


STRONTIAN SOLAR FARM AND BATTERY ENERGY STORAGE SYSTEM

SCOPING REPORT

SEPTEMBER 2025

Authorisation

| | | | |
|--------------------|---|----------------------------|---|
| Author Name | Grant Bennett | Reviewer / Approver | David Carberry |
| Position | Environmental Consultant | Position | Principal Consultant |
| Signature |  | Signature |  |
| Date | 30/09/2025 | Date | 30/09/2025 |

Document Revision History

| Revision | Date | Details |
|----------|----------------|-------------------------------------|
| 1 | Dec 2024 | First draft |
| 2 | August 2025 | Second draft |
| 3 | September 2025 | Final |
| 4 | September 2025 | Final following DPHI update request |

Report Name: Strontian Solar Farm and Battery Energy Storage System Scoping Report

Project No.: 1212

Prepared for:

Strontian Solar Farm Pty Ltd

Prepared by:

WolfPeak Group Pty Ltd

T: 1800 979 716

W: www.wolfpeak.com.au

© Document copyright of WolfPeak Group Pty Limited.

This disclaimer, together with any limitations specified in this report, apply to use of this report. This report was prepared in accordance with the contracted scope of works for the specific purpose stated in the contract and subject to the applicable cost, time and other constraints. In preparing this report, WolfPeak Group Pty Ltd (WolfPeak) relied on client/third party information which was not verified by WolfPeak except to the extent required by the scope of works, and WolfPeak does not accept responsibility for omissions or inaccuracies in the client/third party information; and information taken at or under the particular times and conditions specified, and WolfPeak does not accept responsibility for any subsequent changes. This report has been prepared solely for the use by, and is confidential to, the client and WolfPeak accepts no responsibility for its use by any other parties. This report does not constitute legal advice. This report is subject to copyright protection, and the copyright owner reserves its rights.

EXECUTIVE SUMMARY

Overview of the project

Strontian Solar Farm Pty Ltd (SSF or the 'Applicant'), proposes to develop the Strontian Solar Farm and Battery Energy Storage System (BESS) (the project) to provide sustainable and renewable electricity while reducing carbon emissions and bolstering national energy security.

The project site is located in Sandigo, New South Wales (NSW), within the Narrandera Local Government Area (Narrandera LGA), approximately 17 kilometres (km) southeast of Narrandera (Figure 1). The project site spans a total area of approximately 670 hectares (ha) and the land, which is used for agricultural cropping and grazing activities, is zoned RU1 Primary Production under the *Narrandera Local Environmental Plan 2013* (Narrandera LEP).

The project involves the development of a 370 megawatt (MW) direct current (DC) utility-scale solar photovoltaic (PV) array, ground-mounted on a single-axis tracking system (connection capacity of 328 MWac), integrated with a 335 MW/670 MWh BESS.

Key elements of the project include:

- Approximately 654,000 solar panels installed in rows in regular arrays fixed to single-axis mounting structures via piling or screwed. The PV modules would be installed in parallel rows within each section in a north to south direction, with an indicative spacing of 5 m between the axis in each row. The PV modules would have tracker that would allow the modules to rotate from east to west during the day, tracking the sun's movement.
- An existing 330 kilovolt (kV) transmission line (Wagga 330 to Darlington Point) crosses the project site. An on-site electrical substation and connection to the Transgrid 330 kV Wagga Wagga to Darlington Point transmission network, subdivision of substation land (to be transferred to Transgrid upon completion).
- Other infrastructure including 166 central inverters, switchgear and 335 MWDC/670 MWh BESS. Inclusion of a BESS increases the stability and flexibility of the electricity network by storing energy from different sources and discharging it into the electricity grid upon demand.
- Underground and overhead cabling, inverters, operations and control building, maintenance and storage buildings, car parking, water storage tanks, earthworks, land clearing, internal access tracks, road upgrades, perimeter security fencing, signage, associated infrastructure and works.

Planning framework

The project is classified as State significant development (SSD) under the *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) and will therefore be assessed under Part 4, Division (Div) 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Minister (or the Independent Planning Commission in some circumstances) is the consent authority for the project pursuant to section (s) 4.5 of the EP&A Act.

Pursuant to s 173(1) of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation), the Applicant must apply to the Planning Secretary for the environmental assessment requirements before preparing the environmental impact statement (EIS). This scoping report (SR) has been prepared on behalf of the Applicant and seeks the Planning Secretary's Environmental Assessment Requirements (SEARs) to guide the preparation of the EIS that will accompany the SSD application for the project.

This scoping report has been prepared in accordance with the following:

- State Significant Development Guidelines (DPHI, 2024a)
- State significant development guidelines – preparing a scoping report (DPIE, 2022a)
- Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024b)
- Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2022b)
- Social Impact Assessment Guideline (DPHI, 2025a)
- Technical Supplement: Social Impact Assessment Guideline for State Significant Project (DPHI, 2025b)
- Renewable Energy Planning Framework (DPHI, 2024c)
- Large-Scale Solar Energy Guideline (DPHI, 2022a)
- Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b).

Strategic context

The project would be consistent with both Commonwealth and NSW Government policy commitments to increase renewable energy generation and storage and reduce greenhouse gas (GHG) emissions in accordance with the Paris Agreement, AEMO 2024 Integrated System Plan, the NSW Electricity Strategy, and the NSW Electricity Infrastructure Roadmap 2020.

The project would improve the security, stability and reliability of National and State electricity networks by generating renewable electricity, storing energy from different sources, and supplying electricity into the grid. The overall flexibility and resilience of the electricity grid would improve as renewable energy generation and battery storage increases and reliance on non-renewable energy generation decreases.

Community and stakeholder engagement

Community and stakeholder engagement is integral to the project. A Social Impact Assessment Scoping Report (SIASR) prepared by The Social Aspect accompanies this SR in support of the project. The SIASR provides a framework to engage with the community and stakeholders about the project and ensure opportunities to provide input into the assessment and development process are communicated, evaluated and documented. The purpose of the SIASR is to:

- Establish a preliminary social baseline and define the social locality for the project.
- Identify and determine the size and scale of likely social impacts of the project.
- Identify project activities that could have social impacts and group them against the categories presented in the Social Impact Assessment Guideline.
- Provide a summary of potential social impacts that require additional assessment (scoping worksheet).
- Establish appropriate methodologies to investigate and assess project related social impacts.
- Provide a brief overview of potential management measures and ongoing monitoring.

The approach to the SIASR follows the Social Impact Assessment Guideline (DPHI, 2025a), the Technical Supplement: Social Impact Assessment Guideline for State Significant Project (DPHI, 2025b), the Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024b), and the SIA Scoping Worksheet and seeks to provide an initial understanding and foundation the issues or opportunities identified that the project presents within the social locality and an initial evaluation of predicted social impacts associated with the project.

Key environmental risks

A preliminary environmental assessment has been carried out for the project to assist in the identification of key environmental factors that would require detailed assessment within the EIS. Potential impacts were considered for both the construction and operational phases of the project. The aspects identified as requiring detailed assessment in the EIS include biodiversity, Aboriginal cultural heritage, socio-economic, soils and agricultural land, and visual amenity. Aspects requiring standard assessment include cumulative impacts, hazards, noise and vibration, and traffic and transport.

Several preliminary technical environmental assessments have also been carried for the key issues of Aboriginal cultural heritage, biodiversity, landscape and visual amenity, and biodiversity, and are based on the Applicant's experience in solar farm development, desktop reviews, and preliminary site inspections, and are summarised below.

Aboriginal cultural heritage

An Aboriginal and Historical Heritage Constraints and Opportunities Assessment (AHHCOA) has been prepared by Artefact Heritage and Environment (Artefact) which provides a preliminary desktop assessment to identify any potential heritage constraints associated with the project. The AHHCOA determined that Aboriginal objects are likely to be present in the study area and, as such, may be impacted by the proposed works.

Therefore, an Aboriginal Cultural Heritage Assessment Report (ACHAR), supported by an Archaeological Technical Report (ATR), would be conducted in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010a), Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010b), and the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011).

Biodiversity

A Preliminary Biodiversity Assessment (PBA) has been prepared by WolfPeak Group Pty Ltd to determine the ecological values of the project site and the scale and nature of the likely impacts of the project on the receiving environment. The PBA was prepared having relevant regard to the relevant provisions of Part 7 of the *Biodiversity Conservation Act 2016* (BC Act) and Part 7A of the *Fisheries Management Act 1994* (FM Act), as well as any Australian Government approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The preliminary technical environmental assessments are appended to and accompany this SR.

The EIS will be prepared in accordance with the project-specific SEARs. Mitigation measures will be developed for inclusion in the EIS and will address the management of key issues and other issues identified in the assessment and community and stakeholder engagement process.

Landscape and visual amenity

A Preliminary Visual Impact Assessment (PVIA) has been prepared by Moir Landscape Architecture Pty Ltd (Moir Studio) which aims to provide a preliminary assessment of the potential visual impacts associated with the project. The PVIA was prepared in accordance with the Large-Scale Solar Energy Guideline (DPHI, 2022a) and Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b).

CONTENTS

| | |
|---|-----------|
| Executive summary | ii |
| Overview of the project | ii |
| Planning framework | ii |
| Strategic context | iii |
| Community and stakeholder engagement | iii |
| Key environmental risks | iv |
| Aboriginal cultural heritage | iv |
| Biodiversity | iv |
| Landscape and visual amenity | v |
| 1. Introduction | 5 |
| 1.1 Project overview | 5 |
| 1.1.1 Aboriginal cultural heritage | 6 |
| 1.1.2 Biodiversity | 6 |
| 1.1.3 Landscape and visual amenity | 6 |
| 1.1.4 Social impact | 6 |
| 1.2 The Applicant | 9 |
| 1.3 Project objectives | 9 |
| 1.4 Site information | 9 |
| 1.4.1 Crown land | 10 |
| 1.5 Related development | 10 |
| 1.6 Project development | 10 |
| 1.7 Purpose of this report | 11 |
| 2. Strategic context | 12 |
| 2.1 Project justification | 12 |
| 2.1.1 International commitments | 12 |
| 2.1.2 Commonwealth commitments | 13 |
| 2.1.3 State commitments | 14 |
| 2.1.4 Regional and local plans and strategies | 16 |
| 2.2 Key features of the project site | 18 |
| 2.3 Cumulative impacts | 22 |
| 3. The project | 39 |
| 3.1 Overview | 39 |

| | | |
|-------|--|-----------|
| 3.2 | Key project elements | 39 |
| 3.2.1 | Solar farm and BESS | 39 |
| 3.2.2 | Transmission connection | 42 |
| 3.2.3 | Ancillary infrastructure | 42 |
| 3.2.4 | Construction methodology | 42 |
| 3.2.5 | Operation and decommissioning | 44 |
| 3.2.6 | Capital investment value | 44 |
| 3.2.7 | Subdivision | 45 |
| 3.3 | Alternatives considered | 45 |
| 4. | Statutory context | 47 |
| 5. | Community engagement | 57 |
| 5.1 | Social Impact Assessment Scoping Report | 57 |
| 5.1.1 | Scoping phase engagement research methodology and key project stakeholders | 58 |
| 5.1.2 | Preliminary social baseline | 61 |
| 5.2 | Preliminary social impact assessment | 62 |
| 5.2.1 | Likely social impacts requiring further assessment | 65 |
| 5.3 | Social impact assessment methodology, monitoring, and management | 68 |
| 5.4 | Potential project refinements and approaches | 70 |
| 5.5 | Impact management and mitigation | 71 |
| 5.6 | Community Consultation Strategy | 72 |
| 5.7 | Future proposed community engagement | 72 |
| 5.7.1 | Objectives | 72 |
| 5.7.2 | Planned engagement activities | 73 |
| 5.7.3 | Monitoring, reporting and improvement | 73 |
| 5.7.4 | Anticipated outcomes | 73 |
| 6. | Proposed assessment of impacts | 74 |
| 6.1 | Amenity – visual | 75 |
| 6.1.1 | Existing environment | 75 |
| 6.1.2 | Potential impacts | 78 |
| 6.1.3 | Assessment approach | 78 |
| 6.2 | Biodiversity | 79 |
| 6.2.1 | Existing environment | 79 |
| 6.2.2 | Potential impacts | 82 |
| 6.2.3 | Assessment approach | 83 |

| | | |
|--------|--|----|
| 6.3 | Heritage..... | 83 |
| 6.3.1 | Aboriginal cultural heritage | 83 |
| 6.3.2 | Historic heritage | 85 |
| 6.4 | Land..... | 86 |
| 6.4.1 | Existing environment | 86 |
| 6.4.2 | Potential impacts | 86 |
| 6.4.3 | Assessment approach | 87 |
| 6.5 | Social and Economic | 89 |
| 6.5.1 | Existing environment | 89 |
| 6.5.2 | Potential impacts | 89 |
| 6.5.3 | Assessment approach | 89 |
| 6.6 | Access and traffic | 90 |
| 6.6.1 | Existing environment | 90 |
| 6.6.2 | Potential impacts | 92 |
| 6.6.3 | Assessment approach | 92 |
| 6.7 | Amenity – Noise and vibration | 93 |
| 6.7.1 | Existing environment | 93 |
| 6.7.2 | Potential impacts | 93 |
| 6.7.3 | Assessment approach | 94 |
| 6.8 | Air quality (particulate matter) | 94 |
| 6.8.1 | Existing environment | 94 |
| 6.8.2 | Potential impacts | 94 |
| 6.8.3 | Assessment approach | 95 |
| 6.9 | Built environment (private property, public land, public infrastructure) | 95 |
| 6.9.1 | Existing environment | 95 |
| 6.9.2 | Potential impacts | 95 |
| 6.9.3 | Assessment approach | 95 |
| 6.10 | Hazards and risks | 96 |
| 6.10.1 | Preliminary hazard analysis | 96 |
| 6.10.2 | Bushfire | 97 |
| 6.10.3 | Electromagnetic fields | 98 |
| 6.10.4 | Flooding | 98 |
| 6.11 | Water | 98 |
| 6.11.1 | Existing environment | 98 |
| 6.11.2 | Potential impacts | 99 |

| | |
|---|------------|
| 6.11.3 Assessment approach | 100 |
| 6.11.4 Other matters | 100 |
| 6.12 Uncertainties in assessment | 101 |
| 6.13 Matters requiring no further assessment in the EIS | 101 |
| 7. Conclusion..... | 103 |
| 8. References | 104 |
| Limitations | 110 |
| Appendix A – Scoping summary table | 111 |
| Appendix B – Aboriginal and Historical Heritage Constraints and Opportunities Assessment. | 114 |
| Appendix C – Preliminary Biodiversity Assessment..... | 115 |
| Appendix D – Social Impact Assessment Scoping Report | 116 |
| Appendix E – Preliminary Visual Impact Assessment | 117 |

LIST OF FIGURES

| | |
|--|----|
| Figure 1: Regional location of the project site | 8 |
| Figure 2: Land configuration, local context, existing infrastructure and topography relevant to the project site | 24 |
| Figure 3: Crown land within and around the development footprint | 25 |
| Figure 4: Crown land associated with the Sturt Highway and Strontian Road intersection | 26 |
| Figure 5: Land use zoning associated with the project | 27 |
| Figure 6: Private receivers (visual) within 4 km of the development footprint | 28 |
| Figure 7: Private receivers (community/social) within 5 km of the development footprint | 29 |
| Figure 8: Salinity relevant to the project | 30 |
| Figure 9: Land and soil capability associated with the project | 31 |
| Figure 10: Flood planning area | 32 |
| Figure 11: Hydrology associated with the project | 33 |
| Figure 12: Mapped plant community types associated with the project | 34 |
| Figure 13: Terrestrial biodiversity and groundwater dependent ecosystems associated with the project | 35 |
| Figure 14: NSW Draft native vegetation regulatory map | 36 |
| Figure 15: Bushfire prone land associated with the project | 37 |
| Figure 16: State Significant Developments within the Narrandera LGA | 38 |
| Figure 17: Indicative dimensions of the proposed solar panels | 40 |
| Figure 18: Indicative BESS container | 40 |
| Figure 19: Concept layout of the project | 41 |
| Figure 20: Social Impact Assessment phases aligned with the EIA process (source: DPHI, 2025a) | 58 |
| Figure 21: Viewshed mapping (source: Moir Studio, 2025) | 77 |
| Figure 22: Intersection of the Sturt Highway and Strontian Road | 91 |

LIST OF TABLES

| | |
|---|----|
| Table 1: Applicant's details | 9 |
| Table 2: Project site details | 10 |
| Table 3: Key features of the project site | 18 |
| Table 4: SSDs within the Narrandera LGA | 23 |
| Table 5: Analysis of alternatives considered | 45 |
| Table 6: Key statutory requirements for the project | 47 |

| | |
|--|-----|
| Table 7: Pre-conditions that must be satisfied prior to consent..... | 50 |
| Table 8: Scoping engagement methods..... | 58 |
| Table 9: Stakeholder and rights holder groups and their defining characteristics | 59 |
| Table 10: Community engagement undertaken | 63 |
| Table 11: Matters and issues raised during community consultation | 63 |
| Table 12: Likely social impact categories | 64 |
| Table 13: Social impact assessment methodology..... | 68 |
| Table 14: Project refinements | 70 |
| Table 15: Level of assessment required in EIS | 74 |
| Table 16: Mapped PCTs occurring within the project site and their associated threatened ecological communities | 80 |
| Table 17: Previously recorded threatened flora and fauna species proximate the project..... | 81 |
| Table 18: Summary of AHIMS site types adjacent the project site | 84 |
| Table 19: Climate statistics for the Narrandera Airport AWS meteorological station | 99 |
| Table 20: Matters requiring no further assessment in the EIS | 101 |

ACRONYMS AND ABBREVIATIONS

| Term | Definition |
|------------|--|
| ACHAR | Aboriginal Cultural Heritage Assessment Report |
| AEMO | Australian Energy Market Operator |
| AEP | Annual Exceedance Probability (%) |
| AHD | Australian Height Datum |
| AHHCOA | Aboriginal and Historical Heritage Constraints and Opportunities Assessment |
| AHIMS | Aboriginal Heritage Information Management System |
| APZ | Asset Protection Zone |
| ATR | Archaeological Technical Report |
| BAM | Biodiversity Assessment Method |
| BC Act | <i>Biodiversity Conservation Act 2016</i> (NSW) |
| BDAR | Biodiversity development assessment report |
| BESS | Battery Energy Storage System |
| BFRMP | Bush Fire Risk Management Plan |
| BSAL | Biophysical Strategic Agricultural Land |
| CCNZT Act | <i>Climate Change (Net Zero Future) Act 2023</i> |
| CCS | Community Consultation Strategy |
| CIA | Cumulative Impact Assessment |
| CrLM Act | <i>Crown Land Management Act 2016</i> |
| CPS | Community Perceptions Survey |
| CSP | Community Strategic Plan |
| Cth DCCEEW | Commonwealth Department of Climate Change, Energy, the Environment and Water |
| DC | Direct current |
| DCP | Development Control Plan |
| Div | Division |
| DPE | Department of Planning and Environment |
| DPHI | Department of Planning, Housing and Infrastructure (or the Department) |
| DPIE | Department of Planning, Industry and Environment |
| DISER | Department of Industry, Science, Energy and Resources |

| Term | Definition |
|-----------------|---|
| EII Act | <i>Electricity Infrastructure Investment Act 2020</i> |
| EIS | Environmental impact statement |
| EMF | Electromagnetic field |
| EPA | Environment Protection Authority |
| EP&A Act | <i>Environmental Planning and Assessment Act 1979</i> |
| EP&A Regulation | <i>Environmental Planning and Assessment Regulation 2021</i> |
| EPBC Act | <i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth) |
| EPL | Environment protection licence |
| GDE | Groundwater Dependent Ecosystems |
| GHG | Greenhouse gas |
| GWh | Gigawatt hour |
| ha | Hectares |
| HV | High voltage |
| ILUA | Indigenous Land Use Agreement |
| ISP | Integrated System Plan |
| KFH | Key fish habitat |
| km | Kilometres |
| kV | Kilovolt |
| LALC | Local Aboriginal Land Council |
| LEP | Local environmental plan |
| LETS | Low Emissions Technology Statements |
| LGA | Local government area |
| LSC | Land and soil capability |
| LRET | Large-scale Renewable Energy Target |
| LSPS | Local strategic planning statement |
| LUCRA | Land Use Conflict Risk Assessment |
| LVIA | Landscape and Visual Impact Assessment |
| MIA | Murrumbidgee Irrigation Area |
| Minister, the | Minister for Planning and Public Spaces (or delegate) |
| MNES | Matters of national environmental significance |

| Term | Definition |
|----------------|---|
| MW | Megawatt |
| MWh | Megawatt hour |
| NDC | Nationally Determined Contributions |
| NEM | National Energy Market |
| NNTT | National Native Title Tribunal |
| NPW Act | <i>National Parks and Wildlife Act 1974</i> |
| NPW Regulation | <i>National Parks and Wildlife Regulation 2019</i> |
| NSC | Narrandera Shire Council |
| NSW | New South Wales |
| NSW DCCEEW | NSW Department of Climate Change, Energy, the Environment and Water |
| NT Act | <i>Native Title Act 1993</i> |
| NVIA | Noise and Vibration Impact Assessment |
| OSOM | Oversize and Overmass |
| PBA | Preliminary Biodiversity Assessment |
| PCT | Plant community type |
| PHA | Preliminary hazard analysis |
| POEO Act | <i>Protection of the Environment Operations Act 1997</i> |
| PSIA | Preliminary Social Impact Assessment |
| PV | Photovoltaic |
| PVIA | Preliminary Visual Impact Assessment |
| RAP | Registered Aboriginal Party |
| RET | Renewable Energy Target |
| REZ | Renewable energy zone |
| RFS | Rural Fire Service |
| s | Section |
| SAIL | Serious and irreversible impact |
| SEARs | Secretary's Environmental Assessment Requirements |
| SEPP | State environmental planning policy |
| SES | State Emergency Service |
| SIA | Social Impact Assessment |

| Term | Definition |
|--------|---|
| SIASR | Social Impact Assessment Scoping Report |
| SR | Scoping report |
| SRLUP | Strategic Regional Land Use Plans |
| SSD | State significant development |
| SSF | Strontian Solar Farm Pty Ltd |
| TEC | Threatened ecological community |
| TfNSW | Transport for NSW |
| TIA | Traffic Impact Assessment |
| UNFCCC | United Nations Framework Convention on Climate Change |

1. INTRODUCTION

1.1 Project overview

Strontian Solar Farm Pty Ltd (SSF) (the Applicant), propose to develop the Strontian Solar Farm and Battery Energy Storage System (BESS) (the project) to provide sustainable and renewable electricity while reducing carbon emissions and bolstering national energy security.

The project site is located in Sandigo, New South Wales (NSW), within the Narrandera Local Government Area (Narrandera LGA), approximately 17 kilometres (km) southeast of Narrandera (Figure 1). The Narrandera LGA 'lies within the Riverina region of south-west NSW. With a population of over 5,800 people, the Shire covers an area of 4118 km², which includes Narrandera township, the rural villages of Barellan, Grong Grong, Binya as well as fifteen other rural localities' (NSW Government, 2020). The project site spans a total area of approximately 670 hectares (ha) and the land, which is currently used for agricultural cropping and grazing activities, is zoned RU1 Primary Production under the *Narrandera Local Environmental Plan 2013* (Narrandera LEP).

The project involves the development of a 370 megawatt (MW) direct current (DC) utility-scale solar photovoltaic (PV) plant (connection capacity of 328 MWac), integrated with a 335 MW/670 MWh BESS.

Key elements of the project include:

- Approximately 654,000 solar panels installed in rows in regular arrays fixed to single-axis mounting structures via piling or screwed. The PV modules would be installed in parallel rows within each section in a north to south direction, with an indicative spacing of 5 m between the axis in each row. The PV modules would have tracker that would allow the modules to rotate from east to west during the day, tracking the sun's movement.
- An existing 330 kilovolt (kV) transmission line (Wagga 330 to Darlington Point) crosses the project site. An on-site electrical substation and connection to the Transgrid 330 kV Wagga Wagga to Darlington Point transmission network, subdivision of substation land (to be transferred to Transgrid upon completion).
- Other infrastructure including 166 central inverters, switchgear and 335 MWDC/670 MWh BESS. Inclusion of a BESS increases the stability and flexibility of the electricity network by storing energy from different sources and discharging it into the electricity grid upon demand.
- Underground and overhead cabling, inverters, operations and control building, maintenance and storage buildings, car parking, water storage tanks, earthworks, land clearing, internal access tracks, road upgrades, perimeter security fencing, signage, associated infrastructure and works.

The project is designed to avoid and minimise impacts where possible. The exact land area to be covered by the project components (i.e. the development footprint) will be refined as the project design progresses and will respond to and be informed by the outcomes of community and stakeholder engagement and the findings of the technical environmental, social, and economic assessments.

Several preliminary technical environmental assessments have also been carried for the key issues of Aboriginal cultural heritage, biodiversity, landscape and visual impact, and social impact. The preliminary technical environmental assessments are based on the Applicant's experience in solar farm development, desktop reviews, and preliminary site inspections, and are summarised below.

1.1.1 Aboriginal cultural heritage

An Aboriginal and Historical Heritage Constraints and Opportunities Assessment (AHHCOA) has been prepared by Artefact Heritage and Environment (Artefact) which provides a preliminary desktop assessment to identify any potential heritage constraints associated with the project. The AHHCOA determined that Aboriginal objects are likely to be present in the study area and, as such, may be impacted by the proposed works.

Therefore, an Aboriginal Cultural Heritage Assessment Report (ACHAR), supported by an Archaeological Technical Report (ATR), will be conducted in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW, 2010a), Code of Practice for Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010b), and the Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEI, 2011).

1.1.2 Biodiversity

A Preliminary Biodiversity Assessment (PBA) has been prepared by WolfPeak Group Pty Ltd to determine the ecological values of the project site and the scale and nature of the likely impacts of the project on the receiving environment. The PBA was prepared having regard to the relevant provisions of Part 7 of the *Biodiversity Conservation Act 2016* (BC Act) and Part 7A of the *Fisheries Management Act 1994* (FM Act), as well as any Australian Government approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

1.1.3 Landscape and visual amenity

A Preliminary Visual Impact Assessment (PVIA) has been prepared by Moir Landscape Architecture Pty Ltd (Moir Studio) which aims to provide a preliminary assessment of the potential visual impacts associated with the project. The PVIA was prepared in accordance with the Large-Scale Solar Energy Guideline (DPHI, 2022a) and Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b).

1.1.4 Social impact

A Social Impact Assessment Scoping Report (SIASR) prepared by The Social Aspect accompanies this scoping report (SR) in support of the project. The SIASR provides a framework to engage with the community and stakeholders about the project and ensure opportunities to provide input into the assessment and development process are communicated, evaluated and documented. The purpose of the SIASR is to:

- Establish a preliminary social baseline and define the social locality for the project.
- Identify and determine the size and scale of likely social impacts of the project.
- Identify project activities that could have social impacts and group them against the categories presented in the Social Impact Assessment Guideline.
- Provide a summary of potential social impacts that require additional assessment (scoping worksheet).
- Establish appropriate methodologies to investigate and assess project related social impacts.
- Provide a brief overview of potential management measures and ongoing monitoring.

The approach to the SIASR follows the Social Impact Assessment Guideline (DPHI, 2025a), the Technical Supplement: Social Impact Assessment Guideline for State Significant Project (DPHI, 2025b), the Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024b), and the SIA Scoping Worksheet and seeks to provide an initial understanding and foundation the issues or opportunities identified that the project presents within the social locality and an initial evaluation of predicted social impacts associated with the project.

The preliminary technical environmental assessments are appended to and accompany this SR.

The expected operational life of the project is 30 years, dependent on the nature of solar PV technology and market demands. Once the project reaches the end of the operational lifecycle, the solar farm would be decommissioned, and all above-ground infrastructure would be removed to enable the site to return to its prior agricultural land use. Equipment dismantled and removed from the site would either be repurposed or recycled where possible.

The project is consistent with NSW Government policy for development of renewable energy generation and storage infrastructure, and will assist in meeting NSW and Australian Government emissions reduction targets (see Section 2.1).

The project is classified as State significant development (SSD) under the *State Environmental Planning Policy (Planning Systems) 2021* (Planning Systems SEPP) and will therefore be assessed under Part 4, Division (Div) 4.7 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The Minister (or the Independent Planning Commission in some circumstances) is the consent authority for the project, consistent with section (s) 4.5 of the EP&A Act.

This SR has been prepared on behalf of the Applicant and seeks the Planning Secretary's Environmental Assessment Requirements (SEARs) to guide the preparation of the EIS that will accompany the SSD application for the project.

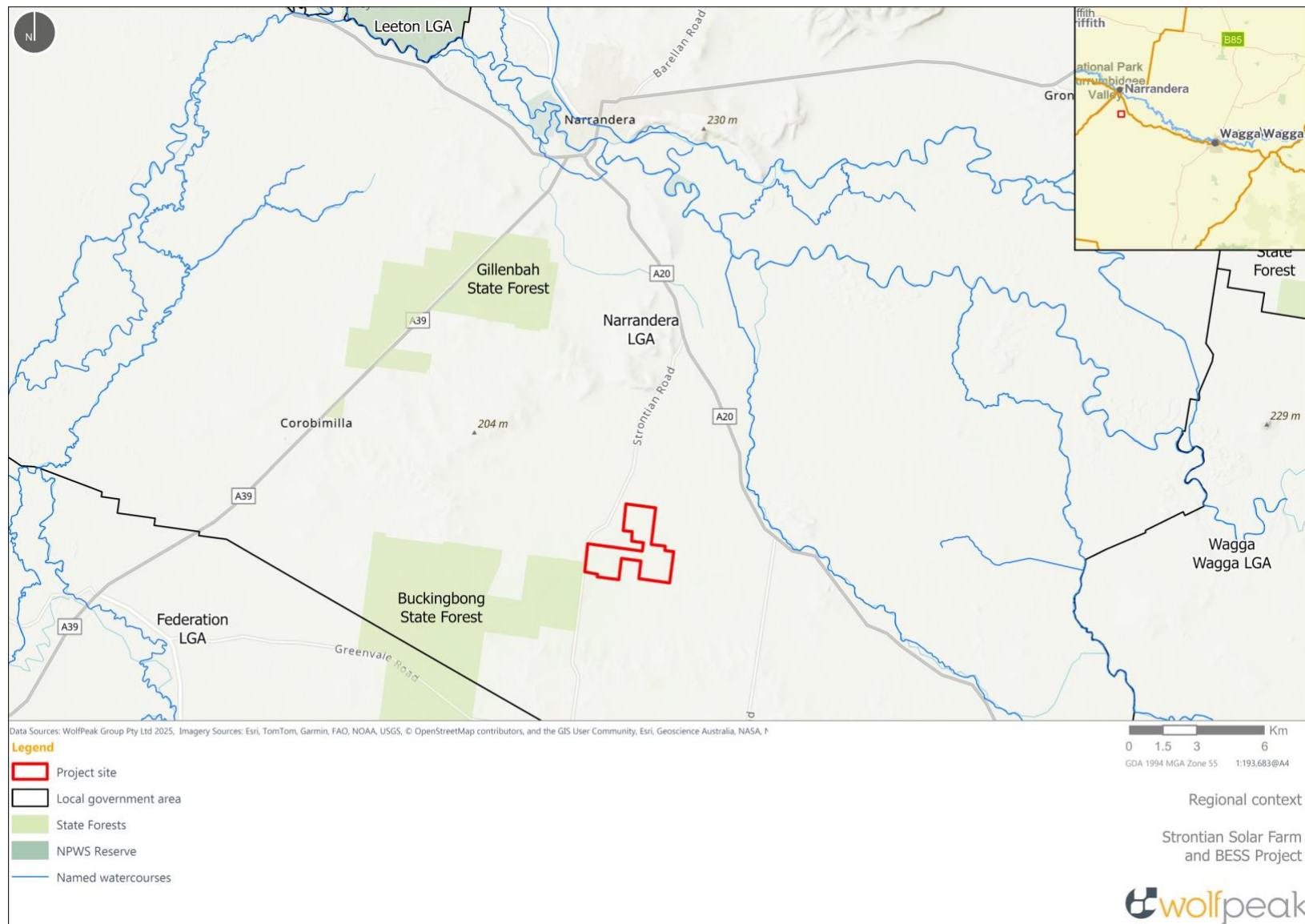


Figure 1: Regional location of the project site

1.2 The Applicant

The Applicant for the project is Strontian Solar Farm Pty Ltd (SSF), owned by Zero-E Services, a wholly owned subsidiary of Grupo Cobra. Grupo Cobra develops photovoltaic plants, wind farms, battery storage and transmission lines for sustainable infrastructure, and operates in key global markets, including Australia, the United States of America, South America, and South Africa. Key information about the Applicant is provided in Table 1.

Table 1: Applicant's details

| Item | Details |
|---------------------------------|---|
| Applicant name | Strontian Solar Farm Pty Ltd |
| Australian Company Number (CAN) | 681 576 483 |
| Address | Level 14, 1 York Street, Sydney NSW 2000 |
| Website | https://strontiansolarfarm.com/ |
| Project contact | Sedat Erol |
| Contact details | sedat.erol@grupocobra.com |

1.3 Project objectives

The project aims to contribute to NSW's transition to renewable energy and is respectively consistent with Commonwealth, State and local land use policies. The increase in renewable energy generation, supported by appropriate storage and transmission infrastructure, will reduce Australia's reliance on fossil fuels for electricity generation and the consequent harmful effects of climate change.

The key objectives of the Strontian Solar Farm and BESS are to:

- support NSW's transition towards renewable energy generation and storage and facilitate the shift away from fossil fuel electricity generation
- contribute to and support the National Energy Market (NEM) by providing renewable energy generation and storage capacity and improving the security, stability and resilience of the NEM
- avoid, minimise and mitigate adverse impacts on the environment and community during construction and operation
- contribute to the economic growth of the region
- establish positive relationships within the local community, businesses and relevant stakeholders.

1.4 Site information

The project site has historically been used for agricultural cropping and grazing activities, with current uses including cereal cropping and some areas sown to pasture. Historical aerial photographs of the site from 1959, 1966, 1977 and 1998 (DCS, 2025) show the site largely cleared of vegetation with scattered trees and agricultural usage. The project site address and legal descriptions or land parcels are provided in Table 2.

Table 2: Project site details

| Item | Details |
|-----------------------|---|
| Address | Strontian Road, Sandigo NSW 2700 |
| Local government area | Narrandera |
| Land use zoning | RU1 Primary Production |
| Land parcel | Lot 1 DP220430 Lot 1 DP548128 Lot 23 DP754538 Lot 44 DP754538 Lot 71 DP754538 |
| Site area | The total project site area is approximately 670 ha |

1.4.1 Crown land

A Crown road is located within the development footprint which will require closing, or an application for tenure, which will be undertaken in consultation with the Department of Planning, Housing and Infrastructure (DPHI): Crown Lands in parallel with the assessment process for the project.

1.5 Related development

Related development, as specified in the State significant development guidelines – preparing a scoping report (DPIE, 2022a), refers to any related development, including any:

- existing or approved development (including any existing use rights or continuing use rights) that would be:
 - incorporated into the project, allowing some or all of the existing development consents or rights for this development to be surrendered if the SSD project is approved and the approved project to operate under a single SSD development
 - operated in conjunction with the project under a separate development consent or approval.
- development that is required for the project but would be subject to a separate assessment (e.g. upgrades to ancillary infrastructure, approvals for subsequent stages of the project).

There are no existing or approved developments that would be incorporated or operated in conjunction with the project under a separate development consent or approval.

1.6 Project development

The following strategies have been, and will be further, adopted as possible to avoid, minimise or offset the impacts of the project to the extent known at the scoping stage:

- infrastructure site layout design response to avoid identified potential impacts to existing biodiversity and riparian ecosystems
- align the transmission line to maximise use of existing roads and cleared land to reduce disturbance

- minimise visual impacts by design, including setback distances and landscaping
- potential for sheep grazing under the solar arrays to continue under agricultural/grazing activities.

1.7 Purpose of this report

The project is classified as SSD pursuant to Schedule 1, section 20, of the Planning Systems SEPP and approval is therefore required under Part 4, Div 4.7 of the EP&A Act (refer to Section 4 for statutory context). An SSD application for the project is to be accompanied by an EIS.

This SR supports a request to the Department of Planning, Housing and Infrastructure (DPHI) for the SEARs in relation to the project, which will identify the matters to be assessed in the EIS and the level of assessment required.

This report has been prepared by WolfPeak Group on behalf of Strontian Solar Farm Pty Ltd consistent with the State significant development guidelines – preparing a scoping report (DPIE, 2022a). Other NSW Government SSD technical guidelines have been considered where applicable, as well as the Large-Scale Solar Energy Guideline (DPHI, 2022a).

This SR provides a high-level description of the project, including the project study area and its surroundings, the environmental planning pathway for approval and the identification of key potential environmental issues that may be associated with the project.

2. STRATEGIC CONTEXT

2.1 Project justification

The project is consistent with Commonwealth and NSW government policy commitments to increase renewable energy generation and storage and reduce greenhouse gas (GHG) emissions. Strontian Solar Farm and BESS would improve the security and reliability of Australian and NSW electricity networks by generating electricity from a renewable source and feeding into the grid. The overall flexibility and resilience of the electrical grid would improve as renewable energy generation increases and reliance on non-renewable energy generation decreases over time.

The project is consistent with the principles of ecologically sustainable development as defined by s 193 of the EP&A Regulation and s 3A of the EPBC Act, with particular focus on long-term environmental considerations and inter-generational equity.

The project will:

- Facilitate the shift from fossil fuel power generation to less polluting, renewable energy options which supports Australia's transition towards clean and renewable sources of energy.
- Avoid, minimise and mitigate serious or irreversible damage to the environment and community during construction and operation.
- Establish a strong network of positive and long-term relationships within the local community and contribute to economic and social benefits within the Narrandera LGA.
- Provide energy storage for sustainable renewable energy to enable continuous and reliable electricity output as part of a rapidly expanding industry in NSW.

The project is also aligned with International, Commonwealth, NSW, regional and local strategic planning as discussed further in this section.

2.1.1 International commitments

2.1.1.1 The Paris Agreement

The Paris Agreement (the Agreement) is a legally binding international treaty on climate change. It was adopted by 195 Parties at the United Nations Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016 (UNFCCC, n.d.). The overarching goal of the Agreement is to hold '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 above pre-industrial levels'.

As a signatory to the Agreement, the Australian Government submitted its first Nationally Determined Contributions (NDC) to the United Nations Framework Convention on Climate Change (UNFCCC) in 2015, and an updated version was provided in 2022 which 'commits Australia to reducing its emissions to 43% below 2005 levels by 2030' (Cth DCCEEW, 2025a).

The development of renewable energy projects is considered to be one of the most effective ways to meet the nation's international commitments to reduce GHG and the project would contribute to Australia's effort to meet the Paris Agreement.

2.1.2 Commonwealth commitments

2.1.2.1 2024 Integrated System Plan

The 2024 Integrated System Plan (ISP), prepared by the Australian Electricity Market Operator (AEMO), 'is a roadmap for the transition of the NEM power system, with a clear path for essential infrastructure that will meet future energy needs' (AEMO, 2024). The ISP is a robust plan that calls for urgent investment in generation, storage and transmission to deliver secure, reliable and affordable electricity through the energy transition.

The project supports the ISP through the creation of additional essential infrastructure for renewable energy generation and storage which will help meet future sustainable energy needs.

2.1.2.2 Australia's Long-Term Emissions Reduction Plan

'Australia's whole-of-economy Long-Term Emissions Reduction Plan (the Plan) sets out how Australia will achieve net zero emissions by 2050. The Plan is focused on 'the how', on practical action to convert ambition into achievement' (DISER, 2021). The Plan has been informed by detailed modelling and analysis which 'has built on the work undertaken for the 2020 Low Emissions Technology Statement (LETS) to assess customer and technology trends and identify priority technologies for Australia, as well as subsequent work for the LETS 2021 to understand how far and how soon the costs of those technologies could fall' (DISER, 2021).

The analysis shows that it is possible for Australia to reach net zero emissions by 2050, and the costs will be significantly lower if a technology-based approach is adopted for reducing emissions. Australia's Technology Investment Roadmap, consisting of annual LETS, outlines the role the Australian Government will play in reducing the costs of low emissions technologies.

The roadmap is an enduring process for identifying low emissions technologies that:

- will have the biggest impact in reducing emissions in Australia and globally
- have significant economic potential
- build on Australia's competitive advantages
- government investment can help develop and deploy.

The project will reduce GHG emissions associated with energy generation over its operational life which will contribute to the Commonwealth Government's plan to reduce Australia's greenhouse gas emissions by 43% by 2030, and net zero emissions by 2050. The incorporation of a BESS will enable the storage of renewable energy to increase market efficiency and enable greater penetration of renewables in the electricity grid.

2.1.2.3 Renewable Energy Target

The Renewable Energy Target (RET) scheme is an Australian Government scheme designed encourage renewable electricity generation and 'aims to reduce greenhouse gas emissions from the electricity sector' (Cth DCCEEW, 2025b). One of the 2 schemes of the RET includes the Large-scale Renewable Energy Target (LRET) which incentivises investment in renewable energy power solutions such as wind and solar farms, and aims to deliver 33,000 gigawatt hours of extra renewable electricity each year until the scheme concludes in 2030.

The Strontian Solar Farm and BESS project would contribute to Australia reaching its renewable energy targets by contributing up to approximately 789,327 MWh of renewable energy per year, which would

power approximately 148,000 average NSW homes while avoiding the release of approximately 401 metric tonnes of CO₂ equivalent per annum (using conversion estimates from the US EPA).

2.1.2.4 Climate Change Act 2022

Part 2 of the Commonwealth's *Climate Change Act 2022* outlines Australia's GHG reduction targets, which include:

- (a) reducing Australia's net greenhouse gas emissions to 43% below 2005 levels by 2030;
- (b) reducing Australia's net greenhouse gas emissions to zero by 2050.

The project aims to be operational prior to 2030, and would therefore contribute to Australia's GHG reduction targets through the generation of renewable solar energy.

2.1.3 State commitments

2.1.3.1 Climate Change (Net Zero Future) Act 2023

The purpose of the *Climate Change (Net Zero Future) Act 2023* (CCNZF Act) is to give effect to the international commitment established through the 2015 Paris Agreement to—

- (a) hold the increase in the global average temperature to well below 2°C above pre-industrial levels, and
- (b) pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, and
- (c) increase the ability to adapt to the adverse impacts of climate change.

The CCNZF Act enshrines whole-of-government climate action to deliver net zero by 2050, sets a clear path to 2050 with emissions reduction targets, and also ensures the NSW Government follows comprehensive guiding principles while continuing to improve resilience and accountability.

Pursuant to s 9(1) of the CCNZF Act, the targets for reducing net greenhouse gas emissions in New South Wales are—

- (a) by 30 June 2030—to reduce net greenhouse gas emissions in New South Wales by at least 50% from the net greenhouse gas emissions in 2005, and
- (b) by 30 June 2035—to reduce net greenhouse gas emissions in New South Wales by at least 70% from the net greenhouse gas emissions in 2005, and
- (c) by 30 June 2050—to reduce net greenhouse gas emissions in New South Wales to zero.

The project is consistent with the objects of the CCNZF Act as it would help reduce NSW emissions towards the State goals through the provision of renewable energy generation and storage infrastructure.

2.1.3.2 Electricity Infrastructure Roadmap 2020

'The Electricity Infrastructure Roadmap (the Roadmap) is the NSW Government's plan to transform the NSW electricity sector into one that is cheap, clean, and reliable' (EnergyCo, 2025). The Roadmap will support the private sector to deliver at least:

- 12 gigawatts of renewable electricity generation, such as wind and solar
- 2 gigawatts of long-duration storage, such as pumped hydro and batteries.

Key objectives of the Roadmap include:

- attract up to \$32 billion of timely and coordinated private sector investment by 2030 in large-scale generation storage and transmission to maintain a reliable, secure and affordable supply
- support an expected 6,300 construction jobs and 2,800 ongoing jobs mostly in regional NSW by 2030
- generate an estimated \$1.5 billion in lease payments to landholders in regional NSW by 2042
- reduce NSW's carbon emissions by a total of 90 million tonnes of CO₂e (MtCO₂e) by 2030
- reduce household and small business average annual energy bills.

The Roadmap is enabled by the *Electricity Infrastructure Investment Act 2020* (EII Act) to give industry and investors the certainty they need to invest in the necessary infrastructure. Pursuant to s 23 of the EII Act, the Minister for Energy has declared 5 renewable energy zones (REZs) in NEW: the Central-West Orana REZ, Illawarra REZ, New England REZ, South West REZ and Hunter-Central Coast REZ. The priority REZs for development are the Central-West Orana REZ, New England REZ and South West REZ.

The project is located approximately 70 km east of the South-West REZ and receives the same level of average daily solar exposure (megajoules per square metre) as that for the South-West REZ.

'While the primary focus of the Roadmap is on developing the three NSW Government REZs, 'outstanding' projects outside the REZs and other private-led REZs with substantial public benefit may be supported to improve competition for agreements' (DPIE, 2020a). The project aligns with the Roadmap objectives to achieve private sector investment in the delivery of at least 12 gigawatts of new renewable energy generation.

2.1.3.3 Net Zero Plan Stage 1: 2020-2030

The Net Zero Plan Stage 1: 2020-2030 (the Plan) sets out how the NSW Government will deliver on its objectives to achieve net zero emissions by 2050 over the next decade. The Plan is financially supported by a Bilateral Memorandum of Understanding on Energy and Emissions Reduction Policy between the Commonwealth and NSW Governments (DPIE, 2020b).

It is expected that by delivering the Net Zero Plan, 'New South Wales will create almost 2,400 jobs and attract over \$11.6 billion of investment over the next 10 years. Almost two-thirds of this investment will go to regional and rural New South Wales. The Plan is expected to save households \$40 a year on their electricity bills' (DPIE, 2020b).

The development of utility-scale renewable energy projects, such as the proposed Strontian Solar Farm and BESS, are key to supporting the delivery of the Plan by providing emissions reduction technologies in the form of at-scale renewable energy generating infrastructure.

2.1.3.4 NSW Climate Change Policy Framework

The NSW Climate Change Policy Framework (the Framework) was introduced in 2016 and aims to 'maximise the economic, social and environmental wellbeing of NSW in the context of a changing climate and current and emerging international and national policy settings and actions to address climate change' (OEH, 2016). The Framework endorses and complements International and National targets, and has the following aspirational long-term objectives:

- achieve net-zero emissions by 2050
- NSW is more resilient to a changing climate.

The NSW Government aims to achieve the aspirational long-term objectives by implementing the following:

- investigate how to embed climate change emissions savings and adaptation in government decision making
- develop a benchmark value for emissions saving and apply this consistently in government economic appraisal
- release and consult on a strategic plan to guide expenditure from the Climate Change Fund
- develop an advanced energy action plan, a new energy efficiency plan, a climate change adaptation action plan, and additional policy investigations for sectors with significant opportunities and risks.

The project would generate renewable electricity and provide storage capacity to help deliver more reliable, cheaper and cleaner energy, supporting NSW's transition to net zero emissions.

2.1.3.5 NSW Electricity Strategy

The NSW Electricity Strategy (the Strategy) is the NSW Government's plan for reliable, affordable and sustainable electricity in the future that supports a growing economy. The purpose of the NSW Electricity Strategy is to improve the efficiency and competitiveness of the NSW electricity market and encourage investment in new price-reducing generation and energy saving technology. 'The Strategy is expected to drive \$8 billion in private investment over a decade, create at least 1,200 jobs and make NSW the home of Australia's first coordinated Renewable Energy Zone' (DPIE, 2019).

The project is consistent with the Strategy as it will provide renewable energy generation and storage capacity which, together with other renewable generation projects, is expected to result in a lower cost of power in comparison to wholesale prices. The project will also contribute to greater energy resilience through the use of BESS to support stabilising the supply of electricity to the region.

2.1.4 Regional and local plans and strategies

2.1.4.1 Riverina Murray Regional Plan 2041

The Riverina Murray Regional Plan 2041 (the Regional Plan) is a 20-year land use plan with a targeted delivery focus on the next 5 years (DPE, 2023a) and applies to the Narrandera LGA in which the project is situated. The Regional Plan is an update to the Riverina Murray Regional Plan 2036 which provides the NSW Government's vision for land uses in the Riverina Murray region, and was developed in consultation with councils, stakeholders and the community to achieve priority actions. It 'covers all facets of land use planning, including the natural environment, future hazards, housing and related infrastructure, industry, employment areas and town centres' (DPE, 2023a), and aims to implement the plan through objectives, strategies and actions for the three main sections of the plan, including the environment, community and place, and the economy.

Objective 13 of the Regional Plan aims to support the transition to net zero by 2050, and notes that:

The Riverina Murray's climate, resources and strategic connections to utility infrastructure place it in a strong position to contribute to and capitalise on the net zero target and electricity infrastructure plans. In recent years, large-scale solar farms account for more than 50% of major projects.

The project will contribute to the strategic objectives of the Regional Plan by:

- contributing to the national renewable energy target
- promoting energy security through a more diverse energy mix
- investigating areas within the region with renewable energy potential and ready access to connect with the electricity network
- increasing energy efficiency
- moving to lower emission energy sources.

2.1.4.2 Local Strategic Planning Statement – Narrandera Shire Council

The Local Strategic Planning Statement (LSPS) sets the framework for Narrandera Shire's economic, social and environmental land use needs over the next 20 years. It outlines clear planning priorities describing what will be needed, where these are located and when they will be delivered. The LSPS sets short, medium and long-term actions to deliver the priorities for the community's vision. 'The LSPS gives effect to the Riverina Murray Regional Plan and brings together and builds on the planning work found in Council's other plans and strategies, such as the Local Environmental Plan (LEP), Development Control Plan (DCP) and Community Strategic Plan (CSP)' (NSC, 2020).

Priority 3 of the LSPS aims to provide a sustainable region which is adaptive to changing conditions, and provides that:

One key long term action to combat climate change is to invest in environmentally conscious practices and innovate new ways to be sustainable. Becoming a well-informed community can help us to adapt to and plan for future climate risks and land use planning plays an important role in this. By promoting appropriate locations for renewable energy, we can protect our existing assets and enable this emerging energy sector to grow.

Priority 6 of the LSPS applies to industry growth and diversification and acknowledges the following:

The shift to renewable energy will allow Narrandera to produce such energy from within the shire. Solar farms like Yarrabee Solar project, Sandigo Solar projects are pioneers in Narrandera, leading the shire into an environmentally friendly industry where the energy produced will be used in the shire and exported, while creating local employment opportunities and economic benefits. Council will continue to facilitate emerging industries being appropriately located within the shire.

The project is consistent with the strategic objectives of the LSPS and the Applicant will continue to engage with Narrandera Shire Council throughout the assessment process.

2.1.4.3 Community Strategic Plan 2040 – Narrandera Shire Council

Narrandera Shire Council's Community Strategic Plan 2040 (CSP) was developed under the guidance of the social justice principles of access, equity, participation, and rights and has been prepared to inform all long-term planning for the future of the Narrandera LGA. The purpose of the CSP 'is to identify the community's main priorities and aspirations for the future and to plan strategies for achieving these goals' (NSC, 2025). During its development, various Commonwealth, State and regional strategies, plans, programs and initiatives were considered, including the Commonwealth's Renewable Energy Target Scheme. The Narrandera community also provided feedback which suggests enhancing the Narrandera Shire through economic growth, diversifying local industries, and expanding renewable energy projects.

The project will contribute to supporting economic and industrial growth and diversification in the Narrandera LGA and will seek to maximise environmental protection while developing new renewable energy generation and storage potential.

2.2 Key features of the project site

The project site is located on the eastern side of Strontian Road, Sandigo, in the Narrandera LGA. The total project site area is approximately 670 ha and is located on freehold land. The key features of the project site and the surrounds which could affect or be affected by the project are summarised in Table 3 and shown in Figure 2 to Figure 15.

Table 3: Key features of the project site

| Aspect | Description |
|--------------------------------|---|
| Land configuration, topography | <p>The site consists of 5 freehold lots with the westernmost lot adjacent to Strontian Road having 2 existing access points. The topography of the site is generally flat with an elevation of 150 m Australian Height Datum (AHD). An ephemeral creek crosses the south-western part of the site while 3 farm dams are located throughout the site. The site is mostly cleared of vegetation with some isolated stands of native vegetation.</p> <p>Land configuration and topography associated with the project is shown in Figure 2.</p> |
| Crown land | <p>A Crown road occurs within the development footprint, between the northern and southern section of the site between Lot 23 and Lot 71 of DP754538 as shown in Figure 3, while the Sturt Highway/Strontian Road intersection requiring upgrading is a Crown road jointly managed by DPHI Crown lands and NSC (Figure 4).</p> <p>The Crown roads will either require closing, or an application for tenure, which will be undertaken in consultation with DPHI: Crown Lands in parallel with the assessment process for the project.</p> |
| Land use and zoning | <p>The site is zoned RU1 Primary Production under the Narrandera LEP and current land use is associated with agricultural cropping and grazing activities.</p> <p>Electricity generating works are prohibited within the RU1 zone under the Narrandera LEP; however, pursuant to s 2.36 of the Transport and Infrastructure SEPP, development for the purpose of electricity generating works is permissible in a prescribed non-residential zone, including RU1 Primary Production.</p> <p>Land use zoning associated with the project are shown in Figure 5.</p> |
| Local context | <p>The site is surrounded by agricultural land on all sides with the exception of the following:</p> <ul style="list-style-type: none"> • Strontian Road borders the site to the west, with agricultural land and Forestry occurring west of Strontian Road. • Buckingbong State Forest (zoned RU3 Forestry) is situated adjacent the south-western portion of the site. Buckingbong State Forest is a hardwood forest managed by the Forestry Corporation of NSW. • Avonlie Solar Farm is situated east of and adjacent to the project site. It comprises of over 450,000 solar panels with a total energy capacity of up to approximately 245 MW (DC). The Avonlie Solar Farm received development approved in August 2019, commenced construction in 2021 and has been operational since 2023. <p>Figure 2 provides the local context of the project.</p> |
| Community | <p>There are a number of private receivers (dwellings) within proximity of the development footprint, with the nearest private receiver located over 1.5 km to the site boundary and solar panel arrays.</p> |

| Aspect | Description | | | | | | | | | |
|---------------------------------|--|-------------------------------------|------------------------|-------------------------------------|----------------------|----|------|-----------------------------|----|------|
| | <p>The Large-Scale Solar Energy Guideline (DPHI, 2022) requires that private receivers up to 4 km from the proposed development site require a landscape character and visual impact assessment, while the State significant guidelines – preparing a scoping report (DPIE, 2022) requires that community/social receivers within 5 km of the development footprint require assessment.</p> <p>The impact type on private receivers, number of receivers, and their distance from the development footprint requiring assessment, are described in the following table.</p> <table><tr><th>Impact type on private receiver</th><th># of private receivers</th><th>Distance from development footprint</th></tr><tr><td>Landscape and visual</td><td>14</td><td>4 km</td></tr><tr><td>Community interest (social)</td><td>17</td><td>5 km</td></tr></table> <p>Figure 6 identifies private receivers with the potential to be affected by visual amenity, while Figure 7 identifies private receivers with the potential to be affect by social impacts. Two private receivers are associated with the project.</p> <p>As indicated, the land surrounding the project site is largely used for agricultural cropping and grazing activities, with Buckingbong State Forest located to the south-west and the Avonlie Solar Farm located to the east (Figure 2). The township of Narrandera is approximately 17 km to the north and is the closest population centre (population of approximately 5,600) to the site. Wagga Wagga, with a population of over 60,000 people, is located approximately 73 km east of the project site.</p> | Impact type on private receiver | # of private receivers | Distance from development footprint | Landscape and visual | 14 | 4 km | Community interest (social) | 17 | 5 km |
| Impact type on private receiver | # of private receivers | Distance from development footprint | | | | | | | | |
| Landscape and visual | 14 | 4 km | | | | | | | | |
| Community interest (social) | 17 | 5 km | | | | | | | | |
| Infrastructure | <p>A 330 kV electrical overhead transmission line (Wagga 330 to Darlington Point) owned and managed by Transgrid crosses the site at Lot 1 DP220430 in a northwest to southeast direction. An 11 kV electrical overhead distribution line owned and managed by Essential Energy runs approximately north-south through the centre of Lot 1 DP220430 and partially through the northwestern corner of Lot 71 DP754538.</p> <p>Infrastructure associated with the project is shown in Figure 2.</p> | | | | | | | | | |
| Soils | <p>The soils on site are Chromosols under the Australian Soil Classification. Land within the project site is not affected by salinity, while the nearest salinity affected land, as mapped pursuant to the Narrandera LEP, is present within 370 m of the project site (Figure 8).</p> <p>The project site is situated on Class 3 (moderate limitations) consistent with the land and soil capability (LSC) (Figure 9). In accordance with the Large-Scale Solar Energy Guidelines, a detailed agricultural impact assessment is required for a large-scale solar energy project located on rural zoned land verified as LSC Class 1-3.</p> <p>There is no biophysical strategic agricultural land mapped within or near the project site pursuant to the <i>State Environmental Planning Policy (Resources and Energy) 2021</i>.</p> <p>No acid sulfate soils, soil acidity or land subject to gully or sheet erosion are present on site. The modelled erosion (annual cover erosion 2023) mapped in NSW Government SEED mapping is in the lowest erosion category of 0-0.2 t/ha/year.</p> | | | | | | | | | |
| Contamination | <p>The project site is not listed in the NSW Environment Protection Authority’s contaminated land record (EPA, 2025a) or the list of notified sites (EPA, 2025b). Further, the NSW Government PFAS Investigation Program (EPA, 2023) does not identify any PFAS within or near the project site, nor is there any naturally occurring asbestos located within the Narrandera LGA.</p> <p>Historical aerial photographs of the site from 1959, 1966, 1977 and 1998 show the site largely cleared of vegetation with scattered trees and agricultural usage. Other than</p> | | | | | | | | | |

| Aspect | Description |
|--|---|
| | agricultural uses, available information, including preliminary site observations, does not suggest of historical land uses that could have left a legacy of contamination at the site. |
| Stormwater and flooding / hydrology and wetlands / groundwater | <p>The site is not situated in flood liable land or located in Council's flood planning area under the Narrandera LEP. The Planning Certificates under s 10.7 of the EP&A Act obtained for the site indicates that the land is not subject to flood related development controls. However, the Sturt Highway between Narrandera and the intersection to Strontian Road is situated within the flood planning area (Figure 10). While this is outside the development footprint, flooding has the potential to impact access to the project site for the construction and operation workforce, which is proposed to be accommodated in Narrandera.</p> <p>As indicated above, an unnamed ephemeral watercourse is situated on the western side of the site, with 3 farm dams scattered throughout the site.</p> <p>Two wetlands mapped in the Narrandera LEP are located to the southeast, outside of the project site, one approximately 300 m south and the other approximately 450 m southeast of the site boundary.</p> <p>The site is not mapped as 'groundwater vulnerable' under the Narrandera LEP, with the nearest 'groundwater vulnerable' area located approximately 3.5 km east of the site.</p> <p>The site is situated within the Murrumbidgee catchment, with the Murrumbidgee River located approximately 13 km north of the site, flowing in a generally western direction across the riverine plains to its confluence with the River Murray near Balranald. The Murray-Darling Basin Authority, established under the Commonwealth <i>Water Act 2007</i>, manages the water resources within the Murray-Darling Basin.</p> <p>Hydrology associated with the project is shown in Figure 11.</p> |
| Aboriginal heritage | <p>The AHHCOA (Appendix B) determined that there are 79 recorded Aboriginal sites listed on AHIMS within the search area; however, none have previously been recorded within the development footprint. However, the AHHCOA determined that the AHIMS data is limited to areas that have been previously surveyed. Further, the proximity of numerous AHIMS sites to the study area, and the presence of a watercourse within the development footprint, which has been associated with the presence of Aboriginal objects in other archaeological investigations of this region, indicate that it is likely that Aboriginal objects are also located within the study area.</p> <p>There are no Native Title Claims, Native Title Determinations or Indigenous Land Use Agreements present within or near the project site.</p> |
| Historic heritage | <p>No Commonwealth, State or local heritage items occur within or near the project site, with the closest heritage item being the Sandigo Hall, a local heritage item located at 7499 Sturt Highway (Item I095 under the Narrandera LEP) approximately 5 km east of the project site. Further, there are no World Heritage properties or National Heritage Places within 10 kilometres of the site.</p> |
| Biodiversity | <p>Terrestrial</p> <p>The project site is predominately cleared of native vegetation and used for cropping. The NSW State Vegetation Type Map (Environment and Heritage, 2025a) identifies a number of plant community types (PCT) occurring within the locality; however, those associated with the project are provided below and shown in (Figure 12):</p> <ul style="list-style-type: none"> • PCT 70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt • PCT 75: Yellow Box – White Cypress Pine grassy woodland on deep sandy-loam alluvial soils of the eastern Riverina Bioregion and western NSW South Western Slopes Bioregion |

| Aspect | Description |
|---------------------|---|
| | <ul style="list-style-type: none"> PCT 76: Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions PCT 80: Western Grey Box - White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion. <p>PCT 75 and PCT 76 have associated threatened ecological communities (TECs) under both the BC Act and EPBC Act, while PCT 80 has 3 associated TECs under the BC Act.</p> <p>Parts of the site are also mapped as 'Biodiversity' under Narrandera LEP (Figure 13). Pursuant to s 6.4 of the Narrandera LEP, the consent authority must consider whether the development is likely to have an adverse impact on biodiversity land.</p> <p>The Planning Certificates under s 10.7 of the EP&A Act obtained for the site indicates that Council has no record of the land being in an area of outstanding biodiversity value under the BC Act.</p> <p>NSW Government's Draft native vegetation regulatory map, prepared under Part 5, Division 2 of the <i>Local Land Services Act 2013</i>, identifies the project site predominately consists of Category 1 – exempt land, with some areas in the centre of the site containing Category 2 – regulated land (Figure 14).</p> <p>Further, there are no wilderness areas declared under the <i>Wilderness Act 1987</i> or land reserved or acquired under the <i>National Parks and Wildlife Act 1974</i> within or near the site.</p> <p>Freshwater</p> <p>The unnamed ephemeral watercourse on the western side of the site is not associated with any major watercourses and is not mapped key fish habitat (KFH) under the <i>Fisheries Management Act 1994</i>. No areas of KFH occur within or near the site, with the nearest area of KFH located in Sandy Creek, approximately 4 km east of the site which also contains modelled habitat for the threatened freshwater species Flathead Galaxias (<i>Galaxias rostratus</i>). The status of the freshwater fish community in Sandy Creek is 'Poor' under the Fisheries NSW Spatial Data Portal (DPI, n.d.).</p> <p>Groundwater Dependent Ecosystems</p> <p>A search in the Australian Government's Groundwater Dependent Ecosystems Atlas (BoM, 2025a) indicated that no aquatic Groundwater Dependent Ecosystems (GDEs) are present on site; however, several pockets of terrestrial GDEs are present within and adjacent the project site as shown in Figure 13.</p> <p>A Preliminary Biodiversity Assessment has been prepared to support this SR and is attached at Appendix C.</p> |
| Bushfire prone land | <p>The project site is situated entirely on land classified as Vegetation Category 3 under the NSW Rural Fire Service Guide for Bush Fire Prone Land Mapping (NSW RFS, 2015). Vegetation Category 3 is considered to be medium bush fire risk, and is higher in bush fire risk than Category 2 (and the excluded areas) but lower than Category 1. Vegetation Category 3 consists of grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands, and shall be given a 30 m buffer.</p> <p>Buckingbong State Forest is located south-west of the site on the opposite side of Strontian Road. The majority of Buckingbong State Forest is mapped as Vegetation Category 1, which is considered to be the highest risk for bush fire and has the highest combustibility and likelihood of forming fully developed fire including heavy ember production, and contains areas of forest, woodlands, heaths (tall and short), forested wetlands and timber plantations. Vegetation Category 1 land is to be given a 100 m buffer.</p> <p>Bushfire prone land associated with the project is shown in Figure 15.</p> |

| Aspect | Description |
|---|--|
| Traffic and access | <p>Access to the project site is via Strontian Road (Road Id: 45952) which is a local road under the Transport for NSW (TfNSW) 'NSW Road Network Classifications' (TfNSW, 2025). Strontian Road is a two lane two-way asphalted road with unsealed shoulders and connects the Sturt Highway (National Route: A20) to the north with Boree Creek (Boree Creek Road / Lockhart Boree Creek Road) to the south.</p> <p>The Sturt Highway is an Australian national highway in NSW, Victoria, and South Australia and a major east-west through the Murray-Riverina region. It is an important road link for the transport of passengers and freight between Sydney and Adelaide and the regions along the route, and is the shortest, highest-standard route between Sydney and Adelaide. In the vicinity of Strontian Road, Sturt Highway has a single travel lane in each direction with sealed shoulders, typically a single broken centre line and unbroken edge lines and guideposts. It has a posted speed limit of 100 km/h. A slip lane provides access to Strontian Road for south bound traffic along Sturt Highway.</p> <p>A Traffic and Transport Assessment shall accompany the EIS to assess the traffic and transport impact of the project including an assessment of Oversize and Overmass (OSOM) movements from the port to the project site.</p> |
| Defence communications facility buffer land | <p>The project site is located within the defence communications facility buffer land under the Narrandera LEP. This relates to the defence receiver station established by the Commonwealth Department of Defence on land near Morundah.</p> <p>Pursuant to s 5.15(2) of the Narrandera LEP, 'before determining a development application for development on defence communications facility buffer land, the consent authority must consider Australian and New Zealand Standard AS/NZS 5070.1:2008, <i>Siting and operation of radiocommunications facilities – General guidelines for fixed, mobile and broadcasting facilities including fixed location satellite earth stations independent of the operating frequency</i>'.</p> <p>Further, s 5.15(3) of the Narrandera LEP states that development consent must not be granted for certain developments on defence communications facility buffer land unless the consent authority is satisfied that the Secretary of the Commonwealth Department of Defence has been consulted about the proposed development and has indicated that he or she is of the opinion that the development will not adversely affect the optimum operational capability of the defence receiver station. Consultation with the Commonwealth Department of Defence will be undertaken during the EIS.</p> |
| Other | <p>The Planning Certificates under s 10.7 of the EP&A Act for the site indicate the land is not declared to be a mine subsidence district within the meaning of the <i>Coal Mine Subsidence Compensation Act 2017</i>.</p> |

2.3 Cumulative impacts

The Large-Scale Solar Energy Guideline requires that 'any cumulative impacts from other developments (proposed, approved and operative), especially on biodiversity, social and economic wellbeing and construction, must be assessed according to the latest version of Cumulative Impact Assessment Guidelines for State Significant Projects' (DPHI, 2022a). Therefore, the Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2022b) is applicable to the project.

There are 5 approved or proposed SSDs in the Narrandera LGA listed on the Department of Planning and Environment's Major Projects website (DPE, 2025) in addition to the project described in this SR, all within 30 km of the project site. Table 4 and Figure 16 provide information on other SSDs in the Narrandera LGA.

Table 4: SSDs within the Narrandera LGA

| Name | SSD location | Number | Status | Distance from the project (approximate) |
|---------------------------|---|--------------|-------------------------------------|---|
| Avonlie Solar Farm | Muntz Road, Narrandera | SSD-9031 | Approved and operational | Directly adjacent (east) |
| Devilins Bridge Wind Farm | Plains West, 12249 Sturt Highway Euroley | SSD-76610458 | Prepare EIS | 26 km northwest |
| Euroley Poultry Facility | Sturt Highway Euroley New South Wales Australia 2700 | SSD-6882 | Approved 2015 | 32.5 km northeast |
| Sandigo Solar Farm | 174 Mitchells Road Sandigo New South Wales Australia 2700 | SSD-8872 | Approved 2018 (not yet constructed) | 12.5 km southeast |
| Yarrabee Solar Farm | 2354 Back Morundah Road Morundah New South Wales Australia 2700 | SSD-9237 | Approved 2018 (not yet constructed) | 26.5 km northwest |

The EIS will assess the potential for any cumulative impacts of the project with existing, approved or proposed SSDs within the Narrandera LGA, and the Applicant will continue to monitor and consider these projects for potential cumulative impacts to the project. The EIS will consider cumulative impacts of other relevant developments (proposed, approved and operative) on aspects such as biodiversity, land use, traffic and the social environment.

Further, the Scoping Summary Table provided in Appendix A outlines identifies where a cumulative impact assessment (CIA) will be undertaken for the relevant matters including the level of assessment and engagement required.



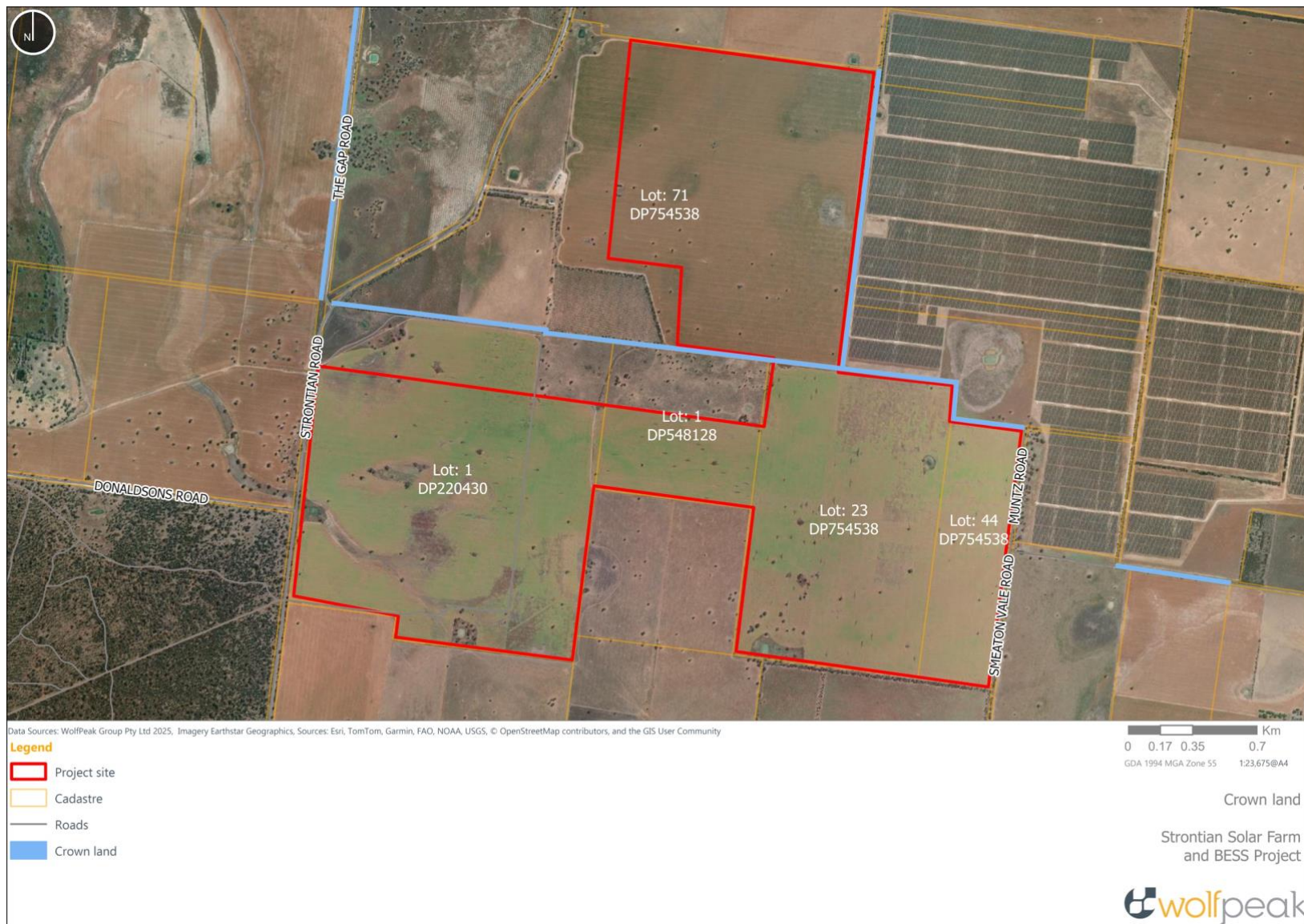


Figure 3: Crown land within and around the development footprint

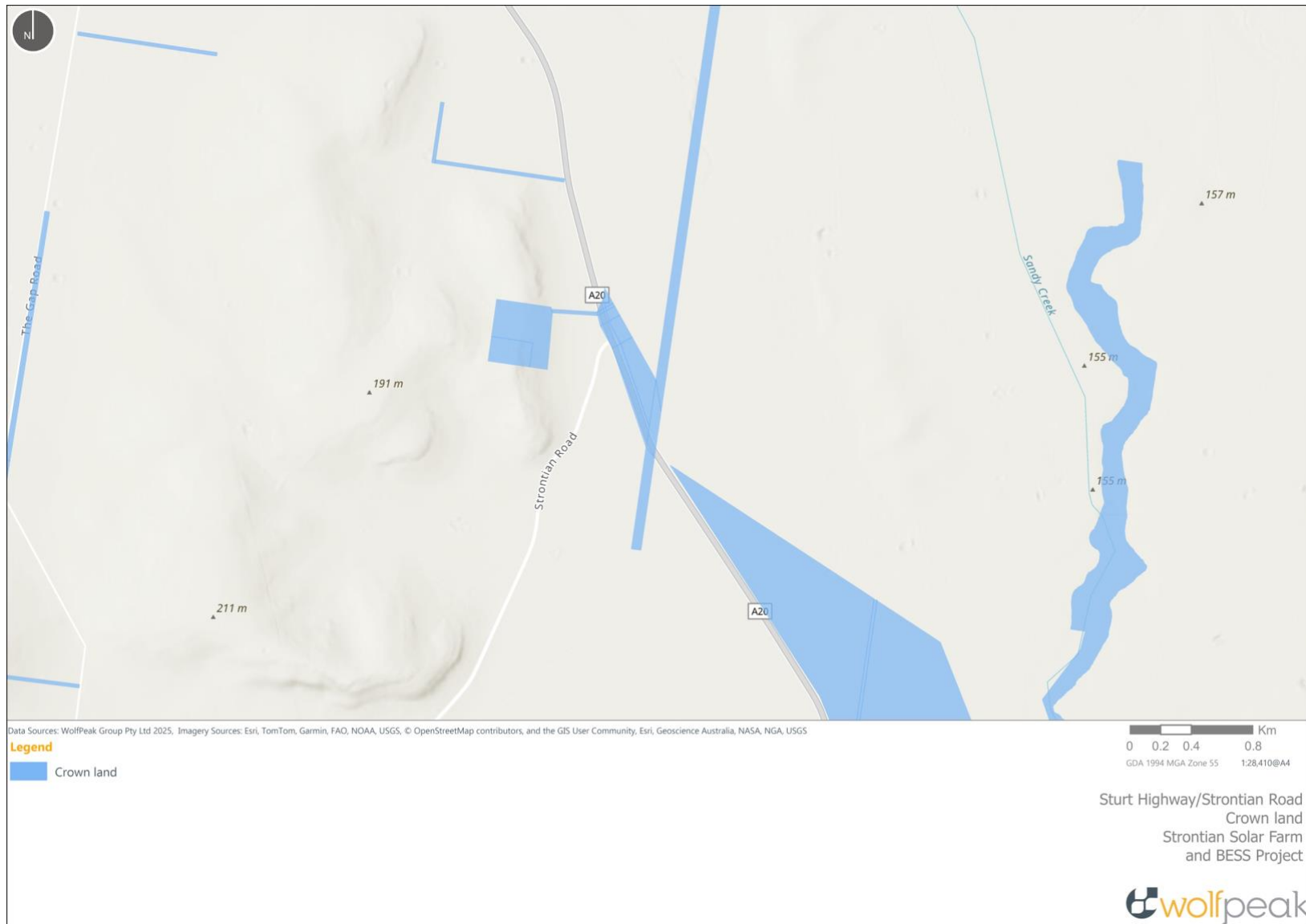


Figure 4: Crown land associated with the Sturt Highway and Strontian Road intersection

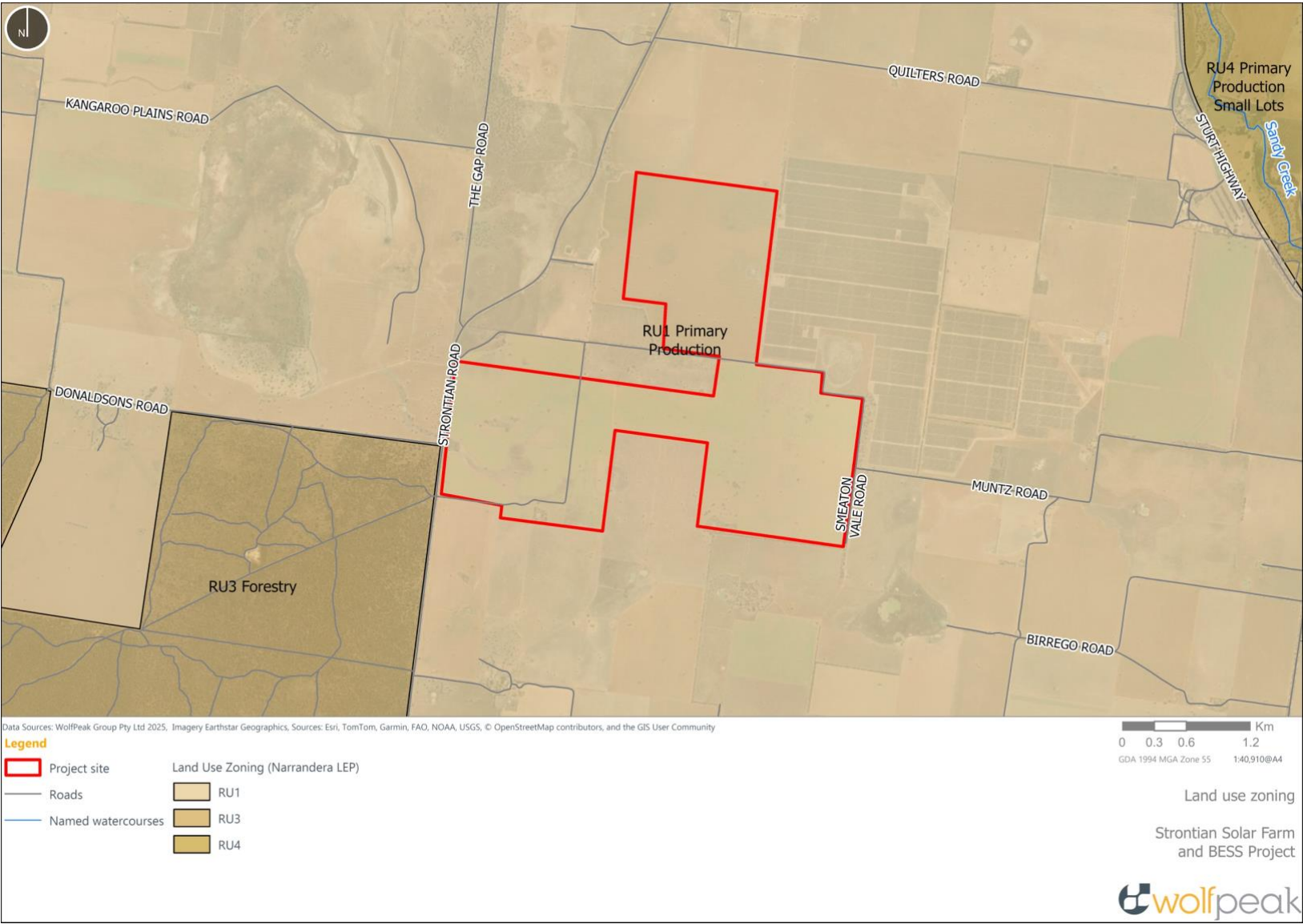


Figure 5: Land use zoning associated with the project

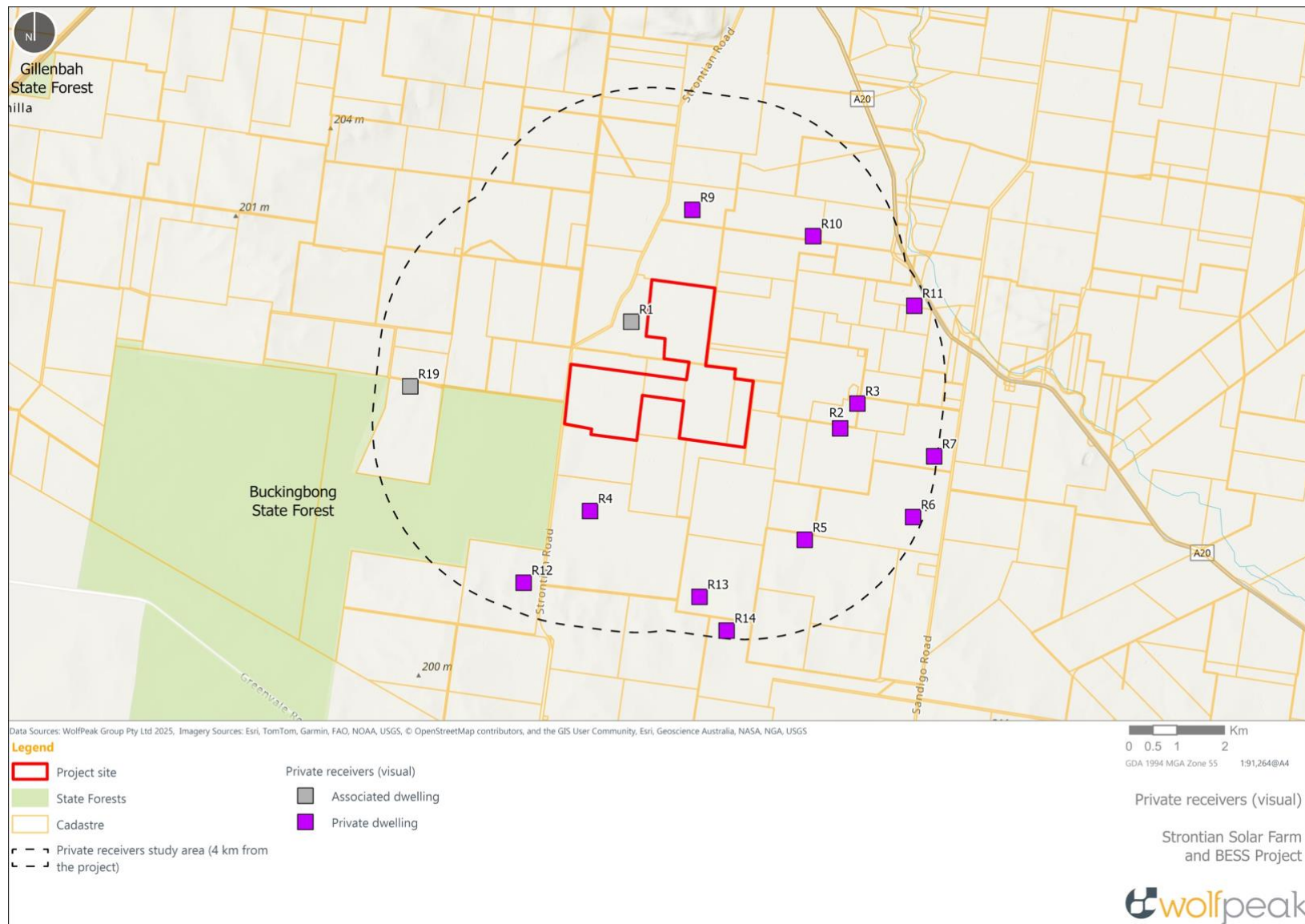


Figure 6: Private receivers (visual) within 4 km of the development footprint

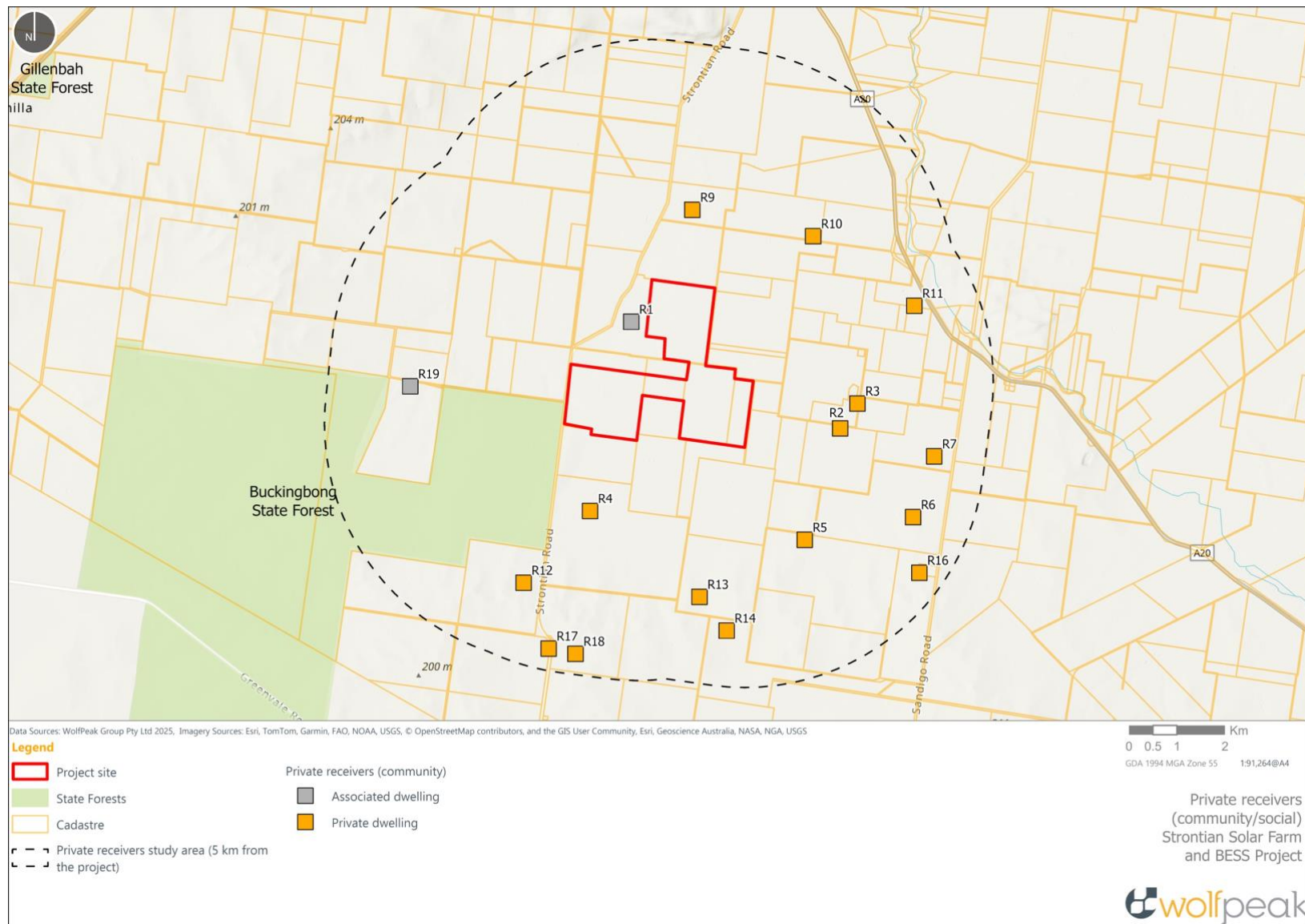


Figure 7: Private receivers (community/social) within 5 km of the development footprint

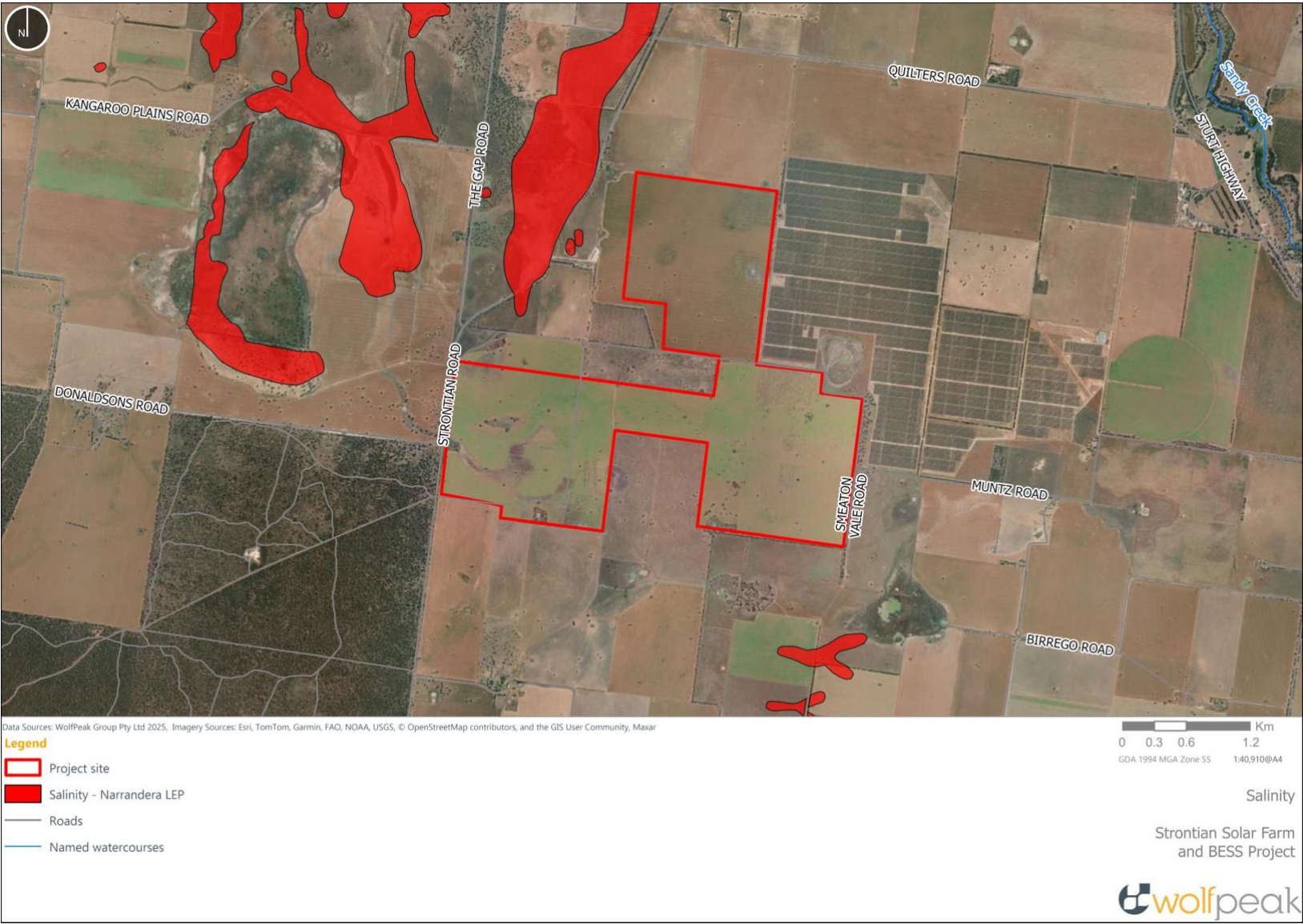


Figure 8: Salinity relevant to the project

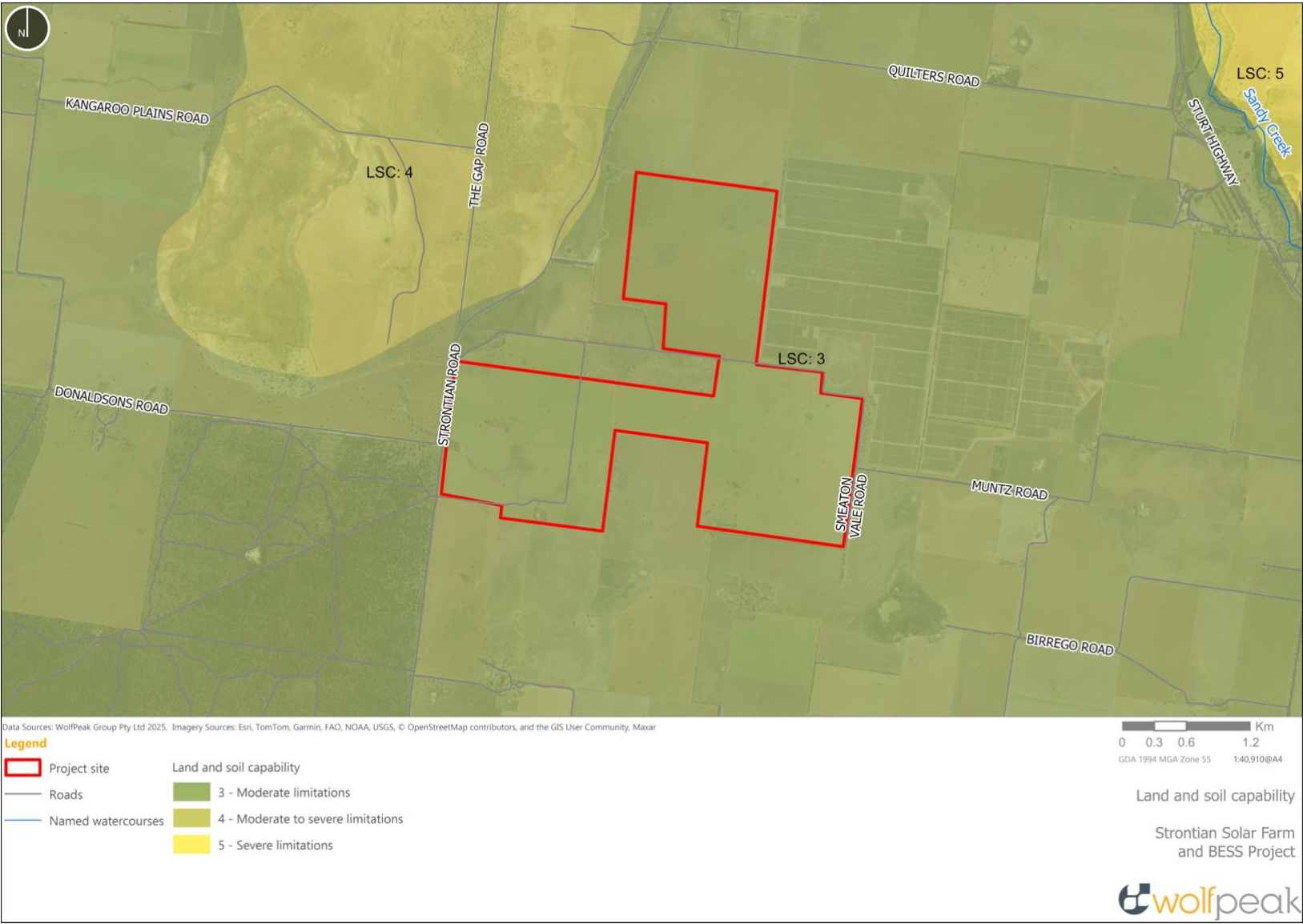


Figure 9: Land and soil capability associated with the project

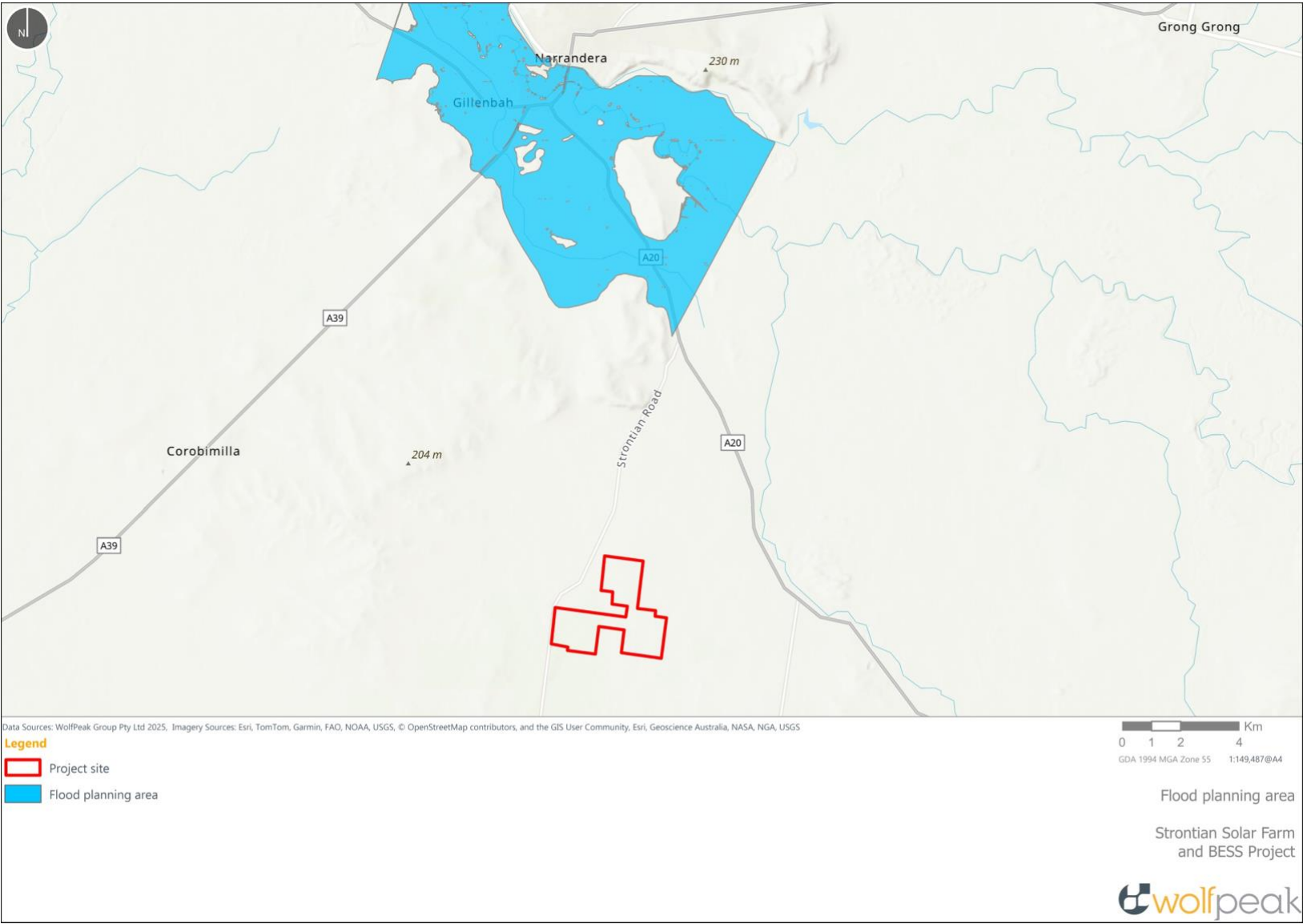


Figure 10: Flood planning area

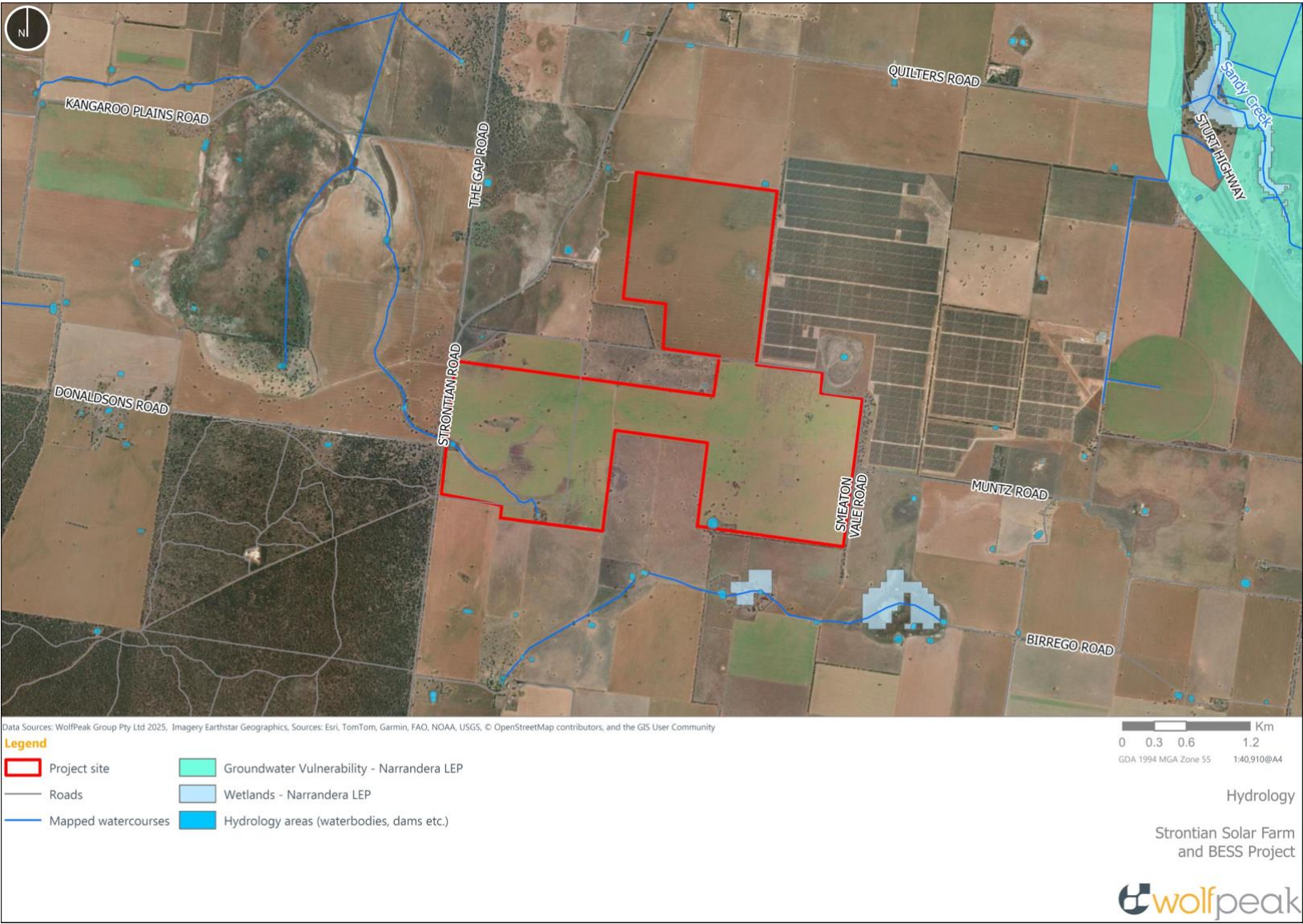


Figure 11: Hydrology associated with the project

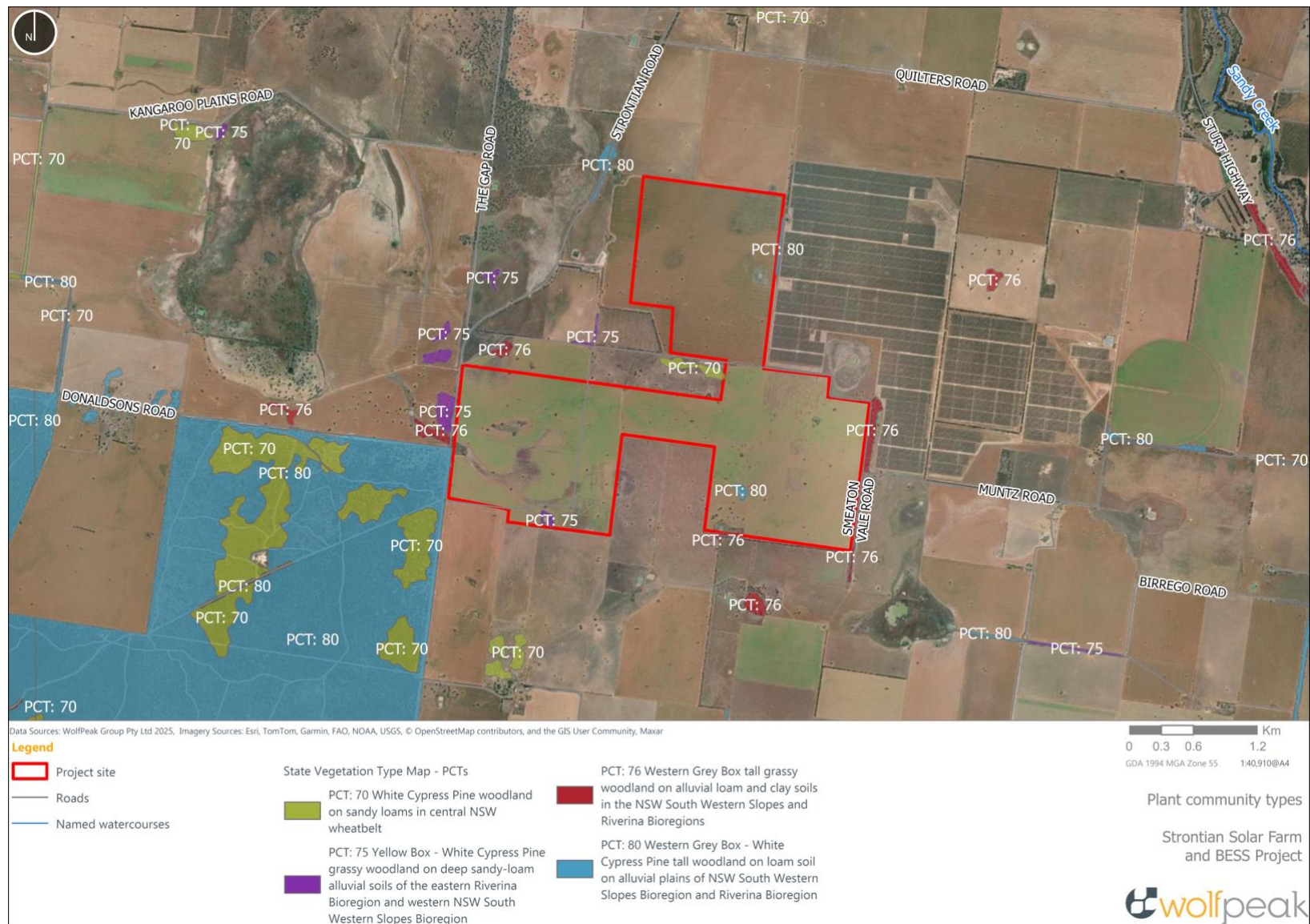


Figure 12: Mapped plant community types associated with the project

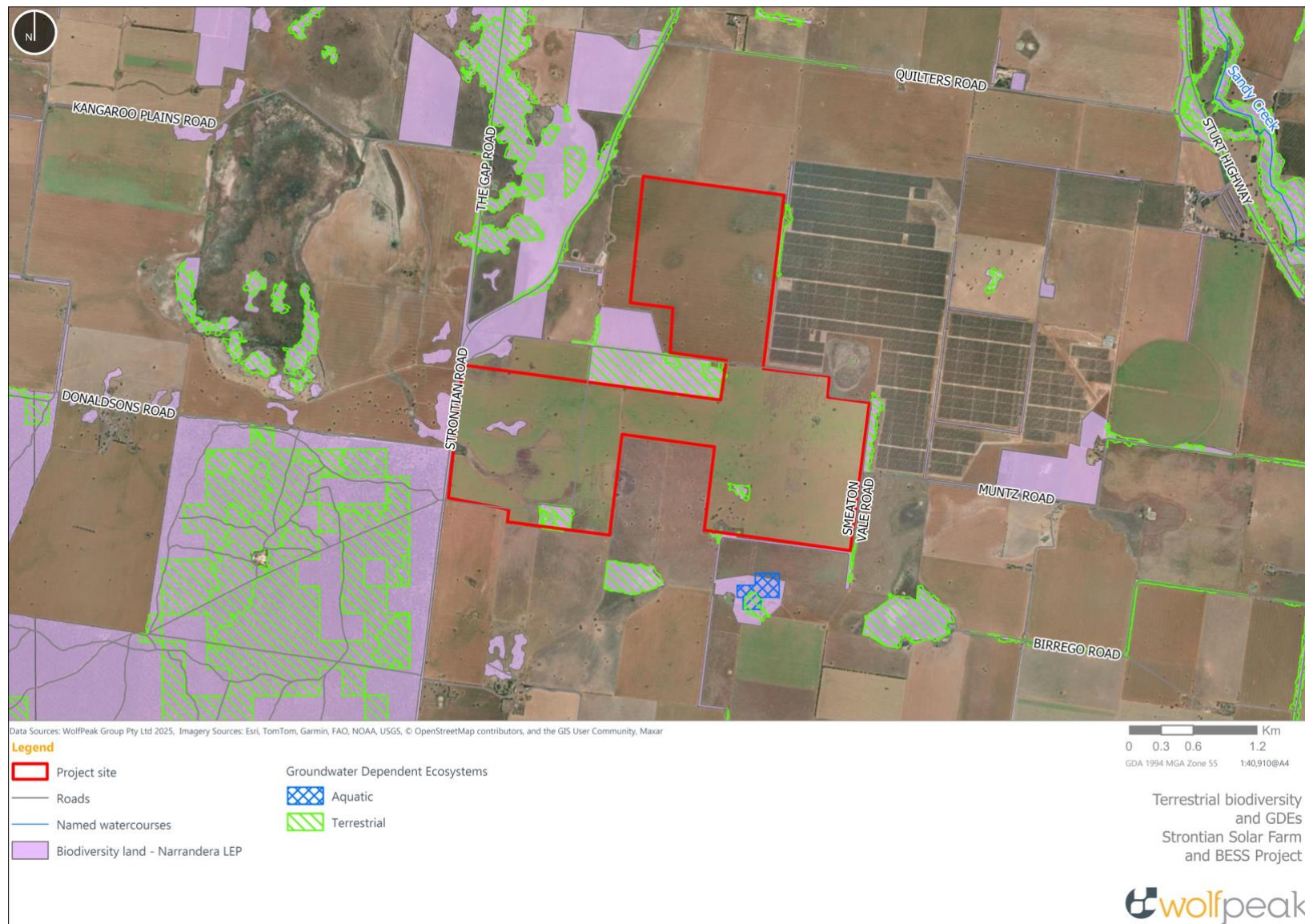


Figure 13: Terrestrial biodiversity and groundwater dependent ecosystems associated with the project

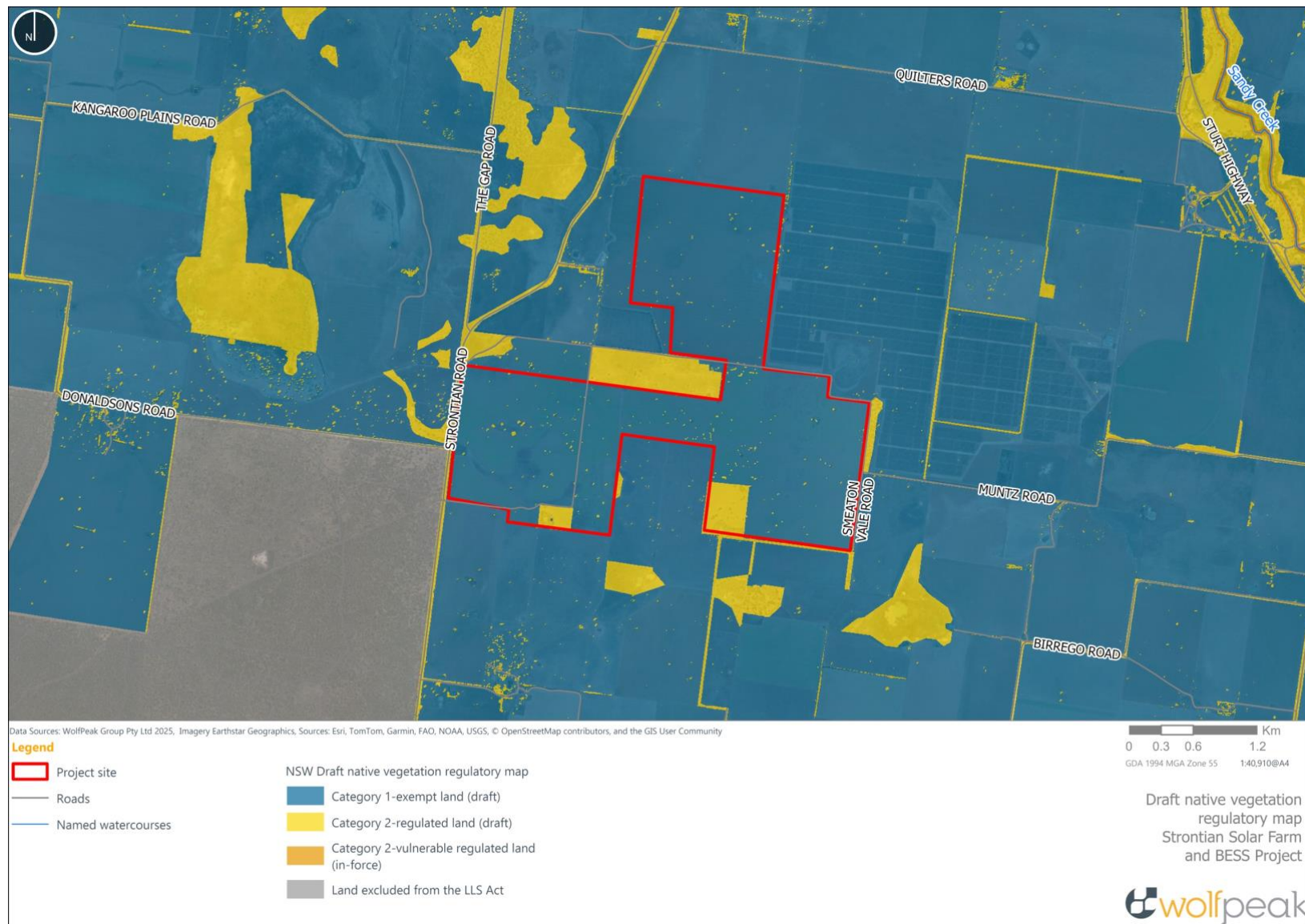


Figure 14: NSW Draft native vegetation regulatory map

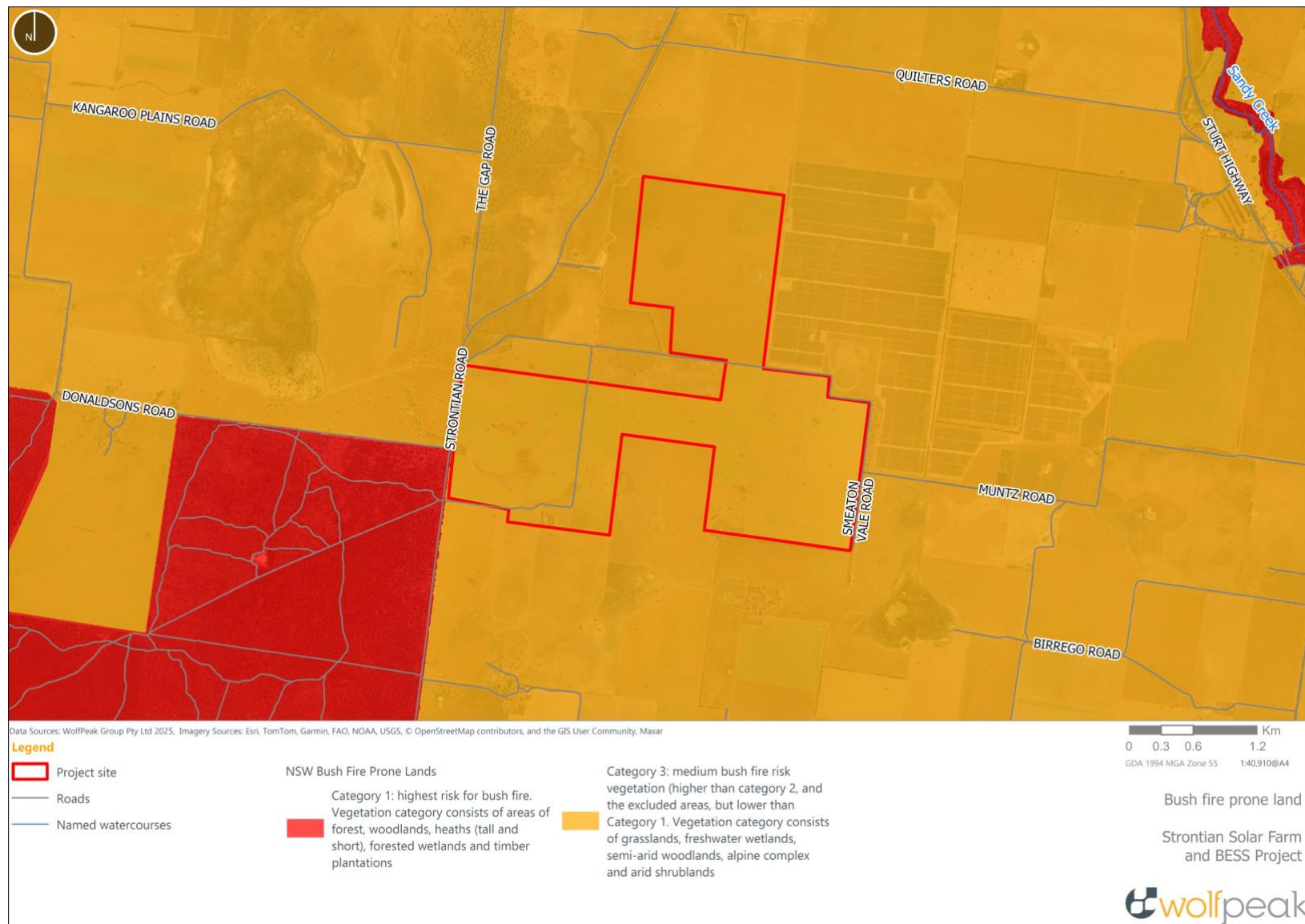


Figure 15: Bushfire prone land associated with the project

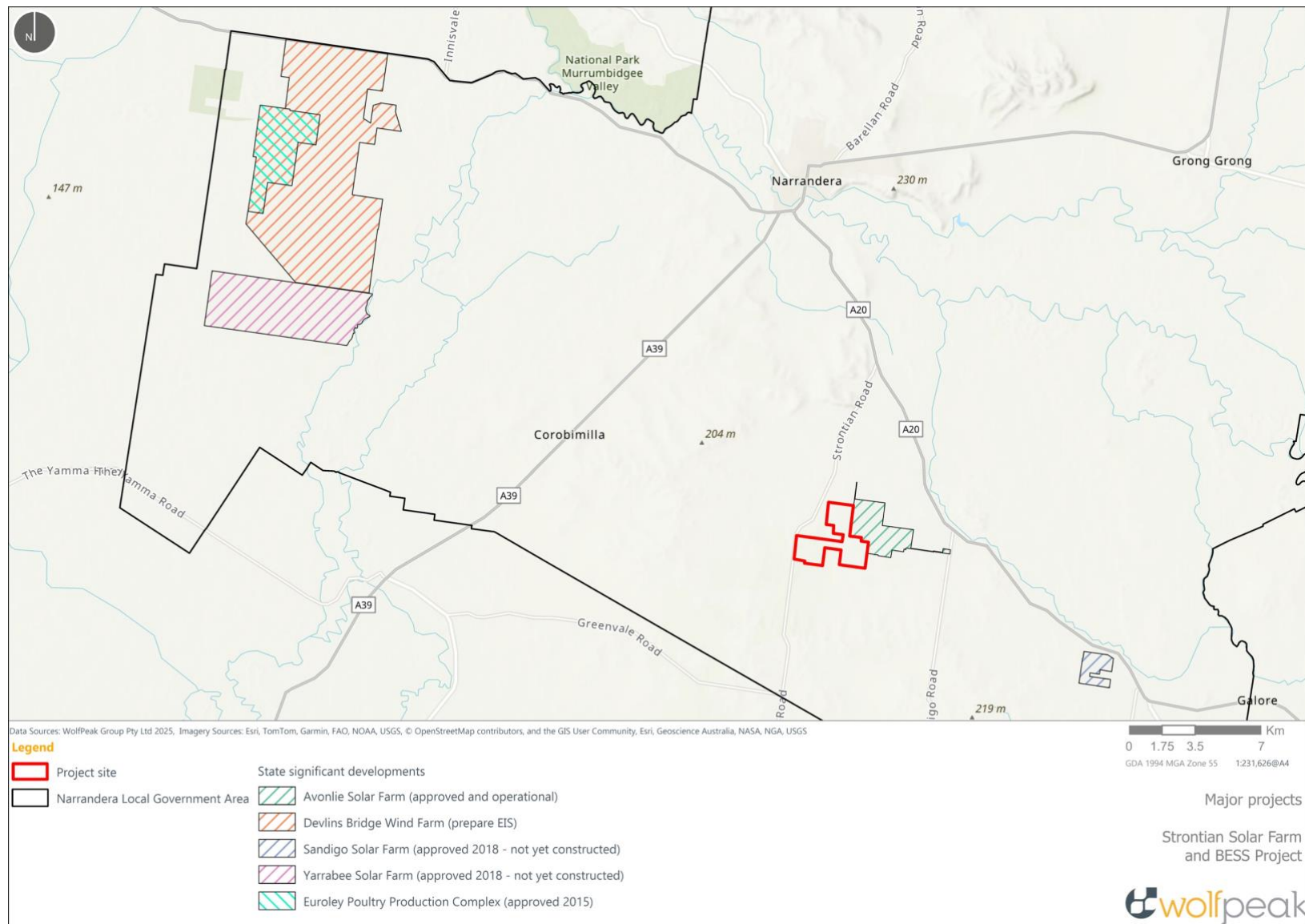


Figure 16: State Significant Developments within the Narrandera LGA

3. THE PROJECT

3.1 Overview

The project involves the development of a 370 megawatt (MW) direct current (DC) utility-scale solar photovoltaic (PV) array, ground-mounted on a single-axis tracking system (connection capacity of 328 MWac), integrated with a 335 MW/670 MWh BESS.

The projected annual energy output is estimated at approximately 789,327 MWh of renewable energy per year, which would power approximately 148,000 average NSW homes while avoiding the release of approximately 401 metric tonnes of CO₂ equivalent per annum (using conversion estimates from the US EPA).

The project's study area is approximately 670 ha which encompasses 5 freehold land parcels, while the development footprint is expected to be approximately 520 ha.

The project's location on Strontian Road was selected due to the following:

- optimal solar resources in the region
- the availability of suitable land
- anticipated minimal impacts to the project and surrounding lands
- access to grid connection with sufficient connection capacity
- landowner and community support for renewable energy projects
- existing agricultural land use quality and the capacity to reinstate post-decommissioning
- ability to continue agricultural production (agrivoltaics) by continuing sheep grazing post-construction.

3.2 Key project elements

3.2.1 Solar farm and BESS

Key elements of the project include:

- Approximately 654,000 solar panels installed in rows in regular arrays fixed to single-axis mounting structures via piling or screwed. The PV modules would be installed in parallel rows within each section in a north to south direction, with an indicative spacing of 5 m between the axis in each row. The PV modules would have tracker that would allow the modules to rotate from east to west during the day, tracking the sun's movement.
- An existing 330 kV transmission line (Wagga 330 to Darlington Point) crosses the project site. An on-site electrical substation and connection to the Transgrid 330 kV Wagga Wagga to Darlington Point transmission network, subdivision of substation land (to be transferred to Transgrid upon completion).
- Other infrastructure including 166 central inverters, switchgear and 335 MWDC/670 MWh BESS. Inclusion of a BESS increases the stability and flexibility of the electricity network by storing energy from different sources and discharging it into the electricity grid upon demand.

- Underground and overhead cabling, inverters, operations and control building, maintenance and storage buildings, car parking, water storage tanks, earthworks, land clearing, internal access tracks, road upgrades, perimeter security fencing, signage, associated infrastructure and works.

The solar panels' maximum height from the ground at the maximum tilt angle are expected to be 2.8 m as shown in Figure 17. The BESS will include battery container units sized approximately 6 m long, 2.5 m wide and 2.9 m high, as shown in the typical battery container unit provided in Figure 18, while Figure 19 shows the conceptual site layout. The final number of battery containers will be confirmed as the project development progresses.

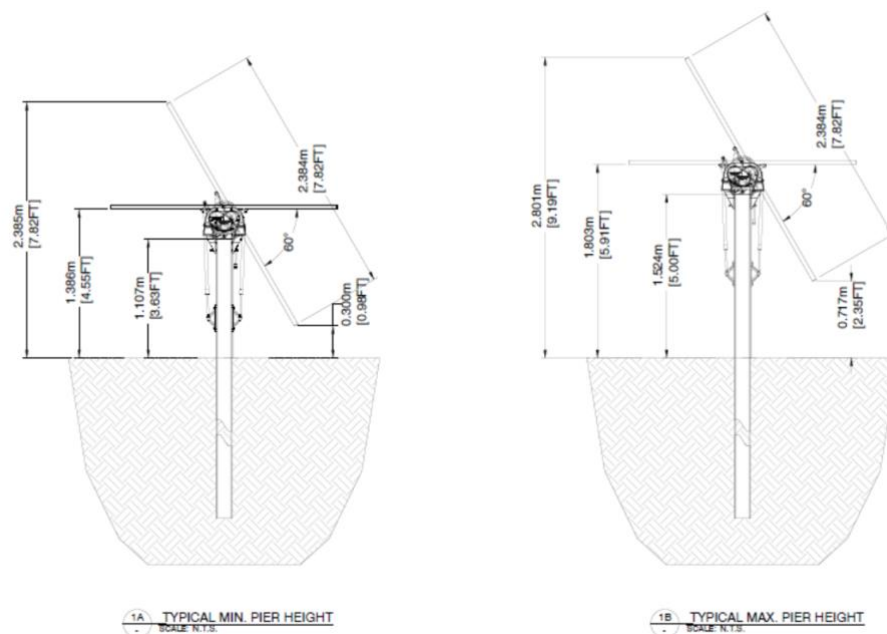


Figure 17: Indicative dimensions of the proposed solar panels



Figure 18: Indicative BESS container

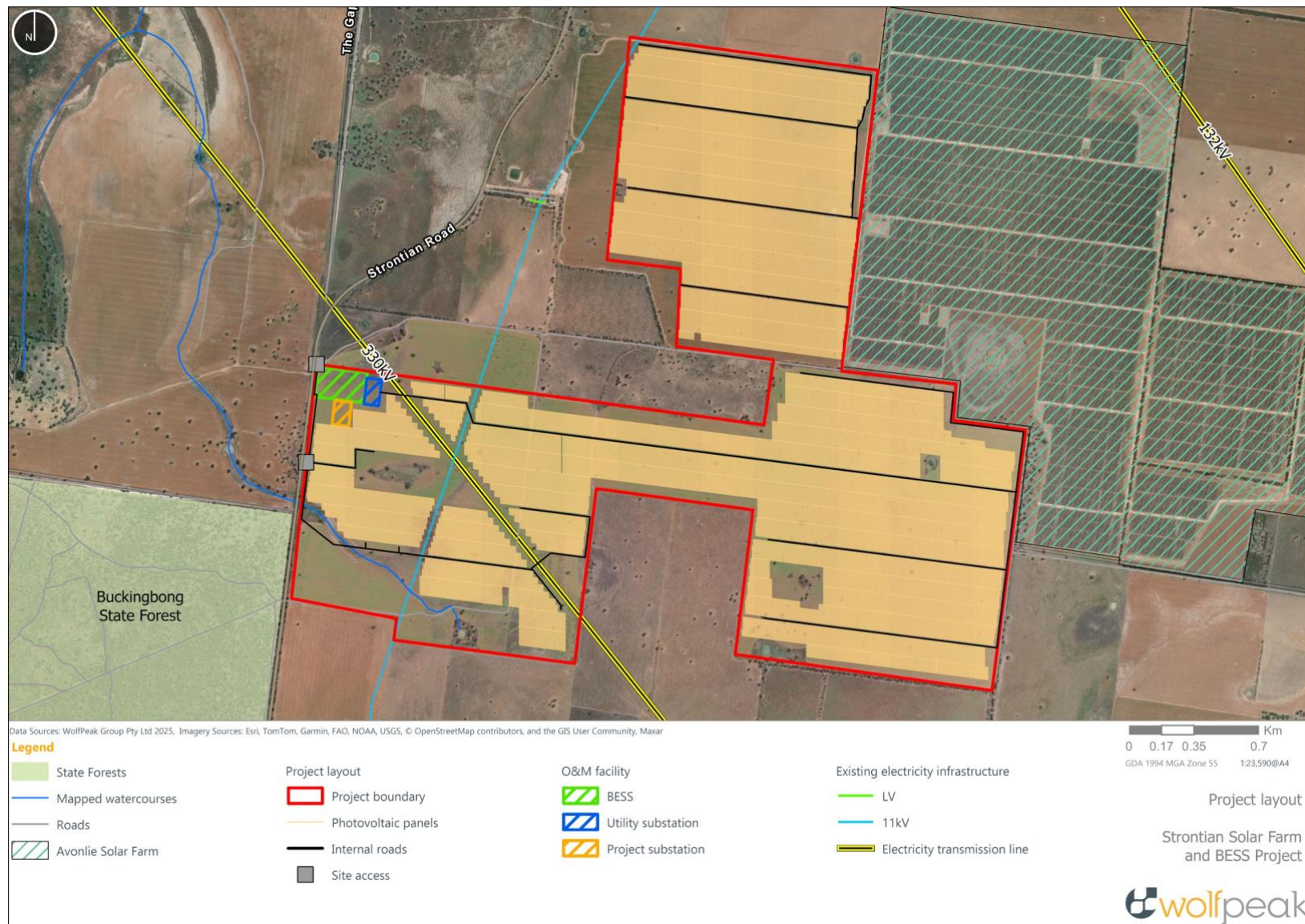


Figure 19: Concept layout of the project

3.2.2 Transmission connection

An existing 330 kV transmission line (Wagga 330 to Darlington Point) crosses the project site. An on-site electrical substation and connection to the Transgrid 330 kV Wagga Wagga to Darlington Point transmission network, subdivision of substation land (to be transferred to Transgrid upon completion).

3.2.3 Ancillary infrastructure

Supporting infrastructure will be required during construction and operations and will include:

- temporary construction facilities, including:
 - construction compound(s)
 - site office buildings
 - laydown areas
 - construction materials storage.
- a site office and operations and maintenance buildings (including offices, amenities and equipment storage sheds) with parking during operations
- other associated permanent infrastructure, including:
 - hardstands
 - new access tracks
 - access points from the public road network.

Security fencing to a height of 2.4 m will also be installed around the perimeter of the solar farm and high voltage electrical equipment such as the BESS and on-site substation. Signage will be clearly displayed identifying hazards present within the development footprint.

Lighting, lighting protection, security cameras and weather stations will be installed where necessary for safety, maintenance, and security purposes. Landscaping may also be implemented where necessary to reduce the visibility of infrastructure associated with the project.

3.2.4 Construction methodology

3.2.4.1 Overview

Construction works will commence as soon as possible following development consent (which is estimated in late 2026). The project would be constructed over a period of approximately 18 to 24 months, with peak construction occurring over a period of 12 to 18 months. The key construction activities would include the following:

- groundcover clearing and levelling
- construction of concrete footings on which the batteries will be installed upon
- upgrade of existing access and egress points and access tracks to the project area
- security fencing and landscaping

- construction of a permanent carpark and temporary construction laydown area
- installation of the solar arrays
- installation of battery containers, high-voltage (HV) stations and associated electrical equipment
- installation of the HV transformer(s)
- installation of HV electrical equipment
- installation of earthing system and installation of lighting.

Construction hours would likely be restricted to the recommended standard hours for construction work outlined in the Interim Construction Noise Guideline (DECC, 2009), which are:

- Monday to Friday 7 am to 6 pm
- Saturday 8 am to 1 pm
- No work on Sundays or public holidays.

Any variations to the standard hours for construction work would be undertaken consistent with the requirements of the planning approval. In general, construction outside the recommended standard hours would be limited to:

- the delivery of oversized plant or structures that police or other authorities determine require special arrangements to transport along public roads
- emergency work to avoid the loss of life or damage to property, or to prevent environmental harm
- maintenance and repair of public infrastructure where disruption to essential services and/or considerations of worker safety do not allow work within standard hours
- public infrastructure works that shorten the length of the project and are supported by the affected community
- works where a proponent demonstrates and justifies a need to operate outside the recommended standard hours.

Temporary infrastructure required during construction will include temporary construction compounds, laydown areas and internal access tracks. Minor earthworks may be required for the preparation of the project footprint, including site levelling, access track formation and drainage works. The majority of infrastructure will be prefabricated off-site, delivered and assembled on-site.

Where required, additional or improved drainage channels, sediment control ponds and dust control measures will be implemented. Laydown areas, waste handling, fuel and chemical storage areas will be strategically placed to minimise potential environmental impacts during construction.

Access to the project site would be via 2 existing access points located on Strontian Road.

3.2.4.2 Workforce

A workforce of approximately 250 to 300 staff would be required on site during construction. Narrandera Shire Council and local businesses will be consulted throughout the development and assessment of the project regarding managing potential impacts and opportunities for accommodation of the project's construction workforce. The construction workforce would be sourced from the local area as far as practicable.

The temporary construction workforce is proposed to be accommodated in existing hotels, motels, caravan parks and Airbnb accommodation in Narrandera. If accommodation constraints were to emerge during preparation of the SIA, the project team will develop alternative worker accommodation strategies within the broader region. The social locality has a capacity of around 400 beds in commercial accommodation establishments, not including Airbnb accommodation.

Potential cumulative impacts on accommodation, infrastructure, and services will be considered in the EIS as part of the social impact assessment, and a workforce accommodation strategy will be developed during detailed design of the project.

The workforce required for construction related activities would generally include (but not be limited to) the following on- and off-site activities:

- installation of PV support structures
- fabrication
- vehicle and equipment hire
- earthworks
- foundations
- engineering services
- roads and access tracks
- transport and logistics
- assembly and installation of PV panels
- accommodation
- electrical works (cabling and connections)
- installation of monitoring equipment
- fencing
- landscaping
- trade services
- fuel supplies
- security
- waste disposal
- business, finance and administrative services
- catering.

3.2.5 Operation and decommissioning

The expected operational life of the project is 30 years, dependent on the nature of solar PV technology and market demands. Following the initial operating period, a decision will be made to either decommission or re-power the facility, subject to approval requirements.

If the solar farm is to be decommissioned, all above ground infrastructure would be dismantled and removed from the project site in accordance with a future Decommissioning Plan, and the site would be returned to its previous condition and land use. The disposal and recycling of project infrastructure will be completed consistent with contemporary waste management legislation and practices at the time of decommissioning. Where practicable, efforts will be made to reduce wastes disposed to landfill, in line with best practice sustainability principles.

Alternatively, the project site may be upgraded and re-powered with new PV equipment. If re-powering the project is agreed, an appropriate stakeholder consultation process will be undertaken, and all necessary approvals will be sought and aligned with contemporary relevant legislation.

3.2.6 Capital investment value

The project would have an estimated capital investment value of >\$30 million. A quantity surveyor's report would be prepared during the EIS process as part of the project which would confirm the capital investment cost.

3.2.7 Subdivision

Transgrid required freehold title to the switchyard lot to proceed with the construction of the substation and associated connection to the Wagga 330 to Darlington Point transmission line; therefore, consultation will be carried out with Transgrid regarding how the switchyard infrastructure will be owned and operated. The area to be subdivided at the switchyard site is yet to be finalised; however, initial project design indicates a location within Lot 1 DP220430. The land is zoned RU1 Primary Production with a minimum lot size of 400 ha; therefore, any proposed subdivision will require the approval of the Minister for Planning and Public Spaces under the provisions of s 4.38 of the EP&A Act.

Once the location of the substation is determined, and it is confirmed that subdivision is required, the proposed subdivision will be discussed with Narrandera Shire Council (NSC), DPHI and the project landholders, and a subdivision certificate will be obtained from NSC for the subdivision of the SSD in accordance with s 6.5(3) of the EP&A Act.

The development footprint will be leased under a private arrangement with the landholders. Given the project has been refined following the assessment of site constraints, it does not follow cadastral boundaries, and the project will require a lease subdivision over the individual lots specified in Table 2. The subdivision over individual lots will be administrative only, and no actual subdivision would occur to create a new freehold lot

3.3 Alternatives considered

Consistent with the State significant development guidelines – preparing a scoping report, an analysis of feasible alternatives has been carried out having regard to the objectives of the development, including the consequences of not carrying out the development. Analysis of feasible alternatives are discussed in Table 5.

Table 5: Analysis of alternatives considered

| Option | Comments |
|---------------------------------|---|
| Option 1 – Do nothing | <p>The 'do nothing' option would allow for the continued use of the land for agricultural cropping and grazing activities; however, this would preclude the strategic benefits outlined in Section 2.</p> <p>Considering the potentially negative impacts the continued use of fossil fuel electricity generation and climate change would have on land uses, biodiversity and human health among other effects, it is considered that the benefits of proceeding with the development of this project, which will provide clean renewable energy generation and storage, overwhelmingly outweighs the alternative of continuing with the status quo of fossil fuel generation and doing nothing. Therefore, the 'do nothing' alternative is not deemed favourable.</p> |
| Option 2 – Alternative location | <p>The Applicant has undertaken a detailed site suitability analysis and due diligence to inform the site selection at this location using parameters such as landowner and community support, solar resource, biodiversity, access, distance to sensitive land uses and receivers, hydrology, value of agricultural land, amenity and proximity to and capacity of the electricity network.</p> <p>Compared to alternative sites that were considered, the project site was identified as containing the least number of constraints for the development of the renewable energy project.</p> |

| Option | Comments |
|---|---|
| Option 3 – Strontian Road Solar Farm (preferred option) | After site selection, the design and layout of the project was further refined following the assessment of site constraints. The initial project design responded to identified constraints and a refined development was optimised to avoid areas with ecological constraints, and to avoid an ephemeral water creek crossing the site, following ecologically sustainable development principles while maximising the optional energy generation and storage. |

4. STATUTORY CONTEXT

The key statutory requirements for the project having regard to the EP&A Act and EP&A Regulation, other NSW and Commonwealth legislation, and environmental planning instruments are encapsulated in Table 6 and Table 7, which has been set out consistent with the State significant development guidelines – preparing a scoping report to cover the following:

- power to grant consent (i.e. approval pathway)
- permissibility
- consistent approvals
- Commonwealth approvals
- approvals not required (pursuant to s 4.41 of the EP&A Act)
- pre-conditions to exercising the power to grant consent
- mandatory matters for consideration.

Detailed consideration of relevant statutory requirements will be provided in the EIS.

Table 6: Key statutory requirements for the project

| Approval | Requirement |
|--|--|
| Power to grant consent | |
| <p><i>State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP),</i></p> <p><i>Environmental Planning and Assessment Act 1979 (EP&A Act)</i></p> | <p>Pursuant to s 2.6 of the Planning Systems SEPP:</p> <p>(1) development is declared to be State significant development for the purposes of the Act if—</p> <p>(a) the development on the land concerned is, by the operation of an environmental planning instrument, not permissible without development consent under Part 4 of the Act, and</p> <p>(b) the development is specified in Schedule 1 or 2.</p> <p>Section 20 of Schedule 1 of the Planning Systems SEPP states that the following is considered SSD:</p> <p><i>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—</i></p> <p>(a) has an estimated development cost of more than \$30 million, or</p> <p>(b) has an estimated development cost of more than \$10 million and is located in an environmentally sensitive area of State significance.</p> <p>The project requires development consent and would have a capital investment cost estimate of more than \$30 million, which meets the criteria specified in Schedule 1 of the Planning Systems SEPP; therefore, the project is classified as State significant development pursuant to Div 4.7, s 4.36(2) of the EP&A Act.</p> <p>The Minister for Planning and Public Spaces is the consent authority for SSD, and SSD applications are assessed by DPHI, unless the Independent Planning Commission is declared the consent authority by an environmental planning instrument. Pursuant to s 2.7 of the Planning Systems SEPP:</p> <p>(1) The Independent Planning Commission is declared, under section 4.5(a) of the Act, to be the consent authority for any of the</p> |

| Approval | Requirement |
|--|--|
| | <p>following development that is State significant development unless the application to carry out the development is made by or on behalf of a public authority or unless the development is declared to be State significant infrastructure related development under subsection (2)—</p> <ul style="list-style-type: none"> (a) development in respect of which the council of the area in which the development is to be carried out has duly made a submission by way of objection under the mandatory requirements for community participation in Schedule 1 to the Act, (b) development in respect of which at least 50 submissions (other than from a council) have duly been made by way of objection under the mandatory requirements for community participation in Schedule 1 to the Act, (c) development the subject of a development application made by a person who has disclosed a reportable political donation under section 10.4 to the Act in connection with the development application. |
| Permissibility | |
| <p><i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (Transport and Infrastructure SEPP),</p> <p><i>Narrandera Local Environmental Plan 2013</i> (Narrandera LEP)</p> | <p>The project is situated on land zoned RU1 Primary Production under the Narrandera LEP. Electricity generating works are prohibited within this zone under the Narrandera LEP; however, pursuant to s 2.36 of the Transport and Infrastructure SEPP:</p> <ul style="list-style-type: none"> (1) Development for the purpose of electricity generating works may be carried out by any person with consent on the following land— <ul style="list-style-type: none"> (a) in the case of electricity generating works comprising a building or place used for the purpose of making or generating electricity using waves, tides or aquatic thermal as the relevant fuel source—on any land, (b) in any other case—any land in a prescribed non-residential zone. <p>Pursuant to s 2.35 of the Transport and Infrastructure SEPP, the land use zone RU1 Primary Production is a prescribed non-residential zone; therefore, the project is permissible with consent pursuant to s 2.36(1) of the Transport and Infrastructure SEPP.</p> |
| Consistent approvals | |
| <p><i>Protection of the Environment Operations Act 1997</i> (POEO Act)</p> | <p>The POEO Act is the key piece of environment protection legislation administered by the NSW Environment Protection Authority. It regulates pollution to the environment and requires licences for environment protection including waste, air, water and noise pollution control.</p> <p>Section 48 of the POEO Act requires an environment protection licence (EPL) to undertake scheduled activities at any premises. Scheduled activities are defined in Schedule 1 of the POEO Act.</p> <p>Solar farms are not a scheduled activity and therefore an EPL is not required.</p> |
| <p><i>Roads Act 1993</i></p> | <p>The project will require consent from the local road authority, Narrandera Shire Council, for works undertaken under s 138 of the Roads Act.</p> <p>Pursuant to s 4.42(1) of the EP&A Act, an authorisation of the following kind cannot be refused if it is necessary for carrying out State significant</p> |

| Approval | Requirement |
|--|--|
| | <p>development that is authorised by a development consent under this Division and is to be substantially consistent with the consent—</p> <p>...</p> <p>(f) a consent under section 138 of the <i>Roads Act 1993</i>...</p> |
| Commonwealth approvals | |
| <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) | <p>Approval from the Minister for the Commonwealth Department of Climate Change, Energy, the Environment and Water (Cth DCCEEW) is required for any action that will or is likely to have a significant impact on one or more matters of national environmental significance (MNES). At this stage of the assessment process 2 TECs, the White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland, which is listed as critically endangered, and the Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-Eastern Australia, which is listed as endangered, have been identified within the project site. A referral to the Cth DCCEEW will therefore be lodged in order to obtain Supplementary SEARs. The assessment of Commonwealth matters can be efficiently 'streamlined' consistent with the bilateral agreement between the NSW government and the Australian government, which allows NSW to assess projects on behalf of the Commonwealth.</p> |
| <i>Native Title Act 1993</i> (NT Act) | <p>A search of the National Native Title Tribunal (NNTT) geospatial viewer (NNTT, 2025) was undertaken on 22 July 2025 which did not identify any Native Title Applications, Determinations, or Indigenous Land Use Agreements within the study area. Notwithstanding, a detailed review of native title will be undertaken for the project during the EIS.</p> |
| Approvals not required | |
| <p><i>Fisheries Management Act 1994,</i> <i>Heritage Act 1977,</i> <i>National Parks and Wildlife Act 1974,</i> <i>Rural Fires Act 1997,</i> <i>Water Management Act 2000.</i></p> | <p>Pursuant to s 4.41 of the EP&A Act, the following authorisations are not required for State significant development that is authorised by a development consent granted after the commencement of this Division (and accordingly the provisions of any Act that prohibit an activity without such an authority do not apply)—</p> <p>...</p> <ul style="list-style-type: none"> (b) a permit under section 201, 205 or 219 of the <i>Fisheries Management Act 1994</i>, (c) an approval under Part 4, or an excavation permit under section 139, of the <i>Heritage Act 1977</i>, (d) an Aboriginal heritage impact permit under section 90 of the <i>National Parks and Wildlife Act 1974</i>... (f) a bush fire safety authority under section 100B of the <i>Rural Fires Act 1997</i>, (g) a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the <i>Water Management Act 2000</i>. |

Table 7: Pre-conditions that must be satisfied prior to consent

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|--|--|--|
| Environmental Planning and Assessment Regulation 2021 (EP&A Regulation) | | |
| Section 1.3 Objects of Act | <p>The objects of the EP&A Act are as follows—</p> <ul style="list-style-type: none"> (a) 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, (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment, (c) to promote the orderly and economic use and development of land, (d) to promote the delivery and maintenance of affordable housing, (e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats, (f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage), (g) to promote good design and amenity of the built environment, (h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants, (i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State, (j) to provide increased opportunity for community participation in environmental planning and assessment. | The objects of the EP&A Act will be considered in the EIS. |
| Section 4.15 Evaluation | <p>Pursuant to s 4.15(1) of the EP&A Act, the consent authority is to take into consideration the following relevant matters:</p> <ul style="list-style-type: none"> • environmental planning instruments relevant to the project, including: | The requirements of s 4.15 of the EP&A Act will be considered in the EIS, with the exception of relevant development control plans, which do not apply to SSD (s 2.10 of the Planning Systems SEPP). |

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|--|---|---|
| | <ul style="list-style-type: none"> ◦ <i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i> ◦ <i>State Environmental Planning Policy (Resilience and Hazards) 2021</i> ◦ <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> • relevant development control plans • 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 • the public interest. | |
| Section 23 Persons who may make development applications | <p>Pursuant to s 23 of the EP&A Regulation:</p> <ol style="list-style-type: none"> (1) A development application may be made by— <ol style="list-style-type: none"> (a) the owner of the land to which the development application relates, or (b) another person, with the written consent of the owner of the land. | Landowner's consent will accompany the SSD application. |
| Section 173 Application to Planning Secretary for environmental assessment requirements | <p>Pursuant to s 173 of the EP&A Regulation:</p> <ol style="list-style-type: none"> (1) Before preparing an environmental impact statement, the responsible person must apply to the Planning Secretary for the environmental assessment requirements for the environmental impact statement. (2) The application must— <ol style="list-style-type: none"> (a) be in the approved form, and (b) contain details of the location, nature and scale of the development or activity. (3) If the application relates to State significant development, the applicant must have regard to the State Significant Development Guidelines in preparing the application. | This SR has been prepared consistent with the State significant development guidelines – preparing a scoping report (DPIE, 2022a) and s 173 of the EP&A Regulation. |
| Section 190 Form of environmental impact statement | <p>Pursuant to s 190 of the EP&A Regulation:</p> <ol style="list-style-type: none"> (1) An environmental impact statement must contain the following information— <ol style="list-style-type: none"> (a) the name, address and professional qualifications of the person who prepared the statement, (b) the name and address of the responsible person, (c) the address of the land— | The EIS will be prepared consistent with the requirements of s 190 of the EP&A Regulation. |

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|--|--|---|
| | <ul style="list-style-type: none"> (i) to which the development application relates, or (ii) on which the activity or infrastructure to which the statement relates will be carried out, (d) a description of the development, activity or infrastructure, (e) an assessment by the person who prepared the statement of the environmental impact of the development, activity or infrastructure, dealing with the matters referred to in this Division. <p>(2) The person preparing the statement must have regard to—</p> <ul style="list-style-type: none"> (a) for State significant development—the State Significant Development Guidelines, or (b) for State significant infrastructure—the State Significant Infrastructure Guidelines. <p>(3) An environmental impact statement must also contain a declaration by a relevant person that—</p> <ul style="list-style-type: none"> (a) the statement has been prepared in accordance with this Regulation, and (b) the statement contains all available information that is relevant to the environmental assessment of the development, activity or infrastructure, and (c) the information contained in the statement is not false or misleading, and (d) for State significant development or State significant infrastructure—the statement contains the information required under the Registered Environmental Assessment Practitioner Guidelines. | |
| Section 192 Content of environmental impact statement | <p>Pursuant to s 192 of the EP&A Regulation:</p> <ul style="list-style-type: none"> (1) An environmental impact statement must contain the following— <ul style="list-style-type: none"> (a) a summary of the environmental impact statement, | <p>The EIS will be prepared consistent with the requirements of s 192 of the EP&A Regulation.</p> |

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|----------|---|---------|
| | <ul style="list-style-type: none"> (b) a statement of the objectives of the development, activity or infrastructure, (c) an analysis of feasible alternatives to the carrying out of the development, activity or infrastructure, considering its objectives, including the consequences of not carrying out the development, activity or infrastructure, (d) an analysis of the development, activity or infrastructure, including— <ul style="list-style-type: none"> (i) a full description of the development, activity or infrastructure, and (ii) a general description of the environment likely to be affected by the development, activity or infrastructure and a detailed description of the aspects of the environment that are likely to be significantly affected, and (iii) the likely impact on the environment of the development, activity or infrastructure, and (iv) a full description of the measures to mitigate adverse effects of the development, activity or infrastructure on the environment, and (v) a list of the approvals that must be obtained under another Act or law before the development, activity or infrastructure may lawfully be carried out, (e) a compilation, in a single section of the environmental impact statement, of the measures referred to in paragraph (d)(iv), (f) the reasons justifying the carrying out of the development, activity or infrastructure, considering biophysical, economic and social factors, including the principles of ecologically sustainable development set out in section 193. | |

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|--|---|--|
| Biodiversity Conservation Act 2016 (BC Act) | | |
| Section 7.9 Biodiversity assessment for State significant development or infrastructure | Pursuant to s 7.9 of the BC Act, an SSD application is to be accompanied by a biodiversity development assessment report (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. | A BDAR consistent with the Biodiversity Assessment Method (BAM) will be prepared to accompany the EIS. |
| Conveyancy Act 1919 | | |
| Division 3A Transactions with respect to existing lots | The development footprint will require a lease from the owners of the affected land. Lease of a solar farm site is treated as a lease of premises, regardless of whether the lease will be for more or less than 25 years. | As the registered survey plan defines 'premises' (being the solar panels or battery sites etc) it will not constitute a 'current plan' within the meaning of section 7A of the <i>Act 1919</i> and therefore will not require subdivision consent as this is one of the exemptions under section 23G <i>Conveyancing Act 1919</i> (NSW LRS, 2025). |
| Crown Land Management Act 2016 (CrLM Act) | | |
| Division 5.6 Licences over Crown land | The project site is adjoined by sections of unformed Crown Road. Pursuant to s 1.15 of the CrLM Act, Crown land must not be occupied, used, sold, leased, licensed, dedicated, reserved or dealt with in any other way unless it is authorised by the relevant Crown land authority. Pursuant to Division 5.6, s 5.21 of the CrLM Act: (1) A licence may authorise the use or occupation of Crown land for the purposes that the Minister thinks fit. | An easement, licence or permit under Division 5.6 of the CrLM Act will be obtained for the Crown road between Lot 23 and Lot 71 of DP754538 shown in Figure 3. |
| State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Biodiversity and Conservation SEPP) | | |
| Chapter 3 Koala habitat protection 2020, | The project is situated on land zoned RU1 Primary Production, and the Narrandera LGA is listed under Schedule 2 of the Biodiversity and Conservation SEPP which applies to Chapter 3. | The BDAR prepared for the EIS will consider Koala habitat protection consistent with Chapter 3 of the Biodiversity and Conservation SEPP. |
| State Environmental Planning Policy (Resilience and Hazards) 2021 (Resilience and Hazards SEPP) | | |
| Section 3.7 Consideration of Departmental guidelines | Pursuant to s 3.7 of the Resilience and Hazards SEPP: In determining whether a development is— (a) a hazardous storage establishment, hazardous industry or other potentially hazardous industry, or | The EIS will consider the following relevant departmental guidelines: <ul style="list-style-type: none"> Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 |

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|--|--|--|
| | <p>(b) an offensive storage establishment, offensive industry or other potentially offensive industry,</p> <p>consideration must be given to current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development.</p> | <ul style="list-style-type: none"> Hazardous Industry Planning Advisory Paper No 3: Risk Assessment Hazardous Industry Planning Advisory Paper No 12: Hazards-Related Conditions of Consent. |
| Section 4.6 Contamination and remediation to be considered in determining development application | <p>Pursuant to s 4.6 of the Resilience and Hazards SEPP:</p> <p>(1) A consent authority must not consent to the carrying out of any development on land unless—</p> <p>(a) it has considered whether the land is contaminated, and</p> <p>(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and</p> <p>(c) 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.</p> | <p>The project site is not listed in the NSW Environment Protection Authority's contaminated land record or the list of notified sites. Notwithstanding, the EIS will consider the potential for the project to impact on contaminated land.</p> |
| State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) | | |
| Section 2.48 Determination of development applications—other development | <p>Section 2.48(1)(b) of the Transport and Infrastructure SEPP applies to a development application for development carried out—</p> <p>(i) within or immediately adjacent to an easement for electricity purposes (whether or not the electricity infrastructure exists), or</p> <p>(ii) immediately adjacent to an electricity substation, or</p> <p>(iii) within 5m of an exposed overhead electricity power line.</p> <p>(2) Before determining a development application (or an application for modification of a consent) for development to which this section applies, the consent authority must—</p> <p>(a) give written notice to the electricity supply authority for the area in which the development is to be</p> | <p>Written notice will be required to be given to the relevant electricity authority during the EIS phase.</p> |

| Approval | Pre pre-conditions to exercising the power to grant consent | Comment |
|---|--|---------|
| | <p>carried out, inviting comments about potential safety risks, and</p> <p>(b) take into consideration any response to the notice that is received within 21 days after the notice is given.</p> | |
| Narrandera Local Environmental Plan 2013 | | |
| The EIS will consider the relevant objectives and land uses for land zoned RU1 Primary Production under the Narrandera LEP. | | |

5. COMMUNITY ENGAGEMENT

5.1 Social Impact Assessment Scoping Report

A Social Impact Assessment Scoping Report (SIASR) (Appendix D) has been prepared consistent with the following guidelines:

- Social Impact Assessment Guideline (DPHI, 2025a)
- Technical Supplement: Social Impact Assessment Guideline for State Significant Project (DPHI, 2025b)
- Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024b).

The purpose of the SIASR is to:

- Establish a preliminary social baseline and social locality for the project.
- Identify and determine the size and scale of likely social impacts of the project.
- Identify project activities that could have social impacts and group them against the categories presented in the Social Impact Assessment Guideline.
- Provide a summary of potential social impacts that require additional assessment (scoping worksheet).
- Establish appropriate methodologies to investigate and assess project related social impacts.
- Provide a brief overview of potential management measures and ongoing monitoring.

The SIASR and the SIA Scoping Worksheet seeks to provide an initial understanding and foundation the issues or opportunities identified that the project presents within the social locality and an initial evaluation of predicted social impacts associated with the project.

A Social Impact Assessment (SIA) will be prepared for the EIS and will be used to identify, predict and evaluate the likely social impacts of a project. It also proposes responses that aim to avoid, mitigate or reduce negative impacts and enhance positive impacts (DPHI, 2025a). Social Impact Assessments generally occur across 3 phases from project development and scoping, through assessment and into post approval (Figure 20). The SIASR provides the outcomes of the first phase (the Social Impact Assessment [SIA] scoping phase).

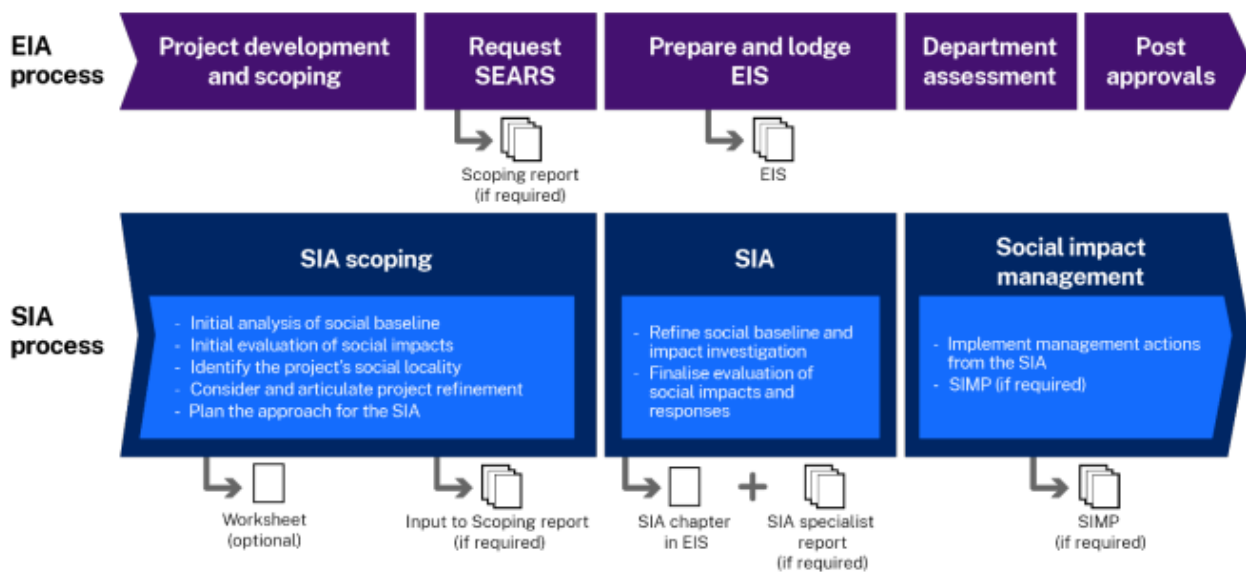


Figure 20: Social Impact Assessment phases aligned with the EIA process (source: DPHI, 2025a)

5.1.1 Scoping phase engagement research methodology and key project stakeholders

The Applicant recognises that respectful, inclusive, and meaningful engagement is fundamental to the development of rural renewable energy projects and a key component of State significant projects. Stakeholder and community engagement commenced in July 2023 when the Applicant began preliminary project planning. The ongoing engagement and research methods summarised in Table 8 have continued which have facilitated the project's preliminary social impact assessment.

Table 8: Scoping engagement methods

| Method | Date of activity | Method details |
|--|---------------------|--|
| Phone calls and direct meetings with project site property landowner | Jan – July 2025 | Ongoing contact with the project site's property owner to develop the relationship, build trust and highlight the Community Perceptions Survey (CPS), and the letterbox distribution/publicity program as part of the community engagement to be undertaken at this early stage. |
| Meetings with proximal landowners | July 2025 – ongoing | Face-to-face meetings have been held with landowners identified as private receivers, who own the majority of land directly surrounding the proposed development area. Phone discussions have also been conducted with additional nearby landowners, who are willing to meet and discuss the project. |
| Stakeholder meetings | June – July 2025 | Stakeholder meetings have been held with: Gundyarri Narrandera Aboriginal Corporation, Narrandera Local Aboriginal Land Council (Narrandera LALC), Narrandera Shire Council, Narrandera Business Organisation, Wagga Wagga City Council, and Narrandera TAFE to introduce the project and obtain feedback and prior experiences in relation to solar farms and BESS's in the region. |

| Method | Date of activity | Method details |
|--|---------------------|--|
| Strontian Solar Farm project webpage | June 2025 – ongoing | <p>A website has been developed and has been online since June 2025: https://strontiansolarfarm.com/.</p> <p>The website provides clear and transparent information regarding the project, including a project overview, question and answer document, why the site was chosen, news updates and a stay informed option for interested peoples. There is a QR code providing a link to the online community survey form and contact information provided to the Senior Project Manager via mobile and email.</p> |
| Community Introduction Letter distribution | June – July 2025 | <p>A project information letter was hand-delivered to the letterboxes of all properties adjacent the project site, and to all properties along East Street in the Narrandera town centre. The letter introduced the Strontian Solar Farm project, and invited participation in the SIA providing feedback on the application and any other information requests.</p> |
| Online stakeholder survey | June – July 2025 | <p>An online stakeholder survey has been developed to explore community sentiment towards the project which sought to better understand the interest, concerns and opportunities from people in the region regarding the project. The survey results were used to inform the SIA scoping assessment.</p> <p>The online survey was available online for a period of 6 weeks and was also on the letters distributed to neighbouring properties and Narrandera town centre. There have been only 2 responses to date.</p> |

Source: The Social Aspect (2025).

The SIASR also identifies a number of key stakeholders and rights holder groups which are likely to be interested in the project, several of which have already been contacted. Table 9 summarises the key stakeholders and rights holder groups identified in the SIASR.

Table 9: Stakeholder and rights holder groups and their defining characteristics

| Stakeholder group | Defining characteristics |
|---------------------------------|---|
| 1. Adjacent and near neighbours | <p>Sixteen dwellings are located within 5 km of the project site.</p> <p>The surrounding landscape of the project is generally flat, with no elevated views of the project site within 5 km. The nearest private receivers are located over 1.5 km from the project site; therefore, it is considered unlikely that any neighbour would be adversely affected by view, noise or vibrations. The closest private receivers and their distance to the project are detailed in the SIASR.</p> <p>Face-to-face ongoing consultation and direct feedback is being carried out with all proximal landowners who line on the land ('private receivers') as they are the key stakeholder group and that may be potentially impacted by the project. Additionally, key stakeholder feedback will facilitate design iteration and any mitigation and management measures if required, or with the development of specific plans of management (i.e. screening visual impacts). This will be determined once the EIA/SIA is undertaken in the next phase of the development.</p> |
| 2. Adjacent businesses | <p>The nearest business is the Avonlie Solar Farm, adjacent to the site, followed by the Newell Motor Inn, Narrandera Caravan Park, Ampol Service Station and Mobil Service Station located in Gillenbah approximately 17 km northeast of the project site. The businesses would not be adversely impacted by construction or operation</p> |

| Stakeholder group | Defining characteristics |
|---|---|
| | <p>of the solar farm and would benefit from the temporary construction phase accommodation demand from the project.</p> <p>Farming activities will be addressed with the group above.</p> |
| 3. Local businesses | <p>Apart from the Avonlie Solar Farm and farming activities, no other local businesses are located within 5 km of the site. Other businesses are located and operating in Narrandera town centre. These businesses are unlikely to experience any negative impact and a number of them will benefit through supplier and contracting arrangements with the development during both the construction and operational period.</p> <p>As a consequence of the development, positive impacts would be generated during the construction period, in particular through demand for accommodation, catering, supply of tools, plant, fuel, services, labour, and other multiplier impacts from the proposed development. Local businesses would be given the opportunity to tender for the supply of services for the project both during construction and during operation.</p> |
| 4. Representative bodies, government agencies and elected representatives | <p>Representatives of groups including the Narrandera Visitors Information Centre; NSC officers and Councillors; Narrandera Landcare; local, State and National Members of Parliament; and the Narrandera Business Group.</p> <p>Other agencies would include: the local Department of Primary Industries and Regional Development Agriculture Policy Officer; Department of Planning, Housing and Infrastructure: Water; Fire and Rescue NSW; NSW Rural Fire Service; and the Forestry Corporation of NSW.</p> |
| 5. Local media | <p>There are 2 main newspapers distributed in the area:</p> <ul style="list-style-type: none"> The Area News is a Griffith based newspaper, and is circulated locally (Newspapers.com.au 2017). The Narrandera Argus is an independent bi-weekly newspaper published and circulated locally in the LGA. <p>Further, Narrandera's Community Radio Station (91.1FM) provides 24/7 programming.</p> |
| 6. Broader community | <p>Despite the minimal interest in the project to date, it is likely to be of growing interest to the broader local and regional community, as the project would be a large new development for the broader community with good opportunities for local businesses and training and employment opportunities during construction and operation.</p> |
| 7. Narrandera LGA | <p>The project would be an exciting new development for the LGA and aligns with the Narrandera Economic Development Strategy (NSC, 2024).</p> |
| 8. Aboriginal stakeholders and the Narrandera LALC | <p>No Aboriginal sites have previously been recorded within the project's development footprint, including along the length of Strontian Road from the Sturt Highway/Strontian Road intersection to the project site; however, 79 Aboriginal sites have previously been recorded within the boundaries of the adjacent Avonlie Solar Farm. Site investigations shall be carried out during the EIS phase to understand the Aboriginal heritage potential of the site.</p> <p>There are no Native Title Claims, Native Title Determinations or Indigenous Land Use Agreements present within or near the project site.</p> |

Source: The Social Aspect (2025).

5.1.2 Preliminary social baseline

5.1.2.1 Regional context

The project is located in Sandigo, NSW, within the Narrandera LGA approximately 17 km southeast of Narrandera. Narrandera Shire is situated centrally in the Riverina region of NSW, 554 km southwest of Sydney, 339 km west of Canberra and 437 km north of Melbourne. Narrandera is equidistant from the major regional centres of Wagga Wagga (99 km to the east) and Griffith (98 km to the west) which are approximately an hour away. Both major centres support the community by providing health and educational services (NSC, 2020).

The SIASR identifies the Narrandera Shire hosts a diverse economic base and is well equipped with key services, including:

- freight and transport services
- auto mechanics
- construction firms
- engineering services
- trade Suppliers (Mitre 10, Home, Timber & Hardware)
- fuel supplies
- commercial and private accommodation
- medical and emergency services including:
 - Narrandera District Hospital, with an emergency department
 - Narrandera Medical Centre
 - NSW Rural Fire Service
 - Narrandera Police Station
 - Narrandera State Emergency Services (SES) unit
- bakeries, cafes, take-away food shops and restaurants
- entertainment (licensed hotels, clubs, sports and recreational facilities)
- banks and financial institutions
- real estate agents (multiple)
- postal services (Australia Post)
- employment agencies (Summit Employment and Training)
- retail services - including Coles, Woolworths, and IGA supermarkets
- Narrandera TAFE
- child care facilities
- tourist accommodation providers
- Narrandera LALC
- Gundyarri Narrandera Aboriginal Corporation.

The Leeton township is also located approximately 50 km north of the project site and has a number of services, infrastructure, and accommodation options.

5.1.2.2 Local context

The SIASR provides the following description of the local context associated with the project.

Narrandera LGA is the project's social locality, and the project developer has confirmed that most of the construction workforce will likely be housed within existing tourist accommodation facilities proximate to the site within the Narrandera LGA. Construction workers would therefore be spending part of their

incomes locally in Narrandera Construction workers may also choose to rent accommodation in the Narrandera LGA which will be examined in the SIA.

The township of Narrandera is the commercial and administrative centre of the LGA. The town is a small attractive tree-lined rural town which is in contrast to the open plains that surround it. Narrandera and its surrounds have a mixture of land uses, including an extensive dry-land area devoted to cereal crops and sheep and wool production to the east, and the Murrumbidgee MIA fed by water from the Burrinjuck Dam to the east. The MIA is a region where irrigation has opened the way to a diversity of enterprise, from the growing of rice and other cereals under irrigation to the production of citrus, wine grapes, potatoes, and increasingly, cotton and nuts. Narrandera is within the Southwest Slopes Bioregion of NSW, which is dominated by a sub-humid climate characterised by hot summers and no dry season.

The Shire has 2 villages, Barellan and Grong Grong, and 16 rural localities. The town is located in the central Riverina region of south-western NSW and lies on the junction of the Newell and Sturt highways, adjacent to the Murrumbidgee River, and it is considered the gateway to the Murrumbidgee Irrigation Area. It has a weekly train service to Sydney, and daily TrainLink coach service to Wagga Wagga and Griffith. Rail freight is connected via the Main Southern Railway line via the Temora – Roto branch line.

5.1.2.3 Initial overview on accommodation

The project is expected to span approximately 18 to 24 months with a construction workforce of approximately 250 to 300 staff required on site during construction. Non-local staff would require accommodation in the area during construction, which would include workers such as general management, project management and supervising engineers. Contract lengths will vary and there will be a need for a number of types of accommodation.

The majority of construction staff are proposed to be accommodated in hotels, caravan parks and Airbnb accommodation in the Narrandera LGA. If accommodation constraints emerge during preparation of the SIA, the project team will explore purpose-built worker accommodation within the Narrandera LGA, in collaboration with the Council and local business groups.

The SIASR identifies that “there is a range of accommodation options, including over 32 properties listed on Hotala in mid-2025 which encompasses hotels, motels, bed & breakfasts, vacation rentals, and caravan parks. In Airbnb, there are over 18 homes available within a 60 km radius of Narrandera town”. Further, the SIASR suggests commercial accommodation occupancy rate was approximately 50% in 2023, indicating capacity exists to host project workers locally.

Further assessment of accommodation will be carried out during the EIS development, with ongoing discussions between the Applicant and NSC.

5.2 Preliminary social impact assessment

The scoping engagement methods summarised in Table 8 facilitated the collection of primary data used for the Preliminary Social Impact Assessment (PSIA), while secondary data was also collected where possible. Data analysed for the PSIA predominately derived from the following:

- The community introduction letter and the Community Perceptions Survey which targeted local landholders, residents, businesses and stakeholders in the social locality, including in Narrandera.
- Meetings with representatives of NSC.

- Correspondence via email and telephone with the project stakeholders outlined in Table 9, seeking early feedback about the project.
- Separate key stakeholder meetings with representatives of the Narrandera LALC, NSC, Narrandera Business Organisation, Wagga Wagga City Council, and others.
- A rapid review of relevant literature and SIA reports related to other renewable energy industry projects in the wider area and adjacent LGAs.

Community engagement carried out for the project has facilitated the development of the PSIA, and is detailed in Table 10, while the matters and issues raised during community engagement sessions is provided in Table 11.

Table 10: Community engagement undertaken

| Stakeholder | Engagement description | Method | Results |
|---|--|---|-------------------------|
| All properties within 5 km radius of the project site | Introductions, information sharing, letters and fact sheet to introduce project and invite feedback | Face-to-face meetings and phone calls 13 letters hand delivered to letterboxes of surrounding properties | 6 meetings |
| Narrandera Shire Council | Meeting held to introduce project on 1 July 2025 | Face-to-face meeting | 1 meeting |
| Narrandera Business Group | Meeting held on 1 July 2025 | Face-to-face meeting | 1 meeting |
| Narrandera town residents | Letterbox drop with QR survey along main town road | Letterbox drop and information provided | 234 letters distributed |
| Wagga Wagga City Council | Meeting on 2 July 2025 – Introductions, information sharing, letters and fact sheet to introduce project and invite feedback | Face-to-face meeting | 1 meeting |
| Gundyarri Narrandera Aboriginal Corporation | Meeting 15 July 2025 | Face-to-face meeting | 1 meeting |
| Narrandera Local Aboriginal Land Council | Meeting 1 July 2025 | Face-to-face meeting and information provided and sought | 1 meeting |
| National Native Title Tribunal, Office of the Registrar, <i>Aboriginal Land Rights Act 1983</i> , Heritage NSW, Native Title Services (NTSCORP) | Letter sent | Letter by email and post | No reply |
| Narrandera TAFE | Meeting 6 August 2025 to introduce project | Meeting via teleconference | 1 meeting |

Source: The Social Aspect (2025).

Table 11: Matters and issues raised during community consultation

| Perceived positive impacts | Perceived negative impacts | Opportunities arising from proposed development (unprompted input) |
|---|--|---|
| Local employment (7) | Potential impacts on rental accommodation during construction (3) | Sponsorship and community support (6) |
| Local business opportunities (6) | Rural amenity disturbed (2) | SSF to work with the existing business supplier register that the SSF already has (2) |
| Diversification of local economic base (5) | Environmental disturbance and management (2) | Discounted energy for local community (1) |
| Legacy accommodation facility for the Shire (2) | Visual impacts (3) | Support for local community groups – RFS, Birrego Stock and Domestic water, Boree Creek P&C committee, Sandigo Hall committee (1) |
| Modernising the community (2) | Perceived loss of agricultural land (2) | Support for Gundyarri community group (1) |
| Sponsorship and community support (2) | Property price impact (1) | Training and employment and training for Indigenous community members (1) |
| Good location for the solar farm (1) | Sense of community disrupted due to influx of construction workers (1) | - |
| Improved environmental stewardship of proposed project land (1) | Sense of community cohesion due to neighbouring landowners not involved in land negotiations (1) | - |
| - | Potential fire risk from project (1) | - |
| - | Increased traffic during construction (1) | - |
| - | Potential salinity issues along SW creek line (1) | - |
| - | How to transition to ongoing employment for local post construction period (1) | - |
| - | Local road excavations being washed away (1) | - |

Source: The Social Aspect (2025).

The Social Impact Assessment Guideline (DHPI, 2025a) requires that the likely social impacts, both positive and negative, are analysed, and how they will be distributed. The social impacts are considered across 8 categories, which are summarised in Table 12.

Table 12: Likely social impact categories

| Social impact category | Impact definition |
|-------------------------|---|
| Way of life | How people live, how they get around, how they work, how they play, and how they interact each day. |
| Community | Composition, cohesion, character, how the community functions, resilience, and people's sense of place. |
| Accessibility | How people access and use infrastructure, services and facilities, whether provided by a public, private, or not-for-profit organisation. |
| Culture | Both Aboriginal and non-Aboriginal, including shared beliefs, customs, practices, obligations, values and stories, and connections to Country, land, waterways, places and buildings. |
| Health and wellbeing | Physical and mental health especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, access to open space and effects on public health. |
| Surroundings | Ecosystem services such as shade, pollution control, erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity. |
| Livelihood | People's capacity to sustain themselves through employment or business. |
| Decision-making systems | The extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms. |

To determine the likely social impacts of the project, the SIA scoping worksheet available in the Technical Supplement: Social Impact Assessment Guideline for State Significant Project (DPHI, 2025b) was populated to inform the SIA methodology. The completed SIA scoping worksheet is available in the SIASR, while the potential impacts considered relevant to the project and require further investigation in the SIA are:

- way of life (negative)
- community (positive, negative)
- accessibility (negative, positive)
- culture (negative)
- health and wellbeing (negative)
- surroundings (negative)
- livelihood (positive).

5.2.1 Likely social impacts requiring further assessment

5.2.1.1 Way of life

Loss of agricultural land is a growing issue for many people in rural communities that believe that there is a considerable amount of high-quality agricultural land being converted into renewable energy areas. This issue was not raised in any of the landholder meetings, the community survey, or the stakeholder meetings.

The solar panels selected for the project would facilitate the continuation of agricultural practices such as sheep grazing. The sheep are attracted to the shade provided by the panels, and the rows of green grass from the runoff.

5.2.1.2 Community

The project team met with stakeholders in mid-2025 and conveyed preliminary details of the project, the development process, and the project footprint. Initial meetings and feedback from some of the local community suggested that there is a guarded optimism regarding the proposed development in terms of improvements to the community character and modernising the Shire. Narrandera Shire Council noted that:

There has been almost no negative feedback from local residents to previous renewable energy developments in the Narrandera Shire.

This is largely due to the good reputation that the adjacent Avonlie Solar Farm has with the community. One representative from the Narrandera Business Group noted that:

...the Avonlie Solar Farm has been a positive outcome for us overall... there was a significant influx of construction personnel at the outset which caused some disruption, but this eased over time, and the town adjusted.

The NSC has therefore had good experiences with other renewable energy developments in the area with the Avonlie Solar Farm and the Devlin's Bridge Wind Farm, and is supportive of the economic benefits that can flow from such projects.

Whilst a number of stakeholders, including NSC, discussed the positive impact the project could have in terms of modernising and improving the community character, 2 respondents raised concerns about the rural and agricultural community character changing as a result of the development.

5.2.1.3 Accessibility

Access and availability to community sponsorships was raised in a number of the face-to-face meetings. There is the potential for the project to impact positively on people's access to community sponsorship, particularly when the project is operational. During the NSC meeting, representatives explained that it has a list of 'Future Projects' that it would like to fund, which could be supported by pooling developer contributions over time.

Accommodation for construction workers was also raised as a concern during several of the stakeholder meetings, although was not noted in the survey. A LALC representative suggested that:

...short term accommodation will be in demand and that the development will make things busy, but overall, the project will be good for the town with local investment.

The EIS will further assess accommodation requirements in conjunction with NSC.

5.2.1.4 Culture

Narrandera has a higher proportion of Indigenous Peoples than the State average. The Proponent will have a specific local and Indigenous employment focus, and with the approval of the existing Gundyarri Narrandera Aboriginal Corporation and the Narrandera LALC, will seek to build upon the existing positive arrangements that previous renewable energy developers have created.

In terms of Aboriginal heritage, the land surface within the site has been modified due to heavy and continual cropping. However, it is important to note that 79 of Aboriginal sites were found within the

adjacent property boundary of Avonlie Solar Farm. It is also important to note that the Guideline (DPHI, 2025a) explains that:

In addition to understanding the differential social impacts for Aboriginal people, a key objective of engaging with Aboriginal people for SIA – distinct from Cultural Heritage Assessment – is to help identify the risk of a project causing intangible harm through ‘cultural or spiritual loss’.

Correspondingly, this will be an important focus during the EIS development, to help identify the risk of a project causing intangible harm through ‘cultural or spiritual loss’. Cultural or spiritual loss is defined as ‘loss or diminution of traditional attachment to the land or connection to Country, and associated cultural obligations to care for Country, or loss of rights to gain spiritual sustenance from the land’ (DPHI, 2025a).

The project site is within the boundaries of the Narrandera LALC, and an Aboriginal Cultural Heritage Assessment of the project site would be completed as part of the EIS. As outlined in the Guideline quote above, consultation with representatives of local Aboriginal groups and the Narrandera LALC will be undertaken in more detail as part of the SIA consultation in Phase 2 and the assessment to determine if the project would adversely impact on Aboriginal sites or cultural beliefs. The Proponent is also open to the opportunity for cultural awareness training for construction personnel as part of project development, especially as there is a scarred tree adjacent to Strontian Road.

5.2.1.5 Health and wellbeing

The issue of a perceived increase in fire risk due to the land clearing and land use of a solar farm is a relatively common issue that is raised by communities and landowners living proximal and within a number of kilometres of a solar farm. The underlying issue here is the fear and anxiety of the solar farm and BESS construction and operations phase increasing the possibility of a fire. A fire management plan is therefore required to provide an appropriate level of information and communication to community members, including mitigation measures and management to ameliorate potential fire impacts to offsite land holdings.

5.2.1.6 Surroundings

5.2.1.6.1 Potential environmental impacts

Some of the survey participants raised concerns regarding the peaceful nature of the Narrandera Shire and the impact that the development may have on this. The project will introduce a solar farm and BESS into an agricultural community which may result in perceived and actual changes to community cohesion due to the introduction of the temporary workforce into the LGA through the construction period. The construction workforce is likely to be predominantly male which may have implications for gendered impacts to communities, and likely temporary changes to the composition of the community which is characterised as a tightknit community.

The EIS will further assess the potential for the project to impact the natural environment, and the potential for change in rural amenity, noting that the development will occur on existing cleared cropping land.

5.2.1.6.2 Visual impacts

Visual impacts are an issue of concern with neighbours to a solar farm; however, there are only 12 dwellings within 4 km of the project would reduce the magnitude of potential impacts. The community have also been living with other renewable energy facilities and there is a familiarity with the type of development, whereby familiarity is considered one of the best ways to reduce community

concern. The EIS will determine the visual amenity of the project and the need for any mitigation and management measures.

5.2.1.6.3 Perceived loss of agricultural land

The perceived loss of agricultural land is an issue for many people in rural communities that believe that there is a considerable amount of high-quality agricultural land being converted into renewable energy areas. This issue is also discussed in Section 5.2.1.1.

5.2.1.6.4 Increased traffic

The temporary construction period will see increased traffic within the locality. Some of the feedback nominated this impact, linking it to the construction period.

5.2.1.7 Livelihood

There is a high likelihood that the project will create positive social impacts through increased business opportunities. This particularly applies to the Narrandera town given the Applicant's commitment to focus its business opportunities and linkages here. The Narrandera Shire Council has supplier register for the town, and are keen to work with the Applicant to utilise this as part of their construction and procurement requirements.

Additionally, there is a feeling, particularly amongst the NSC and Narrandera businesses that were met, that the proposed development offers an opportunity to modernise and diversify the local economic base. Representatives of NSC showed particular interest in working with the Proponent on community activities of mutual benefit, particularly in relation to any potential workforce accommodation camp for use during construction. In addition, TAFE NSW – Narrandera identified its established Connected Learning Centre, which may be useful to the project as a local workplace training facility. This offers renewable energy preparatory and upskilling courses at the TAFE which would provide potential collaborative opportunities during construction and operation.

5.3 Social impact assessment methodology, monitoring, and management

Based on the results of the SIA scoping worksheet, the methodology proposed to assess the identified social impacts is summarised in Table 13.

Table 13: Social impact assessment methodology

| Social impact category (and aspect) | Potential social impact | Assessment methodology |
|---|--|--|
| Potential positive impacts | | |
| Livelihood (direct – employment opportunities) | Opportunity for individuals seeking employment during construction | Working with NSC, TAFE NSW, Narrandera LALC and the Gundyarri Narrandera Aboriginal Corporation for employment opportunities and placements; local job seeker employers; semi-structured interviews with key local individuals and businesses. |
| Livelihood (indirect - increased local business opportunities increasing) | Local business obtaining new business from the project | Working with NSC and TAFE NSW for employment opportunities and placements; local job seeker |

| Social impact category (and aspect) | Potential social impact | Assessment methodology |
|---|--|---|
| employment opportunities) | | employers; semi-structured interviews with key local individuals and businesses. |
| Way of life – community character and livelihoods | Economic benefits and local business opportunities | Workshop with the Applicant, NSC and business representatives to plan for construction period; buy local preferential supplier approach; community benefits desktop research; study commissioned for the project on construction job requirements (i.e. economic study) and tie-ins to local community; meetings with NSC and local business representatives. |
| Legacy accommodation facility | Post-construction local community benefits | Accommodation strategy developed and tested with NSC. |
| Sponsorship and community support | Local community benefits | Community benefit sharing approach developed with NSC and the community. |
| Potential negative impacts for further assessment | | |
| Accessibility | Impact on rental market due to accommodating construction workforce | Accommodation strategy designed to reduce negative impact and maximise opportunities; construction of an accommodation facility for construction; close collaboration and information sharing with NSC on construction workforce impact; consideration of how to create legacy accommodation; demonstratable use of a variety of different accommodation options. |
| Surroundings - local environment | Impact on environment and rural amenity/feel | Engagement and working with key neighbour homestead property owners for bio-physical and structural screening; interview with representatives of local environmental organisations; consultation regarding green initiatives with NSC or other responsible government agencies. |
| Surroundings (perceived reduction in agricultural land) Way of life (perceived reduction in agricultural land) | Impact on environment and rural amenity/feel | Solar farm design would ensure ongoing agricultural use of the land such as agrivoltaics with the ability to continue sheep grazing as a compatible agricultural use of the land. |
| Surroundings (visual impact) Health and wellbeing (visual impact) | Potential for the project to yield negative visual impacts | Preliminary visual impact assessment has been commissioned for the project and forms part of the SR. |
| Surroundings Health and wellbeing | Potential for the construction period of the project to yield negative traffic impacts relating to disturbance, amenity, and health and safety | A traffic management plan shall be incorporated into the environmental assessments for the project to minimise impact on local traffic flows and on road safety. |

| Social impact category (and aspect) | Potential social impact | Assessment methodology |
|--|--|---|
| Community character changes and community division over changing physical and business environment | Perceived negative community character changes, esp. during construction away from the 'rural idyllic' to a modern, man-made environment | SIA Phase 2 to better understand this; buy local preferential supplier approach; community benefits research; alignment of project construction job requirements (i.e. economic study) to locals and with tie-ins to local community; meetings with local council and local community representatives throughout construction to obtain performance feedback. |
| Health and wellbeing | Increased worry of project-induced rural fires | Professional fire management plan; collaborate and involve RFS; communicate with local landowners and NSC on approach and mitigations relating to fire management. |

Source: The Social Aspect (2025).

5.4 Potential project refinements and approaches

Following community and stakeholder engagement to date, the Applicant has already committed to refinements to the project. In addition, the Applicant has made (or is considering making) other project refinements that it considers to be sensible and responsive to potential social impacts.

Table 14 lists the potential project refinements that:

- Have been adopted according to stakeholder feedback.
- Are being considered by the project team.
 - In these cases, a range of options are feasible, and a decision has not yet been made. The project team will consult the community about these options during the development of the EIS.

Table 14: Project refinements

| Stakeholder feedback or Applicant-led project design initiative | project refinement | Status (adopted vs being considered) |
|---|--|---|
| Maximising local business opportunities | Narrandera Shire Council maintains a contact list of local business that could be used as part of construction and operations. | Adopted |
| Maximising local employment for the Shire | Maximising local employment as much as possible. | Adopted and committed to doing. |
| Maximising opportunities for local Shire Indigenous peoples | Strontian Solar Farm would incorporate a local employment policy and an Indigenous employment policy as part of its business approach and commitment to the local community. | Adopted |
| Legacy accommodation facility | Primary locality focus on Narrandera LGA so benefits from housing construction workforce is within the LGA. | To be considered, should a new worker accommodation facility be proposed. |

| Stakeholder feedback or Applicant-led project design initiative | project refinement | Status (adopted vs being considered) |
|---|--|---|
| The Applicant selecting local plants and trees to ameliorate visual amenity impacts | More use of plants and trees to screen visual amenity. | Adopted |
| Concern over loss of agricultural land | Solar arrays would enable the continuation of agricultural production and sheep grazing. | Adopted |
| Concern over loss of agricultural land | Existing land use quality enables the capacity to rehabilitate post-decommissioning back to agriculture. | Adopted |
| Concern over loss of agricultural land from transmission lines | Subject site has an existing transmission line that the project will connect into and will not require new transmission lines. | Adopted |
| Local sponsorship opportunities | Community sponsorship and benefits scheme to be developed if approved. | Adopted |
| Local community obtaining reduced price energy | NSC advises that power bills are 20% higher in regional Australia and seeks ways to reduce electricity prices in the LGA. | Issue is unable to be directly resolved by this Project, however, the increased supply of renewable energy will lead to lower electricity prices overall. |
| Local community obtaining reduced price energy | NSC advises that power bills are 20% higher in regional Australia and seeks ways to reduce electricity prices in the LGA. | Issue is unable to be directly resolved by this Project, however, the increased supply of renewable energy will lead to lower electricity prices overall. |
| Voluntary Planning Agreement | NSC seeks the ability to pool funding from multiple renewable energy developers to fund grander projects. | Adopted |

Source: The Social Aspect (2025).

5.5 Impact management and mitigation

A range of mitigation and management measures will be developed or updated as part of the project operations which will assist with the management of the negative project impacts identified in Table 13. These plans may include, but are not limited to, the following:

- Environmental Management Plan
- Landscape and Visual Impact Assessment
- Community Benefits Scheme
- Local Employment and Procurement Plan
- Construction Workforce Accommodation Plan
- Traffic and Transport Management Plan
- Fire Management Plan.

The Applicant has commenced stakeholder and community engagement for the project which will be reviewed annually and at the next phase of the project. This will be converted into a plan that will outline how the community and stakeholders will be engaged by the Applicant throughout the operational life of the project, and also aim to strengthen community relationships in the social locality.

Further consideration of the management measures and plans above would be detailed as part of the SIA report in consultation with the Applicant and the community.

5.6 Community Consultation Strategy

Community and stakeholder engagement will be integral to the project; therefore, a Community Consultation Strategy (CCS) has been prepared which provides a framework for community and stakeholder engagement regarding the project, and to ensure opportunities to provide input into the assessment and development process are understood.

The CCS is used as an internal document to guide the Applicant's community and stakeholder engagement, and was developed consistent with the following plans and guidelines:

- Social Impact Assessment Guideline (DPHI, 2025a)
- Technical Supplement: Social Impact Assessment Guideline for State Significant Project (DPHI, 2025b)
- Undertaking Engagement Guidelines for State Significant Projects (DPHI, 2024b)
- Practice Note: Engaging with Aboriginal Communities (DPHI, 2024d)
- Narrandera Shire Council Community Participation Plan (NSC, 2019a).

5.7 Future proposed community engagement

Strontian Solar Farm Pty Ltd proposes to continue the stakeholder, Agency, and community engagement to ensure that consultation remains ongoing, transparent, responsive, and inclusive throughout the EIS process and the construction and operational phases. Engagement will aim to build public acceptance and support, identify potential concerns early, and co-design practical responses that inform project design or implementation of mitigation and management measures. To date, the project has been received very positively by NSC, Agencies, community groups, First Nations representatives, Chamber of Commerce, local accommodation providers, businesses and surrounding landowners. This is due in large part to the ongoing positive experiences and benefits associated with hosting other renewable energy developments in the Narrandera LGA.

5.7.1 Objectives

- Build public acceptance and support for the project.
- Identify potential concerns early and address them through design and mitigation.
- Be transparent, responsive, and inclusive in all engagement.
- Respond to community needs and concerns through inclusive design.
- Provide clear, accessible information, including “you said / we did” feedback.
- Deliver benefits for the wider community including a Planning Agreement with NSC.
- Minimise conflict and maintain social licence.

5.7.2 Planned engagement activities

- Continue and expand stakeholder, Agency, community, and surrounding landholder consultations as the project develops and responds to any concerns raised.
- Provide online engagement surveys to allow electronic options for provision of community feedback.
- Hosting of Open Days to meet with communities, inform stakeholders about the project and obtain feedback.
- Engage with communities, businesses, First Nations peoples, surrounding landholders, Members of Parliament, NSC councillors and officers and the neighbouring Wagga Wagga City Council.
- Undertake stakeholder mapping, workshops, and community events.
- Conduct public consultations, including one-on-one and group meetings.
- Use online engagement (social media, project website) and provide written responses that address the concerns raised.
- Implement agreed benefit-sharing measures with the community and NSC.
- Use digital engagement methods where face-to-face is not convenient for respondents.
- Develop community partnerships to foster goodwill within the community.
- Sponsor local sporting clubs and community events.
- Maintain early, continuous, and inclusive engagement with all stakeholders.
- Run co-design sessions with nearby residents on visual screening, and landscaping.
- Publish a Local Procurement and Employment Opportunities Roadmap with targets for local and indigenous hiring, apprenticeships, and suppliers.
- Ensure accessibility to materials in plain English.
- Implement a complaints and dispute-resolution pathway with response timeframes and a public register.
- Commitment to evolve and adapt engagement methods using any new best practice methods to find the best fit for reaching as broad a cross-section of the community as possible.

5.7.3 Monitoring, reporting and improvement

The Applicant will maintain an engagement register, track participation, record issues raised, resolved, and monitor delivery of commitments. Methods will be refined based on feedback to ensure inclusivity and effectiveness.

5.7.4 Anticipated outcomes

- Increased project acceptance.
- Improved project design responsive to community concerns.
- Enhanced community benefits, including local and indigenous employment, and long-term partnerships.

6. PROPOSED ASSESSMENT OF IMPACTS

A preliminary environmental risk assessment has been carried out for the project to identify matters requiring further assessment in the EIS and the level of assessment that should be carried out. Consistent with the State significant development guidelines – preparing a scoping report (DPIE, 2022a), the following key factors have been considered in the identification of matters needing further assessment for the project:

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

The following sections of this chapter present the matters identified which require further assessment and the proposed approach to the respective assessments. In addition to the preliminary environmental assessment presented herein, preliminary technical studies have been carried out for the key issues of landscape and visual impact, biodiversity, Aboriginal cultural heritage and social impact. These preliminary technical studies have commenced to ensure that the values of the project's study area and surrounds are considered early in the planning and design of the project. Measures implemented through the scoping phase to avoid and minimise impacts are also described in the following sections.

A scoping summary table consistent with the State significant development guidelines – preparing a scoping report is included in Appendix A, while Table 15 presents the level of assessment identified for each category of assessment matter.

Table 15: Level of assessment required in EIS

| Level of assessment | Aspect | Section addressed in SR |
|---------------------|---|-------------------------|
| Detailed | Amenity – Visual | Section 6.1 |
| | Biodiversity | Section 6.2 |
| | Heritage – Aboriginal and historic heritage | Section 6.3 |
| | Land | Section 6.4 |
| | Social and Economic | Section 6.5 |
| Standard | Access and traffic | Section 6.6 |
| | Amenity – Noise and vibration | Section 6.7 |
| | Air quality (particulate matter) | Section 6.8 |
| | Built environment | Section 6.9 |
| | Hazards and risks | Section 6.10 |
| | Water | Section 6.11 |

6.1 Amenity – visual

A PVIA has been prepared to support this SR (Appendix E).

6.1.1 Existing environment

A PVIA has been prepared for the project which aims to provide a preliminary assessment of the potential visual impacts associated with the project. The PVIA was prepared consistent with the following documents:

- Large-Scale Solar Energy Guideline (DPHI, 2022a)
- Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b).

The PVIA identifies the following 2 visual study areas:

- 2.5 km from the project for public roads
- 4 km from the project for other private receivers and public viewpoints.

The PVIA then utilised viewshed mapping to identify areas from which the project could be visible. This process eliminates the need to assess viewpoints within the study areas that have no line of sight to the development. Following mapping, the PVIA identified public viewpoints and private receivers that would have line of sight to the project and within the study areas.

The project site is located between Buckingbong State Forest (located west of Strontian Road) and Avonlie Solar Farm (located east of the project site) and is used primarily for agricultural cropping and grazing activities. The topography is flat, with minimal undulations within the study area. Several public roads have been identified with 2.5 km from the project site, which consist of the following:

- | | |
|---------------------|------------------------|
| • Strontian Road | • Quilters Road |
| • The Gap Road | • Kangaroo Plains Road |
| • Muntz Road | • Green Lane |
| • Smeaton Vale Road | • Forbidden Road |
| • Red Hut Road | • Maryvale Road |
| • Dragonfly Road | • Telephone Road |
| • Donaldsons Road | • Birrego Road. |

Representative viewpoint locations have been selected for roads identified within the 2.5 km study area. Thirteen private receivers were identified within 4 km of the project with potential to view the project site.

Viewshed mapping was undertaken to identify viewpoint locations that will have a line of sight to the proposed solar panels (refer to Figure 21). It is important to note that the viewshed map provides an assessment based on topography alone and does not consider intervening elements such as vegetation and structures. Therefore, the viewshed map represents a theoretical worst-case scenario.

Viewshed mapping has been undertaken based on a maximum panel height of 2.8 m. The following provides a summary of the viewshed map assessment:

- Eleven private receivers identified within the study area with a theoretical line of sight to the project (4.0 km from the development area).
- One private receiver within the study area has no theoretical visibility of the project.
- The majority of the study area has high theoretical visibility of the project due to flat topography.
- Land to the south, southeast, east and northeast of the project, within 4.0 km, has the highest theoretical visibility of the project.
- Strontian Road, Maryvale Road, Birrego Road and Muntz Road have high potential visibility towards the project within the 2.5 km study area.
- Areas northwest and far northeast of the project have comparatively lower theoretical visibility within the 4.0 km study area.

Viewshed Mapping

Refer to Section 4.1

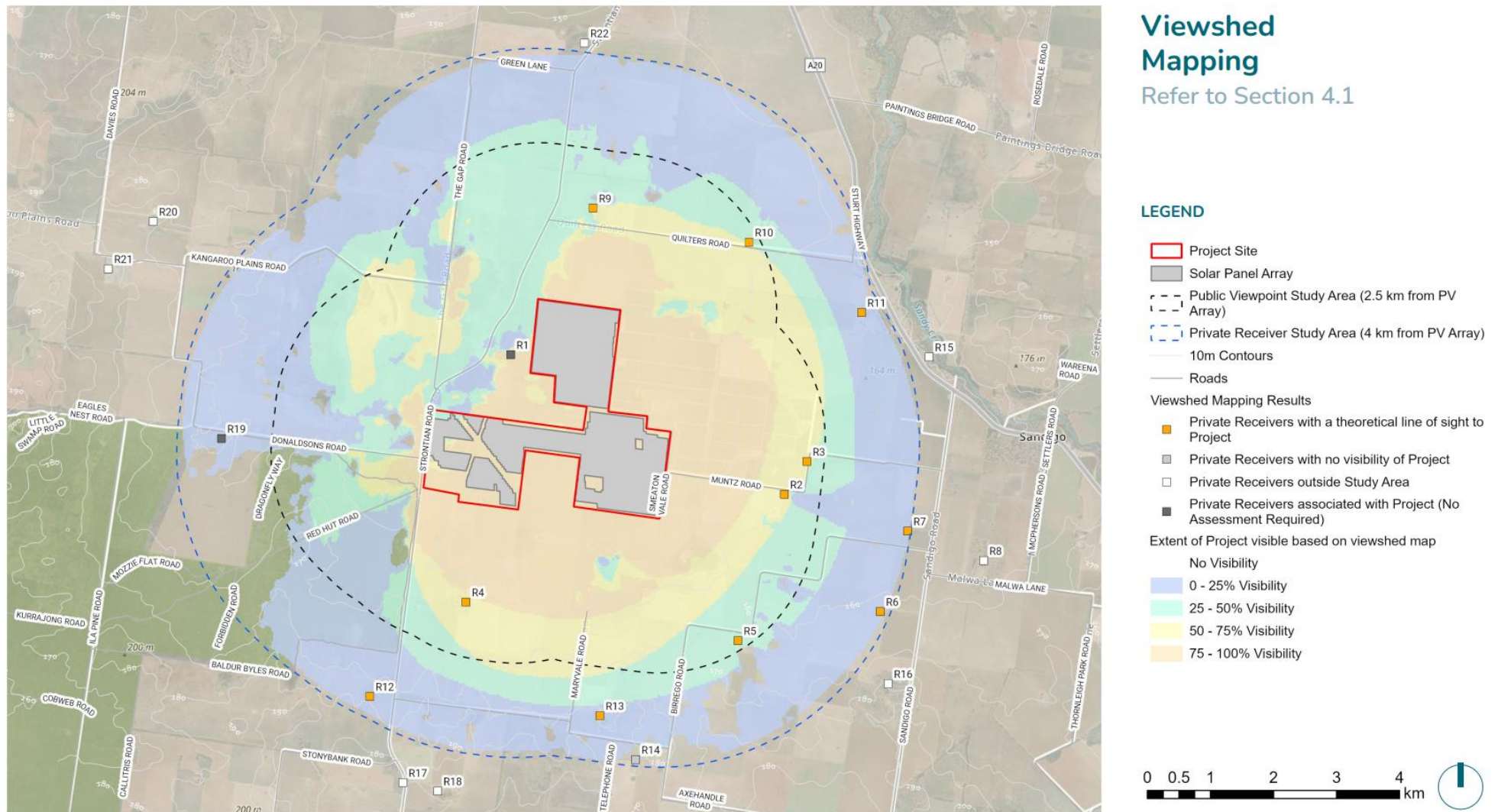


Figure 21: Viewshed mapping (source: Moir Studio, 2025)

6.1.2 Potential impacts

The PVIA also applies reverse viewshed mapping consistent with DPHI's Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b), whereby the following summary is produced:

- Based on the reverse viewshed mapping, the project has the highest theoretical visibility from the southeast area of the project site.
- The western areas of the project site has the lowest theoretical visibility on the surrounding private receivers.

The PVIA then utilised the Simple Assessment Tool to assist identifying potential viewpoint locations where a solar project may have visual impacts and may require further consideration. The results of the Simple Assessment Tool are summarised below.

Public Viewpoints

Fourteen preliminary public viewpoints were identified within 2.5 km of the development footprint. Application of the Simple Assessment Tools identified that 2 viewpoints requires further intermediate assessment.

Private Viewpoints

Twelve private receivers were identified within 4.0 km of the development footprint, with a line of sight to the project. The Simple Assessment Tools identified that none require further intermediate assessment.

Further, a preliminary desktop analysis of the landscape character suggests that intervening vegetation, including surrounding tree cover and roadside plantings, will likely fragment and reduce direct views of the project from nearby dwellings and roadways. Dense vegetation cover associated with Buckingbong State Forest adjacent to the southwest boundary of the project will likely screen views of the project.

6.1.3 Assessment approach

A Landscape and Visual Impact Assessment (LVIA) will be prepared consistent with the following guidelines:

- Large-Scale Solar Energy Guideline (DPHI, 2022a)
- Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b).

During the preparation of the LVIA, detailed site investigations will be undertaken from areas identified in the preliminary assessment as having potential visibility towards the project site. Specialised modelling tools and visualisations (including photomontages) will be developed to provide potential views of the project site from key public and private viewpoints. In addition, site inspections will be undertaken from key public viewpoints identified as requiring further assessment.

The LVIA will include an assessment of the landscape and visual impact resulting from all associated infrastructure and ancillary structures, and consideration of cumulative impacts of nearby infrastructure. Further assessment will be undertaken to assess potential impacts of glint and glare using industry standard methodology.

The cumulative impacts of surrounding renewable energy projects will be assessed as part of the PVIA to evaluate potential effects on the broader regional landscape character. A detailed analysis of the cumulative visual and landscape impacts from the adjacent Avonlie Solar Farm will be carried out during the EIS phase.

6.2 Biodiversity

6.2.1 Existing environment

A PBA has been prepared to support this SR (Appendix C).

6.2.1.1 Project site vegetation communities and threatened ecological communities

The project site is situated within a heavily modified agricultural landscape which has been heavily cleared for agricultural cropping and grazing activities and has poor landscape connectivity. The PBA determined that the project site predominately comprises cropping land with scattered remnant trees, consisting of Grey Box (*Eucalyptus microcarpa*), Yellow Box (*Eucalyptus melliodora*), White Cypress (*Callitris glaucophylla*) and Black Cypress (*Callitris endlicheri*). Some of these trees showed signs of dieback and several dead trees were also noted throughout the project area. Several piles of paddock trees (White Cypress) removed by the landowner in 2022 occur in the southern half of the site which may offer refuge habitat for common fauna species.

Small patches of woodland occur throughout which are dominated by Grey Box, Black Cypress, White Cypress and occasional Yellow Box, while strips of modified remnant woodland occur along part of the northern, eastern and southeastern boundary. These areas are dominated by Grey Box and Cypress species, the understorey shrub layer being typically absent, aside from clumps of Saltbush (*Atriplex* spp.) in some areas. The ground layer in these communities is sparse and features a mix of native and exotic grasses and herbs with a large component of annual grasses.

A drainage depression is located in the southwest of the project site which is colonised by a mix of native grass, rush and forb species including Common Rush (*Juncus usitatus*), Dock (*Rumex crispus*), Nardoo (*Marsilea* sp.) and Hairy Panic (*Panicum effusum*).

Table 16 provides the PCTs occurring on the project site which have an associated TEC. The PBA identifies that vegetation occurring on site is likely to meet the criteria of Grey Box Grassy Woodlands TEC listed under the BC Act and EPBC Act. Some patches containing Yellow Box may qualify as White Box – Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland TEC; however, is in a highly degraded state.

Table 16: Mapped PCTs occurring within the project site and their associated threatened ecological communities

| Plant community type | Area (ha) within the project site | BC Act listed (status) | EPBC Act listed (status) |
|--|-----------------------------------|--|---|
| PCT 70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt | 0.19 | No | No |
| PCT 75: Yellow Box – White Cypress Pine grassy woodland on deep sandy-loam alluvial soils of the eastern Riverina Bioregion and western NSW South Western Slopes Bioregion | 1.09 | 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 | White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland |
| | | Sandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions | |
| PCT 76: Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions | 0.44 | Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions | Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia |
| PCT 80: Western Grey Box – White Cypress Pine tall woodland on loam soil on alluvial plains of NSW South Western Slopes Bioregion and Riverina Bioregion | 1.96 | Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions | No |
| | | Mallee and Mallee-Broombush dominated woodland and shrubland, lacking Triodia, in the NSW South Western Slopes Bioregion | |
| | | Grey Box (<i>Eucalyptus microcarpa</i>) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia | |

The project site is heavily disturbed due to cropping and grazing and has been subject to historical clearing which has reduced the suitability of site habitats to support fauna species.

Fauna habitats within the project site generally comprise scattered paddock trees, small patches of woodland and a mix of native and exotic grassland. Many of the remnant paddock trees contain hollows which offer nesting and denning habitat for a range of species; however, due to the isolated nature of these trees, they are most likely to support breeding by bird species such as parrots and cockatoos as well as microbats.

6.2.1.2 Threatened flora and fauna

Background searches identified 4 threatened flora species and 15 threatened fauna species previously recorded within a 10 km buffer of the project site, which are summarised in Table 17.

Table 17: Previously recorded threatened flora and fauna species proximate the project

| Common name | Scientific name | BC Act status | EPBC Act status |
|---|---|---------------|-----------------|
| Flora | | | |
| A spear-grass | <i>Austrostipa wakoolica</i> | E | E |
| Silky Swainson-pea | <i>Swainsona sericea</i> | V | - |
| Sand-hill Spider Orchid | <i>Caladenia arenaria</i> | E | E |
| Pine Donkey Orchid | <i>Diuris tricolor</i> | V | - |
| Amphibia | | | |
| Southern Bell Frog | <i>Litoria raniformis</i> | E | V |
| Aves | | | |
| Black-tailed Godwit | <i>Limosa limosa</i> | V | E |
| Brolga | <i>Grus rubicunda</i> | V | - |
| Brown Treecreeper (eastern subspecies) | <i>Climacteris picumnus victoriae</i> | V | V |
| Diamond Firetail | <i>Stagonopleura guttata</i> | V | V |
| Dusky Woodswallow | <i>Artamus cyanopterus cyanopterus</i> | V | - |
| Grey-crowned Babbler (eastern subspecies) | <i>Pomatostomus temporalis temporalis</i> | V | - |
| South-eastern Hooded Robin | <i>Melanodryas cucullata cucullata</i> | E | E |
| Southern Whiteface | <i>Aphelocephala leucopsis</i> | V | V |
| Spotted Harrier | <i>Circus assimilis</i> | V | - |
| Superb Parrot | <i>Polytelis swainsonii</i> | V | V |
| Varied Sittella | <i>Daphoenositta chrysoptera</i> | V | - |
| White-bellied Sea-Eagle | <i>Haliaeetus leucogaster</i> | V | - |
| White-fronted Chat | <i>Epthianura albifrons</i> | V | - |

| Common name | Scientific name | BC Act status | EPBC Act status |
|--|-------------------------------|---------------|-----------------|
| Mammalia | | | |
| Koala | <i>Phascolarctos cinereus</i> | E | E |
| Key: Vulnerable (V), Endangered (E), Critically Endangered (CE). | | | |

Threatened avian species that could potentially use tree hollows on site include the Superb Parrot (*Polytelis swainsonii*), Brown Treecreeper (*Climacteris picumnus victoriae*) and Barking Owl (*Ninox connivens*).

The project site has poor quality habitat for the Koala (*Phascolarctos cinereus*) due to the low level of landscape connectivity and limited extent of preferred foraging trees. Both Grey Box and Yellow Box are potential browse species. The nearest Koala records on BioNet occur 8 km north near the Sturt Highway.

The site offers good foraging habitat for raptors and potentially forest owls such as the Barking Owl and has several suitable trees that could be used for nesting. The threatened Spotted Harrier (*Circus assimilis*) was recorded during the survey and other species which could occur include the Little Eagle (*Hieraaetus morphnoides*).

The site habitats are likely to be too open and disturbed for threatened woodland bird species such as the Regent Honeyeater (*Anthochaera phrygia*), Grey-crowned Babbler (*Pomatostomus temporalis*), Hooded Robin (*Melanodryas cucullata*) and Scarlet Robin (*Petroica boodang*). Similarly, there is not enough landscape connectivity and foraging habitat to support arboreal species such as the Squirrel Glider (*Petaurus norfolcensis*), Greater Glider (*Petauroides volans*) and Brush-tailed Phascogale (*Phascogale tapoatafa*).

The only potential aquatic habitat within the project area consists of 3 farm dams with limited ecological value. These were dry or almost dry during the site inspection in June 2025. There are also drainage depressions and several ephemeral soaks which would hold water temporarily after heavy rain and may provide habitat for common amphibian species.

6.2.2 Potential impacts

The project has been designed to avoid and minimise impacts on biodiversity which will significantly reduce potential impacts on native vegetation and habitat, and impacts will primarily comprise removal of paddock trees.

The project's development footprint is predominately situated on highly disturbed cropping land which has low biodiversity value; however, there are many scattered paddock trees that would require removal. These trees still provide biodiversity functions such as offering a nectar resource and providing hollows which could be used for breeding by bird and microbat species. They also provide stepping stones of habitat across the highly cleared landscape.

The biodiversity values occurring on the project site, including the PCTs, TECs, the drainage depression and ephemeral drainage soaks, and the narrow strips of planted trees around the edges of the project site are recommended to be retained; however, given the layout is indicative, the impacts outlined in this SR may change.

Given the measures that have been taken to avoid and minimise impacts on biodiversity, it is unlikely that the project would result in a significant impact on EPBC Act listed species or ecological communities and is therefore unlikely to be a controlled action requiring referral to the Minister for

approval. Detailed field studies and seasonal surveys shall be undertaken, where required, and a proposed construction and development layout shall be reviewed before final impacts are determined.

Impacts to terrestrial biodiversity during operation would be minimal and limited to the development footprint, and would likely be associated with traffic and maintenance activities presenting a small risk to fauna species.

6.2.2.1 Groundwater Dependent Ecosystems

A search in the Australian Government's Groundwater Dependent Ecosystems Atlas (BoM, 2025a) indicated that no aquatic GDEs are present on the project site; however, several pockets of terrestrial GDEs are present within and adjacent the project site (see Figure 13).

There is a low potential for groundwater to be encountered during excavations and earthwork during construction; however, this is likely to be highly localised, and no inception of groundwater is considered.

6.2.3 Assessment approach

A BDAR will be prepared as part of the EIS which will require detailed surveys in line with the Biodiversity Assessment Method. These will collect additional vegetation data, mark habitat features and search for threatened species, and involve a number of survey methods including threatened flora transects, habitat searches, diurnal bird surveys, and the placement of camera traps and ultrasonic microbat call recording devices. Surveys would need to be conducted over a 12-month period to account for seasonal survey requirements for candidate species. Field surveys are planned to be carried out in 3 different survey seasons (winter, spring and summer) to target the candidate threatened species which require survey.

The BDAR is required to contain State/Commonwealth statutory assessments, an assessment of potentially serious and irreversible impacts (SAIL) to any susceptible species considered likely to occur and demonstrate how the project has avoided and minimised impacts on threatened species and ecological communities. The report would also provide recommendations to reduce impacts on flora and fauna (these may include habitat avoidance, pre-clearing surveys and clearing supervision, habitat replacement, hollow-bearing tree removal protocol and a preparation of a vegetation management plan). The BDAR will also provide a detailed assessment of offset obligations (biodiversity credits) required for the development.

6.3 Heritage

6.3.1 Aboriginal cultural heritage

An AHHCOA has been prepared to support this SR (Appendix B).

6.3.1.1 Existing environment

The project site is located within the boundaries of the Narrandera Local Aboriginal Land Council (Narrandera LALC); however, a review of the National Native Title Tribunal's Native Title Vision (NNTT, 2025) was carried out on 22 July 2025 which did not identify any registered or determined native title claims over the project site. Further, no Indigenous Land Use Agreements (ILUAs) are present within or near the project area. Notwithstanding, a detailed review of native title will be undertaken for the project during the EIS.

A search of the Aboriginal Heritage Information Management System (AHIMS) database was carried out on 28 July 2025 which identified 110 Aboriginal sites and no Aboriginal places within surrounding areas. An extensive search of the AHIMS database was therefore carried out to determine the location of the Aboriginal sites relevant to the project site. The search identified 79 Aboriginal sites, all of which are recorded within the boundaries of the adjacent Avonlie Solar Farm. The absence of Aboriginal sites within the boundaries of the project site may; however, indicate a lack of prior assessment. A summary of recorded Aboriginal objects and places within the boundaries of Avonlie Solar Farm are provided in Table 18.

Table 18: Summary of AHIMS site types adjacent the project site

| Site type | Number of sites | Percentage total |
|---|-----------------|------------------|
| Aboriginal Ceremony and Dreaming | 1 | 1% |
| Artefact | 68 | 86% |
| Artefact, Modified Tree (Carved or Scarred) | 1 | 1% |
| Modified Tree (Carved or Scarred) | 9 | 12% |

In addition to the AHIMS database searches, the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales (DECCW, 2009) states that Aboriginal objects are often associated with particular landscape features which have a higher potential to contain Aboriginal objects. It is therefore essential to consider whether there are landscape features that indicate the likely existence of Aboriginal objects. Landforms with increased Aboriginal heritage potential include:

- areas within 200 m of waters, or
- areas located within a sand dune system, or
- areas located on a ridge top, ridge line or headland, or
- areas located within 200 m below or above a cliff face, or
- areas within 20 m of or in a cave, rock shelter or a cave mouth.

Some of these landforms, such as areas within 200 m of waterways, are relevant to the project site.

Based on preliminary desktop assessment, Aboriginal objects are likely to be present in the study area and, as such, may be impacted by the proposed works.

6.3.1.2 Potential impacts

Given the presence of known Aboriginal sites directly adjacent the project, it is considered possible that other unrecorded sites may be present within the project footprint, particularly in areas which have not been disturbed or subject to field inspections. During construction, the project has the potential to impact previously unidentified Aboriginal heritage sites.

The Applicant will seek to avoid potential impacts to Aboriginal sites where possible, and due to the design and nature of infrastructure associated with solar farms, potential impacts to Aboriginal sites could be avoided with careful consideration of the project's design. Any impacts and mitigation and management measures will be defined in the EIS in consultation with any Registered Aboriginal Parties (RAPs).

6.3.1.3 Assessment approach

In NSW, Aboriginal objects and Aboriginal places are protected by the following legislation:

- *National Parks and Wildlife Act 1974* (NPW Act) and its subordinate legislation, the *National Parks and Wildlife Regulation 2019* (NPW Regulation)
- *Environmental Planning and Assessment Act 1979* (EP&A Act).

An Aboriginal Cultural Heritage Assessment Report (ACHAR) will be prepared to inform the EIS consistent with the following key guidelines:

- Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010a)
- Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010b)
- Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH, 2011a).

The ACHAR shall identify Aboriginal cultural heritage values relevant to the project study area through background research, predictive modelling, consultation with any RAPs for the project and archaeological field investigations. A range of management strategies may be available in relation to the project that include varying levels of mitigation of identified sites or potential harm to Aboriginal cultural heritage. When impacts to sites or areas of archaeological potential are unavoidable, a strategy will be developed which involves implementing appropriate measures to manage and mitigate these impacts with reference to the archaeological and Aboriginal cultural significance of the sites/areas of potential.

6.3.2 Historic heritage

6.3.2.1 Existing environment

A search of the available historic heritage databases have been carried out, including:

- Australia's National Heritage List (Cth DCCEEW, 2025c)
- Australian Heritage Database (Cth DCCEEW, 2025d)
- NSW State Heritage Inventory (Environment and Heritage, 2025b)
- Narrandera LEP (DPE, 2023b).

No historic items of National, State or local significance have been identified within or near the project, with the closest heritage item being the Sandigo Hall, a local heritage item located at 7499 Sturt Highway approximately 5 km east of the project site.

Although there are no listed heritage items nor any readily available historical reports found during preparation of this report specific to the study area, there are potentially physical remains in the study area or surrounds of colonisation and the forceable reallocation of land from First Nations People to colonists, and conflict between colonists and Wiradjuri People.

The AHHCOA therefore recommends that further investigation of the historical archaeological potential of the study area, and a site inspection, is carried out.

6.3.2.2 Assessment approach

A Historical Heritage Impact Assessment will be prepared to assess the potential impacts on historical heritage associated with the project, and will include the following:

- A review of Australia's National Heritage List, the Australian Heritage Database, the NSW State Heritage Inventory, and the Narrandera LEP to determine if there is any additional information on places of heritage significance in or near to the project.
- A site assessment will be carried out to assess the potential impact of the project upon any previously unidentified heritage values and assessing the significance of any potential historical heritage items identified.
 - Any previously unidentified historical heritage items will be mapped, and assessed for their significance in accordance with Assessing heritage significance: Guidelines for assessing places and objects against the Heritage Council of NSW criteria (DPE, 2023c).

6.4 Land

6.4.1 Existing environment

The land and soil capability assessment scheme: second approximation (OEH, 2012) provides land and soil capability (LSC) largely for:

- regional assessment of land capability
- the assessment of land capability for broad-scale, dry-land agricultural land use.

The project site is situated on Class 3 LSC land, which is considered high capability land with moderate limitations and is capable of sustaining high-impact land uses, such as cropping with cultivation, using more intensive, readily available and widely accepted management practices. However, careful management of limitations is required for cropping and intensive grazing to avoid land and environmental degradation.

The LSC dataset is used by the NSW Government to assist in the determination of Biophysical Strategic Agricultural Land (BSAL) as a component of the NSW Government's Strategic Regional Land Use Plans (SRLUP); however, the project footprint and broader study area is not mapped as BSAL.

The soils on site are Chromosols under the Australian Soil Classification Soil, and there are no acid sulfate soils, soil acidity or land subject to gully or sheet erosion are present on site; however, land that is subject to salinity is present approximately 350 m north-west of the project site.

6.4.2 Potential impacts

6.4.2.1 Land use

The project would involve some earthworks and ground disturbance to formalise the 2 access points to the project site from Strontian Road, as well as upgrades to the Sturt Highway/Strontian Road intersection. The majority of works will occur within the development footprint; however, there is potential for works to impact on adjacent land uses. Further, given the project will be developed adjacent to land used for cropping activities, there is potential for heat island effects.

6.4.2.2 Construction

Construction activities associated with the project have the potential to disturb soils which may result in:

- topsoil and subsoil impacts resulting from loss of topsoil and/or compaction of soil through vehicle movement
- disturbance and changes which affect natural surface drainage
- erosion and sedimentation, particularly during clearance and soil exposure activities resulting in:
 - on-site impacts (such as erosion of constructed landforms)
 - off-site impacts (such as sedimentation and eutrophication of downstream waters)
- increased dust generation.

Implementation of suitable management and mitigations measures would ensure that the potential for any adverse impact upon soil quality, agricultural productivity and land use following rehabilitation shall be appropriately mitigated.

6.4.2.3 Operation

Once constructed, the land within the project footprint can continue to be used for productive agricultural production with the ability to undertake agrivoltaics by co-location of agricultural land uses, such as sheep grazing within the solar farm.

6.4.3 Assessment approach

6.4.3.1 Land use

The impact of the project on all adjacent land uses, including cropping and grazing areas, the Avonlie Solar Farm, and road users will be assessed in detail in the EIS and a Land Use Conflict Risk Assessment (LUCRA).

6.4.3.2 Agricultural impact assessment

Under the Large-Scale Solar Energy Guideline, a detailed agricultural impact assessment is required for a large-scale solar energy project located on rural zoned land verified as LSC classes 1 to 3. Given the project is situated on land zoned RU1 Primary Production under the Narrandera LEP and the land is LSC Class 3, a detailed agricultural impact assessment will be undertaken as part of the EIS.

The soil survey will include investigations at 134 locations to examine and record the soil profile and soil features. At each location, the physical and chemical characteristics of the soil will be measured including pH, salinity, cation exchange capacity, sodicity, texture, colour, structure, aggregate stability, hydraulic conductivity, and available water capacity.

The proposed sampling density of 134 over 670 ha is derived from the Large-Scale Solar Energy Guidelines which indicates that soil surveys should be completed at a density of 1 site per 5 to 25 ha. This inspection density is recommended for moderately intensive uses at 'field' level and detailed project planning under the Guidelines for Surveying Soil and Land Resources (Second Edition).

6.4.3.3 Phase 1 contamination assessment

Given the historical agricultural land uses on the site, there may be localised contamination risks from previous fuel spills and the use of pesticides. A Phase 1 contamination assessment would be carried out for the project as part of the EIS preparation. The Phase 1 contamination assessment would be prepared consistent with the following:

- Acid Sulfate Soils Assessment Guidelines (ASSMAC, 1998)
- Managing Land Contamination: Planning Guidelines SEPP 55–Remediation of Land (Department of Urban Affairs and Planning and Environmental Protection Authority, 1998)
- Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011b).

6.4.3.4 Soil erosion

The EIS will identify suitable management and mitigation measures to mitigate any potential impacts in relation to soil, land capability or agriculture (e.g. erosion potential) during design, construction, operation and decommissioning of the project.

6.5 Social and Economic

A Social Impact Assessment Scoping Report has been prepared to support this SR (Appendix D).

6.5.1 Existing environment

The project is located in Sandigo, approximately 17 km south of Narrandera and about 75 km west of Wagga Wagga in the NSW Riverina Region. The township of Narrandera is the closest population centre (population of about 5,600 people) to the site. The town lies on the junction of the Newell and Sturt highways, adjacent to the Murrumbidgee River, at the centre of a diverse agricultural region.

The Narrandera LGA marks the transition between the extensive broad acre agricultural areas of the western slopes and plains to the east and the highly productive Murrumbidgee Irrigation Area (MIA) to the west. Narrandera Shire is readily accessible by a variety of transport options including a daily passenger air service to Sydney.

In the 2021 Census (ABS, 2021), Narrandera LGA had a median age of 44 years (NSW median 39 years) and a median household income of \$1,113 (NSW household median \$1,829).

6.5.2 Potential impacts

Potential social impacts and benefits during the construction phase of the project could include:

- demand on regional and social infrastructure and services (such as accommodation)
- impacts to access and surroundings (such as changes to the landscape)
- impacts to livelihood (such as the potential for lowered agricultural productivity and potential biosecurity and weed risk due to increased vehicle activity)
- health and wellbeing impacts (such as increased noise and public safety issues due to trucks and increased vehicle movements)
- impacts on culture and community (such as from potential loss of heritage and changes in the community due to a new workforce entering the area).

Potential social benefits to the community could include:

- significant economic stimulus to the area, working opportunities, and positive agreements with the government authorities, which could help fund community services and infrastructure
- building intergenerational value by assisting in the renewable transition and decarbonisation of the economy
- opportunities for diversification of landholder income.

6.5.3 Assessment approach

Social and economic impacts will be assessed consistent with the Social Impact Assessment Guideline (DPHI, 2025a) and the Technical Supplement: Social Impact Assessment Guideline for State Significant Projects (DPHI, 2025b) and their objectives and requirements. The Social Impact Assessment will include an evaluation of the economic impacts and benefits of the project undertaken as a holistic evaluation with the rest of the social component.

An overview of the social impact methodology to be implemented in Phase 2 of the SIA is summarised in Table 13.

6.6 Access and traffic

6.6.1 Existing environment

6.6.1.1 Road network

The project site is accessible via the Sturt Highway and Strontian Road. Strontian Road is a local road under the NSW Road Network Classifications and is a two-lane two-way asphalted road with unsealed shoulders which connects the Sturt Highway (A20) to the north with Boree Creek (Boree Creek Road/Lockhart Road) to the south. It has gravel shoulders, and no centre or edge line marking beyond edge lines at the intersection with Sturt Highway.

The Sturt Highway (A20) is an Australian national highway in NSW, Victoria, and South Australia and a major east-west through the Murray-Riverina region. It is an important road link for the transport of passengers and freight between Sydney and Adelaide and the regions along the route. The highway is the shortest, highest-standard route between Sydney and Adelaide.

Near Strontian Road, the Sturt Highway has a single travel lane in each direction with sealed shoulders, typically a single broken centre line and unbroken edge lines and guideposts. The Sturt Highway has a posted speed limit of 100 km/h. A slip lane provides access to Strontian Road for northbound vehicles on the southern side of the Sturt Highway, while widened shoulders are also provided to assist vehicles turning into and out of Strontian Road (Figure 22). There is 'give way' signage at the intersection, and an advance warning sign of the approaching intersection for drivers in Strontian Road. Sight distances available for drives at the intersection are satisfactory.

The Sturt Highway and Strontian Road between Sturt Highway and Boree Creek are both approved routes for use by 26 metre-long B-doubles (NHVR, 2025).

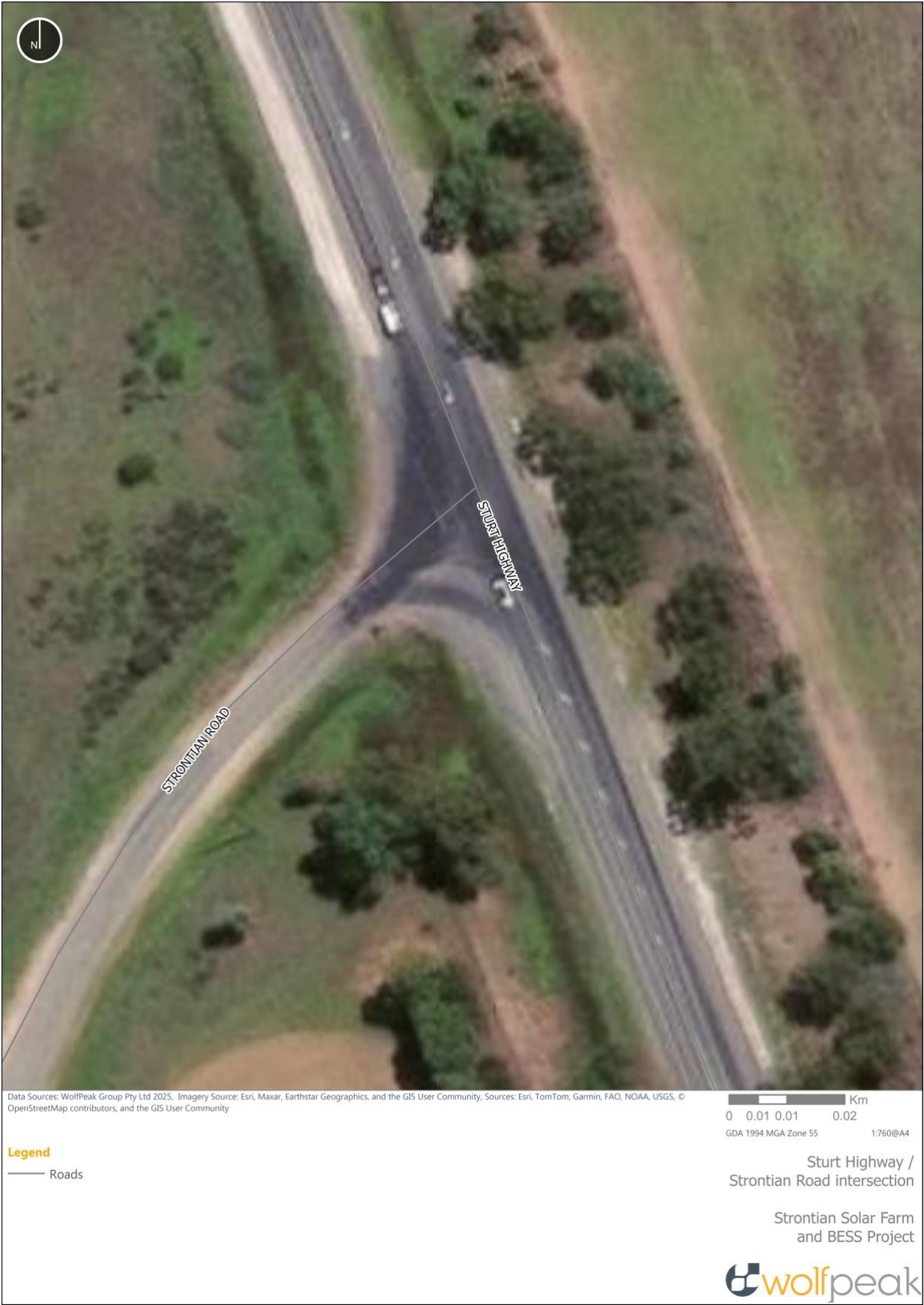


Figure 22: Intersection of the Sturt Highway and Strontian Road

6.6.2 Potential impacts

During construction, project related vehicle movements will be required for the movement of construction workers and the delivery of materials, plant and equipment. Oversize and Overmass (OSOM) vehicles will be required to transport oversized infrastructure and project components from the selected port(s) to the construction site. Construction traffic generation therefore has the potential to impact on traffic volume capacity on the surrounding network and along key transport routes for the movement of infrastructure from ports to the project. Further, the Sturt Highway/Strontian Road intersection, as well as several locations between the intersection and the project access location, may require upgrading to facilitate OSOM vehicle movements.

Once completed, operational traffic generation will be minimal with some daily light vehicle movements and heavy vehicle deliveries only as required.

6.6.3 Assessment approach

Primary access to the project site during construction, including the delivery of major solar and BESS components, will be by road via the Sturt Highway and Strontian Road. Alternative OSOM access routes from various ports to the site have been identified to the project site at the time of the preparation of this report. The OSOM routes shall be investigated and then rationalised for EIS submission.

Two existing site access locations are proposed to be retained and upgraded for Solar Farm construction and operation use (see Figure 19). Existing access tracks shall be upgraded in so far as possible to accommodate construction and operational phase vehicular access requirements.

Access tracks will be constructed within the project site to provide access throughout the proposed solar farm. The proposed access tracks and level of construction/maintenance required will be confirmed and assessed during the preparation of the EIS. All access tracks will be maintained during the construction and operation phase of the project.

Engagement with TfNSW and NSC will be required to identify any existing road safety concerns and ensure any potential deficiencies are clearly understood and assessed, particularly regarding any required upgrades to Strontian Road to for OSOM vehicle movements. New access points from the public road network will also be required for access to the project.

A Traffic Impact Assessment (TIA) will be undertaken as part of the EIS to assess the potential transport routes required for the construction of the project and any potential impact to the road network. The TIA will be prepared consistent with relevant the following guidelines, policies and design requirements:

- Guide to Transport Impact Assessment (TfNSW, 2024)
- Austroads Guide to Road Design (Austroads, 2025a)
- Austroads Guides to Traffic Management (Austroads, 2025b)
- Australian Standard AS 2890 Off-street car parking
- Australian Code for the Transport of Dangerous Goods by Road & Rail (NTC, 2024).

The TIA will include the following elements:

- review of background documents on the transport network and any existing traffic data
- undertake traffic counts
- obtain crash history data from Transport for NSW and analyse
- review access layout and compliance with Australian Standards and Council DCP relevant to design and any parking quantum provisions
- undertake swept path analysis of access and internal road layout for B85, B99 and largest design vehicles
- assess the proposed traffic impacts consistent with the guidelines, policies and design requirements specified above
- review and assessment of the traffic and transport impacts of the proposed worker accommodation strategy
- prepare a Construction Traffic Management Plan
- investigate transport routes and trip distribution/assignment and analyse access arrangements
- prepare a Traffic Impact Assessment Report for the proposed development, addressing all the relevant/expected Council and TfNSW comments/issues as well as all estimates of traffic generations based on information supplied and reference to Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development and the Guide to Traffic Generating Developments
- identify any mitigation and management measures that may be required to reduce traffic impacts.

Any potential cumulative impacts on the road network of other reasonably foreseeable future projects will be considered in the EIS and associated TIA.

6.7 Amenity – Noise and vibration

6.7.1 Existing environment

Land use within and surrounding the project study area is predominately associated with agricultural cropping and grazing activities State Forestry operations, and the adjacent Avonlie Solar Farm. Given the project's setting in a rural environment, background noise at nearby sensitive noise receivers is likely to be low and characterised by agricultural equipment and machinery, as well as vehicle movements along Strontian Road. The nearest private receiver is located over 1.5 km to the site boundary and solar panel arrays.

6.7.2 Potential impacts

Noise impacts from the project will predominately be associated with the temporary construction phase activities including light and heavy vehicle noise from the delivery of machinery, equipment and staff, initial earthworks (including pile driving), and the construction of the solar panel infrastructure, the BESS and other infrastructure includes inverters, a substation, a control room, water storage tanks, internal roads and associated infrastructure.

Operational noise impacts will be limited to the operation of the solar farm, BESS and associated infrastructure. Operational noise is anticipated to be minimal and consistent with background noise in this remote rural setting combined with the traffic noise from land transport vehicles regularly using Strontian Road and the noise produced from existing transmission lines in the area.

6.7.3 Assessment approach

A Noise and Vibration Impact Assessment (NVIA) will be prepared as part of the EIS consistent with relevant NSW guidelines including the following:

- Interim Construction Noise Guideline (DECC, 2009)
- Noise Policy for Industry (EPA, 2017)
- NSW Road Noise Policy (DECCW, 2011)
- Assessing Vibration: a technical guideline (DEC, 2006).

The NVIA will include the following components of work:

- establishing the relevant levels of background noise using minimum noise levels specified in the Noise Policy for Industry
- undertaking predictive noise modelling of the project's construction and operation activities
- assessing the road traffic noise during construction activities
- assessing any vibration impacts at private receivers
- assessing potential cumulative noise and vibration impacts
- identifying any reasonable and feasible mitigation and management measures to reduce noise impacts.

6.8 Air quality (particulate matter)

6.8.1 Existing environment

The project site and surrounding areas are predominately associated with agricultural cropping and grazing activities, State Forestry operations, and the adjacent Avonlie Solar Farm. Existing land use arrangement may influence air quality within the locality. Existing sources of air particulate matter are limited and typically comprise vehicle and machinery exhaust emissions associated with agricultural production and dust from road usage. Vegetation smoke from fires, particularly those associated with hazard reduction burns within Buckingbong State Forest and rural residences, would also be a source of air particulate matter.

6.8.2 Potential impacts

During construction, the project is unlikely to produce significant amounts of air particulate matter; however, dust would be generated via earthworks and road usage associated with the project. Large exposed areas of earth also has the potential to produce higher dust levels. Air particulate matter produced is anticipated to be localised and unlikely to significantly impact nearby receivers, and the use of standard mitigation measures it is considered sufficient to manage impacts on air quality.

During the decommissioning phase, minor levels of dust may be generated during removal of the solar array and associated infrastructure. Areas of bare earth may be temporarily exposed; however, this would only occur for a short duration before rehabilitation of exposed areas occurs.

6.8.3 Assessment approach

The EIS will assess potential air quality impacts of the project consistent with relevant NSW guidelines in relation to construction activities; however, a quantitative air quality assessment is not considered warranted given the risk of impacts to air quality is low and would predominately occur during the construction phase of the project.

6.9 Built environment (private property, public land, public infrastructure)

6.9.1 Existing environment

The project site is situated on land zoned RU1 Primary Production under the Narrandera LEP, and current land use is associated with agricultural cropping and grazing activities. A Crown road also occurs within the development footprint, between the northern and southern section of the site between Lot 23 and Lot 71 of DP754538 as shown in Figure 3.

The Avonlie Solar Farm, a 245 MW, 450,000+ panel solar farm, is located adjacent the eastern boundary of the project site, while Strontian Road, a local road, and Buckingbong State Forest are located on the western and south-western boundary (respectively). Land to the north and south of the project are also used for agricultural activities.

Land use associated with the project is shown in Figure 5.

6.9.2 Potential impacts

The project site comprises multiple large rural paddocks which have predominately been cleared for cropping, while similar land and agricultural activities are widespread in the locality.

Once constructed, the land within the project footprint will not be viable for its existing intensity of agricultural production; however, there are opportunities to co-locate agricultural land uses, such as sheep grazing under the solar panels, to maintain a level of agricultural productivity.

The project is anticipated to be decommissioned at the end of its operational life, whereby all above ground infrastructure would be removed, and it is expected that the land would be returned to its prior agricultural production use, unless the site is repowered with newer PV panels or other technology, subject to obtaining planning permission.

6.9.3 Assessment approach

During construction, agricultural activities would temporarily pause within the project footprint; however, during the operational phase, not all agricultural activities would potentially continue, with the establishment of agrivoltaics and co-location and continuation of sheep grazing.. Impacts associated with land use, primarily private property, public land, public infrastructure, will be further assessed in the EIS.

The Crown road will require closing, or an application for tenure, which will be undertaken in consultation with DPHI: Crown Lands in parallel with the assessment process for the project.

6.10 Hazards and risks

6.10.1 Preliminary hazard analysis

Pursuant to s 3.11 of the Resilience and Hazards SEPP, a preliminary hazard analysis (PHA) must be prepared in accordance with the current circulars of guidelines published by the Department of Planning and submitted with the development application. Section 3.2 of the Resilience and Hazards SEPP defines a **potentially hazardous industry** as:

development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality—

- (a) to human health, life or property, or
- (b) to the biophysical environment,

and includes a hazardous industry and a hazardous storage establishment.

Appendix 3 of the Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (DoP, 2011a) identifies industries that may fall within the Resilience and Hazards SEPP (former SEPP 33) which does not include solar farms or energy storage facilities. However, the proposed BESS is likely to use lithium-ion batteries, which are a Class 9 Miscellaneous dangerous goods (CASA, 2023). The proposed BESS will also have a storage capacity of more than 30 MW.

Therefore, a PHA will be prepared for the EIS in accordance with the Hazardous Industry Planning Advisory Paper No 4 – Risk Criteria for Land Use Safety Planning, Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis and the Assessment Guideline – Multi-level Risk Assessment' (DPHI, 2022a).

It will detail the potential hazards and controls to mitigate hazards to ensure the fire prevention and protection systems are adequate to protect the BESS, and will include:

- Identifying the nature and scale of hazards at the site (e.g. battery type, solar panel type, associated infrastructure, hazardous materials/dangerous goods stored and handled on site, natural events e.g. floods and fires) and select representative incident scenarios.
- Analysing the likelihood and consequences of these incidents on people, property and the biophysical environment from a land use safety planning perspective.
- Calculating the risk levels of the facility using the methodology in the Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis.
- Identifying opportunities for risk reduction (e.g. separation distances between BESS units and/or receivers).
- Assessing OEM recommended separation distances against the proposed layout.
- Identifying whether the project should be considered a hazardous industry under the Resilience and Hazards SEPP.
- Preparing a PHA Report for inclusion in the EIS.

The assessment will be a Level 1 qualitative assessment only for one battery type and one layout. The assessment of fire hazard will be undertaken using BESS OEM specifications and the requirements of the SEARs.

6.10.2 Bushfire

6.10.2.1 Existing environment

The project site is situated entirely on land classified as Vegetation Category 3 under the NSW Rural Fire Service Guide for Bush Fire Prone Land Mapping. Vegetation Category 3 is considered to be medium bush fire risk, and is higher in bush fire risk than category 2 (and the excluded areas) but lower than Category 1. Vegetation Category 3 consists of grasslands, freshwater wetlands, semi-arid woodlands, alpine complex and arid shrublands, and shall be given a 30 m buffer.

Buckungbong State Forest is located south-west of the site on the opposite side of Strontian Road. The majority of Buckungbong State Forest is mapped as Vegetation Category 1, which is considered to be the highest risk for bush fire and has the highest combustibility and likelihood of forming fully developed fire including heavy ember production, and contains areas of forest, woodlands, heaths (tall and short), forested wetlands and timber plantations. Vegetation Category 1 land is to be given a 100 m buffer.

6.10.2.2 Potential impacts

Although the project site has been subject to extensive cultivation associated with agricultural land use, there are areas of remnant vegetation which form a potential fuel load capable of sustaining and spreading bushfire. Areas of vegetation within the project site also represent a potential linkage between vegetated areas within and adjoining the project site, with the potential to support the spread of bushfire.

6.10.2.3 Assessment approach

A bushfire threat assessment will be undertaken as part of the EIS, informing a Bush Fire Risk Management Plan (BFRMP) which will be developed consistent with the requirements of the Planning for Bush Fire Protection (NSW RFS, 2019). Consultation with the NSW Rural Fire Service (RFS) and/or Fire and Rescue NSW will also be undertaken during preparation of the EIS and the BFRMP.

An assessment will also be prepared which demonstrates that the area designated for the BESS is sufficient such that the separation distances between the BESS and on-site or off-site receivers, and between BESS sub-units (containers, modules, etc.), would prevent fire propagation.

Typical bushfire management strategies which would be further investigated during the EIS phase will include, but not be limited to:

- on-site water storage tanks
- establishment of an Asset Protection Zone (APZ) and perimeter roads to serve as a fire break while providing access
- strategic placement of access gates along the perimeter fence line
- management of vegetation cover (including grass height)
- 24/7 automated monitoring of panels and electrical connections.

6.10.3 Electromagnetic fields

An existing 330 kV transmission line (Wagga 330 to Darlington Point) crosses the southwestern portion of the project site in a northwest to southeast direction, while an 11 kV overhead span also crosses the same portion of the project in a north-south direction.

Electromagnetic fields (EMFs) are present where electric current flows, including overhead and underground transmission lines, substations, and electrical appliances. The Large-Scale Solar Energy Guideline mandates that 'applicants should consider the power frequency and electric and magnetic field exposure guidelines referenced by the Australian Radiation Protection and Nuclear Safety Agency'. It is expected that EMF risks associated with the project will be below the ICNIRP Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz – 100 kHz) (ICNIRP, 2010). A review of potential EMF risks associated with the project will be undertaken as part of the EIS, and suitable safeguards and mitigation measures will be proposed to reduce any potential risks.

6.10.4 Flooding

Flooding patterns in the vicinity of Narrandera are a complex interaction between several tributary and effluent systems of the Murrumbidgee River, principally Bundidgerry Creek, Old Man Creek, the Sandy Creek system and Gillenbah Creek, with water levels in the river typically rise over a number of days, where they remain near their peak for a period of about a day before receding (NSC, 2019b).

The Review of the Narrandera Floodplain Risk Management Strategy Study and Plan (NSC, 2019b) identifies areas where Main Stream Flooding and Major Overland Flow at Narrandera for 1% Annual Exceedance Probability (AEP) and Extreme Flood events occur; however, the project site is not situated within those areas. Further, the project site is located outside the flood planning area under the Narrandera LEP.

Notwithstanding, the Sturt Highway between Narrandera and the intersection to Strontian Road is situated within the flood planning area of the Narrandera LEP. While this is outside the development footprint, flooding has the potential to impact access to the project site for the construction workforce, which is proposed to be accommodated in Narrandera.

The EIS will assess the impacts of flooding during construction and operation and include appropriate mitigation measures as required. The flooding assessment will be undertaken in accordance with the following:

- Flood risk management manual (DPE, 2023d)
- Review of the Narrandera Floodplain Risk Management Strategy Study and Plan (NSC, 2019b).

6.11 Water

6.11.1 Existing environment

6.11.1.1 Topography

The project site is located within the Murrumbidgee catchment which has an area of 84,000 km², with elevations ranging from over 2,200 m to the east, to less than 50 m on the western plains (DPHI, 2025c). Within the catchment, the Murrumbidgee River is a major tributary of the Murray-Darling River system, which spans almost 1,600 km and drains much of southern NSW and most of the ACT

(DPHI, 2025c). The project site is located on flat terrain, with slope measuring 4% or less, at an elevation of 150 m AHD.

6.11.1.2 Climate

The study area features a semi-arid climate, with limited precipitation which is slightly more concentrated in summer and autumn than in other seasons. The nearest relevant meteorological station is the Narrandera Airport AWS which is located approximately 21 km north of the project site. The station is detailed as follows:

Site name: Narrandera Airport AWS
Site number: 074148
Latitude: 34.71°S **Longitude:** 146.51°E
Elevation: 145 m
Commenced: 1967 **Status:** Open
Latest available data: 13 May 2025

The mean maximum and minimum temperatures for the years 1970-2025, and mean rainfall statistics for the years 1967-2025 are detailed in Table 19.

Table 19: Climate statistics for the Narrandera Airport AWS meteorological station

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Annual |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| Mean max temp (°C) | 33.4 | 32.3 | 28.8 | 23.9 | 18.9 | 15.1 | 14.5 | 16.3 | 20.2 | 24.6 | 28.3 | 31.2 | 24.0 |
| Mean min temp (°C) | 17.6 | 17.3 | 14.2 | 9.7 | 6.3 | 3.9 | 3.2 | 3.7 | 5.7 | 9.3 | 12.7 | 15.1 | 9.9 |
| Mean rainfall (mm) | 40.2 | 33.0 | 33.9 | 34.7 | 39.3 | 38.6 | 35.7 | 38.9 | 35.0 | 40.5 | 38.7 | 36.4 | 444.7 |

Source: Bureau of Meteorology (2025b).

6.11.1.3 Hydrology

Sandy Creek, a fourth order Strahler stream (Class 2 waterway), is located approximately 4 km east of the project site. Based on the New South Wales River Styles spatial dataset (NSW DCCEE, 2025b), Sandy Creek is a laterally unconfined, continuous channel, low sinuosity, fine-grained bed river style with a poor geomorphic stream condition. A first order Strahler stream flows in an east-west direction within the south-western portion of the project site, while 3 farm dams are located within the project footprint.

6.11.1.4 Groundwater

The site is outside of the Mid Murrumbidgee Alluvial Groundwater Sources zone (DPE, 2022), and outside the Groundwater Vulnerability area of the Narrandera LEP.

6.11.2 Potential impacts

During construction the project has the potential to result in the following impacts to water quality should suitable mitigation measures not be implemented:

- ground disturbance during bulk earthworks and other site activities could lead to exposure of soils and potential erosion and mobilisation of sediment into receiving watercourses
- pollution of local water quality from machinery and construction materials and spills

- a variety of chemicals will be used which have the ability to disperse away from the project site means that they could have a negative impact on ground or surface water on or adjacent to the subject sites, especially during rain
- demand for water during construction.

During the operation phase of the project water quality impacts may result from:

- demand for water for land management purposes
- pollution of local water quality from machinery and construction materials and spills
- a variety of chemicals (particularly pesticides and herbicides) will be used which have the ability to disperse away from the project site means that they could have a negative impact on ground or surface water on or adjacent to the subject sites, especially during rain

Specific design considerations and mitigation measures will be recommended within the EIS to minimise potential impacts to water quality. Further, the project is not likely to impact groundwater during construction, operation, or decommissioning given the site is outside of the Mid Murrumbidgee Alluvial Groundwater Sources zone and the groundwater vulnerability areas.

6.11.3 Assessment approach

The EIS will assess the impacts to surface waterways during construction and operation and include appropriate mitigation measures as required. The assessment will include:

- potential impacts on surface water and groundwater resources, including (where identified) watercourses, wetlands, riparian land and groundwater dependent ecosystems
- consideration of water requirements and supply arrangements for construction and operation
- adjacent licensed water users and basic landholder rights
- erosion and sediment control measures to be implemented to mitigate any impacts consistent with Managing Urban Stormwater: Soils and Construction – Volume 1 (Landcom, 2004).

6.11.4 Other matters

The EIS will also address other potential impacts relating to the following matters:

- **Glint and glare** – the EIS will assess the potential reflectivity and glare related impacts of the project consistent with the Large-Scale Solar Energy Guideline.
- **Decommissioning and rehabilitation** – the EIS will assess potential impacts of the project arising from decommissioning and rehabilitation activities, particularly on the final landform and compatibility with existing land uses.
- **Waste** – The project would generate several waste streams and utilise a variety of materials during the construction phase, including:
 - excavated materials (soils)
 - vegetation
 - packaging from materials used
 - consumable and putrescible waste generated from the construction and operation workforce.

Whilst these matters will be appropriately assessed in the EIS, detailed assessments are not proposed as the issues can be readily defined, assessed and mitigated using well recognised approaches.

6.12 Uncertainties in assessment

Preliminary assessments undertaken during the scoping phase, and as documented in this report, have been based on publicly available data and predominantly desktop specialist investigations, with the addition of preliminary (rapid) ecological surveys and a preliminary visual site inspection. Further detailed investigations including field inspections and surveys will be undertaken during the preparation of the EIS.

Key matters to be considered further in the development of the EIS include (but are not limited to):

- The OSOM access route(s) from the port(s) to the project site including the need for any road upgrades.
- Visual impacts of the project and potential landscape mitigation, including screen planting on site and off site.
- Location, number and sensitivity of receivers.
- Flooding risks and potential hydrology impacts.
- Presence of threatened fauna and flora species including potential habitat for these species.
- Development footprint and layout for the project to be reviewed and refined based on the findings of the detailed environmental assessments and further engagement with stakeholders, the community and government agencies.

6.13 Matters requiring no further assessment in the EIS

Table 20 outlines the matters that are considered to not require further assessment in the EIS based on the scoping phase assessment along with a comment justifying why no further assessment is required.

Table 20: Matters requiring no further assessment in the EIS

| Issue | Comment |
|----------------------------------|--|
| Greenhouse gas and energy | As the project will generate renewable energy, the emissions resulting from the construction, operation or decommissioning will be readily offset by the reduction in energy generation emissions. Greenhouse gas emissions will be addressed in the justification for the project as part of the EIS. |
| Operational traffic | Traffic generation associated with the operational phase of the project will be minimal and will generally only involve the movement of light vehicles transporting operational staff to and around the site. No assessment of operational traffic is considered necessary. |
| Port, airport or rail facilities | The project does not result in any change to port or airport facilities. Other than the potential delivery of project components to the port, the transportation of project components to the site will be assessed as part of the TIA. The project does not propose to utilise any rail facilities. |
| Odour | The project is not anticipated to cause any odour. |
| Coastal hazards | The project is not located within a coastal zone and will not result in any impacts to coastal zones. |
| Dam safety | The project does not require the construction or maintenance of a dam. |

| Issue | Comment |
|---------------|---|
| Land movement | The project is not anticipated to result in any land movement, and only relatively minor excavation works are required. |

7. CONCLUSION

This scoping report has been prepared on behalf of Strontian Solar Farm Pty Ltd and in support of a proposed large-scale solar farm and Battery Energy Storage System at Strontian Road, Sandigo. It outlines and establishes the planning and general environmental context of the project, which will be assessed under Part 4 of the EP&A Act and classed as SSD under the Planning Systems SEPP.

The scoping report has categorised the potential environmental impacts of the project as key issues or other issues. Based on this scoping report, an indicative scope for the EIS has been developed, focusing on the key issues:

- Amenity – Visual
- Biodiversity
- Heritage – Aboriginal
- Land
- Social and Economic.

The EIS will also consider other issues including access and traffic, amenity – noise and vibration, air quality (particulate matter), the built environment, hazards and risks, and water.

The EIS will be prepared consistent with the project-specific SEARs, with mitigation measures developed for inclusion which will address the management of key issues and other issues identified in the assessment and community and stakeholder engagement process.

8. REFERENCES

- Acid Sulfate Soils Management Advisory Committee (1998). *Acid Sulfate Soils Assessment Guidelines*. Retrieved from <https://www.epa.nsw.gov.au/sites/default/files/ASS-Manual-2-Assessment-Guidelines.pdf>
- Australian Bureau of Statistics (2021). *Narrandera: 2021 Census Ass persons QuickStats*. Retrieved from <https://abs.gov.au/census/find-census-data/quickstats/2021/SAL12915>
- Australian Energy Market Operator (2024). *2024 Integrated System Plan*. Retrieved from <https://aemo.com.au/-/media/files/major-publications/isp/2024/2024-integrated-system-plan-isp.pdf?la=en>
- Austrroads (2025a). *Guide to Road Design*. Retrieved from <https://austrroads.gov.au/safety-and-design/road-design/guide-to-road-design>
- Austrroads (2025b). *Guide to Traffic Management*. Retrieved from <https://austrroads.gov.au/network-operations/network-management/guide-to-traffic-management>
- Bureau of Meteorology (2025a). *Groundwater Dependent Ecosystems Atlas*. Retrieved from <http://www.bom.gov.au/water/groundwater/gde/map.shtml>
- Bureau of Meteorology (2025b). *Climate statistics for Australian locations: Summary statistics Narrandera Airport AWS*. Retrieved from http://www.bom.gov.au/climate/averages/tables/cw_074148.shtml
- Civil Aviation Safety Authority (2023). *Dangerous goods classes and hazard labels*. Retrieved from <https://www.casa.gov.au/operations-safety-and-travel/safety-advice/dangerous-goods-and-air-freight/dangerous-goods-classes-and-hazard-labels#Hazardlabelsfordangerousgoods>
- Commonwealth Department of Climate Change, Energy, the Environment and Water (2025a). *International climate change*. Retrieved from https://www.dcceew.gov.au/climate-change/international-climate-action#toc_0
- Commonwealth Department of Climate Change, Energy, the Environment and Water (2025b). *Renewable Energy Target scheme*. Retrieved from <https://www.dcceew.gov.au/energy/renewable/target-scheme>
- Commonwealth Department of Climate Change, Energy, the Environment and Water (2025c). *Australia's National Heritage List*. Retrieved from <https://www.dcceew.gov.au/parks-heritage/heritage/places/national-heritage-list>
- Commonwealth Department of Climate Change, Energy, the Environment and Water (2025d). *Australian Heritage Database*. Retrieved from https://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=search_results:list_code=CHL;legal_status=35
- Department of Customer Services (2025). *Spatial Collaboration Portal: Historical Image Viewer*. Retrieved from <https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccdda8075238cb>
- Department of Planning (2011a). *Hazardous and Offensive Development Application Guidelines: Applying SEPP 33*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/hazardous-and-offensive-development-application-guidelines-applying-sepp-33.pdf>
- Department of Planning (2011b). *Hazardous Industry Planning Advisory Paper No 3: Risk Assessment*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/hazardous-industry-planning-advisory-paper-no-3-risk-assessment.pdf>

- Department of Planning (2011c). *Hazardous Industry Planning Advisory Paper No 4: Risk Criteria for Land Use Safety Planning*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/hazardous-industry-planning-advisory-paper-no-4-risk-criteria-for-land-use-safety-planning.pdf>
- Department of Planning (2011d). *Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/hazardous-industry-planning-advisory-paper-no-6-hazard-analysis.pdf>
- Department of Planning (2011e). *Hazardous Industry Planning Advisory Paper No 12 – Hazards-Related Conditions of Consent*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/hazardous-industry-planning-advisory-paper-no-12-hazards-related-conditions-of-consent.pdf>
- Department of Environment and Climate Change (2008a). *Managing Urban Stormwater: Soils and construction – Volume 2A, Installation of services*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/managing-urban-stormwater-soils-construction-volume-2a-installation-services-0801.pdf>
- Department of Environment and Climate Change (2008b). *Managing Urban Stormwater: Soils and construction – Volume 2C, Unsealed roads*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/managing-urban-stormwater-soils-construction-volume-2c-unsealed-roads-0802.pdf>
- Department of Environment and Climate Change (2009). *Interim Construction Noise Guideline*. Retrieved from <https://www.environment.nsw.gov.au/resources/noise/09265cnq.pdf>
- Department of Environment and Conservation (2006). *Assessing Vibration: a technical guideline*. Retrieved from <https://www.environment.nsw.gov.au/resources/noise/vibrationguide0643.pdf>
- Department of Environment, Climate Change and Water (2009). *Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/due-diligence-code-of-practice-aboriginal-objects-protection-100798.pdf>
- Department of Environment, Climate Change and Water (2010a). *Aboriginal Cultural Heritage Consultation Requirements for Proponents*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/aboriginal-cultural-heritage-consultation-requirements-for-proponents-2010-090781.pdf>
- Department of Environment, Climate Change and Water (2010b). *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/code-of-practice-for-archaeological-investigation-of-aboriginal-objects-100783.pdf>
- Department of Environment, Climate Change and Water (2011). *NSW Road Noise Policy*. Retrieved from <https://www.epa.nsw.gov.au/sites/default/files/2011236nswroadnoisepolicy.pdf>
- Department of Industry, Science, Energy and Resources (2021). *Australia's Long-term Emissions Reduction Plan*. Retrieved from <https://www.dccew.gov.au/sites/default/files/documents/australias-long-term-emissions-reduction-plan.pdf>
- Department of Planning and Environment (2022). *Mid Murrumbidgee Alluvial Groundwater Sources*. Retrieved from [https://publications.water.nsw.gov.au/watergroupjspui/bitstream/100/728/1/Groundwater Annual Report 2022 -Mid Murrumbidgee Alluvial groundwater source.pdf](https://publications.water.nsw.gov.au/watergroupjspui/bitstream/100/728/1/Groundwater%20Annual%20Report%202022-Mid%20Murrumbidgee%20Alluvial%20groundwater%20source.pdf)
- Department of Planning and Environment (2023a). *Riverina Murray Regional Plan 2041*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/riverina-murray-regional-plan-2041.pdf>

- Department of Planning and Environment (2023b). *Narrandera Local Environmental Plan 2013*. Retrieved from <https://legislation.nsw.gov.au/view/whole/html/inforce/current/epi-2013-0357>
- Department of Planning and Environment (2023c). *Assessing heritage significance Guidelines for assessing places and objects against the Heritage Council of NSW criteria*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/assessing-heritage-significance-guidelines-assessing-places-objects-against-criteria-230167.pdf>
- Department of Planning and Environment (2023d). *Flood risk management manual*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/flood-risk-management-manual-2023-230220.pdf>
- Department of Planning and Environment (2025). *Major Projects: State Significant Applications*. Retrieved from https://www.planningportal.nsw.gov.au/major-projects/projects?status=All&lga=84&development_type=All&industry_type=Energy&case_type=All
- Department of Planning, Housing and Infrastructure (2024a). *State Significant Development Guidelines*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/state-significant-development-guidelines.pdf>
- Department of Planning, Housing and Infrastructure (2024b). *Undertaking Engagement Guidelines for State Significant Projects*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/undertaking-engagement-guidelines-for-ssp.pdf>
- Department of Planning, Housing and Infrastructure (2024c). *Renewable Energy Planning Framework*. Retrieved from <https://www.planning.nsw.gov.au/policy-and-legislation/renewable-energy/renewable-energy-planning-framework>
- Department of Planning, Housing and Infrastructure (2024d). *Practice Note: Engaging with Aboriginal Communities*. Retrieved from <https://www.energy.nsw.gov.au/sites/default/files/2022-08/SIA-Aboriginal-Engagement-Practice-Note.pdf>
- Department of Planning, Housing and Infrastructure (2022a). *Large-Scale Solar Energy Guideline*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2024-11/large-scale-solar-energy-guideline.pdf>
- Department of Planning, Housing and Infrastructure (2022b). *Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2024-11/large-scale-solar-energy-guideline-visual-technical-supplement.pdf>
- Department of Planning, Housing and Infrastructure (2025a). *Social Impact Assessment Guideline*. Retrieved from https://shared-drupal-s3fs.s3.ap-southeast-2.amazonaws.com/master-test/fapub_pdf/NSW%2BPlanning%2BPortal%2BDocuments/Social+Impact+Assessment+Guideline+July+2025.pdf
- Department of Planning, Housing and Infrastructure (2025b). *Technical Supplement: Social Impact Assessment Guideline for State Significant Projects*. Retrieved from <https://www.planningportal.nsw.gov.au/sites/default/files/documents/2025/Social%20Impact%20Assessment%20Guideline%20Technical%20Supplement%20July%202025.pdf>
- Department of Planning, Housing and Infrastructure (2025c). *Murrumbidgee: About the Murrumbidgee*. Retrieved from <https://water.dpie.nsw.gov.au/about-us/learn-about-water/basins-and-catchments/catchments/murrumbidgee>
- Department of Planning, Industry and Environment (2019). *NSW Electricity Strategy*. Retrieved from https://www.energy.nsw.gov.au/sites/default/files/2022-08/2019_11_NSW_ElectricityStrategyOverview.pdf

- Department of Planning, Industry and Environment (2020a). *NSW Electricity Infrastructure Roadmap*. Retrieved from <https://www.energy.nsw.gov.au/sites/default/files/2022-08/NSW%20Electricity%20Infrastructure%20Roadmap%20-%20Detailed%20Report.pdf>
- Department of Planning, Industry and Environment (2020b). *Net Zero Plan Stage 1: 2020-2030*. Retrieved from <https://www.energy.nsw.gov.au/sites/default/files/2022-08/net-zero-plan-2020-2030-200057.pdf>
- Department of Planning, Industry and Environment (2020c). *Biodiversity Assessment Method*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/biodiversity-assessment-method-2020-200438.pdf>
- Department of Planning, Industry and Environment (2020d). *NSW Survey Guide for Threatened Frogs*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/nsw-survey-guide-for-threatened-frogs-200440.pdf>
- Department of Planning, Industry and Environment (2022e). *Surveying threatened plants and their habitats*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/surveying-threatened-plants-and-habitats-nsw-survey-guide-biodiversity-assessment-method-200146.pdf>
- Department of Planning, Industry and Environment (2022a). *State significant development guidelines – preparing a scoping report*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/ssd-guidelines-preparing-a-scoping-report.pdf>
- Department of Planning, Industry and Environment (2022b). *Cumulative Impact Assessment Guidelines for State Significant Projects*. Retrieved from <https://www.planning.nsw.gov.au/sites/default/files/2023-03/cumulative-impact-assessment-guidelines-for-ssp.pdf>
- Department of Primary Industries (n.d.). *Fisheries NSW Spatial Data Portal*. Retrieved from https://webmap.industry.nsw.gov.au/Html5Viewer/index.html?viewer=Fisheries_Data_Portal
- Department of Primary Industries (2013). *Policy and guidelines for fish habitat conservation and management: Update 2013*. Retrieved from https://www.dpi.nsw.gov.au/data/assets/pdf_file/0009/468927/Policy-and-guidelines-for-fish-habitat.pdf
- Department of the Environment (2013). *Matters of National Environmental Significance: Significant impact guidelines 1.1*. Retrieved from https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines_1.pdf
- Department of Urban Affairs and Planning and Environment Protection Authority (1998). *Managing Land Contamination: Planning Guidelines SEPP 55—Remediation of Land*. Retrieved from <https://www.epa.nsw.gov.au/sites/default/files/managing-contaminated-land-guidelines-remediation.pdf>
- EnergyCo (2025). *The Electricity Infrastructure Roadmap*. Retrieved from <https://www.energyco.nsw.gov.au/about-energyco/electricity-infrastructure-roadmap>
- Environment and Heritage (2025a). *State Vegetation Type Map*. Retrieved from <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet/state-vegetation-type-map#how-do-i-get-the-map>
- Environment and Heritage (2025b). *State Heritage Inventory*. Retrieved from https://www.hms.heritage.nsw.gov.au/App/Item/SearchHeritageItems?_ga=2.165972984.714120821.1658117920-344545924.1656901875
- Environment Protection Authority (2017). *Noise Policy for Industry*. Retrieved from <https://www.epa.nsw.gov.au/sites/default/files/17p0524-noise-policy-for-industry.pdf>

- Environment Protection Authority (2023). *The NSW Government PFAS Investigation Program*. Retrieved from <https://www.epa.nsw.gov.au/your-environment/contaminated-land/pfas-investigation-program>
- Environment Protection Authority (2025a). *Search the contaminated land record*. Retrieved from <https://app.epa.nsw.gov.au/prclmapp/searchregister.aspx>
- Environment Protection Authority (2025b). *List of notified sites*. Retrieved from <https://www.epa.nsw.gov.au/your-environment/contaminated-land/notified-and-regulated-contaminated-land/list-of-notified-sites>
- International Commission on Non-Ionizing Radiation Protection (2010). *ICNIRP Guidelines for Limiting Exposure to Time-Varying Electric and Magnetic Fields (1 Hz – 100 kHz)*. Retrieved from <https://www.icnirp.org/cms/upload/publications/ICNIRPLFgdl.pdf>
- Landcom (2004). *Managing Urban Stormwater: Soils and Construction – Volume 1*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/managing-urban-stormwater-soils-construction-volume-1-fourth-edition.pdf>
- Narrandera Shire Council (2019a). *Community Participation Plan – Planning*. Retrieved from <https://www.narrandera.nsw.gov.au/development/planning-tools/community-participation-plan>
- Narrandera Shire Council (2019b). *Review of the Narrandera Floodplain Risk Management Study and Plan: March 2019*. Retrieved from https://www.narrandera.nsw.gov.au/sites/default/files/2020-02/narrandera_flood_risk_management_system_report_1.pdf
- Narrandera Shire Council (2020). *Local Strategic Planning Statement*. Retrieved from <https://www.narrandera.nsw.gov.au/development/planning-tools/local-strategic-planning-statement>
- Narrandera Shire Council (2024). *Narrandera Shire Economic Development Strategy 2024-2028*. Retrieved from <https://www.narrandera.nsw.gov.au/economic-development-strategy-0>
- Narrandera Shire Council (2025). *Community Strategic Plan 2040*. Retrieved from <https://www.narrandera.nsw.gov.au/governance/council-plans/community-strategic-plan>
- National Heavy Vehicle Regulator (2025). *National Network Map*. Retrieved from https://maps.nhvr.gov.au/?networkLayerContext=NATIONAL_MAP&view=Category&viewBy=Vehicle+Categories&parentCategory=bdouble&category=bdouble&exemptionSetId=3&networkIds=%5B330%2C5128%2C261%2C566%5D
- National Native Title Tribunal (2025). *Native Title Vision*. Retrieved from <https://www.nntt.gov.au/assistance/Geospatial/Pages/NTV.aspx>
- National Transport Commission (2024). *Australian Code for the Transport of Dangerous Goods by Road & Rail*. Retrieved from <https://www.ntc.gov.au/sites/default/files/assets/files/Australian%20Code%20for%20the%20Transport%20of%20Dangerous%20Goods%20by%20Road%20%26%20Rail%20-%20Edition%207.9%20%28Volume%20I%20%26%20II%29.pdf>
- NSW Department of Climate Change, Energy, the Environment and Water (2025b). *New South Wales River Styles spatial dataset*. Retrieved from <https://datasets.seed.nsw.gov.au/dataset/new-south-wales-river-styles-spatial-dataset>
- NSW Government (2020). *Narrandera Shire Council*. Retrieved from <https://data.nsw.gov.au/data/organization/about/narrandera-shire-council>
- NSW Land Registry Services (2025). *Renewable Energy Leases (SSIR 2024)*. Retrieved from https://rq-guidelines.nswlrs.com.au/deposited_plans/lease_plans/lease_of_premises/solar-farms

- NSW Rural Fire Service (2015). *Guide for Bush Fire Prone Land Mapping: Version 5b*. Retrieved from https://www.rfs.nsw.gov.au/_data/assets/pdf_file/0011/4412/Guideline-for-Councils-to-Bushfire-Prone-Area-Land-Mapping.pdf
- NSW Rural Fire Service (2019). *Planning for Bush Fire Protection: A guide for councils, planners, fire authorities and developers*. Retrieved from https://www.rfs.nsw.gov.au/_data/assets/pdf_file/0005/174272/Planning-for-Bush-Fire-Protection-2019.pdf
- Office of Environment and Heritage (2011a). *Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales*. Retrieved from <https://www.environment.nsw.gov.au/sites/default/files/guide-to-investigating-assessing-reporting-aboriginal-cultural-heritage-nsw-110263.pdf>
- Office of Environment and Heritage (2011b). *Guidelines for Consultants Reporting on Contaminated Sites*. Retrieved from <https://www.environment.nsw.gov.au/resources/clm/20110650consultantsglines.pdf>
- Office of Environment and Heritage (2012). *The land and soil capability assessment scheme: Second approximation*. Retrieved from <https://nswdpe.intersearch.com.au/nswdpejspui/bitstream/1/14012/1/land-soil-capability-assessment-scheme-120394.pdf>
- Office of Environment and Heritage (2016). *NSW Climate Change Policy Framework*. Retrieved from <https://www.energy.nsw.gov.au/sites/default/files/2022-08/nsw-climate-change-policy-framework-160618.pdf>
- The Social Aspect (2025). *Strontian Road Solar Farm and Battery Energy Storage System: Social Impact Assessment Scoping Report*.
- Transport for NSW (2024). *Guide to Transport Impact Assessment*. Retrieved from <https://www.transport.nsw.gov.au/system/files/media/documents/2024/print-version-guide-transport-impact-assessment-TS%2000085-v1.1.pdf>
- Transport for NSW (2025). *NSW Road Network Classifications*. Retrieved from <https://maps.transport.nsw.gov.au/egeomaps/road-network-classification/index.html>
- United Nations Framework Convention on Climate Change (n.d.). *The Paris Agreement: What is the Paris Agreement?* Retrieved from <https://unfccc.int/process-and-meetings/the-paris-agreement>

LIMITATIONS

This Document has been provided by WolfPeak Group Pty Ltd (WolfPeak) to the Client and is subject to the following limitations:

This Document has been prepared for the particular purpose/s outlined in the WolfPeak proposal/contract/relevant terms of engagement, or as otherwise agreed, between WolfPeak and the Client.

In preparing this Document, WolfPeak has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations (the information). Except as otherwise stated in the Document, WolfPeak has not verified the accuracy or completeness of the information. To the extent that the statements, opinions, facts, findings, conclusions and/or recommendations in this Document (conclusions) are based in whole or part on the information, those conclusions are contingent upon the accuracy and completeness of the information. WolfPeak will not be liable in relation to incorrect conclusions should any information be incomplete, incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to WolfPeak.

This Document has been prepared for the exclusive benefit of the Client and no other party. WolfPeak bears no responsibility for the use of this Document, in whole or in part, in other contexts or for any other purpose. WolfPeak bears no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with in this Document, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in this Document (including without limitation matters arising from any negligent act or omission of WolfPeak or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in this Document). Other parties should not rely upon this Document or the accuracy or completeness of any conclusions and should make their own inquiries and obtain independent advice in relation to such matters.

To the best of WolfPeak's knowledge, the facts and matters described in this Document reasonably represent the Client's intentions at the time of which WolfPeak issued the Document to the Client. However, the passage of time, the manifestation of latent conditions or the impact of future events (including a change in applicable law) may have resulted in a variation of the Document and its possible impact. WolfPeak will not be liable to update or revise the Document to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of issue of the Document.

APPENDIX A – SCOPING SUMMARY TABLE

| Level of assessment | Matter | CIA | Engagement | Relevant government plans, policies and guidelines | Scoping report reference |
|---------------------|-----------------------|-----|------------|---|--------------------------|
| Detailed | Amenity – Visual | Yes | Specific | <ul style="list-style-type: none"> Large-Scale Solar Energy Guideline (DPHI, 2022a) Large-Scale Solar Energy Guideline: Technical Supplement for Landscape Character and Visual Impact Assessment (DPHI, 2022b) Cumulative Impact Assessment Guidelines for State Significant Projects (DPIE, 2022b). | Section 6.1 |
| | Biodiversity | Yes | Specific | <ul style="list-style-type: none"> Biodiversity Assessment Method (DPIE, 2020c) NSW Survey Guide for Threatened Frogs (DPIE, 2020d) Surveying threatened plants and their habitats (DPIE, 2020e) Matters of National Environmental Significance: Significant impact guidelines 1.1 (Department of the Environment, 2013) Policy and guidelines for fish habitat conservation and management: Update 2013 (DPI, 2013). | Section 6.2 |
| | Heritage – Aboriginal | Yes | Specific | <ul style="list-style-type: none"> Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010a) Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010b) Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales (OEH, 2011a). | Section 6.3 |
| | Land | No | Specific | <ul style="list-style-type: none"> Large-Scale Solar Energy Guideline (DPHI, 2022a) Acid Sulfate Soils Assessment Guidelines (ASSMAC, 1998) Managing Land Contamination: Planning Guidelines SEPP 55–Remediation of Land (Department of Urban Affairs and Planning and Environmental Protection Authority, 1998) Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011b) Land and soil capability assessment scheme: second approximation (OEH, 2012). | Section 6.4 |
| | Social and Economic | Yes | Specific | <ul style="list-style-type: none"> Social Impact Assessment Guideline (DPHI, 2025a) Technical Supplement: Social Impact Assessment Guideline for State Significant Projects (DPHI, 2025b). | Section 6.5 |
| Standard | Access and traffic | Yes | General | <ul style="list-style-type: none"> Guide to Transport Impact Assessment (TfNSW, 2024) Austrorads Guide to Road Design (Austrorads, 2025a) | Section 6.6 |

| Level of assessment | Matter | CIA | Engagement | Relevant government plans, policies and guidelines | Scoping report reference |
|---------------------|----------------------------------|-----|------------|--|--------------------------|
| | | | | <ul style="list-style-type: none"> Austroads Guides to Traffic Management (Austroads, 2025b) Australian Standard AS 2890 Australian Code for the Transport of Dangerous Goods by Road & Rail (NTC, 2024). | |
| | Amenity – Noise and vibration | Yes | General | <ul style="list-style-type: none"> Interim Construction Noise Guideline (DECC, 2009) Noise Policy for Industry (EPA, 2017) NSW Road Noise Policy (DECCW, 2011) Assessing Vibration: a technical guideline (DEC, 2006). | Section 6.7 |
| | Air quality (particulate matter) | No | General | N/A | Section 6.8 |
| | Built environment | No | General | N/A | Section 6.9 |
| | Hazards and risks | No | General | <ul style="list-style-type: none"> Hazardous and Offensive Development Application Guidelines: Applying SEPP 33 (Department of Planning, 2011a) Hazardous Industry Planning Advisory Paper No 3: Risk Assessment (Department of Planning, 2011b) Hazardous Industry Planning Advisory Paper No 4: Risk Criteria for Land Use Safety Planning (Department of Planning, 2011c) Hazardous Industry Planning Advisory Paper No 6 – Hazard Analysis (Department of Planning, 2011d) Hazardous Industry Planning Advisory Paper No 12: Hazards-Related Conditions of Consent (Department of Planning, 2011e). | Section 6.10 |
| | Water | No | General | <ul style="list-style-type: none"> Managing Urban Stormwater: Soils and construction – Volume 1 (Landcom, 2004) Managing Urban Stormwater: Soils and construction – Volume 2A, Installation of services (DECC, 2008a) Managing Urban Stormwater: Soils and construction – Volume 2C, Unsealed roads (DECC, 2008b). | Section 6.11 |

APPENDIX B – ABORIGINAL AND HISTORICAL HERITAGE CONSTRAINTS AND OPPORTUNITIES ASSESSMENT

Refer to supporting document 'SSF-Appendix B-Aboriginal and Historical Heritage Constraints and Opportunities Assessment'.

APPENDIX C – PRELIMINARY BIODIVERSITY ASSESSMENT

Refer to supporting document 'SSF-Appendix C-Preliminary Biodiversity Assessment'.

APPENDIX D – SOCIAL IMPACT ASSESSMENT SCOPING REPORT

Refer to supporting document 'SSF-Appendix D-Social Impact Assessment Scoping Report'.

APPENDIX E – PRELIMINARY VISUAL IMPACT ASSESSMENT

Refer to supporting document 'SSF-Appendix E-Preliminary Visual Impact Assessment'.