to the landowner.

3. The Project

3.1. Project areas

For the purposes of defining the Project area, two areas are defined in the Scoping Report. These being

- Study Area: Defined as the area of land corresponding to property boundaries on which the Project is located, as summarised in Table 1.1. The Study Area is approximately 57.01 ha.
- Development footprint: Defined as the area of land to be directly impacted during construction and/or operation of the Project, and located within the Study Area (Figure 3.1). The development footprint associated with the Project is indicatively 8.16 ha, with the development footprint for each of the Project aspects being:
 - BESS site: Approximately 3.38 ha.
 - Site access from Eathorpe Road: Up to 1.20 ha (i.e. approximately 800 m long, with a width up to approximately 15 m).
 - Transmission easement corridor: Up to 2.13 ha (i.e. approximately 850 m long, with a width up to approximately 25 m).
 - Eathorpe Road upgrade works (including the intersection with Waterfall Way / Grafton Road): Up to 1.45 ha (i.e. approximately 725 m long, with a width up to 20 m).

However, the development footprint for all aspects, excluding the BESS site, have not been determined at this stage. In particular, the Eathorpe Road upgrade works (including the intersection with Waterfall Way / Grafton Road) are subject to assessment under separate SSD development applications associated with:

- Armidale BESS Project: Located on Lot 737 of DP755808 located directly east of the Armidale Substation, proposed by the Maoneng Group.
- Kooyong BESS Project: Located on Lot 842 of DP755808 directly adjacent to the Project to the east, and proposed by Edify Energy.

The Study Area is larger than the actual development footprint, as it allows for the determination of Disturbance Footprint of the Site access from Eathorpe Road, transmission easement corridor, and Eathorpe Road upgrade works (including the intersection with Waterfall Way / Grafton Road) during the preparation of the EIS.

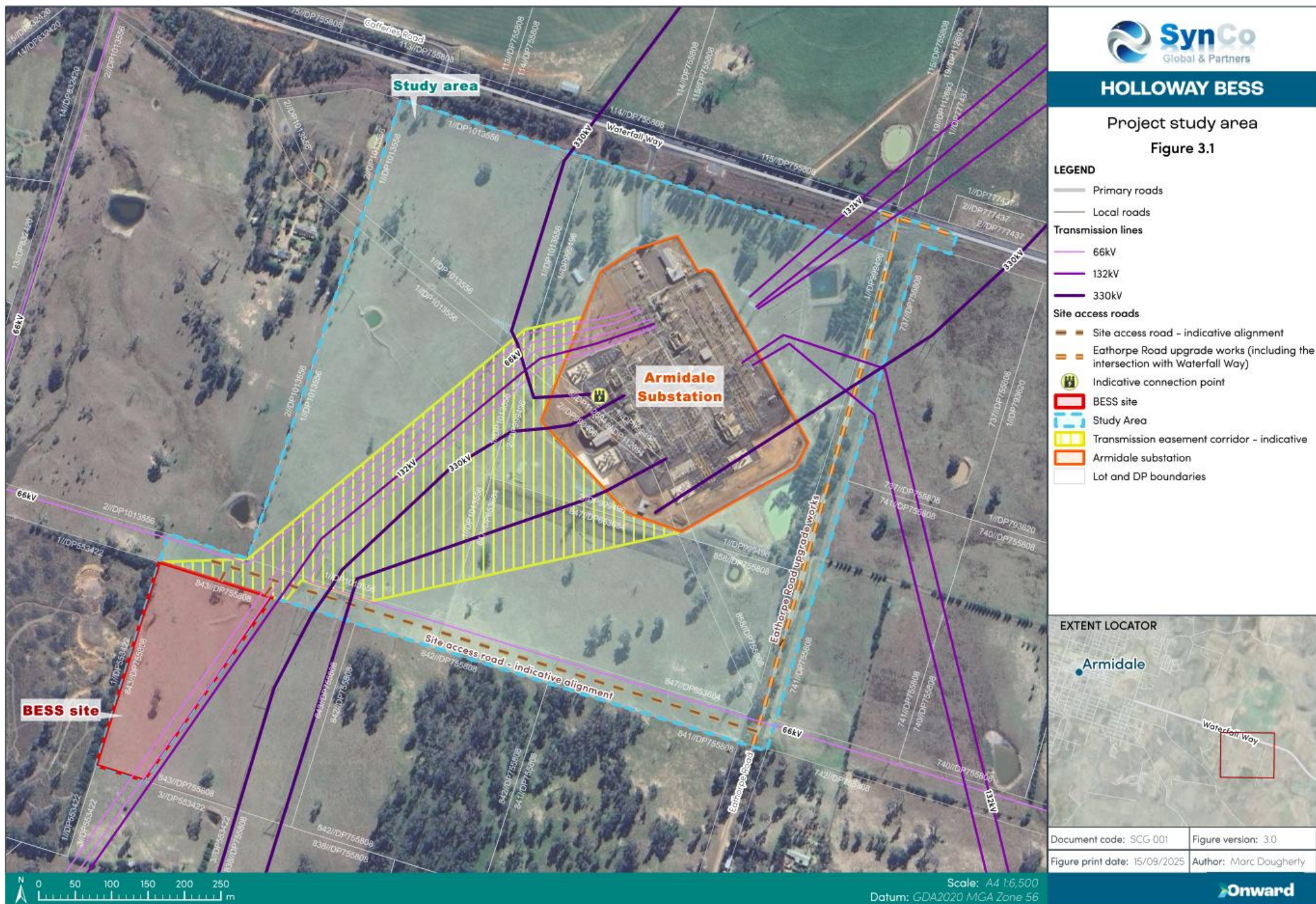
The Disturbance Footprint for these aspects would be evaluated and determined:

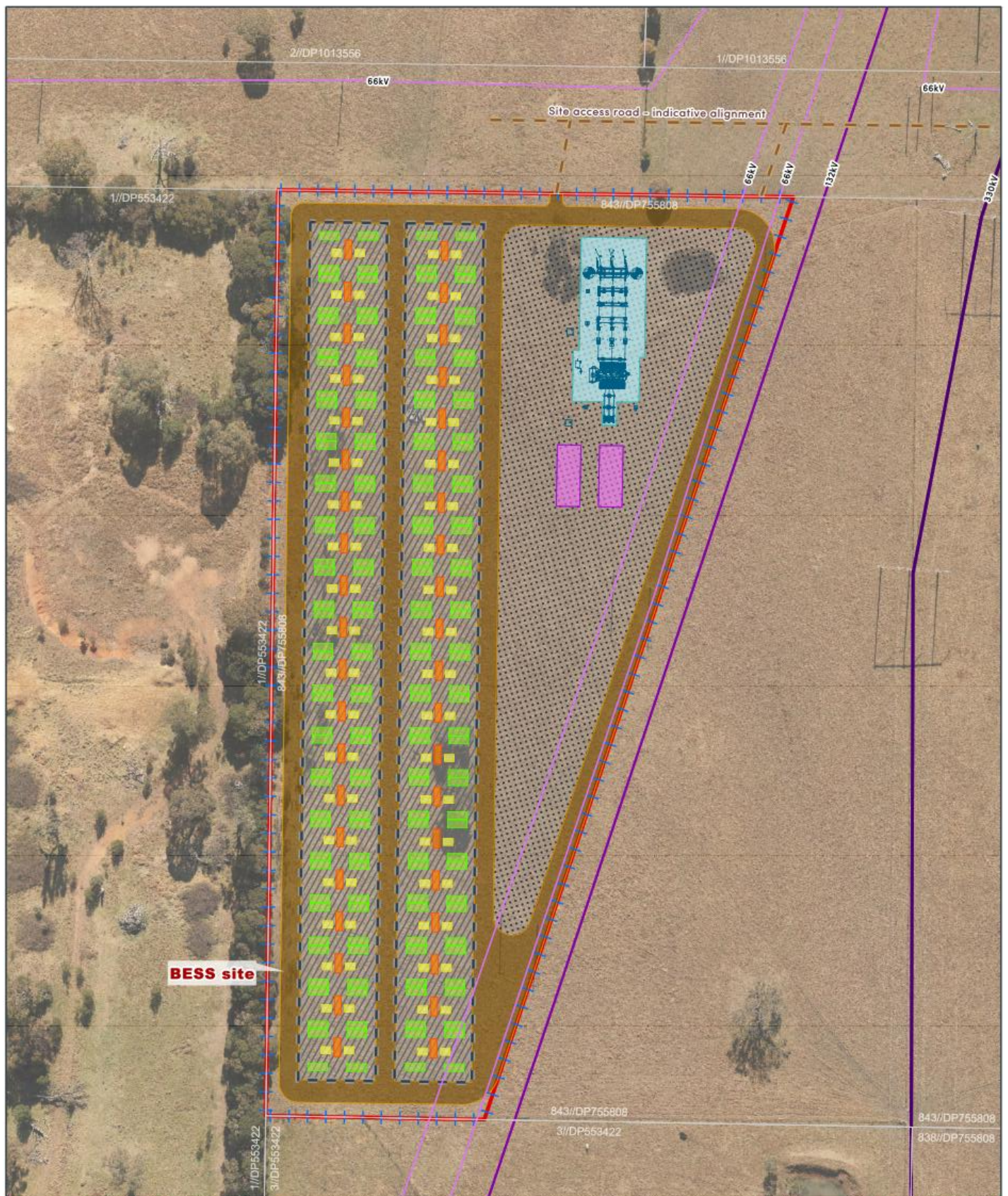
- during preparation of technical studies for the EIS (e.g. biodiversity development assessment report [BDAR], Aboriginal Cultural Heritage Assessment Report [ACHAR], traffic impact assessment [TIA].)
- in consultation with relevant stakeholders such as Transgrid, ARC, and Transport for New South Wales (TfNSW)

3.2. Indicative Project design

The Project would have a capacity up to 250 MW / 1,000 MWh (4 hour duration), with key elements including:

- BESS site (Section 3.2.1), with an overview of the current design of BESS infrastructure shown on Figure 3.2
- Transmission easement corridor (Section 3.2.2)
- Site access from Eathorpe Road (Section 3.2.3)
- Eathorpe Road upgrade (including the intersection with Waterfall Way / Grafton Road) (Section 3.2.4)





LEGEND

 BESS site

 Lot and DP boundaries

Electricity Transmission Lines

— 66kV

— 132kV

— 330kV

BESS elements

 Batteries in 20ft containers

 Internal access roads

 Main transformer

 Harmonic filter

 Medium voltage skids

 Inverters

 Power equipment zone

 BOM

— Site access road - indicative alignment

— Noise barrier wall

| Security fence



HOLLOWAY BESS

Indicative site layout

Figure 3.2

3.2.1. BESS site

The BESS site would include:

- lithium-ion battery units housed in containers, including invertors and transformers
- harmonic filters
- step up transformer
- electrical reticulation network
- 330/33 kV substation
- permanent infrastructure, including site office and maintenance building (including amenities), car parking, water tanks, fire-fighting equipment, internal access roads, perimeter security fencing, noise barrier walls, security and communications systems, and other infrastructure
- sealed internal access roads aligned with consideration of hazard and risk requirements, and to reduce impacts to biodiversity (where practicable)
- temporary construction facilities
- landscaping, including vegetative screening, subject to final visual impact assessment outcomes

3.2.2. Transmission easement corridor

The Project would involve connection to Transgrid's Armidale Substation, located approximately 650 m to the north-east of the BESS site, with connection via an underground or overhead transmission line from the Project substation.

The alignment and area impacted by the connection to Armidale Substation would be determined in consultation with Transgrid and assessed during the EIS (Figure 3.1).

3.2.3. Site access from Eathorpe Road

Site access during construction and operation of the Project is proposed via an ARC-owned easement off Eathorpe Road, which connects to Waterfall Way / Grafton Road and leads to the New England Highway west of the Study Area. The indicative alignment of the Site access from Eathorpe Road is shown on Figure 3.1.

Site access would be considered in specialist studies during the EIS, including transport, noise, and biodiversity, and in consultation with relevant road authorities (i.e. ARC and TfNSW).

3.2.4. Eathorpe Road upgrade, including Waterfall Way / Grafton Road intersection

Construction and operational access to the Site access for the Project proposes to utilise the existing road infrastructure including Waterfall Way / Grafton Road and Eathorpe Road.

It is noted potential upgrade works to Eathorpe Road and the intersection with Waterfall Way / Grafton Road are subject to assessment under separate SSD development applications described in Section 3.1.

However, to account for the potential that these projects do not proceed, the need for these upgrade works would be investigated as part of the EIS, and in consultation with relevant stakeholders such as ARC and TfNSW.

3.3. Staging

3.3.1. Construction

3.3.1.1. Construction hours and workforce

The construction phase of the Project is expected to take approximately 12 to 18 months and would be undertaken during standard construction hours:

- Monday to Friday: 7am to 6pm
- Saturdays: 8am to 1pm
- Sundays and public holidays: No works

Any construction or commissioning activities outside of these standard working hours would require approval from relevant authorities. Any affected local residences would be informed of the timing and duration of the proposed activities, prior to the commencement of any works.

During the peak construction period, a workforce of up to approximately 80 FTE personnel would be required onsite. Construction workforce accommodation would be assessed in the EIS, and a strategy developed in consultation with relevant stakeholders, including ARC.

3.3.1.2. Construction station

Construction would generally involve the following activities:

- Stage 1 – Site establishment, including:
 - installation of a site office and amenities, which would likely be constructed off-site and transported in modulated sections
 - groundcover clearing
 - cut/fill leveling works required due to the topography of the BESS site
 - site drainage works
 - construction of hardstand areas
 - site access construction from Eathorpe Road
 - civil works
- Stage 2 – Delivery of BESS infrastructure
- Stage 3 – Primary construction works, including installation of:
 - BESS infrastructure (i.e. BESS containers [including invertors and transformers], harmonic filters, step-up transformer, substation)
 - electrical and control cabling, including:
 - high voltage electrical equipment such as circuit breakers, switching equipment, auxiliary power equipment and control system
 - earthing system
 - lighting
 - permanent infrastructure, including site office and maintenance building (including amenities), car parking, water tanks, fire-fighting equipment, internal access roads, perimeter security fencing, noise barrier walls, security and communications systems, and other infrastructure
 - landscaping, including vegetative screening, subject to final visual impact outcomes
- Stage 3 – Commissioning and testing works

3.3.1.3. Temporary facilities

Temporary facilities required during construction would include:

- hardstands
- laydown areas
- site compound
- temporary site office, that may be formalised as operations site offices
- stockpiles

3.3.1.4. Plant and equipment

The following typical equipment would be used throughout the construction of the Project. Further details and quantities of this equipment would be provided in the EIS:

- excavators
- mobile cranes
- graders
- telehandlers
- forklifts
- drum / padfoot rollers
- wheeled loader
- dump truck
- trencher
- water truck
- hand tools

3.3.2. Operation

The operational life of the Project is expected to be 30 years; however, this would be dependent on the nature of battery technology and energy markets. It is envisaged that some individual components, such as battery modules and inverter units, may need to be replaced before the end of this term due to unforeseen faults or general wear and tear.

The operational hours for the Project would be 24 hours, 7 days a week. The primary activities conducted on site would include routine operations, maintenance of infrastructure, and general site maintenance and security. Operation of the Project would also likely be supported by local contractors for tasks such as repairs, minor works, weed/vegetation management, fencing, and cleaning.

It is anticipated that the Project would require up to three FTE jobs during operation which would be required on an intermittent basis. The Project would typically be managed remotely and staffed as required during both planned and unplanned maintenance periods.

3.3.3. Decommissioning

At the end of the operational life of the Project, all infrastructure would be removed from site, including buried infrastructure, and the land rehabilitated to a safe, stable and non-polluting state. It is anticipated that the pre-existing land use would be re-established at the time of decommissioning, unless otherwise agreed with the landowner and/or regulatory authorities. As far as possible, efforts would be made to recycle Project infrastructure to reduce wastes disposed to landfill.

The Project may also be upgraded with new battery technology and the life extended. This would be subject to relevant approvals, landowner agreements and consultation with relevant stakeholders.

3.4. Capital investment value

The estimated development cost (EDC) of the Project would be more than \$30 million. The final EDC figure would be subject to a detailed EDC report and would be provided with the EIS.

3.5. Analysis of alternatives

Several alternative development options have been considered and are summarised in Table 3.1.

Table 3.1 Alternative development options

Alternative option	Description
Option 1 – Do nothing	While the ‘do nothing’ option would avoid any potential impacts associated with the Project; the potential for the Project to have significant negative impacts is considered low, particularly in comparison to the benefits of the Project, being an energy storage solution that would: • enhance grid reliability and stability • contribute to ESD by: ◦ supporting renewable energy integration and further assists the Australian and NSW Governments in reaching their targets ◦ reducing GHG emissions by supporting the transition away from fossil fuel-based power generation. • reduce pressure on existing infrastructure, particularly during peak periods • provide direct and indirect employment opportunities
Option 2 – Larger project	The Project originally targeted a capacity up to 500 MW / 1,000 MWh (2-hour duration); however, this option was not progressed due to preliminary assessment indicating unacceptable noise impacts on nearby sensitive receivers.
Option 3 – Alternative technology	At this stage, lithium-ion technology is the preferred electrical storage technology because it is cost-effective and a proven technology which is readily available for broad scale deployment at the site. At this stage there are no notable battery technologies competing with Lithium-ion for this scale of development. However storage technology would be investigated during the EIS and alternatives may be considered. Lithium-ion batteries are suitable for the size of the BESS site, which consume a much smaller footprint (per MWh) than other forms of renewable energy technology. For example, use of solar technology would involve larger areas of land clearing and consequently increase the scale of biodiversity and other environmental impacts. In addition, a solar farm at the BESS site would introduce greater amenity impacts associated with visual and glare impacts. In comparison, the Project would efficiently utilise the Site and have a larger positive impact on the electricity grid when compared with alternative technologies.
Option 4 – Alternative site locations	Alternative site locations were rejected due to the benefits offered by the location of the proposed Project, as described in Section 2.4.2.
Option 5 – Project at the proposed site (i.e. the Preferred Option)	The Project as described in Sections 3.1 to 3.3, with alignment with policy and strategic goals provided at Section 2.1 and justification provided at Section 2.4.

4. Statutory context

This section outlines the key statutory requirements for the Project under the EP&A Act and other relevant NSW and Commonwealth legislation. It describes the power to grant approval, permissibility, any post approvals required under relevant Acts. Detailed consideration of relevant statutory requirements would be provided in the EIS.

4.1. Power to grant consent

Approval for the Project would be sought under Part 4, Division 4.7 of the EP&A Act, which outlines the approval pathway for development deemed to be SSD. Section 4.36(2) of the EP&A Act states:

‘(2) A State environmental planning policy may declare any development, or any class or description of development to be State significant development.’

The Planning Systems SEPP identifies development that is SSD. Section 2.6(1) of the Planning Systems SEPP states:

‘(a) the development on land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and (b) the development is specified in Schedule 1 or 2...’

Section 20 of Schedule 1 of the Planning Systems SEPP states that the following is considered SSD:

‘Development for the purpose of electricity generating works or heat or their co-generation (using any energy source, including gas, coal, biofuel, distillate, waste, hydro, wave, solar or wind power) that:

- (a) has a capital investment value of more than \$30 million, or
- (b) has a capital investment value of more than \$10 million and is located in an environmentally sensitive area of State significance.’

The Project would have a capital investment cost estimate greater than \$30 million and is therefore classified as SSD under Division 4.7 of the EP&A Act. Under Section 4.12 of the EP&A Act a development application (DA) for SSD is to be accompanied by an EIS.

The Minister for Planning and Public Spaces is the consent authority for SSD, and SSD applications are assessed by the DPHI unless specific conditions occur whereby the Independent Planning Commission (IPC) would be the consent authority. The IPC becomes the consent authority when certain conditions are met, as outlined in Clause 2.7 of the Planning Systems SEPP. These conditions include:

- the local council objects to the development under the mandatory community participation requirements in Schedule 1 of the EP&A Act
- at least 50 submissions (other than from the council) object to the development under the mandatory community participation requirements in Schedule 1 of the EP&A Act
- the development application involves a person who has disclosed a reportable political donation under Section 10.4 of the EP&A Act in connection with the development application

4.2. Permissibility

The permissibility of the Project is determined by the Transport and Infrastructure SEPP. Under Clause 2.36(1) of the Transport and Infrastructure SEPP, electricity generating works can be carried out with development consent on land within prescribed rural, industrial, or special use zones. The Project is located on land zoned RU4 – Primary Production Small Lot and SP2 – Infrastructure under the Armidale Regional LEP. The former is a prescribed rural zone, while the latter is an industrial zone, making the Project permissible with consent as per Clause 2.36(1) of the Transport and Infrastructure SEPP.

In addition, Clause 2.35 of the Transport and Infrastructure SEPP defines the Project as ‘electricity storage’, which includes both electricity generation and electricity storage. Since the Project falls within the criteria of Clause 2.36(1)(b), it is permissible with consent on land within the RU4 and SP2 zones, as it is classified as a prescribed rural zone under the Transport and Infrastructure SEPP.

4.3. Other approvals

Consideration of other NSW and Commonwealth approvals required for the Project are detailed in Table 4.1.

Table 4.1 Other approvals consistent with the Project

Approval	Requirement
Sections 4.41¹ and 4.42² of the EP&A Act	
<i>Fisheries Management Act 1994</i> (NSW) (FM Act)	The Project would not require a dredging or reclamation work permit, a marine vegetation regulation of harm permit, or a passage of fish not to be blocked permit. No watercourse crossings or controlled activities on waterfront land are expected to be required for the Project.
<i>Heritage Act 1977</i> (NSW) (Heritage Act)	An approval under Part 4, or an excavation permit under Section 139, of the Heritage Act would not be required pursuant to Section 4.41 of the EP&A Act. There are no listed heritage items potentially impacted by the Project.
<i>National Parks and Wildlife Act 1974</i> (NSW) (NPW Act)	An Aboriginal heritage impact permit under section 90 of the NPWS Act 1974 is not required for SSD Projects. A search undertaken on 15 August of the Aboriginal Heritage Information Management System (AHIMS) web service identified 5 sites within 1 km of the Study Area; however, no sites are located within the Study Area. An ACHAR would be prepared as part of the EIS and would include consultation with registered Aboriginal parties (RAP).
<i>Rural Fires Act 1997</i> (NSW)	A bushfire safety authority under Section 100B would not be required for the Project. A bushfire assessment would be carried out for the Project in accordance with Planning for Bushfire Protection (RFS, 2019).
<i>Water Management Act 2000</i> (NSW) (WM Act)	A water use approval under section 89, a water management work approval under section 90, or an activity approval under section 91 of the WM Act would not be required for the Project. No construction work within or near watercourses would be required as part of the Project. For water use during construction of the Project, a water access license (WAL) may be required. This requirement would be investigated and assessed in the EIS.
<i>Roads Act 1993</i> (NSW) (Roads Act)	Consent under section 138 of the Roads Act for road upgrades to the public road network.

Approval	Requirement
<i>Protection of the Environment Operations Act 1997 (NSW) (POEO Act)</i>	Scheduled activities listed in Schedule 1 of the POEO Act require an environment protection license (EPL). Clause 17(2) of Schedule 1 declares activities referred to in Column 1 of the table at that clause to be a scheduled activity if it meets the criteria set out in Column 2 of the table. The table referred to in Schedule 1, Clause 17(2) specifies 'general electricity works' with capacity to generate more than 30 MW of electrical power'. The Project would have a capacity that is greater than 30 MW; therefore, an EPL would be required.
<i>Conveyancing Act 1919 (NSW) (Conveyancing Act)</i>	As the Project would require either lease agreements with affected landowners or the purchase of land in accordance with Part 8 and Part 4 of the Conveyancing Act, respectively. If easement agreements are to be required for access to the site upon finalisation of the Project layout, Part 6 Division 4 of the Act would be applicable.
Other NSW approvals	
<i>Biodiversity Conservation Act 2016 (NSW) (BC Act)</i>	A BDAR would be prepared for the EIS to determine the management practices and measures to be employed for the protection of biodiversity at the site. Assessment of the biodiversity offsets required as per the Biodiversity Offset Scheme (BOS) would be undertaken due to the SSD nature of the Project and as per Part 7, Division 4, Section 7.14 of the BC Act.
Commonwealth approvals	
<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)</i>	Approval from the Minister is required for any proposed action that will, or is likely to, have a significant impact on one or more MNES. Preliminary biodiversity investigations have not identified any MNES within the Project Study Area. As such, at this stage a referral under the EPBC Act has been determined to not be required
<i>Native Title Act 1993 (NT Act)</i>	Section 13 of the NT Act states that an individual can apply to the federal court for a determination regarding Native Title. The Study Area would be investigated for the potential for Native Title in the EIS, however, current investigations using the Native Title Vision tool (NNTT, 2025) have indicated there are no current Native Title claims over the site.

1. Authorisations are not required for SSD that is authorised by a development consent granted.
2. An authorisation cannot be refused if it is necessary for carrying out an approved SSD and is to be substantially consistent with the development consent.

4.4. Pre-conditions to exercising the power to grant consent

There are several pre-conditions that must be met by the Project for the Minister to exercise the power to grant consent. These are summarised in Table 4.2.

Table 4.2 Applicable pre-conditions to granting development consent

Statutory reference	Requirement
Environmental Planning and Assessment Regulation 2021 (NSW)	
Section 28(2)	A DA that is accompanied by a BDAR under the BC Act must contain the 'biodiversity credits information'. The DA for the Project would be accompanied by a BDAR, including the required biodiversity credit information, and the EIS would include the biodiversity assessment required by the SEARs.
BC Act	
Section 7.9	A DA for SSD is to be accompanied by a BDAR (unless the Planning Agency Head and the Environment Agency Head determine that the proposed development is not likely to have any significant impact on biodiversity values) and the EIS is to include the biodiversity assessment required by the environmental assessment requirements of the Planning Agency Head under the EP&A Act. The DA for the Project would be accompanied by a BDAR, including biodiversity credit information) and the EIS would include the biodiversity assessment required by the SEARs.

Statutory reference	Requirement
Transport and Infrastructure SEPP	
Section 2.48	Section 2.48 of the Transport and Infrastructure SEPP requires written notice to be given of a project located near electrical infrastructure to the electricity supply authority inviting comments about potential safety risks and take into consideration any response to the notice received in 21 days after the notice is given. The Project would be situated adjacent to existing transmission lines and involves connection to the Armidale Substation. Consultation with the electricity authority would be undertaken in preparation of the EIS.

4.5. Mandatory matters for consideration

When deciding whether to grant consent for the Project, the consent authority is required to consider a range of mandatory matters, as identified in Table 4.3. The EIS would explore how the Project is consistent with these requirements.

Table 4.3 Mandatory planning considerations

Statutory reference	Mandatory consideration
Considerations under the EP&A Act	
Section 1.3 – Objects of the Act	The Objects of the EP&A Act are: - to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources - to facilitate ESD by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment - to promote the orderly and economic use and development of land - to promote the delivery and maintenance of affordable housing - to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats - to the sustainable management of built and cultural heritage (including Aboriginal cultural heritage) - to promote good design and amenity of the built environment - to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants - to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State - to provide increased opportunity for community participation in environmental planning and assessment The EIS would consider and confirm the Project's concurrence with the Objects of the EP&A Act.
Section 4.15	The consent authority is required to take the following matters into consideration in determining a development application: - relevant environmental planning instruments (EPI) including: - State Environmental Planning Policy (Resilience and Hazards) 2021 (Hazards SEPP) - State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP) - Transport and Infrastructure SEPP - Armidale Regional LEP - the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality - the suitability of the site for the development - any submissions made in accordance with this Act or the regulations - the public interest

Statutory reference	Mandatory consideration
	The EIS would address each evaluation matter and provide relevant detail in relation to how the Project is consistent with each.
Considerations under the other legislation	
BC Act	Section 7.16 of the BC Act (serious and irreversible impacts on biodiversity values) would be considered in the BDAR and EIS.
Considerations under relevant EPIs	
Resilience and Hazards SEPP	The Resilience and Hazards SEPP assesses the potential hazards associated with the proposed development by providing definitions and guidelines for hazardous industry, offensive industry, hazardous storage establishments, and offensive storage establishments. In accordance with clause 3.7 of the Resilience and Hazards SEPP, consideration would be given to current circulars or guidelines published by the former Department of Planning (now the DPPI) relating to hazardous or offensive development, including: • Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis (DoP, 2011a) • Hazardous Industry Advisory Paper No. 4, Risk Criteria for Land Use Safety Planning (DoP, 2011d) Under section 4.6 of the Resilience and Hazards SEPP, a consent authority is required to consider whether a development is affected by soil or other contaminants before granting consent. Each of a hazards and contamination assessment would be prepared as part of the EIS.
Biodiversity and Conservation SEPP	Chapter 2 of the Biodiversity and Conservation SEPP provides for the requirements for clearing vegetation in non-rural areas, as the Project is located within a rural area, the clauses in this chapter are not relevant. Chapter 3 and 4 of the Biodiversity and Conservation SEPP aims to conserve and manage areas of natural vegetation that provide suitable habitat for koalas, applicable to land zoned for RU1 Primary Production, RU2 Rural Landscape or RU3 Forestry or land in the designated Koala Management Area (KMA), which for Armidale is the Northern Table KMA. As the Project is zoned as RU4 – Primary Production Small Lots and SP1 – Infrastructure, the clauses set out in Chapter 3 are not applicable. Chapter 4 does apply to the Project as the Project is within the KMA; however, due to the nature of the Project site being cleared and no likely habitat for koalas present, the clauses are not relevant. The BDAR and biodiversity assessment completed for the Project would be provided to confirm this.
Transport and Infrastructure SEPP	Clause 2.42 applies to determination of development applications for solar or wind electricity generating works on certain land. As the Project is not for the purposes of electricity solar or wind electricity generating works, Clause 2.42 of the Transport and Infrastructure SEPP is not applicable to the Project.
Armidale Regional LEP	The EIS would address relevant components of the Armidale Regional LEP, including: • Section 1.2 – Aims of Plan; • Section 2.3 – Zone Objectives and land use table; • Section 5.21 – Flood planning; and • Section 6.1 – Earthworks
Considerations under Development Control Plans (DCP)	
Armidale Regional DCP	In accordance with section 2.10 of the Planning Systems SEPP, DCPs do not apply to SSD and are not a relevant consideration for the Project.

5. Community and stakeholder engagement

5.1. Overview

SynCo Global is committed to informing and engaging with people who may be impacted or interested in the Project, and using their feedback to influence the Project's design, as well as the development of environmental and social mitigations and enhancements.

5.2. Community and stakeholder engagement plan

SynCo Global has prepared a CSEP in accordance with the Undertaking Engagement Guidelines (DPHI, 2024) to guide community engagement and communication activities associated with the development and delivery of the Project.

The CSEP has been prepared in line with standards and industry frameworks for best practice engagement, including the International Association for Public Participation Core Values and the AA1000 Accountability Stakeholder Engagement Standard (2015).

The CSEP details the Project's:

- communication and engagement objectives
- engagement roles and responsibilities of those involved with the Project
- scope, location and negotiables
- known community issues and concerns
- stakeholders and communities
- engagement approach including First Nations engagement
- past, current and future engagement activities
- communication and stakeholder management protocols
- monitoring, reporting and evaluation framework

The objectives of the CSEP are to:

- generate awareness of the Project including its social, economic and environmental benefits
- generate community support for the Project
- build connections with key stakeholders and the broader community
- establish a robust and transparent process to engage with stakeholders and community
- identify and provide engagement opportunities, communication and feedback channels for community to provide input and feedback and get involved
- ensure timely responses are given to Project enquiries and complaints
- identify and implement strategies to address known community issues and concerns about the Project

The CSEP is considered a living document and would be updated as the Project evolves, including in response to community and stakeholder feedback.

A copy of the CSEP is available in Appendix B.

5.3. Engagement carried out

5.3.1. Stakeholder identification

Understanding respective communities and identifying stakeholders is key to designing and delivering effective engagement.

For this Project, a stakeholder was defined as any individual, group of individuals, organisation, or political entity with an interest in the Project. They may be, or perceive that they may be, impacted directly or indirectly by the Project.

Key stakeholder groups identified for this Project include:

- ARC – Councillors and staff
- NSW Government – MPs and agencies
- Federal Government – MPs and agencies
- landowners – associated and non-associated
- residents
- First Nations and Traditional Owners
- business – representative bodies, potential suppliers and individual (if impacted)
- industry – representative bodies
- recreational bodies, members and users
- educational institutions
- community service providers and organisations
- special interest groups e.g. environmental, farmers, clean energy
- media – traditional and digital

Preliminary mapping has shown there are 109 sensitive receivers within 2 km of the Study Area.

5.3.2. Activities

SynCo Global is committed to using a range of offline and digital tools and methods to support communication and engagement activities. Where possible, stakeholder preferences would be accommodated.

A Project website has been created at www.hollowaybessproject.com to provide an online receptacle of Project information and frequently asked questions, as well as how to contact the Project team and subscribe to the Project mailing list.

A community email inbox engagement hollowaybess@synco-global.org and phone number 9056 7494 has also been established.

Other tools and methods that have and would be used throughout engagement for the Project include:

- | | |
|------------------------------------|----------------------|
| • meetings – in person and virtual | • letterbox dropping |
| • community information sessions | • webinars |
| • project newsletters | • presentations |
| • fact sheets | • briefings |
| • letters | • site visits |
| • doorknocking | • interviews |

A summary of community and stakeholder engagement and communication activities completed to date is outlined in Table 5.1.

Table 5.1 Community and stakeholder engagement and communication activities

Date	Activity	Purpose	Stakeholders
6 May 2025	Phone call and email	To provide a status update	Associated landowner
22 May 2025	Phone calls and emails	To request permission to install a noise logger on the property	Non-associated landowners
18 June 2025	Phone call	To answer questions related to construction	Non-associated landowner
25 June 2025	Email	To request a meeting to introduce the Project	ARC
1 July 2025	Project website published	To provide an online repository of Project information and an online feedback form	All
1 July 2025	Project phone line activated	To provide a channel to contact the Project team	All
1 July 2025	Project email inbox activated	To provide a channel to contact the Project team	All
1 July 2025	Virtual meeting	To introduce the Project team, provide an overview of the Project, proposed engagement activities, planning process and proposed assessments to be completed during the EIS	ARC staff
3 July 2025	Doorknocking and letterbox dropping	To introduce the Project, collect contact details, sign-up stakeholders to the Project newsletter, answer questions, invite non-associated landowners to meet with the Project team	Non-associated landowners within 2 km of Project site
3 July 2025	Email	Clarify Project site boundary	Non-associated landowner
4 July 2025	In-person meeting	To listen to feedback and concerns and answer questions	Non-associated landowner
11 July 2025	Call to Project phone line	Enquiry about the planning process and relationship of Project to other projects proposed in the area	Non-associated landowner
17 July 2025	Call to Project phone line	Enquiry about Project location and siting in relation to other projects in the immediate area, request for meeting	Non-associated landowner
29 July 2025	In-person meeting	To introduce new members of the Project team, site walkover	Associated landowner
29 July 2025	In-person meeting	To answer questions and listen to feedback and concerns	Non-associated landowners
29 July 2025	In-person meeting	To view the Site from the perspective of the non-associated landowner	Non-associated landowners
29 July 2025	Email	To share maps showing location of other BESS projects in locality	Non-associated landowner
30 July 2025	In-person meeting	To clarify expectations for community benefit sharing and the VPA	ARC staff

Date	Activity	Purpose	Stakeholders
30 July 2025	Email	To provide an update following discussions with council about Castledoyle Cycleway	Non-associated landowner
30 July 2025	In-person meeting	To follow-up on previous day's discussion to better understand concerns and views, introduce neighbour agreement options	Non-associated landowner
6 August 2025	Phone call	To seek opportunities to collaborate on project development	Other developer
7 August 2025	Email	To seek opportunities to collaborate on project development	Other developer
7 August 2025	Project newsletter	To provide a Project update, including information about upcoming site surveys	Project mailing list
15 August 2025	Email	To request a meeting with DPHI to discuss the project and receive any feedback prior to lodging the Scoping Report	DPHI
15 August 2025	Advertisement in Armidale Express	To call for expressions of interest from RAP to participate in cultural heritage investigations	• First Nations people and groups • RAP
15 August 2025	Letters via email	To call for expressions of interest from RAP to participate in cultural heritage investigations	• Heritage NSW • Armidale Local Aboriginal Land Council • National Native Title Tribunal • NTSCORP • ARC • Northern Tablelands Local Land Services • Office of the Registrar, Aboriginal Land Rights Act
21 August 2025	Email	To confirm meeting request and organise a meeting time	DPHI
21 August 2025	Email	To provide an update on health studies and research into the long-term health impacts of large-scale battery technology	Non-associated landowner
21 August 2025	Phone call	To discuss access to leased land for the purpose of biodiversity surveys	Non-associated landowner
21-24 August 2025	Site visits	To undertake seasonal biodiversity surveys	Associated landowner
27 August 2025	Virtual meeting	To discuss the project and take on any feedback provided by the department prior to lodgement of the scoping report	DPHI

5.3.3. Community

SynCo Global commenced early engagement with the associated landowner in 2024.

In May 2025, SynCo Global engaged with four non-associated landowners to request access to their property for the purpose of installing noise monitoring equipment and to quantify the existing background noise environment of the area (Section 6.4.1).

Engagement with non-associated landowners and receivers within 2 km of the Study Area commenced in July 2025, with a letter introducing the Project door-knocked and letterbox dropped to non-associated landowners. The letter provided an overview of the Project, offered meetings between landowners and members of the Project team, a site map, Project contact information, and a QR code to access more information on the Project website. In the event no-one was home, sorry we missed you flyers were also left. A copy of the letter can be found in Appendix C.

Meetings, calls, texts, emails and additional doorknocks with non-associated landowners were completed throughout July.

In August 2025, the first Project newsletter was distributed via email to members on an opt-in mailing list. The newsletter provided an update on the Project status, details about upcoming targeted biodiversity surveys, and an overview of the SSD process. A copy of the newsletter can be found in Appendix C.

5.3.4. Armidale Regional Council

Early engagement with ARC commenced in July 2025 when members of the Project team met with ARC staff. The purpose of the meeting was to introduce the Project team, provide an overview of the Project, outline planned engagement activities during scoping, and an indication of assessments to be completed as part of the EIS.

A second meeting was held between members of the Project team and ARC staff in late July 2025 to specifically discuss ARC's expectations for a VPA and community benefit sharing, and seek indicative support for a local community benefits initiative proposed by non-associated landowners.

Engagement with ARC would continue during development of the EIS.

5.3.5. First Nations

Early engagement with First Nations individuals, groups and bodies has commenced with a call for registration for RAP to participate in cultural heritage investigations.

An advertisement was placed in the Armidale newspaper, in accordance with cultural heritage assessment requirements, and letters sent to agencies requesting potential stakeholders to get involved.

Further engagement with First Nations people would continue during development of the EIS.

5.3.6. Agencies

Engagement with the DPHI was undertaken in August 2025, prior to finalisation of the Scoping Report to discuss the Project and take on any feedback. Email correspondence was exchanged to organise a meeting prior to a meeting being held on 27 August 2025.

5.3.7. Utility providers

SynCo Global commenced engagement with Transgrid as the owner of the Armidale Substation and incoming transmission lines in 2024.

5.3.8. Other developers

The Project is located directly adjacent to another proposed renewable energy development, Kooyong BESS, for which the proponent (Edify Energy) is partnering with the same associated landowner as the Project.

To align relevant assessment activities, collaborate on engagement opportunities, and limit the likelihood of consultation fatigue, SynCo Global has proactively engaged with Edify Energy to discuss opportunities for efficiencies in coordinating onsite works. .

These opportunities may include coordinating efforts to provide a more streamlined experience for non-associated landowners and the wider community when engaging on both projects.

These efforts might include:

- hosting joint community engagement sessions to allow the community to provide feedback about both projects in a single sitting
- potentially extending this approach to joint meetings with ARC to support their engagement process
- aligning survey activities where appropriate to minimise local disruption
- sharing relevant community feedback that may apply to both projects

SynCo Global and Edify Energy may also explore other opportunities to partner, including community benefit sharing initiatives, and design development.

This engagement would continue through the EIS phase.

5.4. Community and stakeholder views

Feedback from the community and other stakeholders mostly aligned to widely-held views and perceptions about BESS projects. This feedback included concerns about potential Project impacts such as visual amenity, noise, traffic and transport, fire, and biodiversity. There was also positivity and excitement about the possibility of funding local initiatives, such as the Castledoye Cycleway Project, through community benefit sharing.

There was some confusion and misunderstanding about the planning and assessment process, the role of ARC and EnergyCo in this process, and the source of Project funding.

The proximity of the Project to three other BESS projects in the immediate locality was also a source of confusion (Section 6.11). To aid in communication, a map showing the location and footprints of the four BESS projects was produced for use during stakeholder meetings.

Overall, most community and stakeholder feedback to date has been supportive or neutral.

Community and stakeholder views and the suggested strategies for future engagement to address these, is detailed in Table 5.2.

Table 5.2 Summary of community and stakeholder views

Topic	Feedback	Proposed strategy during EIS
Non-associated landowners		
Noise	Some landowners had questions about noise and the source of noise during operations.	Undertake a construction and operational noise assessment as part of the EIS to assess potential noise impacts and share findings with impacted landowners Engage with landowners to provide input into the design of any noise barriers

Topic	Feedback	Proposed strategy during EIS
Visual amenity	Adjoining landowners to the Project site expressed concerns about visual amenity and the loss of their view due to the elevated position of their dwelling above the Project site.	Undertake landscape and visual impact assessment (LVIA) as part of the EIS and share findings with impacted non-associated landowners Engage with directly impacted landowners to co-design any screening or vegetation mitigations Enter into neighbour agreements as appropriate
Traffic and transport	Questions were asked about site access but all were pleased that Eathorpe Road not Castledoyle Road would be used. Questions also related to vehicle numbers however it was broadly understood this impact would only be during construction.	Undertake a TIA and transport route assessment (TRA) as part of the EIS and share findings with stakeholders.
Contamination	One landowner was concerned about the risk of leeching of the BESS components and the risk of contamination to the soil, ground and surface water.	Undertake a hydrology assessment as part of the EIS to understand the potential impacts to watercourses and waterbodies. Undertake a preliminary hazards analysis (PHA) to understand the risk of leeching and leaking BESS components.
Project location and proximity to other projects	There was generalised confusion about the location and siting of the Project in relation to the other BESS proposals in the immediate locality.	Coordinate efforts with other developers in the immediate locality to share information, host joint engagement events, and coordinate site investigations. Create and distribute map showing the location and footprint of BESS projects in the immediate locality.
Biodiversity	One landowner was concerned about the loss of trees and habitat, and the impact on flora and fauna.	Undertake a BDAR as part of the EIS and share findings with nearby landowners. Engage with adjoining neighbours to co-design any vegetation screening including plant selection, as appropriate.
Property values	Two adjoining landowners expressed concern about the potential impacts on property value were they to sell. Their concern was that the Project would significantly de-value their property which could affect their financial position.	Continue to engage with adjoining landowners and communicate the findings of specialist studies to better understand the full extent of Project impacts. Implement suggested mitigation measures as recommended by the EIS or required by the conditions of consent.
Health and wellbeing	One landowner expressed concerns about the long-term health impacts of living close to a BESS. They were concerned about possible leeching into the soil and groundwater and wanted to see longitudinal health studies from people living next to BESS. The landowner has experienced significant distress since the Project's announcement and has expressed a desire to sell and move.	Continue to review relevant peer-reviewed studies from Australia and overseas and share with the landowner as they become available. Continue to engage with and be responsive to the landowner's concerns and offer support if required. Undertake a social impact assessment as part of the EIS to document and assess impacts related to health and wellbeing, including mental health. Undertake a PHA as part of the EIS to understand the risks to human health.
Crime and safety	One landowner expressed concerns about crime, safety, and security with a construction workforce (that may not be local) so close to their property	Prepare an Industry Participation Plan with a focus on recruiting locally and engaging local people where feasible. Communicate security measures that would be employed during construction to nearby landowners.

Topic	Feedback	Proposed strategy during EIS
Community benefit sharing	Several landowners were excited about the possibility of the Project providing funding to support a cycleway project in the immediate locality. It's understood the Project has the support of the community but had no funding.	Continue to liaise with the Castledoye Cycleway Project committee to understand the design, staging and costs of the Project. Negotiate with ARC to incorporate the cycleway into the Project's VPA as a stand-alone project. Continue to liaise with Edify Energy about opportunities to partner on delivery of the community benefit sharing project.
Planning process	There was some confusion among landowners about the SSD process, who the consent authority was, and how it was determined.	Prepare Project fact sheets and additional FAQs to provide clarity about the SSD process. Include regular explainers and graphics about the SSD process in Project newsletters. Communicate opportunities for community input and feedback, including during public exhibition of the EIS.
Land access	One landowner raised concerns about the need to access their land to undertake some specialist studies, such as the LVIA. Their concerns related to communication and respect.	Prepare land access agreements with non-associated landowners where site investigations may be required.
Privacy	One landowner was concerned about the security and privacy of noise data obtained from a logger on their property.	Confirm and share data storage and privacy policies for any specialists collecting data from non-associated landowners with affected landowners.
ARC		
Worker accommodation and housing	Council's preference is not to have worker camps located on site. Council also expects proponents to find other accommodation options that do not rely on temporary or tourist accommodation. Council is investigating options with the University of New England to repurpose unused accommodation as a coordinated solution to workforce accommodation in the REZ.	Prepare a worker accommodation and housing strategy as part of the EIS, or as required by the SEARs. Liaise with ARC about accommodation options that are being progressed at a regional level. Continue to liaise with Edify Energy on potential partnership opportunities for worker accommodation and housing.
Community benefit sharing	Council has adopted a framework for community benefit sharing that mostly aligns to the NSW Benefit Sharing Guidelines. Stand-alone storage projects are the exception, requiring a commitment of \$850 p/MW each year for the life of the Project. Council will require SynCo Global to enter into a VPA. The funds would go into a Future Fund that will be invested and the dividends spent on projects agreed to by a committee. Council was also open to specific localised projects that would benefit and were supported by the impacted community, such as the Castledoye Cycleway project.	Prepare an offer for a VPA for ARC's consideration incorporating specific projects supported by the local community. Negotiate an in-principle agreement for inclusion in the EIS.
Site access	Council staff asked about the proposed site access, confirming the location was an unformed council road (paper road). Council staff advised the appropriate s138 approval would be required.	Engage with Council as required to seek the relevant approvals to use Council-owned roads. Undertake a TIA as part of the EIS. Coordinate site access with Edify Energy to streamline engagement and permitting.
Bushfire-prone land	Council staff advised that updated mapping for bushfire-prone land was due to be released imminently and would include the Project site.	Undertake a bushfire assessment as part of the EIS using current approved mapping.

Topic	Feedback	Proposed strategy during EIS
Department of Planning, Housing and Infrastructure		
Cumulative impacts – noise	The DPHI outlined expectations for the cumulative impact assessment in the EIS, especially given the proximity of other proposals in the immediate area. They will particularly be looking at noise impacts, and taking a conservative approach to the noise impact assessment. They want to see clear assumptions that informed the assessment, and recommended the noise impact assessment be completed early in the EIS process.	Undertake noise impact assessment early during preparation of the EIS and seek preliminary feedback from the DPHI. Undertake a cumulative impact assessment in the EIS that includes noise.
Cumulative impacts – workforce accommodation	The DPHI outlined expectations for how the Project will address worker accommodation. The Project would need to include one of three options: • Demonstrate available existing capacity for housing and accommodation • Provide evidence of an agreement for housing workers in existing or new accommodation • Demonstrate physical work to facilitate worker accommodation needs i.e. a workers camp	Undertake a cumulative impact assessment that includes worker accommodation. Provide evidence in the EIS of how the Project would address worker accommodation needs.
Cumulative impacts – consultation	The DPHI encouraged partnering with other developers to undertake consultation with stakeholders to reduce consultation fatigue.	Partner with Edify Energy and possibly other nearby proponents to facilitate joint consultations or engagements.
Transport – oversize and over mass loads	The DPHI indicated the EIS would need to include how the Project expects to move oversize and over mass loads, especially through possible pinch points along the New England Highway at Muswellbrook and Tamworth.	Undertake a transport and traffic assessment including oversize and over mass loads and identify preferred route.
SEARs	The DPHI encouraged reviewing all the agency advice in addition to the SEARs as this advice was often more detailed and specific than the SEARs.	Review all agency advice in addition to SEARs upon receipt.

5.5. Future engagement

Engagement during preparation of the EIS would be undertaken in accordance with the SEARs and the Engagement Guidelines (DPHI, 2024). The CSEP will be updated at regular intervals to reflect any changes to the Project, or the needs of stakeholders.

Engagement during this period will:

- inform the community about the opportunities to engage
- explain how community feedback will be considered and documented
- provide relevant information in plain English so that potential impacts and implications can be readily understood
- be clear about the level of influence engagement will have by identifying what elements can be changed as a result of feedback
- give the community the opportunity to voice their concerns or share local knowledge so that this information can be considered early in the planning, design and assessment of the Project
- consider the issues raised by the community, council and relevant government agencies when making Project refinements and accurately reflect how these issues have been addressed in EIS documentation
- keep the community, council and relevant government agencies informed with up-to-date information on the project

To achieve this, SynCo Global commits to undertaking the following activities during preparation of the EIS:

- community information sessions
- in-person and virtual meetings with associated and non-associated landowners, local government, business, community groups and potential accommodation providers
- site visits and investigations with associated and non-associated landowners who may be impacted
- interviews to inform the SIA
- surveys
- doorknocking and letterbox dropping neighbours for whom the Project has no contact details
- presentations to community interest groups and local government
- briefings to local government, state and federal members of Parliament
- distribution of a regular Project newsletter
- maintaining the Project website with updated content, frequently asked questions and fact sheets
- responding to the Project phone line and email inbox

Further engagement will also be undertaken with ARC to negotiate a VPA that meets the Community Benefit-Sharing Guidelines (DPHI, 2024) and ARC's Renewable Energy Community Benefit Framework (ARC, 2024a).

Engagement will be undertaken with potential accommodation providers within Armidale and surrounding LGAs to identify a housing solution for the construction workforce, in consultation with local councils.

The CSEP will be updated to inform future engagement beyond submission of the EIS, including during public exhibition and response to submissions.

6. Assessment of impacts

6.1. Introduction

A preliminary environmental assessment has been conducted in accordance with Scoping Report Guidelines (DPE, 2022a) and State Significant Development Guidelines 2024 (DPHI, 2024b). In accordance with the guides the scale of impact, nature of impact and sensitivity of the receiving environment for the environmental issues has been evaluated in Section 6.2 to 6.10 and summarised in the scoping summary table in Appendix D.

The scoping summary table stipulates the level of assessment required for each matter for the EIS phase. In summary:

- eight matters requiring detailed assessment (Table 6.1)
- seven matters require standard assessment (Table 6.2)

Relevant government plans, policies and guidelines for each matter are identified in Appendix D.

Table 6.1 Matters requiring detailed assessment

Matter	Cumulative assessment	Engagement	Support chapters / appendices
Biodiversity	Yes (Section 6.11.3)	Specific	Section 6.2
Landscape and visual	Yes (Section 6.11.3)	Specific	Section 6.3
Noise and vibration	Yes (Section 6.11.3)	General	Section 6.4
Social and economic impacts	Yes (Section 6.11.3)	Specific	Section 6.5 and Appendix A
Traffic, transport and access	Yes (Section 6.11.3)	Specific	Section 6.6
Aboriginal heritage	Yes (Section 6.11.3)	Specific	Section 6.7
Hazards and risk – Hazardous and offensive development	Yes (Section 6.11.3)	General	Section 6.8
Hazards and risk – Bushfire	Yes (Section 6.11.3)	General	Section 6.9

Table 6.2 Matters requiring standard assessment

Matter	Cumulative assessment	Engagement	Support chapters / appendices
Hazards and risk – Electro-magnetic frequency (EMF)	Yes (Section 6.11.3)	General	Section 6.8
Soils and land use	Yes (Section 6.11.3)	General	Section 6.10.1
Water resources	Yes (Section 6.11.3)	General	Section 6.10.2
Air quality	Yes (Section 6.11.3)	General	Section 6.10.3
Historic heritage	No	General	Section 6.10.4
Waste management	No	General	Section 6.10.5
Cumulative impacts	No	General	Section 6.11

6.2. Biodiversity

A preliminary biodiversity assessment was undertaken by OzArk Environment & Heritage (OzArk) for the Project to inform this Scoping Report and provide an overview of the vegetation and biodiversity values within the Study Area.

As a part of this engagement a preliminary survey has been undertaken, which serves to provide an understanding of the biodiversity values and constraints associated with the Study Area, and provide information to inform this Scoping Report.

6.2.1. Existing environment

6.2.1.1. Regional context

A summary of the regional context for the Project is provided in Table 6.3.

Table 6.3 Regional context of the Project

Criteria	Value
IBRA region/sub-region	Located on the Armidale Plateau sub-region of the New England Tablelands IBRA region
Mitchell Landscapes	Dingo Spur Meta-sediments
Connectivity	Connectivity between the Study Area and nearby remnant vegetation is already severely limited, with a scarcity of habitat features offered in the Study Area. The nearest parks, state forest or reserves are Imbota Nature Reserve (approximately 3.25 km to the south-east), Yina Nature Reserve (approximately 3.5 km to the north-east), and Armidale State Forest (approximately 4 km to the north).
Hydrology	The Project is located within the Macleay River catchment. While there are several man-made water features (i.e. dams) located in the Study Area, there are no natural water features (i.e. wetlands areas, watercourses, or lakes). The closest watercourse is Commissioner Waters approximately 1.4 km to the east, a perennial watercourse which joins the Gara River 15 km downstream. Most other watercourses in the locality are non-perennial, such as Dumaresq Creek, which is found approximately 1.6 km north-west of the Study Area. Water generally drains in a north-westerly direction from the Study Area.
Areas of outstanding biodiversity value	No registered areas of outstanding biodiversity value are located within or in proximity to the Study Area.

6.2.1.2. Plant community types

A field survey was completed by an OzArk ecologist on 24 June 2025 covering the BESS site and the site access from Eathorpe Road within the Study Area, involving the completion of six Biodiversity Assessment Method (BAM) (DPIE, 2020b) plots to map the boundaries of each community (Appendix E). Two Plant Community Types (PCTS) were identified within the BESS site and access route from Eathorpe Road as follows:

- PCT 3344 – New England Ribbon Gum Grassy Forest
- PCT 3352 – Armidale Quartz Hills Stringybark Forest

A description of each zone is provided in Table 6.4, while PCTs mapped in this area are shown on Figure 6.1. In total, six Vegetation Integrity (VI) plots were conducted during the site assessment.

Table 6.4 PCT condition states recorded during the field survey

PCT	Condition State	Vegetation Zone	Area (ha)	Plots
3344	Regenerating	3344_Regen	0.28	HB02
3344	Derived	3344_Derived	3.8	HB03 HB04
3344	Dam	3344_Dam	0.04	HB05
3344	Moderate	3344_Moderate	0.1	HB01
3344	Good	3344_Good	0.1	No plots
3352	Poor	3352_Poor	1.6	HB06
3352	Good	3352_Good	0.7	No plots



HOLLOWAY BESS

PCTs and vegetation zones

Figure 6.1

LEGEND

- Indicative development footprint
- 3344_Moderate
- 3344_Regen
- 3344_Derived
- 3344_Dam
- 3352_Good
- 3352_Poor
- 3363_Good
- 3363_Derived

EXTENT LOCATOR



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Figure version: 2.0

Figure print date: 18/08/2025

Author: Marc Dougherty

The transmission easement corridor and Eathorpe Road upgrade areas of the Study Area were not able to be comprehensively mapped during the course of OzArk's fieldwork, however, the following was observed for each:

- Transmission easement corridor: Contains PCTS consistent with the BESS site (i.e. PCT 3344, with condition state identified as Derived) and the site access from Eathorpe Road (i.e. PCT 3352, with condition state identified as mostly Poor and a small area identified as Good).
- Eathorpe Road upgrade: Contain a mixture of planted non-native pine, Ribbon Gum (*Eucalyptus viminalis*), Blakely's Red Gum (*Eucalyptus blakelyi*) and Yellow Box (*Eucalyptus melliodora*), which has been assigned to PCT 3363, with condition state identified as a mixture of Derived and Good.

6.2.1.3. Threatened Ecological Communities

Vegetation within the BESS site and the site access from Eathorpe Road areas of the Study Area was assessed against the conditional criteria for each BC Act-listed or EPBC Act-listed Threatened Ecological Community (TEC) known, or predicted, to occur within the Armidale Plateau Subregions of the New England Tablelands Bioregion.

One TEC (i.e., BC Act-listed Endangered Ecological Community [EEC]) was identified within the BESS site and the site access from Eathorpe Road areas of the Study Area, as provided in Table 6.5.

Table 6.5 Threatened ecological communities recorded within the Study Area

TEC	Status	PCTs
Ribbon Gum-Mountain Gum-Snow Gum Grassy Forest/Woodland of the New England Tableland Bioregion	BC Act, Endangered	3344_Good, 3344_Moderate, and 3344_Regen

Further assessment and analysis during the EIS would be required to confirm this TEC within the Disturbance Footprint. Fieldwork completed to date has identified areas of potential Ribbon Gum-Mountain Gum-Snow Gum Grassy Forest/Woodland of the New England Tableland Bioregion within the Study Area.

In addition, with Blakely's Red Gum (*Eucalyptus blakelyi*) and Yellow Box (*Eucalyptus melliodora*) observed along Eathorpe Road (amongst stands of planted non-native pine), if upgrades to Eathorpe Road are required (i.e. if not undertaken as part of separate projects described in Section 3.1), there is the potential for impacts to the following TECs:

- **BC Act-listed Critically Endangered Ecological Community (CEEC):** White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions.
- **EPBC Act-listed CEEC:** White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland.

Presence of EPBC Act or BC Act listed TECs would need further assessment and confirmation throughout subsequent survey periods during preparation of the BDAR.

6.2.1.4. Flora and fauna

Incidental searches for fauna were undertaken during the field survey completed by an OzArk on ecologist on 24 June 2025, including the BESS site and the site access from Eathorpe Road areas of the Study Area.

The majority of habitat trees (i.e. hollow-bearing trees or trees containing nests) were GPS tagged, though given time and access constraints, some habitat trees were not. Potential habitat (e.g. rocks, logs, loose bark, and coarse woody debris) was examined for cryptic species. Areas of suitable substrate were searched for animal tracks and burrows. Secondary evidence of fauna presence on the BESS site and the site access from Eathorpe Road areas of the Study Area (e.g. scats, feathers, and sloughed skin) was also recorded.

Considering the scope of this preliminary survey, targeted surveys such as live trapping, nocturnal searches, aquatic surveys, deployment of bat echolocation detectors and so forth, were not undertaken. However, targeted surveys would be undertaken to support the BDAR.

Habitat features

While the majority of the Study Area is made up of agricultural land cleared for grazing and cropping, remnant woodland fragments, isolated paddock trees and derived grasslands are also found within the Study Area. Vegetation on the western edge of the BESS site was dominated by isolated individuals of Ribbon Gum (*Eucalyptus viminalis*), Blakely's Red Gum (*Eucalyptus blakelyi*) with juvenile regrowth of both species and the shrub Fern-leaved Wattle (*Acacia filicifolia*). The derived grasslands present were heavily grazed and generally in poor condition with low diversity. However, the community south of the BESS site and planned access route consisted of an intact stringybark forest dominated by Broad-leaved Stringybark (*Eucalyptus caliginosa*) (PCT 3352). This reasonably large vegetation patch offers intact habitat in an otherwise degraded landscape and contains a nest confirmed as belonging to a pair of Little Eagles (listed as vulnerable under the BC Act). The Little Eagle nest is 330 m south of the site access Eathorpe Road and 600 m south-east of the BESS site. The dams located within the Study Area likely provides permanent habitat for turtles and frogs and intermittent habitat for waterbirds.

There are no hollow-bearing trees within the proposed BESS site, although they occur along Eathorpe Road and in the Study Area between the BESS site and substation, where a transmission line would be required. Additional habitat features include coarse woody debris and scattered surface rock suitable for reptiles.

Despite the identification of habitat features, the limited connectivity and scarcity of the habitat features offered by the Study Area, suggest no significant impacts to the movement of any threatened species are expected as a result of the Project.

Flora species

Preliminary surveys identified 44 species of flora within or immediately adjacent to the BESS site and the site access from Eathorpe Road areas of the Study Area (Appendix E) with 59% of species identified as native and 14 species of fauna observed.

Six (6) threatened flora species have the potential to occur within or in proximity to the Study Area, as detailed in Table 6.6, and would be the subject of targeted surveys during preparation of the BDAR for the EIS.

Table 6.6 Threatened flora species with potential to occur

Name	Listing	
	BC Act	EPBC Act
Bluegrass (<i>Dichanthium setosum</i>)	Vulnerable	Vulnerable
Northern Blue Box (<i>Eucalyptus magnificata</i>)	Endangered	Not listed
Narrow-leaved Black Peppermint (<i>Eucalyptus nicholii</i>)	Vulnerable	Vulnerable
Austral toadflax (<i>Thesium australe</i>)	Vulnerable	Vulnerable
<i>Callistemon pungens</i>	Not listed	Vulnerable
Silky Swainson-pea (<i>Swainsona sericea</i>).	Vulnerable	Not listed

Fauna species

A review of the Threatened Species Profiles database identified 88 threatened or migratory fauna and flora species/populations that are known/predicted to occur within the Armidale Plateau Subregions of the New England Tablelands Bioregion (Appendix F).

Preliminary surveys identified 14 fauna species within or immediately adjacent to the BESS site and the site access from Eathorpe Road areas of the Study Area (Appendix E). No threatened fauna species were detected during the field survey; however, 17 threatened species credit fauna species have the potential to occur within or in proximity to the Study Area and would be the subject of targeted surveys during preparation of the BDAR for the EIS:

- Tusked Frog (*Adelotus brevis*) population in the Nandewar and New England Tableland Bioregions – Endangered population
- Bush Stone-curlew (*Burhinus grallarius*)
- South-eastern Glossy Black-Cockatoo (*Calyptorhynchus lathami*)
- Eastern Pygmy-possum (*Cercartetus nanus*)
- Large-eared Pied Bat (*Chalinolobus dwyeri*)
- White-bellied Sea-Eagle (*Haliaeetus leucogaster*)
- Little Eagle (*Hieraaetus morphnoides*)
- Peppered Tree Frog (*Litoria piperata*)
- Glandular Frog (*Litoria subglandulosa*)
- Square-tailed Kite (*Lophoictinia isura*)
- Southern Myotis (*Myotis macropus*)
- Barking Owl (*Ninox connivens*)
- Southern Greater Glider (*Petauroides volans*)
- Squirrel Glider (*Petaurus norfolcensis*)
- Brush-tailed Rock Wallaby (*Petrogale penicillata*)
- Koala (*Phascolarctos cinereus*)
- Masked Owl (*Tyto novaehollandiae*)

6.2.1.5. Matters of National Environmental Significance

Table 6.7 summarises the MNES relevant to the Project, with a search of the Protected Matters Search Tool undertaken with a 10 km buffer (Appendix G).

Table 6.7 Summary of MNES

MNES	Relevance to the Project
World Heritage Properties	One World Heritage Area (Gondwana Rainforest) within the 10 km buffer of search area.
National Heritage Places	One National Heritage Place (Gondwana Rainforest) within the 10 km buffer of search area.
Wetlands of International Importance (Declared Ramsar Wetlands)	None within 10 km of the Study Area.
The Great Barrier Reef Marine Park	None within 10 km of the Study Area.
Commonwealth Marine Area	Not within proximity to a Commonwealth Marine Area.

MNES	Relevance to the Project
Listed TEC	Three (3) TEC's listed under the EPBC Act within the 10 km buffer of search area: • New England Peppermint (<i>Eucalyptus nova-anglica</i>) Grassy Woodlands • Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion) • White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland
Listed Threatened Species	53 threatened species listed under the EPBC Act within the 10 km buffer of search area. Five fauna species have potential to occur based on records in the locality and the presence of preferred habitat: • South-eastern Glossy Black-Cockatoo (<i>Calyptorhynchus lathami</i>) • White-bellied Sea-Eagle (<i>Haliaeetus leucogaster</i>) • Peppered Tree Frog (<i>Litoria piperata</i>) • Glandular Frog (<i>Litoria subglandulosa</i>) • Koala (<i>Phascolarctos cinereus</i>) Four flora species have potential to occur based on records in the locality and the presence of preferred habitat: • Bluegrass (<i>Dichanthium setosum</i>) • Narrow-leaved Black Peppermint (<i>Eucalyptus nicholii</i>) • Austral toadflax (<i>Thesium australe</i>) • <i>Callistemon pungens</i>
Listed Migratory Species	10 migratory species listed under the EPBC Act within the 10 km buffer of search area.

6.2.2. Preliminary assessment

The main potential impacts of the Project (during construction and operation) that would need to be assessed include:

- the potential to cause a Serious and Irreversible Impact (SII) to TECs or threatened species (including endangered populations)
- clearing of TECs
- loss of extant native vegetation communities and associated fauna habitat and the subsequent impacts to local population of native species
- increased foraging habitat fragmentation
- mortality and injury to fauna species from vehicle strike and/or vegetation clearing

6.2.3. EIS assessment

As the Project is classified as SSD, the BOS would be triggered and BDAR would be required as part of the EIS phase. Impacts to biodiversity within the Study Area would be assessed through a BDAR during the EIS phase, supported by targeted field surveys in accordance with the BAM (DPIE, 2020b) and Surveying threatened plants and their habitats: NSW survey guide for the BAM (DPIE, 2020c), to determine the extent of impacts.

An assessment of the biodiversity values and the likely biodiversity impacts of the Project, in accordance with Section 7.9 of the BC Act, having regard to the BAM would be documented in a BDAR prepared by an accredited assessor in accordance with the BAM. as far as possible. However, the Project design would seek to minimise and avoid impacts on biodiversity values within the Study Area as far as practicable. Where required, the BDAR would identify mitigation and avoidance measures, quantification of the offsetting requirements, and present a strategy for offset delivery.

All relevant MNES that are likely to be present would be included in targeted surveys with impacts reported upon and offset (where applicable) in the BDAR. The requirements for an EPBC Referral would be assessed following quantification of the impacts to all relevant listed entities. Referral under the EPBC Act is considered unlikely; however, if the Project is likely to significantly affect MNES and requires Commonwealth approval, the Project is expected to be assessed under provisions of the Assessment Bilateral Agreement between the Australian Government and NSW Government.

6.3. Landscape and visual

6.3.1. Existing environment

The proposed development is located approximately 6 km east–south–east of Armidale town centre, within a rural landscape setting characterised by a mix of grazing lands, larger rural lifestyle properties, and scattered vegetation. The Study Area is bounded by Waterfall Way / Grafton Road to the north and Eathorpe Road to the east, both functioning as local roads. It is situated within the New England REZ and the Armidale Regional LGA.

Armidale is located to the west, containing urban residential development and associated infrastructure. North of Waterfall Way/Grafton Road, the landscape is predominantly grazing land, while larger rural residential and lifestyle blocks are more common to the east and south. The Study Area and its surrounds are gently undulating, allowing open views from some nearby elevated areas. Vegetation cover is generally sparse, limited to perimeter windrows and roadside plantings.

The Armidale Substation is located approximately 500 m to the north-east of the Study Area, with transmission lines feeding into the substation. The Study Area itself is immediately adjacent to 132 kV transmission lines.

The broader Armidale region is defined by its temperate climate, open tableland topography, and rural land uses. Scenic values are associated with expansive views, tree-lined roads, and scattered rural properties. There are no heritage-listed scenic landscapes or significant ridgelines intersecting the Study Area.

6.3.2. Preliminary assessment

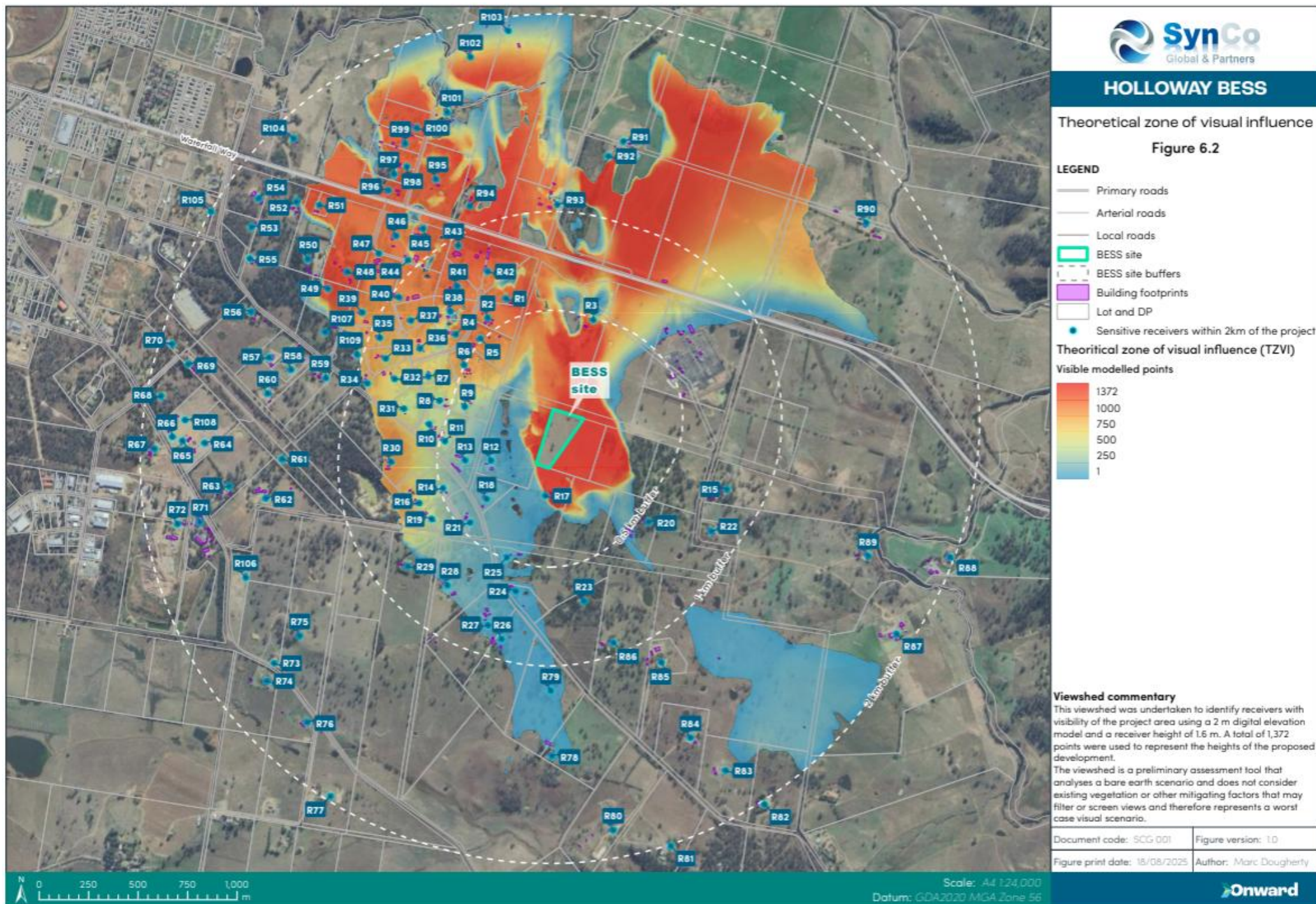
6.3.2.1. Visual catchment and sensitive receivers

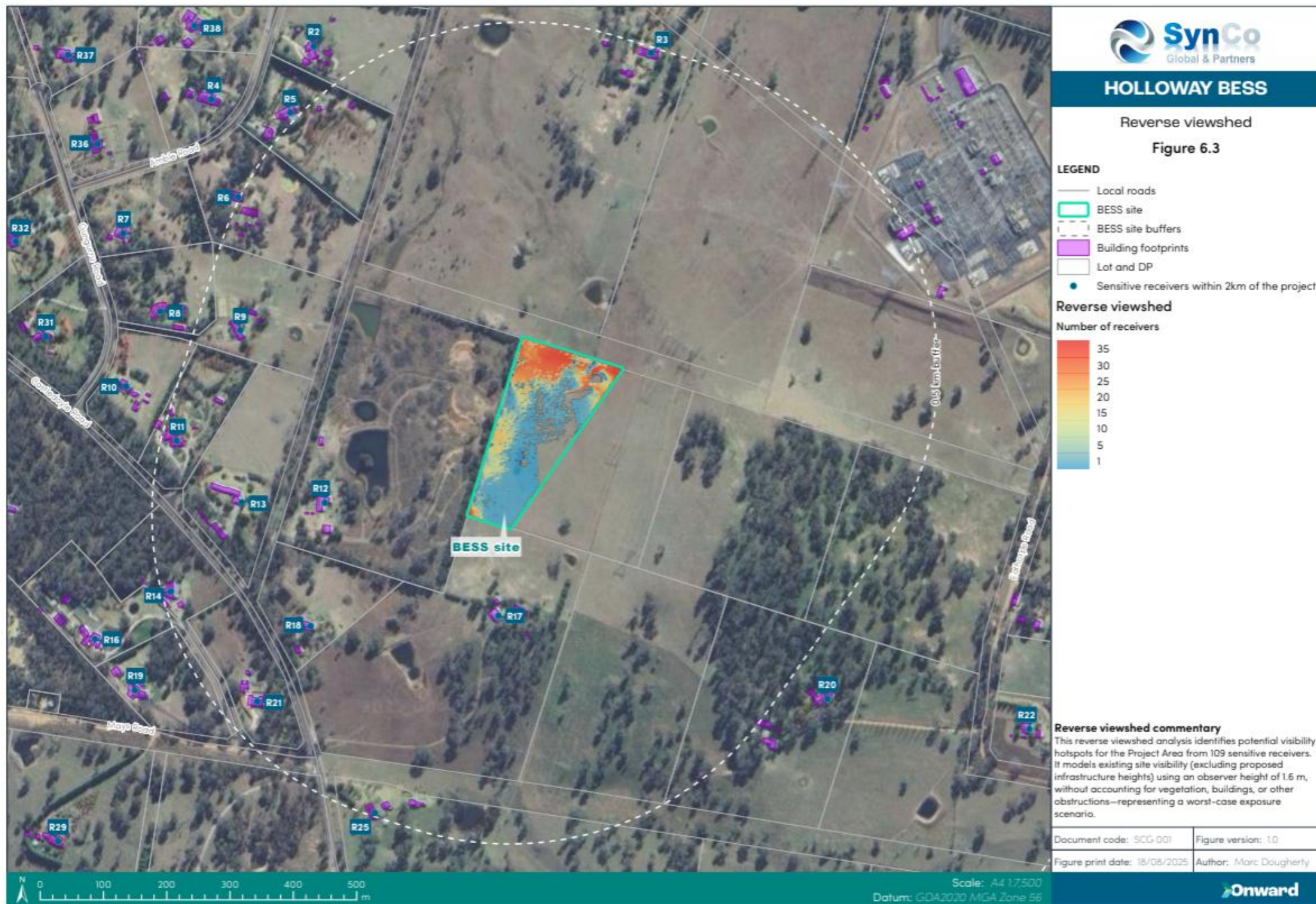
A total of 109 sensitive receivers were identified within 2 km of the Project, including residential dwellings, rural properties, and lifestyle blocks. Figure 6.2 maps their distribution in relation to the Study Area and shows the preliminary modelled viewshed.

Using a 2 m digital elevation model, a 1.6 m receiver height, and 1,372 points to represent the Project footprint, the analysis depicts a bare-earth ‘worst-case’ theoretical zone of visual influence (TZVI) that excludes vegetation and built form. Of the 109 receivers, 57 are within the TZVI and 52 are outside it.

Due to local topography, project visibility is limited from the east and south, with western and south-western views generally restricted to around 1 km. In contrast, the Project is visible from the north and north-west. Once screening from vegetation and buildings is considered, actual visibility would be greatly reduced for most receivers. The highest visual impacts are likely for those within 500 m of the Study Area and inside the TZVI, particularly R3, R12, and R17.

Figure 6.3 shows the reverse viewshed, modelling visibility from each of the 109 receivers back to the Study Area. This identifies visibility ‘hotspots’ where multiple receivers share a line of sight to the Study Area. Like the TZVI, it uses a 1.6 m observer height and bare-earth terrain to represent a conservative, worst-case scenario. The reverse viewshed indicates that the northern, western, and south-western portions of the Study Area are the most visible.





6.3.2.2. Visual characteristics of the Project

The Project would consist of battery container units, inverter stations, transformers, a switchyard, internal access roads, and associated infrastructure including security fencing and lighting. The compound would be enclosed by a perimeter fence and in addition to the existing vegetative screening to the west of the BESS site, vegetative screening would be included subject to final visual impact outcomes.

Given the proximity of the Study Area to the Armidale Substation and existing energy infrastructure, the Project is not out of character with the evolving energy landscape in the area.

6.3.3. EIS assessment

An assessment of the level of visual impact would be undertaken as part of the EIS process. This would include viewshed analysis, representative viewpoint assessment, and consideration of the effectiveness of mitigation options. Impacts would be assessed in terms of the change in visual character produced by the development, the degree of contrast, and the likely sensitivity of receivers to the change.

The EIS would also consider the potential for the Project to affect local landscape character. Consultation would be undertaken to understand the values of the area, including visual characteristics valued by the community. Engagement with affected residences identified as likely to have a view of BESS infrastructure has already commenced and further consultation would be undertaken to inform the significance of impacts and the need for mitigation measures.

Mitigation of low-profile BESS infrastructure in a gently undulating landscape is considered feasible. Visual impacts are expected to attenuate rapidly with distance; therefore, the focus of mitigation would be on nearby receivers.

6.4. Noise and vibration

6.4.1. Existing environment

To quantify the existing background noise environment of the area, background noise monitoring was conducted in the vicinity of the Study Area at four locations between 19 June and 9 July 2025. To account for the temporal variation of background noise levels, the Rating Background Level (RBL) is used, with the resulting RBLs from background noise monitoring provided in Table 6.8.

Table 6.8 Measured RBLs

Location	Day (dB(A))	Evening (dB(A))	Night (dB(A))
Receiver_03	36	29	26
Receiver_12	34	34	28
Receiver_17	34	29	22

The measures RBLs reflect the Study Area's location in a rural setting just outside Armidale. The existing Armidale Substation is a likely source of local noise, and other background noise sources would include traffic, farm equipment, wind through trees, and animals.

6.4.2. Preliminary assessment and management

Noise impacts would primarily occur during construction as a result of construction plant and equipment. Management and mitigation measures would be implemented to reduce potential noise disturbance (e.g. working within standard hours, regular plant and machinery maintenance, or fitting vehicles with silencing devices to reduce the risk of adverse noise impacts).

Minimal noise is likely to be generated during operation, with operational noise sources likely to include the battery containers, inverter units, transformers, and site power transformer. Other noises during operation, such as from maintenance works, would be minimal, short in duration, and unlikely to disturb surrounding residences. In addition, the existing design of the Project includes construction of a 4 m high wall around each bank of units to manage potential noise impacts.

6.4.3. EIS assessment

A construction and operational noise and vibration assessment would be undertaken as part of the EIS to assess potential noise impacts for the identified sensitive receivers. This would identify maximum noise affected areas and provide the appropriate mitigation measures for each of the sensitive receivers. The report would include an assessment of road traffic noise as a qualitative assessment of offset traffic movements inclusive of a review of existing and future traffic movements for the Project.

The assessment would be undertaken in accordance with the Interim Construction Noise Guideline (DECC, 2009), NSW Noise Policy for Industry (NSW EPA, 2017), Assessing Vibration: A Technical Guideline (DEC, 2006), German Standard DIN 4150-3: Structural Vibration – Effects of Vibration on Structures, and NSW Road Noise Policy (DECCW, 2011). These guidelines aim to protect the majority of sensitive residences and land uses from noise and vibration impacts.

6.5. Social and economic impacts

A SIA scoping report and SIA worksheet was prepared for the Project in accordance with DPHI's SIA Guideline (DPHI, 2025a) and the SIA Technical Supplement (DPHI, 2025b).

The SIA Scoping Report and the supporting SIA Worksheet is provided in Appendix A and summarised in the following sections.

6.5.1. Existing environment

The Study Area is located in a peri-urban locality in the Armidale Regional LGA, about 10 km south-east of the Armidale CBD. The social Study Area adopted for SIA scoping includes:

- local area: comprised of the two immediate statistical area 1 (SA1) geographies intersecting the Project site, chosen to consider localised impacts (i.e. amenity changes)
- Armidale Regional LGA: chosen to consider residents, businesses and other stakeholder who may experience non-localised impacts (i.e. employment opportunities or service demands)
- Regional NSW: the state average, excluding the Greater Sydney area, for a baseline comparison

Local area

The local area is a peri-urban locality about 6 km south-east of Armidale CBD. The area is primarily comprised of large lot residential land; however a residential growth area is located to the north of the Project area. Existing employment and future employment growth areas, including manufacturing, are in the south-west of the local area. There are also horticulture priority areas located to the north and east of the Project area. Key demographics of the local area can be found in the SIA Scoping Report (Appendix A).

Armidale Regional LGA

Armidale Regional LGA encompasses several population centres, including Armidale city and Guyra, and is home to the Anaiwan people, whose traditional lands cover much of the New England Tableland (NSW Government, 2024). As of June 2023, Armidale Regional LGA had an estimated resident population (ERP) of 29,594 (ABS, 2024). At the time of the 2021 Census, 7.6% of residents identified as Aboriginal and/or Torres Strait Islander (ABS, 2022).

Demographically, Armidale Regional LGA has a younger median age and higher population density than the Regional NSW average, reflective of its role as a major regional centre anchored by the University of New England. Despite its established status, the LGA has experienced stagnant population growth over the past two decades, including a 1.1% population decline between 2016 and 2021 (ABS, 2022). Forecasts suggest minimal population growth toward 2041 (DPHI, 2024d). State and local strategic planning efforts have consistently prioritised residential growth, workforce retention, and housing availability as critical enablers of broader economic stability (DPHI, 2022a; ARC, 2024c).

The education and training sector remains the top employer in Armidale Regional LGA, driven by the presence of the university and schools. Health care, social assistance, and agriculture are also key industries, while new opportunities are emerging in renewable energy and controlled-environment horticulture. Armidale Regional LGA is in a strong position to benefit from regional clean energy investment and associated supply chain activities, being centrally located within the New England REZ (ARC, 2024c).

6.5.2. Preliminary assessment

An evaluation of social impacts was undertaken using the SIA Worksheet (DPHI, 2025b). The outcomes from the SIA Worksheet are provided in full in Appendix A and summarised in Table 6.9.

The SIA worksheet provides a framework to consider dimensions of each social impact and their level of significance. The dimensions include extent, duration, intensity/scale, and concern/interest, and are defined in the SIA Scoping Report (Appendix A). The significance of each dimension is denoted with 'yes', 'no', or '?' (unknown) within Table 6.9.

This process identified 13 potential social impacts that may arise due to Project activity. Additional data collection during the development of the SIA may identify social impacts not listed here.

Table 6.9 Initial social impact evaluation

Project activity	Social impact	extent	duration	intensity	sensitivity	interest
Construction workforce demand	Reduced access to social infrastructure and services due to non-local workforce demand (emergency services, health and medical, and police)	No	No	No	?	Yes
Construction workforce accommodation demand (non-local workforce)	Reduced access to housing and accommodation due to non-local workforce demand	?	?	Yes	?	Yes
Construction activity, including vehicle movements	Local amenity changes resulting from construction activity (i.e. noise, vibration, visual, and air quality)	No	No	No	?	Yes
Presence of BESS	Changes to the landscape character due to the presence of project infrastructure	No	Yes	?	?	Yes
Construction demands for supplies and services	Contribution to local economy due to project demand for supplies and services	?	No	No	No	Yes

Project activity	Social impact	extent	duration	intensity	sensitivity	interest
Construction workforce requirements	Project workforce requirements creating employment opportunities	No	No	No	?	?
Construction workforce requirements	Project workforce requirements contributing to worker shortages for local businesses	No	No	No	?	?
Ground disturbing construction activity	Aboriginal cultural heritage loss resulting from disturbance of unknown (unregistered) artefacts or sites	?	?	?	Yes	?
Project development	Changes to land use at site reducing the Project's contribution to agricultural output (livestock and grazing)	No	Yes	No	No	No
Project development	Changes to land-based activities at neighbouring properties	No	?	?	?	Yes
Vehicle movements during construction	Changes to road conditions during construction, contributing to reduced sense of public safety or travel delays	No	No	No	?	Yes
Project development	Concern or stress generated from perceptions of risks associated with fire or electromagnetic fields (EMF)	No	?	?	?	Yes
Project development	Contribution to community benefit sharing and VPA	No	?	No	No	Yes

6.5.3. EIS assessment

The level of assessment required for each impact for the SIA at for Phase 2 (EIS phase) has been derived from the SIA Worksheet process. A full description of this process and definitions for each level of assessment is provided in Appendix A.

The outcome from this process shows that two potential social impacts would require a detailed level of assessment for the SIA, these include:

- reduced access to housing and accommodation due to non-local workforce demand
- project workforce requirements contributing to worker shortages for local businesses

Of the remaining impacts, nine would require a standard assessment, one would require a minor assessment, and one is not relevant for assessment.

The social impact that is not relevant for assessment relates to changes to land use at site reducing the Project's contribution to agricultural output. This impact was evaluated to have negligible impact to extent, intensity, sensitivity, or interest in terms of social impacts. This was determined by considering the size of the Project footprint, the level of interest among stakeholders, the modest level of agricultural activity at the Study Area, and the severe to very severe limitations to land and soil capability.

The SIA would address the matters set out by the SEARs and fulfil the requirements of the SIA Guideline (DPHI, 2025a) and the SIA Technical Supplement (DPHI, 2025b), which would:

- predict and analyse potential social impacts based on Project activities
- collect primary (stakeholder engagement) and secondary data to establish the social context and how impacts may be experienced
- evaluate social impacts based on the social context, including among vulnerable and high-risk groups within the social locality
- propose appropriate responses to key matters, such as social impact management measures and the integration of such into future project phases

In addition, the need for construction workforce accommodation would be assessed in the EIS, and a strategy developed in consultation with relevant stakeholders (i.e. ARC), as relevant.

6.6. Traffic, transport and access

6.6.1. Existing environment

With the Project located in regional NSW, it is expected that resources and materials needed for the construction of the Project (including ancillary infrastructure), that cannot be sourced locally, would be delivered to an appropriate location on the east coast (e.g. Sydney, Newcastle, and Brisbane) and trucked in using heavy vehicles via the existing road network.

Access to the BESS site is subject to finalisation of the Project design; however, it is envisioned that construction and operational site access to the BESS site would utilise existing road infrastructure, including Waterfall Way / Grafton Road and Eathorpe Road. In addition, access to the BESS site is proposed via a road parcel off Eathorpe Road owned by ARC. Final access points and any necessary road upgrades would be determined in the during preparation of the EIS, and in consultation with relevant road authorities.

In addition, the Project would involve construction of internal access roads within the BESS site, which would be utilised for movement of materials during construction, and for maintenance and ad-hoc works required during the operational phase.

6.6.2. Preliminary assessment

During construction there would be a temporary increase in traffic along Eathorpe Road and Waterfall Way / Grafton Road and surrounds as components are brought to, and construction workers travel to/from, the BESS site. This would indirectly lead to some increase in localised noise levels during the main construction period.

Intersection upgrades, surface upgrades and other improvements to existing roads may be required for safe access to the Project. An assessment of Project access would be undertaken as part of the TIA for the EIS, to determine if intersection or road upgrades are necessary to meet ARC and TfNSW guidelines and requirements. If upgrades to existing road infrastructure is required, it would be undertaken in consultation with the relevant road authorities prior to the submission of the EIS.

Traffic management during construction would also need to consider activities during key agricultural activities such as harvesting periods, peak tourism seasons and the associated vehicle movements and their timing. In addition, site access would require the establishment of a new access track to accommodate the delivery of materials to site.

Traffic impacts during operations would be minimal, with traffic likely to be limited to employee vehicle movements for full-time staff, plus a small number of vehicle movements associated with ongoing maintenance and associated activities performed by local contractors/consultants. In addition, a temporary increase in traffic would be expected during the decommissioning phase as infrastructure is removed.

6.6.3. EIS assessment

A detailed TIA would be prepared as part of the EIS, implementing the SEARs requirements provided by the DPHI, ARC, and TfNSW. The TIA would inform Project access options and associated Project impacts. The scope of assessments would likely involve:

- assessment and selection of appropriate haulage routes, access option/s based on sight distances, nearby receivers, swept path diagrams through intersection (if required) and environmental constraints
- direct engagement with road authorities including TfNSW and ARC
- an assessment of existing traffic volumes and future traffic volumes in consideration of intersection assessments, road condition and safety assessment, and cumulative impact assessment with other road users (e.g. bus routes, nearby industry, pedestrian needs)
- an assessment of road traffic impact due to the construction and operation of the Project
- a review of any previous TIAs undertaken in the surrounding area
- identification of site-specific mitigation measures that would be developed in consultation with TfNSW and ARC including but not limited to:
 - a schedule of road upgrades
 - traffic control measures
 - a description of road contributions to account for road damage
 - communication requirements with nearby projects and/or businesses

The TIA would be completed in accordance with the relevant guidelines, policies and design requirements, including:

- NSW Roads and Traffic Authority: Guide to Traffic Generating Developments, version 2.2 (TfNSW, 2002)
- Austroads Guides to Road Design (various publications)
- Austroads Guides to Traffic Management Part 3: Traffic Studies and Analysis Methods (Austroads, 2020)
- Australian Standard AS 2890 Parts 1 and 2
- Australian Code for Dangerous Goods by Road & Rail (National Transport Commission, 2024)

The TIA would help to inform a Traffic Management Plan that would be prepared and include mitigation measures and confirmed haulage routes and manage traffic, for safety as well as road pavement conditions would be required.

6.7. Aboriginal heritage

6.7.1. Existing environment

According to Horton's (1994) and Tindale's (1974) mapping of linguistic groups, the Study Area is situated within the traditional lands of the Nganyaywana, also known as the Anaiwan, country.

According to the ethnographic studies of Tindale (1974), the Anaiwan traditional lands measure some 8,300 km², extending over the New England Tableland from Moree, Guyra and Ben Lomond south to Uralla, Walcha and the Moonbi Range. To the northwest, their borders ran to Tingha, and encompassed Bendemeer and Armidale Tindale (1974). Clayton-Dixon (2019) notes that the Anaiwan language group was located near Armidale. Yaniwan and Anaiwan are part of the same group of languages.

It is noted that one of the potential registered Aboriginal parties (RAPs) for the Project has previously advised that the New England Tablelands are also within the traditional lands of the Gumabingarr people.

Therefore, the potential RAP considers any tangible and/or intangible heritage values of the Study Area and its surrounding landscapes as holding great cultural and spiritual importance to present Gumbaingarr people.

The Macleay River Valley was a known travel route between the New England Tablelands and the coast (Harrison, 2004). Therefore, the Anaiwan people likely had close relations with their neighbours, the Thungghutti people. Linguistically, the two languages share many similarities, with Anaiwan language classified as belonging to the Thunggutti subgroup (Dixon, 2002). Godwin (Godwin, 1990) also suggests that the Anaiwan people were originally linked to the coastal Thunggutti people, based on linguistic similarities, but following occupation of the New England Tablelands, and over time, interactions became more common with the people of the western slopes, such as the neighbouring Gamilaroi people.

6.7.2. Preliminary assessment

A search of the AHIMS database was conducted on 17 June 2025, which returned 80 results for Aboriginal sites within a 10 km x 10 km search area centred on the Study Area (GDA Zone 56 Eastings: 371037–3810370 Northings: 6616078–6626078). Two of these sites are listed as ‘restricted’. On 17 June 2025, AHIMS confirmed that both sites would not be impacted by works in the Study Area.

Table 6.10 lists the site types and their frequencies within the AHIMS search area.

Table 6.10 AHIMS site types and their frequencies

Site Type	Number	% Frequency
Artefact site (number unspecified)	30	38.46
Isolated find	15	19.23
Artefact scatter	12	15.38
Modified tree (carved or scarred)	12	15.38
PAD	3	3.85
Aboriginal ceremony and Dreaming with artefact	1	1.28
Aboriginal resource and gathering	1	1.28
Aboriginal resource and gathering, with ceremony and dreaming, artefact, conflict, and modified tree	1	1.28
Bora/Ceremonial	1	1.28
Habitation with Aboriginal resource and gathering	1	1.28
Quarry with artefact	1	1.28
Total	78	100

Artefact sites are the most frequently recorded site type found within the AHIMS search area, comprising 38.46% of sites, with this site type having an unspecified number of artefacts recorded and is predominantly located within 200 m of waterways. The next most commonly recorded artefact type within the AHIMS search area is isolated find sites, which accounts for 19.23% of sites in the AHIMS search area. Artefact scatters and modified trees make up 15.38% of sites respectively, followed by potential archaeological deposits (PADs) which make up 3.85% of sites. The remainder of sites only have a single occurrence within the AHIMS search area.

To facilitate the Project, ground disturbing activities would be required, including vegetation clearance as required, grading of the BESS site, and construction works associated with all Project elements (Section 3.2). Maintenance and repair works are expected to be undertaken as required during the operational stage of the Project; however, significant ground disturbance is not anticipated for this stage of the proposed works.

Based on the landforms present, it is possible that site types such as isolated finds, artefact scatters, or scarred trees may be present within the Study Area; however, there is an overall low potential for Aboriginal sites of high-density or complexity to be present within the Study Area.

6.7.3. EIS and further assessment

An ACHAR would be prepared for the proposal as part of the EIS. The investigation for the ACHAR would include the following steps:

1. Desktop review to develop a predictive model for the location of Aboriginal objects.
2. Site survey with the assistance of the Aboriginal community to identify any Aboriginal objects that may be present, as well as identifying any landforms where subsurface archaeological deposits may be present.
3. Identify any areas/landforms of cultural significance in consultation with the Aboriginal community
4. Undertake test excavation if warranted.
5. Determination of the significance of the Aboriginal objects and/or landforms identified during the site survey in consultation with the Aboriginal community.
6. Assessment of the impact to identified Aboriginal heritage values including both tangible and intangible values.
7. Development of mitigation measures to minimise impacts to Aboriginal cultural values.

As part of further investigations to be undertaken as part of the ACHAR, full consultation with the Aboriginal community would be undertaken, including a pedestrian survey completed by archaeologists and a representative of the Aboriginal community. The results of the survey would indicate whether test excavation at any specific landforms is warranted.

Further investigations to be undertaken as part of the ACHAR would be in accordance with the following guidelines:

- Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010a).
- Code of Practice for the Investigation of Aboriginal Objects in NSW (DECCW, 2010b).
- Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011).

The results of the survey, Aboriginal community consultation, any test excavation results (if required), and relevant mitigation measures would be presented in the ACHAR.

6.8. Hazards and risk – Hazardous and offensive development, and electromagnetic fields

6.8.1. Existing environment

The Armidale Substation and associated electrical infrastructure located within the Study Area are subject to the management and requirements of SafeWork NSW and applicable legislation. Such infrastructure produces EMF.

The existing rural landscape surrounding the Study Area present hazards in the form of farm-scale fuel storage, use of hydrocarbon and agricultural chemicals such as pesticides, and legacy farm equipment.

6.8.2. Preliminary assessment

Hazards associated with the BESS units include the presence of potentially flammable lithium-ion batteries. In addition, the design of the BESS units would include operational controls such as cooling and emergency management systems to limit associated risks and to quickly detect and respond to any issues such as over-heating. Detailed operational, maintenance and emergency response procedures would be implemented to further minimise risk.

In addition, infrastructure which form a part of the Project such as connecting powerlines, substation, switchyard, may produce EMF. However, the EMF levels associated with the Project would be below the guideline for public exposure and is not expected to have any adverse impact on human health. Standard design provisions are expected to ensure impacts comply with relevant guidelines together with communication of the issue as required.

Hazards associated with the proposed substation would be managed in accordance with the standard requirements of SafeWork NSW and applicable legislation.

6.8.3. EIS assessment

Clause 3.2 of the Resilience and Hazards SEPP states that development for industry which would pose a significant risk in relation to human health, life, property or the biophysical environment are to be considered a potentially hazardous industry.

While the Project is not considered potentially hazardous in the guidelines for Appendix 3 of the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP, 2011c) under the Resilience and Hazards SEPP, the need for a PHA results from the Project's use of lithium-ion batteries, which are listed as a Class 9 material (miscellaneous dangerous goods).

While Class 9 materials are excluded from the SEPP 33 screening test, the hazards related to these materials should be considered in accordance with the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP, 2011c).

A PHA would be completed for the EIS in accordance with Hazardous Industry Planning Advisory Paper No. 6 'Hazard Analysis (DoP, 2011a), Multi-level Risk Assessment (DoP, 2011b), and the required battery installation guidelines would be adhered to. The PHA would detail the potential hazards and controls to mitigate hazards to ensure the fire prevention and protection systems are adequate to protect the BESS. The mitigation and control measures afforded by the Applicant and the proposed construction contractor would reduce the likelihood of these events to manageable risk levels and contain the effects on-site.

EMF levels of the proposed BESS infrastructure would be assessed as part of the EIS against the Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields (ICNIRP, 1998) . Standard design provisions are expected to ensure impacts comply with relevant guidelines together with communication of potential issues as required.

6.9. Hazards and risk – Bushfire

6.9.1. Existing environment

The Study Area is largely clear of vegetation, and a review of the NSW RFS BPL mapping confirms that none of the Study Area is currently mapped as BPL.

Currently, the nearest BPL being a bushfire protection buffer zone and vegetation category 1 mapped approximately 350 m and 450 m away respectively (Figure 6.4). However, from consultation with ARC it is understood new BPL mapping is to be released soon, which would identify the Study Area as BPL.

HOLLOWAY BESS

Bushfire prone lands

Figure 6.4

LEGEND

 Lot and DP boundaries

 Study Area

 BESS site

NSW Bush Fire Prone Lands

 Category 0: bush fire prone vegetation buffer polygons

Category 1: highest risk for bush fire.
Vegetation category consists of areas of forest, woodlands, heaths (tall and short), forested wetlands and timber plantations



0 100 200 300 400 500
m

Scale: A4 1:15,000
Datum: GDA2020 MGA Zone 56

Document code: SCG 001

Figure version: 3.0

Figure print date: 02/09/2025

Author: GVH

6.9.2. Preliminary assessment

Bushfires present a threat to human life and assets and can adversely impact ecological values. Bushfire risk can be considered in terms of environmental factors that increase the risk of fire (e.g., fuel quantity and type, topography and weather patterns), as well as specific activities (e.g., hot works and construction activities) or infrastructure components that exacerbate combustion or ignition risks (such as transmission lines and other electrical components).

6.9.3. EIS assessment

The potential to increase risk of bushfire would be assessed in the EIS in accordance with the RFS Planning for Bushfire Protection Guideline 2019 (PBP) (NSW RFS, 2019). Emergency protocols would reflect advice from relevant agencies. A Bushfire Assessment would be undertaken in accordance with PBP, Chapter 8 (other developments).

The Bushfire Hazard Assessment would:

- characterise the regional fire weather, vegetation present and slope characteristics of the Study Area and surrounds
- identify suitable bushfire protection measures for the Project, in accordance with the applicable requirements of PBP, such as asset protection zones and strategic fire advantage zones

Engagement with the NSW RFS and ARC would be undertaken during the preparation of the EIS.

Mitigation measures and emergency response protocols would be developed in consultation with the NSW RFS and NSW Fire and Rescue.

6.10. Other environmental factors

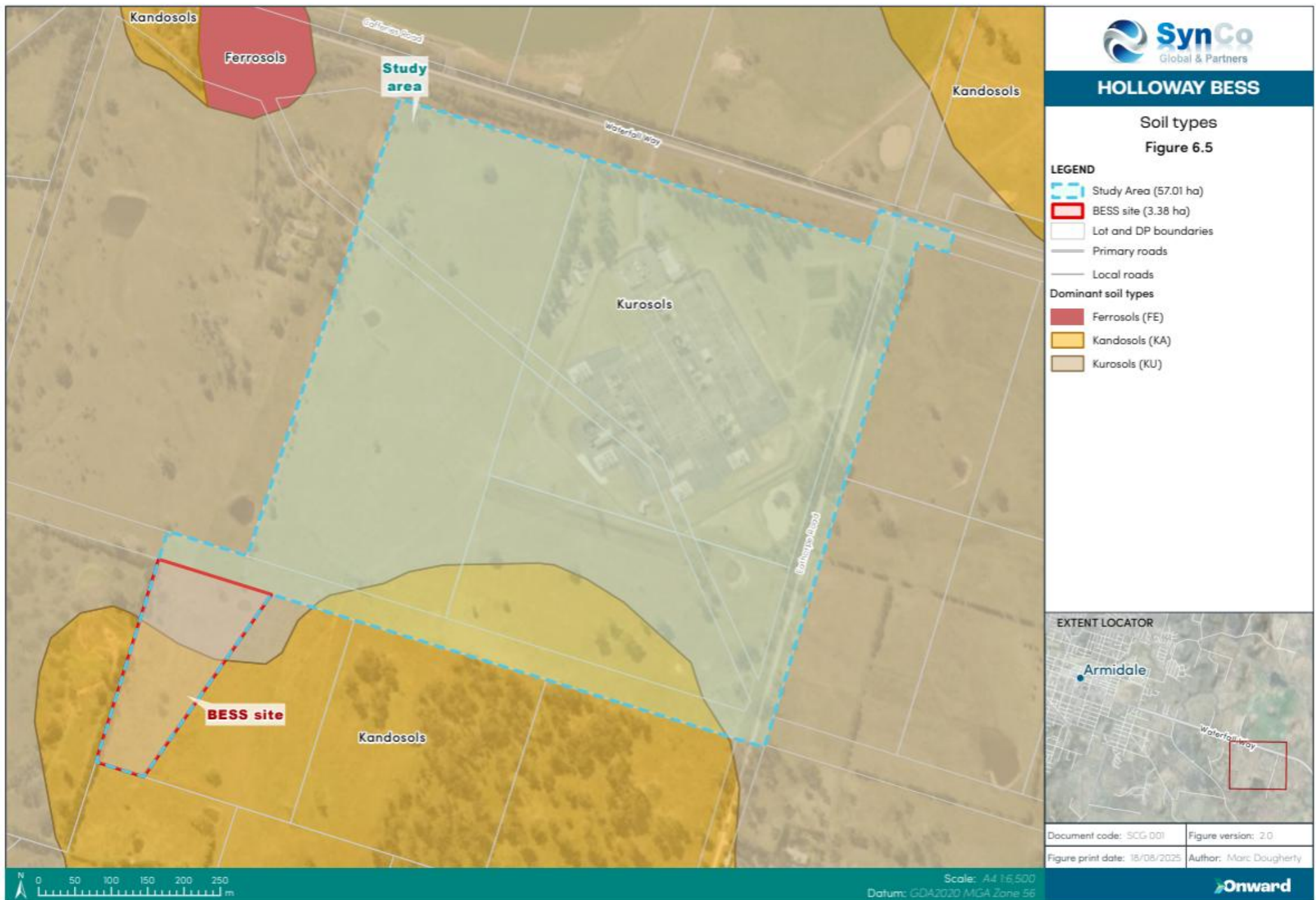
6.10.1. Soils and land use

6.10.1.1. Existing environment

A search of the Australian Soil Classification (ASC) Soil Type Map of NSW (NSW DCCEEW, 2012) indicates the study contains two soil types, as mapped on Figure 6.5, being:

- Kandosols – these soils are generally non-textured contrast soils with weakly to non-structured subsoils and of a sandy to loamy surface soil, grading to sandy-clay porous subsoils offering low fertility and poor retention. They are typical of poorly drained sites and offer low to moderate agricultural potential.
- Kurosols – these soils exhibit a strong textural contrast between the loamy surface horizons and clayey subsurface horizon. These soils are acidic, with a pH typically less than 5.5. they offer low water retention and very low agricultural potential.

There are no known acid sulfate soils (ASS) or ASS risks mapped within, or in proximity to, the Study Area. A search of the NSW Office of Environment and Heritage (OEH) Contaminated Sites Register on 10 June 2025 identified five sites within ARC with former contaminated record notices, all of which are between 5 to 13 km west of the Study Area. In addition, as part of this Scoping Report, a site walkover was completed of the Study Area, which did not identify any visual indicators of contamination (e.g. odours, stressed vegetation, or evidence of discharges).



In addition, review of land and soil capability (LSC) mapping available on the NSW Government's SEED portal indicates the Study Area contains two LSC classes, as mapped on Figure 6.6, being:

- LSC 5: Associated with Kurosol soils, LSC 5 land has severe limitations and is considered that for higher impact land management practices (e.g. cropping) there are few methods available to overcome limitations. Highly specialised land management practices can overcome some limitations for high value crops/products.
- LSC 6: Associated with Kandasol soils, LSC 6 land has very severe limitations and is considered that no management practices available to overcome limitations for a wide range of land uses (e.g. cropping, moderate to high intensity grazing, horticulture). Highly specialised practices can overcome some limitations for some high value products.

The Study Area does not contain any biophysical strategic agricultural land (BSAL), with the nearest BSAL mapped at more than 1 km away, to the west.

Existing land uses in the Study Area is a mix of dryland grazing, industrial land use associated with Armidale Substation, and rural residential land.

Crown land located in the Study Area of the Project and with potential to be impacted is located across Lot 1 of DP1013556 and between Lots 847 and 848 of DP755808. In addition, Crown land is mapped at the intersection of Eathorpe Road and Waterfall Way / Grafton Road.

6.10.1.2. Preliminary assessment

An extensive search and desktop analysis for soil and land use has been undertaken using an array of NSW Government sources, primarily the SEED and Spatial Viewer platforms, as well as the EPA public register of contaminated land records.

This analysis has confirmed the land's suitability to host the Project, due to:

- the limitation of the land agricultural purposes
- lack of ASS or contaminated sites
- compatibility with existing land uses (i.e. Armidale Substation)

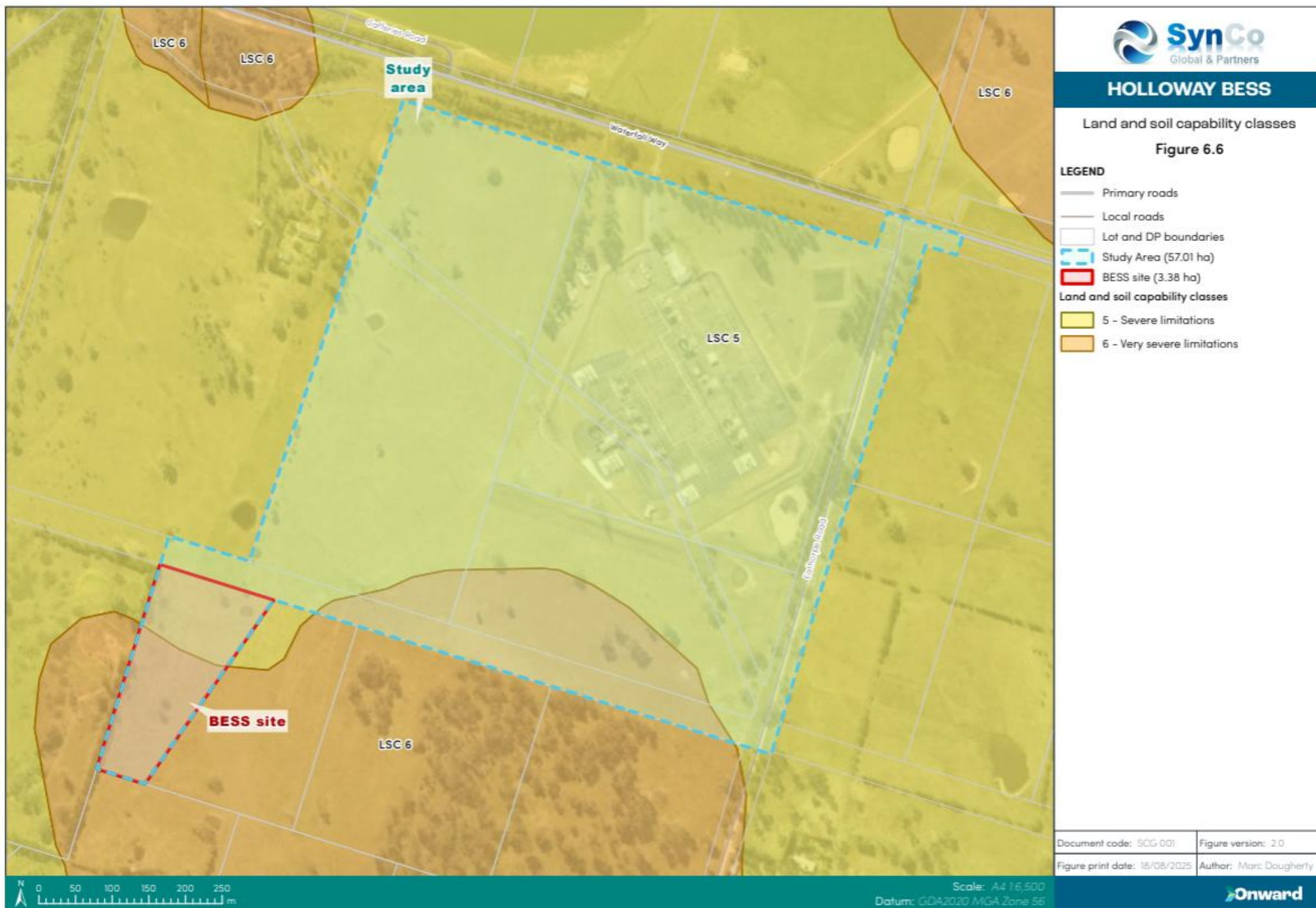
The Project would involve earthworks and ground disturbance, which would be to the Project disturbance footprint, exposing the natural ground surface and subsurface, which may increase the risk of soil erosion. Appropriate erosion and sediment control measures would be included in accordance with the Managing Urban Stormwater: Soils and construction 'Blue book guidance' (Landcom, 2004).

At the completion of operations, the Project would be decommissioned, with all above and below-ground infrastructure removed. As battery projects typically do not cause significant permanent impacts to soil or landform, existing land uses are expected to be restored.

6.10.1.3. EIS assessment

The preliminary assessment indicates the Study Area is compatible with the Project, and the impact on soils and land use is expected to be low, temporary and confined to the Disturbance Footprint for the Project. However, this notwithstanding, the EIS would further assess the Project's effects on soils and land use with consideration to soil and erosion impacts, with the proportionate proposed mitigation measures for construction, operation and decommissioning of the BESS.

While no evidence of contamination was identified within the Study Area, a Preliminary Site Investigation (PSI) is proposed to help ensure that the Project proceeds with full consideration of any potential environmental constraints or legacy impacts from any currently unknown contamination on-site.



6.10.2. Water resources

6.10.2.1. Existing environment

The Project is located within the Macleay River catchment, which spans an area of 11,450 km² and is located within the Murray-Darling Basin. While there are several man-made water features (i.e. dams) located in the Study Area, there are no natural water features (i.e. wetlands areas, watercourses, or lakes).

The closest watercourse is Commissioner Waters approximately 1.4 km to the east (Figure 6.7), a perennial watercourse which joins the Gara River 15 km downstream. Most other watercourses in the locality are non-perennial, such as Dumaresq Creek, which is found approximately 1.6 km north-west of the Study Area. The Study Area is generally flat to gently sloping land, ranging from approximately 970 masl to 1,030 masl. Water generally drains in a north-westerly direction from the Study Area.

The Project is not located within a flood planning area as designated by ARC (ARC, 2015a) or the 1% annual exceedance probability flood extent (ARC, 2015b).

Water sharing plans (WSPs) applicable to the catchment, the WSP for the Macleay Unregulated and Alluvial Water Sources 2016, and the WSP for the North Coast Fractured and Porous Rock Groundwater Sources 2016.

There are no groundwater dependent ecosystems (GDE) mapped in the Study Area; however, vegetation to the south and east have been mapped as medium probability GDEs (DCCEEW, 2022). The closest GDE is a small portion medium GDE of New England Tableland Carex Fens found approximately 1.2 km north-east of the Study Area.

Using the Bureau of Meteorology (BoM) Australian Groundwater Explorer tool, a search completed on 12 June 2025 found there are no groundwater bores within the Study Area (BoM, 2025a); however, there are approximately 12 groundwater supply bores monitored by WaterNSW within a 2 km radius of the Study Area.

There are no Ramsar Wetlands of International importance within proximity to the Study Area, with the closest identified wetland (i.e. Little Llangothlin Nature Reserve) found approximately 50 km to the north of the Project.

6.10.2.2. Preliminary assessment

The WM Act defines waterfront land as the bed of any river, lake or estuary, together with any land within 40 m of the riverbanks, lake shore or estuary mean high water mark, or lesser distance if prescribed in the NSW Water Management Regulations 2018. The Study Area is not considered to be in waterfront land as defined by the WM Act.

Potential impacts to water resources from the Project are expected to include demand for water during the construction and, to a lesser extent, during operation of the Project. The Project is not likely to impact groundwater during construction, operation or decommissioning due to the limited amount of subsurface disturbance activities required during the installation and decommissioning of infrastructure.

Water used for construction and operation of the Project may be sourced via a combination of existing farm dams, surface water or groundwater abstraction, or trucked in via a third party water source. If surface water or groundwater extraction is required to meet the Project's demand for water, it would be obtained from a licensed source. Impacts of the traffic associated with water trucks would also be assessed in the TIA, as relevant.

6.10.2.3. EIS assessment

The EIS would assess the potential impacts to watercourses and waterbodies and would include appropriate mitigation measures in line with current best practice guidelines.

HOLLOWAY BESS

Local hydrology

Figure 6.7

LEGEND

- Primary roads
- Arterial roads
- Local roads
- Study Area (57.01 ha)
- BESS site (3.38 ha)
- Lot and DP
- Lakes
- Key fish habitat
- Groundwater bores

Strahler Stream Order

- 1
- 2
- 3
- 5
- 6

GDE probability based on the High Ecological Value Aquatic Ecosystems (HEVAE) framework

- Medium
- Low

Document code: SCG 001

Figure version: 2.0

Figure print date: 18/08/2025

Author: Marc Dougherty



The assessment would comprise a qualitative, standard level of assessment and include:

- characterisation of the existing surface water and groundwater environment relevant to the Project
- water quantities, sources and access for construction and operation
- review and synthesis of relevant legislation, regulation and guidelines
- description of potential surface water and groundwater resource modification and impacts, with focus on sensitive receptors
- description of erosion and sediment control principles and management measures in accordance with Managing Urban Stormwater: Soils and Construction (Landcom, 2004) to be implemented during both project construction and operation
- flood risk assessment based on consideration of the Project layout against flood modelling to be undertaken to define existing flooding conditions
- high level assessment of potential impacts to groundwater resources and quality
- estimates of water use and proposed source(s) of supply during construction and operation
- proposed management and mitigation measures to minimise impacts to surface water and groundwater resources

6.10.3. Air quality

6.10.3.1. Existing environment

The air quality within and surrounding the Study Area is influenced by existing land use practices which are predominantly agricultural. There are no heavy-emitting industries in proximity to the Project. Therefore, air quality in the region is expected to be of good quality and typical of what is expected in a rural setting, due to factors including existing land use, low population density, low traffic volumes, and the absence of heavy-emitting industries. Armidale has consistently exhibited a good average air quality rating except for the Black Summer bushfires of 2019–2020.

Existing sources of air pollution are likely related to dust, vehicle and machinery use during agricultural production, and vehicle exhaust emissions from traffic along the New England Highway and Waterfall Way / Grafton Road. During colder months, solid fuel heating may result in a localised reduction in air quality, particularly if temperature inversions operate overnight.

The closest weather station to the Project is found at Armidale Airport (BoM ID: 95773 and site number: 056238) located approximately 6.6 km east of the Project. The station indicates the locality experiences an average maximum and minimum temperatures of 19.6 and 7.6°C respectively, with maximum highs in January and maximum lows in July. The average rainfall is in the order of 794.2 mm a year, with an average of 79.6 rain days a year, with rainfall peaking in December. Wind speeds average at 17.6-19.2 km/h (stronger in the afternoons) and are typically easterly or westerly winds (BoM, 2025b).

6.10.3.2. Preliminary assessment

The Project is not expected to have significant impacts on air quality in the region.

Emissions to the atmosphere from the Project would be predominantly associated with construction phase activities which would be temporary and limited to:

- localised dust emissions generated by land disturbance
- exhaust emissions of civil construction and vehicle, plant and machinery

During the temporary construction phase, dust particles and other air quality emissions could potentially be released from activities including:

- construction of new / upgraded access tracks and roads
- creation of open exposed areas
- excavation works and stockpile management
- mobile concrete batching plants
- transport of material and equipment
- processing and handling of material
- construction activities and associated earthmoving and construction equipment
- loading and unloading of material

During operation, the Project would store energy without directly emitting air pollutants that are known to affect the climate and human health. The Project would contribute to the improvement of air quality through the displacement of emissions that would otherwise be generated through the burning of fossil fuels used to generate electricity from traditional coal-fired power stations.

6.10.3.3. EIS assessment

The EIS would include a qualitative analysis of the potential impacts to air quality and stipulate appropriate management and mitigation measures during the construction, operations and decommissioning phases of the Project. Air quality and dust management would generally be assessed in accordance with relevant guidelines and policies including:

- National Greenhouse Accounts Factors (DCCEE, 2023b)
- NSW Climate Change Policy Framework (OEH, 2016)
- Approved methods for the modelling and assessment of air pollutants (EPA, 2022)

6.10.4. Historic heritage

6.10.4.1. Existing environment

The first European visitors to visit the New England Tablelands Bioregion was John Oxley and his exploration party in 1818, with squatters soon after establishing large leaseholds in the area (NPWS, 2003).

Armidale was later settled in 1839 by G.J. MacDonald and became a pastoral-agricultural economy. Clayton-Dixon (2019) describes the rapid colonisation of the district that began in the late 1830s. In September 1839, government records show that there were 37 stations across the Tablelands holding 422 colonists. By 1841 the colonial population had tripled to 1,052.

The township was established in 1845, and was serviced by a post-office, courthouse, flour mill, church and inns. The subsequent gold rush of the 1850s caused Armidale to grow significantly, from 76 people in 1846 to more than 5,000 in 1855 (NPWS, 2003). The mining boom and the finding of gold and antimony, gave Armidale a notable economic boost. Considered by Governor Gipps to be “one of the best grazing districts in the colony”, the Tablelands saw exponential growth in the number of stations it held. By 1848 there were 132 stations, and the New England district quickly became the epicentre of colonial expansion.

Livestock grazing has long been a dominant land use in Armidale and the New England Tablelands Bioregion, and the allocation of state forests of NSW dates to early 1900 (NPWS, 2003).

Armidale’s long history has contributed to its array of state and local heritage listed items, rooted in the early towns’ foundations and legacy mining infrastructure, such as the Armidale Post Office and Bakers Creek Mine.

6.10.4.2. Preliminary assessment

Desktop searches were undertaken for the Project on 11 June 2025 using the relevant historic heritage registers, including:

- Australian Heritage Database
- NSW State Heritage Inventory
- Armidale Regional LEP

While no listed Commonwealth, State, or locally listed heritage items identified in the Study Area, there were several local and State heritage items found in the broader locality. The nearest State-listed item is Roseneath homestead, located approximately 3.4 km to the south-east. A summary of the listed heritage items found within a 2 km buffer of the Study Area can be found in Table 6.8.

Table 6.11 Local heritage items in proximity to the Project

Site Name	Item ID	Significance	Approximate distance to the Project (km)
Site of Commissioners Inn	A033	local heritage item	1.7
Site of Abattoir 'Wongalea'	A032	local heritage item	1
Site of Brookstead fellmongery and woolwashing works	A034	local heritage item	1.5
House, Palmerston, including outbuildings and grounds	I080	local heritage item	1.7

6.10.4.3. EIS assessment

Although the preliminary assessment has not identified that the Study Area contains a registered historic heritage item, there is potential for heritage values to be present. A Statement of Heritage Impact (SoHI) would be prepared as part of the EIS, which would consider known and potential heritage values, and potential impacts to built heritage features and areas of historical archaeological sensitivity. The SoHI would also consider any intangible (social) values held by the community or relevant stakeholders.

Preparation of the SoHI would involve detailed historical research, including analysis of historical aerial imagery, and physical inspection of the relevant areas within the Project Site. The preparation of the SoHI would ensure compliance with all statutory obligations and best practice guidelines and would assist in the management of risk associated with inadvertent impact to heritage values.

6.10.5. Waste management

The Project would generate several waste streams during the construction phase, including:

- excavated materials (i.e. soil)
- packing from materials and other infrastructure (cardboard packaging, plastic wrapping, wood pallets etc.)

There would be minor quantities of waste generated by the day-to-day operation of the Project. Waste would also be generated at the end of the Project's operational life as part of the decommissioning activities.

The EIS would quantify and classify the likely waste streams to be generated during construction, operation and decommission phases of the Project.

The EIS would identify and describe measures to manage, reuse, recycle and dispose of this waste to ensure resources are used effectively and impacts to the environment due to waste generated from the Project are minimised.

Measures would be identified in accordance with the following guidelines and strategies:

- Waste Classification Guidelines – Part 1: classifying waste (NSW EPA, 2014)
- NSW Waste and Sustainable Materials Strategy 2041 (DPIE, 2021)
- NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012 (NSW EPA, 2012)

6.11. Cumulative impact assessment

6.11.1. Background

Cumulative impacts relate to the combined potential effects of different impact areas of the Project as well as the potential interaction with other projects in the local area. They may occur concurrently or sequentially. The NSW Government's Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021) sets out the approach for addressing cumulative impacts.

The relevant cumulative impacts are those associated with other known foreseeable developments occurring in proximity to the Project.

6.11.2. Preliminary assessment

SSD and state significant infrastructure (SSI) projects undergoing assessment or that have been determined are available to view on the Major Projects Planning Portal. Those projects that are completed and would not contribute to a cumulative impact have not been considered. SSD and SSI projects that are currently proposed as well as those that are operational and in close proximity to the Project would need to be assessed for potential cumulative impacts. While most potential cumulative impacts would be expected to be highly localised, the radius distance accounts for other impacts that may arise such as traffic and transport.

6.11.3. EIS assessment

The level of cumulative assessment required is identified in Table 6.12, which has been prepared in accordance with the Cumulative Impact Assessment Guidelines for State Significant Projects (DPHI, 2022b).

Table 6.13 lists the current relevant nearby proposed and operational SSD and SSI projects within Armidale Regional LGA that may be considered within the cumulative impact assessment for the EIS. The Study Area for the cumulative impact assessment would be aspect specific. For example, it would vary depending on the specific characteristics of the assessment matter and the scale and nature of the potential impacts.

Table 6.12 Level of cumulative assessment required

Assessment	Description
Detailed	The Project may result in significant impacts on the matter, including cumulative impacts.
Standard	The Project is unlikely to result in significant impacts on the matter, including cumulative impacts.
N/A	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

Table 6.13 SSD and SSI projects within the Armidale Regional LGA

Project name	Description	LGA	Status	Approximate distance (km)	Potential overlap											
					Relevant assessment matters											
					Landscape and visual	Noise and vibration	Social and economic	Traffic	Biodiversity	Aboriginal heritage	Hazards and risk – Hazardous and offensive development	Hazards and risk – Bushfire	Hazards and risk – EMF	Soils and land use	Water resources	Air quality
Proposed renewable projects																
Oxley Solar Farm	Development of a 215 MW solar farm with up to 50 MW of battery energy storage and associated infrastructure	Armidale Regional	Approved – 11/12/2023	9	No – N/A	No – N/A	Yes – Standard	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
New England Solar Farm (Mod 2)	Adding 127 ha of land to the Project to accommodate a change to the Project infrastructure layout and increasing the BESS capacity. Total capacity would be increased to 720 MW.	Uralla Shire	Approved – 26/05/2023	13	No – N/A	No – N/A	Yes – Standard	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
Tilbuster Solar Farm (including Mod 1) and Tilbuster 2 Solar Farm	Acquisition of adjacent land and development of a 150 MW solar farm and 30 MWh battery energy storage facility, including a modification of the disturbance footprint, weekend hours, port options and OSOM definition. Noting that the initial project was approved on 03/03/2022, however construction has not yet commenced.	Armidale Regional	Response to Submissions	19	No – N/A	No – N/A	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
Armidale BESS	Development of a 150 MW battery energy storage facility with associated infrastructure	Armidale Regional	Assessment	0.7	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Standard	Yes – Standard	Yes – Standard	Yes – Standard
Armidale East BESS	Development of a 500 MW / 1000 MWh battery energy storage facility with associated infrastructure	Armidale Regional	Prepare EIS	14	No – N/A	No – N/A	Yes – Standard	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
Wongalea BESS	Construction, operation, and decommissioning of a BESS with a capacity of approximately 300 MW/1200 MWh, and ancillary infrastructure.	Armidale Regional	Prepare EIS	1	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Standard	Yes – Standard	Yes – Standard	Yes – Standard
Gara BESS	Development of a 400 MW / 1760 MWh battery storage system and associated infrastructure including grid connection.	Armidale Regional	Exhibition	5	No – N/A	No – N/A	Yes – Standard	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A

Project name	Description	LGA	Status	Approximate distance (km)	Potential overlap											
					Relevant assessment matters											
					Landscape and visual	Noise and vibration	Social and economic	Traffic	Biodiversity	Aboriginal heritage	Hazards and risk – Hazardous and offensive development	Hazards and risk – Bushfire	Hazards and risk – EMF	Soils and land use	Water resources	Air quality
Boorolong Wind Farm	Boorolong Wind Farm includes the construction, operation and decommissioning of a wind farm and ancillary infrastructure	Armidale Regional	Prepare SEARs	20	No – N/A	No – N/A	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
New England REZ Transmission Project	Development of new transmission lines between Bayswater Power Station Substation and the New England REZ, new energy hubs within the New England REZ, and ancillary infrastructure.	Armidale Regional and multiple other	Prepare EIS	Varies – closest point is approximately 29	No – N/A	No – N/A	Yes – Standard	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
Kooyong BESS	Development of a 200 MW / 400 MWh BESS with associated infrastructure and connection works	Armidale Regional	Prepare EIS	<0.5	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Detailed	Yes – Standard	Yes – Standard	Yes – Standard	Yes – Standard
Other proposed SSD and SSI projects																
Hillgrove Mine (Mod 5)	Extension of mine life and changes to infrastructure	Armidale Regional	Prepare Mod Report	18	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
Operational renewable projects																
Metz Solar Farm, including Mod 1	Increase in the maximum height of solar panels and reduction of disturbance footprint of the 100 MW solar farm and associated infrastructure	Armidale Regional	Approved – 21/12/2018	15	No – N/A	No – N/A	Yes – Standard	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A
Other operational SSD and SSI projects																
Hillgrove Mine (as approved by various modifications)	Gold and antimony mine approved to process 250,000 tonner of ore per annum until 31 December 2026.	Armidale Regional	Approved – 24/06/2025	18	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A	No – N/A

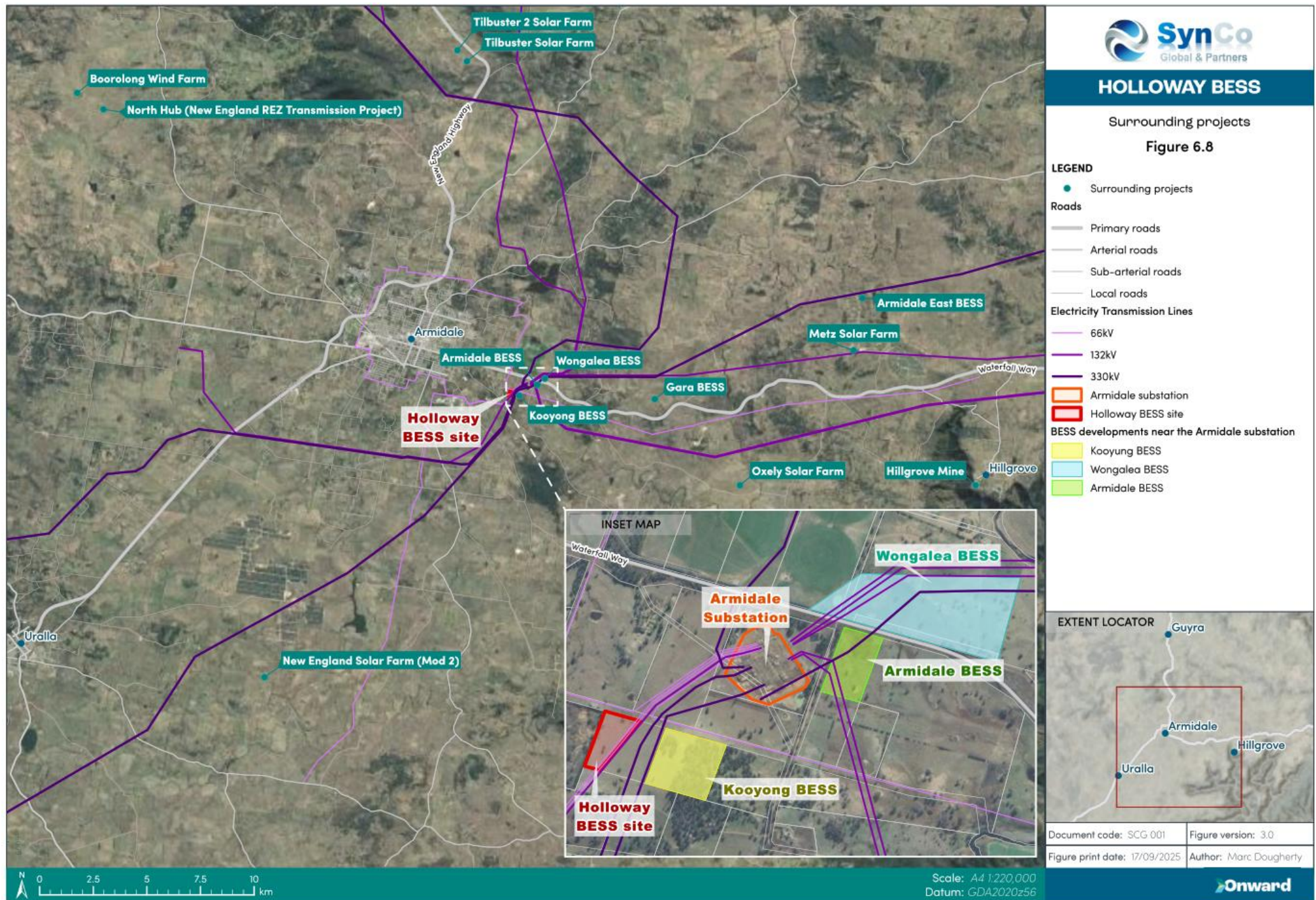
The projects identified in Table 6.13 are shown on Figure 6.8, relative to the Project. Of note is the Project is in close proximity to several other energy storage projects around the Armidale substation. The Project in combination with other proposed energy projects represents a cluster of energy infrastructure, with other nearby proposed BESS projects including:

- Armidale BESS Project: Located on Lot 737 of DP755808 located directly east of the Armidale Substation, proposed by the Maoneng Group.
- Kooyong BESS Project: Located on Lot 842 of DP755808 directly adjacent to the Project, to the east, and proposed by Edify Energy.
- Wongalea BESS Project: Located on Lot 1 of DP777437, north-west of the Armidale BESS on the northern side of Waterfall Way / Grafton Road and proposed by EkuEnergy.

Potential cumulative impacts would be assessed within the EIS in line with the Cumulative Impact Assessment Guidelines for State Significant Projects (DPHI, 2022b).

The timing of works associated with the proposed developments nearby would be monitored throughout the EIS stage to ensure appropriate mitigation measures are implemented, particularly in relation to construction traffic and pressure on local services and facilities.

It's also anticipated there would be cumulative benefits to the local communities from the Project and other developments in the region through the generation of jobs (during construction and ongoing operations) and through contribution to local economies associated with the purchase of local goods and services.



6.12. Matters requiring no further assessment

Matters listed in Appendix B of the Scoping Report Guidelines that are considered to not require further assessment in the EIS are provided in Table 6.14.

Table 6.14 Matters requiring no further assessment in the EIS

Matter	Relevance
Access – rail, port and airport facilities	The Project does not contain rail, port and airport facilities. No interactions with such facilities are proposed under the Project other than deliveries of plant.
Air – atmospheric emissions and gases	Vehicles associated with the Project's construction activities would generate atmospheric emissions and gases. These emissions would be temporary and minimal compared to existing emissions from traffic travelling on the New England Highway and Waterfall Way / Grafton Road. The renewable energy nature of the Project would ultimately help to reduce atmospheric emissions and gases.
Amenity – odour	The Project would not generate any odorous emissions.
Built environment	The Project would have no impacts on built environment. All works would be undertaken within the Study Area or within existing road reserves.
Biodiversity – conservation areas	There are no conservation areas within the Study Area.
Hazards and risks – biosecurity	The Project would have low risk to biosecurity. Potential introduction of weeds to or from the Study Area would be limited to vehicle movements. These risks can be easily mitigated through the implementation of standard management measures.
Hazards and risks – dams safety	There are no existing dams within the Study Area or within surrounding land that would pose a safety risk. No dams are proposed to be constructed under the Project.
Hazards and risks – coastal hazards	The Project is not within a coastal zone.
Hazards and risks – environmental hazards	Environmental hazards relevant to the Study Area are incorporated in other proposed assessments.
Hazards and risks – groundwater contamination	The Project is unlikely to have potential for groundwater contamination. The Project is not anticipated to interact with any aquifer. Impacts to groundwater would be assessed in the water resources assessment.
Hazards and risks – land movement	The Project is not within a landslide risk area. Erosion risks would be considered in the water assessment.
Heritage – natural	The Project does not have any identified natural heritage significance.
Land – stability	The Project is not within a landslide risk area. Erosion risks would be considered in the water assessment.
Land – soil chemistry	The Project would not involve any processes that would alter the soil chemistry of the Study Area.
Land – topography	The Project would not significantly alter the topography of the Study Area.
Social – decision-making systems	The Project would be in accordance with relevant decision-making systems but has no impact on those systems.
Water – water availability	The Project would require water during construction for dust suppression and during operation for landscaping maintenance. Water for construction would be sourced via existing landowner access rights, water access licences, or via town water supply or trucked into Site. If required, the Applicant would obtain its own water supply works approval or water access licence.

7. Conclusion

SynCo Global is proposing to construct, operate and decommission a BESS at 112 Eathorpe Road, Armidale. The Project would have a capacity up to 250 MW / 1,000 MWh (4 hour duration), with key elements including:

- BESS site
- Transmission easement corridor
- Site access from Eathorpe Road
- Eathorpe Road upgrade (including the intersection with Waterfall Way / Grafton Road)

This Scoping Report has provided an overview of the Project, and outlined the planning and general environmental context of the Project, as well as the anticipated scope of assessment requirements.

The Project is classified as SSD under Section 4.36 of the EP&A Act as it has an EDCC greater than \$30 million and is for the purpose of an electricity storage facility it meets the criteria outlined in Clause 20 of the Planning Systems SEPP. Consequently, the Project would require development consent from the Minister for Planning (or delegate) or the IPC under Section 4.5(1) of the EP&A Act.

The Scoping Report has categorised the environmental impacts requiring further assessment in the EIS as per Table 7.1.

Table 7.1 Matters requiring further assessment

Matter	
Matters requiring detailed assessment	
Biodiversity	Traffic, transport and access
Landscape and visual	Aboriginal heritage
Noise and vibration	Hazards and risk – Hazardous and offensive development
Social and economic impacts	Hazards and risk – Bushfire
Matters requiring standard assessment	
Hazards and risk – Electro-magnetic frequency	Historic heritage
Soils and land use	Waste management
Water resources	Cumulative impacts
Air quality	

The EIS would address the following:

- A detailed description of the Project including construction activities, and ancillary sites and components.
- A comprehensive assessment of the potential impacts on the key issues, including a description of the existing environment and assessment of potential direct and indirect impacts of construction, operation, and decommissioning.
- Descriptions of measures to be implemented to avoid, minimise, manage, mitigate, offset, and/or monitor the potential impacts.
- Identify and address issues raised by stakeholders and community members.
- The development of an accommodation strategy for the construction workforce, in consultation with ARC and other developers proposing similar projects nearby.

The Scoping Report demonstrates the critical importance of the Project in supporting various policies and frameworks, contributing to the decarbonisation of this emissions-intensive sector, by storing surplus renewable electricity and discharging it when needed, thereby reducing reliance on traditional thermal power generators, many of which are nearing the end of their operational lifespan.

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Appendix A

SIA Scoping Report



SIA Scoping Report

Holloway Battery Energy Storage System

SynCo Global Pty Ltd

1 September 2025



Document version history

Version	Date	Revision description	Author	Approved for issue
1.	1 September 2025	Final for submission	Sonya Pascoe	Mark Vile

Disclaimer

This SIA Scoping Report has been prepared in accordance with the brief provided by SynCo Global. The Report relies upon information provided by SynCo Global and information collected at the time and under the conditions specified in the SIA Scoping Report. All findings, conclusions or recommendations contained in the SIA Scoping Report are based on that information. The SIA Scoping Report is for the use of SynCo Global and no responsibility will be taken for its use by any third party. SynCo Global may, at its discretion, use the report to inform regulators and the public.

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1. Introduction

1.1. Overview

SynCo Global Pty Ltd (SynCo Global) is proposing to construct, operate and decommission the Holloway Battery Energy Storage System (BESS) at 112 Eathorpe Road, Armidale within Lot 843 of DP755808 (the Project). The Project is located in Armidale Regional local government area (LGA) (Armidale LGA) in the New England North West (NENW) Region of NSW, approximately 6 km south-east of Armidale.

The Project would include the installation of lithium-ion batteries, inverters, transformers and a switching station, connection to the existing network, and other ancillary infrastructure and amenities required for construction and operation.

SynCo Global has engaged Onward Consulting Pty Ltd (Onward) to prepare the Scoping Report to support a request to the Department of Planning, Housing and Infrastructure (DPHI) for Secretary's Environmental Assessment Requirements (SEARs) for the Project. The SEARs would guide the preparation of an environmental impact statement (EIS) for the Project by identifying the relevant matters to be assessed and the level of assessment required.

A description of Project design and staging can be found in Section 3 of the Holloway BESS Scoping Report.

1.2. Purpose

This social impact assessment (SIA) Scoping Report (SIA Scoping Report) has been prepared to support the Holloway BESS Scoping Report. This SIA Scoping Report has been developed in accordance with DPHI's Social Impact Assessment Guideline for State Significant Projects: July 2025 (SIA Guideline) (DPHI, 2025a) and the Technical Supplement: Social Impact Assessment Guideline for State Significant Projects: July 2025 (SIA Technical Supplement) (DPHI, 2025b). Scoping for potential social impacts for this Project was supported by the completion of DPHI's SIA scoping worksheet.

This SIA Scoping Report provides an initial social baseline study and an evaluation of potential social impacts that may occur as a result of the development of the Holloway BESS project, and the level of assessment for the EIS phase.

1.2.1. Approach

This section presents the approach adopted to scope potential social impacts. This process will define a proportionate level of assessment for the Project's SIA at the EIS phase and provide social considerations for Project refinements and management measures in future Project phases. An overview for the SIA process, and how it generally aligns with the environmental impact assessment (EIA) process and Project engagement is provided in Figure 1.1.

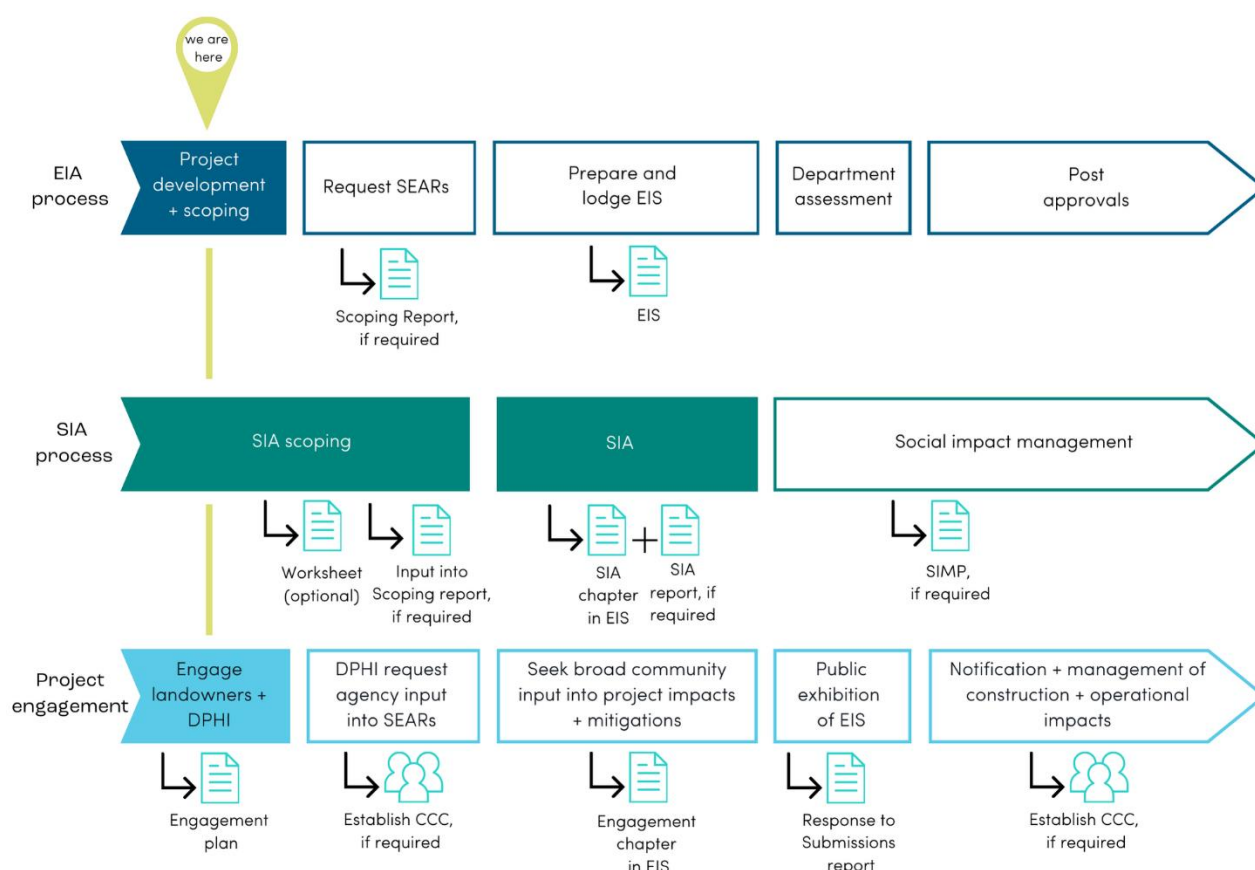


Figure 1.1 The SIA process as it relates to the EIA process and Project engagement (DPHI, 2025a)

The SIA scoping process for this Project included:

- identifying the social locality and study area: recognising those who are most likely to experience Project impacts and selecting geographies for desktop studies (Section 2)
- initial social baselining: snapshot of existing social environment within the study area, including key socio-economic indicators and strategic planning context (Section 3)
- social impact scoping: scoping and initial evaluation of social impacts using the SIA scoping worksheet as a framework (Section 4)
- identifying Project refinements and management measures: identifying existing and future opportunities for design changes or management strategies in response to potential social impacts (Section 5)
- determining the level of assessment for EIS phase: the approach and scale of assessment for the SIA that will support the Project's EIS (Section 5)

1.2.2. Data sources

The social baseline was developed using recent and reputable qualitative and quantitative data sources, including:

- the 2021 Census of Population and Housing (ABS, 2022) (the '2021 Census')
- the 2021 Socio-economic Indexes for Areas (SEIFA) state deciles (ABS, 2023a)
- local and state government strategic planning documents
- Torrens University Australia's Public Health Information Development Unit (PHIDU) Social Health Atlas (PHIDU, 2023)

2. Social locality and study area

Project interests vary between stakeholder groups, making it essential to define relevant geographies to identify communities and stakeholders. The SIA Guideline describes a social locality as the area where people are most likely to experience impacts (DPHI, 2025a). The social locality for this Project includes nearby residents that may experience direct impacts from Project activities, such as changes to local amenity. The social locality also includes communities that may experience less direct impacts, such as requirements for workers, accommodation, goods and services.

Defining the social locality provides a basis to identify and engage key stakeholders for the SIA at the EIS phase and establishes the context to explore potential social impacts. The social locality also influences the selection of geographic boundaries for the social baseline study area.

The initial social baseline study is developed using qualitative and quantitative data to profile the study area. This SIA Scoping Report adopts Australian Statistical Geography Standard (ASGS) defined geographies to establish the study area, including statistical area (SA) geographies.

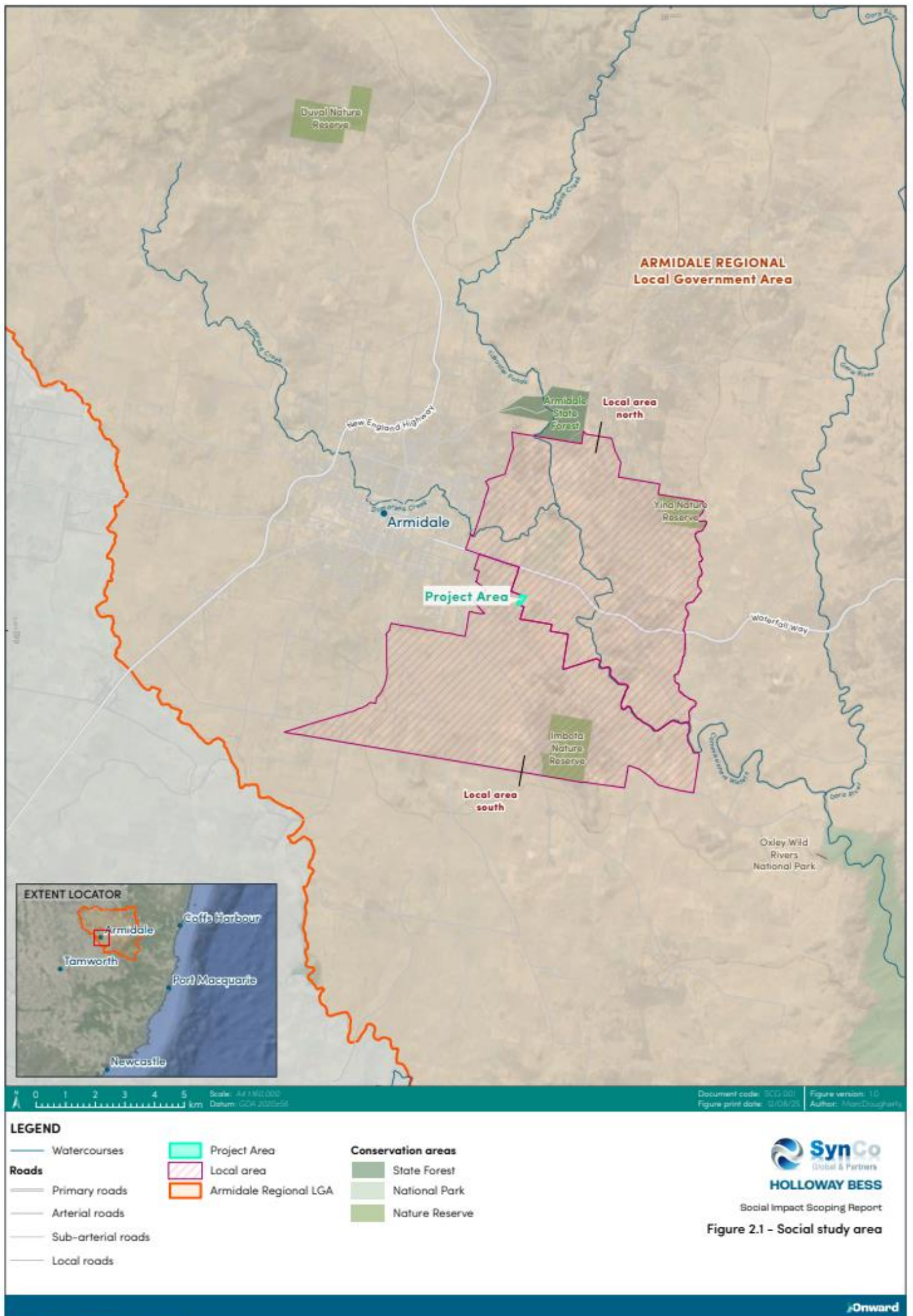
The local area has been established as the two immediate SA1 geographies surrounding the Project site. These localities are referred to as 'local area north' and 'local area south' in the social baseline for ease of discussion of key indicators. These SA1 geographies were selected for the study area to gain social and demographic insights about nearby neighbours and landholders who may experience direct social impacts.

Those that may experience less direct impacts are likely to be residents and businesses within the Armidale Regional local government area (Armidale Regional LGA). Armidale Regional LGA forms another relevant geography for the study area. Regional NSW provides the state average, excluding the Greater Sydney area, and serves as a comparator for the local study area and Armidale Regional LGA.

The study area is described in Table 2.1 along with potential Project interests. The relationship of the Project site to the study area is shown in Figure 2.1.

Table 2.1 Social study area

Study area	Locality & ASGS code	Population (ABS, 2022)	Potential interests
Local area	Local area north: 11001118611 (SA1)	208	The Project area is located in a peri-urban locality about 10 km south-east of Armidale CBD. Nearby residents and businesses may experience impacts relating to: - local amenity changes: visual, air quality, noise, and vibration - road safety and access - land use changes - health and wellbeing
	Local area south: 11001118602 (SA1)	412	
Armidale LGA	LGA10180	29,124	Residents, businesses and other stakeholders of the Armidale LGA may experience impacts relating to: - road safety and access - housing demand - economic development - employment and training - Aboriginal cultural values - emergency service demand
Regional NSW	1RNSW	2,829,637	NA – baseline for comparison



3. Social baseline

This section provides an initial social baseline for the social study area. The social baseline provides a snapshot of the existing social environment through a review of key strategic planning documents and analysis of recent social and demographic data. Key social and demographic indicators collected for the study area are presented in full in Appendix A and relevant findings are discussed in the following sections.

3.1. Strategic context

Sources

Key strategic planning documents have been reviewed to establish the strategic direction for Armidale LGA and the NENW region, including the significance and role of peri-urban localities around Armidale city. The strategic direction and planning documents collectively promote a coordinated approach to supporting residential and employment growth, economic diversification, and environmental resilience in and around Armidale city.

These documents include:

- Advancing our Region Community Plan 2025-2034 (the Community Plan) (ARC, 2025)
- Local Strategic Planning Statement (the LSPS) (ARC, 2024a)
- Brilliant Region Strategy 2024 (the BRS) (ARC, 2024b)
- Local Housing Strategy (the LHS) (ARC, 2024c)
- New England North West Regional Plan 2041 (the Regional Plan) (DPHI, 2022)
- Armidale Regional Local Environmental Plan (the LEP) (NSW Government, 2024)

Summary

Local and regional strategic planning places strong emphasis on economic diversification, environmental sustainability, and managed growth within and around Armidale. The Community Plan identifies limited private and government investment as a contributor to a slowing rate of population growth and constrained employment opportunities (ARC, 2025).

In response to a stagnating population, the LSPS sets a target of 4,000 new jobs by 2040, with a focus on growing industries beyond the traditional education and agriculture sectors (ARC, 2024a). These include controlled environment horticulture, renewable energy, and advanced manufacturing. These industries are well suited to peri-urban areas on the edge of Armidale due to the availability of land and access to infrastructure (ARC, 2024a).

Renewable energy is identified as a priority growth sector across strategic planning documents for the Armidale region. The LSPS highlights renewable energy as one of the emerging industries essential to economic diversification (ARC, 2024a). It notes that infrastructure planning, such as water security upgrades, will support the viability of renewable energy developments in peri-urban and rural parts of the LGA. The BRS positions renewable energy as a key driver of future employment and investment, contributing to the region's transition toward a more sustainable and innovative economy (ARC, 2024b). The Regional Plan further reinforces this direction by encouraging the development of renewable energy projects as part of a strategy to diversify mining-dependent economies and reduce regional vulnerability to economic shocks (DPHI, 2022).

Horticulture priority areas support economic diversification through high-value agricultural production, while proposed employment lands offer potential synergies with logistics and processing industries. The Regional Plan reinforces this focus on diversification and encourages efficient land use planning to avoid land use conflict in peri-urban settings (DPHI, 2022).

Tourism is another strategic priority, and the Community Plan outlines a community vision to enhance local tourism, focusing on Armidale town's heritage, cultural assets, and events (ARC, 2025). The BRS recognises that cultural and recreation-based tourism can stimulate job creation in hospitality and creative sectors, particularly within the urban centre (ARC, 2024b).

The south-eastern peri-urban area of Armidale is identified as a priority area for residential and employment growth (ARC, 2024a). The LEP zones parts of this area as R1 General Residential and R5 Large Lot Residential, enabling a range of housing options (NSW Government, 2024). This supports implementation of the LHS which directs low-density growth to areas that preserve rural character while accommodating demand (ARC, 2024c).

Local area

The local area is a peri-urban locality about 10 km south-east of Armidale CBD. The area is primarily comprised of large lot residential land (R5), however, a residential growth area, identified by the LSPS, is located to the north of the Project area. Existing employment and future employment growth areas, including manufacturing, are in the south-west of the local area. There are also horticulture priority areas located to the north and east of the Project area.

Armidale Substation is located about 650 m north-east of the Project site, situated within associated transmission infrastructure. Other features of the local area include Armidale Landfill Transfer Station, Petersons Winery and Guest House, New England Model Aircraft Club, and Yina Nature Reserve

Key road transport corridors intersecting the local area include Waterfall Way, an east-west connection between the New England and Pacific highways, and Castledoyle Road, a local road extending south-east from Armidale into the Castle Doyle locality, providing access to rural properties and agricultural and horticultural areas.

Key demographic and social characteristics for the local area have been derived from collecting data for the two immediate SA1 geographies surrounding the Project site: local area north and local area south. The data collected is available in Appendix A and summarised in the following sections.

Local area north

At the time of the 2021 Census, the area had a population of 208 people, and no residents identified as Aboriginal and/or Torres Strait Islander. The population in this area decreased by 1% between 2016 and 2021.

The area is characterised by a slightly older population, where the median age is 49 years, 6 years more than the Regional NSW average. Compared to the Regional NSW average the proportion of people in the working age group (15 to 64 years) was higher, and the proportion of people under 15 years was smaller.

The national IRSAD¹ decile for this area was 8, flagging a low level of socio-economic disadvantage in this area. This is consistent with key socio-economic indicators when this area is compared to the Regional NSW average. The area experienced higher incomes, lower unemployment, lower rates of lone households, and

¹ Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) is a SEIFA index that provides a measure of socio-economic advantage and disadvantage (ABS, 2023). IRSAD calculates variables related to income, occupation, health, employment, education, housing suitability, and rental payments. A low score indicates a high proportion of people experiencing disadvantage and a lower proportion of people experiencing advantage.

higher rates of homes owned outright. There was also a very large proportion of households with an income of \$3,000 or more per week, more than double the rate of Armidale LGA and that of Regional NSW.

Compared to Regional NSW, residents of this area experienced a lower rate of long-term health conditions. Rates of people who provide unpaid assistance to another due to age, disability, or health condition were much lower than the Regional NSW average.

Local area south

There were 412 residents in the area at the time of the 2021 Census, a 1.1% decline since the 2016 Census. Of the total population, 1.7% (or 7 people) identified as Aboriginal and/or Torres Strait Islander.

The median age in this area was 51 years, much higher than the Regional NSW median. The proportion of people in the working age cohort was higher than Regional NSW. The workforce participation rate was also high, at 68.5%, compared to the Regional NSW rate of 56.4%.

Residents of this area experienced low levels of socio-economic disadvantage, with an IRSAD decile of 8. When compared to Regional NSW, key socio-economic indicators reflect this IRSAD decile, including a lower rate of unemployment, much higher median household income, a higher proportion of households earning over \$3,000 per week, lower rates of lone person households, and very low rates of children under 14 years living with two unemployed parents.

Unlike the local area in the north, residents of this area had a higher rate of providing unpaid assistance due to age, disability, or health condition.

Armidale LGA

Armidale LGA is situated in the NENW region of NSW, approximately halfway between Sydney and Brisbane. The LGA encompasses several population centres, including Armidale city and Guyra, and is home to the Anaiwan people, whose traditional lands cover much of the New England Tableland (NSW Government, 2024).

As of June 2023, Armidale LGA had an estimated resident population (ERP) of 29,594 (ABS, 2024). At the time of the 2021 Census, 7.6% of residents identified as Aboriginal and/or Torres Strait Islander (ABS, 2022).

Demographically, Armidale LGA has a younger median age and higher population density than the Regional NSW average, reflective of its role as a major regional centre anchored by the University of New England. However, despite its established status, the LGA has experienced stagnant population growth over the past two decades, including a 1.1% population decline between 2016 and 2021 (ABS, 2022). Forecasts suggest minimal population growth toward 2041, with an average annual increase of just 0.1% (DPHI, 2024). In response, state and local strategic planning efforts have consistently prioritised residential growth, workforce retention, and housing availability as critical enablers of broader economic stability (DPHI, 2022; ARC, 2024a).

The education and training sector remains the top employer in Armidale LGA, driven by the presence of the university and schools. Health care, social assistance, and agriculture are also key industries, while new opportunities are emerging in renewable energy and controlled-environment horticulture. Armidale LGA is centrally located within the New England renewable energy zone (NEREZ), placing it in a strong position to benefit from regional clean energy investment and associated supply chain activities (ARC, 2024a).

Income levels in Armidale LGA aligned closely with the Regional NSW average, and the area showed characteristics consistent with a transient university town, such as higher rental rates and higher population mobility indicated by rates of those who lived elsewhere 5 years ago (ABS, 2022). At the 2021 Census, the workforce participation rate was 56.5%, mirroring the regional average, although unemployment at that time was slightly higher.

Housing in Armidale LGA was predominantly comprised of separate houses, accounting for 84.3% of all dwellings, slightly higher than the Regional NSW average. The LGA had a relatively high proportion of lone-person households at 33.1%, compared to 29% across Regional NSW, reflecting the presence of older residents and transient student populations.

Rented dwellings make up 34.7% of housing in Armidale, which was notably higher than the Regional NSW average of 26.8%. Despite having a lower median rent (\$285/week) than Regional NSW (\$330/week), 32.8% of renters in Armidale were in rental stress, on par with the regional average of 36%.

As reported by SQM Research, rental vacancy rates in Armidale (postcode 2305) have predominantly been below 3% since 2018 (SQM Research, 2025). There have been very few periods where rates exceeded 3%, with one exception in 2020, a key period of COVID-related restrictions. These spikes may relate to the presence of university students and other population movements characteristic of the time. Because a vacancy rate of 3% is considered to reflect a balanced market, rates within Armidale may indicate that renters have experienced consistent competition for housing.

Mortgage stress affected 10.7% of households with a mortgage, slightly below the Regional NSW average of 12.7%. Home ownership rates in Armidale were also marginally lower, with 34.6% owning outright and 26.6% owning with a mortgage, compared to 38% and 31.2% respectively in Regional NSW.

4. Social impact scoping

The evaluation of social impacts was undertaken using the SIA scoping worksheet (DPHI, 2025b). SIA scoping provides a basis to consider changes that may be experienced throughout the life of the Project. The scoping exercise identifies social impacts that may occur from these changes and who may experience them. The SIA scoping worksheet provides a framework to consider the potential significance of the dimensions of the identified social impacts.

The dimensions of social impact include:

- extent: the number of people potentially affected, who they are and where they are located
- duration: the timing and duration that people may be affected
- intensity or scale: the degree or scale of the change to people
- sensitivity: the level of vulnerability or sensitivity of the people potentially affected, and the importance or value attached to the matter
- concern or interest: the level of concern or interest among people potentially affected, which may or may not be proportionate to findings from technical assessments

The outcomes from the SIA scoping worksheet are provided in full in Appendix B and summarised in Table 4.1. For each impact, initial consideration is given to the level of significance for each of the five dimensions and the potential for combined or cumulative impacts.

This process identified 13 potential social impacts that may arise due to Project activity. Additional data collection during the development of the SIA for Phase 2 (EIS phase) may identify social impacts not listed here.

The findings from this approach will focus engagement and research activity during the EIS phase and enhance positive social benefits and the development of strategies to appropriately manage negative impacts. Section 5 presents the level of assessment for the SIA at the EIS phase.

Table 4.1 Initial social impact evaluation

Project activity	Social impact	Who is likely to be impacted?	Positive or negative	Potential for combined/ cumulative?	extent	duration	intensity	sensitivity	concern/ interest
Construction workforce demand	Reduced access to social infrastructure and services due to non-local workforce demand (emergency services, health and medical, and police)	Residents and workers in Armidale LGA	Negative	Yes	No	No	No	?	Yes
Construction workforce accommodation demand (non-local workforce)	Reduced access to housing and accommodation due to non-local workforce demand	Residents and workers in Armidale LGA	Negative	Yes	?	?	Yes	?	Yes
Construction activity, including vehicle movements	Local amenity changes resulting from construction activity (i.e. noise, vibration, visual, and air quality)	Residents and landholders nearby to the site	Negative	Yes	No	No	No	?	Yes
Presence of BESS	Changes to the landscape character due to the presence of project infrastructure	Residents and landholders nearby to the site	Negative	Yes	No	Yes	?	?	Yes
Construction demands for supplies and services	Contribution to local economy due to project demand for supplies and services	Residents and businesses in Armidale LGA	Positive	Yes	?	No	No	No	Yes
Construction workforce requirements	Project workforce requirements creating employment opportunities	Resident workers in Armidale LGA	Positive	Yes	No	No	No	?	?
Construction workforce requirements	Project workforce requirements contributing to worker shortages for local businesses	Locally owned businesses in Armidale LGA	Negative	Yes	No	No	No	?	?
Ground disturbing construction activity	Aboriginal cultural heritage loss resulting from disturbance of unknown (unregistered) artefacts or sites	Traditional Owner groups, Registered Aboriginal Parties (RAP), and other local Aboriginal community members	Negative	Yes	?	?	?	Yes	?
Project development	Changes to land use at site reducing the site's contribution to agricultural output (livestock and grazing)	Businesses within the region seeking these supplies	Negative	Yes	No	Yes	No	No	No

Project activity	Social impact	Who is likely to be impacted?	Positive or negative	Potential for combined/cumulative?	extent	duration	intensity	sensitivity	concern/interest
Project development	Changes to land-based activities at neighbouring properties	Neighbouring landowners	Negative	Yes	No	?	?	?	Yes
Vehicle movements during construction	Changes to road conditions during construction, contributing to reduced sense of public safety or travel delays	Road users and pedestrians in the local area and along transport routes	Negative	Yes	No	No	No	?	Yes
Project development	Concern or stress generated from perceptions of risks associated with fire or electromagnetic fields (EMF)	Residents and landholders nearby to the site	Negative	Yes	No	?	?	?	Yes
Project development	Contribution to community benefit sharing and voluntary planning agreement (VPA)	Armidale LGA residents	Positive	Yes	No	?	No	No	Yes

5. Level of assessment for EIS phase

The level of assessment for the Project's SIA at the EIS phase has been established through the completion of the SIA scoping worksheet. The level of assessment is determined by what is currently understood about the dimensions of the social impact (extent, duration, etc.) as described in Section 4.

The SIA Technical Supplement categorises four levels of impact assessment: not relevant, minor, standard, and detailed, which is described in Table 5.1. Each level of assessment determines the scale and methodology for each impact, such as data requirements and engagement activities (DPHI, 2025b).

Table 5.1 Description and indicative data requirements for different levels of assessment (DPHI, 2025b)

Level	Description	Secondary data	Primary data	
			Engagement	Research
Not relevant	Where potential social impacts are immaterial and do not warrant assessment	NA	NA	NA
Minor assessment	The impact is considered minor	Required	Limited if required (e.g. local council)	Not required
Standard assessment	The project may result in a moderate social impact, including cumulative impacts	Required	Targeted engagement	Potentially targeted research
Detailed assessment	The project may result in a significant negative social impact, including cumulative impacts	Required	Broad engagement	Targeted research

The level of assessment for each of the 13 potential social impact is summarised in Table 5.2, which is drawn from the SIA scoping worksheet (Appendix B). For each of these impacts, existing opportunities or Project refinement have been identified, along with initial considerations for mitigation/enhancement measures.

The outcome from this process shows that two potential social impacts would require a detailed level of assessment for the SIA to be developed for Phase 2 (EIS phase), these include:

- reduced access to housing and accommodation due to non-local workforce demand
- project workforce requirements contributing to worker shortages for local businesses

Of the remaining impacts, nine will require a standard assessment, one will require a minor assessment, and one is not relevant for assessment.

The impact that is not relevant for assessment relates to changes to land use at site reducing the site's contribution to agricultural output. This impact was evaluated to have negligible impact to extent, intensity, sensitivity, or interest in terms of social impacts. This was determined by considering the size of the Project footprint, the level of interest among stakeholders, the modest level of agricultural activity at the site, and the severe to very severe limitations to land and soil capability.

The SIA would address the matters set out by the SEARs and fulfil the requirements of the SIA Guideline (DPHI, 2025a) and the SIA Technical Supplement (DPHI, 2025b), which would:

- predict and analyse potential social impacts based on Project activities
- collect primary (stakeholder engagement) and secondary data to establish the social context and how impacts may be experienced, using the methods in Table 5.2 as a guide
- evaluate social impacts based on the social context, including among vulnerable and high-risk groups within the social locality
- propose appropriate responses to key matters, such as social impact management measures and the integration of such into future project phases

Table 5.2 Level of assessment and data collection methods

Social impact	Level of assessment	Data collection plan to investigate impact	Opportunities for, or refinements to date	Initial mitigation or enhancement plans
Reduced access to social infrastructure and services due to non-local workforce demand (emergency services, health and medical, and police)	Standard	• desktop review of service provision and capacity within the study area • presence of high-risk or vulnerable groups informed by stakeholder interviews and indicators of vulnerability • engagement outcomes, especially housing service providers and ARC • past experiences with workforce-related population spikes, deduced from literature review and stakeholder engagement	• fire and other hazards considered in site design • health, medical and police – not yet developed	Workforce policies (i.e. use of telehealth, site medic), and Project engagement with police and emergency services to develop management plans
Reduced access to housing and accommodation due to non-local workforce demand	Detailed	• short-term accommodation and housing characteristics in the local area, including typology, rental vacancy, and occupancy • indicators of housing affordability, including rental and mortgage stress • presence of high-risk or vulnerable groups, informed by stakeholder interviews and indicators of vulnerability • engagement outcomes, especially housing service providers and ARC	• early engagement with ARC for accommodation preferences and opportunities • collaborating with neighbouring development to progress joint opportunities for worker accommodation • workforce management strategies to be adopted by proponent	Workforce accommodation strategies, balance use of local and non-local workers

Social impact	Level of assessment	Data collection plan to investigate impact	Opportunities for, or refinements to date	Initial mitigation or enhancement plans
Local amenity changes resulting from construction activity (i.e. noise, vibration, visual, and air quality)	Standard	- presence of high-risk or vulnerable groups among nearby residents, informed by stakeholder interviews and indicators of vulnerability - outcomes from respective technical studies and level of acceptability of management measures by nearby landowners and residents	- reduction of the size of the Project to minimise potential operational noise impacts - inclusion of noise walls which also act as a visual barrier - inclusion of visual screening on western and southern boundary - early commencement of LVIA to inform detailed design - early engagement with impacted landowners has commenced	Mitigation and management measures to be developed by respective technical reports, and a complaints management process established within a community and stakeholder engagement plan
Changes to the landscape character due to the presence of project infrastructure	Standard	- outcomes from respective landscape and visual impact assessment - level of acceptability of management measures by nearby landowners and residents - social value placed on visual amenity as deduced from interviews with neighbouring landowners and residents	- inclusion of noise walls which also act as a visual barrier - inclusion of visual screening on western and southern boundary - early commencement of LVIA to inform detailed design	Mitigation and management measures to be developed by the landscape and visual impact assessment
Contribution to local economy due to project demand for supplies and services	Standard	- local business counts, disaggregated by industry - engagement outcomes, especially ARC and industry stakeholders	No	Community and stakeholder engagement to identify local procurement opportunities, and opportunities to enhance local capacity
Project workforce requirements creating employment opportunities	Standard - unknown	- disaggregated workforce characteristics within the study area - industries of employment within the study area - skills and qualifications within the study area - engagement outcomes, especially ARC and industry stakeholders	No	Community and stakeholder engagement to identify opportunities to build skills and qualifications among local workforce

Social impact	Level of assessment	Data collection plan to investigate impact	Opportunities for, or refinements to date	Initial mitigation or enhancement plans
Project workforce requirements contributing to worker shortages for local businesses	Detailed - unknown	- disaggregated workforce characteristics within the study area - industries of employment within the study area - skills and qualifications within the study area - engagement outcomes around skill and worker demand, especially ARC and industry stakeholders	No	Community and stakeholder engagement to identify opportunities to build skills and qualifications among local workforce, which would generate more skills/qualifications within the local workforce market
Aboriginal cultural heritage loss resulting from disturbance of unknown (unregistered) artefacts or sites	Standard - unknown	- outcomes from the Project's Aboriginal cultural heritage assessment and feedback from RAPs on the assessment - Project engagement outcomes among Traditional Owner groups, RAPs, and other local Aboriginal community members	engagement commenced with cultural knowledge holders	Mitigation and management measures developed by the Aboriginal cultural heritage assessment, in consultation with RAPs and Traditional Owner stakeholders
Changes to land use at site reducing the site's contribution to agricultural output (livestock and grazing)	Not relevant	NA	reduction of the size of the Project also reduces total area of land use change at site	Mitigation and management measures developed by Land Use Conflict Risk Assessment and a site verification assessment
Changes to land-based activities at neighbouring properties	Standard - unknown	- outcomes from the Land Use Conflict Risk Assessment to understand potential land use conflicts at adjacent or nearby properties - outcomes from stakeholder engagement, i.e. interviews with nearby landholders and concerns raised	engagement with nearby landowners has commenced	Mitigation and management measures developed by Land Use Conflict Risk Assessment and ongoing engagement with neighbouring landowners
Changes to road conditions during construction, contributing to reduced sense of public safety or travel delays	Minor	- outcomes from the traffic impact assessment - local road use and past experiences, deduced from stakeholder interviews and EIS engagement - presence of high-risk or vulnerable groups amongst nearby residents, informed by stakeholder interviews and indicators of vulnerability	- considering intersection upgrades, surface upgrades, and other improvements to existing roads - coordinating traffic impact assessment with a neighbouring developer	Mitigation and management measures developed by the traffic impact assessment, worker conduct policies (i.e. driver behaviour), and a complaints management process within a community and stakeholder engagement plan

Social impact	Level of assessment	Data collection plan to investigate impact	Opportunities for, or refinements to date	Initial mitigation or enhancement plans
Concern or stress generated from perceptions of risks associated with fire, leeching or electromagnetic fields (EMF)	Standard - unknown	- outcomes from the bushfire assessment, such as proximity of residences to project site and fire-prone vegetation - stakeholder engagement outcomes, i.e. frequency of fire risk, leeching or EMF raised as a concern - presence of high-risk or vulnerable groups among nearby residents, informed by stakeholder interviews and indicators of vulnerability - impacts of past bushfire impact events understood through literature review - community reliance on local roads or evacuation routes potentially impacted by Project infrastructure	- engagement with nearby landowners has commenced - considering use of fire-resistant vegetation for visual screening - site access and egress and road design considerations to support emergency response	Stakeholder and community engagement activity that promotes outcomes from the preliminary hazard analysis and bushfire assessment, as well as mitigation and management measures that reduce risk and impact
Contribution to community development through community benefit sharing and a voluntary planning agreement (VPA)	Standard	engagement outcomes, especially ARC	- early engagement with ARC to determine funding preferences and opportunities - early engagement with neighbours about community benefit sharing opportunities	Ongoing consultation with Armidale Regional Council Ongoing engagement with neighbours about community initiatives

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Appendix A

Demographic and social indicators

A.1 Demographic and social indicators

Key demographic and social indicators were collected to inform the social baseline, which are presented in Table A1. This data is sourced from the 2021 Census (ABS, 2022), unless specified otherwise.

Table A1 Demographic and social indicators

	Indicator	Local area north		Local area south		Armidale LGA		Regional NSW	
Population and age	Population density	NA		NA		3.7		3.6	
	Population	208		412		29,124		2,829,637	
	Estimated resident population as of June 2023 (ABS, 2024)	NA		NA		29,594		189,331	
	Population (ATSI) (count & proportion)	0	0.0%	7	1.7%	2,205	7.6%	185,873	6.6%
	Median age (years)	49		51		37		43	
	Median age (ATSI) (years)	-		23		21		23	
	Population change 2016-2021	-1.0%		-1.1%		-1.1%		7.0%	
	Under 15 years	14.7%		13.7%		18.0%		17.9%	
	Working age (15 to 64 years)	62.9%		64.9%		63.1%		59.9%	
	Over 65 years	22.4%		21.4%		18.9%		22.2%	
	Low or no English proficiency	NA		NA		1.6%		0.9%	
	IRSAD national decile (ABS, 2023)	8		8		7		NA	
Health and assistance	No long-term health condition reported	60.1%		59.5%		54.2%		53.6%	
	One or more long-term health conditions	29.3%		28.2%		29.6%		33.3%	
	Asthma	6.7%		6.8%		9.4%		9.6%	
	Arthritis	11.5%		9.5%		8.9%		11.6%	
	Heart disease	5.3%		4.4%		4.2%		5.0%	
	Lung condition	1.4%		1.9%		1.9%		2.6%	
	Need for assistance	NA		NA		5.2%		6.8%	
	Provides unpaid assistance	8.2%		15.0%		12.5%		13.1%	
Workforce and income	Workforce participation	65.4%		68.5%		56.5%		56.4%	
	Unemployment	0.0%		2.9%		5.3%		4.6%	
	Household median weekly income	\$2,277		\$2,333		\$1,404		\$1,434	
	Households earning less than \$650 a week	13.5%		11.8%		19.0%		18.8%	
	Households earning more than \$3,000 per week	39.2%		33.8%		15.0%		16.7%	

	Indicator	Local area north	Local area south	Armidale LGA	Regional NSW
	Children under 14 years living with unemployed lone parent	NA	NA	21.4%	20.7%
	Children under 14 years with both parents unemployed	16.7%	15.8%	21.2%	25.6%
Housing	Different address 5 years ago	NA	NA	42.8%	37.9%
	Lone person households	18.4%	15.6%	33.1%	29.0%
	Rented housing	13.0%	11.6%	34.7%	26.8%
	Median rent	\$254	\$368	\$285	\$330
	Rental stress	NA	35.3%	32.8%	36.0%
	House owned outright	41.6%	53.4%	34.6%	38.0%
	House owned with a mortgage	41.6%	36.3%	26.6%	31.2%
	Mortgage stress	0.0%	13.2%	10.7%	12.7%
	Social housing (of total rented housing)	NA	NA	14.3%	15.1%
	Separate house (dwelling structure)	100.0%	100.0%	84.3%	82.3%
	Unoccupied dwelling	12.5%	4.4%	11.8%	11.2%
	Estimated homelessness 2021 (rate per 10,000) (PHIDU, 2023)	NA	NA	51.3	36.5
Industry	Top three industries of employment	Higher education (7.6%)	Higher education (6.7%)	Higher education (8.9%)	Hospitals (ex. psychiatric hospitals) (4.4%)
		Central government administration (6.8%)	Secondary education (5.9%)	Hospitals (ex. psychiatric hospitals) (3.9%)	Other social assistance (3.1%)
		Real estate services (5.9%)	Takeaway food services (4.2%)	Beef cattle farming (3.4%)	Aged care residential services (2.9%)

Appendix B

Full SIA scoping worksheet

B.1 SIA scoping worksheet

This SIA Scoping Report used the DPHI SIA scoping worksheet (DPHI, 2025b) for initial identification and evaluation of potential social impacts, and is presented in Table B1.

Table B1 SIA scoping workshop

Project activities	Category of social impact	Likely impact on people			Combined and cumulative impacts	Dimensions of impact					Management by other technical disciplines?	Assessment level for each impact		Data collection plan to investigate impact	Opportunities for, or refinements to date?	Initial mitigation or enhancement plans?
		How is this impact likely to be experienced?	Who is likely to be impacted?	Positive or negative		Is this dimension significant for the social impact?						Level of assessment	Indicative data requirements			
						extent	duration	intensity	sensitivity	concern/interest						
Construction workforce demand	Accessibility	Reduced access to social infrastructure and services due to non-local workforce demand (emergency services, health and medical, and police)	Residents and workers in Armidale LGA	Negative	Yes	No	No	No	?	Yes	No	Standard	Secondary data + targeted engagement + potentially targeted research	- desktop review of service provision and capacity within the study area - presence of high-risk or vulnerable groups informed by stakeholder interviews and indicators of vulnerability - engagement outcomes, especially housing service providers and ARC - past experiences with workforce-related population spikes, deduced from literature review and stakeholder engagement	- fire and other hazards considered in site design - health, medical and police – not yet developed	Workforce policies (i.e. use of telehealth, site medic), and Project engagement with police and emergency services to develop management plans
Construction workforce accommodation demand (non-local workforce)	Accessibility	Reduced access to housing and accommodation due to non-local workforce demand	Residents and workers in Armidale LGA	Negative	Yes	?	?	Yes	?	Yes	No	Detailed	Secondary data + detailed engagement + targeted research	- short-term accommodation and housing characteristics in the local area, including typology, rental vacancy, and occupancy - indicators of housing affordability, including rental and mortgage stress - presence of high-risk or vulnerable groups, informed by stakeholder interviews and indicators of vulnerability - engagement outcomes	early engagement with ARC for accommodation preferences and opportunities	Workforce accommodation strategies, balance use of local and non-local workers

Project activities	Category of social impact	Likely impact on people			Combined and cumulative impacts	Dimensions of impact					Management by other technical disciplines?	Assessment level for each impact		Data collection plan to investigate impact	Opportunities for, or refinements to date?	Initial mitigation or enhancement plans?
		How is this impact likely to be experienced?	Who is likely to be impacted?	Positive or negative		Is this dimension significant for the social impact?	extent	duration	intensity	sensitivity	concern/interest					
														especially housing service providers and ARC		
Construction activity, including vehicle movements	Surroundings	Local amenity changes resulting from construction activity (i.e. noise, vibration, visual, and air quality)	Residents and landholders nearby to the site	Negative	Yes	No	No	No	?	Yes	Yes - partly	Standard	Secondary data + targeted engagement + potentially targeted research	- presence of high-risk or vulnerable groups among nearby residents, informed by stakeholder interviews and indicators of vulnerability - outcomes from respective technical studies and level of acceptability of management measures by nearby landowners and residents	- reduction of the size of the Project to minimise potential operational noise impacts - inclusion of noise walls which also act as a visual barrier - inclusion of visual screening on western boundary - early commencement of LVIA to inform detailed design	Mitigation and management measures to be developed by respective technical reports, and a complaints management process within a community and stakeholder engagement plan
Presence of BESS	Surroundings	Changes to the landscape character due to the presence of project infrastructure	Residents and landholders nearby to the site	Negative	Yes	No	Yes	?	?	Yes	Yes - partly	Standard	Secondary data + targeted engagement + potentially targeted research	- outcomes from respective landscape and visual impact assessment - level of acceptability of management measures by nearby landowners and residents - social value placed on visual amenity as deduced from interviews with neighbouring landowners and residents	- inclusion of noise walls which also act as a visual barrier - inclusion of visual screening on western boundary - early commencement of LVIA to inform detailed design	Mitigation and management measures to be developed by the landscape and visual impact assessment
Construction demands for supplies and services	Livelihoods	Contribution to local economy due to project demand for supplies and services	Residents and businesses in Armidale LGA	Positive	Yes	?	No	No	No	Yes	No	Standard	Secondary data + targeted engagement + potentially targeted research	- local business counts, disaggregated by industry - engagement outcomes, especially ARC and industry stakeholders	No	Community and stakeholder engagement to identify local procurement opportunities, and opportunities to enhance local capacity
Construction workforce requirements	Livelihoods	Project workforce requirements creating	Resident workers in Armidale LGA	Positive	Yes	No	No	No	?	?	No	Standard - unknown	Secondary data + targeted engagement + potentially	disaggregated workforce characteristics	No	Community and stakeholder engagement to identify opportunities to build skills and

Project activities	Category of social impact	Likely impact on people			Combined and cumulative impacts	Dimensions of impact					Management by other technical disciplines?	Assessment level for each impact		Data collection plan to investigate impact	Opportunities for, or refinements to date?	Initial mitigation or enhancement plans?
		How is this impact likely to be experienced?	Who is likely to be impacted?	Positive or negative		Is this dimension significant for the social impact?	extent	duration	intensity	sensitivity	concern/interest					
		employment opportunities											targeted research	- within the study area - industries of employment within the study area - skills and qualifications within the study area - engagement outcomes, especially ARC and industry stakeholders		qualifications amongst local workforce
Construction workforce requirements	Livelihoods	Project workforce requirements contributing to worker shortages for local businesses	Locally owned businesses in Armidale LGA	Negative	Yes	No	No	No	?	?	No	Detailed - unknown	Secondary data + detailed engagement + targeted research	- disaggregated workforce characteristics within the study area - industries of employment within the study area - skills and qualifications within the study area - engagement outcomes around skill and worker demand, especially ARC and industry stakeholders	No	Community and stakeholder engagement to identify opportunities to build skills and qualifications amongst local workforce, which would generate more skills/qualifications within the local workforce market
Ground disturbing construction activity	Culture	Aboriginal cultural heritage loss resulting from disturbance of unknown (unregistered) artefacts or sites	Traditional Owner groups, RAPs, and other local Aboriginal community members	Negative	Yes	?	?	?	Yes	?	Yes - partly	Standard - unknown	Secondary data + targeted engagement + potentially targeted research	- outcomes from the Project's Aboriginal cultural heritage assessment and feedback from RAPs on the assessment - Project engagement outcomes among Traditional Owner groups, RAPs, and other local Aboriginal community members	engagement commenced with cultural knowledge holders	Mitigation and management measures developed by the Aboriginal cultural heritage assessment, in consultation with RAPs and Traditional Owner stakeholders
Project development	Livelihoods	Changes to land use at site reducing the site's contribution to agricultural output	Businesses within the region seeking these supplies	Negative	Yes	No	Yes	No	No	No	No	Not relevant	NA	NA	reduction of the size of the Project also reduces total area of land use change at site	Mitigation and management measures developed by Land Use Conflict Risk Assessment and a site verification assessment.

Project activities	Category of social impact	Likely impact on people			Combined and cumulative impacts	Dimensions of impact					Management by other technical disciplines?	Assessment level for each impact		Data collection plan to investigate impact	Opportunities for, or refinements to date?	Initial mitigation or enhancement plans?
		How is this impact likely to be experienced?	Who is likely to be impacted?	Positive or negative		Is this dimension significant for the social impact?						Level of assessment	Indicative data requirements			
						extent	duration	intensity	sensitivity	concern/interest						
		(livestock and grazing)														
Project development	Livelihoods	Changes to land-based activities at neighbouring properties	Neighbouring landowners	Negative	Yes	No	?	?	?	Yes	Yes - partly	Standard - unknown	Secondary data + targeted engagement + potentially targeted research	- outcomes from the Land Use Conflict Risk Assessment to understand potential land use conflicts at adjacent or nearby properties - outcomes from stakeholder engagement, i.e. interviews with nearby landholders and concerns raised	engagement with nearby landowners has commenced	Mitigation and management measures developed by Land Use Conflict Risk Assessment and ongoing engagement with neighbouring landowners
Vehicle movements during construction	Health and Wellbeing	Changes to road conditions during construction, contributing to reduced sense of public safety or travel delays	Road users and pedestrians in the local area and along transport routes	Negative	Yes	No	No	No	?	Yes	Yes - fully	Minor	Secondary data + limited engagement (if required)	- outcomes from the traffic impact assessment - local road use and past experiences, deduced from stakeholder interviews and EIS engagement - presence of high-risk or vulnerable groups amongst nearby residents, informed by stakeholder interviews and indicators of vulnerability	considering intersection upgrades, surface upgrades, and other improvements to existing roads	Mitigation and management measures developed by the traffic impact assessment, worker conduct policies (i.e. driver behaviour), and a complaints management process within a community and stakeholder engagement plan
Project development	Health and Wellbeing	Concern or stress generated from perceptions of risks associated with fire, leeching or electromagnetic fields (EMF)	Residents and landholders nearby to the site	Negative	Yes	No	?	?	?	?	Yes - partly	Standard - unknown	Secondary data + targeted engagement + potentially targeted research	- outcomes from the bushfire assessment, such as proximity of residences to project site and fire-prone vegetation - stakeholder engagement outcomes, i.e. frequency of fire risk, leeching or EMF raised as a concern - presence of high-risk or vulnerable groups among	- engagement with nearby landowners has commenced - considering use of fire-resistant vegetation for visual screening - site access and egress and road design considerations to support emergency response	Stakeholder and community engagement activity that promotes outcomes from the preliminary hazard analysis and bushfire assessment, as well as mitigation and management measures that reduce risk and impact

Project activities	Category of social impact	Likely impact on people			Combined and cumulative impacts	Dimensions of impact					Management by other technical disciplines?	Assessment level for each impact		Data collection plan to investigate impact	Opportunities for, or refinements to date?	Initial mitigation or enhancement plans?
		Is this dimension significant for the social impact?	extent	duration		intensity	sensitivity	concern/interest	Level of assessment	Indicative data requirements						
		How is this impact likely to be experienced?	Who is likely to be impacted?	Positive or negative												
														nearby residents, informed by stakeholder interviews and indicators of vulnerability - impacts of past bushfire impact events understood through literature review - community reliance on local roads or evacuation routes potentially impacted by Project infrastructure		
Project development	Community	Contribution to community benefit sharing and voluntary planning agreement (VPA)	Armidale LGA residents	Positive	Yes	No	?	No	No	Yes	No	Standard	Secondary data + targeted engagement + potentially targeted research	engagement outcomes, especially ARC	early engagement with ARC to determine funding preferences and opportunities	Ongoing consultation with Armidale Regional Council

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Appendix B

Community and Stakeholder Engagement Plan

Community and Stakeholder Engagement Plan

Holloway BESS

September 2025



1. Introduction

1.1. Community and Stakeholder Engagement Plan

This Community and Stakeholder Engagement Plan (the Plan) has been developed to guide community engagement and communication activities associated with the development and delivery of the Holloway Battery Energy Storage System (BESS) (the Project).

This Plan is a living document and will be updated as the Project evolves and in response to community and stakeholder feedback.

1.2. Objectives of this Plan

The objectives of this Plan are to:

- generate awareness of the Project including its social, economic and environmental benefits
- generate community support for the Project
- build connections with key stakeholders and the broader community
- establish a robust and transparent process to engage with stakeholders and community
- identify and provide engagement opportunities, communication and feedback channels for community to provide input and feedback and get involved
- ensure timely responses are given to Project enquiries and complaints
- identify and implement strategies to address known community issues and concerns about the Project

1.3. Link to other plans

This Plan has been prepared to align with various planning documents, government guidelines and industry frameworks for best practice engagement.

Table 1.1 List of plans, guidelines and frameworks for community engagement

Document name	Description and relevance to Project
Undertaking Engagement Guidelines for State Significant Projects (Engagement Guidelines) (DPHI, 2024)	• structured framework for identifying and engaging stakeholders early and meaningfully throughout the project lifecycle • apply these guidelines to build community trust, support regulatory compliance, and contribute to a more robust and socially responsible development outcome
Benefit-Sharing Guideline (DPHI, 2024)	• applies to BESS projects where BESS projects are proposed on rural zoned land (including RU1 Primary Production, RU2 Rural Landscape, RU3 Forestry, RU4 Primary Production Small Lots)
AA1000 AccountAbility Stakeholder Engagement Standard (2015)	• provide a guide on how to plan, implement, and evaluate quality stakeholder engagement • promote inclusivity, materiality, and responsiveness • ensure the views of all affected stakeholders, including residents, council and Aboriginal groups are meaningfully considered in project decisions • apply these guidelines to support a transparent, ethical engagement process that aligns with both local expectations and global best practice
International Association for Public Participation (IAP2) Core Values and Public Participation Spectrum	• international standard for engagement practices and provides guidance to the level of engagement needed with different stakeholder groups based on their level of impact

Document name	Description and relevance to Project
	informs engagement methods and approach
AS 10002:2022 Guidelines for complaint management in organisations	sets out standards for complaint response and management practices

1.4. Project overview

SynCo Global is an Australian-owned renewable project developer and asset manager committed to advancing the global transition towards net-zero carbon emissions and a more sustainable future.

SynCo Global is proposing to construct, operate and decommission Holloway BESS. The Project would include a four-hour duration BESS located at 112 Eathorpe Road, Armidale, just 650 m from the Armidale substation.

The Project would include:

- BESS infrastructure (i.e. lithium-ion batteries, inverters, transformers and switching station), with a capacity of up to 250 megawatts (MW) / 1000 MW hours
- electrical reticulation network
- internal access roads
- perimeter security fencing
- ancillary infrastructure, including site office and maintenance building, including amenities

1.5. Project location

The Project is located at 112 Eathorpe Road, Armidale, approximately 5km east of Armidale town centre, within the Armidale Regional Council local government area (LGA). The Project is situated in the New England renewable energy zone (NEREZ).

The site is bounded by Waterfall Way to the north and Eathorpe Road to the east, both of which are local roads.

The Project development area within a rural setting well-situated to utility-scale infrastructure and selected for its proximity to adjacent transmission infrastructure (Transgrid Armidale substation) and low land-use conflict.

The site lies within the federal electorate of New England and the state electorate of Northern Tablelands

1.6. Project benefits

The Project will provide the following benefits to the region:

- grow the integration of renewable energy within the NEREZ by storing any excess solar and wind generation for use during peak demand
- enhance grid stability contributing to emissions reductions and NSW net-zero goals
- strengthen local energy reliability and resilience, especially during peak demand or emergency events, for example, extreme heat or bushfires
- create opportunities for local input and engagement, including community benefit-sharing initiatives
- minimise long-term land disturbance compared to other large-scale energy infrastructure due to quiet, enclosed operation and modular design
- attract regional investment as part of the NEREZ, helping to establish Armidale as a renewable energy hub

- generate direct and indirect employment during construction, operation, and maintenance phases
- support long-term energy market efficiency and cost stability

1.7. Community benefit sharing

SynCo Global is committed to sharing the benefits of the Project with their neighbours and the wider community. SynCo Global will engage with Armidale Regional Council and the community to establish a community benefit sharing program. This engagement has begun and will continue during preparation of the EIS.

1.8. Negotiables

SynCo Global is committed to working together with the community and other stakeholders to shape decisions and actions in relation to an impact, opportunity or outcome of the Project.

While community and stakeholder feedback may influence decisions, there are some aspects of the Project that are not negotiable. SynCo Global aims to be transparent about what elements of the Project are negotiable with the community and stakeholders.

The following aspects of the Project are open to community and stakeholder influence:

- tools for engaging with community and stakeholders, along with frequency and timing of engagement
- identification of perceived and real Project impacts
- mitigation and management of Project impacts
- community benefit sharing opportunities

1.9. Project timeline

There are several opportunities for community and stakeholder engagement during the Project's development and delivery. Table 1.2 details the anticipated timing of the Project's key milestones.

Table 1.2 Project timeline

Timing	Project milestone
July 2025	Project announcement Engagement to inform scoping
September 2025	Lodge scoping report and request for SEARs
October 2025	SEARs issued Prepare EIS Engagement to inform EIS Engagement to inform community benefit sharing model
Early 2026	Lodge EIS
Early-mid 2026	Public exhibition of the EIS Formal engagement
Mid 2026	Response to submissions report
Late 2026	Project assessment
2027	Project determination
2027	Project construction commences
2028	Project operations commence
2058	Decommissioning (assuming 30-year Project life)

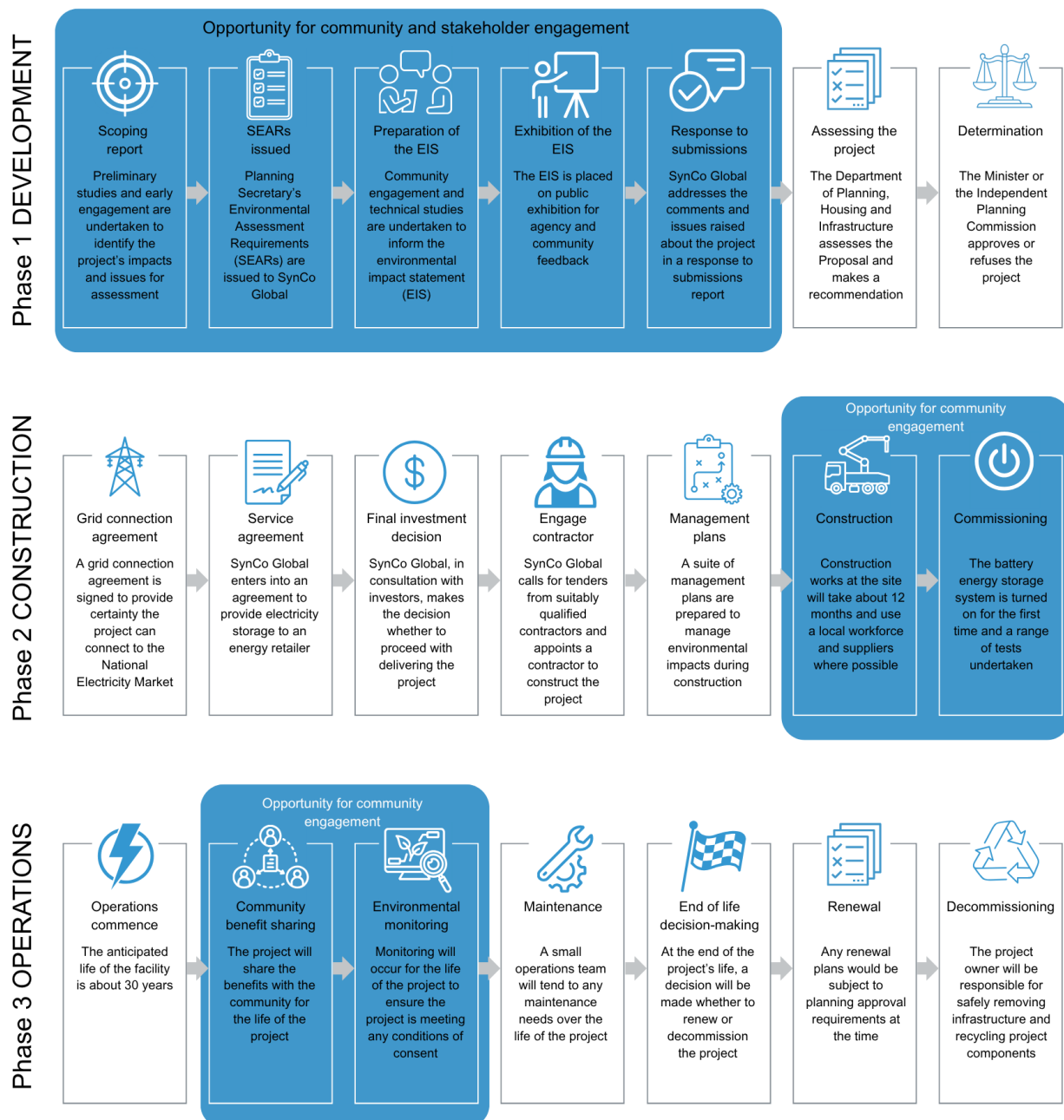


Figure 1.2 Community engagement opportunities during the Project's development

1.10. Known Project concerns and issues

The Project's engagement activities aim to identify issues of interest or concern highlighted by the community and other stakeholders and address the matters in an open manner.

There are known community concerns and issues with large-scale battery projects, as well as issues that have been raised during scoping for this Project. Management strategies have been identified in the Scoping Report to address each of these issues as part of the Project.

Table 1.2 Known Project issues, concerns and management strategies

Theme	Sub-theme	Issue	Management strategy
Hazards	Fire	Risk of spontaneous lithium battery fires sparking bushfires/grassfires	A preliminary hazard analysis and a bushfire assessment will be prepared as part of the EIS. Prepare key messages/fact sheet about fire management
Project ownership	Foreign ownership	Perception many renewable projects are foreign owned, profits going overseas	Include information about SynCo Global's Australian interests on Project website and commitment to benefit sharing
Cost	Taxpayer funds	Perception private renewable developments are being government-funded	Include information about Project funding on Project website
Rationale	Need	Concerns about the number of BESS projects proposed in immediate area	Prepare a fact sheet about the energy transition and role of BESS
Cumulative impacts	Housing	Council-raised issue requesting the proponent detail plan for construction workforce accommodation	Develop a Construction Workforce Accommodation Plan during development of the EIS
	Supply shortages	Materials, equipment and labour shortages due to volume of projects in development and construction in the region	Work with EnergyCo, Armidale Regional Council and other developers to manage regional supply and procurement
	Traffic	Additional traffic on local and main roads during construction and transport of oversize/over mass loads	A traffic study will be undertaken as part of the EIS. A traffic management plan will be prepared before construction commences.
Engagement	Council engagement	Council has established expectations for community benefit sharing as part of a framework that broadly align with the NSW Guidelines	Engage with Armidale Regional Council during scoping to introduce the Project. Commence VPA negotiations during development of the EIS.
Land use	Agricultural land	Use/loss of agricultural land and impacts on food security	An assessment of land use will be undertaken as required by the SEARs
Amenity (operational)	Visual	Loss of rural amenity and landscape from renewable projects across NEREZ	A visual impact assessment is being prepared as part of the modification report to identify impacts and any mitigation measures required.
	Noise	Noise from multiple projects in the area	An operational noise and vibration management plan will be prepared and any mitigation measures required will be implemented.
Construction	Noise	Noise from earthworks, plant and equipment and heavy vehicles	A construction noise and vibration management plan will be prepared before construction commences. Noise mitigation measures will be implemented as required.
	Dust/air quality	Earthworks and truck movements creating dust	A construction management plan will be prepared before construction commences. Dust suppression will be used on site as required.

Theme	Sub-theme	Issue	Management strategy
	Traffic	Increased traffic and heavy vehicles on local roads	A traffic management plan will be prepared before construction commences.
	Water	Where will it be sourced from during construction	A water management plan will be prepared before construction commences.
Decommissioning	Cost and responsibility	What will happen to the batteries at the end of the Project and who will be responsible for this	A decommissioning plan will be prepared as part of post-approvals.
Economic	Minimal short-term jobs	BESS has small construction workforce and minimal ongoing job opportunities	Update Project website with information about job opportunities and how local people can register their interest.

2. Stakeholders

Understanding respective communities and identifying stakeholders is key to designing and delivering effective engagement.

For this Project, a stakeholder is defined as any individual, group of individuals, organisation, or political entity with an interest in the Project. They may be, or perceive that they may be, impacted directly or indirectly by the Project.

Key stakeholder groups for this Project include:



A detailed stakeholder map can be found in Table 2.1.

Table 2.1 Project stakeholder map

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
Landowners	Associated – details securely stored in database	• lease agreement • land access • site investigations • fire	High	Medium	High	• calls • emails • meetings • site visits
	Non-associated (neighbours) – details securely stored in database	• noise • visual amenity • fire risk • contamination risk • traffic • property values • insurance premiums • cumulative impacts • benefit sharing • site investigations and land access	High	Medium	Medium	• letterbox drop • door-knock • meetings • calls • emails • drop-in session • project fact sheets • website • interviews (SIA)
Community	Locality Regional – Armidale LGA	• cumulative impacts • job opportunities • trade and skill shortage • housing affordability and availability • community benefit sharing	Medium	Low/Medium	Medium	• letterbox drop • door-knock • meetings • calls • emails • drop-in session • project fact sheets • website • interviews (SIA)
First Nations	• Anaiwan People	• cultural heritage investigations • job opportunities	Low	Low	Medium	• advertising • calls

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
	- Armidale Local Aboriginal Land Council - NSW Indigenous Chamber of Commerce - Registered Aboriginal Parties	community benefit sharing				- emails - meetings - project briefings - project factsheets - site visits - website - interviews (SIA)
Local government	- Armidale Regional Council - Neighbouring LGAs	- voluntary planning agreement and community benefit sharing - cumulative impacts - construction workforce housing strategy - water sourcing during construction - community engagement	Medium	High	High	- calls - emails - meetings - website - briefings - fact sheets - interviews (SIA)
State government	NSW Department of Planning, Housing and Infrastructure (DPHI)	application assessment	High	Low	High	- calls - email - meetings - Major Project Portal
	Minister for Planning and Public Spaces	consent authority	High	Low	High	referral for determination
	Conservation Programs Heritage and Regulation Division (CPHR) of the NSW Department of Climate Change, Energy, the	heritage	High	Low / Medium	High	- emails - calls - meetings - agency referral

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
	Environment and Water (DCCEEW)					
	Transport for NSW	- traffic and transport – waterfall way - oversize/overweight vehicles on main roads	Medium	Low	Medium	- emails - calls - meetings - agency referral
	- EnergyCo - Heritage	- cumulative impacts - network capacity - access rights scheme	Low/Medium	Medium	Medium	- emails - calls - meetings - briefings - agency referral
	State MP Member for Northern Tablelands Brendan Moylan	- cumulative impacts - environmental impacts - community benefit sharing - media opportunities	Medium	Low	Low	- calls - briefings - emails - meetings - media opportunities invitations - fact sheets - website
Commonwealth government	Federal MP Member for New England Barnaby Joyce	- cumulative impacts - environmental impacts - project rationale - local economic development - community sentiment	Medium	Low	Medium/Low	- calls - briefings - emails - meetings - media opportunities invitations - fact sheets - website

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
	Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW)	biodiversity	Low	Low	High	- calls - emails - meetings - agency referral
	Regional Development Australia Northern Inland	- housing affordability and availability - construction workforce sourcing - local content and supply - investment in region	Low	Low	Low	- emails - calls - meetings - interviews (SIA)
Emergency services	NSW Rural Fire Service (RFS)	- fire safety planning and infrastructure - emergency access and response - hazardous materials and battery risks	High	Medium	Medium	- calls - emails - meetings - briefings - agency referral - site visits - interviews (SIA)
	- NSW State Emergency Services (SES) - NSW Police - NSW Ambulance - NSW Fire and Rescue	- emergency access and response - communication protocols - public safety - traffic and road safety	Low	Low	Low	- calls - email - website - site visits
Community groups	details securely stored in database	- community benefit sharing/funding opportunities - community benefits - local economic benefits	Low/Medium	Low	Medium	- website - fact sheets - drop-in sessions - webinars

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
		- environmental impacts and protection - health and safety - access to information				
Environmental groups	details securely stored in database	- local economic benefits - environmental impacts and protection - health and safety - access to information	Medium	Low/Medium	Medium	- website - fact sheets - drop-in sessions - webinars
Special interest groups	details securely stored in database	- local economic benefits - environmental impacts and protection - health and safety - access to information	Low	Low	Low/Medium	- calls - emails - letters - website - fact sheets - webinars
Education	details securely stored in database	- potential workforce opportunities - opportunities to collaborate on energy, engineering or environmental research - opportunity for stem learning and school excursions - community benefit programs	Low/Medium	Low	Low	- calls - emails - letters - website - site visits - fact sheets - interviews (SIA)
Community service providers	details securely stored in database	- community benefit sharing/funding opportunities - cumulative impacts on service provision - housing affordability and availability - health services	Low/Medium	Low	Low	- calls - emails - letters - website - fact sheets - interviews (SIA)

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
Businesses	details securely stored in database	- cumulative impacts - housing affordability and availability - trade and skill shortages - job opportunities - community benefits - local spend and content	Medium	Low	Medium/High	- calls - emails - drop-in sessions - meetings - newsletters - fact sheets - website - interviews (SIA)
Other developers	- Edify Energy - Valent Energy	- grid connection - connection capacity - cumulative impact assessment	High	Medium	Medium	- Major Project Portal - meetings - emails
Utilities	- Transgrid - Lumea - Australian Energy Market Operator (AEMO)	network connection	High	High	High	- agency referral - calls - emails - meetings
Regulators	- Environment Protection Authority NSW (EPA) - National Energy Regulator (NER)	- compliance - reporting	Medium	Low	High	- agency referral - calls - emails - meetings
Media	- New England Times - Armidale Express - The Land - The Northern Daily Leader	- community engagement opportunities - environmental and social impacts - events - project milestones	Medium	Low	Low	- media events - media releases - newsletters - website

Stakeholder group	Stakeholder	Interests and issues	Interest level Low Medium High	Impact level Low Medium High	Influence level Low Medium High	Tools
	• ABC New England North West • Prime7 • NBN News • Renew Economy					

3. Approach to engagement

3.1. Principles

Community engagement guidelines for state significant development recommend the use of the International Association for Public Participation's (IAP2) Public Participation Spectrum.

The Spectrum identifies five levels of engagement, the goal of each level and stakeholders' role in decision-making and implementation. The greater the impact of the Project on a stakeholder, the greater their input into the decision-making should be.

Using the IAP2 Spectrum, the engagement approach for the Project is a combination of Inform, Consult, Involve and Collaborate.

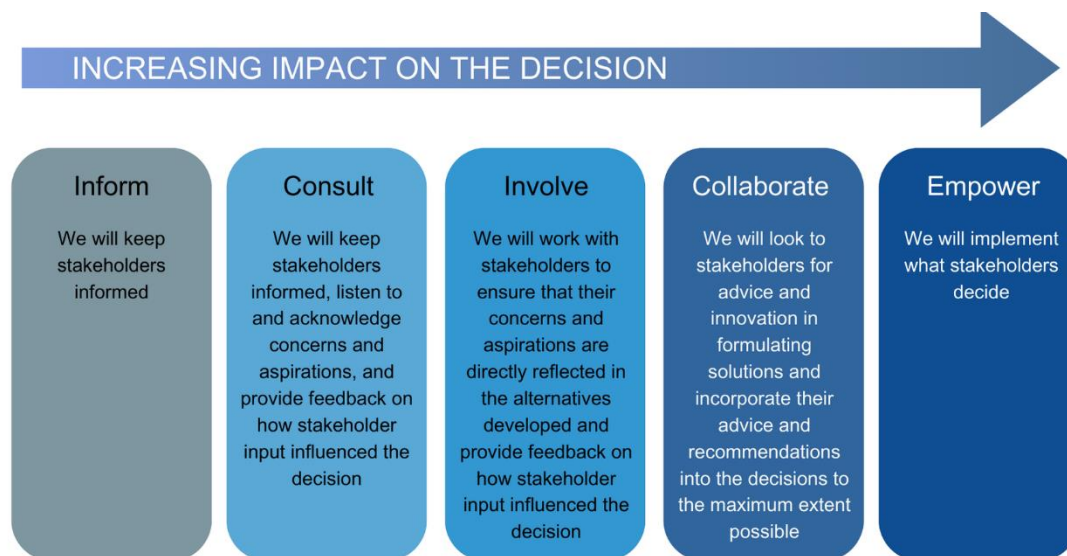


Figure 3.1 IAP2 Spectrum of Public Participation

3.2. Goals

SynCo Global is committed to engaging with its neighbours and the wider community about the proposed battery system. There will be various opportunities throughout the planning and assessment process for the Project for the community to provide input and feedback.

The engagement goals of this Plan are to:

- enhance awareness of the Project outside the immediate locality including its social, economic and environmental benefits
- build and maintain broader community support for the Project
- strengthen and maintain connections with key stakeholders and the broader community
- establish a robust and transparent process to engage with stakeholders and community
- identify and provide engagement opportunities, communication and feedback channels for community to provide input and feedback and get involved
- ensure timely responses are given to Project enquiries and complaints
- identify and implement strategies to address known community issues and concerns about the Project

3.3. Tools

A range of online and offline tools will be used to communicate with and engage stakeholders during development of the Project.

SynCo Global is responsive to community feedback and tools may change in response to stakeholder needs. Tools proposed for use for communication and engagement throughout the development of the Project are detailed in Table 3.1.

Table 3.1 List of engagement and communication tools

Tool	Detail	Participation level
Briefings	Stakeholder briefings include face-to-face, virtual and phone meetings with Council, government authorities, and elected members of parliament. Briefings ensure that stakeholders are aware of project developments and the Project can make informed decisions in line with prevailing policies and initiatives	Inform Consult Involve
Drop-in sessions	Multi-hour community drop-in sessions offer stakeholders and community members the opportunity to meet the Project team, learn more about the Project, and engage with the design and development application process.	Inform Consult
Phone line	The information line provides the community with an accessible channel to contact the Project team, ask questions, and provide feedback.	Inform Consult
Doorknocking	Doorknocking allows stakeholders to meet the Project team and provide contact details for future Project communication. It is a common technique when contact details of landowners are unknown.	Inform Consult
Email inbox	A Project email inbox hollowaybess@synco-global.org allows the community to ask questions, share their views, issues, and concerns and provide feedback.	Inform Consult
Events	Community events offer an opportunity to engage with the broader community in an informal setting. The Project may choose to attend and participate in local shows and events.	Inform Consult
Fact sheets	Printed and digital factsheets provide informative snapshots of the Project. They cover key areas of interest, such as the environmental planning process, and can be provided to the community and stakeholders via the website, community information hub, meetings, letterbox drops, and community drop-in sessions.	Inform
Letterbox dropping	Letterbox dropping is used to deliver Project updates and notifications related to Project impacts to Project neighbours and nearby surrounds. This might be more suitable for remote and rural localities.	Inform
Mailing list	Community and other stakeholders can register to receive Project updates and newsletters via email. People can subscribe by contacting the Project team by email, phone or in person or via the Project website. Email recipients can opt out at any time by selecting unsubscribe.	Inform
Maps	Maps help the community and stakeholders to better visualise and understand the scope of the Project and ongoing design work.	Inform
Media	Proactive and reactive media statements and events provide Project information to local and industry media to share engagement opportunities, Project milestone and Project benefits.	Inform
Meetings	One-on-one or small group gatherings with stakeholders to discuss Project matters. The purpose of the meeting might be to provide information and project updates, seek feedback and input on elements of the Project or involve and/or collaborate with	Inform Consult Involve Collaborate

Tool	Detail	Participation level
	stakeholders to solve a problem, negotiate a sensitive issue or resolve a complaint.	
Newsletters	Regular Project newsletters are provided to the community and stakeholders to increase understanding of the Project, provide information on key activities and milestones, and foster further engagement with the development application process.	Inform
Presentations	Presentations provide a formal setting to provide information and updates about the Project, as well as answer questions. Presentations could be made to community and special interest groups, schools, and business groups.	Inform
Summary of Findings	A plain English summary document providing an overview of the EIS findings and proposed mitigation measures.	Inform
Surveys	Structured questionnaires can be used to help collect community views and sentiment on a broad range of Project issues.	Consult
Webinars	Facilitated online video presentations about a specific topic or issue, with presentations from subject matter experts and the option of questions from the audience.	Inform Consult
Website	An online repository for Project information including key messages and frequently asked questions, maps and documents, links to the Major Project Portal and SynCo Global corporate site, news, events, feedback form and contact details www.hollowaybessproject.com	Inform Consult

4. Engagement activities

4.1. Engagement undertaken to date

The level of engagement undertaken to date has been proportionate to the anticipated level of impact of the Project.



SynCo commenced informal discussions with the host landowner in 2024



Project website, phone number and email inbox set up



Door knocking and letterboxing to nearby neighbours, including offering meetings



Meetings held with Armidale Regional Council, Department of Planning, Housing and Infrastructure

4.2. Engagement during preparation of the EIS

Engagement during preparation of the EIS would be undertaken in accordance with the SEARs and the Engagement Guidelines (DPHI, 2024). The CSEP will be updated at regular intervals to reflect any changes to the Project, or the needs of stakeholders.

Engagement during this period will:

- inform the community about the opportunities to engage
- explain how community feedback will be considered and documented
- provide relevant information in plain English so that potential impacts and implications can be readily understood
- be clear about the level of influence engagement will have by identifying what elements can be changed because of feedback
- give the community the opportunity to voice their concerns or share local knowledge so that this information can be considered early in the planning, design and assessment of the Project
- consider the issues raised by the community, council and relevant government agencies when making Project refinements and accurately reflect how these issues have been addressed in EIS documentation
- keep the community, council and relevant government agencies informed with up-to-date information on the project

To achieve this, SynCo Global commits to undertaking the following activities during preparation of the EIS:

- community information sessions
- in-person and virtual meetings with associated and non-associated landowners, local government, business, community groups and potential accommodation providers
- site visits and investigations with associated and non-associated landowners who may be impacted
- interviews to inform the SIA
- surveys
- doorknocking and letterbox dropping neighbours for whom the Project has no contact details
- presentations to community interest groups and local government
- briefings to local government, state and federal members of Parliament

- distribution of a regular Project newsletter
- maintaining the Project website with updated content, frequently asked questions and fact sheets
- responding to the Project phone line and email inbox

Further engagement will also be undertaken with ARC to negotiate a VPA that meets the Community Benefit-Sharing Guidelines (DPHI, 2024) and ARC's Renewable Energy Community Benefit Framework (ARC, 2024).

Engagement will be undertaken with potential accommodation providers within Armidale and surrounding LGAs to identify a housing solution for the construction workforce, in consultation with local councils.

The CSEP will be updated to inform future engagement beyond submission of the EIS, including during public exhibition and response to submissions.



Communication collateral outlines the State significant development process



Notify landowners and wider community about site and field investigations



Communication collateral including Project fact sheets, frequently asked questions and Project newsletters



Engagement with Armidale Regional Council to negotiate a voluntary planning agreement



Facilitate meetings with landowners and other stakeholders



Host community drop-in sessions



Respond to enquiries via the Project phone line and email inbox



Engagement with potential accommodation providers and local councils for construction worker housing

5. Communication protocols

5.1. Enquiries and complaints

Responding to complaints, feedback and enquiries is essential to the successful delivery of the Project and maintaining a positive reputation within the community. Complaints, feedback, and enquiries may be received from a range of sources including through phone calls, emails, and face-to-face interactions.

An enquiry is defined as a question or request for information.

A complaint is defined as a statement that something is unsatisfactory or unacceptable. Complaints may also be accompanied by threats to contact the media, local MP, or some other authority.

Complaints and enquiries may be received via phone, email, post or in person. They may be received by the SynCo Global, a Project consultant or a Project contractor.

Complaints and enquiries will be recorded through a management process and responded to as required.

If the Project is approved and proceeds to construction, a complaints and enquiries management process will be established to set out the procedure for managing complaints and enquiries in accordance with agreed timeframes.

6. Monitoring, reporting and evaluation

6.1. Monitoring and evaluation

Regular monitoring of engagement and communication activities ensures this Plan is delivering on its objectives.

Monitoring can take many forms and includes environmental scanning to track community and stakeholder sentiment and trends. This can be by way of media and social media monitoring, feedback received through formal and informal channels, feedback received through engagement activities, and regular analysis of complaints and enquiries received.

SynCo Global will regularly evaluate its engagement activities against the Project's engagement objectives using multiple sources of evaluation data. Where appropriate, the communication and engagement approach can be adjusted to improve future engagement processes.

Appendix C

Consultation Materials

Thursday 3 July 2025

Dear Neighbour,

Proposal for the Holloway Battery Energy Storage System (BESS)

SynCo Global is an Australian-owned renewable energy project developer committed to advancing the global transition towards net-zero carbon emissions.

You are receiving this letter because SynCo Global is proposing to develop a large-scale battery energy storage system (BESS) on private land at 112 Eathorpe Road, Armidale. The site is an optimal location for hosting battery storage, located just 650 m southwest from the Armidale substation.

The Holloway BESS Project would include the installation of lithium-ion batteries with a capacity of up to 250 MW / 500 MWh with up to two hours storage. The batteries would be housed in 2.5 m high units similar in appearance to shipping containers.

Other infrastructure on the proposal site would include inverters, transformers and a switching station, a site office and storage area, internal access tracks, on-site parking and security fencing.

The footprint of the development area would be approximately 3 hectares. We have attached an indicative map to show the location of the proposal.

The proposal is considered a state significant development (SSD) under section 4.36 of the *Environmental Planning and Assessment Act 1979*. The consent authority for the Project will be the Minister for Planning and Public Spaces.

The first step in the SSD process is to submit a scoping report to request the Secretary's Environmental Assessment Requirements (SEARs). The SEARs will detail the investigations needed to inform an environmental impact statement or EIS. SynCo Global is currently preparing the scoping report for the proposal.

As part of SynCo Global's commitment to engaging with its neighbours and the wider community about the proposal, we would like to offer you a meeting with the Project team where you can ask any questions you may have and provide any early feedback.

If you would like to meet with someone from the Project team, you can give us a call on 02 9056 7494 or email us at hollowaybess@synco-global.org

There will be other opportunities throughout the planning and assessment process for you to provide input and feedback.

We have set up a website where you can learn more about the proposal, the planning and assessment process, project benefits, and how to get involved. Head to www.hollowaybessproject.com or scan the QR code below.

Sincerely,

Curtis Montgomery

SynCo-Global – Holloway BESS Project



Site locality

Figure 1.1

LEGEND

Roads

- Primary roads
Local roads
Project Area
Armistide substation



Scale: A4 1:8,500
Datum: GDA2020 MGA Zone 56

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Document code: SCG 001 Figure version: 2.0

Figure version: 2.0

Figure print date: 03/06/2025	Author: MarcDougherty
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Author: MarcDoughty





Sorry we missed you!

SynCo Global is proposing to develop the Holloway Battery Energy Storage System at 112 Eathorpe Road. We dropped in _____ to say hi and introduce the project but unfortunately we missed you.

If you would like to organise a meeting with someone from the project team or if you have any questions, please reach out to us on 9056 7494 or email us at hollowaybess@synco-global.org



Thanks



Sorry we missed you!

SynCo Global is proposing to develop the Holloway Battery Energy Storage System at 112 Eathorpe Road. We dropped in _____ to say hi and introduce the project but unfortunately we missed you.

If you would like to organise a meeting with someone from the project team or if you have any questions, please reach out to us on 9056 7494 or email us at hollowaybess@synco-global.org



Thanks



Sorry we missed you!

SynCo Global is proposing to develop the Holloway Battery Energy Storage System at 112 Eathorpe Road. We dropped in _____ to say hi and introduce the project but unfortunately we missed you.

If you would like to organise a meeting with someone from the project team or if you have any questions, please reach out to us on 9056 7494 or email us at hollowaybess@synco-global.org



Thanks

Appendix D

Scoping Summary Table

Matter	Level of assessment	Cumulative impact assessment	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report reference
Biodiversity	Detailed	Yes	Specific	- Biodiversity Assessment Method (BAM) (DPIE, 2020b) - NSW Biosecurity and Food Safety Strategy 2022-2030 (DPI) - Framework for Biodiversity Assessment – NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014) - Surveying threatened plants and their habitats: NSW survey guide for the BAM (DPIE, 2020c) - Commonwealth EPBC 1.1 Significant Impact Guidelines – Matters of National Environmental Significance (Commonwealth of Australia, 2013a) - Commonwealth EPBC 1.2 Significant Impact Guidelines – Actions on, or Impacting upon Commonwealth Land and Actions by Commonwealth Agencies (Commonwealth of Australia, 2013b)	Section 6.2
Landscape and visual	Detailed	Yes	Specific	- Guidance Note for Landscape and Visual Assessment (Australian Institute of Landscape Architects, 2018) - Large-Scale Solar Energy Guideline - Technical Supplement for Landscape Character and Visual Impact Assessment (DPE, 2022d) - Transmission Guideline – Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2024c) - Guidelines for Landscape and Visual Impact Assessment, 3rd edition (Landscape Institute & IEMA, 2013)	Section 6.3
Noise and vibration	Detailed	Yes	General	- Interim Construction Noise Guideline (DECC, 2009) - NSW Noise Policy for Industry (NSW EPA, 2017) - NSW Road Noise Policy (DECCW, 2011) - Assessing Vibration: A Technical Guideline (DEC, 2006) - German Standard DIN 4150-3: Structural Vibration – Effects of Vibration on Structures	Section 6.4
Social and economic impacts	Detailed	Yes	Specific	- Social Impact Assessment Guideline for State Significant Projects (DPHI, 2025a) - Technical Supplement - Social Impact Assessment Guideline for State Significant Projects (DPHI, 2025b) - Undertaking Engagement Guideline for State Significant Projects (DPHI, 2024a) - Benefit Sharing Guideline (DPHI, 2024e) - Renewable Energy Community Benefit Framework (ARC, 2024a) - Private Agreement Guideline (DPHI, 2024f)	Section 6.5 and Appendix A
Traffic, transport and access	Detailed	Yes	Specific	- Authority: Guide to Traffic Generating Developments, version 2.2 (TfNSW, 2002) - Austroads Guides to Road Design (various publications) - Austroads Guides to Traffic Management Part 3: Traffic Studies and Analysis Methods (Austroads, 2020) - Australian Standard AS 2890 Parts 1 and 2 - Fact sheet: Transport Management Plans for oversize and/or overmass movements in NSW (RMS, 2013) - Australian Code for Dangerous Goods by Road & Rail (National Transport Commission, 2024)	Section 6.6
Aboriginal heritage	Detailed	Yes	Specific	- Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010a) - Guide to Investigating, Assessing, and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) - Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010b) - Guidelines for preparing a statement of heritage impact (DPE, 2023c) - NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998)	Section 6.7
Hazards and risk – Hazardous and offensive development	Detailed	Yes	General	- State Environmental Planning Policy (Resilience and Hazards) 2021 - Hazardous Industry Planning Advisory Paper No. 6 'Hazard Analysis (DoP, 2011a) - Multi-level Risk Assessment (DoP, 2011b) - Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP, 2011c) - Hazardous Industry Advisory Paper No. 4, Risk Criteria for Land Use Safety Planning (DoP, 2011d) - Storage and Handling of Dangerous Goods Code of Practice (WorkCover, 2005)	Section 6.8
Hazards and risk – Bushfire	Detailed	Yes	General	Bushfire Protection Guideline 2019 (PBP) (NSW RFS, 2019).	Section 6.9
Hazards and risk – Electro-magnetic frequency (EMF)	Standard	Yes	General	Guidelines for limiting exposure to Time-varying Electric, Magnetic and Electromagnetic Fields (ICNIRP, 1998)	Section 6.8
Soils and land use	Standard	Yes	General	- The Land and Soil Capability Scheme (OEH, 2012) - Australian Soil Classification (ASC) Soil Type Map of NSW (NSW DCCEEW, 2012) - LEP land zoning - Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land (DUAP and NSW EPA, 1998) - Land Use Conflict Risk Assessment Guide (DPI, 2011), as relevant - Managing Urban Stormwater: Soils and construction 'Blue book guidance' (Landcom, 2004). - Managing Urban Stormwater: Soils and construction - Volume 2A (DECC, 2008)	Section 6.10.1
Water resources	Standard	Yes	General	- Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2018) - Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC / ARMCANZ, 2000)	Section 6.10.2

Matter	Level of assessment	Cumulative impact assessment	Engagement	Relevant Government Plans, Policies and Guidelines	Scoping Report reference
				• NSW Water and River Flow Objectives (NSW Government, 2006) • Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) • Managing Urban Stormwater: Soils and construction – Volume 2A (DECC, 2008) • NSW State groundwater dependent ecosystem policy (DLWC, 2002) • DPI Guidelines for Controlled Activities on Waterfront Land (DPI, 2018), as relevant • Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI, 2003), as relevant • Policy & Guidelines for Fish Habitat Conservation & Management (DPE, 2013), as relevant • NSW Flood Risk Management Manual (DPE, 2023a), as relevant • Flood Impact and Risk Assessment – Flood Risk Management Guide LU01 (DPE, 2023b), as relevant	
Air quality	Standard	Yes	General	• National Greenhouse Accounts Factors (DCCEEW, 2023b) • NSW Climate Change Policy Framework (OEH, 2016) • Approved methods for the modelling and assessment of air pollutants (EPA, 2022)	Section 6.10.3
Historic heritage	Standard	No	General	• NSW Skeletal Remains: Guidelines for Management of Human Remains (Heritage Office, 1998) • Guidelines for Preparing a Statement of Heritage Impact (DPE, 2023c)	Section 6.10.4
Waste management	Standard	No	General	• Waste Classification Guidelines – Part 1: classifying waste (NSW EPA, 2014) • NSW Waste and Sustainable Materials Strategy 2041 (DPIE, 2021) • NSW EPA Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities 2012 (NSW EPA, 2012)	Section 6.10.5
Cumulative impacts	Standard	No	General	• Cumulative Impact Assessment Guidelines for State Significant Projects (DPE, 2021)	Section 6.11

Appendix E

Vegetation Plot Locations and Photographs

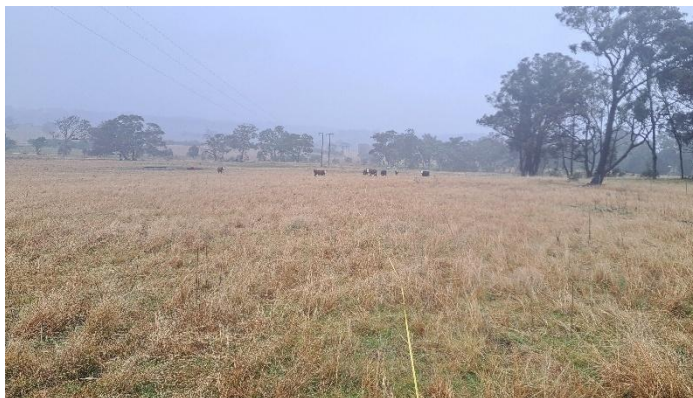
Plot	Zone	Eastings Zone 56	Northings Zone 56	Photographs
HB01	3344_Moderate	375809.6	6621012.8	 

Plot	Zone	Eastings Zone 56	Northings Zone 56	Photographs	
HB02	3344_Regen	375768.4	6621028.9		

Plot	Zone	Eastings Zone 56	Northings Zone 56	Photographs
HB03	3344_Derived	375879.9	6621143.2	 

Plot	Zone	Eastings Zone 56	Northings Zone 56	Photographs	
HB04	3344_Derived	375755.6	6620954.2		

Plot	Zone	Eastings Zone 56	Northings Zone 56	Photographs
HB05	3344_Dam	375945.7	6621153.7	 

Plot	Zone	Eastings Zone 56	Northings Zone 56	Photographs
HB06	3352_Poor	376388.5	6621060.1	 

Appendix F

Biodiversity Field Survey Results

F.1 Flora species list

Growth form ¹	Scientific name	Scientific name Common name	Status ²	HTE ³	WoNS ⁴	PW ⁵
SG	<i>Acacia filicifolia</i>	Fern-leaved Wattle	N	-	-	-
FG	<i>Acaena novae-zelandiae</i>	Bidgee-widgee	N	-	-	-
GG	<i>Austrostipa scabra</i>	Speargrass	N	-	-	-
GG	<i>Bothriochloa macra</i>	Red Grass	N	-	-	-
SG	<i>Brachyloma daphnoides</i>	Daphne Heath	N	-	-	-
NN	<i>Bromus catharticus</i>	Prairie Grass	E	No	No	No
GG	<i>Carex inversa</i>	Knob Sedge	N	-	-	-
NN	<i>Carthamus lanatus</i>	Saffron Thistle	E	Yes	No	No
FG	<i>Chrysocephalum apiculatum</i>	Common Everlasting	N	-	-	-
NN	<i>Cirsium vulgare</i>	Spear Thistle	E	No	No	No
NN	<i>Conyza bonariensis</i>	Flaxleaf Fleabane	E	No	No	No
GG	<i>Cynodon dactylon</i>	Common Couch	N	-	-	-
NN	<i>Dactylis glomerata</i>	Cocksfoot	E	No	No	No
GG	<i>Diplachne fusca</i>	Brown Beetle Grass	N	-	-	-
GG	<i>Eragrostis brownii</i>	Brown's Lovegrass	N	-	-	-
NN	<i>Eragrostis curvula</i>	African Lovegrass	E	Yes	No	No
GG	<i>Eragrostis leptostachya</i>	Paddock Lovegrass	N	-	-	-
TG	<i>Eucalyptus blakelyi</i>	Blakely's Red Gum	N	-	-	-
TG	<i>Eucalyptus caliginosa</i>	Broad-leaved Stringybark	N	-	-	-
TG	<i>Eucalyptus dalrympleana</i>	Mountain Gum	N	-	-	-
TG	<i>Eucalyptus viminalis</i>	Ribbon Gum	N	-	-	-
FG	<i>Euchiton sphaericus</i>	Star Cudweed	N	-	-	-
OG	<i>Glycine spp.</i>		N	-	-	-
NN	<i>Hypochaeris radicata</i>	Catsear	E	No	No	No
GG	<i>Juncus spp.</i>		N	-	-	-
GG	<i>Microlaena stipoides</i>	Weeping Grass	N	-	-	-
NN	<i>Nassella trichotoma</i>	Serrated Tussock	E	Yes	Yes	Yes
FG	<i>Oxalis perennans</i>		N	-	-	-
GG	<i>Panicum effusum</i>	Hairy Panic	N	-	-	-
NN	<i>Paronychia brasiliensis</i>	Chilean Whitlow Wort	E	No	No	No
NN	<i>Paspalum dilatatum</i>	Paspalum	E	Yes	No	No
NN	<i>Plantago lanceolata</i>	Lamb's Tongues	E	No	No	No
FG	<i>Potamogeton sulcatus</i>		N	-	-	-
NN	<i>Pyracantha crenatoserrata</i>		E	Yes	No	No
NN	<i>Rubus anglocandicans</i>	Blackberry complex	E	Yes	Yes	Yes
FG	<i>Rumex brownii</i>	Swamp Dock	N	-	-	-
GG	<i>Rytidosperma laeve</i>	Wallaby Grass	N	-	-	-
NN	<i>Setaria parviflora</i>		E	No	No	No
GG	<i>Sporobolus creber</i>	Slender Rat's Tail Grass	N	-	-	-
NN	<i>Stenotaphrum secundatum</i>	Buffalo grass	E	Yes	No	No
NN	<i>Trifolium repens</i>	White Clover	E	No	No	No

Growth form ¹	Scientific name	Scientific name Common name	Status ²	HTE ³	WoNS ⁴	PW ⁵
NN	<i>Verbascum thapsus subsp. thapsus</i>	Great Mullein	E	No	No	No
NN	<i>Verbena bonariensis</i>	Purpletop	E	No	No	No
FG	<i>Veronica calycina</i>	Hairy Speedwell	N	-	-	-

1. Growth form: FG = Forb, GG = Grass and Grass-like, SG = Shrub, TG = Tree, EG = Fern, OG = Other.
2. Status: N = Native, E = Exotic.
3. High-threat exotic species (Yes/No).
4. Weed of National Significance (Yes/No).
5. Priority weed for the region (Yes/No).

F.2 Fauna species list

Class	Common Name	Scientific Name	Native or introduced
Amphibia	<i>Crinia signifera</i>	Common Eastern Froglet	Amphibia
Aves	<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	Aves
Aves	<i>Eolophus roseicapilla</i>	Galah	Aves
Aves	<i>Gymnorhina tibicen</i>	Australian Magpie	Aves
Aves	<i>Macropus giganteus</i>	Eastern Grey Kangaroo	Aves
Aves	<i>Malurus cyaneus</i>	Superb Fairy-wren	Aves
Aves	<i>Manorina melanocephala</i>	Noisy Miner	Aves
Aves	<i>Microeca fascinans</i>	Jacky Winter	Aves
Aves	<i>Pardalotus striatus</i>	Striated Pardalote	Aves
Aves	<i>Platycercus elegans</i>	Crimson Rosella	Aves
Aves	<i>Psephotus haematonotus</i>	Red-rumped Parrot	Aves
Aves	<i>Rhipidura albiscapa</i>	Grey Fantail	Aves
Aves	<i>Rhipidura leucophrys</i>	Willie Wagtail	Aves
Aves	<i>Zosterops lateralis</i>	Silvereye	Aves

Appendix G

Biodiversity Database Search Results

G.1 Biodiversity Values Map and threshold report



Department of Planning and Environment

Biodiversity Values Map and Threshold Report

This report is generated using the Biodiversity Values Map and Threshold (BMAT) tool. The BMAT tool is used by proponents to supply evidence to your local council to determine whether or not a Biodiversity Development Assessment Report (BDAR) is required under [the Biodiversity Conservation Regulation 2017 \(Cl. 7.2 & 7.3\)](#).

The report provides results for the proposed development footprint area identified by the user and displayed within the blue boundary on the map.

There are two pathways for determining whether a BDAR is required for the proposed development:

1. Is there Biodiversity Values Mapping?
2. Is the 'clearing of native vegetation area threshold' exceeded?

Biodiversity Values Map and Threshold Report

Date of Report Generation		07/07/2025 3:16 PM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	Does the development Footprint intersect with BV mapping?	no
1.2	Was ALL BV Mapping within the development footprint added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
1.3	Date of expiry of dark purple 90 day mapping	N/A
1.4	Is the Biodiversity Values Map threshold exceeded?	no
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	Size of the development or clearing footprint	97,762.0 sqm
2.2	Native Vegetation Area Clearing Estimate (NVACE) (within development/clearing footprint)	43,616.1 sqm
2.3	Method for determining Minimum Lot Size	LEP
2.4	Minimum Lot Size (10,000sqm = 1ha)	400,000 sqm
2.5	Area Clearing Threshold (10,000sqm = 1ha)	10,000 sqm
2.6	Does the estimate exceed the Area Clearing Threshold? (NVACE results are an estimate and can be reviewed using the Guidance)	yes
REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area? (Your local council will determine if a BDAR is required)		yes



Department of Planning and Environment

What do I do with this report?

- If the result above indicates the BOS Threshold has been exceeded, your local council **may require** a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>.
- If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is “likely to significantly affect threatened species” as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.
- If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.
- If **all** Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

For more detailed advice about actions required, refer to the **Interpreting the evaluation report** section of the [Biodiversity Values Map Threshold Tool User Guide](#).

Review Options:

- If you believe the Biodiversity Values mapping is incorrect please refer to our [BV Map Review webpage](#) for further information.
- If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the [Guide for reviewing area clearing threshold results from the BMAT Tool](#).

Acknowledgement

I, as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature: _____

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

Date: _____

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Department of Planning and Environment

Biodiversity Values Map and Threshold Tool

The Biodiversity Values (BV) Map and Threshold Tool identifies land with high biodiversity value, particularly sensitive to impacts from development and clearing.

The BV map forms part of the Biodiversity Offsets Scheme threshold, which is one of the factors for determining whether the Scheme applies to a clearing or development proposal. You have used the Threshold Tool in the map viewer to generate this BV Threshold Report for your nominated area. This report calculates results for your proposed development footprint and indicates whether Council may require you to engage an accredited assessor to prepare a Biodiversity Development Assessment Report (BDAR) for your development.

This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the [Biodiversity Values Map webpage](#).

Map Review: Landholders can request a review of the BV Map where they consider there is an error in the mapping on their property. For more information about the map review process and an application form for a review go to the [Biodiversity Values Map Review webpage](#).

If you need help using this map tool see our [Biodiversity Values Map and Threshold Tool User Guide](#) or contact the Map Review Team at map.review@environment.nsw.gov.au or on 1800 001 490.

Biodiversity Values Map



983.7 0 491.83 983.7 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

Legend

-  Biodiversity Values that have been mapped for more than 90 days
-  Biodiversity Values added within last 90 days
-  Native Vegetation Area Clearing Estimate (NVACE)
-  Development area selected by proponent

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This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Imagery © Airbus DS/Spot Image 2016

© NSW Department of Customer Service, Basemaps 2019

© NSW Department of Planning and Environment

The results provided in this tool are generated using the best available mapping and knowledge of species habitat requirements.

This map is valid as at the date the report was generated. Checking the [Biodiversity Values Map viewer](#) for mapping updates is recommended.

G.2 EPBC Act Protected Matters Report



Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 08-Jul-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	1
National Heritage Places:	1
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	51
Listed Migratory Species:	10

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	41
Commonwealth Heritage Places:	2
Listed Marine Species:	21
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	8
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

World Heritage Properties [\[Resource Information \]](#)

Name	State	Legal Status	Buffer Status
Gondwana Rainforests of Australia	QLD	Declared property	In buffer area only

National Heritage Places [\[Resource Information \]](#)

Name	State	Legal Status	Buffer Status
Natural			
Gondwana Rainforests of Australia	NSW	Listed place	In buffer area only

Listed Threatened Ecological Communities [\[Resource Information \]](#)

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
New England Peppermint (Eucalyptus nova-anglica) Grassy Woodlands	Critically Endangered	Community likely to occur within area	In feature area
Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion)	Endangered	Community likely to occur within area	In buffer area only
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species [\[Resource Information \]](#)

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat known to occur within area	In feature area
Erythrorhynchus radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Melanodryas cucullata cucullata</u> South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Neophema chrysostoma</u> Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Rostratula australis</u> Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Stagonopleura guttata</u> Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Tringa nebularia</u> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area	In buffer area only
CRUSTACEAN			
<u>Euastacus simplex</u> Simple Crayfish, Small Mountain Crayfish [83156]	Endangered	Species or species habitat may occur within area	In feature area
FROG			
<u>Litoria castanea</u> Yellow-spotted Tree Frog, Yellow-spotted Bell Frog [1848]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<u>Litoria piperata</u> Peppered Tree Frog [1827]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Litoria subglandulosa</u> New England Tree Frog, Glandular Frog [1807]	Vulnerable	Species or species habitat known to occur within area	In feature area
MAMMAL			
<u>Chalinolobus dwyeri</u> Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
<u>Dasyurus maculatus maculatus (SE mainland population)</u> Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Petaurus australis australis</u> Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Petrogale penicillata</u> Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</u> Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Pseudomys novaehollandiae</u> New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Pteropus poliocephalus</u> Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In feature area
PLANT			
<u>Arthraxon hispidus</u> Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Bertya sp. Clouds Creek (M.Fatemi 4)</u> [84675]	Endangered	Species or species habitat may occur within area	In feature area
<u>Callistemon pungens</u> [55581]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Cynanchum elegans</u> White-flowered Wax Plant [12533]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Dichanthium setosum</u> bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Diuris eborensis</u> [88275]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Eucalyptus mckieana</u> McKie's Stringybark [20199]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Eucalyptus nicholii</u> Narrow-leaved Peppermint, Narrow-leaved Black Peppermint [20992]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Eucalyptus rubida subsp. barbigerorum</u> Blackbutt Candlebark [64618]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Euphrasia arguta</u> [4325]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Grevillea beadleana</u> Beadle's Grevillea [22002]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Hakea fraseri</u> Gnarled Corkbark, Fraser's Hakea [16093]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Haloragis exalata subsp. velutina</u> Tall Velvet Sea-berry [16839]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Lepidium hyssopifolium</u> Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed [16542]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Picris evae</u> Hawkweed [10839]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Pterostylis metcalfei</u> Metcalf's Greenhood [65908]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Thesium australe</u> Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Vincetoxicum woollsii listed as Tylophora woollsii [40080]	Endangered	Species or species habitat may occur within area	In buffer area only
REPTILE			
Anomalopus mackayi Five-clawed Worm-skink, Long-legged Worm-skink [25934]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area	In feature area
Eulamprus kosciuskoi Alpine Water Skink [59693]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Saltuarius moritzi New England Leaf-tailed Gecko, Moritz's Leaf-tailed Gecko [89490]	Endangered	Species or species habitat known to occur within area	In feature area
Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Commonwealth Lands		[Resource Information]
The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.		
Commonwealth Land Name	State	Buffer Status
Communications, Information Technology and the Arts - Australian Postal Corporation		
Commonwealth Land - Australian Postal Commission [16282]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [11644]	NSW	In buffer area only
Communications, Information Technology and the Arts - Telstra Corporation Limited		
Commonwealth Land - Australian Telecommunications Commission [16490]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11634]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [11645]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [16281]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [16527]	NSW	In buffer area only
Defence - Defence Housing Authority		

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Housing Authority [16432]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15502]	NSW	In buffer area only
Unknown		
Commonwealth Land - [16378]	NSW	In buffer area only
Commonwealth Land - [16379]	NSW	In buffer area only
Commonwealth Land - [16376]	NSW	In buffer area only
Commonwealth Land - [16377]	NSW	In buffer area only
Commonwealth Land - [16374]	NSW	In buffer area only
Commonwealth Land - [16375]	NSW	In buffer area only
Commonwealth Land - [16370]	NSW	In buffer area only
Commonwealth Land - [16372]	NSW	In buffer area only
Commonwealth Land - [16373]	NSW	In buffer area only
Commonwealth Land - [16371]	NSW	In buffer area only
Commonwealth Land - [16390]	NSW	In buffer area only
Commonwealth Land - [16391]	NSW	In buffer area only
Commonwealth Land - [16392]	NSW	In buffer area only
Commonwealth Land - [16393]	NSW	In buffer area only
Commonwealth Land - [16394]	NSW	In buffer area only
Commonwealth Land - [16395]	NSW	In buffer area only
Commonwealth Land - [16397]	NSW	In buffer area only
Commonwealth Land - [16396]	NSW	In buffer area only
Commonwealth Land - [16382]	NSW	In buffer area only
Commonwealth Land - [16381]	NSW	In buffer area only
Commonwealth Land - [16380]	NSW	In buffer area only
Commonwealth Land - [16368]	NSW	In buffer area only
Commonwealth Land - [16383]	NSW	In buffer area only
Commonwealth Land - [16388]	NSW	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [16367]	NSW	In buffer area only
Commonwealth Land - [16369]	NSW	In buffer area only
Commonwealth Land - [16366]	NSW	In buffer area only
Commonwealth Land - [16389]	NSW	In buffer area only
Commonwealth Land - [16384]	NSW	In buffer area only
Commonwealth Land - [16385]	NSW	In buffer area only
Commonwealth Land - [16386]	NSW	In buffer area only
Commonwealth Land - [16387]	NSW	In buffer area only

Commonwealth Heritage Places		[Resource Information]	
Name	State	Status	Buffer Status
Historic			
Armidale Post Office	NSW	Listed place	In buffer area only
Hunter River Lancers Training Depot	NSW	Listed place	In buffer area only

Listed Marine Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat likely to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area overfly marine area	In buffer area only
Extra Information			
State and Territory Reserves		[Resource Information]	
Protected Area Name	Reserve Type	State	Buffer Status
Imbota	Nature Reserve	NSW	In buffer area only
Oxley Wild Rivers	National Park	NSW	In buffer area only
Yina	Nature Reserve	NSW	In buffer area only

Regional Forest Agreements

[Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
North East NSW RFA	New South Wales	In feature area

EPBC Act Referrals

[Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Gara Battery Energy Storage System	2025/10102		Referral Decision	In buffer area only
Controlled action				
Armidale Regional Landfill	2007/3646	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Development of residential lots, Link Road	2007/3375	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Private residential development on Lot 2 DP 500453 Stoney Ridge Road	2004/1682	Not Controlled Action	Completed	In buffer area only
Residential Subdivision & Assoc Infrastructure Kareela Road	2005/2102	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Aerial baiting for wild dog control	2006/2713	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Proposed subdivision/residential development	2007/3605	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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G.3 BioNET Atlas search – Threatened species

Class	Scientific Name	Common Name	*NSW status	+Comm. Status	Records
Amphibia	<i>Mixophyes balbus</i>	Stuttering Frog	E1,P,2	V	82
Amphibia	<i>Adelotus brevis</i>	Tusked Frog population in the Nandewar and New England Tableland Bioregions	E2,P		P
Amphibia	<i>Litoria castanea</i>	Yellow-spotted Tree Frog	E4A,P	CE	1
Amphibia	<i>Litoria piperata</i>	Peppered Tree Frog	E4A,P	V	1
Amphibia	<i>Litoria subglandulosa</i>	Glandular Frog	V,P	V	27
Aves	<i>Anthochaera phrygia</i>	Regent Honeyeater	E4A,P,2	CE	8
Aves	<i>Calyptrorhynchus lathamii lathamii</i>	South-eastern Glossy Black-Cockatoo	V,P,2	V	349
Aves	<i>Anseranas semipalmata</i>	Magpie Goose	V,P		1
Aves	<i>Aphelocephala leucopsis</i>	Southern Whiteface	V,P	V	4
Aves	<i>Apus pacificus</i>	Fork-tailed Swift	P	C,J,K	5
Aves	<i>Artamus cyanopterus cyanopterus</i>	Dusky Woodswallow	V,P		333
Aves	<i>Burhinus grallarius</i>	Bush Stone-curlew	E1,P		1
Aves	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	P	C,J,K	1
Aves	<i>Circus assimilis</i>	Spotted Harrier	V,P		2
Aves	<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (eastern subspecies)	V,P	V	215
Aves	<i>Cuculus optatus</i>	Oriental Cuckoo	P	C,J,K	3
Aves	<i>Daphoenositta chrysoptera</i>	Varied Sittella	V,P		248
Aves	<i>Ephippiorhynchus asiaticus</i>	Black-necked Stork	E1,P		4
Aves	<i>Falco subniger</i>	Black Falcon	V,P		3
Aves	<i>Grantiella picta</i>	Painted Honeyeater	V,P	V	4
Aves	<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle	V,P		16
Aves	<i>Hieraaetus morphnoides</i>	Little Eagle	V,P		590
Aves	<i>Hirundapus caudacutus</i>	White-throated Needletail	V,P	V,C,J,K	47
Aves	<i>Lathamus discolor</i>	Swift Parrot	E1,P	CE	7
Aves	<i>Limosa limosa</i>	Black-tailed Godwit	V,P	E,C,J,K	P
Aves	<i>Lophoictinia isura</i>	Square-tailed Kite	V,P,3		36
Aves	<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin	E1,P	E	41
Aves	<i>Melithreptus gularis gularis</i>	Black-chinned Honeyeater (eastern subspecies)	V,P		6
Aves	<i>Neophema pulchella</i>	Turquoise Parrot	V,P,3		2
Aves	<i>Ninox connivens</i>	Barking Owl	V,P,3		18
Aves	<i>Ninox strenua</i>	Powerful Owl	V,P,3		42
Aves	<i>Oxyura australis</i>	Blue-billed Duck	V,P		8
Aves	<i>Pachycephala olivacea</i>	Olive Whistler	V,P		P
Aves	<i>Parvipsitta pusilla</i>	Little Lorikeet	V,P		29
Aves	<i>Petroica boodang</i>	Scarlet Robin	V,P		1
Aves	<i>Petroica phoenicea</i>	Flame Robin	V,P		15

Class	Scientific Name	Common Name	*NSW status	+Comm. Status	Records
Aves	<i>Pyrrholaemus sagittatus</i>	Speckled Warbler	V,P		342
Aves	<i>Rostratula australis</i>	Australian Painted Snipe	E1,P	E	P
Aves	<i>Stagonopleura guttata</i>	Diamond Firetail	V,P	V	147
Aves	<i>Stictonetta naevosa</i>	Freckled Duck	V,P		P
Aves	<i>Tringa stagnatilis</i>	Marsh Sandpiper	P	C,J,K	1
Aves	<i>Tyto novaehollandiae</i>	Masked Owl	V,P,3		46
Aves	<i>Tyto tenebricosa</i>	Sooty Owl	V,P,3		7
Flora	<i>Caladenia amnicola</i>		E1,P,2		P
Flora	<i>Diuris pedunculata</i>	Small Snake Orchid	E1,P,2	E	P
Flora	<i>Bertya ingramii</i>	Narrow-leaved Bertya	E1	E	26
Flora	<i>Boronia granitica</i>	Granite Boronia	V,P	E	P
Flora	<i>Callistemon pungens</i>			V	1
Flora	<i>Callitris oblonga subsp. parva</i>		E4A		P
Flora	<i>Dichanthium setosum</i>	Bluegrass	V	V	173
Flora	<i>Eucalyptus magnificata</i>	Northern Blue Box	E1		27
Flora	<i>Eucalyptus nicholii</i>	Narrow-leaved Black Peppermint	V	V	53
Flora	<i>Eucalyptus rubida subsp. barbigerorum</i>	Blackbutt Candlebark	V	V	2
Flora	<i>Eucalyptus scoparia</i>	Wallangarra White Gum	E1	V	1
Flora	<i>Euphrasia arguta</i>		E4A	CE	1
Flora	<i>Grevillea beadleana</i>	Beadle's Grevillea	E1,3	E	P
Flora	<i>Hakea fraseri</i>	Gorge Hakea	V	V	9
Flora	<i>Haloragis exalata subsp. velutina</i>	Tall Velvet Sea-berry	V	V	5
Flora	<i>Lepidium hyssopifolium</i>	Aromatic Peppergrass	E1	E	3
Flora	<i>Picris evae</i>	Hawkweed	V	V	1
Flora	<i>Pimelea venosa</i>	Bolivia Hill Rice-flower	E1,3	E	1
Flora	<i>Senna acclinis</i>	Rainforest Cassia	E1		1
Flora	<i>Styphelia perileuca</i>	Montane Green Five-corners	E1	E	13
Flora	<i>Swainsona sericea</i>	Silky Swainson-pea	V		1
Flora	<i>Thesium australe</i>	Austral Toadflax	V	V	8
Mammalia	<i>Aepyprymnus rufescens</i>	Rufous Bettong	V,P		1
Mammalia	<i>Cercartetus nanus</i>	Eastern Pygmy-possum	V,P		4
Mammalia	<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat	E1,P	E	P
Mammalia	<i>Chalinolobus nigrogriseus</i>	Hoary Wattled Bat	V,P		2
Mammalia	<i>Dasyurus maculatus</i>	Spotted-tailed Quoll	V,P	E	186
Mammalia	<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	V,P		8
Mammalia	<i>Miniopterus australis</i>	Little Bent-winged Bat	V,P		6
Mammalia	<i>Miniopterus orianae oceanensis</i>	Large Bent-winged Bat	V,P		20
Mammalia	<i>Myotis macropus</i>	Southern Myotis	V,P		3
Mammalia	<i>Notamacropus parma</i>	Parma Wallaby	V,P	V	P
Mammalia	<i>Petauroides volans</i>	Southern Greater Glider	E1,P	E	491

Class	Scientific Name	Common Name	*NSW status	+Comm. Status	Records
Mammalia	<i>Petaurus australis</i>	Yellow-bellied Glider	V,P	V	3
Mammalia	<i>Petaurus norfolcensis</i>	Squirrel Glider	V,P		5
Mammalia	<i>Petrogale penicillata</i>	Brush-tailed Rock-wallaby	E1,P	V	179
Mammalia	<i>Phascolarctos cinereus</i>	Koala	E1,P	E	1161
Mammalia	<i>Phoniscus papuensis</i>	Golden-tipped Bat	V,P		2
Mammalia	<i>Pseudomys novaehollandiae</i>	New Holland Mouse	V,P	V	14
Mammalia	<i>Pseudomys oralis</i>	Hastings River Mouse	E1,P	E	188
Mammalia	<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V,P	V	483
Mammalia	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat	V,P		3
Mammalia	<i>Scoteanax rueppellii</i>	Greater Broad-nosed Bat	V,P		8
Reptilia	<i>Eulamprus kosciuskoi</i>	Alpine Water Skink	V,P	V	1
Reptilia	<i>Hoplocephalus bitorquatus</i>	Pale-headed Snake	V,P		P

***NSW Status:** P=Protected, V=Vulnerable, E1=Endangered, E2=Endangered population, E4A=Critically Endangered, E4=Extinct, 2=Category 2 sensitive species, 3=Category 3 sensitive species.

+ Comm. Status: C=CAMBA, J=JAMBA, K=ROKAMBA, CE=Critically endangered, E=Endangered, V=Vulnerable, X=Extinct.

G.4 BioNET Atlas search – Threatened Ecological Communities

Community	*NSW Status	+Common. status	Records
Ben Halls Gap Sphagnum Moss Cool Temperate Rainforest		CE	K
Carex Sedgeland of the New England Tableland, Nandewar, Brigalow Belt South and NSW North Coast Bioregions	E3		P
Lowland Rainforest of Subtropical Australia		CE	K
Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions	E3		P
New England Peppermint (Eucalyptus nova-anglica) Grassy Woodlands		CE	K
New England Peppermint (Eucalyptus nova-anglica) Woodland on Basalts and Sediments in the New England Tableland Bioregion	E4B		K
Ribbon Gum-Mountain Gum-Snow Gum Grassy Forest/Woodland of the New England Tableland Bioregion	E3		P
Upland Wetlands of the Drainage Divide of the New England Tableland Bioregion	E3		P
Upland Wetlands of the New England Tablelands (New England Tableland Bioregion) and the Monaro Plateau (South Eastern Highlands Bioregion)		E	K
White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and	E4B		K
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland		CE	K

***NSW Status:** E3=Endangered, E4B=Critically endangered.

+Comm. Status: CE=Critically endangered, E=Endangered.

- Number of Records: P = predicted to occur, K = known to occur.

G.5 BioNET Atlas search – Key Threatening Processes

Threats	NSW Status	Comm Status
Aggressive exclusion of birds from woodland and forest habitat by abundant Noisy Miners, <i>Manorina melanocephala</i> (Latham, 1802)	KTP	KTP
Alteration of habitat following subsidence due to longwall mining	KTP	
Alteration to the natural flow regimes of rivers and streams and their floodplains and wetlands	KTP	
Anthropogenic Climate Change	KTP	KTP
Bushrock removal	KTP	
Clearing of native vegetation	KTP	KTP
Competition and grazing by the feral European Rabbit, <i>Oryctolagus cuniculus</i> (L.)	KTP	KTP
Competition and habitat degradation by Feral Goats, <i>Capra hircus</i> Linnaeus 1758	KTP	KTP
Competition from feral honey bees, <i>Apis mellifera</i> L.	KTP	
Forest eucalypt dieback associated with over-abundant psyllids and Bell Miners	KTP	
Habitat degradation and loss by Feral Horses (brumbies, wild horses), <i>Equus caballus</i> Linnaeus 1758	KTP	
Herbivory and environmental degradation caused by feral deer	KTP	
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	KTP	
Importation of Red Imported Fire Ants <i>Solenopsis invicta</i> Buren 1972	KTP	KTP
Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations	KTP	KTP
Infection of frogs by amphibian chytrid causing the disease chytridiomycosis	KTP	KTP
Infection of native plants by <i>Phytophthora cinnamomi</i>	KTP	KTP
Introduction of the Large Earth Bumblebee <i>Bombus terrestris</i> (L.)	KTP	
Invasion and establishment of exotic vines and scramblers	KTP	
Invasion and establishment of Scotch Broom (<i>Cytisus scoparius</i>)	KTP	
Invasion and establishment of the Cane Toad (<i>Bufo marinus</i>)	KTP	KTP
Invasion of native plant communities by African Olive <i>Olea europaea subsp. cuspidata</i> (Wall. ex G. Don) Cif.	KTP	
Invasion of native plant communities by <i>Chrysanthemoides monilifera</i>	KTP	
Invasion of native plant communities by exotic perennial grasses	KTP	
Invasion of the Yellow Crazy Ant, <i>Anoplolepis gracilipes</i> (Fr. Smith) into NSW	KTP	
Invasion, establishment and spread of Lantana (<i>Lantana camara</i> L. sens. Lat)	KTP	
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	KTP	KTP
Loss of Hollow-bearing Trees	KTP	
Loss or degradation (or both) of sites used for hill-topping by butterflies	KTP	
Predation and hybridisation by Feral Dogs, <i>Canis lupus familiaris</i>	KTP	
Predation by <i>Gambusia holbrooki</i> Girard, 1859 (Plague Minnow or Mosquito Fish)	KTP	

Threats	NSW Status	Comm Status
Predation by the European Red Fox <i>Vulpes Vulpes</i> (Linnaeus, 1758)	KTP	KTP
Predation by the Feral Cat <i>Felis catus</i> (Linnaeus, 1758)	KTP	KTP
Predation, habitat degradation, competition and disease transmission by Feral Pigs, <i>Sus scrofa</i> Linnaeus 1758	KTP	KTP
Removal of dead wood and dead trees	KTP	

Appendix H

Aboriginal Heritage Information Management System Restricted Sites



David Gordon (Heritage NSW) <support@zendesk.environment.nsw.gov.au>
To  Ryan Zanker

Your request has been updated. To add additional comments, reply to this email.

Hi Ryan,

I can confirm that restricted Aboriginal sites:

- 21-4-0081
- 21-4-0094

WILL NOT BE IMPACTED BY ANY WORKS CONDUCTED IN YOUR STUDY AREA.

David Gordon

David Gordon

Heritage NSW

Department of Climate Change, Energy, the Environment and Water (DCCEEW)

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