Preliminary Biodiversity Impact Report

Narrabri North Solar Farm

742 Stoney Creek Road, Narrabri

Prepared for

YES Group Pty Ltd

By Katherine Hill & Damian Wall

Version 2

15/12/2025

Red-Gum Environmental Consulting Pty Ltd
94 Kirby Flat Road, Yackandandah, VIC 3749
Phone: 0402 344 574
ABN: 797 823 838 29
damian.wall@red-gum.com.au

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Authorisation	 Damian Wall (Managing Director)

Contents

1 Introduction 2

2 Anticipated Impacts 2

3 Biodiversity Impact Assessment 5

3.1 Biodiversity Offsets Scheme Entry 5

3.2 Native Vegetation Land Category Assessment 8

3.3 Native Vegetation Extent 12

3.4 Narrabri Local Environmental Plan 2012 (and 2025 amendment) 13

3.5 NSW Rural Fires Act 1997 - NSW Rural Boundary Clearing Code for NSW 2021 15

3.6 Fisheries Management Act 1994 and Waterways 16

3.7 Threatened Species and Ecological Communities 18

3.7.1 Matters of National Environmental Significance 18

3.7.2 EPBC Act and BC Act Listed Threatened Species 19

3.7.3 EPBC Act and BC Act listed Threatened Ecological Communities 19

3.7.4 Koala Habitat Assessment 23

4 Conclusion & Recommendations 26

5 Attachments 27

Attachment 1: Threatened Species Likelihood Assessment 27

Attachment 2: Site Photos - August 2025 by Damian Wall. 36

Attachment 3: Biodiversity Values Map and Threshold 42

Attachment 4: Matters of National Environmental Significance Report 46

Attachment 5: Test of Significance Assessment 57

LIST OF TABLES

Table 1: Details of staff qualifications and experience 2
Table 2: Summary of Matters of National Environmental Significance (MNES) report. 18
Table 3: Summary of BC Act-listed and EPBC Act-listed threatened ecological communities within a 10-kilometre radius of the study area. 21
Table 4: Threatened flora species recorded and/or predicted to occur within 10 km of site. 28
Table 5: Threatened fauna species recorded and/or predicted to occur within 10 km of site. 29
Table 6: Factors for consideration - Test of Significance ("5-part test") 57

LIST OF MAPS

Map 1: Indicative development site location showing hydrological features. 3
Map 2: Client supplied indicative proposed solar farm development site layout. 4
Map 3: Minimum lot size (100ha) as defined by the Narrabri Local Environmental Plan 2012 (and 2025 amendment). ... 6
Map 4: Biodiversity Values Map of the study area locality. 7
Map 5A: NSW Transitional Native Vegetation Regulatory map of the proposal site (in force). 9
Map 5B: NSW Draft NVR Map (not in force) but used to guide required land categorisation. 10
Map 5C. Aerial imagery of the subject land from 1983 shows evidence of native vegetation clearing and ongoing maintenance of the existing road (proposed development access), demonstrating that the area qualifies as Category 1 – Exempt Land.. 11
Map 6: NSW Extant State Vegetation Type Map of the proposal site showing Plant Community Types codes. 14

1 Introduction

Y.E.S. Group Pty Ltd (YES) is proposing the development of a 4.95-megawatt (MW) solar farm with battery storage near Narrabri in north-western region of New South Wales known as the 'Narrabri North Solar Farm' (the project/development).

Red-Gum Environmental Consulting Pty Ltd (Red-Gum) was engaged by YES (the proponent) to undertake a preliminary assessment regarding potential impacts on biodiversity values within the receiving environment resulting from the proposed development. This report provides a level of information necessary to inform approval determinations under section 7.2 of the NSW *Biodiversity Conservation Act 2016* (BC Act) and the *Environmental Planning and Assessment Act 1979* (EP&A Act), including any considerations related to further biodiversity assessments or offsets.

This report covers both a desktop assessment and a field inspection, with the goal of following the NSW Biodiversity Offsets Scheme's 'avoid, minimise, offset' hierarchy whenever possible. The desktop assessment relied on modelled data and databases managed by state and federal authorities. The precision of the findings in this report is directly related to the reliability and accuracy of these database records and spatial datasets. A field assessment of the proposal site was undertaken by Damian Wall on the 11 August 2025 (see Table 1 for qualifications and experience). The study area was traversed to identify the vegetation/habitat types and condition. The site assessment sought primarily to identify the extent and type of native vegetation present and applicable Plant Community Types (PCTs) present within the study area and to identify potential habitat for species and ecological communities. This site survey area is based on client data provided in June 2025 and the environmental and seasonal conditions at that time. Given the site's extensively altered state, these considerations do not substantially constrain the initial evaluation of its ecological habitat values.

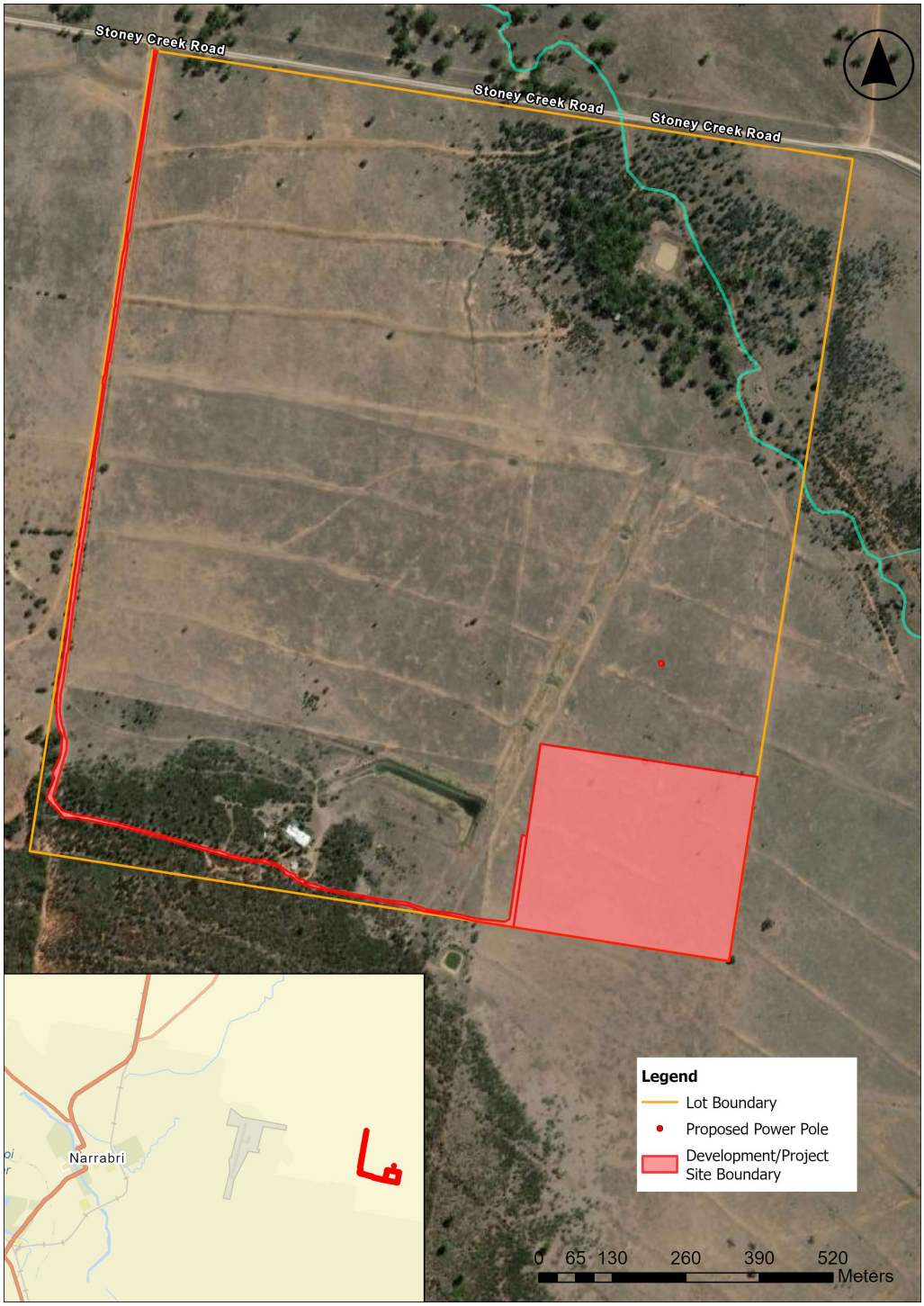
Table 1: Details of staff qualifications and experience

Name	Position/Role	Relevant Qualifications	Relevant Experience
Damian Wall	Biodiversity/field surveys, technical review of report, and contributing author.	• NSW Biodiversity Assessment Method Accredited Assessor (BAAS18081) • Bachelor of Applied Science (Parks, Recreation & Heritage), CSU. • Master Environmental Management & Restoration, CSU. • Certified Environmental Practitioner (CEnvP). • Certified Environmental Practitioner (EIANZ).	+28 years
Katherine Hill	Ecologist and lead author, desktop assessment, reporting.	• NSW Biodiversity Assessment Method Accredited Assessor (BAAS24043) • Bachelor Environmental Science (Conservation Ecology), Deakin University. • Bachelor Science (Ecology) (Hons), Latrobe University.	+23 years

2 Anticipated Impacts

The Narrabri North Solar Farm proposes the development of a 4.95-megawatt (MW) single-axis tracker photovoltaic solar array accompanied by an 11-megawatt hours (MWh) battery storage energy system (BESS) and related infrastructure that at 742 Stoney Creek Road, Narrabri (approximately 9 kilometres east of Narrabri); approximately 100 kilometres northwest of Gunnedah in north-western region of New South Wales (refer to **Map 1 & Map 2**).

The development site spans approximately 10.5 hectares within Lot 3/DP1034554 which is zoned RU1 – Primary Production in the Narrabri Shire Council and includes associated infrastructure such as access/internal roads, security boundary fencing, electrical equipment, site parking, site amenities, and the installation of an 22kV overhead transmission line connection and two new poles (to connect to an existing 22kV line located approximately 300 metres north – refer to indicative site layout in **Map 2**). For this assessment, Red-Gum has considered that all impacts associated with the proposal are within the development site boundary shown in **Map 1**.



Map 1: Indicative development site location showing hydrological features.

Map 2: Client supplied indicative proposed solar farm development site layout.

3 Biodiversity Impact Assessment

This Preliminary Biodiversity Inspection Report (BIR) details the initial desktop assessment and field inspection of the designated project study area at a specific point in time, aiming to comply with the NSW Biodiversity Offsets Scheme (BOS) by following the 'avoid, minimise, offset' hierarchy where feasible.

The BOS hierarchy guides the BIR process to ensure that the proponent:

1. considers if the proposal can avoid negative biodiversity impacts;
2. minimise unavoidable negative impacts to biodiversity values; and
3. after all efforts to avoid or minimise impacts, evaluates whether remaining impacts can be offset.

The latter of the three hierarchy tiers (point 3 above) will require further assessment via either a Test of Significance (ToS) and/or Biodiversity Development Assessment Report (BDAR) to fully consider the development's likely impact on threatened ecological communities, species and their habitats. This is unless the development is classified as a State Significant Development (SSD) or State Significant Infrastructure Development, where it will enter the NSW Biodiversity Offsets Scheme (BOS) by default.

In these circumstances, in line with the NSW Biodiversity Conservation Act 2016 (BC Act), a Biodiversity Development Assessment Report (BDAR) will be required, unless a successful BDAR Waiver is obtained (s7.14 of the BC Act). Consequently, this BIR assessment was conducted in accordance with the Biodiversity Assessment Method (BAM) 2020 requirements.

3.1 Biodiversity Offsets Scheme Entry

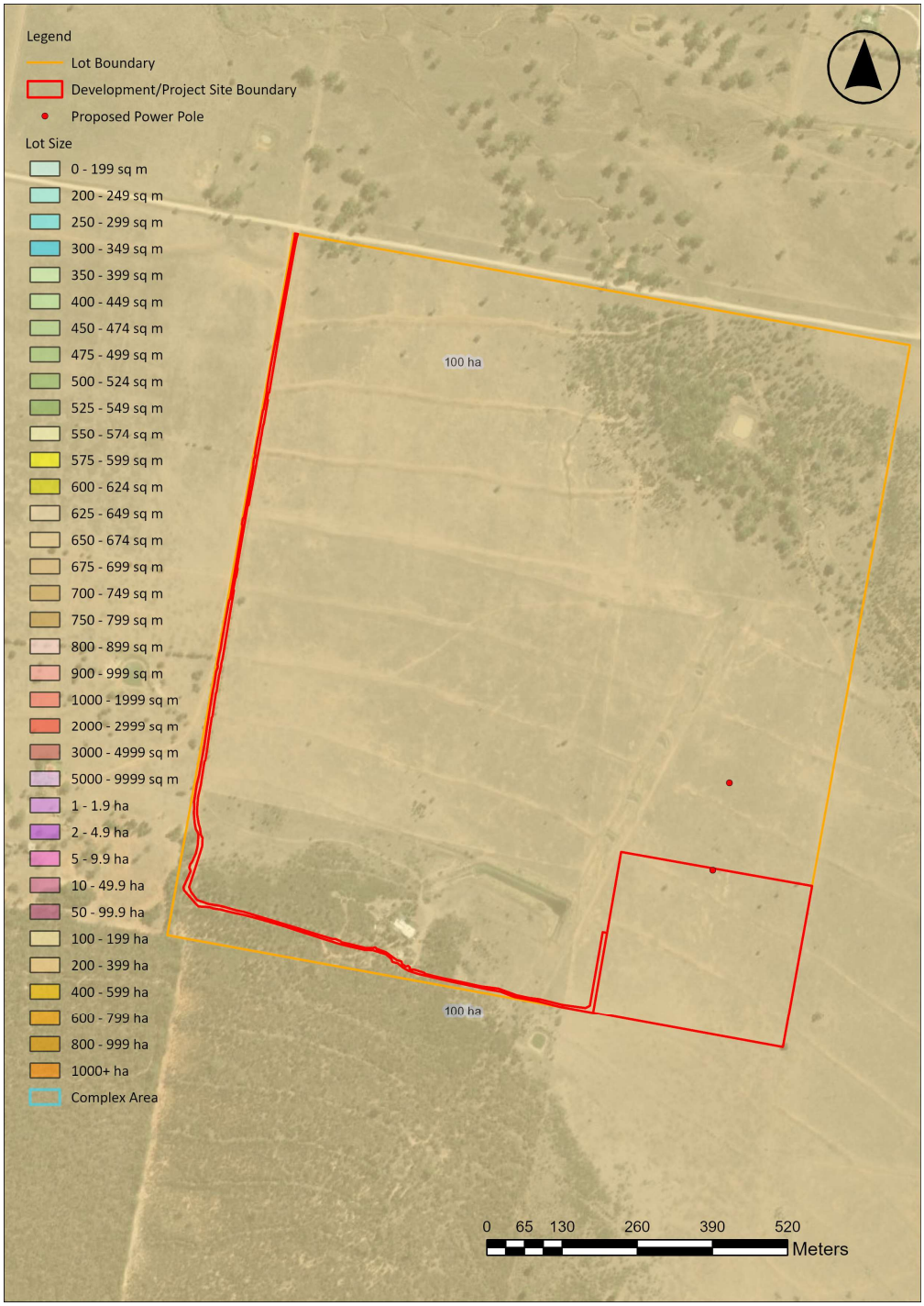
For development applications, under Part 4 of the *Environmental Planning and Assessment Act* 1979 (NSW), the Biodiversity Offsets Scheme (BOS) applies when a proposal:

- exceeds the area of native vegetation BOS clearing threshold; or
- is within an area mapped on the Biodiversity Values Map; or
- is proposed in an Area of Outstanding Biodiversity Value as defined by the BC Act; or
- is likely to have a significant impact according to the Test of Significance (in section 7.3 of the NSW *Biodiversity Conservation Act 2016* (BC Act).

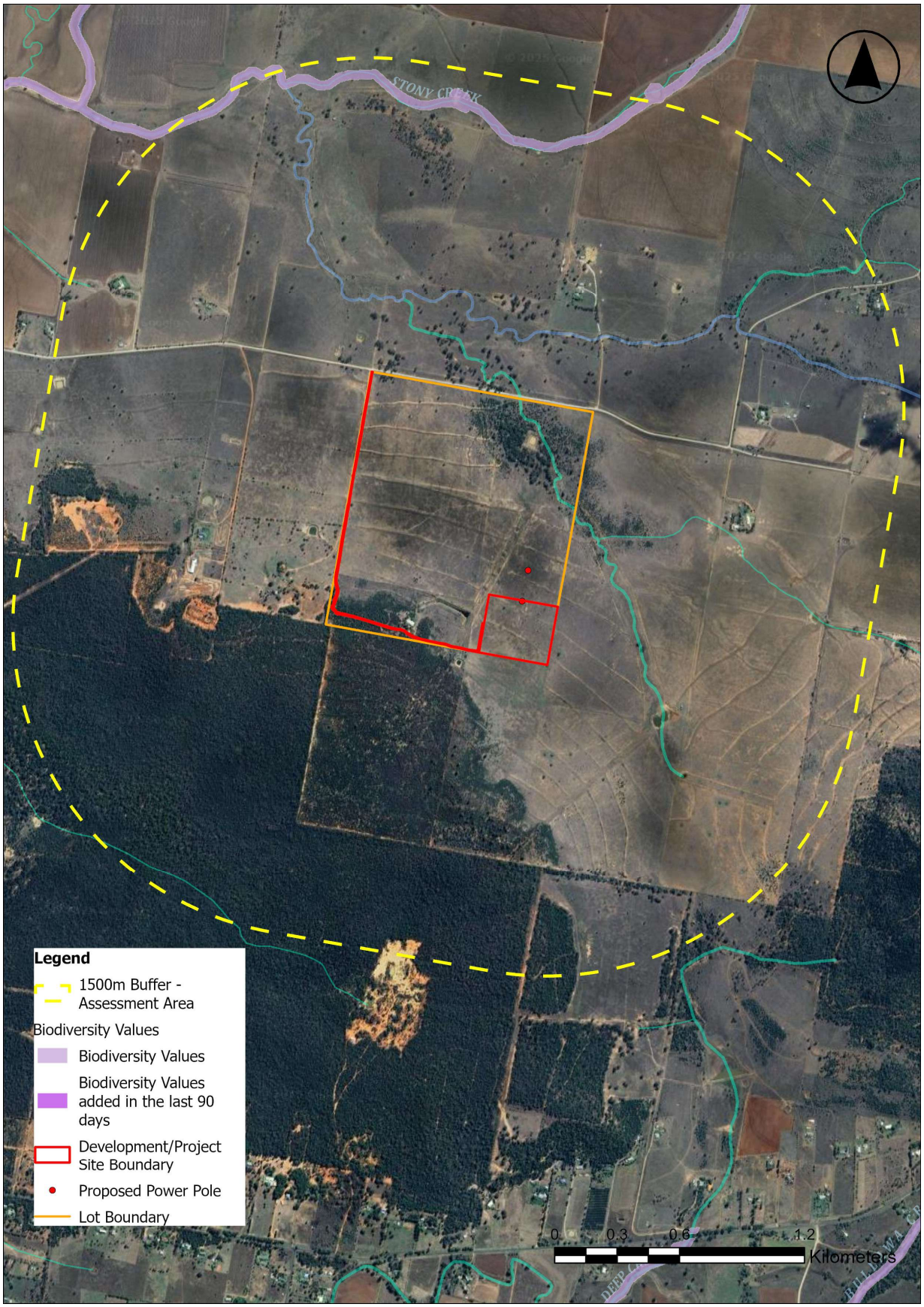
The Biodiversity Values Map and Threshold (BMAT) Tool report (dated 27/11/2025) evaluates:

- According to the NSW Modelled Native Vegetation Area Clearing Estimate layer, 0.53 hectares of native vegetation are projected to be cleared, which is below the one-hectare threshold for a minimum lot size of 100 hectares (refer to BMAT Report in Attachment 3 and Map 3). However, actual clearing is less than predicted, as field assessments have confirmed that the area identified for impact in the southwestern section of the proposed access way coincides with an existing gravel road that is devoid of native vegetation. Consequently, this area does not meet the criteria for a native vegetation PCT or patch and its use will not result in any loss of native vegetation or habitat, provided the development remains within the existing road alignment without widening (refer to Map 6 and site photographs in Attachment 2).
- No mapped biodiversity values under the NSW BC Act are present within or near the site (see Map 4 and Attachment 3).
- The development site is not classified as an 'Area of Outstanding Biodiversity Value'.

*The above BMAT outcomes **DO NOT** necessitate entry into the BOS (nor a BDAR), however, development proponents must still undertake a Test of Significance (TOS) assessment undertaken in accordance with section 7.3 of the Biodiversity Conservation Act 2016 (presented in Attachment 5) to fully consider direct/indirect impacts. Having assessed the five relevant factors, the TOS concluded that the proposal is **UNLIKELY** to result in a significant impact on threatened species or ecological communities. As such, the proposal can continue to be assessed under section 4.15 of the NSW EP&A Act and does **NOT** trigger the Biodiversity Offset Scheme (BOS) or necessitate a BDAR.*



Map 3: Minimum lot size (100ha) as defined by the Narrabri Local Environmental Plan 2012 (and 2025 amendment).



Map 4: Biodiversity Values Map of the study area locality.

3.2 Native Vegetation Land Category Assessment

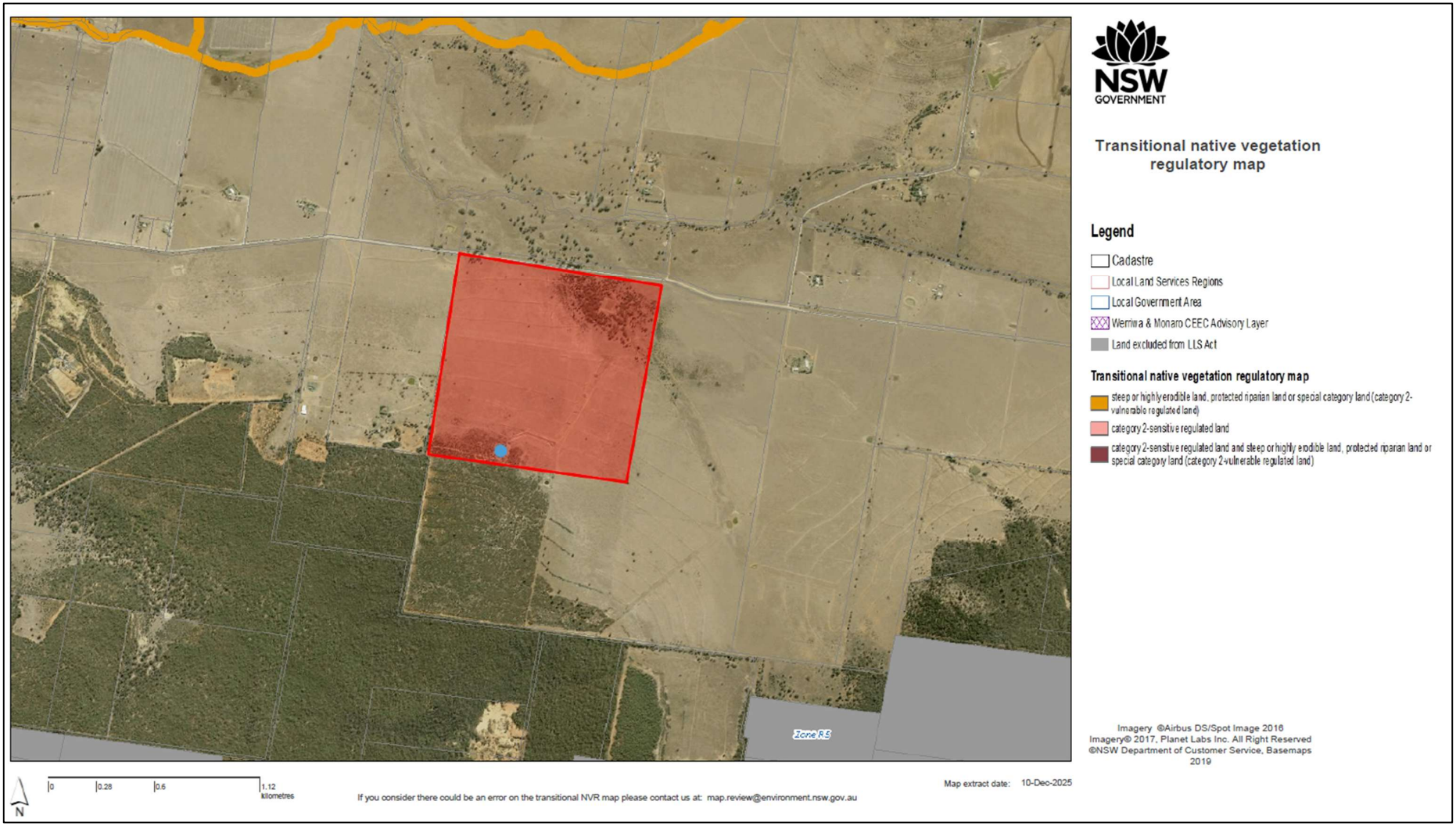
The *Local Land Services Act 2013 (LLS Act)*, as amended by the *Local Land Services Amendment Act 2016* (LLSA Act), provides a regulatory framework for the management of native vegetation on rural land in NSW. Conversely, Chapter 2 of the State Environmental Planning Policy (Biodiversity and Conservation) 2021 regulates clearing of native vegetation in urban and all other land in New South Wales that are zoned for environmental conservation or management.

The NSW Native Vegetation Regulatory (NVR) Map identifies rural land that is regulated under the NSW Land Management Framework. Private landholders can currently review and update vegetation categories on their property's regulatory map. Under the LLSA Act, the Land Management (Native Vegetation) Code 2018 supports landholders to manage their land to ensure more productive farming methods and systems, while responding to environmental risks. Clearing of some native vegetation may be carried out without approval for the purposes of allowable activities. Higher impact clearing will require approval from a new Native Vegetation Panel, and proponents will be required to assess and offset the biodiversity impacts of approved clearing (applicable to Vulnerable and Sensitive Regulated Land).

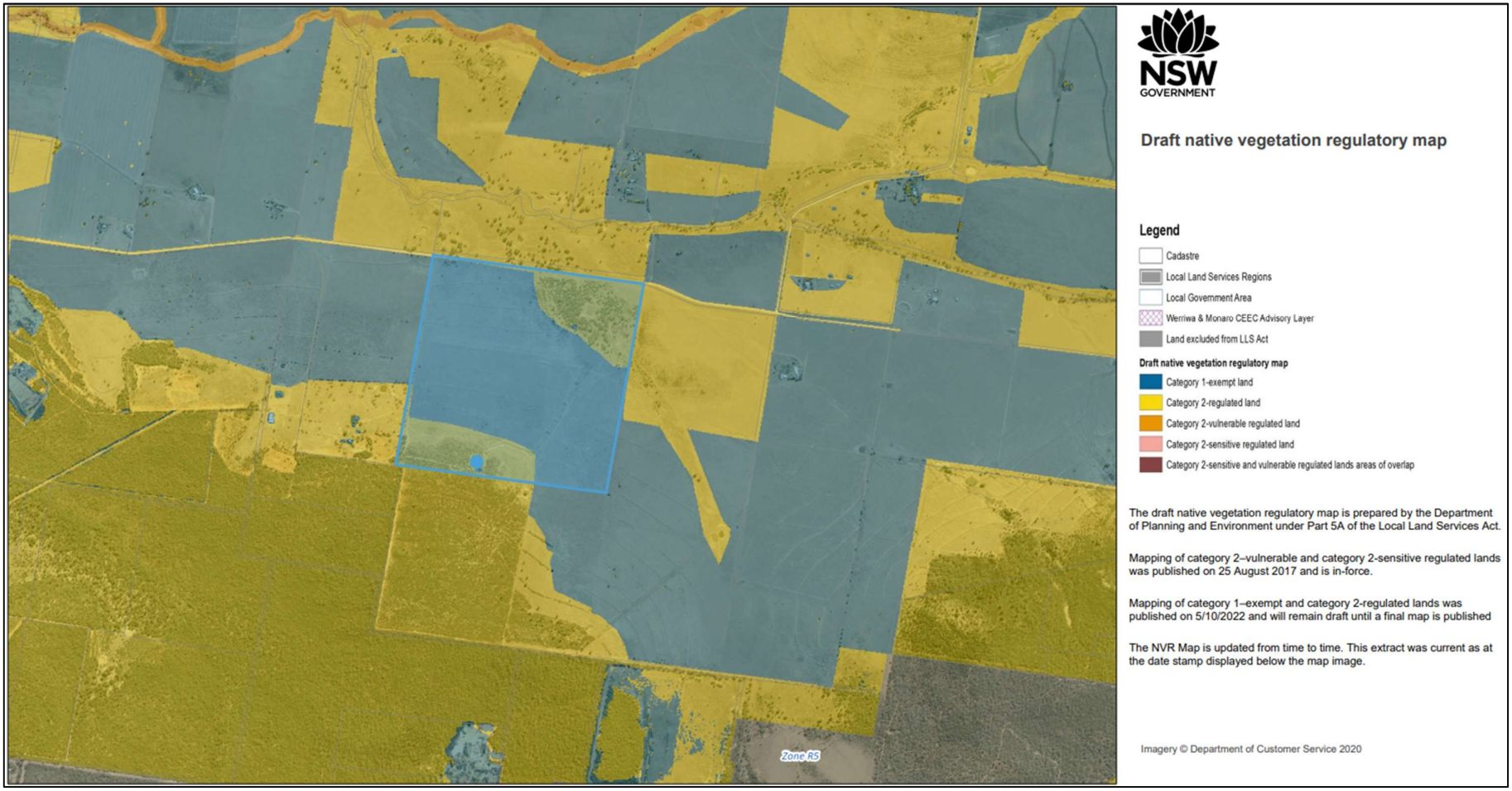
A review of the NSW Transitional NVR (in-force) has confirmed that the development site does **NOT** encompass any areas designated as Category 2 – Vulnerable or Sensitive Regulated Land (refer to **Map 5A**). In addition, the Draft NVR Map (which is not yet in effect) models approximately 0.5 hectares in the southwest part of the planned access way are classified as Category 2 – Regulated Land and the remainder as Category 1 (Exempt Land) (refer to **Map 5B**). Clearing of native vegetation from Category 2 – Regulated Land usually requires authorisation under a Land Management (Native Vegetation) Code administered by Local Land Services or via other approval pathways under Part 5A of the LLS Act. However, site assessments confirmed that the area identified coincides with an existing gravel road that is devoid of native vegetation which is different from the NSW modelled Plant Community Types (PCT) and Land Categorisation. Accordingly, this area does not meet the criteria for a native vegetation PCT/patch and its use will not result in any loss of native vegetation or habitat, provided the development remains within the existing road alignment and is not widened (refer to Map 6 and site photographs in Attachment 2). Aerial imagery of the subject land from 1983 shows evidence of native vegetation clearing and ongoing maintenance of the existing road (proposed development access), demonstrating that the area qualifies as Category 1 – Exempt Land (refer to **Map 5C**).

Development proposals on Category 1 (exempt land) is land where native vegetation can be cleared without approval from Local Land Services; thus, impacts do not contribute to the clearing threshold for entry into the NSW BOS for development assessed under the NSW *EP&A Act* and can be excluded from assessment under the BAM 2020. However, development proponents must still carry out a 'Test of Significance' (TOS) assessment including those on Category 1 (Exempt Land) to assess its impact on threatened ecological communities, species, and their habitats.

*A TOS of the site and surveys of the scattered trees concluded that the proposal is **UNLIKELY** to result in a significant impact on threatened species or ecological communities (refer to **Table 6 in Attachment 5**). Accordingly, the proposed removal of low-value native grasses and six scattered paddock trees (that currently are unlikely to provide habitat for threatened species) on Category 1 – Exempt Land can occur without requiring approval from Local Land Services. As such, the proposal can continue to be assessed under section 4.15 of the NSW Environmental Planning and Assessment Act 1979 and does not trigger the Biodiversity Offset Scheme (BOS) or require a Biodiversity Development Assessment Report (BDAR).*



Map 5A: NSW Transitional Native Vegetation Regulatory map of the proposal site (in force).



Map 5B: NSW Draft NVR Map (not in force) but used to guide required land categorisation.

Map 5C. Aerial imagery of the subject land from 1983 shows evidence of native vegetation clearing and ongoing maintenance of the existing road (proposed development access), demonstrating that the area qualifies as Category 1 – Exempt Land..

3.3 Native Vegetation Extent

Existing native vegetation modelling of the site (NSW pre-1750 and extant State Vegetation Type Map (SVTM) spatial data was groundtruthed in the field via systematically walking and slow driving across the proposal site. The site assessment sought primarily to identify the extent and type of native vegetation present and applicable Plant Community Types (PCTs) present within the study area and to identify potential habitat for threatened species and ecological communities. At a wider landscape context, the proposal occurs within the Brigalow Belt South Interim Biogeographic Regionalisation for Australia (IBRA) region and within both the Liverpool Plains IBRA subregion (for the proposed solar farm) and Northern Basalts IBRA subregion (for the proposed access way).

The subject land, encompassing the broader cadastral lot, is characterised by generally flat terrain that declines northward from around 270 to 250 metres above sea level on land that has been historically cleared of native vegetation and primarily managed for agriculture (refer to Map 1 and Map 6). The subject land contains two large patches of native vegetation that are being avoided by the proposed development site including in the south-western corner and north-eastern corner (refer to PCT mapping in Map 6).

Part of the proposed access way (approximately 0.5 hectares) appears to intersect this modelled NSW PCT area in the south western corner, which is mapped as PCT 411 and 408, however, the PCTs landscape position and remnant native species suggest it more closely aligns with PCT 397 – '*Poplar Box - White Cypress Pine shrub grass tall woodland of the Pilliga - Warialda region, Brigalow Belt South Bioregion*' (refer to Map 6). However, site assessments confirmed that the proposed access way occurs on an existing gravel road that is devoid of native vegetation which is different from the NSW modelled Plant Community Types (PCT) and Land Categorisation due to the inherent limitations in the NSW model mapping resolution. Consequently, this area does not meet the criteria for a native vegetation PCT or patch and its use will not result in any loss of native vegetation or habitat, provided the development remains within the existing road alignment without widening (refer to Map 6 and site photographs in Attachment 2). Historical aerial imagery from 1983 shows evidence of native vegetation clearing and ongoing maintenance of the existing road (demonstrating that the area has been cleared for some time and qualifies as Category 1 – Exempt Land (refer to **Map 5C**).

Although NSW native vegetation modelling has classified the site remainders of the subject land as 'PCT 0 – Not native' and Category 1 - Exempt Land (refer to Map 5B and Map 6), fields surveys identified that there is native vegetation present on site in the form of derived low-conservation value native groundcover (i.e. native grasses) ranging from 0% to 45% (averaging 20% across the site) that has very low species diversity with at least 50% cover of exotic grasses/forbs and six scattered native trees as mapped in Map 6 and site photos in **Attachment 2**. Specifically, there are two medium sized Poplar Box (*Eucalyptus populnea*) and four small to medium sized White Cypress Pine (*Callitris glaucophylla*). The low-value native groundcover cover is characteristic of semi-arid land that has previously subjected to agricultural clearing, cultivation, mechanical disturbance, significant land-forming, and livestock grazing. While low quality native grasses are present, Red-Gum believes the land should remain 'Category 1 – Exempt Land', even though the Native Vegetation Regulatory Map does not show it as such, since the site would meet the LLS Act's Category 1 exempt land definitions of:

- Land cleared of native vegetation as of 1 January 1990 or lawfully cleared after 1 January 1990 (refer to aerial imagery from 1983 in Map 5C); and/or
- Land containing low conservation value groundcover (not being grasslands) (refer to site photos in Attachment 2).

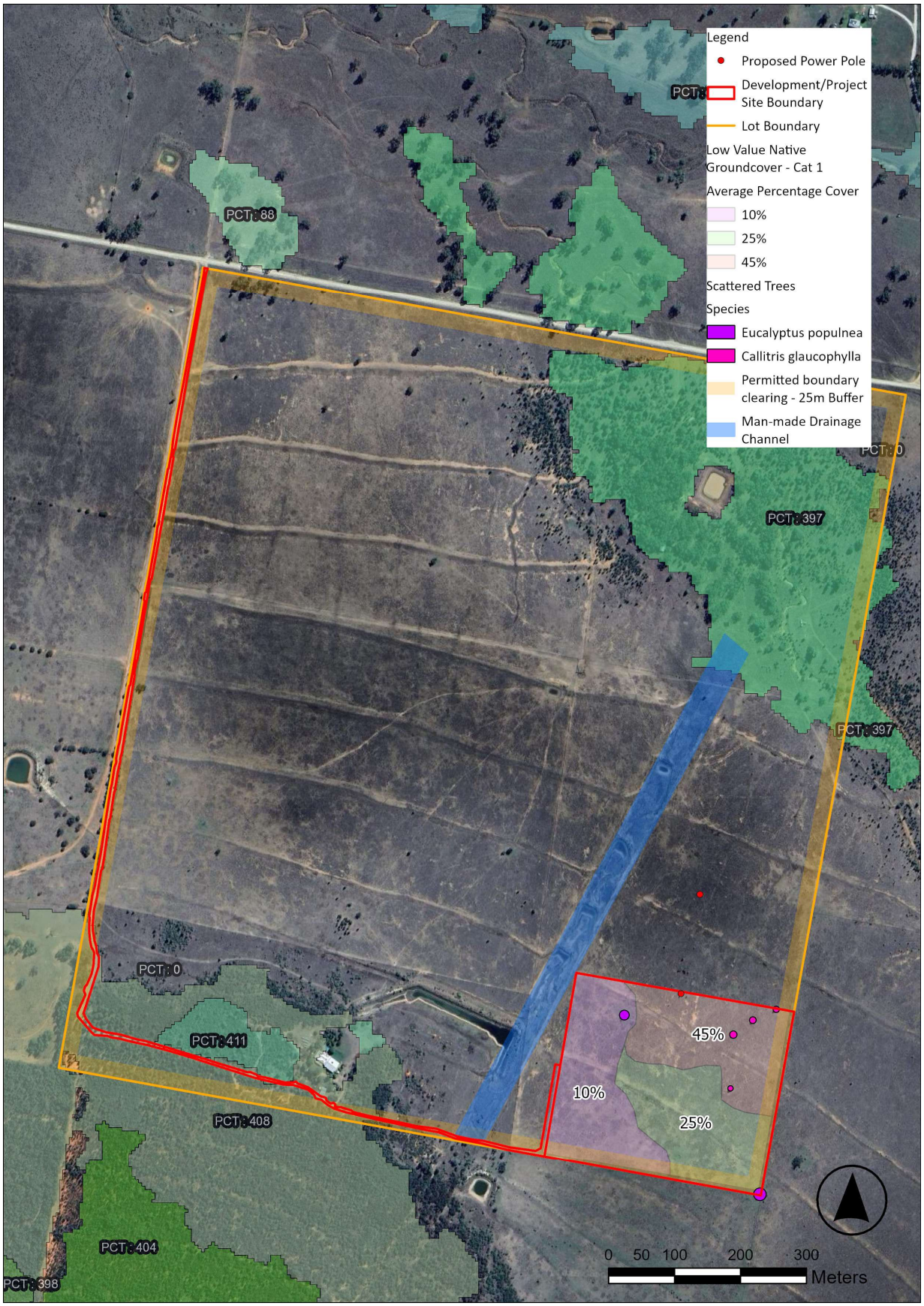
Scattered native understorey species include *Bothriochloa macra* (Redgrass), *Bothriochloa decipien* (Pitted Bluegrass), *Rytidosperma* spp. (Wallaby Grasses), *Austrostipa* spp. (Spear Grasses), *Chloris truncata (Wind*mill Grass), *Panicum decompositum* (Native Millet), *Lachnagrostis* sp. (Blown Grass) and *Tanacetum vulgare* (Tansy). In addition, rare occurrences of *Acacia decora* (Western Silver Wattle), *Maireana sp.* (Bluebush), *Sclerolaena birchii* (Galvanised Burr), and *Sclerolaena muricata* (Black Rolypoly) were observed.

These low-conservation value native groundcover often had at least 50% coverage of exotics including dominating species of: *Eragrostis* spp. (Lovegrasses), *Bromus* spp. (Bromes), *Cenchrus ciliaris* (Buffel Grass), *Sertaria* sp. (Pigeon Grass), *Hyparrhenia hirta* (Coolatai Grass), *Centaurea calcitrapa* (Star thistle), *Hypochaeris radicata* (Flat Weed), *Trifolium repens* (White Clover), *Rapistrum rugosum* (Turnip Weed), *Opuntia spp* (Prickly Pear) and *Lycium ferocissimum* (African Boxthorn).

Red-Gum considers that, prior to European settlement, areas currently mapped as "PCT 0 – Not Native" as well as those mapped as PCT 411 and PCT 408 were most likely representative of PCT 397 – Poplar Box–White Cypress Pine shrub–grass tall woodland of the Pilliga–Warialda region (Brigalow Belt South Bioregion), based on landscape position and the presence of relictual native species. However, this vegetation type is no longer present on the development site due to historical clearing and ongoing agricultural use. This assessment remains valid provided the development is confined to the existing road alignment (with no widening) and the proposed development footprint (refer to Map 6 and site photographs in Attachment 2).

3.4 Narrabri Local Environmental Plan 2012 (and 2025 amendment)

The subject land is zoned RU1 – Primary Production with a minimum lot size of 100 hectares under the Narrabri Local Environmental Plan 2012 (refer to Map 3). Additionally, the site is not constrained by any biodiversity-related environmental planning instruments such as 'Terrestrial Biodiversity', 'Riparian Lands and Watercourse', 'Wetlands' or 'Environmentally Sensitive Areas'.



Map 6: NSW Extant State Vegetation Type Map of the proposal site showing Plant Community Types codes.

3.5 NSW Rural Fires Act 1997 - NSW Rural Boundary Clearing Code for NSW 2021

The Rural Boundary Clearing Code for NSW 2021 (RBCC) permits landholders in designated areas to remove vegetation within 25 metres of the boundary of their property, without requiring approval, for bushfire risk management in rural zones. If applicable to a property, this provision allows vegetation clearing within 25 metres of the combined perimeter, rather than individual lots. The Code does not extend to sections of property boundaries where environmental protections exist (such as protection of waterways, threatened biodiversity or habitat) or where the land is not classified as bush fire prone. Clearing is prohibited in such areas and subject to heavy penalties. The Code provides for vegetation clearing work on land within a holding that is:

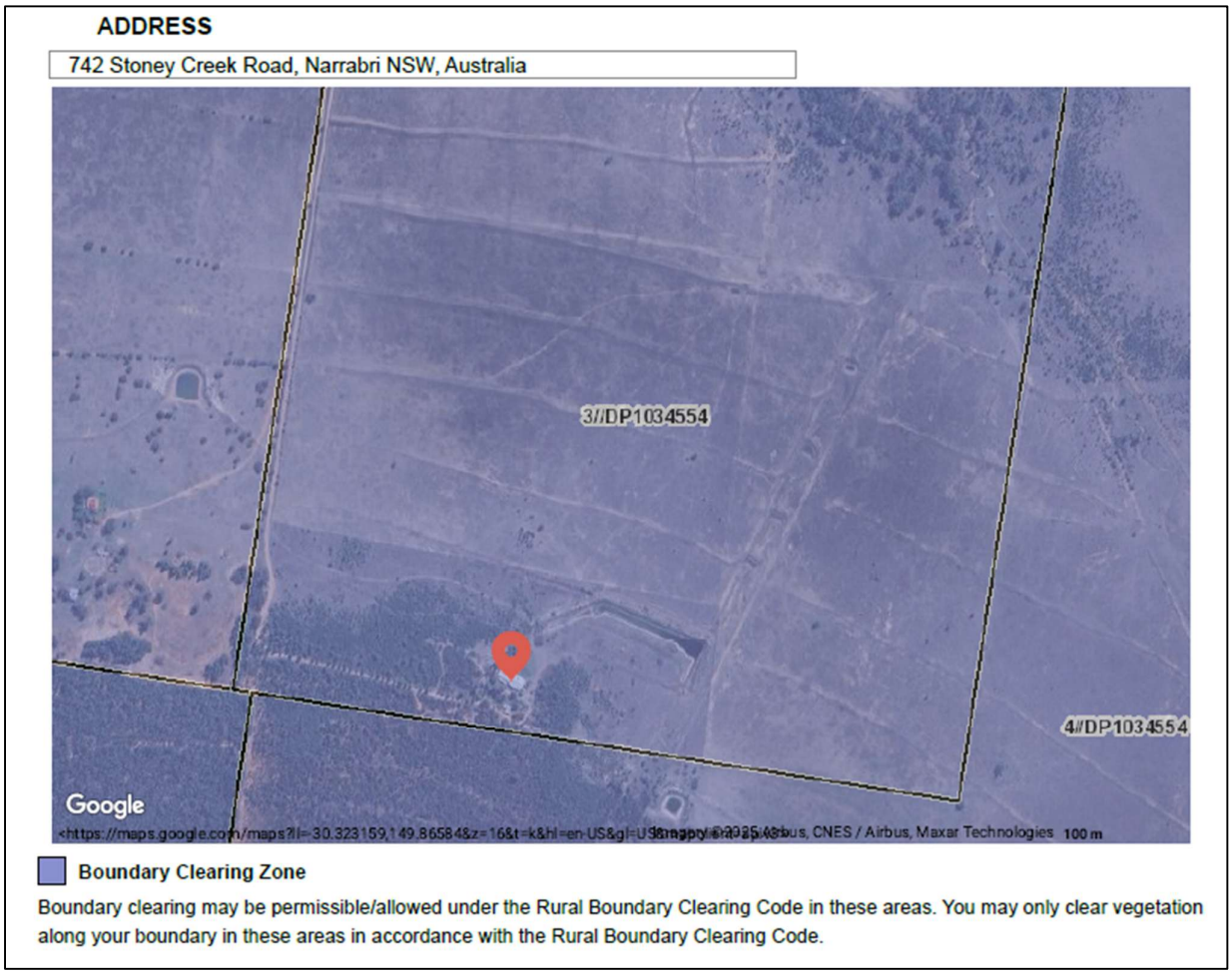
1. within the rural zone,
2. within Clearing Boundary Clearing Code Vegetation Map; and
3. within 25 metres of the holding's boundary with adjoining land; and
4. NOT listed as an excluded specified 'vegetation type' under the code nor mapped as excluded on the Clearing Boundary Clearing Code Vegetation Map as listed below (i.e. this vegetation cannot be cleared under the code).

The types of vegetation are excluded from the Code and cannot be removed includes:

1. Parcels of the following vegetation which are within areas mapped in the Rural Boundary Clearing online tool may not be cleared under the Rural Boundary Clearing Code. The onus is on the owner or occupier of the land to demonstrate that they did not clear any vegetation that constitutes any of the following types of vegetation:
   - **a.** SEPP Coastal Management – Coastal Wetlands (not including the proximity area);
   - **b.** Wetlands in the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005;
   - **c.** Wetlands in the Sydney Regional Environmental Plan 20 – Hawkesbury Nepean River (No 2 – 1997);
   - **d.** SEPP Coastal Management – Littoral Rainforests (not including the proximity area);
   - **e.** Core Koala habitat identified;
   - **f.** Ramsar Wetlands;
   - **g.** vegetation within 100 metres of the coastline or estuaries of NSW;
   - **h.** any vegetation on Lord Howe Island;
   - **i.** land mapped as Declared Area of Outstanding Biodiversity Value;
   - **j.** Critically Endangered Ecological Communities; and
   - **k.** 'Land avoided for strategic biodiversity' and 'strategic conservation area', whether exhibited as part of the Cumberland Plain Conservation Plan (CPCP).
2. Vegetation on land parcels (cadastre lots) which are within areas mapped in the Rural Boundary Clearing online tool are excluded from the Rural Boundary Clearing Code and may not be cleared.

Additionally, any areas mapped as protected riparian land in the Biodiversity Values Map (BVM), as well as any vegetation protected under a legal obligation including conservation or Trust agreements, Property Vegetation Plans, or Biodiversity Stewardship Agreements, are excluded from the Rural Boundary Clearing Code.

*Review of the online Rural Boundary Clearing Tool confirms that boundary clearing is permissible under the Rural Boundary Clearing Code within the subject land (as shown on Map 6). As no other environmental protections apply, the provisions of the Code may be applied to this proposal (Map 7). Notably, the majority of the existing access road (i.e. the proposed access way) appears to intersect the area where boundary 25 metre clearing is permitted (as shown on **Map 6**).*



Map 7: Relevant Rural Boundary Clearing Code Zoning for the proposed development site.

3.6 Fisheries Management Act 1994 and Waterways

The Fisheries Management Act 1994 (FM Act) establishes regulations for the protection of threatened species, populations, and ecological communities of fish and marine vegetation in New South Wales. It outlines objectives related to ecologically sustainable development and the conservation of biological diversity, as well as measures to address risks to native fish and marine vegetation.

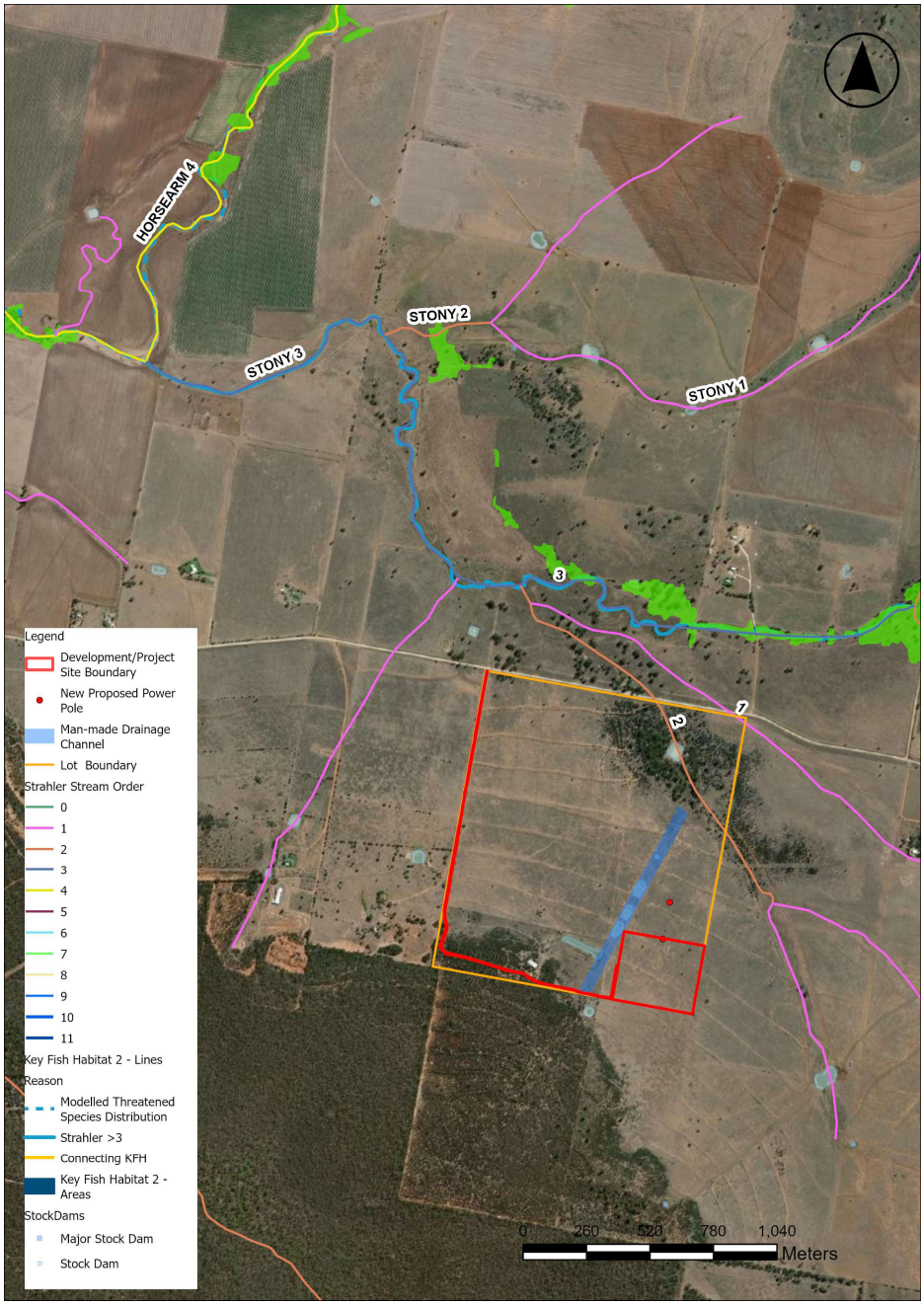
Section 220ZZ of the FM Act states that the determining authority must consider the effect of an activity on:

- Areas of Outstanding Biodiversity Value (AOBV) as defined by the BC Act; and
- Species, populations or ecological communities, or their habitats as listed under the FM Act, and whether there is likely to be a significant impact on those species, populations or ecological communities.

The property features several land-shaped swales designed to improve water runoff control, directing it into a central un-mapped man-made channel. This channel drains towards a series of farm dams located outside the development site, near the western boundary of the main solar farm area, but also the proposed access route, which follows the existing gravel road, will intersect the man-made drain/channel (refer to **Map 8**). This central un-mapped manmade drain/channel eventually connects with unnamed minor ephemeral streams (classified as Strahler Stream Order 2) about 600 meters away in the northeast corner of the property, which ultimately flows into Stony Creek an additional 150 meters beyond the boundary of the lot (see **Map 8**).

While the subject land features no Key Fish Habitat of Groundwater Dependent Ecosystems, such habitat exists further downstream along Horsearm Creek 2.5 kilometres away and Narrabri Creek 13 km kilometres the site. Accordingly, it is essential to implement robust drainage, erosion, and sediment control measures to protect downstream waterways at every stage of development, with particular attention to appropriate road crossings where the proposed access way intersect the man-made drainage channel.

*The proposed development site does not contain any other aquatic habitats - there are no farm dams, natural waterways, or waterbodies (**Map 8**). There are also no mapped AOBV areas, NSW threatened fish species habitats, or Groundwater Dependent Ecosystems within or next to the site (Map 8). As such, an FM Act permit is not needed as significant impacts are considered unlikely.*



Map 8: NSW Strahler Stream Order of the proposal site (with NSW Dependent Ecosystems - High Ecological Value Aquatic Ecosystems Model and modelled threatened key fish habitat based on NSW Fisheries Act).

3.7 Threatened Species and Ecological Communities

3.7.1 Matters of National Environmental Significance

The purpose of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is to ensure that actions likely to cause a significant impact on 'matters of national environmental significance' (MNES) undergo an assessment and approval process. Under the EPBC Act, an action includes a project, a development, an undertaking, an activity or a series of activities, or an alteration of any of these things. An action that 'has, will have or is likely to have a significant impact on a matter of national environmental significance' is deemed to be a 'controlled action' and may not be undertaken without prior approval from the Australian Minister for the Environment. Key MNES are internationally significant wetlands, endangered species and communities, and migratory species.

An EPBC Protected Matters Report was generated for the proposal site July 2025 (with a 10-kilometre buffer) to identify MNES that have the potential to occur. This report is included in **Attachment 4** and is summarised below in **Table 2**. **Attachment 1** assesses the likelihood of any potential threatened species occurring at the proposal site. As further described below, assessments determined a significant impact is unlikely; consequently, further federal assessments or referrals are not expected to be necessary.

Table 2: Summary of Matters of National Environmental Significance (MNES) report.

MNES	Result	Is there an implication for this assessment?
World Heritage Properties	None	No
National Heritage Places	None	No
Wetlands of International Importance	3	No – not applicable as all wetlands are greater than 900 km downstream
Great Barrier Marine Park	None	No
Commonwealth Marine Area	None	No
Listed Threatened Ecological Communities	7	No - not applicable as none are present.
Listed Threatened Species	34	No – considered low to negligible likelihood. Refer to Section 3.7.2
Listed Migratory Species	8	No – considered low to negligible likelihood. Refer to Section 3.7.2
Commonwealth Land	0	No
Commonwealth Heritage Places	0	No
Listed Marine Species	16	No - not applicable
Critical Habitats	None	No
Commonwealth Reserves Terrestrial	None	No
Australian Marine Parks	None	No
Habitat Critical to the Survival of Marine Turtles	None	No
Whales and Other Cetaceans	None	No
State and Territory Reserves	None	No

MNES	Result	Is there an implication for this assessment?
Regional Forest Agreements	None	No
Nationally Important Wetlands	None	No
EPBC Act Referrals	1	Not applicable to the development site.
Key Ecological Features	None	No
Biologically Important Areas	None	No
Bioregional Assessments	1	Not applicable to the development site.
Geological and Bioregional Assessments	None	No

3.7.2 EPBC Act and BC Act Listed Threatened Species

Lists of EPBC Act and BC Act (NSW) threatened species recorded or predicted to occur within 10 kilometres of the study area are provided in **Attachment 1** along with their likelihood of occurrence assessment and are mapped in **Map 9**.

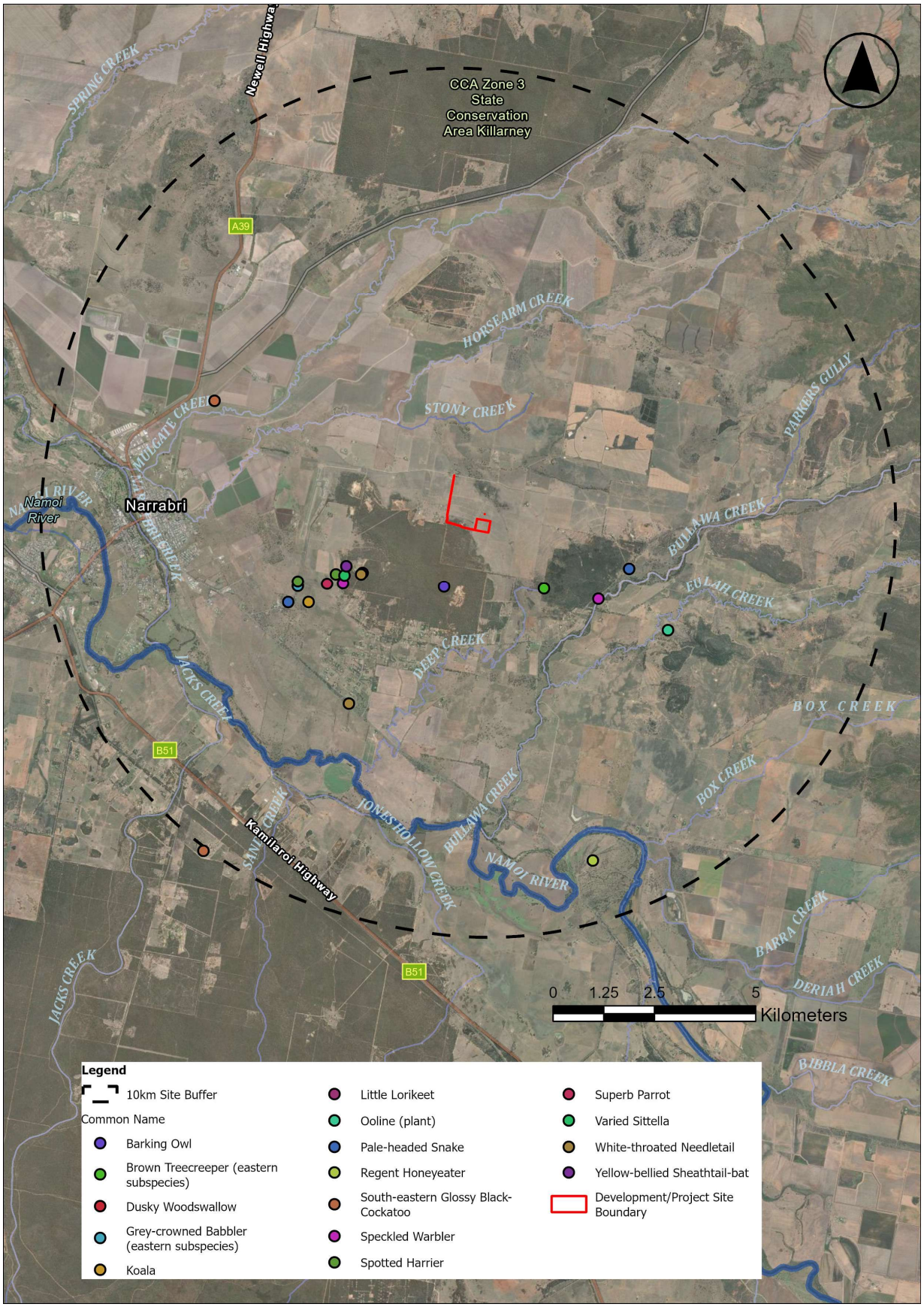
None of the listed threatened species were detected during the assessment nor considered likely to have a medium to high likelihood of occurring within proposal due to the lack of native habitat and significantly disturbed site. Moreover, within the development footprint the probability of all threatened species being present on site is negligible due to the absence of suitable native habitats. The site condition is reflective of cultivation, mechanical ground disturbance, land-forming for run-off, regular use of fertiliser/herbicides, and slashing or grazing by livestock resulting in exotic groundcover.

*Consequently, the impact on these threatened species is deemed **low to negligible**, as they are unlikely to experience significant direct or indirect impact from this ground-based proposal (refer to Attachment 1). Nevertheless, a 'Test of Significance' (TOS) assessment was undertaken (as presented in Attachment 5) and concluded that the proposal is unlikely to result in a significant impact on threatened species (refer to Table 6; consequently, further assessments or referrals are not expected to be necessary.*

3.7.3 EPBC Act and BC Act listed Threatened Ecological Communities

Table 3 lists the threatened ecological communities (TEC) recorded or predicted to occur under the EPBC Act and/or BC Act within a 10-kilometre radius of the study area, along with their likelihood of occurrence. There are no potential Threatened Ecological Communities (TECs) present at the development site.

The majority of the site has been historically cleared for agriculture and cultivated for improved pasture being primarily used for stock grazing. Areas of remnant native vegetation within the subject land are PCTs with no associated TEC, as such there are no anticipated direct or indirect implications for threatened ecological communities or further assessments required. This is also reflected in the 'Test of Significance' (TOS) assessment presented in Attachment 5; consequently, further assessments or referrals are not expected to be necessary.



Map 6: Threatened species records within 10km of proposal site as per NSW Bionet.

Table 3: Summary of BC Act-listed and EPBC Act-listed threatened ecological communities within a 10-kilometre radius of the study area.

Threatened Ecological Community Name	BC Act Status	EPBC Act Status	Likelihood of occurrence in proposal site	Justification	Association on site?
Artesian Springs Ecological Community in the Great Artesian Basin	Endangered	n/a	Unlikely	No artesian springs recorded within the subject land	Not present
Brigalow (Acacia harpophylla dominant and co-dominant)	n/a	Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Brigalow within the Brigalow Belt South, Nandewar and Darling Riverine Plains Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Cadellia pentastylis (Ooline) community in the Nandewar and Brigalow Belt South Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Carbeen Open Forest Community in the Darling Riverine Plains and Brigalow Belt South Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Carex Sedgeland of the New England Tableland, Nandewar, Brigalow Belt South and NSW North Coast Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	n/a	Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Coolibah-Black Box Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain and Mulga Lands Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Fuzzy Box Woodland on alluvial Soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics, soil type and landscape position	Not present
Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	n/a	Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present

Threatened Ecological Community Name	BC Act Status	EPBC Act Status	Likelihood of occurrence in proposal site	Justification	Association on site?
Howell Shrublands in the New England Tableland and Nandewar Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Marsh Club-rush sedgeland in the Darling Riverine Plains Bioregion	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Mount Kaputar high elevation and dry rainforest land snail and slug community in the Nandewar and Brigalow Belt South Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics, abiotic factors and landscape position	Not present
Mount Kaputar land snail and slug community	n/a	Endangered	Unlikely	Lacks diagnostic floristics, abiotic factors and landscape position	Not present
Myall Woodland in the Darling Riverine Plains, Brigalow Belt South, Cobar Peneplain, Murray-Darling Depression, Riverina and NSW South Western Slopes bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Native Vegetation on Cracking Clay Soils of the Liverpool Plains	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	n/a	Critically Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
New England Peppermint (Eucalyptus nova-anglica) Grassy Woodlands	n/a	Critically Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Pilliga Outwash Ephemeral Wetlands in the Brigalow Belt South Bioregion	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present

Threatened Ecological Community Name	BC Act Status	EPBC Act Status	Likelihood of occurrence in proposal site	Justification	Association on site?
Poplar Box Grassy Woodland on Alluvial Plains	n/a	Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Semi-evergreen Vine Thicket in the Brigalow Belt South and Nandewar Bioregions	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Semi-evergreen vine thickets of the Brigalow Belt (North and South) and Nandewar Bioregions	n/a	Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
Weeping Myall Woodlands	n/a	Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present
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	Endangered	n/a	Unlikely	Lacks diagnostic floristics and landscape position	Not present
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	n/a	Critically Endangered	Unlikely	Lacks diagnostic floristics and landscape position	Not present

3.7.4 Koala Habitat Assessment

The Koala (*Phascolarctos cinereus*) is listed as an endangered species under both the EPBC Act and BC Act (NSW). The Koala Habitat Protection SEPP (State Environmental Planning Policy) 2020 under the EP&A Act is a legal instrument in New South Wales designed to protect koala habitats and encourage their conservation. It aims to reverse the decline in Koala populations by ensuring habitat is considered during local development assessments and provides a framework for councils to manage koala habitat through Koala Plans of Management (KPoM). The SEPP applies to Narrabri local government area and rural land use zones, excluding some, and requires consideration of koala habitat in development applications based on confirmed presence of important habitat based on the presence of high cover of important food tree species and/or a breeding population.

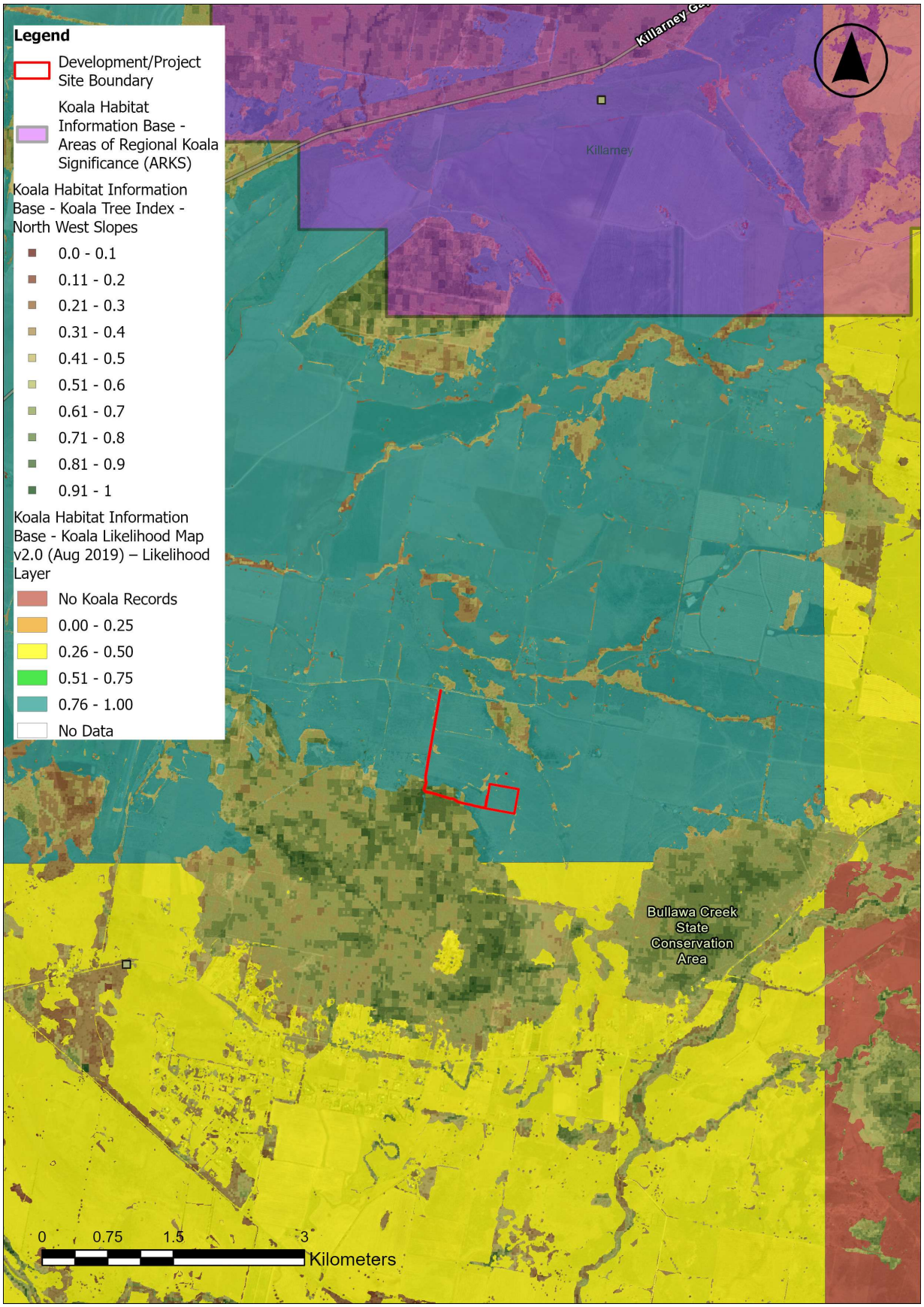
The NSW Koala Habitat Likelihood model rates the subject land as having a high probability of Koala occurrence, given the local extent of native treed vegetation within the locality and its location approximately 4.5 km south of the Killarney NSW Areas of Regional Koala Significance (refer to Map 10). Confidence in this likelihood rating is low, however, due to only one recorded Koala observation within 10 km of the site (2013, 4 km west in a non-contiguous woodland; NSW BioNet – refer to Map 9).

The subject land contains two large patches of native vegetation that are being avoided by the proposed development site including in the south-western corner and north-eastern corner (refer to PCT mapping in Map 6). Part of the proposed access way (approximately 0.5 hectares) appears to intersect this modelled NSW preferred Koala Tree Index of moderate to high rating (refer to Map 10). However, site assessments confirmed that the proposed access way occurs on an existing gravel road that is devoid of native vegetation which is different from the NSW Koala likelihood modelling and tree index due to the inherent limitations in the NSW mapping resolution. Consequently, this area does not meet the criteria for a native vegetation PCT patch nor Koala habitat and its use will not result in any loss of native vegetation or Koala habitat, provided the development remains within the existing road alignment without widening and appropriate fauna mitigation and traffic management measures are implemented, the risk of fauna mortality can be minimised (refer to Map 10 and site photographs in Attachment 2). Historical aerial imagery from 1983 shows evidence of native vegetation clearing and ongoing maintenance of the existing road (demonstrating that the area has been cleared for some time and qualifies as Category 1 – Exempt Land (refer to **Map 5C**). Also there are few medium to large Poplar Box (*Eucalyptus populnea*) species adjacent the existing roadway that nor within the native patch vegetation as many were *Eucalyptus* species were historically cleared) being dominated by *Callitris glaucophylla* and Acacia species, with areas of planted non-indigenous Grevillea robusta and Brachychiton species along the existing driveway, which are all unpreferred Koala feed tree species.

There are also few medium to large Poplar Box (*Eucalyptus populnea*) trees adjacent to the existing roadway and within the remnant patch; as many *Eucalyptus* species were historically cleared for timber in the locality. Also, Poplar Box is considered a secondary Koala food source rather than primary feed tree. The remaining vegetation is dominated by *Callitris glaucophylla* and *Acacia* species, with some planted non-indigenous *Grevillea robusta* and *Brachychiton* species along the driveway, all of which are not preferred Koala feed trees.

The proposed development has been deliberately planned to avoid and minimise potential impacts on Koala habitats by ensuring all activities are confined to previously cleared agricultural land (Category 1 – Exempt land) and existing roads cleared since 1983 that lacks native tree canopy. Consequently, this area does not meet the definition of potential Koala habitat - namely, areas comprising native vegetation where trees listed in Schedule 2 constitute at least 15% of the total number of trees within the upper or lower strata. As such, actual presence is low to negligible within the development footprint due to limited preferred tree canopy cover; only two isolated *Eucalyptus populnea* trees are present within a heavily modified agricultural pasture (refer to Map 6: Extant Vegetation and Map 10: Koala Tree Index and Likelihood) as described in Section 3.3.

Additionally, the site is not considered core habitat, which refers to land supporting a resident koala population as evidenced by breeding females, dependent young, recent sightings, or historical records. The proposed development is therefore not anticipated to significantly affect the local Koala population or their habitats, nor will it contribute to further fragmentation or isolation of neighbouring habitat areas.



Map 7: NSW Koala Habitat Likelihood Map and Koala Tree Index rating for the proposal site with ARK locations.

4 Conclusion & Recommendations

The proposed development has strategically avoided areas of high biodiversity value and minimised the loss of native vegetation by positioning the site in historically cleared areas characterised by substantially altered agricultural land. The site condition is reflective of semi-arid land that has previously subjected to agricultural clearing, cultivation, mechanical disturbance, significant land-forming and livestock grazing. The development site is largely classified as Category 1 – Exempt Land under the NSW Native Vegetation Regulatory framework, with no areas of Category 2 – Vulnerable or Sensitive Regulated Land affected by the proposal. Although the Draft NVR Map identifies approximately 0.5 ha in the southwest of the proposed access as Category 2 – Regulated Land, this area corresponds to an existing gravel road devoid of native vegetation, historically cleared and maintained since before 1983.

A Test of Significance (TOS) and site surveys confirm that the removal of low-value native grasses and six (6) scattered paddock trees is unlikely to significantly impact threatened species or ecological communities. Accordingly, the proposal can proceed within the existing road alignment without widening and be assessed under Section 4.15 of the NSW Environmental Planning and Assessment Act 1979, without triggering approvals under the Land Management Code, the Biodiversity Offset Scheme, or requiring a Biodiversity Development Assessment Report.

Due the strategic positioning of the site, the development site contains limited features of ecological value and habitat connectivity that is unlikely to support threatened species nor contribute to their movement nor maintain their lifecycle. Those few threatened fauna species that have some potential to occur onsite are highly mobile therefore impacts to these species are considered low to negligible, as they are unlikely to be disturbed by terrestrial, ground-based activities on agricultural land. Nevertheless, a 'Test of Significance' (TOS) assessment was undertaken to fully consider direct/indirect biodiversity impacts and concluded that the proposal is unlikely to result in a significant impact on threatened species/communities; consequently, further ecological assessments or referrals are not expected to be necessary.

In addition, development site has attempted to avoid and minimise natural waterways and dams, however runoff from the site is directed through constructed swales into a man-made drainage channel of which the proposed access way will cross. This man-made drainage channel eventually connects with minor ephemeral streams (Strahler Order 2) approximately 600 metres to the northeast, and then with Stony Creek a further 150 metres downstream. Although no aquatic habitats, farm dams, natural waterways, Key Fish Habitat, AOBV areas, threatened fish habitat, or Groundwater Dependent Ecosystems occur within or adjacent to the development footprint, such sensitive aquatic environments exist further downstream. Therefore, effective drainage, erosion, and sediment controls, particularly at access way crossing points, are required to protect downstream waterways. As no significant aquatic impacts are expected, an FM Act permit is not required.

Based on the above findings, Red-Gum considers that the proposed regional development does not trigger entry into the Biodiversity Offset Scheme (BOS) under the *Biodiversity Conservation Act 2016*. Accordingly, a BDAR, Species Impact Statement, or EPBC Act referral is not required, and the proposal may continue to be assessed under section 4.15 of the NSW EP&A Act. If, however, the development is classified as State Significant Development (SSD) or State Significant Infrastructure (SSI), it would enter the BOS by default; however, based on the findings, a BDAR waiver would be appropriate under section 7.9(2) of the BC Act, and this assessment should inform any SEARs request and waiver application.

Please note, this is our professional opinion on the development's compliance with biodiversity-related planning controls. Despite our findings, Red-Gum cannot guarantee approval from the relevant authority for future site development.

5 Attachments

Attachment 1: Threatened Species Likelihood Assessment

Lists of EPBC Act and BC Act (NSW) threatened species recorded or predicted to occur within 10 kilometres of the study area are provided in Table 4 (flora) and Table 5 (fauna) along with their likelihood of presence assessment. Records of threatened species within 10 kilometres of the site are mapped in **Map 9**. The likelihood of species occurrence is categorised based on recorded sightings in credible databases, habitat suitability, site features, field survey results, and professional judgement. Where entities have a likelihood ranking of 'potential', 'likely' or 'yes', they have been considered in more detail in this report. The five categories are:

'Present'	The species was or has been observed on the development area.
'High'	A high probability that a species uses the development area.
'Medium'	A medium probability that a species uses the development area.
'Low'	A very low to low probability that a species uses the development area.
'Negligible'	Habitat on the development area and in the vicinity is unsuitable for the species.

Table 4: Threatened flora species recorded and/or predicted to occur within 10 km of site.

Scientific Name	Common Name	BC Act	EPBC Act	Preferred Habitat	Suitable Habitat?	Likelihood?	Likelihood Justification
Androcalva procumbens	null	Vulnerable	Vulnerable	Sandy soils, often in disturbed habitats such as road verges, quarry boundaries, gravel stockpiles, and power line easements.	No	Negligible	No records in the locality. Absence of preferred habitat.
Cadellia pentastylis	Ooline/ Scrub Myrtle	Vulnerable	Vulnerable	Dry rainforest, semi-evergreen vine thickets and sclerophyll ecological communities.	No	Low	One record in the locality from 1911. Absence of preferred habitat. Not detected.
Dichanthium setosum	Bluegrass	Vulnerable	Vulnerable	Prefers heavy basaltic black soils and red-brown loams with clay subsoil. Prefers Grassy Woodand, but also often found in moderately disturbed areas such as cleared woodland, grassy roadside remnants and highly disturbed pasture. Data deficient.	No	Low	No records in the locality. Absence of preferred habitat. Not detected.
Lepidium aschersonii	Spiny Peppercress	Vulnerable	Vulnerable	Wet sites such as gilgai depressions and the margins of freshwater and saline marshes and shallow lakes, usually on heavy clay soil.	No	Negligible	No records in the locality. Absence of preferred habitat.
Lepidium monoplocoides	Winged Pepper-cress	Endangered	Endangered	Open, sparsely vegetated sites in a range of habitats on heavy clay or clay-loam soils, usually on sites that are seasonally flooded or prone to waterlogging, in arid to semi-arid areas.	No	Negligible	No records in the locality. Absence of preferred habitat.
Swainsona murrayana	Slender Darling-pea	Vulnerable	Vulnerable	The species has been collected from clay-based soils, ranging from grey, red and brown cracking clays to red-brown earths and loams.	No	Negligible	No records in the locality. Absence of preferred habitat.
Thesium australe	Austral Toadflax	Vulnerable	Vulnerable	Shrubland, grassland or woodland, often on damp sites of open grassy heath dominated by Kangaroo Grass grassland surrounded by Eucalyptus woodland; and grassland dominated by Barbed-wire Grass.	No	Negligible	No records in the locality. Absence of preferred habitat.

Scientific Name	Common Name	BC Act	EPBC Act	Preferred Habitat	Suitable Habitat?	Likelihood?	Likelihood Justification
Vincetoxicum forsteri (listed as Tylophora linearis)	null	Vulnerable	Endangered	Dry scrub, open forest and woodlands associated with Melaleuca uncinata, Eucalyptus fibrosa, E. sideroxylon, and E. albens.	No	Negligible	No records in the locality. Absence of preferred habitat

Table 5: Threatened fauna species recorded and/or predicted to occur within 10 km of site.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Actitis hypoleucos	Common Sandpiper	n/a	Migratory	This species does not breed in Australia but is found along all coastlines and inland areas, mainly in the north and west, especially in WA, NT, and Qld.	No	Low	No records within 10km. Absence of preferred habitat.
Anomalopus mackayi	Five-clawed Worm-skink	Endangered	Vulnerable	Found on lower slopes in grassy White Box woodlands with moist black soils and in River Red Gum-Coolibah-Bimble Box woodlands on deep clay.	No	Negligible	No records within 10km. Absence of preferred habitat.
Anthochaera phrygia	Regent Honeyeater	Endangered	Critically Endangered	Patchy distribution on the North West Slopes and Plains of north-east NSW. Prefers the lower slopes of slight rises in grassy White Box woodland on moist black soils.	No	Low	Absence of preferred habitat, unlikely this species would occur, may irregularly overfly or pass through as foraging. One record within 10km. Not a mapped important habitat area.
Aphelocephala leucopsis	Southern Whiteface	Vulnerable	Vulnerable	Occur across most of mainland Australia south of the tropics, from the north-eastern edge of the Western Australian wheatbelt.	No	Low	No records within 10km. Absence of preferred habitat within development footprint, however, may irregularly use adjacent avoided woodland and forested areas in the subject land.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Aprasia parapulchella	Pink-tailed Worm-lizard	Vulnerable	Vulnerable	Grassland, grassy woodland and woodland communities, and the species usually inhabits sloping sites that contain rocky outcrops or scattered, partially buried rocks.	No	Low	No records within 10km. Absence of preferred habitat.
Apus pacificus	Fork-tailed Swift	n/a	Migratory	The Fork-tailed Swift is almost exclusively aerial, flying from less than 1 m to at least 300m above ground and probably much higher.	Yes	Low	No records within 10km. As an aerial species, it may irregularly use the air space over development site and therefore would not be impacted.
Artamus cyanopterus cyanopterus	Dusky Woodswallow (eastern)	Vulnerable	n/a	Prefers dry, open eucalypt forests and woodlands, including mallee associations, with an open or sparse understorey of eucalypt saplings, acacias and other shrubs.	No	Low	One record within 10km. Absence of preferred habitat within development footprint, however, may irregularly use avoided treed areas in the subject land.
Calidris acuminata	Sharp-tailed Sandpiper	n/a	Vulnerable - Migratory	Spends the non-breeding season in Australia. Prefers grassy edges of shallow inland freshwater wetlands.	No	Low	No records in the locality. Absence of preferred habitat.
Calidris ferruginea	Curlew Sandpiper	Critically Endangered	Critically Endangered - Migratory	Spends the non-breeding season in Australia from Siberia. Distributed around most of the Australian coastline (including Tasmania).	No	Low	No records within 10km. Absence of preferred habitat.
Calidris melanotos	Pectoral Sandpiper	n/a	Migratory	Widespread but scattered records across NSW, east of the divide and in the Riverina and Lower Western regions.	No	Low	No records within 10km. Absence of preferred habitat.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	Vulnerable	Vulnerable	This species is uncommon although widespread throughout suitable forest and woodland habitats in inland on the southern tablelands and central western plains of NSW	No	Low	Three recent records in locality. Absence of foraging or breeding habitat present in development footprint. May use treed areas in the subject land.
Chalinolobus dwyeri	Large-eared Pied Bat	Endangered	Endangered	Forages in well-timbered areas containing gullies; and roosts and breeds in caves, cliff crevices/ overhangs, disused mines and concrete structures such as derelict buildings.	No	Low	No records in the locality. The Subject Land does not contain preferred roosting/breeding habitat (cliffs and caves). Absence of preferred foraging habitat.
Circus assimilis	Spotted Harrier	Vulnerable	n/a	Occurs throughout the Australian mainland, except in densely forested or wooded habitats of the coast, escarpment and ranges.	Yes	Low	Three recent records within 10km. Absence of preferred habitat present in development footprint.
Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)	Vulnerable	Vulnerable	Prefers Eucalypt woodlands (including Box-Gum Woodland) and dry open forest of the inland slopes and plains inland of the Great Dividing Range; mainly inhabits woodlands	No	Low	One recent records in locality. Absence of preferred foraging or breeding habitat in development footprint. May use treed areas in the subject land.
Daphoenositta chrysoptera	Varied Sittella	Vulnerable	n/a	Prefers eucalypt woodlands and forests, especially those with rough-barked trees like Stringybarks and Ironbarks.	No	Low	Five recent records in locality. Absence of preferred habitat in development footprint, however, may use avoided treed areas in the subject land.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Dasyurus maculatus maculatus (south-eastern)	Spot-tailed Quoll (south-eastern)	Vulnerable	Endangered	Found in eastern NSW, the species has been recorded across a range of habitat types, including rainforest, open forest, woodland	No	Low	Although the Subject Land has potential habitat, it's unlikely this species would occur due to minimal large tracks of vegetation surrounding the site, no records within 10 km
Falco hypoleucos	Grey Falcon	Vulnerable	Vulnerable	Sparsely distributed in NSW, chiefly throughout the Murray-Darling Basin, with the occasional vagrant east of the Great Dividing Range.	No	Low	Although the Subject Land has potential habitat, it's unlikely this species would occur due to minimal large tracks of vegetation on site
Gallinago hardwickii	Latham's Snipe	Vulnerable	Vulnerable - Migratory	Non-breeding migrant to the south east of Australia. Prefers shallow freshwater or brackish wetlands with nearby cover	No	Negligible	No records in the locality. Absence of preferred habitat.
Grantiella picta	Painted Honeyeater	Vulnerable	Vulnerable	Prefers Boree/ Weeping Myall (Acacia pendula), Brigalow (A. harpophylla) and Box-Gum Woodlands	No	Low	No records in the locality. Absence of preferred habitat in development footprint, however, may use avoided treed areas in the subject land.
Hemiaspis damelii	Grey Snake	Endangered	Endangered	Floodplains and ephemeral wetlands associated with heavy clay soils on the margins of ephemeral wetlands	No	Negligible	No records in the locality. Absence of preferred habitat.
Hirundapus caudacutus	White-throated Needletail	Vulnerable	Vulnerable - Migratory	Migrates to eastern Australia from October to April. Almost exclusively aerial over a wide variety of habitats.	Yes	Low	Two recent records in locality. As an aerial species, it may irregularly use the air space over the site foraging or flying over and therefore would not be impacted
Hoplocephalus bitorquatus	Pale-headed Snake	Vulnerable	n/a	Prefers dry eucalypt forests and woodlands, cypress forest and occasionally in rainforest or moist eucalypt forest.	No	Low	Two recent records in locality. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Lathamus discolor	Swift Parrot	Endangered	Critically Endangered	Migrates to the Australian south-east mainland between February and October. On the mainland they occur in areas where eucalypts are flowering profusely	No	Low	No records in the locality. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land.
Leipoa ocellata	Malleefowl	Endangered	Vulnerable	Utilises mallee with a spinifex understorey, but usually at lower densities than in areas with a shrub understorey. Less frequently found in other eucalypt woodlands	No	Low	Although the Subject Land has potential habitat, it's unlikely this species would occur due to minimal large tracks of vegetation surrounding the site, no know records within 10 km
Lophochroa leadbeateri leadbeateri	Pink Cockatoo (eastern)	Vulnerable	Endangered	Prefers arid and semi-arid woodlands dominated by Mulga (Acacia aneura), Mallee and Box Eucalypts, Cypress Pine (Callitris sp) or Belah (Casuarina cristata) near a fresh water source and with suitable large trees with nesting hollows.	No	Low	No records in the locality. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land.
Melanodryas cucullata cucullata	South-eastern Hooded Robin	Endangered	Endangered	Lightly timbered woodland, mainly dominated by Acacia and/or Eucalypts. Open, dry eucalypt and acacia woodlands and shrublands	No	Low	No records in the locality. Presence of preferred habitat in subject land but not within development footprint and therefore would not be significantly impacted by the proposal.
Motacilla flava	Yellow Wagtail	n/a	Migratory	Occurs within Australia in open country habitat with disturbed ground and some water. Prefers open, grassy habitats near water sources	Yes	Low	No records in the locality. Absence of preferred habitat present in development footprint. As a migratory aerial species, they may very irregularly use exotic pastures/crops on agricultural land.
Neophema chrysostoma	Blue-winged Parrot	Vulnerable	Vulnerable	Prefers a range of habitats from coastal, sub-coastal and inland areas.	No	Low	No records in the locality. Absence of preferred habitat.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Ninox connivens	Barking Owl	Vulnerable	n/a	Prefers woodland and open forest, including fragmented remnants and partly cleared farmland.	Yes	Low	One record within 10km. Absence of preferred habitat present in development footprint. As an aerial species, may very irregularly use exotic pastures/crops over agricultural land for foraging.
Nyctophilus corbeni	South-eastern Long-eared Bat	Vulnerable	Vulnerable	Prefers a variety of vegetation types, including Mallee, Bulloke Allocasuarina leuhmanni and Box Eucalypt dominated communities	No	Low	No records in the locality. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land.
Parvipsitta pusilla	Little Lorikeet	Vulnerable	n/a	Prefers open Eucalyptus Forest and woodland, yet also finds food in Angophora, Melaleuca and other tree species.	No	Low	Two records within 10km. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land irregularly for foraging or as a flyover.
Phascolarctos cinereus (QLD, NSW & ACT)	Koala (QLD, NSW & ACT)	Endangered	Endangered	Inhabits eucalypt woodlands and forests, and feeds on the foliage of more than 70 eucalypt species and 30 non-eucalypt species but will select preferred browse species in any one area.	No	Low	Subject land is not identified in the NSW Area of Regional Koala Significance (ARKS). One recent Koala record 4km to south east of site. Absence of potential habitat/preferred feed trees in development site, however Bimble Box in Subject Land in PCT 397 is being avoided.
Polytelis swainsonii	Superb Parrot	Vulnerable	Vulnerable	Prefers Box-Gum, Box-Cypress-pine and Boree Woodlands and River Red Gum Forest, including open woodlands and riverine forests.	No	Low	One record within 10km. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land irregularly

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Preferred Habitat	Preferred Habitat in Footprint?	Likelihood of Occurrence Development Footprint	Likelihood Justification
Pomatostomus temporalis temporalis	Grey-crowned Babbler (eastern)	Vulnerable	n/a	Prefers open dry sclerophyll woodland with mature eucalypts, regenerating trees, shrubs, and an intact ground cover of grass and forbs.	No	Low	Eight records within 10km. Absence of preferred habitat.
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Vulnerable	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops.	No	Low	No records were found within 10 km. No evidence of a roosting colony. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land irregularly for foraging or as a flyover. Significant impact from the proposed activity is unlikely.
Pyrrholaemus sagittatus	Speckled Warbler	Vulnerable	n/a	Prefers open eucalypt woodlands with a grassy ground layer and scattered shrubs. They are often found on rocky ridges or in gullies.	No	Low	15 recent records in locality. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land.
Rostratula australis	Australian Painted Snipe	Endangered	Endangered	Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber. Forages nocturnally on mudflats and in shallow water.	No	Negligible	No records in the locality. Absence of preferred habitat.
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	n/a	Forages in most habitats across its very wide range, with and without trees appears to defend an aerial territory.	No	Low	The species has no records within the locality. Absence of preferred habitat present in development footprint, however, may use avoided treed areas in the subject land
Stagonopleura guttata	Diamond Firetail	Vulnerable	Vulnerable	Found in grassy eucalypt woodlands, including Box-Gum Woodlands and Snow Gum Eucalyptus.	No	Negligible	No records in the locality. Absence of preferred habitat present in development footprint

Attachment 2: Site Photos - August 2025 by Damian Wall.

Photo 1: View of site conditions from the southwest corner of the development area, facing northeast (with scattered paddocks trees for removal circled yellow).

Photo 2: View of site conditions from the mid-western boundary of the development area, facing east (with scattered paddocks trees for removal circled yellow).

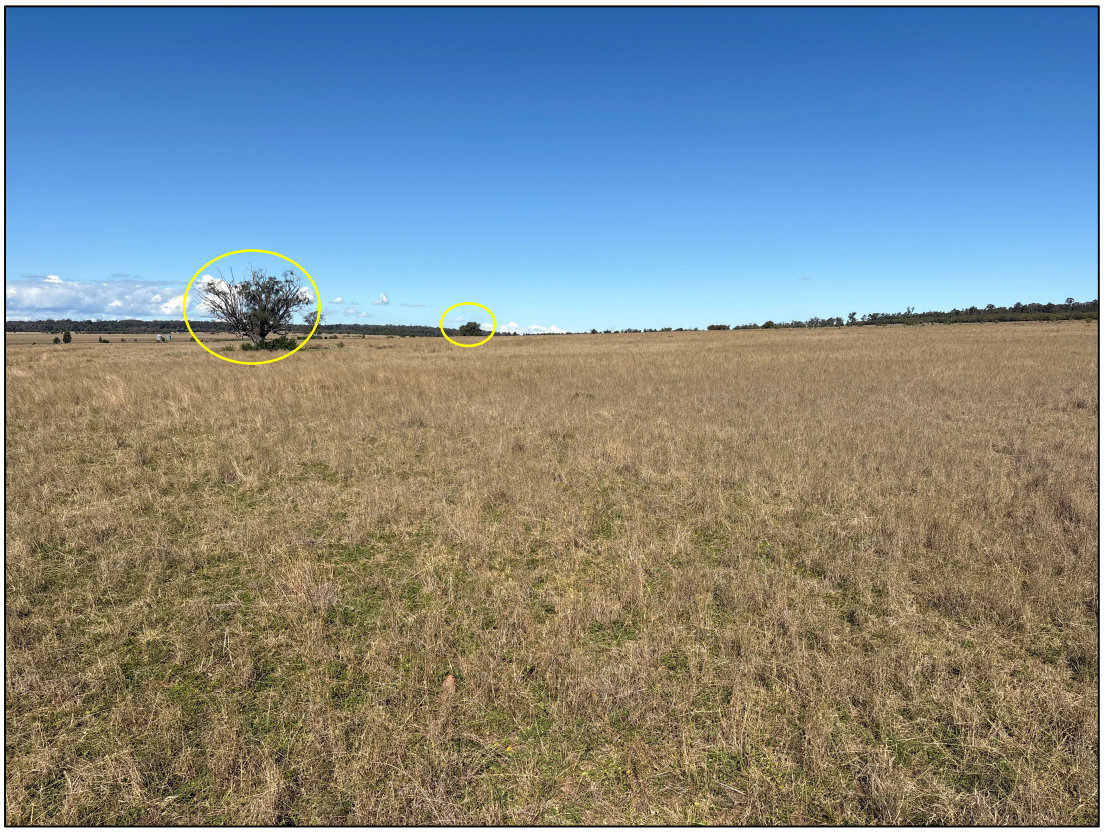


Photo 3: View of site conditions from the north-west corner of the development area, facing south-east (with two scattered Poplar Box (Eucalyptus populnea) paddocks trees for removal circled yellow).

Photo 4: View of site conditions from the north-east corner of the development area, facing south-west (with the northern most scattered Poplar Box (Eucalyptus populnea) paddock tree for removal circled yellow).

Photo 5: View of site conditions from the south-east corner of the development area, facing west.

Photo 6: View of proposed access way on existing driveway facing south from gateway on Stoney Creek Road.

Photo 7: View of proposed access way situated on existing driveway with some planted Brachychiton species, facing north taken from western boundary of subject land.

Photo 8: View of proposed access way situated on existing driveway bordered by PCT 397, facing north taken from south-western corner of subject land.

Photo 9: View of proposed access way situated on existing driveway bordered by PCT 397, facing north taken from south-western corner of subject land.

Photo 10: View of proposed access way situated on existing driveway bordered by PCT 397, facing west taken from south-western corner of subject land.

Photo 11: View of proposed access way situated on existing driveway lined with non-indigenous Grevillea robusta with PCT 397 further back, facing west along southern area of subject land.

Photo 12: View of proposed access way situated on existing driveway bordered with PCT 397, facing west along southern area of subject land.

Attachment 3: Biodiversity Values Map and Threshold

NSW GOVERNMENT Department of Planning and Environment

Biodiversity Values Map and Threshold Report

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

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

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

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

Biodiversity Values Map and Threshold Report

Date of Report Generation		10/12/2025 3:01 PM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	**Does the development Footprint intersect with BV mapping?**	no
1.2	**Was ALL BV Mapping within the development footprinted added in the last 90 days?** (dark purple mapping only, no light purple mapping present)	no
1.3	**Date of expiry of dark purple 90 day mapping**	N/A
1.4	**Is the Biodiversity Values Map threshold exceeded?**	no
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	**Size of the development or clearing footprint**	104,526.2 sqm
2.2	**Native Vegetation Area Clearing Estimate (NVACE)** (within development/clearing footprint)	5,310.2 sqm
2.3	**Method for determining Minimum Lot Size**	LEP
2.4	**Minimum Lot Size** (10,000sqm = 1ha)	1,000,000 sqm
2.5	**Area Clearing Threshold** (10,000sqm = 1ha)	10,000 sqm
2.6	**Does the estimate exceed the Area Clearing Threshold?** (NVACE results are an estimate and can be reviewed using the Guidance)	no
REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area? (Your local council will determine if a BDAR is required)		**no**

Page 1 of 4

NSW GOVERNMENT Department of Planning and Environment

What do I do with this report?

• If the result above indicates the BOS Threshold has been exceeded, your local council **may require** a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor.

• If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is "'likely to significantly affect threatened species" as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.

• If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.

• If **all** Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

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

Review Options:

• If you believe the Biodiversity Values mapping is incorrect please refer to our BV Map Review webpage for further information.

• If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the Guide for reviewing area clearing threshold results from the BMAT Tool.

Acknowledgement

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

Signature: _____ Date: _____

(Typing your name in the signature field will be considered as your signature for the purposes of this form) 10/12/2025 03:01 PM

Page 2 of 4

NSW GOVERNMENT Department of Planning and Environment

Biodiversity Values Map and Threshold Tool

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

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

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

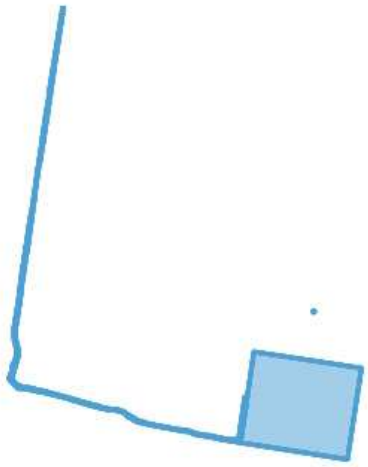
What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the Biodiversity Values Map webpage.

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

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

Page 3 of 4

Biodiversity Values Map



1: 20,082

1,020.1 0 510.07 1,020.1 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

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

Legend

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

10/12/2025 03:01 PM

Imagery © Airbus DS/Spot Image 2016

© NSW Department of Customer Service, Basemaps 2019

© NSW Department of Planning and Environment

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

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

Page 4 of 4

Attachment 4: Matters of National Environmental Significance Report

Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

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

Report created: 01-Jul-2025

- Summary
- Details
  - Matters of NES
  - Other Matters Protected by the EPBC Act
  - Extra Information
- Caveat
- Acknowledgements

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	3
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	7
Listed Threatened Species:	34
Listed Migratory Species:	8

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	16
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

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

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity
Banrock station wetland complex	900 - 1000km upstream from Ramsar site
Riverland	900 - 1000km upstream from Ramsar site
The coorong, and lakes alexandrina and albert wetland	1100 - 1200km upstream from Ramsar site

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text
Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Bioregions	Endangered	Community may occur within area
Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia	Endangered	Community may occur within area
Mount Kaputar land snail and slug community	Endangered	Community may occur within area
Natural grasslands on basalt and fine-textured alluvial plains of northern New South Wales and southern Queensland	Critically Endangered	Community likely to occur within area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community likely to occur within area
Weeping Myall Woodlands	Endangered	Community may occur within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area

Listed Threatened Species [Resource Information]

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

Scientific Name	Threatened Category	Presence Text
BIRD		
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area

Scientific Name	Threatened Category	Presence Text
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
Lophochroa leadbeateri leadbeateri Major Mitchell's Cockatoo (eastern), Eastern Major Mitchell's Cockatoo, Pink Cockatoo (eastern) [82926]	Endangered	Species or species habitat may occur within area
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area
Polytelis swainsonii Superb Parrot [738]	Vulnerable	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat likely to occur within area
MAMMAL		
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat may occur within area
Nyctophilus corbeni Corben's Long-eared Bat, South-eastern Long-eared Bat [83395]	Vulnerable	Species or species habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)		
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area
Pteropus poliocephalus		
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area
PLANT		
Androcalva procumbens		
[87153]	Vulnerable	Species or species habitat likely to occur within area
Cadellia pentastylis		
Ooline [9828]	Vulnerable	Species or species habitat likely to occur within area
Dichanthium setosum		
bluegrass [14159]	Vulnerable	Species or species habitat likely to occur within area
Lepidium aschersonii		
Spiny Peppercress [10976]	Vulnerable	Species or species habitat likely to occur within area
Lepidium monoplocoides		
Winged Pepper-cress [9190]	Endangered	Species or species habitat likely to occur within area
Swainsona murrayana		
Slender Darling-pea, Slender Swainson, Murray Swainson-pea [6765]	Vulnerable	Species or species habitat may occur within area
Thesium australe		
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area
Vincetoxicum forsteri listed as Tylophora linearis		
[92384]	Endangered	Species or species habitat likely to occur within area
REPTILE		

Scientific Name	Threatened Category	Presence Text
Anomalopus mackayi Five-clawed Worm-skink, Long-legged Worm-skink [25934]	Vulnerable	Species or species habitat likely to occur within area
Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area
Hemiaspis damelii Grey Snake [1179]	Endangered	Species or species habitat may occur within area

Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area overfly marine area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Rostratula australis as Rostratula benghalensis (sensu lato)		
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area

Extra Information

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed

Bioregional Assessments		[Resource Information]
SubRegion	BioRegion	Website
Namoi	Northern Inland Catchments	BA website

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Attachment 5: Test of Significance Assessment

Table 6 presents the Test of Significance (TOS) assessment undertaken in accordance with section 7.3 of the *Biodiversity Conservation Act 2016* and the five factors outlined in the *Threatened Species Test of Significance Guidelines* (OEH 2018). The assessment considers the location and scale of the proposed impacts, including any indirect/prescribed impacts that may arise from the proposed development (refer to the threatened species likelihood assessment in Attachment 1 and Section 3.7).

Table 6: Factors for consideration - Test of Significance ("5-part test").

BC Act 'Test of Significance' Criteria	Significant impact?	Justification of decision
(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction	Unlikely	The project has been carefully planned to avoid native vegetation and areas of high-value biodiversity. As a result, the development site is characterised by historically cleared and substantially altered existing roads and agricultural land, which has experienced extensive clearing and cultivation in the past and is currently utilised for grazing, with a dominance of non-native grasses and forbs (as described in Section 3.3). Accordingly, the potential impact on threatened species is considered negligible or low due to the absence of suitable habitat (refer to Attachment 1: Threatened Species Likelihood Assessment and Section 3.7). Therefore, the proposed development features limited ecological value and habitat connectivity, is unlikely to support threatened species, and is not anticipated to adversely affect the lifecycle of such species or put any viable local population at risk of extinction.
(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity: (i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or (ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.	No applicable	No endangered or critically significant ecological communities are identified within or adjacent to the development site, as outlined in Section 3.7.3. Consequently, this criterion does not apply to the proposed development and does not pose any risk to such communities.
(c) in relation to the habitat of a threatened species or ecological community: (i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and (ii) whether an area of habitat is likely to become	Unlikely	The project has been strategically planned to avoid the removal of native vegetation and areas of high biodiversity value. As a result, the development site is characterised by historically cleared and substantially altered existing roads and agricultural land, which has experienced extensive clearing and cultivation in the past and is currently utilised for grazing (as described in Section 3.3). Accordingly, the potential impact on threatened species is considered negligible or low due to the absence of suitable habitat (refer to Attachment 1: Threatened Species Likelihood Assessment and Section 3.7). Furthermore, no threatened ecological communities are

BC Act 'Test of Significance' Criteria	Significant impact?	Justification of decision
fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality.		identified within or adjacent to the development site, as outlined in Section 3.7.3. Therefore, the proposed development features extremely limited ecological value and habitat connectivity, and as such, is unlikely to remove, modify, fragment or isolate such threatened entities.
(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly).	Not applicable	The proposed development is situated outside all NSW 'Declared Areas of Outstanding Biodiversity Value' and, as such, is not anticipated to have a direct or indirect adverse effect on these defined areas. Consequently, this criterion is not applicable.
(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process.	Unlikely	The project has been strategically planned to avoid the removal of native vegetation and areas of high biodiversity value. As a result, the development site is characterised by historically cleared and substantially altered existing roads and agricultural land, which has experienced extensive clearing and cultivation in the past and is currently utilised for grazing, with a dominance of non-native grasses and forbs (as described in Section 3.3). Accordingly, the proposed development would not significantly trigger or exacerbate any key threatening processes.
Conclusion of Test of Significance (TOS) Assessment		
Having assessed the five relevant factors, the TOS concluded that the proposal is unlikely to result in a significant impact on threatened species or ecological communities. Accordingly, the development proposal can be assessed under section 4.15 of the NSW EP&A Act and does not trigger the Biodiversity Offset Scheme (BOS) under the BC Act and neither a BDAR nor an NSW Species Impact Statement (SIS) is required. Additionally, no referral under the EPBC Act is anticipated.		