Biodiversity Inspection Report

for

Proposed Solar Farm

at

180 Greghamstown Road, Lot 74 & 83 / DP750390, Blayney NSW 2799

Prepared for

EDP Renewables

Version 2

10/2/25

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Red-Gum Sign-off	 Damian Wall (Managing Director)

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1 Introduction

EPD Renewables (EDPR) are proposing to develop two (2) 4.99MW solar farm sites, situated within their own lots (each are approximately 16ha in size). Red-Gum has been engaged to assess the likely ecological impacts to the receiving environment assuming the construction of a solar farm at the listed address. The proposed development area is 33 ha in size, and is located approximately 2.6 km north west of the township of Blayney, NSW 2799.

2 Anticipated impacts

Red-Gum has assumed that all impacts associated with the works are confined to the development boundary and access routes. This assessment herein is a desk-top assessment of the likely environs at site and documents the condition of the site at the time of initial inspection (August 2024). Following review of the construction method (and consultation with the client) the construction footprint and associated losses were deduced acknowledging the following key points:

- The solar farm will have an AC capacity of 4.99 MW per site, tracking system. There will be 10,300 panels on 120 tracker rows per site. The tracker rows will be 120 metres in length with 4 metres in between rows (along the north-south axis). The wide distance between each tracker row significantly reduces row shading.
- The height of each module is approximately 2.0 m to 2.75 m and the mounting system is constructed on piles that are driven into the ground, typically within the depths of 1.5 m to 3.0 m.
- Each row of solar photovoltaic (PV) modules will rotate to track the sun across the sky from east to west each day.
- Each solar farm will also consist of an inverter station, which incorporates two 2.5 MW inverter units, the high/medium voltage switchgear and transformers. The inverter station is ground mounted and incorporated on a 12.19 m skid. Allowance is made for a 2.9-metre-high battery energy storage system (BESS) on a 12.1m skid alongside the inverter stations.
- 24 temporary car parking spaces for light vehicles will be installed.
- There are no anticipated vegetation losses along proposed fences or for fire breaks as the entire property has been cleared and is entirely covered by exotic grasses.
- Access to the development area will be by an existing unnamed road located to the south of the development area.
- There will be some inter-row shading in the early morning and late afternoon, however, the ‘agrivoltaic’ industry is expanding worldwide based on the principles of integrating agriculture (grazing) and solar PV projects which, like this project, are essentially designed to take advantage of continued vegetation (grass) cover beneath the panels.
- For further details and arrangement of the development, please refer to the “DA Drawing Pack” lodged with the development application.

*For this reason, total and complete loss of vegetation within the site bounds is **NOT** likely, rather, the anticipated losses have been assumed to be that which will be damaged during construction, and the development area consists of exotic species.*

3 Assessing Biodiversity Impacts

This Biodiversity Inspection Report (BIR) is a desktop and preliminary site assessment of the selected study area, at a particular point in time. The primary aim is to assess the likely impacts of the development with consideration to (where at all possible) avoiding entry into the NSW Biodiversity Offsets Scheme (BOS) by ensuring the development adheres to the 'avoid, minimise, offset' hierarchy. Using the hierarchy, the BIR process attempts to ensure that the proponent:

1) considers whether the development can avoid a negative impact on the environment;
2) considers whether the development can minimise any negative impacts that cannot be avoided; and
3) once all reasonable steps to avoid or minimise environmental impacts have been exhausted, consider whether any remaining impacts can be offset.

The later of the three hierarchy tiers (point 3 above) will require further assessment via either a Test of Significance (ToS) or Biodiversity Development Assessment Report (BDAR) to fully consider the development's likely impact on threatened species, ecological communities and their habitats. This level assessment may make many projects unfeasible.

The 'Test of Significance' (ToS) refers to the factors that must be considered by decision makers to assess whether a proposal is likely to have a significant effect on threatened biodiversity ("5-part test") as per Section 7.3 of the *Biodiversity Conservation Act 2016* (BC Act). The threatened species ToS is used to determine if a development or activity is likely to significantly affect threatened species, ecological communities, or their habitats. It is applied as part of the Biodiversity Offsets Scheme (BOS) entry requirements, and for Part 4 activities, under the *Environmental Planning and Assessment Act 1979* (EP&A Act) (OEH, 2018). It is important to note that the ToS will **ONLY** need to be applied where the proposal:

1. Does **NOT** significantly affect threatened species or ecological communities or their habitats; or
2. Is **NOT** affecting a declared area of Outstanding Biodiversity Value; or
3. Is **NOT** affecting as area on the *Biodiversity Values Map*; or
4. Does **NOT** exceed the BOS clearing threshold for the development area's 'minimum lot size'.

Where the development **IS** determined as being likely to impact threatened species or ecological communities or their habitats; OR **IS** within a declared area of Outstanding Biodiversity Value or any area on the Biodiversity Values Map; OR **DOES** exceed the BOS threshold, then a Biodiversity Development Assessment Report (BDAR) is required.

*In this case, the development area does **NOT** intersect an area mapped on the Biodiversity Values Map and is **NOT** within an area of Outstanding Biodiversity Value. The development is **NOT** threatening ecological communities, threatened species or their habitats. The development is **NOT** exceeding the clearing threshold.*

In addition to determining whether a BDAR is required for a development, the aim of undertaking an ToS is to improve the standard of consideration and protection afforded to threatened biodiversity in planning and decision-making processes (DEC, 2004). *The outcome of any threatened biodiversity assessment should be that developments, activities and actions are undertaken in an environmentally sensitive manner and that appropriate measures are adopted to avoid or minimise adverse effects on threatened biodiversity* (DEC, 2004).

The following sections of this report address two (2) of the three (3) triggers for entry into the BDAR and BOS scheme in ***Section 3.1 & 3.2*** *(i.e. is there native vegetation clearing or a prescribed biodiversity impact on land mapped on the Biodiversity Values Map? OR does the clearing of native vegetation exceed the area threshold?). The final trigger (is it likely to significantly affect threatened species or ecological communities or their habitats?) is addressed in* ***Attachment 1*** *to this report.*

3.1 Does the clearing of native vegetation exceed the area threshold?

The Biodiversity Offsets Scheme Threshold (BOSET) is a test used to determine when it is necessary to engage an accredited assessor to apply the Biodiversity Assessment Method (the BAM) under the BOS to assess the impacts of a proposal. It is most used for local developments (development applications submitted to councils) and clearing that does NOT require development consent in urban areas and areas zoned for environmental conservation. *The Biodiversity Conservation Regulation 2017* sets out threshold levels for when the BOS will be triggered. The threshold has two (2) elements:

1. Whether the amount of native vegetation being cleared exceeds a threshold area, or
2. Whether the impacts occur on an area mapped on the *Biodiversity Values Map* published by the Chief Executive of the NSW Department of Climate Change, Energy, the Environment and Water (**Figure 3**).

If clearing and other impacts exceed either trigger, the BOS applies to the proposed development, including biodiversity impacts prescribed by Clause 6.1 of the *Biodiversity Regulation 2017*. The area threshold applies to all proposed native vegetation clearing associated with a proposal, regardless of whether this clearing is across multiple lots. However, Category 1 Exempt Land is not included in the threshold calculation. If the land on which the proposed development is located has different minimum lot sizes, the smaller or smallest of those minimum lot sizes is used to determine the area clearing threshold. If the BOS is not triggered, the ToS must be used to determine whether a local development is likely to significantly affect threatened species.

The area threshold varies depending on the minimum lot size (shown in the Lot Size Maps made under the relevant Local Environmental Plan (LEP)) or actual lot size (where there is no minimum lot size provided for the relevant land under the LEP) according to the **Table 1**.

Table 1: Minimum lot size and clearing thresholds – with relevant category for this development highlighted

Minimum lot size associated with the property	Threshold for clearing, above which the BAM and offsets scheme apply
Less than 1 ha	0.25 ha or more
1 ha to less than 40 ha	0.5 ha or more
40 ha to less than 1000 ha	1 ha or more
1,000 ha or more	2 ha or more

For this proposal, the minimum lot size associated with the property is the '40 ha to less than 1,000 ha' category, meaning that the maximum threshold for clearing (applied to each site individually) in this case is **1 ha (Table 1, Figure 1)**.

*The development area is located within Category 1 Exempt Land **(Section 3.3)** and is therefore exempt from contributing to the threshold assessment.*

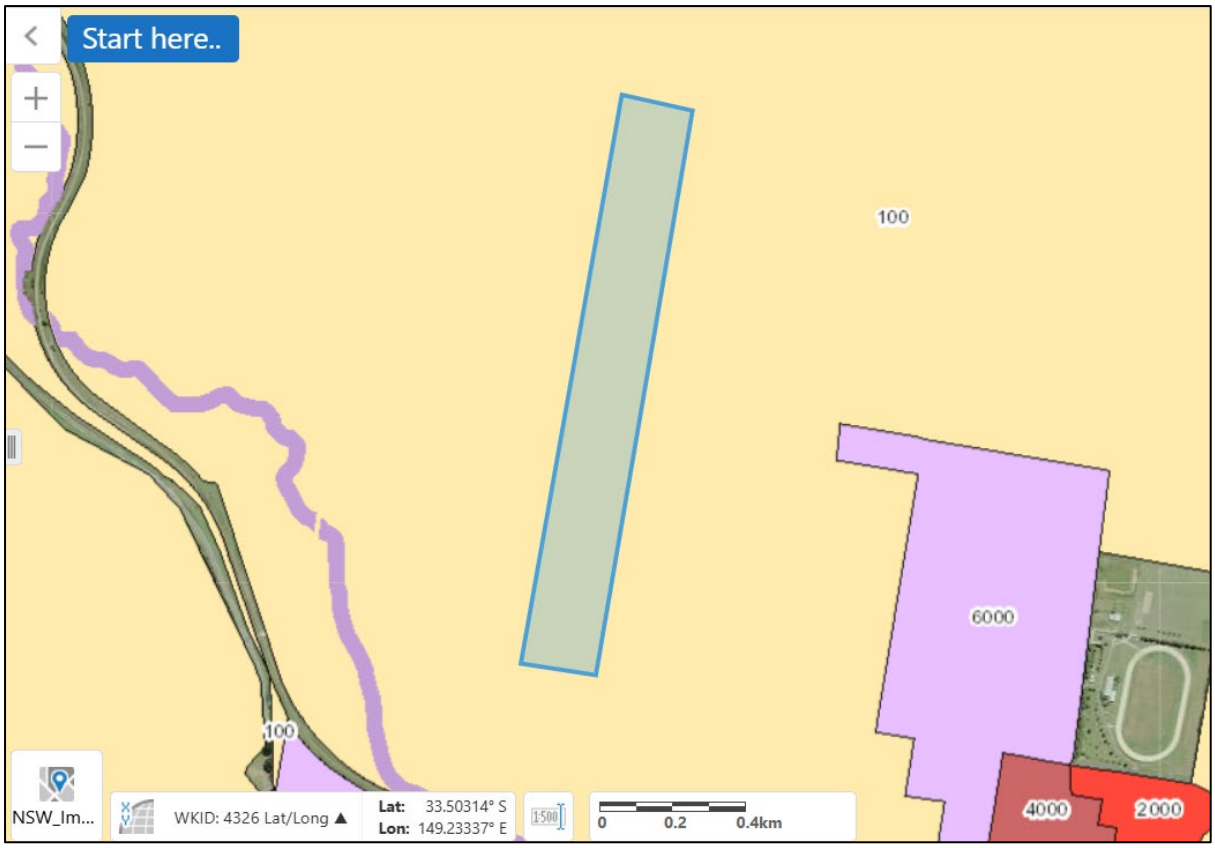


Figure 1: Minimum lot size for the proposed development. Source: NSW Government Biodiversity Values Map and Threshold Tool.

3.2 Biodiversity Values Map and Threshold Tool

The Biodiversity Offsets Scheme Threshold (BOSET) is a test used to determine when it is necessary to engage an accredited assessor to apply the Biodiversity Assessment Method (the BAM) to assess the impacts of a proposal.

*A search conducted on 23/1/25 revealed that the project site does not intersect any areas mapped as possessing 'Biodiversity Values' (**Attachment 3**). The development is not within an area of Outstanding Biodiversity Value.*

3.3 The Draft Native Vegetation Regulatory (NVR) Map Tool

The Draft Native Vegetation Regulatory map categorises land to determine native vegetation management options for landholders. The categories include:

- **Excluded land** - Land managed outside the land management framework. Other clearing controls may exist in these areas.
- **Category 1 Exempt Land** - Native vegetation clearing is allowed without approval from Local Land Services.
- **Category 2 Regulated Land** - is Category 2 land that is not Vulnerable or Sensitive regulated land. You may need authorisation from Local Land Services to clear native vegetation in this category. There are a range of allowable activities which can be carried out without needing authorisation.
- **Category 2 Vulnerable Regulated Land –** is land where clearing of native vegetation may be limited under the Land Management (Native Vegetation) Code 2018, and a limited range of allowable activities are permitted.
- **Category 1 Sensitive Regulated Land -** is land where clearing is not permitted under the Land Management Code (Native Vegetation) Code 2018, and a limited range of allowable activities is permitted.

*The Draft Native Vegetation Regulatory map shows the development area as being completely mapped as Category 1 – Exempt Land (**Attachment 5**).*

3.4 Plant Community Type (PCT) mapping

Aerial photography confirmed that as of at least 2013 the entire site is entirely cleared of native shrubs and trees. A site inspection confirmed that ground cover is entirely exotic (see **section 4**). The development area is not classified as a PCT according to NSW PCT Mapping. PCT that have been mapped nearby include:

- *Southern Tableland Grassy Box Woodland* (the closest PCT to the development area, with small patches occurring 250 m north and 300 metres east),
- *Central Tableland Clay Apple Box Grassy Forest* (a small patch occurs some 300 m east and 500 metres north of the development area).
- *Central and Southern Tableland River Oak Forest* (small patches approximately 490 metres south and approximately 550-700 metres north of the development area).
- *Central Tableland Red Stringybark Grassy Forest* (a small patch approximately 580 metres south of the development area)

- *Southern Tableland Creekflat Ribbon Gum Forest* (a small patch occurs approximately 900 metres north west of the development area)
- *Southern Tableland Grassy Box Woodland (*a larger patch occurs 900 metres north east of the development area)

Given the site is completely cleared and dominated by exotic grass species, there is not enough information to identify the likely PCT of the site by looking at these nearby PCT. The development area and surrounding land consists of heavily modified farmland that has been subject to clearing and agricultural activities since European settlement.

The development area has been completely cleared and used for cattle grazing over exotic pasture. As a result, the development area contains little to no native vegetation diversity or enough structure to ascertain its previous PCT with any certainty.

3.5 EPBC Protected Matters Online Search Tool

A Consultation with the EPBC Protected Matters Online Search Tool shows that within a 10km radius of the development area, two (2) Threatened Ecological Communities potentially occur within a 10km buffer of the development area (both critically endangered). Nine (9) flora species (1 critically endangered, 3 endangered and 5 vulnerable) were identified as having habitat which may occur within 10 km of the development area. **Attachment 1, Table 3 and 4** considers their likelihood of occurring in the proposed site.

Thirty-five (35) fauna species were also identified as having habitat which may occur within 10km of the development area. These species included five (5) critically endangered species, thirteen (13) endangered species, and seventeen (17) vulnerable species. **Attachment 1, Table 5** considers their likelihood of occurring in the proposed site. Eight (8) migratory birds were also identified, one of which is critically endangered and three (3) listed as vulnerable **(Attachment 1, Table 6)**.

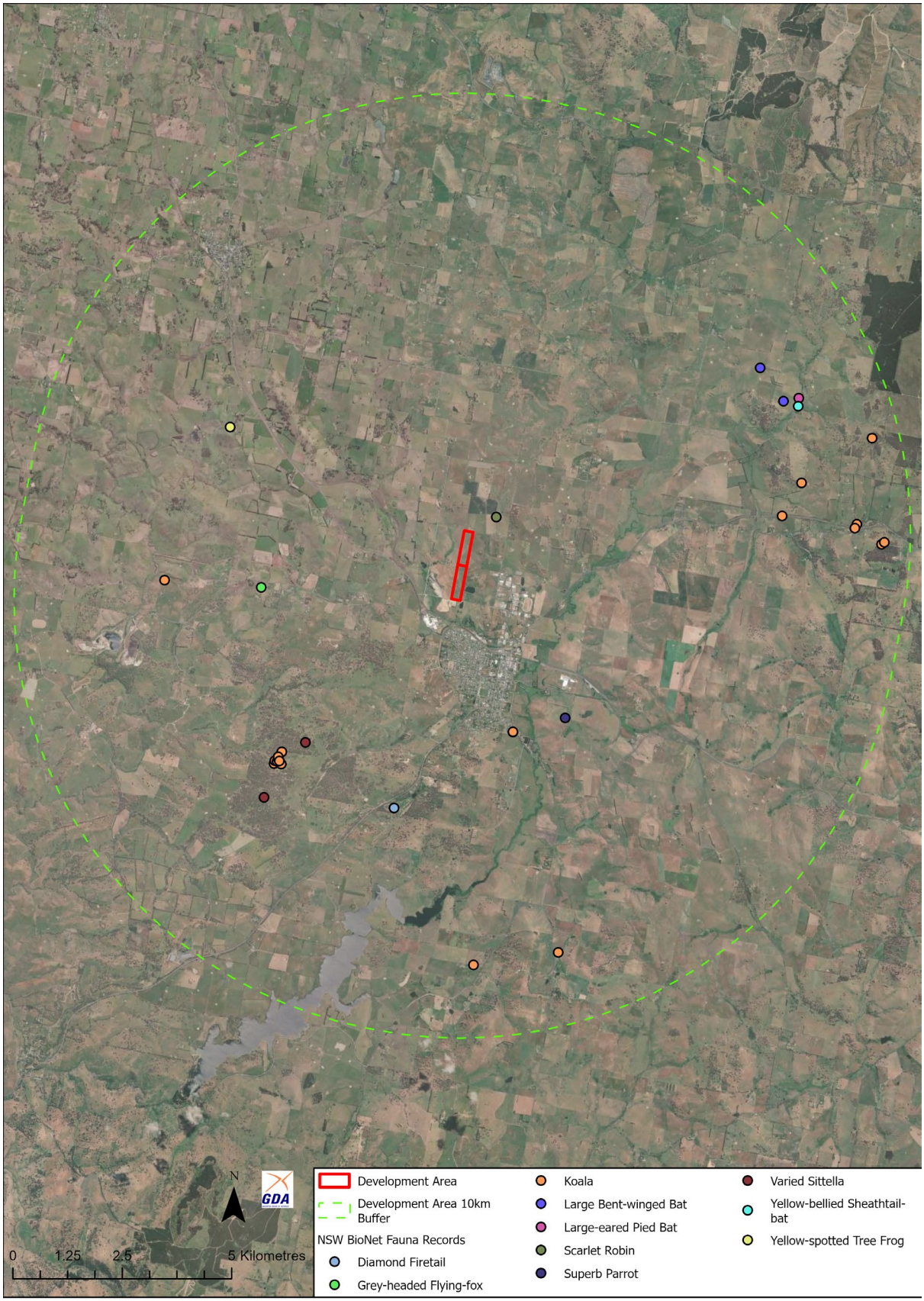
3.6 NSW BioNet (The Atlas of NSW Wildlife)

Consultation with NSW BioNet (The Atlas of NSW Wildlife) shows that within a 10km radius of the development area there were six (6) potential threatened ecological communities, four (4) of which are critically endangered, and two (2) endangered (**Attachment 1, Table 7)**. NSW BioNet showed there were no records of flora species within the 10km radius.

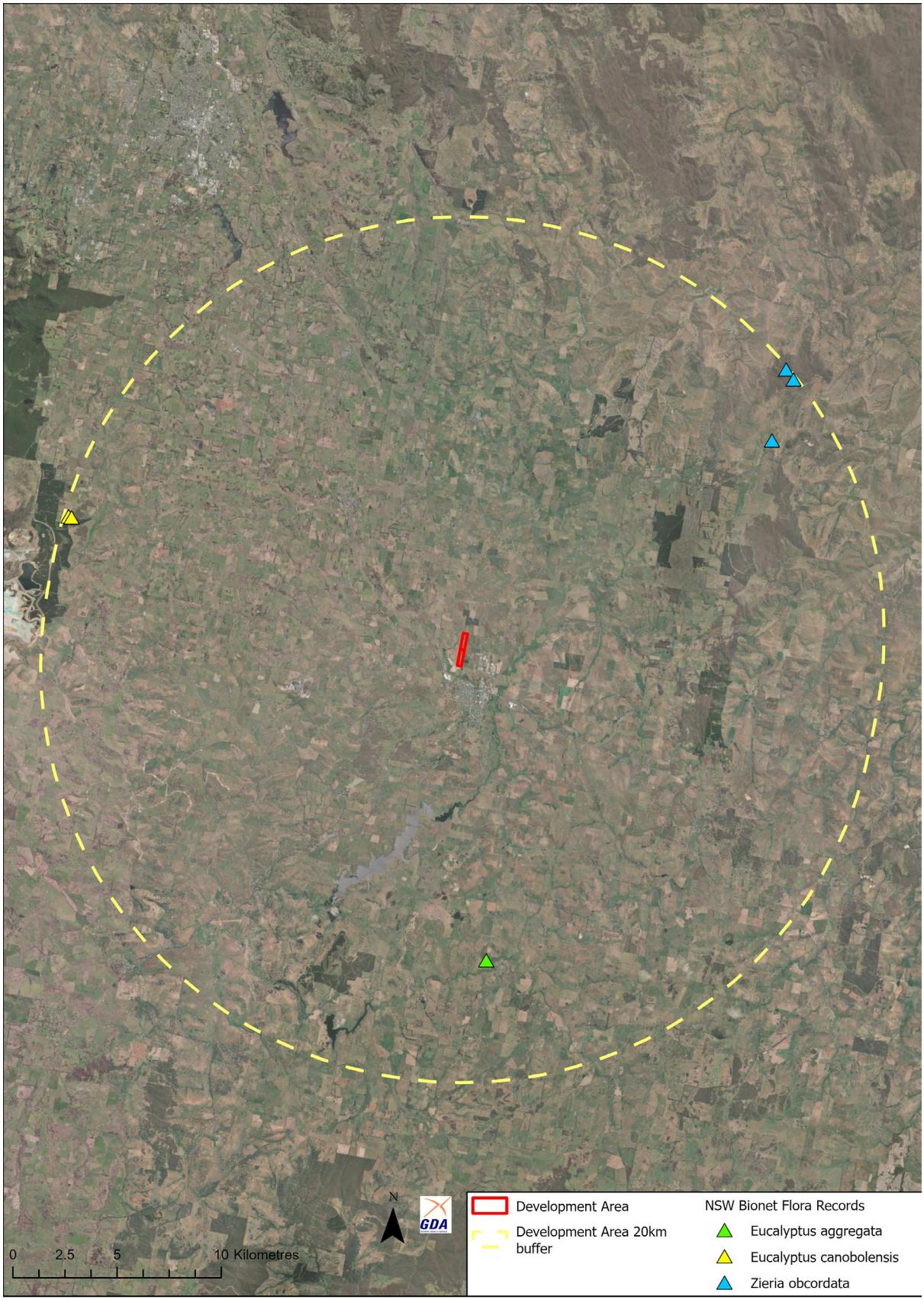
Within a 20 km radius, three (3) recorded flora species occur, consisting of two (2) endangered and one (1) vulnerable species **(Map 1, see all Attachment 1, Table 8)**. Within the 10 km radius, there are records for ten (10) threatened species, including one (1) critically endangered, two (2) endangered, and seven (7) vulnerable species **(Map 2). Attachment 1, Table 9** considers their likelihood of occurring in the proposed site. These species were not recorded on site during the inspection period and are considered unlikely to be present due to a lack of suitable habitat and structure.

3.7 Blayney Shire Council Local Environmental Plan (LEP) 2012

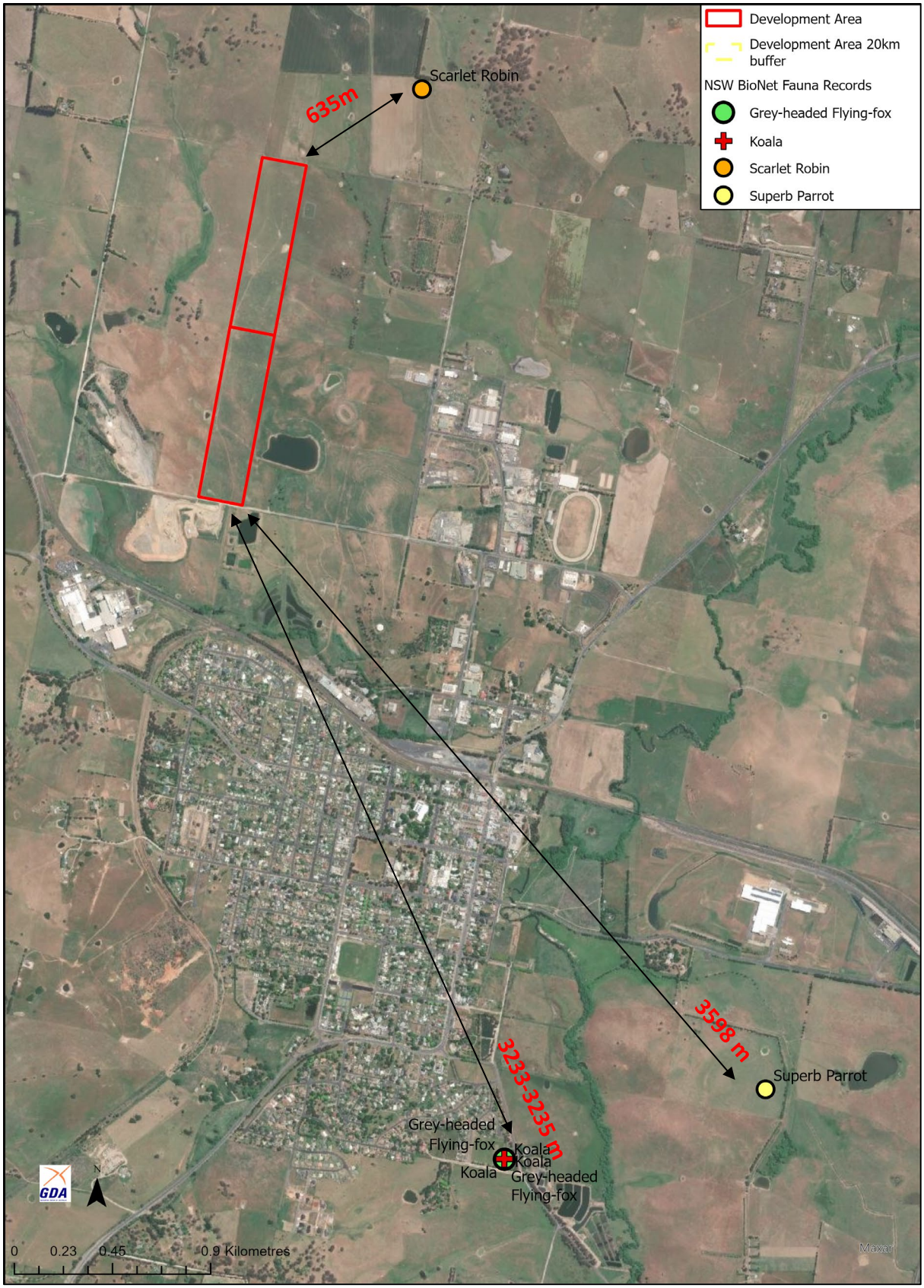
Clause 6.3 Terrestrial biodiversity of Blayney Shire Council LEP 2012 does NOT apply to the development area, which is not located within land identified as 'Biodiversity' on the Natural Resource – Biodiversity Map.



Map 1: Recorded threatened fauna species within 10km of development area, NSW BioNET. Data download, 23/1/2025



Map 2: Recorded threatened flora species within 20km of development area, NSW BioNET. Data download, 23/1/2025



Map 3: Closest recorded threatened fauna species, NSW BioNET. Data download, 23/1/2025

3.8 Koala Assessment

In 2018, the then Office of Environment & Heritage (now DPIE) produced *'A review of koala tree use across New South Wales'* which assessed evidence of koala tree use, for whatever purpose, across New South Wales. The study was intended as a platform to inform the predictive modelling of koala tree species and to contribute to a koala habitat suitability information base and importantly, the data collected for the seven (7) Koala Management Areas (KMAs) 'allows for a bottom-up consideration of a fundamental driver of koala habitat selection – local tree use patterns and tree associations' (OEH, 2018).

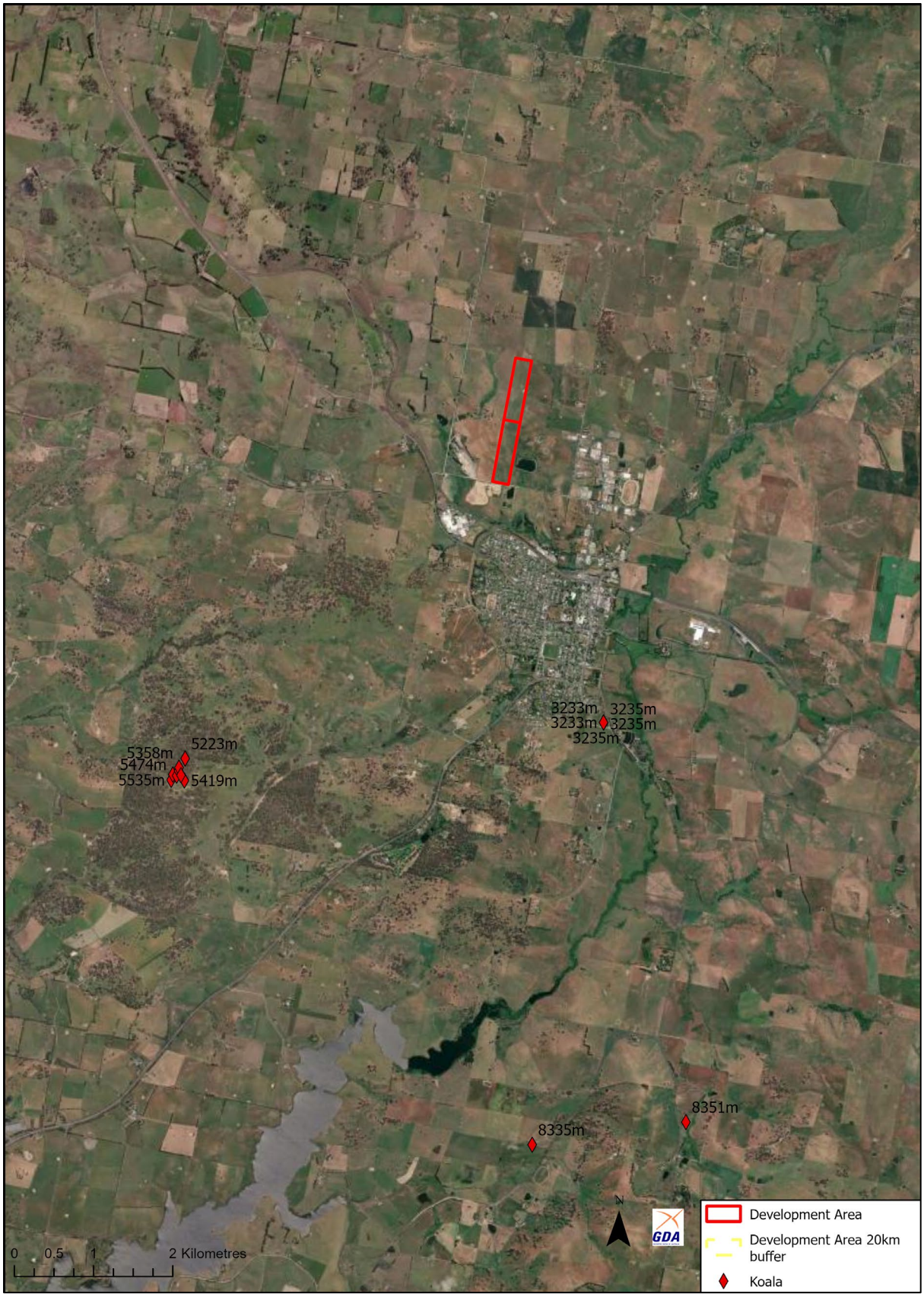
The assessment site at Blayney is in the Central and Southern Tablelands KMA in which the study identified two primary food species regularly used by Koalas, both Eucalypts. Eighteen secondary food species also all consisted of Eucalypts. Pre-inspection database searches revealed twenty-four (24) sightings of Koala (*Phascolarctos cinereus*) within a 10km buffer of the site, with the closest being 3.2 km south east of the development area, within a vegetated patch on the outskirts of Blayney (**Map 4**). Five sightings were recorded here, between 2014 and 2023.

The development area and its surrounds are entirely cleared of trees. It is entirely feasible that Koalas could be using several vegetated sections in the broader area, including riparian corridors. However, there have been no (zero) records within close proximity of assessment site which has been cleared of all native vegetation that could provide any habitat or foraging opportunities for Koalas.

3.9 Desktop Summary

The Desktop assessment prepared by Red-Gum contends that the proposed development at Lot 74 & 83/ DP750390, Blayney, NSW 2799:

1. Is **UNLIKELY** to affect threatened species, ecological communities or their habitats (Attachment 1)
2. Is **NOT** in an area of Outstanding Biodiversity Value or mapped on the Biodiversity Values Map (Attachment 3); and
3. As at the time of this assessment, the on-ground impacts associated with the proposal will **NOT** exceed the allowable 1 ha clearing threshold.



Map 4: Closest recorded Koala sightings, NSW BioNET. Data download, 23/1/2025

4 Site inspection

The field survey was conducted by Damian Wall (Senior Ecologist) of Red-Gum Environmental Consulting Pty Ltd. **Table 2** includes a summary of Mr Wall's relevant qualifications.

Table 2: Contact details and qualifications of assessor

Assessor name	Contact details	Relevant experience
Damian Wall Bachelor of Applied Science (Parks, Recreation & Heritage), Master Environmental Management & Restoration, Graduate Certificate Cultural Heritage Management. **NSW BAM Accredited Person (BAAS 18081)** **VQAM Accredited Person (VIC)**	E: damian.wall@red-gum.com.au P: 0402 344 574	Damian is Managing Director at Red-Gum Environmental Consulting Pty Ltd. Damian is an accredited Biodiversity and Native Vegetation assessor in both NSW and VIC. Damian has over 20 years in the environmental industry and has conducted field work throughout the NT, WA and eastern states

Site inspection on 24/8/2024 was conducted at midday, conditions were clear and 16°C. The designated 'clear zone' was thoroughly inspected in accordance with *Guide 1: Pre-clearing process of the Biodiversity Guidelines: Protecting and managing biodiversity on RTA projects (RTA 2011)*. The following observations were made at the time of inspection:

1. If any threatened native fauna (birds) are present in the surrounding connected native vegetation they were not recorded during the survey on the loss site on 24/8/2024. The typical nesting period for threatened woodland birds species was *closed* at the time of the survey, meaning they were absent and not utilizing the site for breeding.
2. The site is a highly modified paddock with low (<10%) native groundcover present and an obvious history of clearing, pastoralism and cultivation;
3. The entire site has been subject to historical clearing and has no (zero) native remnant native trees;
4. Access of the main road into site will not result in the loss of any large trees or native grasses. The vegetation on the existing road shoulders is predominantly exotic pasture grass species.
5. No threatened species, scats or other evidence of the use of this zone or the development site were recorded during the survey effort.
6. No Koalas, scats or other evidence of use of this zone or the development site were recorded during the survey effort.

5 Summary of Findings

Red-Gum contends that the site is dominated by exotic pasture grasses which have little to no value to threatened fauna and threatened flora are not present in these previously cultivated areas. The site is completely cleared of trees and shrubs. This project is unlikely to displace any rare or threatened species.

The groundcovers in the site and on the roadside (at the site access point) are exotic dominated, with many species commonly regarded as 'highly invasive' in more natural woodland settings. While the proposed works are unlikely to introduce noxious weeds, vermin, feral species or genetically modified organisms into an area, the movement of vehicles, plant, equipment and people on and off the subject site has the potential to introduce such impacts. Wherever possible, the removal of weeds should be undertaken prior to seed developing, which for most species occurs during the warmer months (i.e. summer).

Selection of PCT appropriate species for any revegetation work in this zone is to be guided by a suitably qualified ecological contractor / consultant.

In terms of Koala habitat, there are no viable food sources present in the assessed area. Given the site is completely cleared of trees and shrubs, yhe site is highly unlikely to be traversed or used by the species who are much more likely to stay within the connected canopy of roadside vegetation corridors and more heavily wooded areas.

6 Recommendations

By way of a clearing process that minimizes the risk to threatened species that may be opportunistically using the site, I recommend:

I. Construction limits and exclusion zones clearly identified prior to work;

II. A visual inspection is conducted by environmental staff before construction commences to identify any areas of the site that might be supporting native fauna;

III. Vehicle movements around the site will be restricted to the construction footprint and away from any existing native trees bordering the site with flagging exclusion fencing to be installed.

IV. Soil disturbance by vehicle and pedestrian access is to be kept to a minimum outside the construction footprint.

V. Any weeds removed (particularly those bearing seeds) are to be disposed of appropriately at the nearest waste management facility.

VI. Species selection for any revegetation works is to consider the appropriate PCT for the site and guided by a suitably qualified ecologist or contractor.

Mr Damian Wall
Managing Director
BscAppSc, MEnvMgt, MAACAI

10/2/25

Attachment 1: Likelihood Assessment

Five categories for the 'likelihood of occurrence' of known threatened species, populations or ecological communities has been used. The categories are based on recorded sightings listed in credible databases, the presence or absence of suitable habitat, other features of the site, results of the field survey and professional judgement. The five categories are:

'Yes' The species/community was or has been observed on the development area.

'Likely' A medium to high probability that a species uses the development area

'Potential' A suitable habitat for a species occurs on the development area, but there is insufficient information to categorise the species as 'likely' or 'unlikely' to occur.

'Unlikely' A very low to low probability that a species uses the development area.

'No' Habitat on the development area and in the vicinity is unsuitable for the species.

Table 3: EPBC Protected Matters Database Results – Communities within a 10km radius

Community Name	EPBC Act Status	Likelihood
Natural Temperate Grassland of the South Eastern Highlands	Critically Endangered	No. No indicator species present.
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	No. No indicator species present.

Table 4: EPBC Protected Matters Database Results – Flora within a 10km radius

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Euphrasia arguta		Critically Endangered	Critically Endangered	On the grassy and open forest country surrounding Bathurst in sub humid places and in meadows near rivers.	Unlikely. Closest ALA records are near Newcastle. Site does not contain suitable habitat. Not located during site visit.
Leucochrysum albicans subsp. tricolor	Hoary Sunray, Grassland Paper-daisy	Endangered	Endangered	Grasslands or grassy woodland at lower altitudes (below 900 metres).	Unlikely. Closest ALA record 10km north west of the area. Species not detected during site visit.
Swainsona recta	Small Purple-pea, Mountain Swainson-pea, Small Purple Pea	Endangered	Endangered	Grassy understorey of woodlands and open-forests dominated by Blakely's Red Gum, Yellow Box, Candlebark and Long-leaf box. Grows in association with an understorey dominated by Kangaroo Grass, poa tussocks and spear-grasses.	Unlikely. Nearest records ALA >20km south west of the area. Site lacks suitable habitat. Not detected during site inspection.
Lepidium hyssopifolium	Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed	Endangered	Endangered	Know to establish open, bare ground with limited competition from other plants. Previously recorded from Eucalypt woodland with grassy ground cover, low open Casuarine woodland with grassy ground cover and tussock grassland. Also recorded in weed infested areas of heaving modification, degradation and disturbance (e.g. road and rail verges, fringes agricultural land, small reserves in agricultural land). Found amongst exotic pasture grasses and beneath exotic trees where there is a lack of competition from other shade-tolerant species.	Unlikely. Closest ALA records are >20 km east of site. Not detected during site inspection.
Eucalyptus pulverulenta	Silver-leaved Mountain Gum, Silver-leaved Gum	Vulnerable	Vulnerable	Occurs on crests or upper slopes of moderately steep hillsides or mountains at altitudes of 800-1000m asl on well drained, skeletal soils with frequent rock outcrops. Usually an understorey plant in open forest or woodland, 5-10m tall, dominated by Brittle Gum, Red Stringybark, Broad-leafed Peppermint, Silverstop Ash, Insland Scribbly Gum, Red Box, Long-leaved Box, Apple Box. Occassionally in Acacia-Callistris low woodland.	No. Closest ALA records >20km east of site. Site does not contain suitable elevated, steep, rocky habitat. Not detected during site inspection.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Eucalyptus aggregata	Black Gum	Vulnerable	Vulnerable	Grows in the lowest parts of the landscape on alluvial soils, cold and poorly-drained flats and hollows adjacent to creeks and small rivers. Often with other cold-adaptable eucalyptus (Snow Gum, Ribbon Gum, Candlebark, Black Sallee, Swamp Gum). Occurs in an open woodland formation with a grassy groundlayer dominated by River Tussock or Kangaroo Grass. Occurs as isolated paddock trees in modified/exotic pastures, travelling stock reserves.	Unlikely. Closest ALA records >20km east of site. Site does not contain suitable habitat. Not detected during site visit.
Lepidium aschersonii	Spiny Peppercress	Vulnerable	Vulnerable	Prefers heavy clay soils often near salt lakes on volcanic plains. Seasonally wet sites such as gilgai formations, as well as the edge of wetlands, marshes and shallow lakes.	Unlikely. Site lacks suitable habitat. Not located during site visit. No local records, with nearest ALA sites near Dubbo and West Wyalong (>200km away).
Ammobium craspedioides	Yass Daisy	Vulnerable	Vulnerable	Moist or dry forest communities, Box-Gum Woodland and secondary grassland derived from clearing of these communities.	Unlikely. Site lacks suitable habitat. No daisy species located during site visit. Nearest ALA record >20km south west of site.
Thesium australe	Austral Toadflax, Toadflax	Vulnerable	Vulnerable	Extinct across most of its range. Grows in grasslands, woodlands and herbfields, preferring damp habitats.	Unlikely. Site lacks suitable damp habitat Species not located during site visit. Nearest ALA record >40 KM east of site in State Conservation area.

Table 5: EPBC Protected Matters Database Results – Fauna within a 10km radius

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Bird	*Calidris ferruginea*	Curlew Sandpiper	Critically Endangered	Critically Endangered	Occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets. Estuaries, mudflats, swamps, lakes and lagoons on the coast but also sometimes occurring inland.	No. Site lacks suitable habitat. Not detected during site visit.
Bird	*Anthochaera phrygia*	Regent Honeyeater	Critically Endangered	Critically Endangered	Found in box-ironbark eucalypt associations. Flowering eucalyptus and mistletoe in forests and woodlands, with a preference for the box-ironbark forests and wet lowland coastal forests.	No. Site lacks preferred box-ironbark species. Not detected during site visit.
Bird	*Lathamus discolor*	Swift Parrot	Endangered	Critically Endangered	Occurs in a broad range of forest and woodland habitats dominated by winter flowering Eucalypts, and sometimes urban areas with abundant large trees.	Unlikely. Site lacks suitable habitat. Closest ALA records >25 km north east of the site. Not detected during site visit.
Bird	*Botaurus poiciloptilus*	Australasian Bittern	Endangered	Endangered	Permanent freshwater wetlands and marshes with tall, dense, fringing vegetation. Favours permanent and seasonal freshwater habitats.	No. Site lacks suitable habitat. Nearest ALA records >30 km east of site. Not detected during site visit.
Bird	*Rostratula australis*	Australian Painted Snipe	Endangered	Endangered	Fringes of swamps, lakes, dams, ponds, estuaries, waterlogged grasslands/pastures and marsh areas with a good cover of native grasses, Lignum, shrubs or open timber areas.	No. Site lacks suitable habitat. Not detecting during site visit. Nearest ALA records ?50km north east of site.
Bird	*Callocephalon fimbriatum*	Gang-gang Cockatoo	Endangered	Endangered	Found in tall mountain forests and woodlands, with dense shrubby understoreys in summer. In winter, will move to lower altitudes into drier, more open forests and woodlands.	Unlikely. Site is completely cleared of trees. Nearest ALA record ~15 km south west of site. Not detected during site visit.
Bird	*Melanodryas cucullata cucullata*	South-eastern Hooded Robin, Hooded Robin (south-eastern)	Endangered	Endangered	Prefers lightly wooded, open landscapes, usually Eucalypt woodlands, Acacia scrub and mallee formations, often found in or near clearings in these landscapes.	Unlikely. Site lacks suitable habitat for species and is completely cleared of trees.

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Bird	*Neophema chrysostoma*	Blue-winged Parrot	Vulnerable	Vulnerable	Prefer grasslands and grassy woodlands with a particular preference for areas near wetlands. The species over-summers in Tasmania.	Unlikely. Site lacks suitable wetland habitat and is completely cleared of vegetation. Nearest ALA records >20 km north east of site. Not detected during site visit.
Bird	*Climacteris picumnus victoriae*	Brown Treecreeper (south-eastern)	Vulnerable	Vulnerable	Prefers Eucalyptus woodlands and open forests, particularly those containing box species and dominated by stringybarks for their foraging habitat, with fallen timber, and not too thick shrub cover and an open grassy understorey.	Unlikely. Site lacks any habitat for species being completely cleared. Nearest ALA records >10 km south of site. Not detected during site visit.
Bird	*Stagonopleura guttata*	Diamond Firetail	Vulnerable	Vulnerable	Forests, woodlands and grasslands. Grasslands and grassy woodlands including box-gum woodlands and Snow Gum (Eucalyptus pauciflora) woodlands.	Unlikely. Nearest record > 5km south west of site. Site lacks any habitat for species. Not detected during site visit.
Bird	*Falco hypoleucos*	Grey Falcon	Vulnerable	Vulnerable	Prefers shrubland, grassland and tree-lined watercourses of arid and semi-arid regions.	Unlikely. More likely to frequent riparian areas in broader region. Nearest ALA record >20km south west of site. Not detected during site visit.
Bird	*Gallinago hardwickii*	Latham's Snipe, Japanese Snipe	Vulnerable	Vulnerable	Inhabits freshwater wetlands on or near the coast, generally among dense cover.	No. Site lacks suitable habitat. Not detected during site visit.
Bird	*Leipoa ocellata*	Malleefowl	Endangered	Vulnerable	Semi-arid shrubland and Mallee environments with abundant ground cover and litter. Prefers Mallee woodlands with high diversity.	No. Site lacks suitable habitat. Nearest records >20km north. Not detected during site visit.
Bird	*Grantiella picta*	Painted Honeyeater	Vulnerable	Vulnerable	Prefers Boree/Weeping Myall, Brigalow and Box-Gum woodlands and Ironbark forests. Feeds on Mistletoe species (fruits) that grow on Eucalypts and Acacias.	No. Site lacks suitable habitat or feeding species being completely cleared of tree species. Nearest ALA record >10km east of site. Not detected during site visit.

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Bird	*Calidris acuminata*	Sharp-tailed Sandpiper	-	Vulnerable	Shallow, grassy, vegetated fringes of inland freshwater wetlands and marshes. Also occurs on coasts on mudflats, mangroves, rocky shores and beaches. such as mudflats, estuaries, wetlands and sewage ponds.	No. Site lacks suitable habitat. Not detected during site visit.
Bird	*Calyptorhynchus lathami lathami*	South-eastern Glossy Black-Cockatoo		Vulnerable	Heavily dependent on She-oak species.	No. Site lacks suitable habitat or feeding species being completely cleared of tree species. Not detected during site visit.
Bird	*Aphelocephala leucopsis*	Southern Whiteface	Vulnerable	Vulnerable	Arid and semi-arid acacia and eucalypt woodland and shrubland. Prefers relatively undisturbed open woodland and shrubland with grassy and shrubby understorey, including herbaceous species with low tree densities and numerous tree hollows.	Unlikely. Site lacks suitable habitat and is completely cleared of trees and shrubs. Nearest ALA record is an historical record from >25 km east of site. Not detected during site visit.
Bird	*Polytelis swainsonii*	Superb Parrot	Vulnerable	Vulnerable	Mainly inhabits River Red-Gum forests and Box-gum woodlands. Occurs (nests) in large River Red-gum forests along the Murray River and its nearby major river tributaries, but main foraging habitat is Mallee woodland within 20 km of riverine nesting habitat.	Unlikely. Site lacks suitable habitat. Species more likely to frequent forest and riparian zones in the broader region. Some recent records in Blayney township area. Not detected during site visit.
Bird	*Hirundapus caudacutus*	White-throated Needletail	Vulnerable	Vulnerable	Species appears to primarily roost aerially, it has been recorded roosting in trees in forests and woodlands, both among dense foliage in the canopy or in hollows. Feed, drink and rest on the wing in large groups. May rest at night in forested country.	Unlikely. No suitable habitat on site. May occupy the airspace above the study area on occasion. Not detected during site visit.

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Fish	*Macquaria australasica*	Macquarie Perch	-	Endangered	Clear, deeper permanent waterbodies with abundant in-stream cover such as aquatic vegetation, logs and trees, boulders and vegetation overhanging stream banks.	No. Site lacks suitable waterways for species.
Fish	*Maccullochella macquariensis*	Trout Cod	-	Endangered	Prefer rapidly flowing waterways with rocky or gravel beds, containing deep pools and abundant in-stream woody debris such as logs and trees.	No. Site lacks suitable waterways for species.
Fish	*Maccullochella peelii*	Murray Cod	-	Vulnerable	Occurs in a range of aquatic habitats from clear shallow rocky streams to deeper, turbid slow moving rivers and billabongs.	No. Site lacks suitable waterways for species.
Frog	*Litoria castanea*	Yellow-spotted Tree Frog, Yellow-spotted Bell Frog	Critically Endangered	Critically Endangered	Permanent ponds, swamps, lagoons, farm dams and still backwaters or rivers with tall weeds present.	No. Nearest ALA record >6 km north west of site. Two first order (miner) streams occur on site, one connecting dams on either site of the lot .
Frog	*Litoria booroolongensis*	Booroolong Frog	Endangered	Endangered	Along permanent streams with some fringing vegetation cover such as ferns, sedges or grasses.	No. Nearest ALA record >25 km north east of site. No permanent water bodies.
Frog	*Litoria raniformis*	Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog	Endangered	Vulnerable	Permanent or ephemeral Black Box/ Lignum/Nitre Goosefoot swamps, Lignum/ Typha swamps and River Red Gum swamps.	No. Site does not contain permanent swamps. Closest ALA record >30km south of site. Not detected during site visit.
Insect	*Synemon plana*	Golden Sun Moth	Vulnerable	Vulnerable	Occurs in Natural Temperate Grasslands and grassy Box-Gum Woodlands in which ground layer is dominated by wallaby grasses Rytidosperma spp.	No. Site is heavily disturbed and grazed. Nearest ALA record >6km north west of site from 2019. Not detected during site visit.
Mammal	*Petauroides volans*	Greater Glider (southern and central)	Endangered	Endangered	Territorial, prefer large core forested areas. Abundant hollows required.	No. Site lacks any suitable habitat and is completely cleared of trees and shrubs with no hollos on site.

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Mammal	*Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)*	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Endangered	Endangered	Eucalypt forests and woodlands that contain some of their ~70 preferred Eucalyptus species.	No. Site is completely cleared of trees. Not detected during site visit.
Mammal	*Chalinolobus dwyeri*	Large-eared Pied Bat, Large Pied Bat	Endangered	Endangered	Roosts in caves (near their entrances), crevices in cliffs, old mine workings and in the disused, bottle-shaped mud nests of the Fairy Martin.	No. No suitable habitat on site. Nearest ALA record >10km north east of site.
Mammal	*Dasyurus maculatus maculatus (SE mainland population)*	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)	Vulnerable	Endangered	Primarily forest-dependent species that occupies a wide range of habitat types, although all appear to be characterised by relatively high (> 600mm/yr) rainfall.	No. No suitable habitat on site, being completely cleared of trees and shrubs. Nearest ALA record > 15 km south west of site.
Mammal	*Pteropus poliocephalus*	Grey-headed Flying-fox	Vulnerable	Vulnerable	Requires foraging resources and roosting sites. Has wider ranging habitat, tending to prefer dense vegetation on waterways for roosting.	No. No suitable habitat on site, being completely cleared of trees and shrubs. Some local records
Mammal	*Petaurus australis australis*	Yellow-bellied Glider (south-eastern)	Vulnerable	Vulnerable	Tall, mature eucalypt forests with high rainfall and nutrient rich soils.	No. No suitable habitat on site, being completely cleared of trees and shrubs. Nearest record associated with Canobolas State Forest >30 km north west of site.
Reptile	*Tympanocryptis mccartneyi*	Bathurst Grassland Earless Dragon	Critically Endangered	Critically Endangered	Grassland specialist, inhabiting treeless plains and open grasslands. Found along railway tracks with weedy Paspalum thickets and in vacant paddocks with tall pasture grass. Prefers a more open structure characterised by small patches of bare ground between grasses and herbs.	No. Site is highly disturbed, grazed by cattle and lacks suitable resources for species. Nearest ALA records >30km east of site.

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Reptile	*Aprasia parapulchella*	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard	Vulnerable	Vulnerable	Rocky areas and outcrops are an important habitat requirement, but species has been found from ant nests in shrubland without rocks (Hay Plains). Prefers sloping open woodland areas with a grassy ground layer and partially buried rocks.	No. Site is completely disturbed and lacks suitable habitat. Nearest ALA records >50km west of site.
Reptile	*Delma impar*	Striped Legless Lizard, Striped Snake-lizard	Vulnerable	Vulnerable	Requires complex floristically diverse grass structures, including areas of tussocks, containing rocks with little to no disturbance.	No. Site is completely disturbed. Nearest ALA records north of Cessnock.

Table 6: EPBC Protected Matters Database Results – Migratory Fauna within a 10km radius

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Migratory Category	Marine Status	Habitat Preference	Likelihood
Calidris ferruginea	Curlew Sandpiper	Critically Endangered	Critically Endangered	Migratory Wetlands Species	Listed - overfly marine area	Occur on intertidal mudflats in sheltered coastal areas	No. Site lacks suitable habitat. Not detected during site visit.
Gallinago hardwickii	Latham's Snipe, Japanese Snipe	Vulnerable	Vulnerable	Migratory Wetlands Species	Listed - overfly marine area		No. Site lacks suitable habitat. Not detected during site visit.
Calidris acuminata	Sharp-tailed Sandpiper		Vulnerable	Migratory Wetlands Species	Listed	Shallow, grassy, vegetated fringes of inland freshwater	No. Site lacks suitable habitat. Not detected during site visit.
Hirundapus caudacutus	White-throated Needletail	Vulnerable	Vulnerable	Migratory Terrestrial Species	Listed - overfly marine area	Species appears to primarily roost aerially	No. Site lacks suitable habitat. Not detected during site visit.
Apus pacificus	Fork-tailed Swift			Migratory Marine Birds	Listed - overfly marine area	Almost exclusively an airborne species, roosting on cliffs and rock walls.	No. Site lacks suitable habitat. Not detected during site visit.

Scientific Name	Common Name	BC Act Status	EPBC Act Status	Migratory Category	Marine Status	Habitat Preference	Likelihood
Calidris melanotos	Pectoral Sandpiper			Migratory Wetlands Species	Listed - overfly marine area	Coastal lagoons, estuaries, bays, swamps	No. Site lacks suitable habitat. Not detected during site visit.
Actitis hypoleucos	Common Sandpiper			Migratory Wetlands Species	Listed	Migrates to Australia over winter and prefers coastal and inland wetland habitats	No. Site lacks suitable habitat. Not detected during site visit.
Motacilla flava	Yellow Wagtail			Migratory Terrestrial Species	Listed - overfly marine area	Damp habitats with low vegetation, favouring wet meadows	No. Site lacks suitable habitat. Not detected during site visit.

Table 7: NSW Bionet Database Results – Communities within a 10km radius

Community Name	BC Act status	EPBC Act status	Likelihood
Monaro Tableland Cool Temperate Grassy Woodland in the South Eastern Highlands Bioregion	Critically endangered		No. No indicator species present.
Montane Peatlands and Swamps of the New England Tableland, NSW North Coast, Sydney Basin, South East Corner, South Eastern Highlands and Australian Alps bioregions	Endangered		No. No indicator species present.
Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions	Endangered		No. No indicator species present.
Werriwa Tablelands Cool Temperate Grassy Woodland in the South Eastern Highlands and South East Corner Bioregions	Critically endangered		No. No indicator species 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	Critically endangered		No. No indicator species present.
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland		Critically endangered	No. No indicator species present.

Table 8: NSW Bionet Database Results – Flora within a 20km radius

There were no flora records within 10km of the development area, so a 20km search was conducted.

Scientific Name	Common Name	BC Act Status	EPBC Act status	Habitat preference	Likelihood
Zieria obcordata	Granite Zieria	Endangered	Endangered	Eucalypt woodland or shrubland dominated by species of Acacia on rocky hillsides	No. Site is completely cleared of trees.
Eucalyptus canobolensis	Silver-Leaf Candlebark	Endangered	Endangered	Grows in subalpine woodland, confined to the upper slopes of Mt Canobolas.	No. Site is completely cleared of trees.
Eucalyptus aggregata	Black Gum	Vulnerable	Vulnerable	Grows in the lowest parts of the landscape on alluvial soils, cold and poorly-drained flats and hollows adjacent to creeks and small rivers.	No. Site is completely cleared of trees.

Table 9: NSW Bionet Database Results – Fauna within a 10km radius

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Amphibia	*Litoria castanea*	Yellow-spotted Tree Frog	Critically Endangered	Critically Endangered	Permant ponds, wamps, lagoons, farm dams and still backwaters or rivers with tall weeds present.	No. Nearest ALA record >6 km north west of site. No permanent waterbodies.
Mammalia	*Phascolarctos cinereus*	Koala	Endangered	Endangered	Eucalypt forests and woodlands that contain some of their ~70 preferred Eucalyptus species.	No. Site is completely cleared of trees. Not detected during site visit.
Mammalia	*Chalinolobus dwyeri*	Large-eared Pied Bat	Endangered	Endangered	Roosts in caves (near their entrances), crevices in cliffs, old mine workings and in the disused, bottle-shaped mud nests of the Fairy Martin.	No. No suitable habitat on site. Nearest ALA record >10km north east of site.
Aves	*Stagonopleura guttata*	Diamond Firetail	Vulnerable	Vulnerable	Forests, woodlands and grasslands. Grasslands and grassy woodlands including box-gum woodlands	Unlikely. Nearest record > 5km south west of site. Site lacks any habitat for species. Not detected during site visit.
Aves	*Petroica boodang*	Scarlet Robin	Vulnerable		Dry forests and woodlands with an open grassy understorey and few scattered shrubs, with abundant logs and ground timber.	Unlikely. While there are local records, site lacks any habitat and no ground timber.

Class	Scientific Name	Common Name	BC Act Status	EPBC Act Status	Habitat Preference	Likelihood
Aves	*Daphoenositta chrysoptera*	Varied Sittella	Vulnerable		Forests and woodlands. Prefer rough-barked trees like stringybarks and ironbarks or mature trees with hollows or dead branches.	Unlikely. While there are local records, site is completely cleared of trees.
Aves	*Polytelis swainsonii*	Superb Parrot	Vulnerable	Vulnerable	Mainly inhabits River Red-Gum forests and Box-gum woodlands. Occurs (nests) in large River Red-gum forests along the Murray River	Unlikely. Site lacks suitable habitat. Species more likely to frequent forest and riparian zones
Mammalia	*Pteropus poliocephalus*	Grey-headed Flying-fox	Vulnerable	Vulnerable	Requires foraging resources and roosting sites. Has wider ranging habitat, tending to prefer dense vegetation on waterways for roosting.	No. No suitable habitat on site, being completely cleared of trees and shrubs. Some local records
Mammalia	*Miniopterus orianae oceanensis*	Large Bent-winged Bat	Vulnerable		Requires cave as a primary roosting habitat.	No. Site lacks suitable habitat. Nearest records >10km from site.
Mammalia	*Saccolaimus flaviventris*	Yellow-bellied Sheathtail-bat	Vulnerable		Found individually or in groups, in tree hollows and buildings.	No. Site is completely cleared of trees. Nearest records > 30km from site.

Attachment 2: Photos from the Site Inspection – 24th August 2024

Photo 1. High exotic grass load, South portion of site, west orientation. D. Wall 2024

Photo 2: Roadside exotic grass. East orientation. D. Wall 2024

Photo 3. Mid site, exotic grass dominated, no remnant native vegetation. North orientation. D. Wall 2024

Photo 4: Mid site, exotic grass dominated, no remnant native vegetation. North east orientation. D. Wall 2024

Attachment 3: BOSET Report Results

Biodiversity Values Map

1,486.1 0 743.07 1,486.1 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

23/01/2025 04:48 PM

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.

Attachment 4: Transitional Native Vegetation Regulatory Map