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Scoping Report

Gunning Solar Farm and Battery Energy Storage System

Prepared for
Gunning Subco Pty Ltd

Client representative
Samantha Coras

Date
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List of Abbreviations

ABN	Australian Business Number
AC	Alternating Current
ACHAR	Aboriginal Cultural Heritage Assessment Report
AEP	Annual Exceedance Probability
AHIMS	Aboriginal Heritage Information Management System
BAM	Biodiversity Assessment Method
BC Act	*Biodiversity Conservation Act 2016*
BDAR	Biodiversity Development Assessment Report
BESS	Battery Energy Storage System
BOS	Biodiversity Offset Scheme
CPP	Community Participation Plan
DA	Development Application
dB	Decibel
DC	Direct Current
DEE	Commonwealth Department of Environment and Energy
DPE	NSW Department of Planning and Environment
DPIE	Former NSW Department of Planning, Industry and Environment (now DPE)
EC	Electrical Conductivity
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EP&A Act	*Environmental Planning and Assessment Act 1979*
EP&A Regulation	*Environmental Planning and Assessment Regulation 2000*
EPA	NSW Environmental Protection Authority
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
EPI	Environmental Planning Instrument
GHG	Greenhouse Gas
ha	Hectare

IAP2	International Association for Public Participation
km	Kilometre
kV	Kilovolt
LEP	Local Environmental Plan
LGA	Local Government Area
LSPS	Upper Lachlan Local Strategic Planning Statement
MNES	Matter of National Environmental Significance
MW	Megawatts
MWh	Megawatt hours
NP&W Act	*National Parks and Wildlife Act 1974*
NPI	EPA Noise Policy for Industry
NSW	New South Wales
PCT	Plant Community Type
PMST	Protected Matters Search Tool
POEO Act	*Protection of the Environment Operations Act 1997*
PV	Photovoltaic
RBL	Rating Background Level
RET	Australian Government Renewable Energy Target
SEARs	Secretary's Environmental Assessment Requirements
SEED	NSW Government Sharing and Enabling Environmental Data tool
SEPP	State Environmental Planning Policy
SSD	State Significant Development

1. Introduction

1.1 Background

Gunning Subco Pty Ltd is proposing to construct a 250 megawatt (MW) solar farm, a 120MW/480MWhBattery Energy Storage System (BESS) and an electrical substation (the Proposed Development), on approximately 676 hectares (ha) of land at Lade Vale southwest of Gunning in the Upper Lachlan Local Government Area (LGA).

The Proposed Development will be located close to and connect to TransGrid's 330 kilovolt (kV) transmission line and hence connect to NSW electrical infrastructure. The Proposed Development will have a capital investment value higher than $30 million and hence will trigger the provisions for State Significant Development (SSD) under *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP).

1.1.1 Gunning Solar SSD 8590

The Secretary's Environmental Assessment Requirements (SEARs) for an Environmental Impact Statement (EIS) for a previously proposed solar farm in this location was issued on 27 July 2017 (Gunning Solar – SSD8590). Due to an expired SEARS, Canadian Solar withdrew SSD8590 on 15 June 2021 at the Department's request, with the understanding that new SEARS would be issued for the Proposed Development after new land parcels were secured.

A number of specialist environmental investigations were undertaken for SSD8590 during 2018 and 2019 and included:

- Vegetation type classification and Biodiversity Assessment Method (BAM) mapping;
- Aboriginal Cultural Heritage Assessment;
- Visual impacts for viewpoints within the site and for nearby sensitive receivers, including two initial photomontages based on the concept plan for the Proposed Development;
- A noise model to determine the noise and vibration impacts from construction and operation;
- High level identification and assessment of transport access routes for construction and operational traffic; and
- Flood modelling showing peak discharges for each sub-catchment identified, and each Annual Exceedance Probability (AEP) of interest.

These studies will be confirmed and updated as necessary, with supplementary investigations on Lot 2 DP747697 completed to provide a complete assessment of the environmental impacts of the Proposed Development on the site.

Canadian Solar and pitt&sherry undertook consultation with Upper Lachlan Shire Council, TransGrid, Transport for NSW, landowners, and sensitive receivers during 2018 and 2019. Newspaper advertisements and online feedback forms were also made available during this time as well as a community drop-in session held at Gunning in May 2019.

1.2 Purpose of this Scoping Report

This Scoping Report has been prepared with regard for the *State Significant Development Guidelines – preparing a scoping report* (2021, DPIE) under Clause 173(3) of the *Environmental Planning and Assessment Regulation* to support a request for the SEARs to guide the preparation of an EIS for the Proposed Development under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

Commensurate with the scale and likely impacts of the Proposed Development, this report provides the following:

- An outline of the justification and alternatives considered for the Proposed Development;
- A description of the Proposed Development including an overview of its construction and operation;
- The relevant planning legislation and approval process;
- An outline of the preliminary and proposed community engagement; and

- An outline of the proposed assessment of environmental impacts in the EIS.

1.3 Applicant details

Gunning Subco Pty Ltd (ACN 656 141 749) as trustee for the Gunning Unit Trust is owned by Canadian Solar – a global energy provider, leading manufacturer of solar photovoltaic (PV) modules and developer of solar energy solutions. Canadian Solar was founded in 2001 in Ontario, Canada and is listed on the NASDAQ. The headquarters of Canadian Solar is located in Ontario and the company has business subsidiaries in 20 countries on six continents.

Canadian Solar has several projects under construction or completed in Australia including:

- International Convention Centre (ICC) Sydney – Canadian Solar installed a large rooftop power plant at the ICC which has an annual production capacity of 545,000 KWh;
- Oakey Solar Farm – Canadian Solar is constructing a 100 MW capacity solar farm in Oakey QLD;
- Suntop Solar Farm – 170MW SSD solar farm approved in 2018 and now operational; and
- Gunnedah Solar Farm – 150MW SSD solar farm approved in 2019 and now operational;

1.4 Regional and Local Context

The nearest locality to the Proposed Development is the town of Gunning, approximately 12 kilometres (km) northeast of the site. Gunning has a population of approximately 659 people and forms part of the Upper Lachlan Local Government Area.

Gunning is approximately 243km southwest of Sydney, 67km north of Canberra, 46km west of Goulburn, and approximately 20km east of Yass (Figure 1). Gunning is well serviced by the state highway network of the Hume Highway that connects Sydney to Melbourne and the nearby Barton Highway that connects the Hume Highway to Canberra and the Australian Capital Territory.

West of the site is the Mundoonen Range that lies on the boundary between the Upper Lachlan and Yass Local Government Areas. Straddling the range is the Mundoonen Nature Reserve – a 1,485ha conservation area of remnant Southern Tableland dry sclerophyll forest.

Just east of the site is Jerrawa Creek. Hovells Creek runs through the site parallel to Jerrawa Creek and converges with the latter just north of the Hume Highway and before continuing some 18km northward to join the Lachlan River. The meandering of watercourses across this landscape reflects the gently undulating nature of the locality (Figure 2).

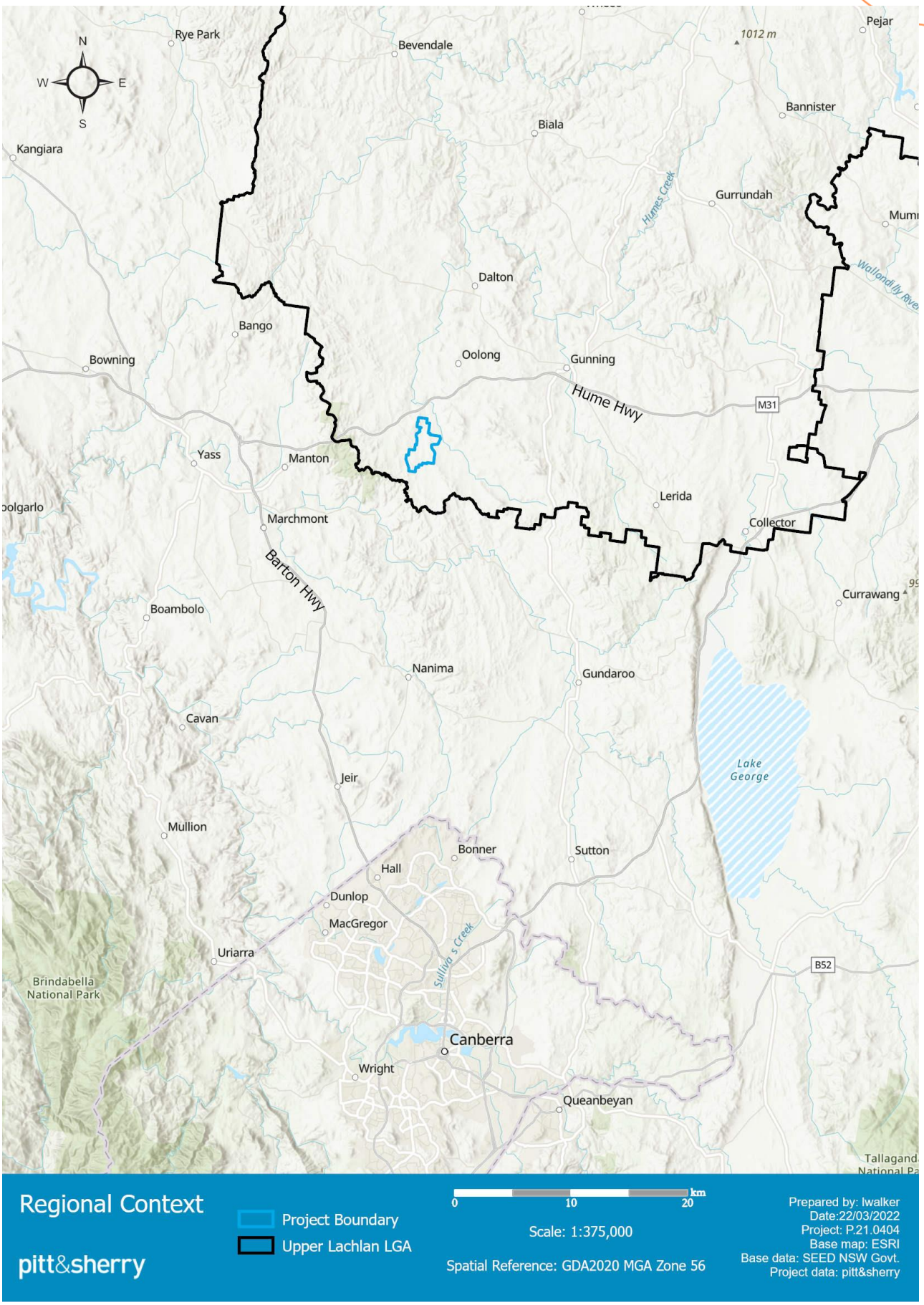


Figure 1 The site and regional context

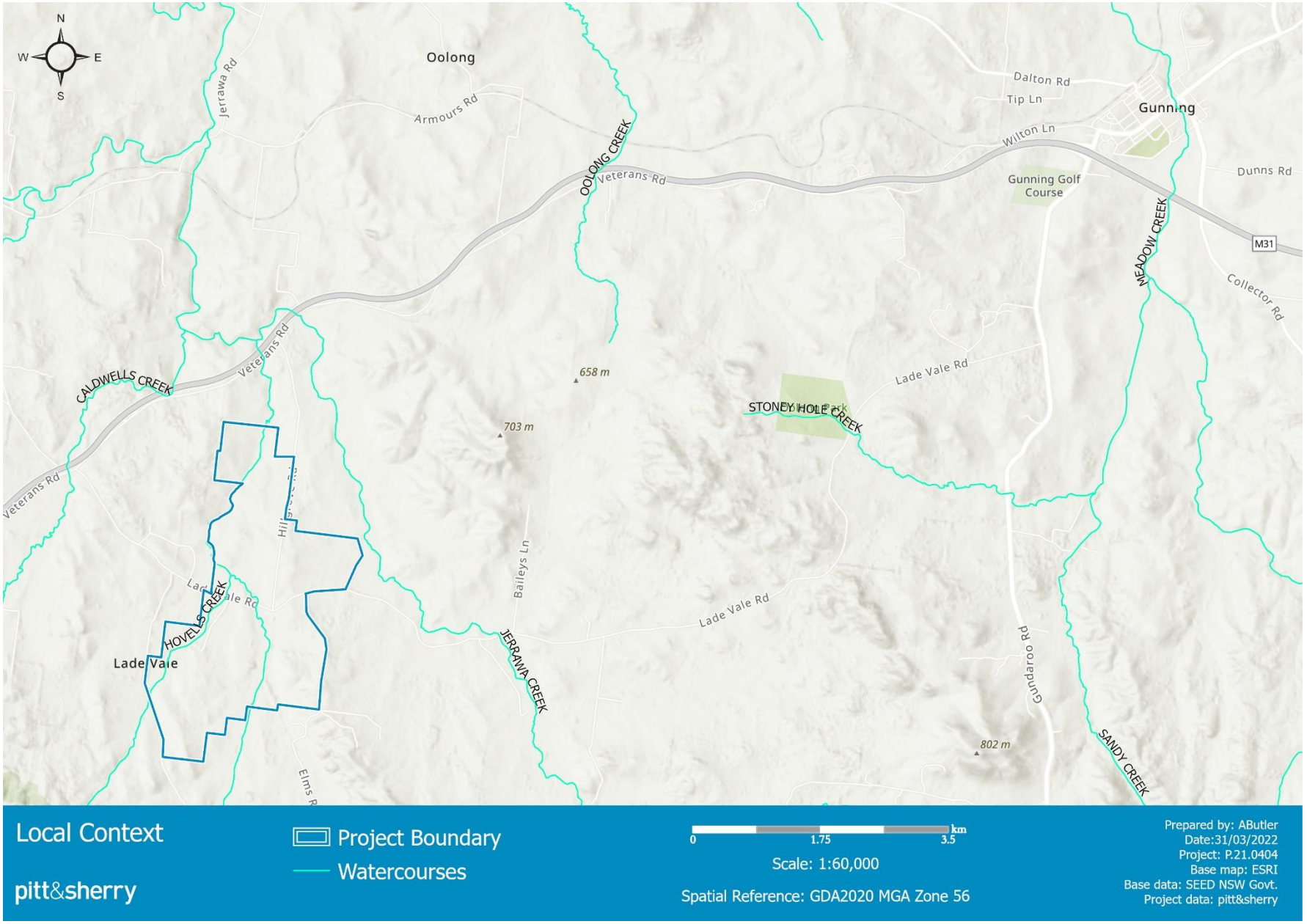


Figure 2 Local context of site.

1.5 Development site

The site for the Proposed Development is located at Lade Vale, approximately 12km southwest of Gunning adjacent to Lade Vale Road, Lade Vale, NSW (Figure 2). Figure 3 illustrates the site and lots that are proposed to be developed.

1.5.1 Property Description

As illustrated in Figure 3, the site is legally described as follows:

- Lot 1 DP1005680
- Lot 1 DP1113747
- Lot 2 DP1234433
- Lot 2 and 3 DP747697
- Lot 3 and 4 DP1142197
- Lot 37 and 48 DP754130
- Lot 50 and 69 DP 754130

Figure 4 identifies Crown land as unformed road reserves within the site. With the exception of the Crown land that straddles part of the length of Hovells Creek and Lots 214, 248 and 249 DP 754130 (adjacent to Lade Vale Rd and approximately 2.9ha in area), it would be reasonable to conclude these Crown road reserves would no longer be required for this purpose and could be closed and included in the development. To this end, Canadian Solar are consulting with Crown Land NSW. If Crown Land NSW advises these Crown lands on the site are no longer required then, on behalf of the landowners adjoining these Crown land road reserves, Canadian Solar would seek to lease or purchase this land via direct negotiation in accordance with Crown Land NSW policies. It is not proposed to develop the Crown land parcels of Lots 214, 248, and 249 DP754130.

There are unformed road reserves within the site. Canadian Solar will consult with Council on the need to retain these road reserves and if they can be included within the Proposed Development.

Figure 4 also illustrates two 60.96m wide easements for 330kV electricity transmission lines running through the site in an east to west alignment. A 30.48m wide easement for a 132kV electricity transmission line runs through the northern portion of the site in a southwest to northeast alignment.

The Site is approximately 676ha and has been historically cleared for agricultural development. It is currently used for sheep grazing and cropping (Figure 5) that appears to be common throughout the Gunning and Lade Vale area.

1.5.2 Sensitive Receivers

Seven residential dwellings are located within 0.5km of the site and have been preliminarily identified as Sensitive Receivers that may be potentially impacted by the proposed development (Figure 6).

1.5.3 Road network

Lade Vale Road (located in a 20m wide road reserve) is a partially sealed Council controlled road running through the centre of the site connecting to the Hume Highway to the west and Gundaroo Rd to the east. The two-lane unsealed road becomes sealed about 2km west of the site, at the Elms Rd intersection.

Hillgrove Road (located in a 20m wide road reserve) is unsealed Council controlled road and runs through the middle of the northern portion of the site from Veterans Road and the Hume Highway.

The western boundary is formed by the unsealed Iron Mines Road and neighbouring lots. The southern boundary is defined by neighbouring lots and farmland. The eastern boundary is bound by Elms Road (unsealed, single lane).

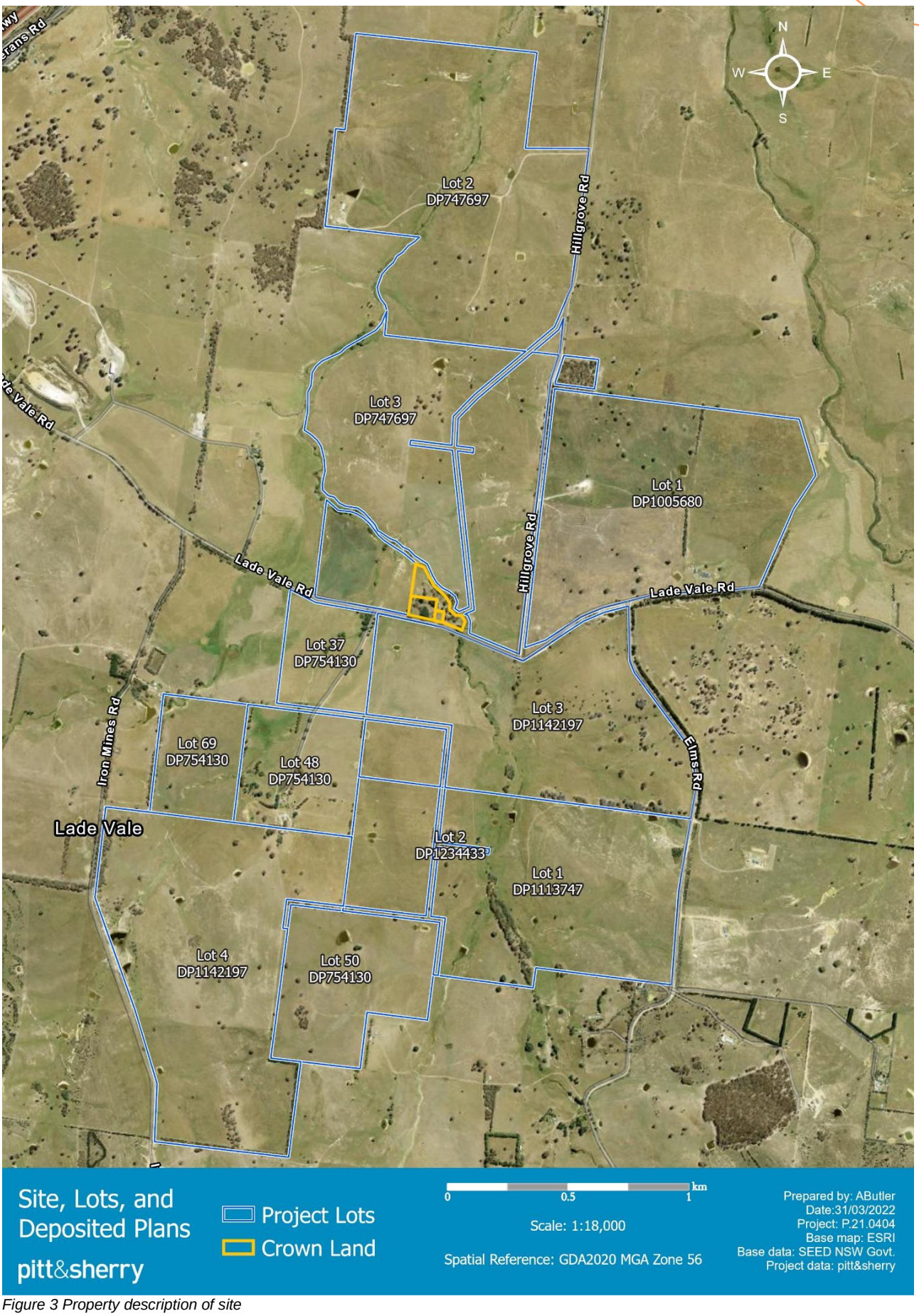


Figure 3 Property description of site

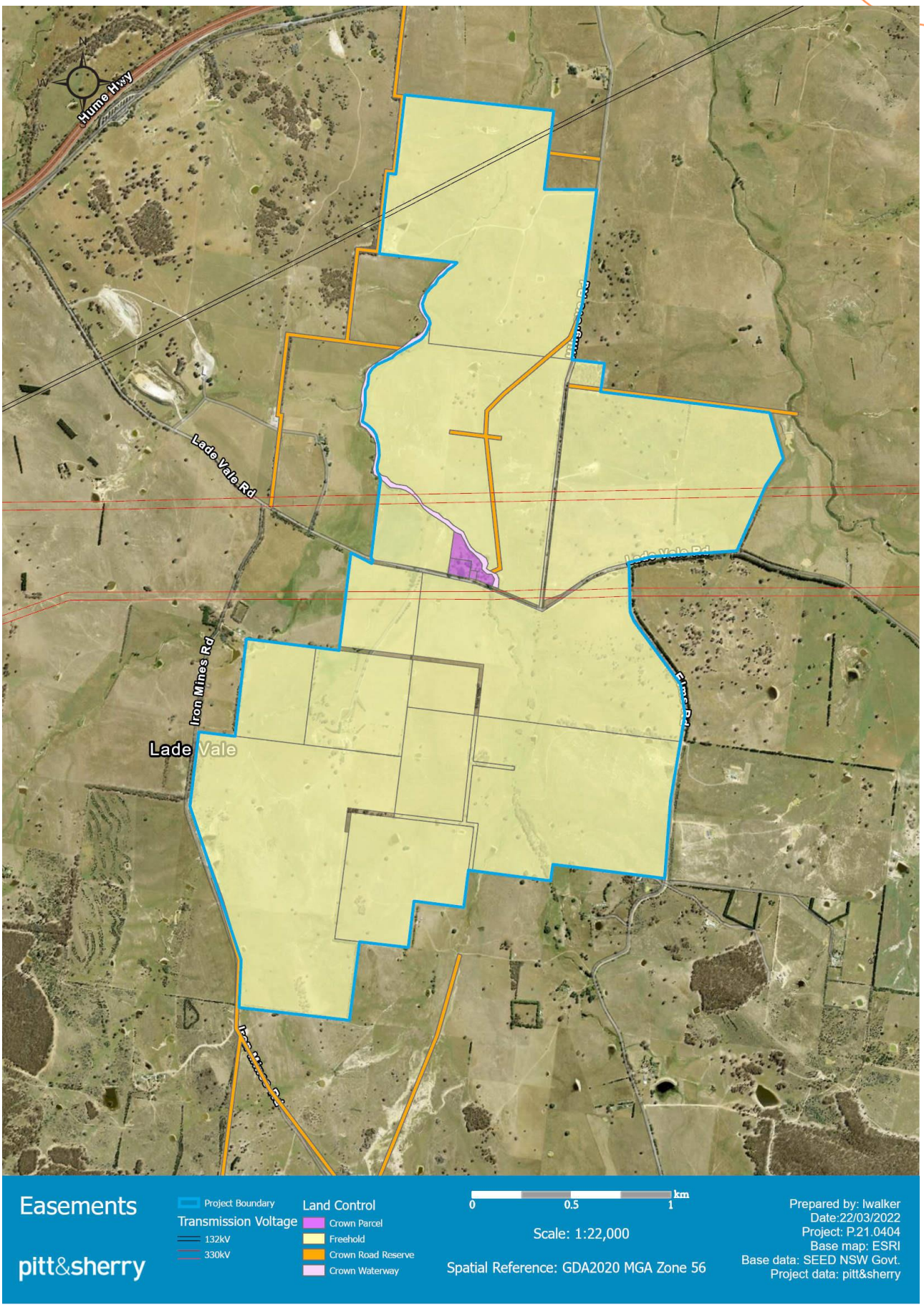


Figure 4 Site with transmission line easement and Crown lands

Figure 5 Typical view of the site illustrating its predominant use for sheep grazing, gentle slopes, and scattered trees

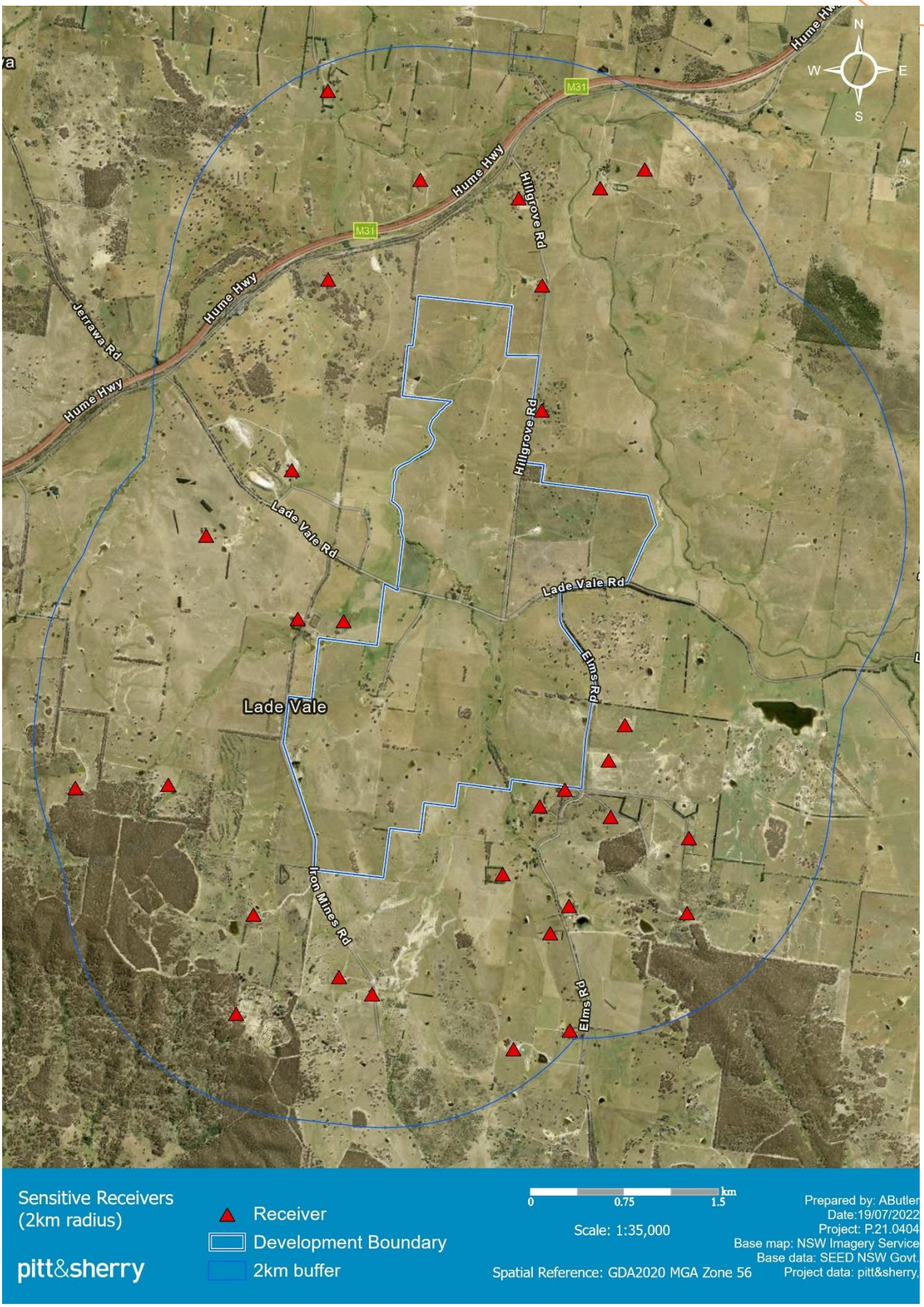


Figure 6 Nearby sensitive receivers

The Site has a history of agricultural land uses and accordingly, most native vegetation has been removed. The remnant native vegetation on site might consist of White Box-Yellow Box-Blakely's Red Gum Grassy Woodland, Derived Native Grassland (*Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act)) and Natural Temperate Grassland of the South-Eastern Highlands (EPBC Act).

Two mapped waterways and eleven farm dams occur within the site. Both waterways, Chimney Creek and Hovells Creek, run in a northerly direction between Elms Road and Iron Mines Road and are tributaries of the Lachlan River. Chimney Creek converges with Hovells Creek on the site whose confluence with Jerrawa Creek is approximately 2.5km north of the Site (Figure 7).

There is also a network of smaller drainage lines, often with small dams for livestock. All the creeks and drainage lines are ephemeral, have limited ponding and appear to have little to no native riparian vegetation.

Figure 7 Site Hydrology

2. Strategic Need

The Proposed Development would improve the reliability and security of the state and national electricity network by generating electricity from renewable sources and storing surplus energy on the site and releasing dispatchable energy during peak demand periods. The Proposed Development would support energy generation and storage development in NSW and Australia and increase flexibility and resilience of the energy grid as overall renewable energy generation increases and non-renewable energy generation decreases across the grid over time.

2.1 International Need

In December 2015, Australia became a signatory to the United Nations Paris Agreement on climate change. The main objectives of the Paris Agreement are:

- limit the increase in global temperatures to well below 2 degrees and pursue efforts to limit the rise to 1.5 degrees
- achieve net-zero emissions, globally, by the second half of the century
- differentiated expectations for developed nations, including Australia, that they will reduce their emissions sooner than developing nations.

The Australian Government has committed to reduce greenhouse gas emissions by 26-28% on 2005 levels by 2030.

The Proposed Development is an effective method to meet the nation's international commitments to reduce greenhouse gas emissions and would contribute to Australia's effort to meet the Paris Agreement.

2.2 National Need

The Renewable Energy Target (RET) is an Australian Government scheme designed to reduce emissions of greenhouse gases in the electricity sector and encourage additional renewable energy generation. The Large-scale RET scheme incentivises investment in renewable energy power stations such as solar farms. The scheme has an annual target of 33,000 gigawatt hours until the scheme ends in 2030.

The Proposed Development would support the RET and provide an alternative power generation source resulting in the reduced greenhouse gas (GHG) emissions, contributing to meeting the Paris Agreement, aid the transition towards cleaner electricity generation and contribute to meeting the RET.

2.3 New South Wales Need

With the objective of delivering cheaper, cleaner, and more reliable electricity to support future growth across the state, the NSW government established the NSW Transmission Infrastructure Strategy (DPIE, 2018); the NSW Electricity Strategy (DPIE, 2019) and the NSW Electricity Infrastructure Roadmap (DPIE 2020).

These policies facilitate transitioning the state into a modern, global renewable energy superpower. The Proposed Development will contribute to this transition.

2.4 Upper Lachlan Local Strategic Planning Statement 2020

Upper Lachlan Shire Council's Local Strategic Planning Statement (LSPS) envisages a lively, welcoming place to live, underpinned by a distinctive residential and working experience that creates a wealth of positive outcomes. The LSPS provides a strategic decision-making process for land use, economic development, and community stability over the next 20 years, in order to build community resilience, able to adapt to new economies, climate, and social change.

Relevant for the Proposed Development, the LSPS identifies an increased investment in renewable energy

developments as an ongoing priority for economic opportunities, with a vision that:

> *…welcomes new investment and encourages collaborative diversity, and to position ULSC as a hub of renewable energy excellence.*

2.5 Development Alternatives

2.5.1 The 'do nothing' option

The consequences of not proceeding with the development would be to forgo the benefits of the Project, resulting in:

- The loss of a source of renewable energy that would assist the Australian and NSW Government to reach their targets such as the NSW Net Zero Plan Stage 1: 2020-2030, which targets net zero emissions by 2050 (DPIE,2020);
- The loss of cleaner energy and reduced greenhouse gas emissions;
- The loss of energy security through diversification of energy sources;
- The loss of additional electricity generation and supply into the Australian grid;
- Loss of social and economic benefits in Gunning and the Upper Lachlan Shire LGA through the provision of direct and indirect employment opportunities locally and regionally during construction and operation of the solar far; and

The 'do nothing' option may avoid potential environmental impacts associated with the Development. However, it is considered the benefits of the Development would significantly outweigh any potential environmental impacts whilst contributing to ecologically sustainable development.

2.5.2 Site Suitability and Layout

pitt&sherry undertook preliminary environmental site assessment of nine potential solar farm sites across NSW including Marulan, Mumbil, Gunnedah, Suntop and others. This information informed the applicant's own site analysis, site suitability for construction and operation, commercial feasibility of yield and return, grid connection costs and likely construction costs for each site.

The Gunning site was subsequently identified as preferred for utility scale solar electricity generation due to:

- Proximity to and capacity of connection infrastructure, with two 330kV transmission lines running through site
- Good energy yield;
- Availability of suitably sized lots;
- Aspect of the land being predominantly north facing;
- Ease of access to the Hume Highway and connections to Sydney, Canberra, and Melbourne for construction logistics; and
- Expectation of low environmental and heritage constraints.

From the original layout proposed under SSD8590, the current layout has been adjusted from an east-west alignment to a north-south alignment. This change was in response to consideration of biodiversity constraints, hydrological impacts, and land ownership negotiations. Additional lots were added to the north of Lade Vale Road, to optimise potential yield. The previous layout overlain with the current proposed layout is shown in Figure 8

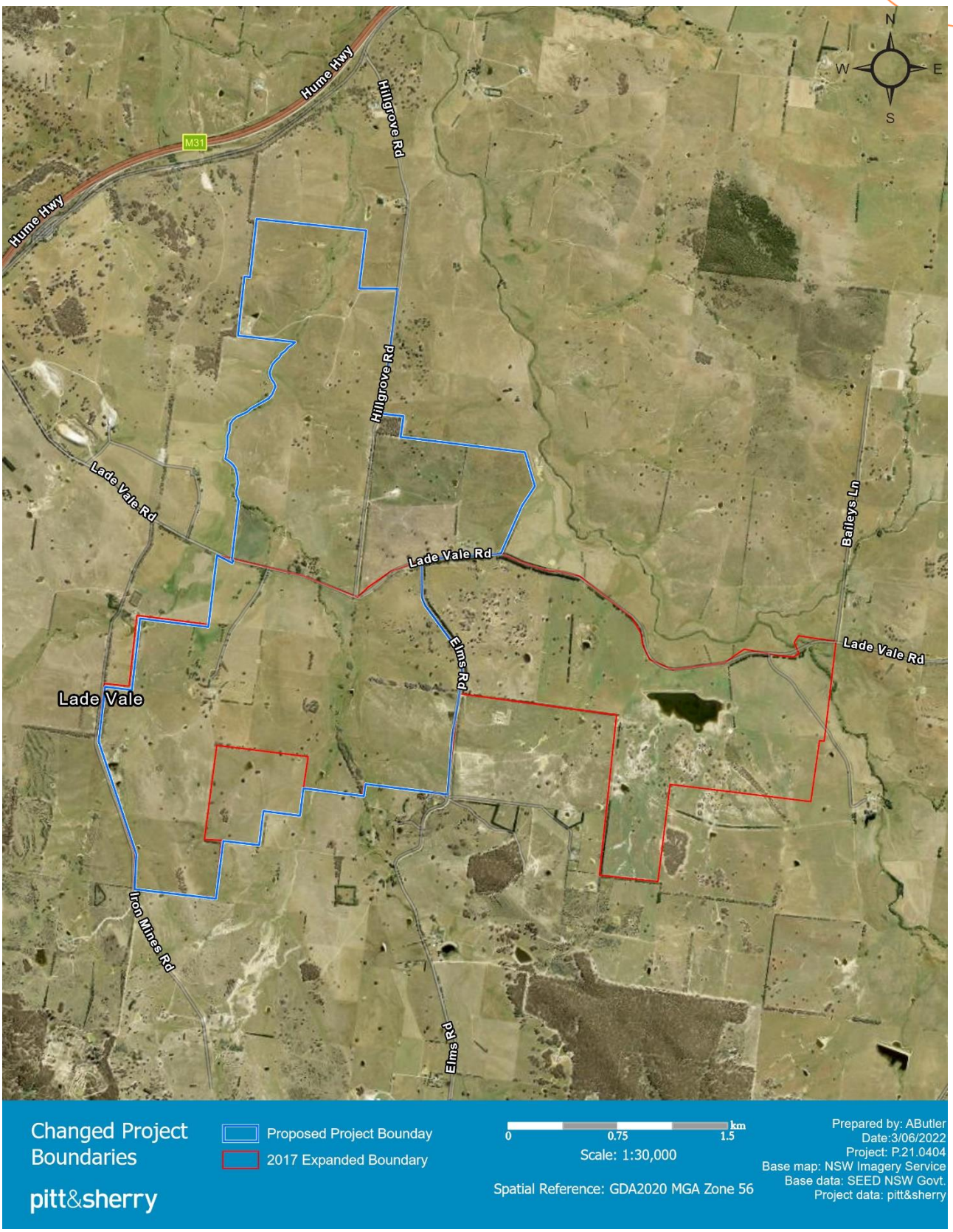


Figure 8 2017 development boundary under SSD8590 and current proposed development boundary

2.6 Benefits of the Proposed Development

The construction and operation of the Proposed Development would provide the following benefits:

- Improving the stability and reliability of the electricity network by storing energy during periods of low demand, including those from intermittent renewable sources and dispatching energy during periods of peak demand;
- Supporting Australia's 2030 emission reduction targets and NSW's transition to net-zero emissions by 2050;
- Local employment opportunities of approximately 200+ jobs during an 18-month construction period and approximately 5-6 full-time jobs during the 35-year operational life;
- Construction and operation of the development is likely to be low impact upon the locality; and
- Potential for direct and indirect investment into the Upper Lachlan Shire during construction.

Additional community benefits would be investigated during preparation of the EIS.

3. Proposed Development

3.1 Development Description

The Proposed Development will consist of a 250MW solar farm, a 150MW/600MWh BESS, an electrical substation and associated infrastructure and subdivision of land upon which the substation will be located to facilitate its transfer to Transgrid. A concept layout shown in Figure 9 has been determined to optimise yield capacity. Initial areas of avoidance include electrical easements, riparian corridors, and an area in the south of the site reserved for Greening Australia. This layout would be refined subject to further site investigations and during detailed design. The panels would connect to inverters via underground cables. The inverters will convert the direct current (DC) electricity from the panels to alternating current (AC) which will be connected to a substation via underground cabling. The substation will connect the solar farm and BESS to the 330kV transmission line and to the NSW and national electricity grid.

The following details concerning the description of the construction and operation of the development are preliminary and will be confirmed and refined as the development technical investigations, consultation, and design progress.

Ancillary features required to support the construction and operation of the solar farm and BESS includes:

- An onsite 330kV substation;
- Electrical collection and conversion systems, including inverter and transformer units, switchyard and control room. underground and above ground cables;
- Fencing the perimeter of the site;
- A construction and maintenance compound and buildings;
- One major road access from the site via Lade Vale Road or Hillgrove Road;
- Parking and Internal access roads, and three waterway crossings;
- Landscaping and environmental works.

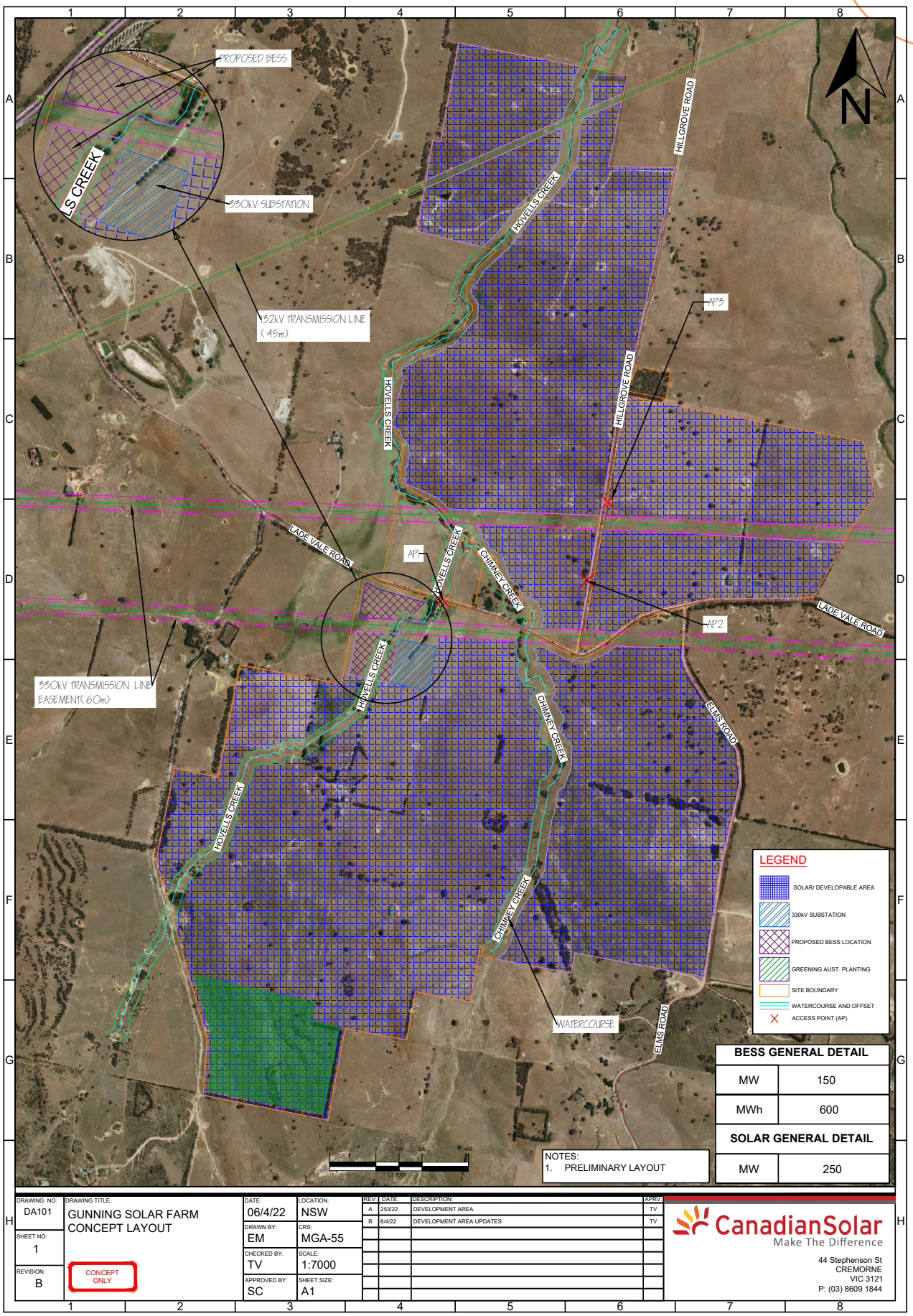


Figure 9 Concept layout of development site

Construction is expected to last approximately 18 months. The main construction activities are expected to include site establishment, road upgrades (to be determined in consultation with Transport for NSW and Upper Lachlan Shire Council), installation and commissioning of PV systems, cables and BESS, construction of 330kV substation and site rehabilitation.

3.1.1 Construction hours and duration

Construction hours for the development will be standard hours for construction with extended hours on Saturday as follows:

- Monday to Friday – 7am to 6pm
- Saturdays – 8am to 1pm, and
- Sundays or Public Holidays – No construction

No audible out of hours or night works are proposed excluding emergencies. In the event construction is required outside of these hours, approval from the relevant authorities and notification to the community would be undertaken.

3.1.2 Resourcing requirements

Labour

It is estimated that up to 200+ construction personnel would be required on site during peak construction period. Construction supervisors and labour force made up of labourers and technicians are intended to be hired locally, where possible.

Plant and equipment

Plant and equipment used during construction would include earth-moving equipment for civil works, cable trenching equipment, trucks, all terrain forklifts, and mobile cranes. Subject to construction contractor requirements, an indicative list of plant and equipment would include:

- Rock Drilling Machines and pile drivers
- All terrain fork-lift (tele handler)
- All terrain utility vehicle
- Backhoe and excavator
- Bulldozer
- Roller
- Winches
- Flatbed truck
- Mobile crane
- Elevated work platforms

Materials

Development infrastructure and construction materials would be transported via road from either Melbourne or Sydney. This would include:

- PV solar panels;
- Piles and mounting structures;
- Electrical equipment and infrastructure including cabling, inverters, and switchgear;

- BESS components;
- Substation components plus HV transformer;
- Maintenance storage shipping containers; and
- Perimeter fencing

3.1.3 Operation

Subject to obtaining development consent, construction of the proposed development is anticipated to commence in the second half of 2023 with the development becoming operational in 2024. Once operational, activities would include daily operations and maintenance.

Hours of operation

The development will operate over 24 hours 7 days a week in its entirety with electricity generation, storage and transmission activities occurring as circumstances allow. Daily operations and maintenance by site staff would be undertaken during standard working hours of:

- Monday – Friday 7am to 6pm
- Saturday - 8am to 1pm.

Emergency response, inspections and maintenance activities may be required to be undertaken out of hours or night works.

Resourcing requirements

During operations, the proposal will support approximately 2-3 full time jobs. Minimal operational plant and equipment will be required for operation of the facility including ad hoc maintenance vehicles (utility vehicle or similar) and other equipment associated with the activities outlined above. On occasion, such as during a major substation shutdown, additional maintenance staff may be required on site.

During operation of the solar farm, water would be required for stock watering and vegetation management which would be supplied from existing on-site dams plus existing bore water. When required water may also be trucked onto site.

Emergency firefighting water would be stored in a tank (approx. 20,000L) located adjacent to the maintenance storage containers.

Operational water use is estimated to be approximately 1.5ML/per annum and will be trucked to Site.

Decommissioning

The development has an operational life of approximately 35 years after which it would be:

- Updated with replacement infrastructure noting that the owner/operator of the development will maintain or update development infrastructure through its operational life, or
- Decommissioned - the plant will be permanently removed
- Should the decision be made to end the development, it will be decommissioned as per standard solar plant isolation and disconnection procedures and the Site returned as close as possible to its existing condition.

4. Statutory Context

4.1 Permissibility

The development is permitted with consent under Clause 2.36(1)(b) of the *State Environmental Planning Policy (Transport and Infrastructure) 2021* (Transport and Infrastructure SEPP), being "*development for the purpose of electricity generating works may be carried out with consent on land in a prescribed rural zone*".

The site is zoned as RU2 Rural Landscape under the Upper Lachlan Local Environmental Plan (LEP), which is a prescribed rural zone under the Transport and Infrastructure SEPP.

4.2 Power to grant consent

Schedule 1 Clause 20 Electricity generating works and heat, or co-generation of the *Planning Systems SEPP* states the following as State Significant Development (SSD):

> *20 Electricity generating works and heat or co-generation*
>
> *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 Proposed Development will have a capital investment value exceeding $30 million and accordingly, will be SSD. The Minister for Planning will be the consent authority.

4.3 Other approvals

Approvals that may be relevant to the development which are not required under Section 4.41 of the Act, or cannot be refused under Section 4.42, are listed in Table 1. Other Commonwealth and NSW environmental legislation that may be relevant to the development are listed in Table 2. The applicability of this legislation would be considered fully in the EIS.

Table 1 Approvals under Division 4 of the EP&A Act

Legislation	Requirement
Approvals not required under section 4.41	
National Parks and Wildlife Act 1979 (NP&W Act)	An Aboriginal heritage impact permit (AHIP) under Section 90 of the NP&W Act is not required.
Water Management Act 2000 (Water Act)	A water use approval under S.89, a water management work approval under S.90 or an activity approval (other than an aquifer interference approval) under S.91, are not required
Approvals that cannot be refused under section 4.42	
Roads Act 1993	Approval from the roads authority is required under Section 138 to erect a structure or carry out a work in, on or over a public road.
Protection of the Environment Operations Act 1997 (POEO Act)	An environmental protection licence (EPL) under Chapter 3 of the POEO Act, for any of the purposes referred to in Section 43 of the Act.

Table 2 Other Commonwealth and NSW environmental legislation of potential relevance to the development

Legislation	Requirement
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)	EPBC Act requires referral to the Commonwealth Minister for Environment and Energy for actions that are likely to have a significant impact on Matters of National Environmental Significance (MNES)

	A preliminary search of the Commonwealth Protected Matters Search Tool indicates the development is not likely to have a significant impact on MNES (see Section 6.1.2)
Native Title Act 1993 (Commonwealth)	A search of the National Native Title Tribunal's (NNTT) Native Title Register did not identify active Native Title claims or applications or Indigenous Land Use Agreements.
Biodiversity Conservation Act 2016 (BC Act)	Biodiversity impact assessment would be undertaken as part of the EIS to determine if the provisions of this act will apply.
Contaminated Land Management Act 1997	Potential for land subject to the Proposed Development to be contaminated as a result of historical development would be considered as part of the EIS.
Noxious Weeds Act 1993	The EIS would assess potential ecological impacts associated with noxious weeds.

4.4 Mandatory Matters for Consideration

Table 3 lists matters the consent authority must consider in deciding whether to grant consent to the Proposed Development.

Table 3 Mandatory Considerations

Statutory Reference	Mandatory Consideration
Consideration under the EP&A Act	
Section 1.3	• to facilitate ecologically sustainable development 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 protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats
Section 4.15	Relevant environmental planning instruments (see below) Draft environmental planning instruments that have been publicly exhibited.
Mandatory relevant considerations under Environmental Planning Instruments (EPIs)	
Upper Lachlan LEP 2010	• Clause 2.3(2) – Zone objectives; • Clause 5.10 Heritage Conservation; • Clause 5.21 Flood Planning; • Clause 6.3 Land; • Clause 6.4 Water; and • Clause 6.9 Essential Services
State Environmental Planning Policy (Transport and Infrastructure) 2021 – Subdivision 2, Clause 2.47 (2)	Before determining a development application (or an application for modification of a consent) for development to which this clause applies, the consent authority must— • give written notice to the electricity supply authority for the area in which the development is to be carried out, inviting comments about potential safety risks, and • take into consideration any response to the notice that is received within 21 days after the notice is given.
State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 3, Clause 3.7 and Chapter 4, Clause 4.6	In determining whether a development is— • a hazardous storage establishment, hazardous industry or other potentially hazardous industry, or • an offensive storage establishment, offensive industry or other potentially offensive industry, consideration must be given to current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development. • if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.
Considerations under other legislation	
Biodiversity Conservation Act 2016 (BC Act) – Section 7.14	The likely impact of the Proposed Development on biodiversity values will be assessed in the biodiversity development assessment report.

5. Community Engagement

5.1 Engagement Undertaken

5.1.1 Government agency and key stakeholders

Canadian Solar have reached out to Upper Lachlan Shire Council to inform them of their intention to recommence the approval process for establishing the solar farm and BESS on the site. Canadian Solar have been in consultation with TransGrid regarding grid connection throughout 2021-2022.

Consultation was carried out under the previous project, with the outcomes summarised in Table 4.

Table 4 Summary of key stakeholder engagement under SSD8590

Agency/Stakeholder	Summary
Upper Lachlan Shire Council	Engagement undertaken to discuss the project. Main concern at time of discussion being removal of 10t load limit on Lade Vale Road.
TfNSW (formerly RMS)	Transport and access routes along the Hume Highway were discussed with TfNSW, with in principal support given to construction of a deceleration lane from the highway onto Lade Vale Road in the west.

5.1.2 Community Engagement

Community consultation carried out under the previous development is summarised in Table 5.

Table 5 Summary of key community engagement activities under SSD8590

Community engagement activity	Summary
2 x Community consultation sessions	Session advertised on Council website, in local newspaper, and radio. 20 attendees over both sessions. No concerns were raised with the main interest in biodiversity and glare impacts.
Community hotline	Calls received were largely from neighbours with enquiries about the development details. Follow up activities carried out included phone calls, emails, and one-on-one sessions.
One-on-one sessions	Held with affected neighbours to discuss particular concerns. Some expressed interest in having individual photomontages completed from their properties to understand impacts.

5.2 Proposed Engagement

A Community Participation Plan (CPP) would be developed in accordance with NSW Government *Undertaking Engagement Guidelines for State Significant Projects July 2021*. The CPP would build on previously completed community consultation activities and be based on the International Association for Public Participation's (IAP2) engagement spectrum at the 'Inform' level and align with IAP2's engagement values and ethics.

The CPP would be based upon the following objectives:

- To confirm previously identified stakeholder groups, and identify additional stakeholder groups with an interest in the Proposed Development;
- To explain to stakeholders the objectives of the development;
- To provide stakeholder groups with information about the planning, approvals, and development timeframe;
- To provide stakeholder groups with opportunities to engage with the development team, ask questions, and offer feedback about the development; and

- To provide stakeholder groups with updates about the development as new information arises, and how any feedback received has shaped development decision making.

The purpose of the CPP is to provide relevant, accessible, timely, and meaningful ways for the community to learn about and engage in the Proposed Development according to IAP2's engagement spectrum, the level of engagement of the development ranges from 'Inform' to 'Involve'.

During the EIS and community engagement process, the CPP will be reviewed and updated in response to feedback received, and to ensure consultation is undertaken in accordance with the SEARs.

5.2.1 Stakeholder Identification

The Australian Bureau of Statistics (2016) data indicates that the population of Gunning is 659 people, made up of 50% males and 50% per cent females. The median age of the population is 42 years of age. The Aboriginal and Torres Strait Islander population accounts for 2% of the total population.

Table 6 identifies stakeholders that should be consulted in the preparation of the EIS.

Table 6 Stakeholder Identification

Stakeholder group	Stakeholder Name
Aboriginal representatives for the Ngunnawal people	Buru Ngunnawal Aboriginal Corporation Onerwal Local Aboriginal Land Council
Adjacent Neighbours	To be finalised
Community groups	Gunning Chamber of Commerce Gunning Focus Group (Gunning District Community and Arts Council Incorporated)
Emergency Services	Gunning Rural Fire Service Fire and Rescue NSW NSW Police Force NSW Ambulance NSW SES
Energy Market players	TransGrid
Environment groups	Gunning District Landcare
Local businesses	Australia Post Gunning LPO Mobil Petrol Station Telegraph Hotel Gunning Gunning Motel
Local Government	Upper Lachlan Council Planning and Environment officer
Service providers	To be identified
State Government	Transport for NSW Minister for Planning and Liberal Member for Lane Cove Anthony Roberts Liberal Member for Goulburn, The Honourable Wendy Tuckerman MP

Further detailed stakeholder identification would be completed as part of the preliminary phase of developing the CPP. Additional tasks during this phase would include:

- Understanding the development and current community sentiment towards solar farms in the region;
- Assessing the development for perceived and/or known community issues;
- Conducting research to inform a thorough stakeholder identification database and risk and opportunities matrix, with mitigations; and
- Preparing an issues resolution flowchart and engagement and community response protocols defining a staffed development number and email address.

5.2.2 Community engagement response timeframes

Table 7 shows the response timeframes for community participation process.

Table 7 Response timeframes

Type of enquiry	Response timeframe	Action
Complaint	24 hours	Alert Canadian Solar immediately Work with the development team to address the complaint and determine approach to resolve Add details to project's stakeholder database
Feedback (negative)	48 hours	Alert Canadian Solar immediately Work with the development team to address the complaint and determine approach to resolve Add details to project's stakeholder database
Feedback (positive	48 hours	Respond to positive feedback according to Frequently Asked Questions Add details to project's stakeholder database
General Enquiry	48 hours	Respond to positive feedback according to Frequently Asked Questions Add details to project's stakeholder database
Register for email updates	48 hours	Add details to project's stakeholder database

6. Proposed Assessment of Environmental Impacts

This section identifies the key environmental matters that would be assessed in the EIS for the design, construction, and operation of the development, and are derived from desktop investigations and previously undertaken investigations.

6.1 Key matters requiring Assessment in the EIS

Based on a desktop review of publicly available data and mapping of environmental constraints and opportunities, key issues to be investigated in the EIS include:

- Heritage – Aboriginal;
- Biodiversity – Terrestrial Flora and Fauna;
- Access – Traffic;
- Visual Amenity; and
- Cumulative impacts.

6.1.1 Heritage – Aboriginal

Preliminary Assessment

A draft Aboriginal Cultural Heritage Assessment Report (ACHAR) was completed in 2019 by Kelleher Nightingale. The ACHAR identified five Aboriginal archaeological sites within or near the site. The sites comprised two artefact scatters, two isolated artefacts, and one culturally modified tree (Figure 10). The draft ACHAR concluded that the Proposed Development would unlikely harm these archaeological sites.

Figure 10 Archaeological findings from 2019 Aboriginal Heritage survey

A search of the Aboriginal Heritage Information Management System (AHIMS), incorporating Lot 2 DP747697 in the north of the development, was conducted on 8 March 2022 to identify known Aboriginal sites or declared Aboriginal places within or adjacent to the site. The AHIMS search result showed 11 Aboriginal sites recorded in or near the search location (Figure 11).

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : P.21.0404 - Gunning
Client Service ID : 665579

pitt&sherry
Date: 08 March 2022

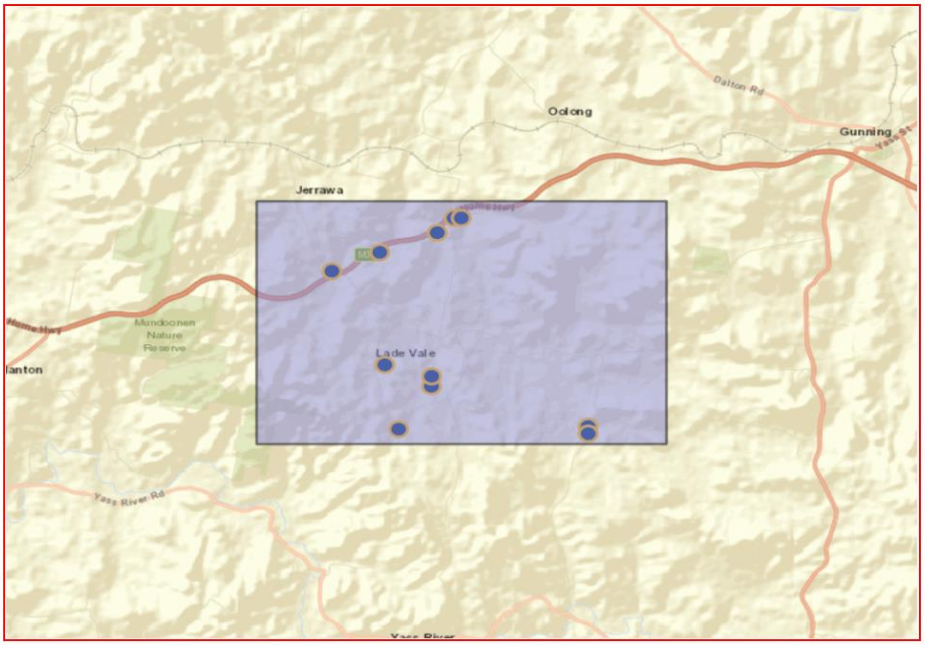
Level 9, Suite 902, 1-5 Railway St, North Tower
Chatswood New South Wales 2067
Attention: Anna Butler

Email: abutler@pittsh.com.au

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lat, Long From : -34.8702, 149.0764 - Lat, Long To : -34.7997, 149.2, conducted by Anna Butler on 08 March 2022.

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



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

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

Figure 11 AHIMS Basic Search Result

Proposed level of assessment

The proposed level of assessment will extend the previous investigation to include the additional area to the north covered by Lot 2 DP747697.

Proposed approach to the assessment

An Aboriginal Cultural Heritage Assessment commenced in March 2022 that updates previous investigation from 2019 and incorporates the additional land to the north and assess the likely impacts of the development to Aboriginal cultural heritage. This investigation includes Aboriginal community consultation, a field survey of site and the subsequent

preparation of the Aboriginal Cultural Heritage Assessment Report (ACHAR) with tailored mitigation/management strategies if and as required. The following documents will guide the assessment:

- *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (ACHCRs, DECCW 2010)
- *Code of Practice for Archaeological Investigations of Objects in NSW* (the Code, DECCW 2011)
- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (The Guide; OEH 2011)

6.1.2 Biodiversity – Terrestrial Flora and Fauna

Preliminary assessment

In 2018, Capital Ecology undertook a site visit and completed BAM mapping for the development of a draft Biodiversity Development Assessment Report (BDAR). The investigation identified two Plant Community Types (PCTs) present on the site. Figure 12 shows the distribution of each PCT identified below;

- PCT287 Dry Sclerophyll Forest
- PCT1330 Yellow Box Grassy Woodland

A search of the NSW government Biodiversity Values Map and Threshold Tool identified a riparian land corridor running through the site from north to south and is mapped in Figure 13.

A search of the Sharing and Enabling Environmental Data in NSW tool (SEED) on 9 March 2022 showed the site contains PCT287 Dry Sclerophyll Forest and PCT1330 Yellow Box Grassy Woodland.

A search of the Commonwealth Protected Matters Search Tool was undertaken on 30 March 2022 for the site with a 5km buffer. The findings of the search are listed in Table 8. The potential for these matters to occur would be investigated as part of the EIS.

Table 8 Matters of National Environmental Significance

MNES	Quantity
World Heritage Properties	None
National Heritage Places	None
Wetlands of International Importance (Ramsar Wetlands)	4
Great Barrier Reef Marin Park	None
Commonwealth Marine Area	None
Listed Threatened Ecological Communities	2
Listed Threated Species	38
Listed Migratory Species	11

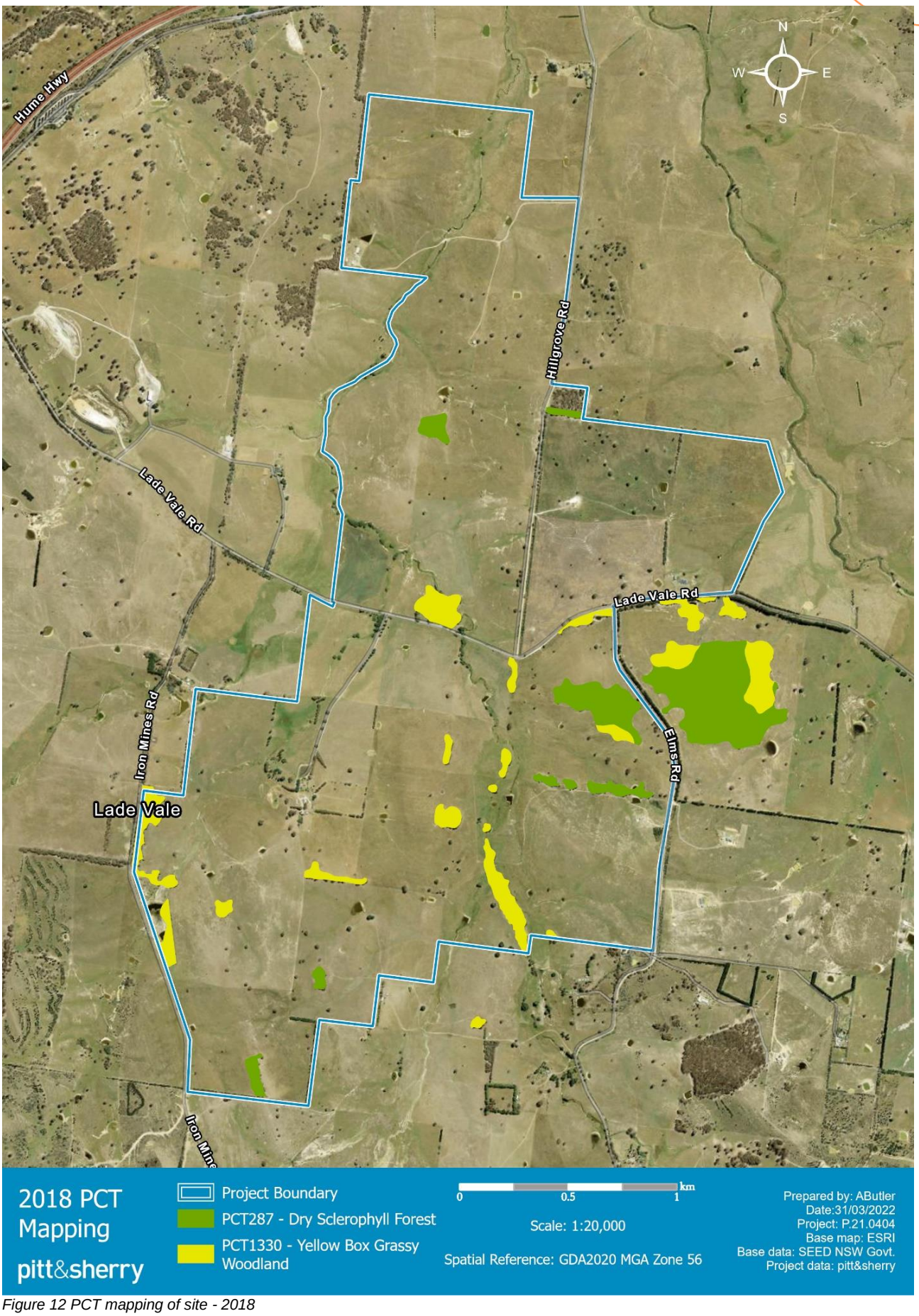


Figure 12 PCT mapping of site - 2018

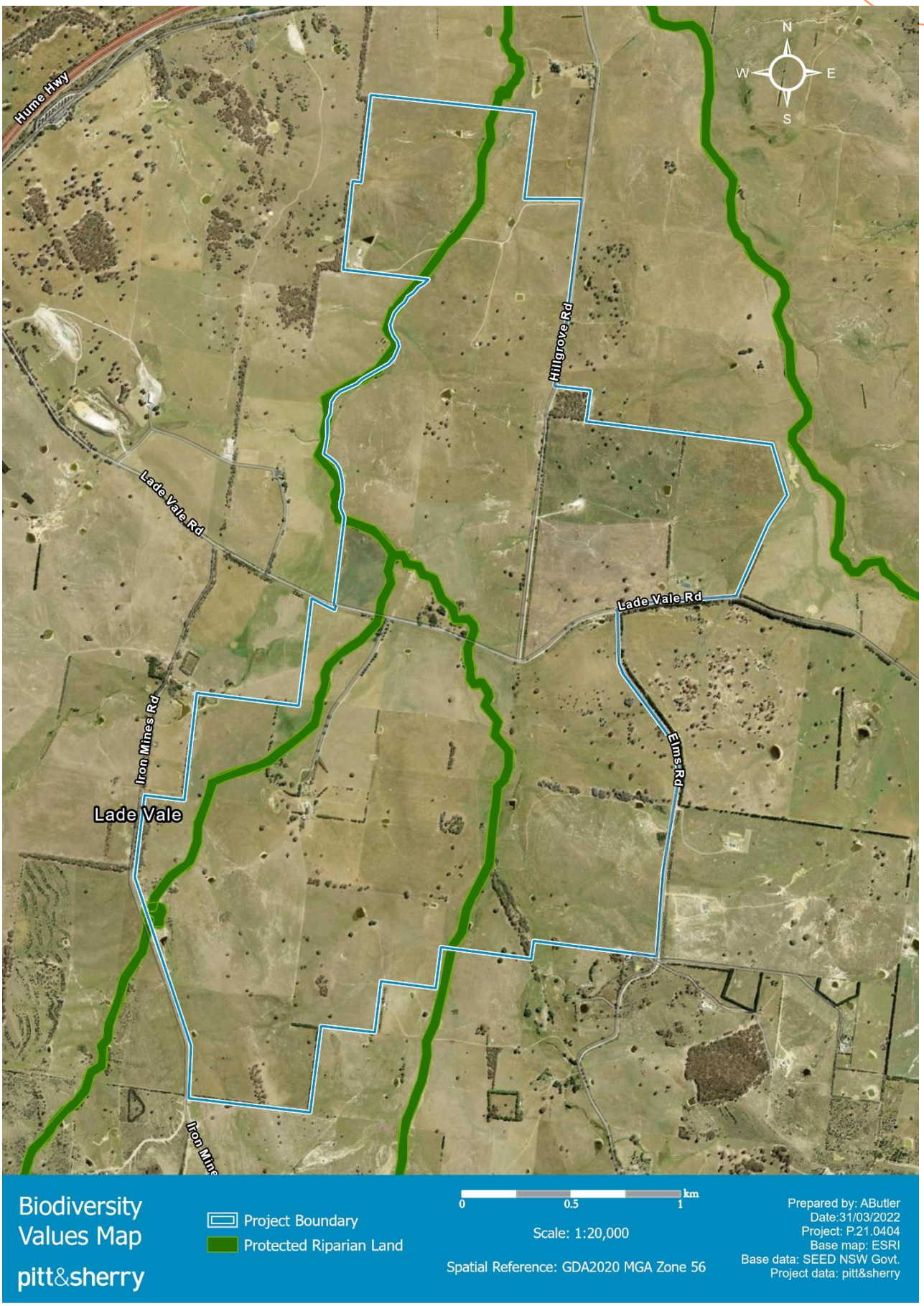


Figure 13 Biodiversity Values Map – Protected Riparian Land

Proposed level of assessment

A BDAR would be prepared in accordance with the revised BAM 2020 methodology. This would involve a review of the 2018 data with additional investigations of the new parcel of land in the north of the site.

Proposed approach to this assessment

The EIS would include a BDAR to assess the potential impacts of construction and operation of the development on ecological values within and around the site. The proposed assessment would be as follows:

- Stage 1 – undertake desktop and field assessments followed by preliminary assessment results. This enables the proponent to assess their proposal, before committing to the more detailed work (Stage 2) and reporting that may be required if the NSW Biodiversity Offset Scheme (BOS) is triggered.
- Stage 2 - complete site field surveys and generate vegetation mapping, remnant tree assessment, targeted threated flora results, targeted survey results for diurnal birds, and completion of a flora and fauna inventory. This would involve the review of previously completed field survey findings, and if necessary, enable this data to be updated to reflect contemporary conditions.
- Stage 3 - prepare a BDAR that would meet the requirements under the BAM, the *Biodiversity Conservation Act 2016* (BC Act) and the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The BDAR would identify suitable avoidance and mitigation measures to be adopted to minimise or mitigate potential ecological impacts.

6.1.3 Access – Traffic

Preliminary Assessment

Temporary construction access to the Site would be from the Hume Highway via Lade Vale Road or Hillgrove Road.

Approximately 3km west of the site, Lade Vale Road intersects with Veterans Road. An at grade intersection with the Hume Highway is located approximately 200m south of the intersection of Lade Vale Road and Veterans Road.

Approximately 12km east of the site, Lade Vale Road intersects with Gundaroo Road. This section of Lade Vale Road from Elms Road to Gundaroo Road has a 10t load restriction in place. Two kilometres north of the intersection at Gundaroo Road, there is a west bound on ramp to the Hume Highway. Access to the east bound on ramp to the Hume Highway is through Gunning, via Yass Street and Collector Road.

Hillgrove Road (located within a 20m wide road reserve) is unsealed and runs through the middle of the northern portion of the site from Veterans Road and the Hume Highway.

Yass Street and Collector Road are both lane local roads. Yass Street passes through Gunning, and past Gunning Public School. Collector Road is a sealed road with kerbs installed for the final 100m approach to the Hume Highway east bound on ramp.

The Hume Highway and the western approach of Lade Vale Road is considered to be of a suitable standard for construction traffic. The eastern approach of Lade Vale Road from Gundaroo Road, and the northern approach of Hillgrove Road from Veterans Road would be assessed for suitability of use by construction vehicles.

The preferred option for transport of infrastructure and materials to site during construction is currently being investigated. Options are being considered that have both Melbourne and Sydney as points of origin. Consultation with Transport for NSW and Council are currently being undertaken to determine the most suitable access arrangements for the development. This includes using the existing on and off ramps on the Hume Highway (a state road) and Collector and Gundaroo Roads (regional roads under the care and control of Council), and Hillgrove and Lade Vale Roads (local roads owned and maintained by Council). Once the preferred transport access option is agreed, the scope for the traffic impact assessment would be finalised.

Proposed level of assessment

The scope of the detailed traffic assessment would be defined following determination of the preferred access option. The assessment would include cumulative impacts from construction and operation of the proposal.

Proposed approach to this assessment

A Traffic Impact Assessment (TIA) will identify the traffic, transport and access impacts including:

- Review of existing arrangements along the determined route;
- Undertake swept path analysis for relevance of use for design vehicles;
- Estimate volumes and distributions of construction and operational traffic;
- Identify mitigation measures including any possible road upgrades; and
- Review site access and parking arrangements.

This assessment will include a route assessment between site access and state road network and advice on safety issues and mitigation options available.

6.1.4 Visual Amenity

Preliminary assessment

A draft Visual Impact Assessment (VIA) was undertaken by Envisage Consulting in 2019. The VIA characterised the site having a low sensitivity to visual change. The landscape does not have a particularly high scenic significance and is a common rural landscape for this part of the region. Despite this, the landscape represents an attractive working, rural landscape and the Site is of a substantial size. The Site under the previous development was determined not to be visually prominent to viewpoints outside the immediate vicinity and substantial numbers of viewers, with potential viewpoints limited to the surrounding rural residences and local roads. Due to the undulating landform some more elevated sections would be more visible to these closer viewpoints. The number of viewers of the site from publicly accessible locations (such as local roads) is very low and it is unlikely the change would be noticed from the Hume Highway located to the north.

Proposed level of assessment

A revised VIA would be completed and account for the change in footprint and design updates and consider changes to the locality since the previous investigations were undertaken.

Proposed approach to this assessment

The VIA would include two photomontages, a zone of theoretical visibility (ZTV), and preparation of a Landscape Plan. Once completed, the VIA would include an assessment of potential visual impacts to receivers during construction and operation of the development and identification of mitigation measures to minimise or mitigate potential visual impacts.

6.1.5 Cumulative Impacts

Preliminary assessment

Cumulative impacts could be experienced by the community if construction or operation coincides with construction or operation of other developments including:

- Increased construction vehicle traffic on local roads causing congestion and delay;
- Pressure on local accommodation and services to house and support construction staff, and managing socio-economic outcomes after construction;

- Increased construction noise on neighbouring residents; and
- Cumulative generation of Electric and Magnetic Fields.

Proposed level of assessment

A standard level of assessment is proposed in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects, July 2021*.

Proposed approach to this assessment

Cumulative impacts would be considered in the EIS.

6.2 Other Environmental Matters

Other environmental matters relevant to the development are described in Table 9 and would be assessed in the EIS.

Table 9 Other environmental matters to be assessed in the EIS

Environmental matter	Preliminary assessment	Proposed approach and level of assessment
Amenity – Air quality	Air quality issues may be an issue during construction and use of unsealed roads.	A standard air quality impact assessment would be undertaken, and mitigation measures would be specified for construction. The operation of the solar farm and BESS do not emit air pollution.
Amenity – Noise	Construction noise is expected to be from traffic movements, construction of panel arrays, substation, and BESS, and installation of associated equipment. It is not anticipated the development would generate noise emissions during operation to be audible at the site boundary. Previous noise modelling completed by Muller Acoustic Consulting in 2018, determined that the site had an ambient noise level of 50dB LA_{eq} during the day.	The existing noise and vibration model would be used to complete a revised construction and operational noise and vibration assessment for the development.
Land – Land Capability	According to MinView – NSW Resources and Geoscience (accessed 14/03/2022), there is one active mineral exploration licence across the site (Figure 14). This licence ends 5 December 2025. A Land and Soil Capability Mapping for NSW search using SEED tool (accessed 14/03/2022) showed the site is predominantly mapped Class 5 – Severe limitations (Figure 15). Class 5 land presents severe limitations for grazing and other pastoral land uses. Limitations can include shallow soils, stoniness, acidification, potential for structure decline, and salinity hazards	The licence does not permit mining but exploration purposes only if there is written access arrangements from the landowner. Conversely, this would not prevent the landowner from seeking or facilitating consent for the development on their land. The suitability of the site and land capability would be considered. In addition, a soils and geology assessment would be conducted to identify potential impacts during construction, and any required mitigation measures to prevent erosion and sedimentation.
Hazards and Risks – Soil Contamination	There is potential for contamination from sheep or cattle dips or from storage of chemicals etc., but this is unlikely to be an issue. As there would be minimal storage of chemicals or other contaminants at the site during construction and operation, the risk of contamination by the development is low.	There is no evidence or record of contamination on the site. Construction and operation of the development is unlikely to impact groundwater resources. A soil and water management plan would be included in the CEMP.
Hazards and Risk – Flooding	The watercourses running through the site have the potential to flood above certain storm events.	A flood impact assessment in accordance with the *NSW Floodplain Development Manual 2005* will be undertaken to inform the development footprint and impact assessment

Hazards and Risks – Waste management	Resources during construction likely to include materials, fuel for vehicles and equipment and water for dust suppression. Waste streams are expected to include construction materials, grasses and vegetation, soils, and general waste. During operation, resource use and waste streams are expected to be minimal.	A waste management plan will be developed after development approval. The plan will include recycling and reduction of waste and use of registered recycling and waste disposal facilities.
Hazards and Risks – Battery Storage	Whilst battery storage can increase potential risk of fire ignitions, the BESS and substation are proposed to be located in an area not affected by bushfire prone land.	A preliminary risk screening in accordance with *State Environmental Planning Policy (Resilience and Hazards) 2021* and *Hazardous and Offensive Development Application Guidelines: Applying SEPP 33* (DoP, 2011) would be undertaken. A Preliminary Hazard Analysis (PHA) would be undertaken in accordance with *Hazard Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011).
Hazards and Risks - Bushfire	The NSW Rural Fire Service Mapping Tool identifies the site as being minimally affected by bushfire prone land (refer to Figure 16).	In accordance with *Planning for Bushfire Protection Guidelines 2019*, bushfire impacts will be considered in the EIS
Water – Hydrology and Stormwater	An unnamed ephemeral creek crosses the site and there are numerous drainage lines. There is evidence of some erosion especially in some of the drainage lines.	Waterways, irrigation channels, and stormwater would be considered in the design of the development.
Socio-economic	The solar farm is located in an agricultural area. The nearest town is Gunning about 12km away.	Development construction would generate approximately 200+ employment opportunities and work for local businesses, while operation would provide approximately 5-6 jobs. A Social Impact Assessment (SIA) will be prepared in accordance with the *Social Impact Assessment Guideline for State Significant Projects* (DPE, 2021).

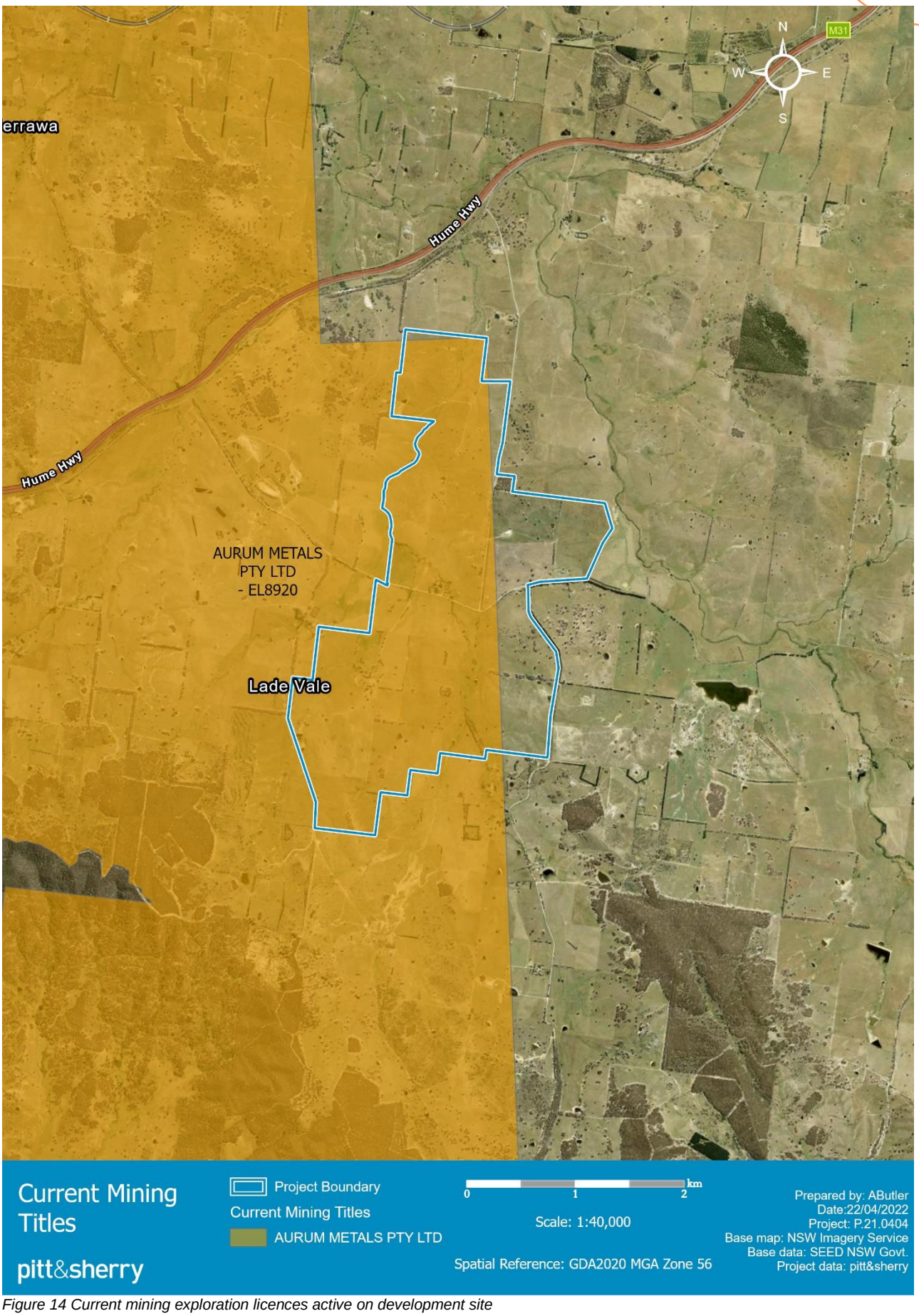


Figure 14 Current mining exploration licences active on development site

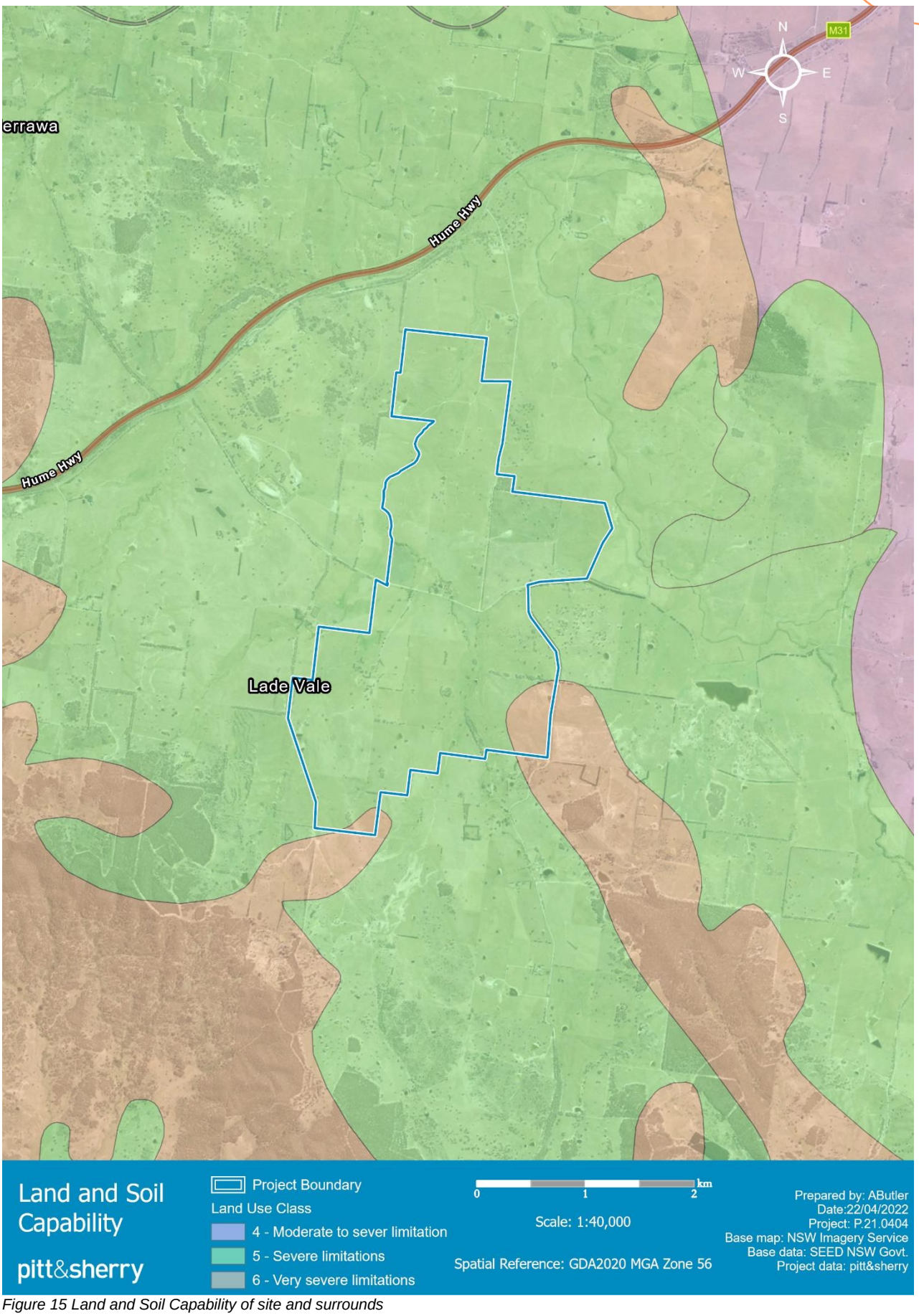


Figure 15 Land and Soil Capability of site and surrounds

6.2.1 Matters not requiring further assessment in the EIS

This section documents other environmental matters that, although they need to be addressed in the EIS, are not relevant to the Development or the impacts are of such a small scale to not warrant further assessment. The environmental matters requiring no further assessment in the EIS are described in Table 10.

Table 10 Matters not requiring further assessment in the EIS

Environmental matter	Preliminary assessment	Proposed approach and level of assessment
Hazard and Risks – Groundwater Contamination	The site is not mapped as groundwater vulnerable under the Upper Lachlan LEP.	Construction and operation of the development is unlikely to impact on groundwater.
Heritage – Historic	There are no European local heritage items on or near the site under the Upper Lachlan LEP or the State Heritage Register	There are no heritage items within or near the site likely to be impacted by the development.
Property and land use	The solar farm would be located on agricultural land primary used for sheep grazing.	The construction and operation of the development would result in the partial loss of lands for sheep grazing. However, sheep grazing within the solar farm could occur for vegetation management albeit at lower stocking rates. The land for the solar farm would be either purchased or leased from the relevant property owner. Agreements have been reached with all property owners.

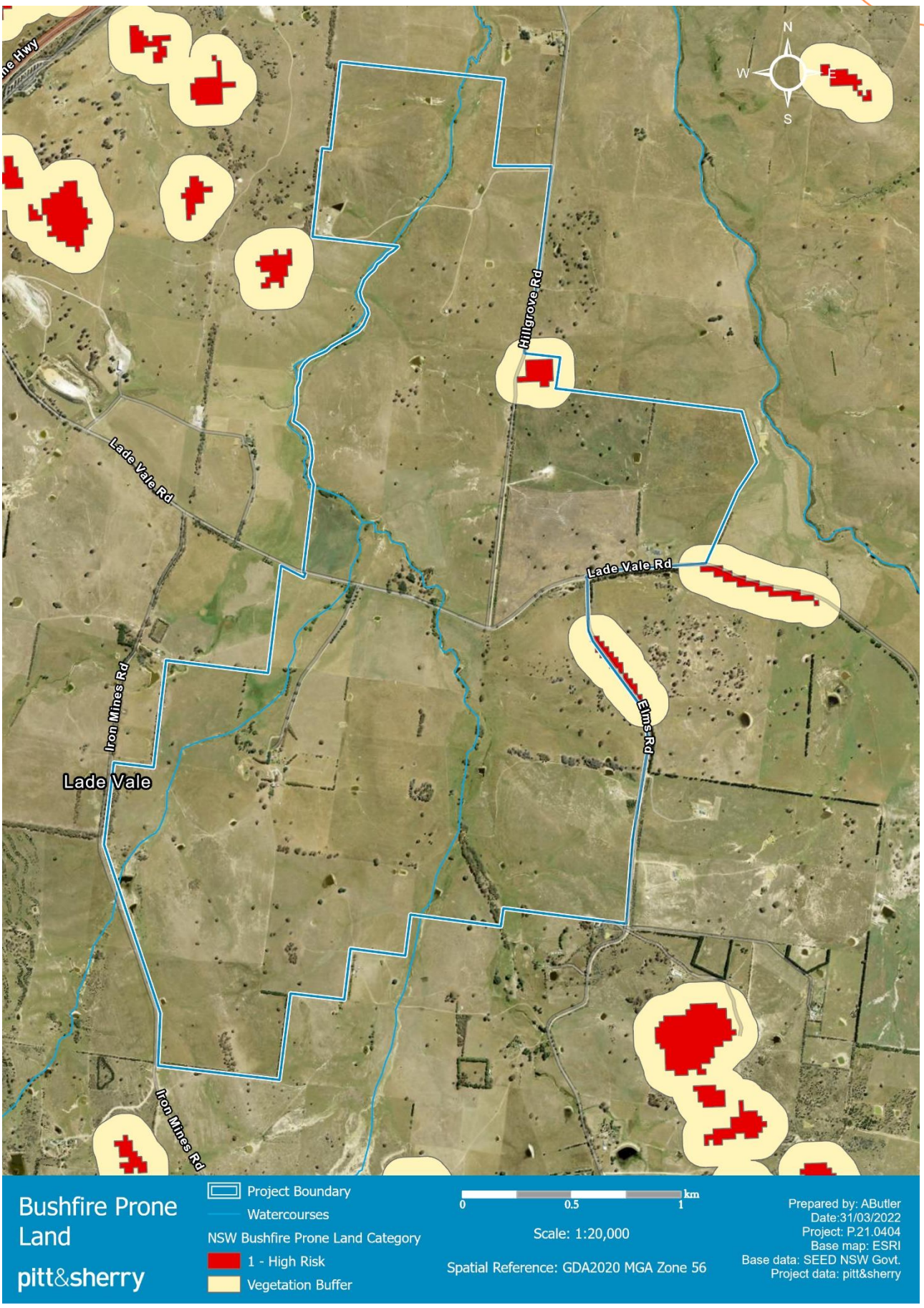


Figure 16 Bushfire prone land

7. Conclusion

In requesting the Secretary's Environmental Assessment Requirements for the proposed Gunning Solar Farm and Battery Energy Storage System at Gunning in the Upper Lachlan Local Government Area, this scoping report has identified the planning approval pathway for the Proposed Development as SSD and identified the following key environmental matters to be assessed in the EIS:

- Heritage – Aboriginal;
- Biodiversity – Terrestrial Flora and Fauna;
- Access – Traffic;
- Visual Amenity; and
- Cumulative impacts.

The benefits of this Proposed Development would include:

- Improving the stability and reliability of the electricity network by storing energy during periods of low demand, including those from intermittent renewable sources and dispatching energy during periods of peak demand;
- Supporting Australia's 2030 emission reduction targets and NSW's transition to net-zero emissions by 2050;
- Local employment opportunities of approximately 200 jobs during the 18 months construction period and about 3-5 full-time jobs during the 35-year operational life;
- Construction and operation of the development is likely to be low impact upon the locality; and
- Potential for direct and indirect investment into the Upper Lachlan Shire during construction.

Subject to receipt of the new SEARs, the EIS would be completed, and Canadian Solar and pitt&sherry will undertake consultation to support the development application. The EIS will fully assess the impacts of the Proposed Development to enable the consent authority to determine the Development Approval.

8. References

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NSW Legislation, *Noxious Weeds Act 1993*

NSW Legislation, *Protection of the Environment Operations Act 1997*

NSW Legislation*, Roads Act 1993*

NSW Legislation*, Rural Fires Act 1997*

NSW Legislation, *State Environmental Planning Policy (Planning Systems) 2021*

NSW Legislation, *State Environmental Planning Policy (Transport and Infrastructure) 2021*

NSW Legislation*, State Environmental Planning Policy (Resilience and Hazards) 2021*

NSW Legislation, *Water Management Act 2000*

NSW Government 2021, *State Significant development guidelines*

NSW Government 2021, *Cumulative Impact Assessment Guidelines for State Significant Projects*

NSW Government 2021 *Undertaking Engagement Guidelines for State Significant Projects*

NSW Rural Fire Service 2019 *Planning for Bushfire Protection: A guide for councils, planners, fire authorities and developers*, online: https://www.rfs.nsw.gov.au/__data/assets/pdf_file/0005/130667/Planning-for-Bush-Fire-Protection-2019.pdf

Parliament of Australia, Climate change—reducing Australia's emissions, online: https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook45p/EmissionsReduction

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Upper Lachlan Shire Council 2010, *Upper Lachlan Local Environmental Management Plan 2010*,

Upper Lachlan Shire Council 2020, *Upper Lachlan Shire 2040 Local Strategic Planning Statement*.

Scoping Summary Table

Appendix A

Level of Assessment	Matter	CIA*	Engagement	Relevant Government Plans, Policies, and Guidelines	Scoping Report Reference
Detailed	Heritage – Aboriginal	No	Specific	• Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW 2011 • Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 • Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW 2010	Section 6.1.1
Detailed	Biodiversity	Yes	General	• Biodiversity Assessment Method (BAM) (NSW Government, 2020) • Commonwealth EPBC 1.1 Significant Impact Guidelines – Matters of National Environmental Significance (Commonwealth of Australia, 2013)	Section 6.1.2
Detailed	Access – Traffic, Road facilities, and Property access	Yes	Specific	• Guide to Traffic Generating Developments Version 2.2 (Roads and Traffic Authority, 2002) • Guide to Traffic Management – Part 3 Traffic Studies and Analysis (Austroads, 2013). • Austroads Guidelines for Road Design (Austroads) • Austroads Guidelines for Traffic Management (Austroads)	Section 6.1.3
Detailed	Amenity – Visual	Yes	Specific	• Refer to Scoping Report	Section 6.1.4
Detailed	Amenity – Noise	No	General	• Construction Noise Strategy (Transport for NSW, 2012) • Interim Construction Noise Guideline (Department of Environment, Climate Change and Water, 2009) • NSW Industrial Noise Policy (Environment Protection Authority, 2000) • NSW Road Noise Policy (Environment Protection Authority, 2011) • Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006) • Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006)	Section 6.2
Standard	Air – Air Quality and Climate	No	General	• NSW Climate Change Policy Framework (Office of Environment and Heritage, 2016) • National Greenhouse Accounts Factors (Australian Government, 2021)	Section 6.2
Standard	Land – Land Capability	No	General	• Agricultural Land Use Mapping Resources in NSW • The Land and Soil Capability Scheme (Office of Environment and Heritage, 2012).	Section 6.2
Standard	Hazards and Risks – Soil Contamination	No	General	• Acid Sulphate Soils Assessment Guidelines (Department of Planning, 2008) • The Land and Soil Capability Scheme (Office of Environment and Heritage, 2012) • Soil and Land Survey Handbooks • Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) • Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008) • Agricultural Land Use Mapping Resources in NSW.	Section 6.2
Standard	Hazards and Risks – Flooding	No	General	• Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) • Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008) • Floodplain Risk Management Guidelines (Department of Environment and Climate Change, 2016) • Floodplain Development Manual: The management of flood liable land (NSW Government, 2005)	Section 6.2
Standard	Hazards and Risks – Waste	No	General	• Waste Classification Guidelines (DECCW, 2009)	Section 6.2
Standard	Hazards and Risks – Battery Storage	No	General	• Chapter 3 Hazardous and offensive development of State Environmental Planning Policy (Resilience and Hazards) 2021 • Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (Department of Planning, 2011) • Assessment Guideline: Multi-level Risk Assessment (Department of Planning and Infrastructure, 2011) • Hazardous Industry Planning Advisory Paper No 6: Hazard Analysis (Department of Planning, 2011)	Section 6.2

Detailed	Water – Hydrology and Stormwater	No	General	• Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG 2018) • NSW Water and River Flow Objectives (NSW Government, 2006) • Floodplain Risk Management Guidelines (Department of Environment and Climate Change, 2016) • Floodplain Development Manual: The management of flood liable land (NSW Government, 2005) • Managing Urban Stormwater: Soils and Construction Volume 1 (Landcom, 2004) • Managing Urban Stormwater: Soils and Construction Volume 2 (Department of Environment and Climate Change, 2008)	Section 6.2
Standard	Social – Community	Yes	General	• Social Impact Assessment Guidelines for State Significant Projects (Department of Planning, Industry and Environment, 2021)	Section 6.2
Standard	Cumulative Impacts	N/A	General	• Cumulative Impact Assessment Guidelines for State Significant Projects (Department of Planning, Industry and Environment, 2021)	Section 6.1.5

*Cumulative Impact Assessment

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