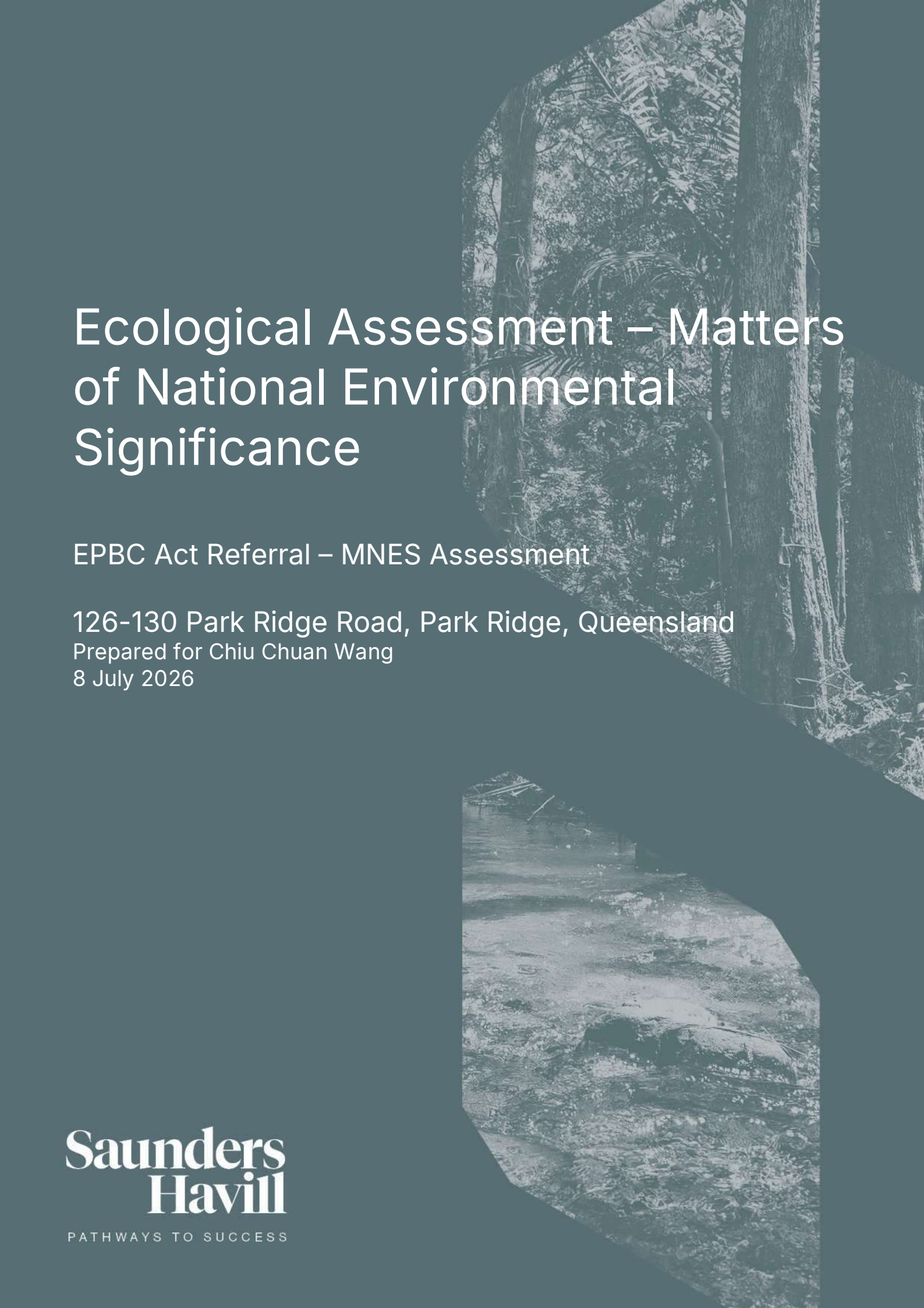




Ecological Assessment – Matters of National Environmental Significance

EPBC Act Referral – MNES Assessment

126-130 Park Ridge Road, Park Ridge, Queensland
Prepared for Chiu Chuan Wang
8 July 2026

**Saunders
Havill**

PATHWAYS TO SUCCESS

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Table of Contents

1.2. Description of the Proposed Action	1
1.2.1 Potential disturbance from Proposed Action	2
1.3. Purpose	3
2. Commonwealth Legislation and Policy	7
2.1. Environment Protection and Biodiversity Conservation Act 1999	7
2.2. Significant Impact Guidelines	7
2.3. Conservation Advices	8
2.4. EPBC Act Environmental Offsets Policy	8
2.5. Guidelines of EPBC Act Listed Species	8
3. Assessment Methodology and Process	9
3.1. Desktop analysis	9
3.2. Field survey methodology	10
3.2.1 Survey guidelines	11
3.2.2 Observational Survey for Significant Flora and Fauna, Habitat Trees and Biodiversity Values	11
3.2.3 Ground-truthing of vegetation communities	11
3.2.4 Scats, tracks, and other traces search	11
3.2.5 Koala habitat and Spot Assessment Technique (SAT) surveys	11
3.2.6 Diurnal bird surveys	12
3.2.7 Other Targeted Survey Techniques	13
3.2.8 Motion sensor camera detection	13
3.2.9 Nocturnal active searches, dusk bird surveys and spotlighting	13
3.2.10 Incidental bird observations	13
3.2.11 Fauna movement barrier assessment	14
3.3. Likelihood of Occurrence Assessment	16
4. Desktop Assessment Results	18
4.1. Landscape Context and Historical Aerial Imagery Analysis	18
4.1.1 Protected Matters Search Tool – EPBC Act (Cth)	22
4.1.2 Wildlife Online – Nature Conservation Act 1992 (Qld)	24
4.1.3 State Regional Ecosystems – Vegetation Management Act 1999 (Qld)	25
4.2. Threatened Species and Communities Desktop Likelihood of Occurrence	29
4.2.1 Threatened Ecological Communities	29
4.2.2 Threatened Flora Species	30
4.2.3 Threatened Fauna Species	31
4.2.4 Migratory Species	33
4.3. Other MNES	33



5. Field Survey Results	35
5.1. Vegetation Communities	35
5.1.1 Category B - Eucalypt woodland indicative of RE12.9-10.4	35
5.1.2 Category B- Eucalypt woodland indicative of RE 12.9-10.12	36
5.1.3 Category X - Highly disturbed area	36
5.1.4 Flora Species	37
5.2. Connectivity assessment	37
5.3. Fauna Assessment Results	39
5.3.1 Targeted Species and survey guidelines	40
5.3.2 Koala survey results	41
5.3.3 Spotlight and nocturnal search results	41
5.3.4 Camera monitoring results	41
5.3.5 Tree plot results	41
5.4. Threatened species and communities	49
5.4.1 Threatened Ecological Communities Assessment	49
5.4.2 Threatened Flora Species Assessment	49
5.4.3 Threatened Fauna Assessment	49
5.4.4 Migratory Species Assessment	53
5.5. Post Field Survey MNES Assessment	54
6. Potential Impacts	57
6.1. Potential Project Related Impacts	57
6.1.1 Potential Direct Impacts	57
6.1.2 Potential Indirect Impacts	59
7. Avoidance, Mitigation and Management Measures	62
7.1. Clearing and Site Establishment Phase	62
7.1.1 Vegetation Clearing and Management Plan	62
7.1.2 Fauna Management Plan	62
7.1.3 Fauna Spotter Catcher	63
7.1.4 Existing Offsets	63
8. Significant impact assessments	64
8.1. Significant Impact Assessment Definitions	64
8.1.1 Population of a species	64
8.1.2 Important population	64
8.1.3 Habitat critical to the survival of a species or ecological community	64
8.2. Phascolarctos cinereus (Koala)	65
8.2.1 Conservation Status	65
8.2.2 Description	65
8.2.3 Distribution	65
8.2.4 Habitat	65
8.2.5 Threats	65



8.2.6 Significant Impact Assessment	65
8.3. <i>Pteropus poliocephalus</i> (Grey-headed Flying-fox)	77
8.3.1 Conservation Status	77
8.3.2 Description	77
8.3.3 Distribution	77
8.3.4 Habitat	77
8.3.5 Recovery Actions	77
8.3.6 Significant Impact Assessment	78
8.4. <i>Petauroides Volans</i> (Greater Glider)	90
8.4.1 Conservation Status	90
8.4.2 Description	90
8.4.3 Distribution	90
8.4.4 Habitat	90
8.4.5 Threats	90
8.4.6 Significant Impact Assessment	90
8.5. <i>Petaurus australis australis</i> (Yellow-bellied Glider (south-eastern))	109
8.5.1 Conservation Status	109
8.5.2 Description	109
8.5.3 Distribution	109
8.5.4 Habitat	109
8.5.5 Threats	110
8.5.6 Recovery Actions	110
8.5.7 Significant Impact Assessment	110
8.6. <i>Hirundapus caudacutus</i> (White-throated Needletail)	128
8.6.1 Conservation Status	128
8.6.2 Description	128
8.6.3 Distribution	128
8.6.4 Habitat	128
8.6.5 Threats	128
8.6.6 Recovery Actions	128
8.6.7 Significant Impact Assessment	129
9. EPBC Act Determination Advice	134
9.1. EPBC Act Significant Impact Guidelines	134



Figures

Figure 1	Site Context	4
Figure 2	Site Aerial	5
Figure 3	Proposed development layout	6
Figure 4	State Vegetation Mapping	27
Figure 5	Vegetation Management Regional Ecosystems	28

Plans

Plan 1	Field Survey Effort	14
Plan 2	Historical Imagery Analysis	19
Plan 3	Context Analysis	20
Plan 4	Zoning and Environmental Corridors	21
Plan 5	Field Survey Results	47
Plan 6	Impact Analysis	58
Plan 7	Koala records and habitat	76
Plan 8	Grey-headed Flying-fox Roosts and habitat	89
Plan 9	Greater Glider habitat analysis	99
Plan 10	Yellow Bellied Glider habitat analysis	118
Plan 11	White-throated Needletail habitat and records	133

Tables

Table 1	Key details of the subject site	2
Table 2	Field Survey Conditions Summary	10
Table 3	Likelihood of occurrence assessment criteria	16
Table 4	PMST summary search results	22
Table 5	NCA Wildlife Online Database Search Results	24
Table 6	Regional Ecosystem Descriptions	25
Table 7	Likelihood of occurrence of TECs within referral area	30
Table 8	Likelihood of occurrence of flora species within referral area	31
Table 9	Likelihood of occurrence of fauna species within referral area	31
Table 10	Likelihood of occurrence of migratory species within the referral area	33
Table 11	Summary of fauna survey techniques and survey effort	40
Table 12	Fauna detected within the referral area	42
Table 13	Potential for the proposed action to impact MNES	54
Table 14	EPBC Significant impact criteria for critically endangered and endangered species – Koala	67



Table 15	EPBC Significant impact criteria for vulnerable species – Grey-headed Flying-fox	80
Table 16	EPBC Significant impact criteria for critically endangered and endangered species – Greater Glider	92
Table 17	EPBC Significant impact criteria for vulnerable species – Yellow-bellied Glider (south-eastern)	111
Table 18	EPBC Significant impact criteria for vulnerable species – White-throated Needle-tail	130



1. Introduction

Saunders Havill (SH) was engaged by Chiu Chuan Wang to carry out an ecological assessment of Matters of National Environmental Significance (MNES) to support a referral under the Commonwealth Government's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The purpose of this report is to identify potential MNES, specifically listed threatened species and communities that may be impacted by the proposed residential development ('the action') located at 126-130 Park Ridge Road, Park Ridge, Queensland ('the referral area' or 'the site').

1.1. Site Context

The referral area is located within the north-western portion of the suburb of Park Ridge approximately 10 kilometres (km) north-west of Logan Village and 1.3km east of Mount Lindesay Highway. The site is bound by Park Ridge Road to the south and bordered on the eastern and western boundaries by current and future approved residential development. To the north of the site is retained vegetation adjacent to an unnamed tributary of Scrubby Creek within Logan City Council's mapped biodiversity corridor.

1.2. Description of the Proposed Action

Chiu Chuan Wang ('the Proponent') is proposing a residential development including residential allotments, internal roads, and detention/drainage areas and environmental open space area on freehold land located at 126-130 Park Ridge Road, Park Ridge, Queensland described as Lot 4 on RP868515. The proposed action sits adjacent to several other current and future residential developments that will cater for increasing housing demands in South-East Queensland (SEQ). The proposed development footprint that is subject to this referral constitutes 5.65 ha.

The proposed infrastructure requires clearing of 4.58 ha of land most of which is locally mapped Primary Vegetation and state mapped Koala Habitat. Project design has been informed by on-ground surveys by ecological consultants with areas of identified higher-value habitat quality and environmental values retained where possible.

The development has obtained approval at a Local and State Government level. An area of 1.2 ha in the north of the site will be retained as an environmental open space area, rehabilitated and voluntarily dedicated to Council as conservation land on the completion of the project. The region of vegetation to be retained is associated with Logan City Council biodiversity corridor mapping. This area has been identified as higher-value for retention and as such this project will contribute positively to the overall environmental outcomes set by Logan City Council. Notably, under the approval any hollows removed by the proposed action will be replaced at a rate of 1:1 within the onsite open space area or in another suitable lot agreed upon between Council and the proponent. In addition, a financial offset will be provided to Council for impacted Primary Vegetation on site totalling \$429,082.11. This financial amount has been agreed upon between the proponent and Council. Further, the State Government has thoroughly assessed potential impacts on Koala habitat on site and deemed the impact acceptable. For the offset of SEQ Koala Habitat loss a financial contribution of \$1,313,565.98 will be paid to the State.

Based on the provision of the financial offsets and conditions the proposal has received State and Local endorsement.

Refer to **Figure 1** and **Figure 2** for site context and referral area respectively and **Figure 3** for the Council and State approved development layout.

The following definitions were used to inform the scope of this MNES Assessment:

- Impact area – the proposed impact footprint comprising temporary clearing works and the earthworks footprint
- Referral area / the site – The entirety of the lot on which the proposed action will occur identified as Lot 4 on RP68651. **Table 1** provides key site details and the proposed impact area.
- Locality – 5 km radius from the referral area boundary utilised as part of database searches.

Table 1 Key details of the subject site

Address	126-130 Park Ridge Road, Park, 4125
Real Property Description	Lot 4 on RP 868515
Impact area	4.58 ha of land potential MNES habitat
Vegetation Management Act 1999	Category X (non-remnant) Category C (high-value regrowth) 'Endangered' RE12.9-10.12 and 'Endangered' RE 12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a Category B (remnant) 'Endangered' RE 12.9-10.12 and 'Least Concern' RE 12.9-10.4 Essential Habitat for Phascolarctos cinereus (Koala)
South East Queensland Koala Habitat Provisions	Not Within Koala Priority Area Contains Core Koala Habitat Area
LGA	Logan City Council (LCC)
Zoning	Mixed Use, Environmental Management and Conservation
Existing Land Use	Vacant Land
Proposed Land Use	Residential Development, Detention/ Drainage and Environmental Open Space Area

1.2.1 Potential disturbance from Proposed Action

The proposed disturbance activities required to undertake the proposed action will run through stages including preliminary works, the broad-scale clearing of vegetation, earthworks and construction to deliver



the development site and then operational impacts. Preliminary works include site assessment and survey, geotechnical testing and preparation of the site, such as the installation of construction fencing. These works are not considered likely to have a significant impact but will involve limited vegetation and ground disturbance relative to the existing disturbed site conditions.

Site clearing is likely to be undertaken sequentially and aligned with approval conditions that reflect State legislative requirements, including daily clearing limits and fauna controls specified under the State Nature Conservation Act. Site clearing will directly impact on vegetative values that provide habitat for native fauna, noting risks to fauna will be mitigated under fauna management controls. Earthworks and construction will introduce potential impacts, such as increased human presence, light and noise disturbance, dust, weed and pathogen contamination, vehicular movements and risk of fauna strike, barriers to dispersal and hydrological changes, and these can be effectively mitigated with standard operating procedures and best practice methodologies conditioned by the State on approval.

Operational impacts include increased risk of vehicle strike, domestic animals that may be threats to native species, barriers to dispersal, light and noise disturbance, weed and pathogen contamination and increased human presence. Through detailed design and the implementation of best practice operating procedures, implementing approval conditions and legislative controls required in urbanised environments, these impacts relative to vegetation clearing and in the absence of direct impacts to habitat values are considered likely to be effectively mitigated.

1.3. Purpose

This ecological assessment has been prepared to support a referral to the Australian Government's Department of Climate Change, Energy, the Environment and Water (DCCEEW, 'the Department') for assessment against the provisions of the EPBC Act. The purpose is to:

- Identify biodiversity values within or near the referral area including MNES
- Identify potential impacts of the proposed action on MNES
- Present a list of measures to avoid, minimise and / or mitigate the identified impacts; and
- Provide an assessment against the *Significant Impact Guideline 1.1* for MNES identified as having the potential to be impacted by the action, at its broadest scope.

The assessment was achieved by employing a combination of desktop analysis, expert opinion, field surveys and local knowledge. The findings of this assessment will identify if the action is likely to have a significant residual impact on MNES and determine if it should be made a controlled action.





LEGEND ★ Project location	FIGURE 1 SITE CONTEXT PROJECT PARK RIDGE ROAD, PARK RIDGE COORDINATE SYSTEM GDA 2020 MGA Z56 SCALE (A4) 1:250,000 0 2 4 6 8 km N	CLIENT CHIU CHUAN WANG Saunders Havill BOWEN HILLS SPRINGFIELD 1300 123 744 mail@saundershavill.com
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153°3'0"E



LEGEND

- Qld DCDB
- Project site

FIGURE 2

SITE AERIAL

PROJECT
PARK RIDGE ROAD, PARK RIDGE
COORDINATE SYSTEM
GDA 2020 MGA Z56
SCALE (A4)
1:3,200

0 20 40 60 80 100 m



CLIENT

CHIU
CHUAN
WANG

**Saunders
Havill**

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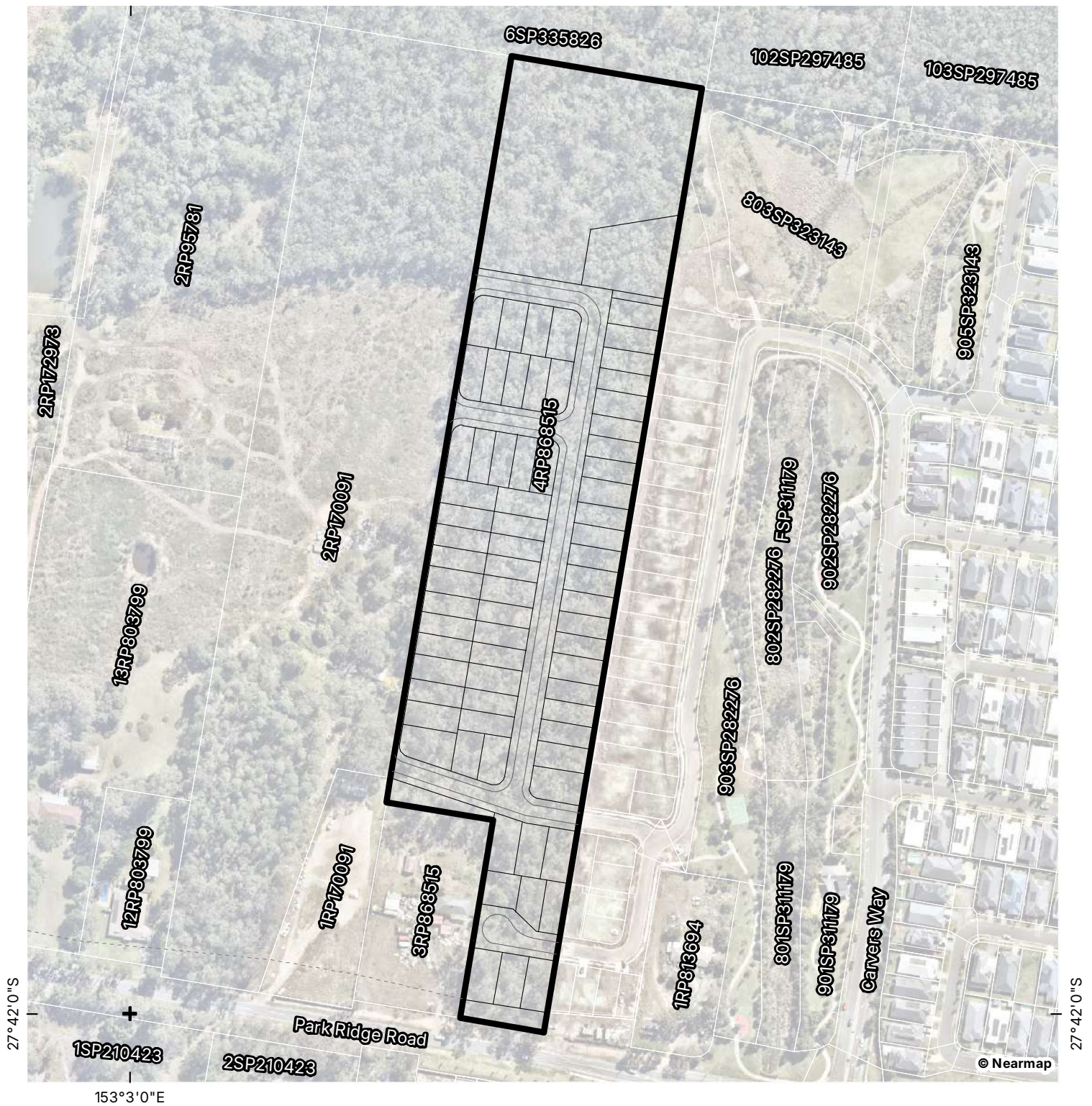
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FILE REFERENCE

12014 E MNES Figure 2 Site Aerial A

DATE 28/10/2025

153°3'0"E



LEGEND

- Qld DCDB
- Project site
- Proposed lots
- Proposed road pavement
- LCC road resumption

FIGURE 3

PROPOSED DEVELOPMENT

PROJECT
PARK RIDGE ROAD, PARK RIDGE
COORDINATE SYSTEM
GDA 2020 MGA Z56
SCALE (A4)
1:3,200

0 20 40 60 80 100 m



CLIENT

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12014 E MNES Figure 3 Dev Layout A

DATE 29/06/2026

2. Commonwealth Legislation and Policy

2.1. *Environment Protection and Biodiversity Conservation Act 1999*

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) establishes a requirement for Commonwealth environmental assessment and approval for actions that are likely to have a significant impact on any MNES protected under the EPBC Act, including:

- World heritage properties;
- National heritage places;
- Wetlands of international importance (listed under the Ramsar Convention);
- Listed threatened species and ecological communities;
- Migratory species protected under international agreements;
- Commonwealth marine areas;
- The Great Barrier Reef;
- Nuclear actions (including uranium mines); and
- A water resource, in relation to coal seam gas development and large coal mining development.

Other matters protected under the EPBC Act, include:

- The environment, where actions proposed are on, or will affect Commonwealth land and the environment; and
- The environment, where Commonwealth agencies are proposing to take an action.

When a proponent proposes to take an action that they believe may need approval under the EPBC Act, they must refer the proposed action to the Australian Government Minister for the Environment (the Minister). The purpose of the referral is to determine whether or not a proposed action is a 'controlled action' and thereby requires approval under the EPBC Act. If the Minister determines that a proposed action is a 'controlled action', it would then proceed through the Commonwealth assessment and approval process.

2.2. *Significant Impact Guidelines*

The *Significant Impact Guidelines 1.1* (DoE 2013) (SIG 1.1) define a 'significant impact' as an impact which is important, notable, or of consequence, having regard to its context or intensity, with whether or not an action is likely to have a significant impact depending upon the sensitivity, value, and quality of the environment to be impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.



The Significant Impact Guidelines provide a set of criteria to assist in determining whether the impacts of a proposed action are likely to result in a significant residual impact on a MNES. When considering whether an action is likely to have a significant impact on a MNES it is relevant to consider all adverse impacts which result from the action, including indirect and offsite impacts.

2.3. *Conservation Advices*

When a native species or ecological community is listed as threatened under the Commonwealth EPBC Act, a conservation advice is developed to assist its recovery. Conservation advice guides recovery planning and identify actions required for conservation and recovery of the threatened species or ecological community. They inform the Australian Government in regulatory decision-making and investment for threatened species and ecological communities. For some species and ecological communities with more complex planning needs, recovery plans may also be developed to guide recovery.

Conservation advices and recovery plans list key habitat requirements, characteristics and life histories of threatened species and ecological communities. They can be used to assess whether habitat critical to threatened species or communities may be present on a site and, therefore, are a useful tool for assessing the potential for an action to impact on MNES.

2.4. *EPBC Act Environmental Offsets Policy*

Environmental offsets are measures that compensate for the residual adverse impacts of an action on the environment. At the national level, environmental offsets are governed by the EPBC Act and EPBC Act Environmental Offsets Policy (2012). Environmental offsets will be required for any significant residual impact on MNES resulting from the Project.

Offsets can comprise a combination of direct offsets (*i.e.*, on ground creation or rehabilitation of habitat) and indirect compensatory measures (*i.e.*, research or educational programs) that aligns with published conservation priorities and provides a conservation gain for the MNES being impacted.

Conservation gain is the benefit that a direct offset delivers to the MNES, which maintains or increases its viability or reduces any threats of damage, destruction or extinction. A conservation gain may be achieved by:

- improving existing habitat for the protected matter;
- creating new habitat for the protected matter;
- reducing threats to the protected matter;
- increasing the values of a heritage place; and/or
- averting the loss of a protected matter or its habitat that is under threat.

An environmental offset may be required if the action is considered to have a significant impact on a MNES.

2.5. *Guidelines of EPBC Act Listed Species*

The Australian Government has published guidelines that provide specific guidance when considering potential impacts on nationally threatened species and communities and should be read in conjunction with the SIG 1.1.



3. Assessment Methodology and Process

3.1. Desktop analysis

Prior to the commencement of field surveys, a desktop analysis was conducted of Commonwealth, State and Local environmental databases and overlay mapping to identify potential MNES and included the following:

- Commonwealth MNES protected under the EPBC Act on and around the site using the protected matters search tool with a 5 km radius (**Appendix A**);
- *Nature Conservation Act 1992* (NCA) listed threatened species on and around the site using the wildlife online database search tool with a 5 km radius (**Appendix B**);
- Public environmental databases including Atlas of Living Australia and BioMaps;
- State regulated vegetation management and vegetation supporting maps under the *Vegetation Management Act 1999* (VMA) including essential habitat mapping; and
- Local Government records where MNES threatened species and communities are known to occur in the area.
- State Government environmental overlay mapping, including;
 - regulated vegetation management and vegetation supporting maps under the *Vegetation Management Act 1999* (VMA) (Qld);
 - protected plant flora survey trigger areas under the NCA (Qld);
 - fish habitat and waterways under the *Fisheries Act 1994* (Qld);
 - watercourses under the *Water Act 2000* (Qld);
 - Matters of State Environmental Significance (MSES) under the *State Planning Policy 2017* (SPP) (Qld);
 - referable wetlands mapping, which are defined under the *Environmental Protection Regulation 2008*;
 - Environmental Reports (provided by the Department of Environment and Science (DETSI)) defining biodiversity and conservation values, including Biodiversity Planning Assessments, Aquatic Conservation Assessments, Threatened and Priority Species, trigger corridors, and wetlands and waterways

Additionally, a review of aerial photography history was undertaken via QImagery to assist with the broad delineation of vegetation communities and to determine historical patterns to local vegetation communities.

Initial desktop assessment identified seven (7) Threatened Ecological Communities (TECs), eighteen (18) threatened flora species, thirty-six (36) threatened fauna species, of which seven (7) are identified as migratory species, having the potential to occur within 5 km of the referral area protected under the EPBC



Act (refer **Appendix A**). An initial assessment for the likelihood of occurrence was undertaken based on desktop survey to inform field survey methodology for target flora and fauna species and communities (refer **Appendix C**).

3.2. Field survey methodology

Field surveys were conducted to describe the ecological value of the referral area and surrounds. Field surveys were undertaken during seasonal conditions generally favourable to the detection and identification of flora and fauna species (refer **Table 2**). Detailed ecological surveys were undertaken over four (4) days by seven (7) ecologists between the 8th and 25th of September 2025. Ecologists were present on site during diurnal hours on the 8th and 9th and dusk and nocturnal hours on the 11th and 25th of September 2025 (refer **Plan 1**).

Field survey methods were determined based on target species and communities and EPBC Act listed species guidelines.

Fauna surveys were conducted under the following permits held by Saunders Havill:

- Scientific Purposes Permit P-SPP-100794835 granted under the provisions of the Nature Conservation (Animals) Regulation 2020
- Department of Agriculture and Fisheries (DAF) Ethics clearance CA 2020/02/1355
- Scientific User Registration SUR000451

The specific methods utilised are described in the following subsections were conducted to describe ecological value of the subject site.

Table 2 Field Survey Conditions Summary

Date	Weather Conditions	Methods
8 September 2025	18.2°C min – 24°C max, 0 mm rainfall	Initial site visit, general observational surveys, Quaternaries, context analysis, camera set-up and SAT surveys
9 September 2025	19.6°C min – 27.1°C max, 0 mm rainfall	General observational surveys, SAT surveys, diurnal bird survey
11 September 2025	17.9°C min – 21.8°C max, 0.8 mm rainfall	General observational, stag watch, dusk bird surveys and spotlighting.
25 September 2025	20.5°C min – 27.7°C max, 0 mm rainfall	General observational, dusk bird surveys, camera collection, and spotlighting.

Source: Greenbank (Defense) QLD (140009), BOM 2025



3.2.1 Survey guidelines

All survey methods undertaken have been guided by best practice and where applicable, Commonwealth and State survey guidelines for threatened species. This includes the following methodologies:

- *Terrestrial Vertebrate Fauna Survey Guidelines.*
- *Survey guidelines for Australia's Threatened Bats.*
- *Survey Guidelines for Australia's Threatened Mammals.*
- *Survey Guidelines for Australia's Threatened Birds.*

3.2.2 Observational Survey for Significant Flora and Fauna, Habitat Trees and Biodiversity Values

The referral area was walked to identify and record flora and fauna species. Particular attention was paid to any threatened species listed as possibly occurring within or proximal to the application area. Specific micro-assemblages, which may support these threatened species, were also recorded when observed. This included observations for vertebrate fauna present within or proximal to the study area, including faunal lists and status of species significance under the Commonwealth's EPBC Act (using JAMBA, CAMBA, ROKAMBA and the Bonn Convention) and Queensland's NCA.

The observational survey included identification of ecological features and values such as broad vegetation communities, fauna habitats, and ecological corridors. Identification and description of the fauna habitats present within the area included any habitat trees.

For the purposes of this report, a significant flora and fauna species has been defined as a species that is scheduled as 'critically endangered', 'endangered', 'vulnerable' or conservation dependent under the Commonwealth EPBC Act.

3.2.3 Ground-truthing of vegetation communities

Vegetation was ground-truthed and assessed against mapping under the relevant planning instrument overlays, current VMA Regional Ecosystem mapping and pre-clear mapping. A comprehensive flora survey was undertaken using a methodology consistent with the established formats used by the Queensland Herbarium (Nelder et al., 2025 and Hnatiuk et al., 2009). Survey methodology comprised an initial visual audit, followed by quantitative assessment of vegetation associations and communities. Distinct vegetation community boundaries were delineated during field survey assessment.

3.2.4 Scats, tracks, and other traces search

Surveys for scats, tracks and other fauna traces were conducted throughout field surveys as part of the observational surveys. Both predator and non-predator scats were sought during all searches. Specific search efforts were made to locate the presence of Koalas or evidence of their occurrence on the subject lands and the local area. In addition, particular attention was paid to the identification of potential dens, scats and tracks for invasive species, such as wild dogs, European red foxes and domestic cats, to identify predator-prey interactions and understand existing impacts within the site.

3.2.5 Koala habitat and Spot Assessment Technique (SAT) surveys

Tools for determining localised levels of use by *Phascolarctos cinereus* (Koala) included the Spot Assessment Technique (SAT) and opportunistic observations for Koala and Koala activity throughout the



field survey effort. The SAT surveys were undertaken in accordance with methodology developed by Phillips and Callaghan (2011) for the Australian Koala Foundation (AKF).

The SAT method is an assessment of Koala activity involving a search for any Koalas and signs of Koala usage. The SAT involves identifying a non-juvenile tree of any species within the site that is either observed to have a Koala or scats or is known to be a food tree or otherwise important for Koalas and recording any evidence of Koala usage of that tree including physical presence, identifiable scratches or scats. The nearest non-juvenile tree is then identified, and the same data recorded. The next closest non-juvenile tree to the first tree is then assessed and so on until 30 trees have been surveyed. Assessment of each tree involves a systematic search for Koala scats beneath the tree within a 1 m radius of the trunk. After approximately two minutes of searching for scats, the base of the trunk is observed for scratches and the crown for Koala. The number of trees showing evidence of Koala activity is expressed as a percentage of the total number of trees sampled to indicate the frequency of Koala usage.

Four (4) Koala SAT surveys were completed during field assessments conducted to support vegetation suitability assessment, as well as in areas where Non-Juvenile Koala Habitat Trees (NJKHT) were dominant.

Incidental surveys for evidence of Koala in the form of scats and scratch marks were completed during other ecological surveys including incidental observational surveys. The vegetation on-site was also assessed for overall suitability as well as the potential connectivity value adjoining the proposed alignment. Habitat values were assessed through identifying the extent of known Koala food trees on-site (i.e., species from genera *Eucalyptus*, *Corymbia*, *Angophora*, *Lophostemon* and *Melaleuca*), modification levels (i.e., within woodland, planted surrounding houses or structures, situated within slashed / maintained environments), and the potential connectivity opportunity to surrounding habitat. Connectivity value was assessed through considering the surrounding regional ecosystems, and ground-truthing these where possible, identifying current and approved future land uses, and substantial barriers intersecting potential habitat such as major roads and existing high density residential areas.

3.2.6 Diurnal bird surveys

This technique is a non-intrusive active area search that provides an estimate of diurnal bird species occurrence and abundance with surveys were undertaken in accordance with the Australian Government's Survey guidelines for Australia's threatened birds (DEWHA, 2010). Inclement weather was avoided as this greatly reduces the detection of bird species. The abundance of flowering trees at the survey site was observed, as this can influence the abundance and composition of nectar feeding diurnal birds. Area searches were the main method of detection as this is generally considered to be the best of the random or systematic sampling methods to use to detect target species due to its easy application and flexibility of observer movement. When sampling is required, area searches are typically conducted over plots of about 1–3 ha, for 10–20 min, though larger plots may be surveyed over hours, days and even months (for example, Blakers et al. 1984). Point surveys were conducted where habitat for target species was present or where terrain is difficult as per the Survey guidelines for Australia's threatened birds (DEWHA, 2010). The amount of time allocated to each point is usually 5–20 min, although intervals ranging from 2–60 min have been used (Recher 1988; Bibby et al. 1992). In addition to targeted surveys, observations of all species encountered were recorded over several hours during other survey activities. Birds were identified from either direct observation or by their calls.



3.2.7 Other Targeted Survey Techniques

Other targeted survey techniques were performed in conjunction with the above to determine the presence of fauna and fauna habitat features. These techniques are outlined below.

Habitat Searches

Targeted observational surveys were conducted to determine the presence or absence of fauna habitat features. Particular attention was paid to any threatened species listed as possibly occurring within or proximal to the application area. In particular, surveys focused on detecting evidence of species presence including:

- Presence of orts (chewed Casuarina/Allocasuarina species cones) (Glossy Black Cockatoo);
- Large stick nests (large birds e.g. Red Goshawk).

3.2.8 Motion sensor camera detection

Camera trapping involves setting up a fixed digital camera to capture images or video of animals that pass in front of a camera with an infrared trigger. It is a non-invasive technique designed to detect medium to large sized animals as they pass, although it is possible to detect smaller animals depending on the set-up. This method identifies fauna activity beyond the scope of direct observational studies and with the absence of potential observer impacts.

Three (3) camera traps were installed across the referral area from 8th September to 25th September 2025 for a total of 17 nights. Cameras were attached 30-100 cm from the ground on a tree trunk and directed towards landscape features. Traps were baited using a general fauna mammal bait consisting of a mixture of peanut butter, honey and oats.

3.2.9 Nocturnal active searches, dusk bird surveys and spotlighting

A combination of high-powered spotlights and head torches were used to detect nocturnal mammals, birds, reptiles within the site. This non-intrusive technique is the most effective method to obtain estimates of nocturnal arboreal mammal incidence and abundance in wooded habitats. Spotlighting also targets medium to large terrestrial nocturnal mammals, and can detect other nocturnal taxon groups (e.g., frogs, geckoes, nocturnal snakes, nocturnal birds, spiders).

The spotlights and head torches were used to sample for nocturnal mammals, birds, reptiles and frogs across the proposed action area. This technique involved detecting eye shine and a record of vegetation density was taken. Additional information recorded included the prevailing conditions and search effort. This method was completed across the referral area on 11th and 25th September 2025.

Additionally, two (2) bird surveys were conducted on 11th and 25th September 2025 just before dusk, as per Survey Guidelines for Australia's threatened birds, where bird activity is typically high. These surveys involved listening for bird calls and observing movement. Birds were identified from either direct observation or by their calls.

3.2.10 Incidental bird observations

This technique is a non-intrusive active area search that provides an estimate of diurnal bird species occurrence and abundance. Inclement weather was avoided as this greatly reduces the detection of bird



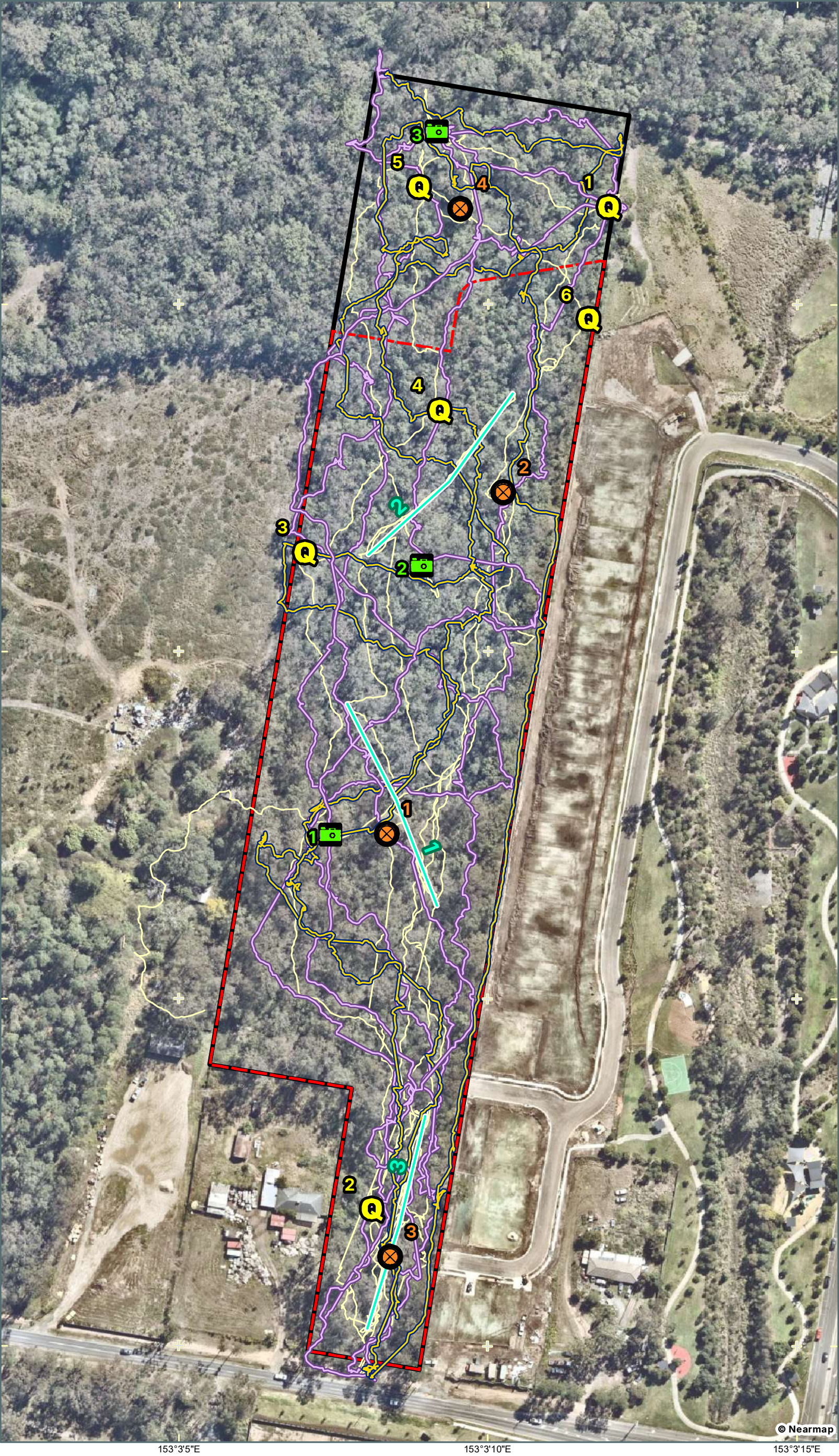
species. The abundance of flowering trees at the survey site was observed, as this can influence the abundance and composition of nectar feeding diurnal birds. Further observations were recorded over several hours during other survey activities. Birds were identified from either direct observation or by their calls.

3.2.11 Fauna movement barrier assessment

A combination of contemporary aerial imagery, locality knowledge and field inspection can assist in understanding if there are barriers to fauna movement in the landscape. Once the aerial imagery is interrogated, location(s) for inspection are selected (typically roads) and barriers identified.



01. MNES - FIELD SURVEY EFFORT

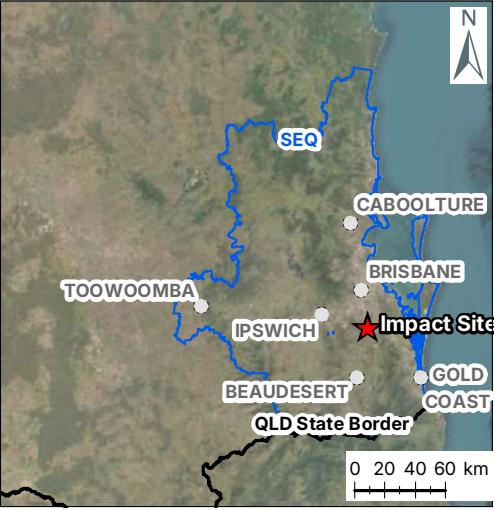


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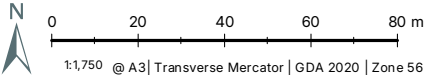
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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- MHQA Transect
- Koala SAT Survey
- Quaternary Survey
- Motion sensor camera
- Bird Survey track
- Spotlighting track
- GPS tracklog



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A	30/06/2026	Preliminary	TC	IP



Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 01 MNES Field Survey A



3.3. Likelihood of Occurrence Assessment

The likelihood of occurrence assessment (**Appendix C**) was based upon publicly available species records and/or other information sources, such as field guides and web-based species profiles, including but not limited to:

- Australian Government's *Species Profile and Threats Database* (SPRAT) for the threatened species and ecological communities listed under the EPBC Act; and
- Queensland Government's *Department of Environment and Science* (DES) threatened species website.

The likelihood of occurrence assessment was informed by desktop assessment and field survey results, including an appreciation and understanding of the species habitats within the referral area. The assessment adopts a two-tiered approach; the first based on desktop analysis and the potential of occurrence and the second based on a combination of desktop and field survey to determine the likelihood of occurrence.

Following the initial survey effort where the site is ground-truthed and the accuracy of existing environmental mapping and additional constraints identified during the desktop analysis, the likelihood of occurrence is re-assessed to reflect on-ground findings. Where necessary, specialists are engaged to complete species-specific targeted field surveys. This often results in several field survey events, however, was not deemed necessary for the subject site.

The likelihood of threatened species and ecological communities occurring in the referral area has been assessed against the criteria outlined in **Table 3**.

Table 3 Likelihood of occurrence assessment criteria

Likelihood of occurrence	Assessment criteria
Unlikely	The investigation area is beyond the known geographic range of the species; OR The investigation area does not contain critical habitat types or resources known to be utilized by the species during any stage of its lifecycle; OR The investigation area is highly disturbed; OR For plant, mammal and reptile species - no contemporary species observations or records of use within 5 km of the investigation area. For avian and bat species - no contemporary species observations or records of use within 20 km of the investigation area.
Possible	For plant, mammal and reptile species - There are contemporary species observations or records of use within 5 km of the investigation area, and it contains habitat types or resources known to be utilized by the species. For avian and bat species - There are contemporary species observations or records of use within 20 km of the investigation area, and it contains habitat types or resources known to be utilized by the species: OR There are contemporary species observations or records of use more than 5 km but within 20 km of the investigation area and the following criteria are met: ▪ The investigation area contains habitat types or resources known to be utilized by the species; AND



■ Ecological Assessment – Matters of National Environmental Significance

- No major barriers to dispersal for the species exist between the location of the record and the investigation area.

Known/Likely

There are contemporary species records within 2 km of the investigation area and the following criteria are met:

- The investigation area contains critical habitat types or resources known to be utilized by the species; AND
- No major barriers to dispersal for the species between the location of the record and the investigation area: OR

There are multiple contemporary species records within the investigation area and the site has not been highly disturbed after the records; OR

Species was observed or records of use identified during field surveys within or adjacent to the investigation area.



4. Desktop Assessment Results

4.1. *Landscape Context and Historical Aerial Imagery Analysis*

The referral area is located in a landscape that has been subject to extensive historical and contemporary modification. Historically, the surrounding area was used for rural land uses with major roads and high-density developments occurring from around 1978. Since 2020 there has been a notable increase in medium-density residential development within the locality of the referral area (refer to **Plan 2** for historical aerial imagery analysis). The site itself has remained relatively vegetated during preceding decades.

Contextually the referral area is bound by construction for residential development to the east and to the west by two highly disturbed lots dominated by lawn/paddock and with significant levels of weed incursion (**Figure 2**). One of the lots adjoining the referral area to the west identified as 2RP170091 has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that majority of the site is to be cleared. The south of the site is a highly-trafficked road identified as Park Ridge Road with an observed speed limit of 70km/h. Further south of the site is a recent medium density residential development surrounded by non-fauna friendly fencing. Multiple state approved residential developments are present within the greater region surrounding the referral area. Several more pending state approvals are also present. Several EPBC referred developments were identified in the greater Park Ridge region, including EPBC2017/8090, EPBC2022/09427, EPBC2023/09495 and EPBC2021/9082 have all received approval (refer to **Plan 3**).

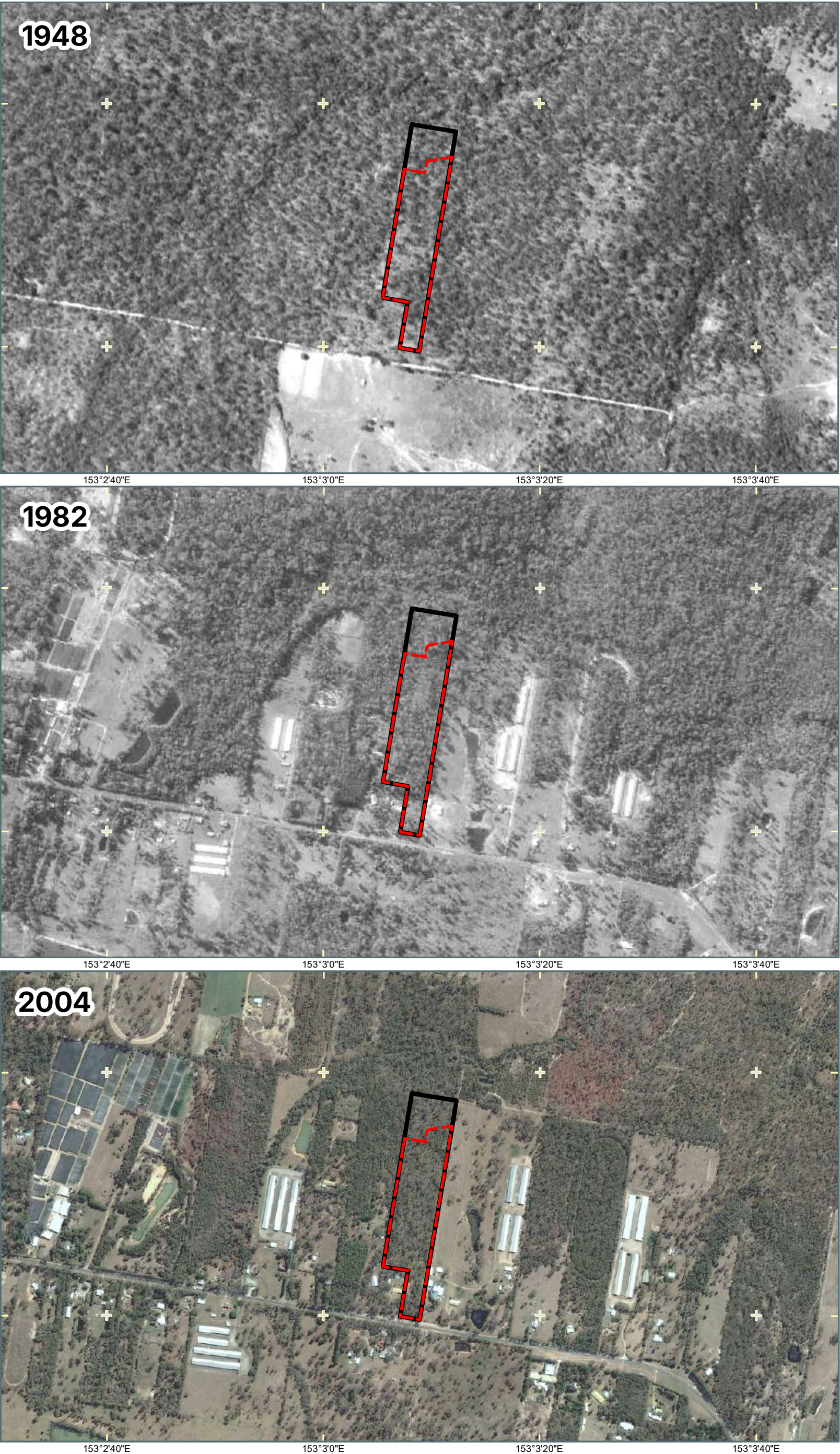
The referral area has been zoned as 'Mixed use' and 'Environmental management and conservation area'. Surrounding land conversion within mixed use zoning has been predominantly for residential developments. Environmental corridor zoning within the area is associated with the retention of vegetation. However, the development to the northeast, identified as EPBC2017/8090 that was previously mostly zoned as 'Environmental management and conservation area' has been rezoned as residential and clearing approved.

The proposed development will retain and rehabilitate vegetation within the area zoned as environmental corridor (refer **Figure 3** and **Plan 4**).

The referral area itself has remained relatively unchanged with vegetation mapped almost entirely as Category B (remnant) vegetation under Queensland legislation. On site surveys indicate historical selective logging that has led to thinned canopy, sub-canopy and ground layer remaining predominantly native with minor weed incursions scattered across the site. Despite relatively intact vegetation within the referral area, this vegetation provides significantly limited connectivity potential given surrounding properties to the west, south and east are, or are expected to be, mostly cleared and converted to residential use. The region within the referral area identified as having higher ecological value and potential connectivity occurs within the north of the referral area. This region occurs within Logan City Council biodiversity corridor mapping and adjoining vegetation is associated with a tributary of Scrubby Creek. This region of vegetation within the referral area is to be retained and rehabilitated as an ecological open space area.



02. HISTORICAL AERIAL IMAGERY



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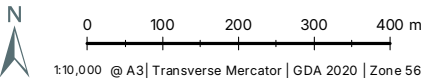
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LEGEND

- Impact site
- Impact area



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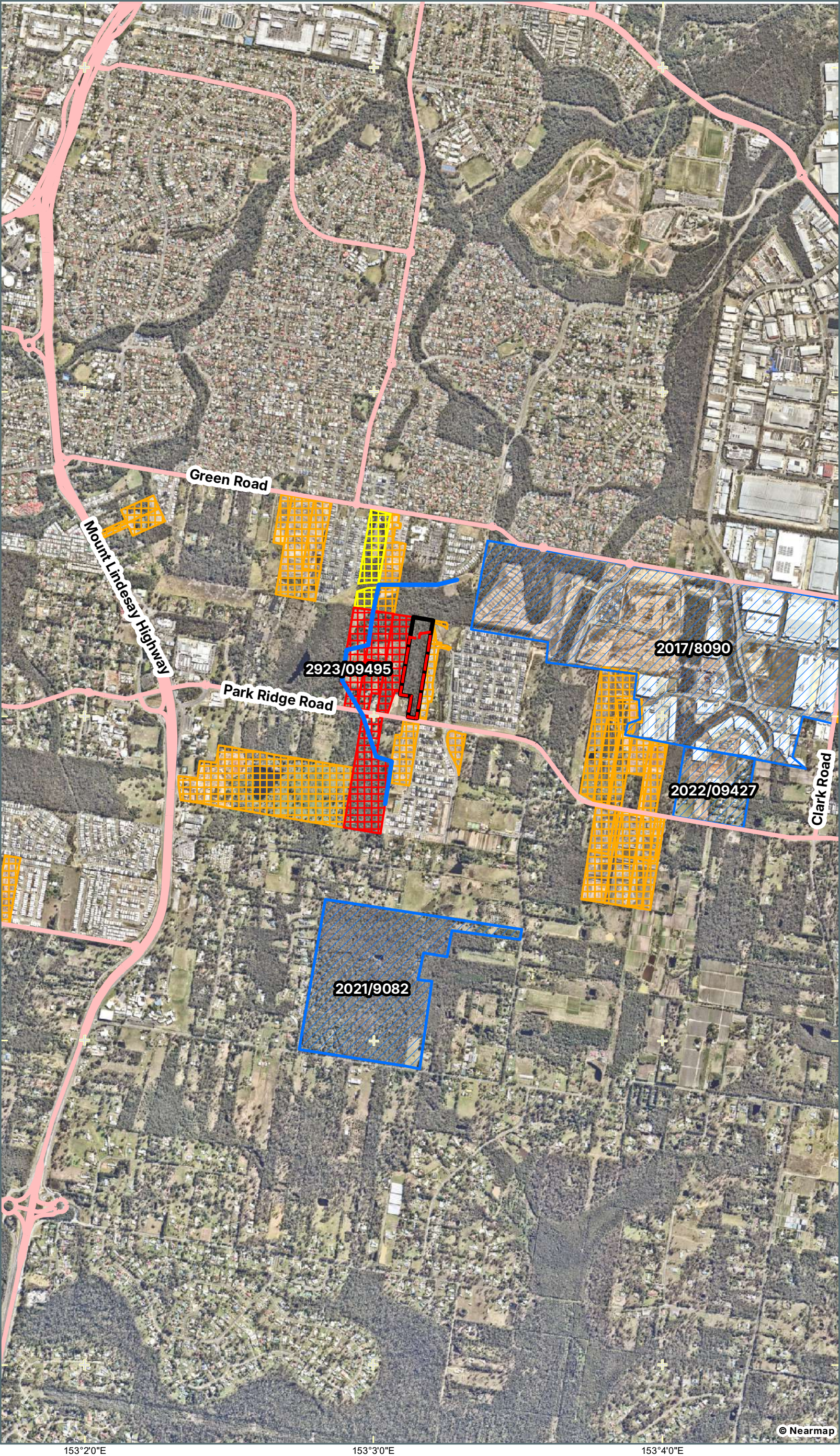
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12014 E 02 MNES Historical A



03. CONTEXT ANALYSIS

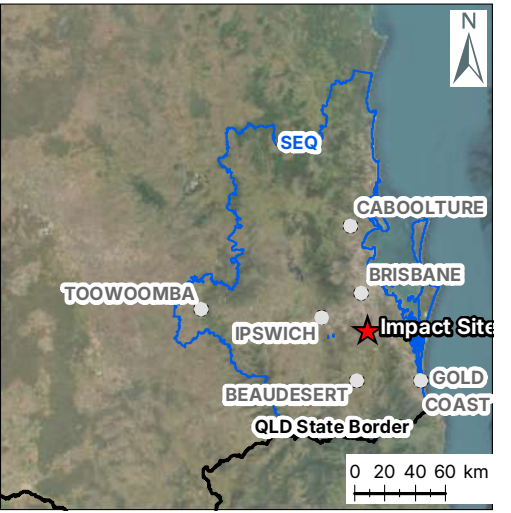


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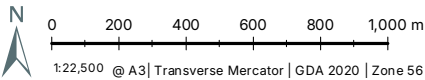
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LEGEND

- Impact Site
- Impact area
- Highways & major roads
- EPBC approval site
- Neighbouring development approvals
- Neighbouring development applications
- Neighbouring construction sites



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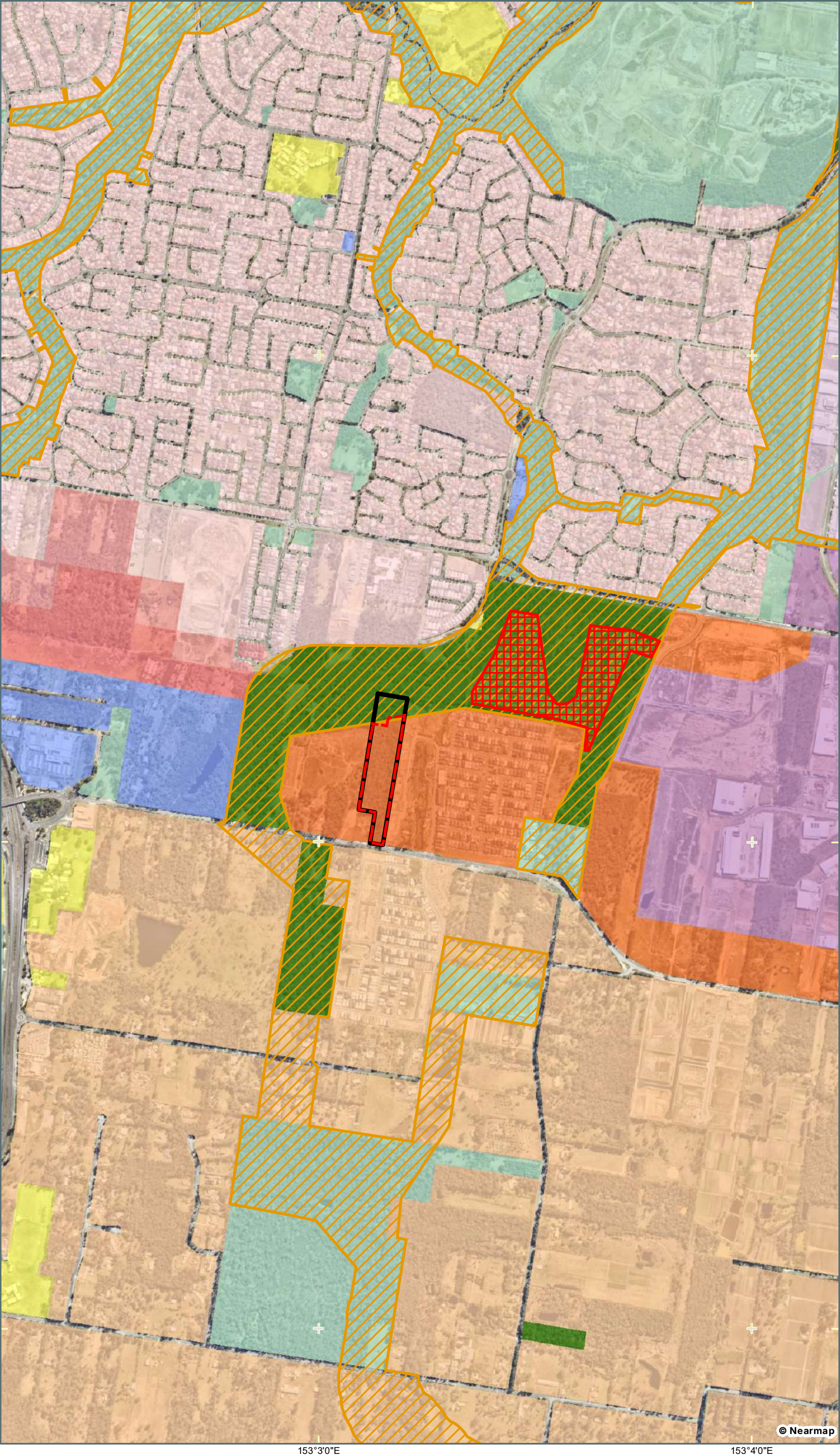
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04. LOGAN CITY ZONING & ENVIRONMENTAL CORRIDORS



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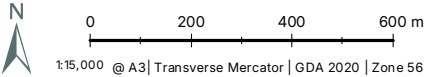
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LEGEND

- Impact Site
- Impact area
- Rezoned & clearing approved
- Biodiversity Corridor
- Centre
- Community facilities
- Emerging community
- Environmental management & conservation
- Low density residential
- Low impact industry
- Low-Medium density residential
- Medium density residential
- Medium impact industry
- Mixed use
- Priority development area
- Recreation and open space
- Rural
- Rural residential
- Special purpose
- Specialised centre



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Date: 30/06/2026

12014 E 04 MNES Zoning A



Commonwealth and State Databases and Mapping

4.1.1 Protected Matters Search Tool – EPBC Act (Cth)

When a proponent proposes to take an action that they believe may need approval under the EPBC Act, they must refer the proposed action to the Australian Government Minister for the Environment (the Minister). The purpose of a referral is to determine whether or not a proposed action is a 'controlled action' and thereby requires approval under the EPBC Act. If the Minister determines that a proposed action is a 'controlled action', it would then proceed through the Commonwealth assessment and approval process.

A search using the Commonwealth's PMST was obtained to initially determine if any MNES have potential to be temporarily or permanently located within a 5 km radius of the site. **Table 4** lists a summary of these results relevant to the site. For the purposes of this assessment, marine animals including tuna, turtles, sharks and whales have been excluded as the site is outside of a marine environment. The complete results of this search are included in **Appendix A**.

Table 4 PMST summary search results

Wetlands of International Importance		
Moreton Bay – 10-20 km upstream of Ramsar Site		
Threatened Ecological Communities		
Coastal swamp sclerophyll forests of south-eastern Australia – Community likely to occur within area.		
Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community (Endangered) – Community may occur within area.		
Lowland Rainforest of Subtropical Australia (Critically Endangered) – Community may occur within area.		
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions (Endangered) – Community likely to occur within area.		
Poplar Box Grassy Woodland on Alluvial Plains (Endangered) – Community may occur within area.		
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland ecological community (Critically Endangered) – Community may occur within area.		
Swamp Tea-tree (<i>Melaleuca irbyana</i>) Forest of South-east Queensland (Critically Endangered) – Community may occur within area.		
Threatened Species		
Scientific Name	Common Name	Status
Birds		
<i>Anthochaera phrygia</i>	Regent Honeyeater	Critically Endangered
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Endangered
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Vulnerable
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered
<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	Vulnerable
<i>Charadrius leschenaultii</i>	Greater Sand Plover, Large Sand Plover	Vulnerable
<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)	Vulnerable
<i>Cyclopsitta diophthalma coxeni</i>	Coxen's Fig-Parrot	Critically Endangered
<i>Erythrotriorchis radiatus</i>	Red Goshawk	Endangered
<i>Falco hypoleucos</i>	Grey Falcon	Vulnerable



■ Ecological Assessment – Matters of National Environmental Significance

<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Vulnerable
<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)	Vulnerable
<i>Grantiella picta</i>	Painted Honeyeater	Vulnerable
<i>Hirundapus caudacutus</i>	White-throated Needletail	Vulnerable
<i>Lathamus discolor</i>	Swift Parrot	Critically Endangered
<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew	Critically Endangered
<i>Rostratula australis</i>	Australian Painted Snipe	Endangered
<i>Stagonopleura guttata</i>	Diamond Firetail	Vulnerable
<i>Tringa nebularia</i>	Common Greenshank, Greenshank	Endangered
<i>Turnix melanogaster</i>	Black-breasted Button-quail	Vulnerable
Fish		
<i>Maccullochella mariensis</i>	Mary River Cod	Endangered
Insect		
<i>Argynnis hyperbius inconstans</i>	Australian Fritillary	Critically Endangered
Mammals		
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat	Endangered
<i>Dasyurus maculatus maculatus</i> (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)	Endangered
<i>Macroderma gigas</i>	Ghost Bat	Vulnerable
<i>Petauroides volans</i>	Greater Glider (southern and central)	Endangered
<i>Petaurus australis australis</i>	Yellow-bellied Glider (south-eastern)	Vulnerable
<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Endangered
<i>Potorous tridactylus tridactylus</i>	Long-nosed Potoroo (northern)	Vulnerable
<i>Pseudomys novaehollandiae</i>	New Holland Mouse, Pookila	Vulnerable
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Vulnerable
Plants		
<i>Arthraxon hispidus</i>	Hairy-joint Grass	Vulnerable
<i>Bosistoa transversa</i>	Three-leaved Bosistoa, Yellow Satinheart	Vulnerable
<i>Coleus habrophyllus</i>	null	Endangered (listed as <i>Plectranthus habrophyllus</i>)
<i>Croton mamillatus</i>	Bahrs Scrub Croton	Critically Endangered
<i>Cryptostylis hunteriana</i>	Leafless Tongue-orchid	Vulnerable
<i>Cupaniopsis shirleyana</i>	Wedge-leaf Tuckeroo	Vulnerable
<i>Dichanthium setosum</i>	bluegrass	Vulnerable
<i>Fontainea venosa</i>	null	Vulnerable



■ Ecological Assessment – Matters of National Environmental Significance

<i>Gossia gonoclada</i>	Angle-stemmed Myrtle	Endangered
<i>Macadamia integrifolia</i>	Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak	Vulnerable
<i>Macadamia tetraphylla</i>	Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough-leaved Queensland Nut	Vulnerable
<i>Notelaea lloydii</i>	Lloyd's Olive	Vulnerable
<i>Notelaea x ipsviciensis</i>	Cooneana Olive	Critically Endangered (listed as <i>Notelaea ipsviciensis</i>)
<i>Planchonella eerwah</i>	Shiny-leaved Condoo, Black Plum, Wild Apple	Endangered
<i>Rhodamnia rubescens</i>	Scrub Turpentine, Brown Malletwood	Critically Endangered
<i>Rhodomyrtus psidioides</i>	Native Guava	Critically Endangered
<i>Samadera bidwillii</i>	Quassia	Vulnerable
<i>Thesium australe</i>	Austral Toadflax, Toadflax	Vulnerable
Reptiles		
<i>Coeranoscincus reticulatus</i>	Three-toed Snake-tooth Skink	Vulnerable
<i>Delma torquata</i>	Adorned Delma, Collared Delma	Vulnerable
<i>Furina dunmalli</i>	Dunmall's Snake	Vulnerable
<i>Hemiaspis damelii</i>	Grey Snake	Endangered
Amphibian		
<i>Mixophyes fleayi</i>	Fleay's Frog	Endangered

4.1.2 Wildlife Online – Nature Conservation Act 1992 (Qld)

The Queensland *Nature Conservation Act 1992* classifies and protects significant areas (Protected Areas) and protects threatened plant and animal species. The *Nature Conservation (Animals) Regulation 2020* and *Nature Conservation (Plants) Regulation 2020* lists plant and animal species presumed extinct, critically endangered, endangered, vulnerable, near threatened, special least concern, least concern, international or prohibited. The schedules of these regulations were considered in this report using a Wildlife Online Database Search with a 5 km radius of the referral area. Threatened species under the EPBC act with the potential to occur within the referral area are listed in **Table 5**. Refer to **Appendix B** for full search results.

Table 5 NCA Wildlife Online Database Search Results

Scientific Name	Common Name	Status
Mammals		
<i>Phascolarctos cinereus</i>	Koala	Endangered
<i>Petauroides volans volans</i>	Southern Greater Glider	Endangered
Birds		



Scientific Name	Common Name	Status
<i>Hirundapus caudacutus</i>	White-throated Needletail	Vulnerable
<i>Ninox strenua</i>	Powerful Owl	Vulnerable
Plants		
<i>Macadamia integrifolia</i>	Macadamia Nut	Vulnerable
<i>Melaleuca irbyana</i>	—	Endangered
Amphibian		
<i>Crinia tinnula</i>	Wallum Froglet	Vulnerable

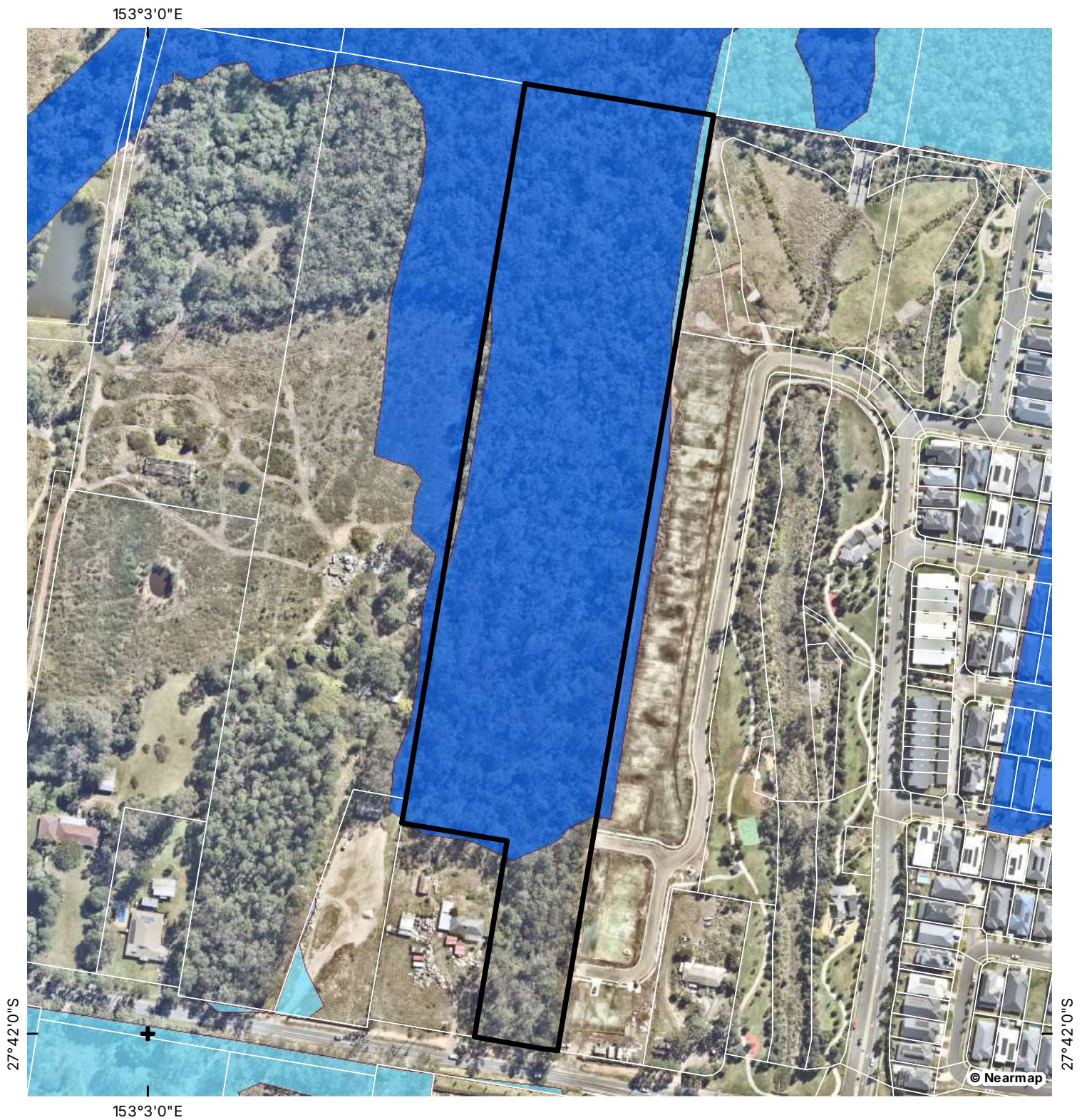
4.1.3 State Regional Ecosystems – Vegetation Management Act 1999 (Qld)

A desktop review of the Queensland 'Regulated Vegetation Management Mapping' under the *Vegetation Management Act 1999* (VMA) was conducted, focusing on the referral area. The referral area is mapped as a combination of Category B (remnant), Category C (high-value regrowth) and Category X (non-remnant). Vegetation mapping shows part of the site is mapped as Category B (remnant) vegetation identified as Least Concern RE12.9-10.4 and Endangered RE12.9-10.12. Also present on site is Category C (high-value regrowth) vegetation identified as Endangered RE12.9-10.12 and composite Endangered RE12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a(60/25/10/5%)(refer **Table 6**, **Figure 4** and **Figure 5**).

Table 6 Regional Ecosystem Descriptions

Regional ecosystem	VMA Status	Description
RE12.9-10.12	Endangered	Mixed woodland to open forest usually containing <i>Corymbia intermedia</i> , <i>Angophora leiocarpa</i> and at least a presence of <i>Eucalyptus seeana</i> . Other commonly associated species include <i>E. siderophloia</i> , <i>E. tereticornis</i> , <i>E. racemosa</i> subsp. <i>Racemosa</i> and <i>C. citriodora</i> subsp. <i>Variegata</i> . <i>E. seeana</i> and <i>Lophostemon suaveolens</i> are often present as sub-canopy or understorey trees. Occasional <i>Melaleuca quinquenervia</i> on lower slopes. Occurs on Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 9g).
RE12.9-10.4	Least Concern	<i>Eucalyptus racemosa</i> subsp. <i>racemosa</i> woodland to open forest. Other species can include <i>Angophora leiocarpa</i> , <i>Eucalyptus seeana</i> , <i>E. siderophloia</i> , <i>Corymbia intermedia</i> , <i>E. tindaliae</i> , with <i>Lophostemon suaveolens</i> , <i>Melaleuca quinquenervia</i> , <i>E. tereticornis</i> common on lower slopes. Occurs on Cainozoic and Mesozoic sediments +/- remnant Tertiary surfaces. Not a Wetland. (BVG1M: 9g).

Regional ecosystem	VMA Status	Description
RE12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a	Endangered	12.9-10.4 & 12.9-10.12 As above 12.9-10.17c Open forest of <i>Eucalyptus carnea</i> and/or <i>E. tindaliae</i> and/or <i>E. helidonica</i> +/- <i>Corymbia citriodora</i> subsp. variegata, <i>Eucalyptus crebra</i>, <i>Eucalyptus major</i>, <i>Corymbia henryi</i>, <i>Angophora woodsiana</i>, <i>C. trachyphloia</i>, <i>E. siderophloia</i>, <i>E. microcorys</i>, <i>E. resinifera</i> and <i>E. propinqua</i>. <i>Lophostemon confertus</i> often present as a sub-canopy or understorey tree. Occurs on Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 9g). 12.5.3a Mixed woodland to open forest usually containing <i>Corymbia intermedia</i>, <i>Eucalyptus racemosa</i> subsp. racemosa and at least a presence of <i>Eucalyptus seeana</i>. Other commonly associated species include <i>Angophora leiocarpa</i>, <i>E. siderophloia</i>, <i>E. microcorys</i>, <i>C. citriodora</i> subsp. variegata and <i>Lophostemon suaveolens</i>. Occurs on complex of remnant Tertiary surfaces +/- Cainozoic and Mesozoic sediments. Not a Wetland. (BVG1M: 9g)



LEGEND

	Project site		Category C area - High value regrowth vegetation
	Qld DCDB		Category R area - Reef regrowth watercourse vegetation
	Category A area - Vegetation Offset/ Compliance notices/VDecs		Category X area - Vegetation not regulated under the VMA
	Category B area - Remnant vegetation		Water
			Area not categorised

FIGURE 4

REGULATED VEGETATION MANAGEMENT MAP

PROJECT
PARK RIDGE ROAD, PARK RIDGE
COORDINATE SYSTEM
GDA 2020 MGA Z56

SCALE (A4)
1:3,200

0 20 40 60 80 100 m



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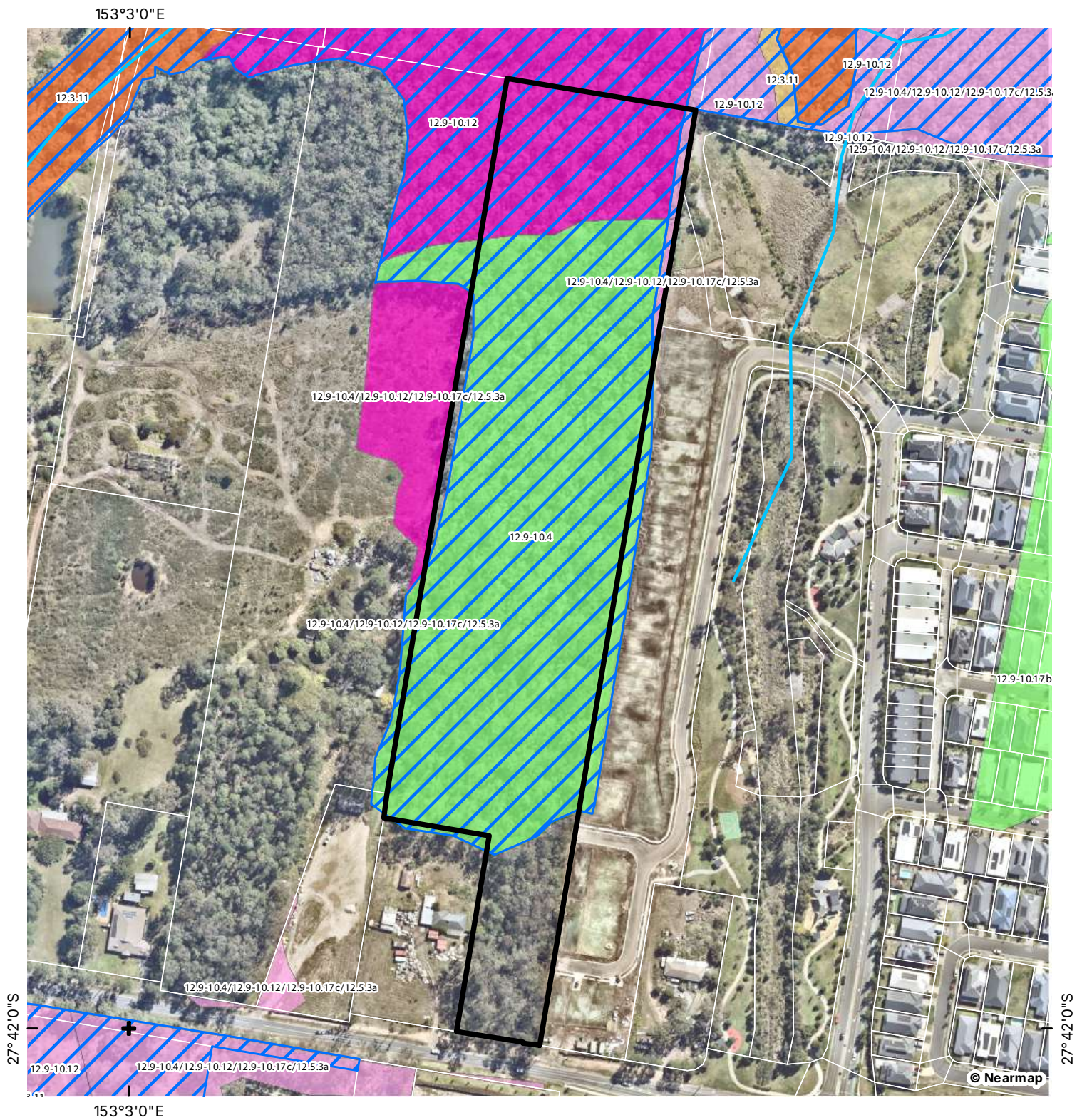
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FILE REFERENCE

12014 E MNES Figure 4 RVM A

DATE 28/10/2025



LEGEND

Qld DCDB

Project site

VM Watercourses

VM Essential Habitat

VM Wetland

VM Regional Ecosystems Map

Category A or B area containing endangered regional ecosystems

Category A or B area containing of concern regional ecosystems

Category A or B area that is a least concern regional ecosystem

Category C area containing endangered regional ecosystems

Category C area containing of concern regional ecosystems

Category C area that is a least concern regional ecosystem

FIGURE 5

VEGETATION MANAGEMENT REGIONAL ECOSYSTEM MAP

PROJECT
PARK RIDGE ROAD, PARK RIDGE
COORDINATE SYSTEM
GDA 2020 MGA Z56

SCALE (A4)
1:3,200

0 20 40 60 80 100 m



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12014 E MNES Figure 5 VMRE A

DATE 28/10/2025

4.2. Threatened Species and Communities Desktop Likelihood of Occurrence

4.2.1 Threatened Ecological Communities

The Protected Matters Search Tool (PMST) (refer **Appendix A**) returned the following seven (7) threatened ecological communities (TEC), listed under the EPBC Act as having potential to occur within 5 km of the referral area:

- Coastal swamp sclerophyll forests of south-eastern Australia
- Coastal Swamp Oak (*Casuarina glauca*) Forest of New South Wales and South East Queensland ecological community
- Lowland Rainforest of Subtropical Australia
- Subtropical eucalypt floodplain forest and woodland of the New South Wales and North Coast and South East Queensland bioregions
- Poplar Box Grassy Woodland on Alluvial Plains
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland
- Swamp Tea-tree (*Melaleuca irbyana*) Forest of South-east Queensland

The likelihood of occurrence for each TEC within the referral area, as presented in **Table 7**, referred to State Government Regional Ecosystem mapping within the locality and known distributions of the TECs, to identify those TECs with potential to occur in the referral area or recorded during field surveys.



Table 7 Likelihood of occurrence of TECs within referral area

TEC	EPBC Act status	Desktop Potential of Occurrence
Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community	Endangered	Low The site is not mapped as containing any regional ecosystems associated with this threatened ecological community.
Coastal swamp sclerophyll forests of south-eastern Australia	Endangered	Low The site is not mapped as containing any regional ecosystems associated with this threatened ecological community.
Lowland Rainforest of Subtropical Australia	Critically Endangered	Low The site is not mapped as containing any regional ecosystems associated with this threatened ecological community.
Subtropical eucalypt floodplain forest and woodland of the New South Wales and North Coast and South East Queensland bioregions	Endangered	Possible The site is not mapped as containing any regional ecosystems associated with this threatened ecological community. However, RE12.3.11 associated with this TEC is mapped within 100 m of the site boundary.
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Low The site is not mapped as containing any regional ecosystems associated with this threatened ecological community.
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Low The site is not mapped as containing any regional ecosystems associated with this threatened ecological community.
Swamp Tea-tree (<i>Melaleuca irbyana</i>) Forest of South-east Queensland	Critically Endangered	Low The site is not mapped as containing any regional ecosystems associated with this threatened ecological community.

4.2.2 Threatened Flora Species

Database searches returned eighteen (18) flora species, listed as threatened under the EPBC Act and/or NCA, as being previously recorded or predicted to occur within 5 km of the referral area, as presented in **Appendix A** and **Appendix B**.

Based on the presence of species records within the locality and the habitats within the referral area, an assessment was conducted to determine those threatened flora species with potential to occur within the referral area. The desktop assessment identified that two (2) threatened flora species under the EPBC Act had a 'possible' or higher potential to occur on the referral area (refer **Table 8**). All other threatened flora species were assessed as having a 'unlikely' potential to occur.

Table 8 Likelihood of occurrence of flora species within referral area

Scientific Name	EPBC Act	NC Act	Desktop Potential of Occurrence
<i>Rhodamnia rubescens</i>	Critically Endangered	Critically Endangered	Possible RE mapping indicates that sclerophyll vegetation and associated species are likely present on-site. Additionally, this species is known to occur within 2km of the site. Given the potential suitable habitat on-site and proximity of a recent record the likelihood of occurrence for this species has been assigned 'possible'.
<i>Rhodomyrtus psidioides</i>	Critically Endangered	Critically Endangered	Possible RE mapping on-site indicates potentially suitable habitat for this species may occur on site. Furthermore, a record of this species is present within 5km of the site. Due to the potential for suitable habitat and presence of a recent record of this species in the locality, the likelihood of occurrence for this species has been assigned 'possible'.

The detailed likelihood of occurrence assessment is presented in **Appendix C**.

4.2.3 Threatened Fauna Species

Database searches returned thirty-six (36) fauna species listed as threatened under the EPBC Act and NCA as having been previously recorded or predicted to occur within 5 km of the referral area.

Based on the presence of species records within the locality and mapped habitats identified within the referral area, a likelihood of occurrence assessment was conducted to determine those threatened species with potential to occur within the referral area. This assessment determined eleven (11) threatened fauna species listed under the EPBC Act as having 'possible' or higher potential to occur on or near the referral area. These species are outlined in **Table 9**. All other threatened and/or migratory fauna species were assessed as 'unlikely' to occur on site.

Table 9 Likelihood of occurrence of fauna species within referral area

Scientific Name	EPBC Act	NC Act	Desktop Potential of Occurrence
<i>Anthochaera phrygia</i> (Regent Honeyeater)	Critically Endangered	Critically Endangered	Possible The referral area is mapped as containing remnant eucalypt woodland. According to Queensland WildNet and ALA, there are 0 records of this species within 5km radius in the last twenty years. 174 records have been recorded within 20km of the site in the last 20 years. A review of these databases shows that the nearest record is approximately 12km south-west of the site, with very few records in the broader area. As the species is known to occur within the broader landscape and there is potential habitat within the referral area, the likelihood of occurrence has been assigned 'possible.'
<i>Calyptorhynchus lathami lathami</i> (Glossy Black Cockatoo)	Vulnerable	Vulnerable	Possible The referral area is mapped as containing eucalypt woodland vegetation which may provide foraging and or breeding habitat for the species. There are five records of the species within 5km, zero of which are within 2km of the

Scientific Name	EPBC Act	NC Act	Desktop Potential of Occurrence
			site with the nearest contemporary record being approximately 4km north. Given the potential for suitable habitat, the likelihood of occurrence for this species has been assigned 'possible.'
<i>Lathamus discolor</i> (Swift Parrot)	Critically Endangered	Endangered	Possible The referral area is mapped as containing remnant eucalypt woodland and is likely to contain associated Swift Parrot habitat tree species. However, there are no records of the species within the locality with the closest record slightly more than 5km west of the referral area. Notably, given this species is Critically Endangered, the location of recorded sightings are generalized to 10km. As there is potential remnant eucalypt habitat within the referral area, the likelihood of occurrence has been assigned 'possible.'
<i>Petauroides volans</i> (Greater Glider)	Endangered	Vulnerable	Possible The referral area is mapped as containing remnant eucalypt woodland and is likely to contain associated Greater Glider habitat tree species. Fifty-four (54) records of the species are present within the locality, with the closest record approximately 2.5km south of the site. As there is potential remnant eucalypt habitat within the referral area, the likelihood of occurrence has been assigned 'possible.'
<i>Petaurus australis australis</i> (Yellow-bellied Glider)	Vulnerable	Vulnerable	Possible The referral area is mapped as containing remnant eucalypt woodland and open forest. There are four (4) records of this species within 5km of the site with the nearest recent occurrence (within the last 20 years) located approximately 1.8km south of the site. As there is potential remnant eucalypt habitat within the referral area, the likelihood of occurrence has been assigned 'possible.'
<i>Phascolarctos cinereus</i> (Koala)	Endangered	Endangered	Likely/Known The referral area is mapped as containing remnant eucalypt woodland and is likely to contain associated Koala habitat tree species. According to Queensland WildNet Data, 140 Koalas have been known to occur within a 5 km radius of the site since 1980. ALA indicates the presence of 117 records within 5km of the site in the last 20 years. The nearest recent record according to ALA is approximately 1km north-east. Based on preliminary desktop searches, there are no records of the species within the referral area. As the species is known to occur within the broader landscape and there is potential habitat within the referral area, the likelihood of occurrence has been assigned 'likely/known.'
<i>Pteropus poliocephalus</i> (Grey-headed Flying-fox)	Vulnerable	-	Likely/Known The referral area is mapped as containing remnant eucalypt woodland and open forest which likely includes potential Grey-headed Flying-fox (GHFF) foraging habitat. There are



Scientific Name	EPBC Act	NC Act	Desktop Potential of Occurrence
			no observed roosts within the referral area, with the nearest known active roost site located approximately 2.2km north-west of the referral area. According to ALA there are 29 recent records of this species within the locality. As the species is known to forage in a variety of habitats, including eucalypt dominated vegetation likely present on-site, a desktop assessment of the likelihood of occurrence has been assigned 'likely/known.'

The detailed likelihood of occurrence assessment is presented in **Appendix C**.

4.2.4 Migratory Species

Database searches returned seven (7) migratory fauna species listed as threatened under the EPBC Act and/or NCA as having been previously recorded or predicted to occur within 5 km of the Referral area.

Based on the presence of species records within the locality and the habitats identified within the referral area, an assessment was conducted to determine those threatened species with potential to occur within the referral area. The assessment determined two (2) migratory fauna species listed under the EPBC Act were identified as having 'possible' or greater potential to occur in the referral area. These species are outlined in **Table 10**.

The detailed likelihood of occurrence assessment is presented in **Appendix C**.

Table 10 Likelihood of occurrence of migratory species within the referral area

Scientific Name	EPBC Act	NC Act	Desktop Potential of Occurrence
<i>Hirundapus caudacutus</i> (White-throated Needletail)	Vulnerable	Vulnerable	Possible

4.3. Other MNES

Of the remaining seven MNES, none were determined to have potential to be impacted by the proposed development. These are:

- World Heritage Properties - The closest World Heritage Site is the Gondwanan Rainforests of Australia (Main Range National Park) of which is approximately 66 km south-west of the referral area.
- National Heritage Places - The closest National Heritage Place is the Gondwanan Rainforests of Australia which is approximately 66 km south-west of the referral area.
- Wetlands of International Importance (Ramsar) – The Moreton Bay Ramsar Site is approximately 10-20km upstream of the referral area.
- Commonwealth marine areas - The action is not being undertaken in or adjacent to a Commonwealth marine area. The proposed action is located 174 km west of a Commonwealth marine area.
- The Great Barrier Reef Marine Park - The GBRMP is more than 200 km north of the proposed action.
- Nuclear actions - The proposed action is not a nuclear action.



■ Ecological Assessment – Matters of National Environmental Significance

- A water resource, in relation to coal seam gas development and large coal mining development -
The proposed action is not a CSG development or large coal mine.

Further assessment against the Significant Impact Guidelines is not deemed necessary for these MNES.



5. Field Survey Results

The results of the flora and fauna surveys, and the potential of occurrence, enables an understanding of the ecological constraints and potential impacts to MNES associated with the Project.

The results of the targeted vegetation, flora and fauna surveys is presented within the following sections. Refer to **Plan 5** for the field survey results across the referral area.

5.1. Vegetation Communities

The referral area is mapped as predominantly Category B (remnant) RE12.9-10.4 with some regions of Category B (remnant) and Category C (high-value regrowth) RE12.9-10.12 and a small region of composite RE12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a associated with Category C (high-value regrowth). Field surveys found mapping to be largely consistent with on ground vegetation communities with the exception of the small region of non-remnant along the western boundary and mapped Category C RE12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a along the eastern boundary where the vegetation communities were more reflective of Remnant RE 12.9-10.4.

5.1.1 Category B - Eucalypt woodland indicative of RE12.9-10.4

Vegetation across the majority of the referral area is generally consistent with the RE mapping of 12.9-10.4 consisting of *Eucalypt* and *Corymbia* species. Although vegetation was not dominated by *Eucalyptus racemosa* it constitutes a significant element of the vegetation community and it appeared selective logging may have led to observed reduction in presence, the other species reflective of RE 12.9-10.4 including *Eucalyptus seeana* (Narrow-leaved Red Gum), *Angophora leiocarpa* (Smooth-barked Apple), *Eucalyptus siderophloia* (Grey Ironbark) and *Corymbia intermedia* (Pink Bloodwood) were observed. The shrub layer contains largely native species including *Alphitonia excelsa* (Soap Tree) and *Acacia* sp. with sparse patches of introduced species including *Lantana camara* (Lantana). The ground layer was observed to be variable throughout the site, with some areas dominated by leaf litter, other areas dominated by native species including *Entolasia stricta* (Wiry Panic), and *Cymbopogon refractus* (Barbed Wire Grass) and patches of introduced species including *Lantana montevidensis* (Creeping Lantana) and *Passiflora suberosa* (Corky Passion) (refer **Photo set 1**).



Photo set 1: Eucalypt dominated (RE12.9-10.4) remnant vegetation within the referral area.

5.1.2 Category B- Eucalypt woodland indicative of RE 12.9-10.12

Vegetation within the northern most extent of the referral area is generally consistent with the RE mapping of 12.9-10.12 consisting of *Eucalypt* and *Corymbia* species. Vegetation was dominated by *Corymbia intermedia* with occasional *Angophora leiocarpa*, *Eucalyptus seeana*, *Eucalyptus siderophloia*, *Eucalyptus tereticornis* and *Eucalyptus racemosa*. The shrub layer contains largely native species including *Alphitonia excelsa* (Soap Tree) and *Acacia* species. The ground layer was observed to be predominantly native species in particular *Entolasia stricta* (Wiry Panic), and *Cymbopogon refractus* (Barbed Wire Grass). Weedy introduced species were occasionally present in the ground layer, in particular a large area being dominated by *Passiflora suberosa* (Corky Passion) (refer **Photo set 2**).



Photo set 2: Eucalypt dominated (RE12.9-10.12) remnant vegetation within the referral area with some presence of weedy introduced species in the ground layer.

5.1.3 Category X - Highly disturbed area

The balance of the referral area displayed significant disturbance as a result of historical land clearing. The Category X (non-remnant) vegetation is located adjacent to the road and highly disturbed lots along the eastern and western sides (refer **Photo set 3**). Scattered large Eucalypts were present within this region of the site reflective of RE 12.9-10.4 including *Corymbia intermedia* (Pink Bloodwood), *Eucalyptus siderophloia* (Grey Ironbark) and *Corymbia citriodora* (Spotted Gum). However invasive species were a significant part of the canopy notably *Syagrus romanzoffiana* (Coco's Palm), *Pinus elliotii* (Slash Pine) and *Corymbia torelliana* (Cadaghi). The shrub layer was observed to be dominated by exotic species including *Murraya paniculata* (Mock Orange) and WONS *Lantana camara* (Lantana). The ground layer was also dominated by exotic species including *Lantana montevidensis* (Creeping Lantana), *Emilia sonchifolia* (Emilia) *Sphagneticola trilobata* (Singapore Daisy) and *Passiflora suberosa* (Corky Passion) (refer **Photo set 3**).



Photo set 3: Highly disturbed vegetation dominated by weeds and regrowth in the southern extent of the referral area.

5.1.4 Flora Species

A total of eighty-eight (88) flora species were recorded within the referral area during field surveys, as listed in **Appendix D**. Of those, forty-five (45) are native and forty-three (43) species are considered to be non-native / introduced species.

No flora species listed under the EPBC Act and NCA were recorded in or adjoining the referral area.

5.2. Connectivity assessment

The referral area largely lacks viable movement opportunity for fauna as a result of current and future developments, roads and highly modified land-uses. To the east lot where the construction of residential blocks are currently underway. To the west of the referral area is a largely cleared lot dominated by open lawn/ paddock and significant areas of Lantana incursion. To the south of the referral area is Park Ridge Road. This road is approximately 10 m in width with a speed limit of 70 km/h. At the time of surveys this road was observed as being highly trafficked with a high rate of speed, and as such providing a significant barrier to fauna movement. Further south across the road is recent residential developments surrounded by 6 foot steel fences further limiting fauna movement into and through this area (refer **Photo set 4**).

To the north of the referral area is a region of retained vegetation adjacent to an unnamed tributary of Scrubby Creek within Logan City Council's mapped biodiversity corridor. The vegetation within the referral area that adjoins this region is planned and has Council and State approval (Refer **Appendix E** and **F**) to be retained as an environmental open space area that will be voluntarily dedicated to Council at the finalisation of construction. This region of the referral area represents the highest opportunity for faunal movement as it adjoins a larger network of environmental corridors that connect to remanent vegetation to the north of the site. There is some connectivity to Karawatha Forest north of the site, however, major barriers to dispersal are present, namely the Logan Motorway that dissects the corridor. There is also some opportunity to connectivity to Greenbank military Training area to the west of the site via corridors although it is dissected by the Mount Lindesay Highway (Refer **Figure 6**).



Photo set 4: Limited connectivity opportunity surrounding the referral area. Current residential developments to the east (Top left), mostly cleared lot to the west (Top right). Highly trafficked road identified as Park Ridge Road to the south (Bottom left) and recent residential development surrounding by non-fauna friendly fencing further south (Bottom right).



Figure 6 Fauna current and future connectivity assessment, green arrows indicate high connectivity, orange medium connectivity and red poor connectivity.

5.3. Fauna Assessment Results

A total of forty-seven (47) fauna species were recorded during field surveys, inclusive of motion sensor camera traps, nocturnal targeted surveys and incidental observations, including thirty-two (32) birds, thirteen (13) mammals two (2) of which were invasive, one (1) reptile and one (1) amphibian. **Two conservation significant fauna species were recorded during the field survey.** Threatened fauna species *Pteropus poliocephalus* (Grey-headed Flying-fox) and *Phascolarctos cinereus* (Koala) were observed within the referral area during surveys. *Pteropus poliocephalus* (Grey-headed Flying-fox) was observed foraging during nocturnal surveys on the 11th and 25th of September. No GHFF roosts were identified on or adjacent to the referral area. *Phascolarctos cinereus* (Koala) was observed during nocturnal surveys on the 25th of September and captured on two of the three deployed Camera traps on four occasions. SAT surveys detected indirect evidence of Koala in the form of scats at SAT 4 (3 out of 30) (refer to **Photo set 5 and Plan 1**). Motion sensor camera traps also detected the presence of at least one European Red Fox (refer to **Photo set 6**), which is known to pose a significant threat to native fauna, including the Koala.

A complete fauna species list is provided in **Table 12**.

5.3.1 Targeted Species and survey guidelines

A detailed fauna assessment has been conducted across the referral area to identify and describe on-ground habitat features (e.g. habitat trees, fallen logs, termite mounds, roosting sites etc.), signs of fauna activity (e.g. scats, tracks, scratch marks on trees, nests etc.) and observations of species present within the area. Consideration was also given to the ecological significance of the site in the context of the local area and the broader region. A summary of the methodologies employed by SH (detailed in **Section 3.2**) and the targeted species are summarised in **Table 11**.

Table 11 Summary of fauna survey techniques and survey effort

Scientific Name	Common Name	Survey guidelines	Techniques Implemented and survey effort
<i>Phascolarctos cinereus</i>	Koala	<i>Survey guidelines for Australia's threatened mammals</i> Phillips and Callaghan, 2011	- 4 SAT surveys - 3.3 hours of spotlighting meanders - Assessment of foraging and breeding values (habitat suitability) - 3 motion triggered camera traps deployed for 17 nights in September 2025
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	<i>Survey guidelines for Australia's threatened bats</i>	- Daytime roost/camp searches - 3.3 hours of spotlighting meanders - Assessment of foraging values and habitat suitability
<i>Petauroides volans</i>	Greater Glider	<i>Survey guidelines for Australia's threatened mammals</i> <i>Reporting detections of Southern Greater Gliders</i> (Conservation Regulator Victoria)	- 3 hours of spotlighting meanders - Assessment of breeding habitat (hollows) and foraging values
<i>Petaurus australis australis</i>	Yellow-bellied Glider	<i>Survey guidelines for Australia's threatened mammals</i>	- 3 hours of spotlighting meanders - Assessment of breeding habitat (hollows) and foraging values
<i>Anthochaera phrygia</i>	Regent Honeyeater	<i>Survey guidelines for Australia's threatened birds</i>	- Over 18 hours of meander surveys (observation searches) - 2 Dusk bird survey - 1 Diurnal bird survey - Assessment of breeding habitat (hollows) and foraging values
<i>Hirundapus caudacutus</i>	White-throated Needletail	Nil. Species Profile and Threats Database (DCCEEW).	It is difficult to conduct systematic surveys of the White-throated Needletail due to its mobility and ability to cover huge distances in a day.



5.3.2 Koala survey results

Four (4) SAT surveys to assess Koala activity within the referral area were completed in accordance with Philips and Callaghan (2011) (Refer to **Plan 1** for locations). SAT survey 1, 2 and 3 both scored 0/30 while SAT survey 4 scored a 3/30 (refer to **Appendix G** for full SAT results).

The site falls within an east-coast medium-high population area so the results indicate 'low usage' by Koala.

5.3.3 Spotlight and nocturnal search results

A total of two (2) ~1.5-hour spotlighting surveys were completed by two Ecologists from SH on the 11 and 25 September 2025. Threatened fauna species *Pteropus poliocephalus* (Grey-headed Flying-fox) and *Phascogale carolinensis* (Koala) were observed within the referral area during surveys

5.3.4 Camera monitoring results

A total of three (3) baited camera traps were installed on-site for a period of 17 nights each. The cameras were deployed on 8th September to 25th September 2025. Eight species were recorded by the cameras.

Refer to **Table 12** for fauna detected within the referral area and the method of detection.

5.3.5 Tree plot results

All trees non-juvenile trees (≥ 100 mm DBH) were recorded as well as any hollow-bearing trees. A total of 20 trees containing hollows, 10 being Dead/Stag trees. A total of thirty-three (33) hollows were detected, eighteen (18) of which were within living trees and fifteen (15) within dead (stag) trees (refer **Plan 5**).



Table 12 Fauna detected within the referral area

2025								2024		
Scientific Name	Common Name	Diurnal surveys	Spotlighting		Camera locations			Incidental	Spotlighting and Cameras	Native/exotic
			Night 1 (11.09.2025)	Night 2 (25.09.2025)	Camera 1 (Mouse)	Camera 2 (Tick)	Camera 3 (Peony)			
BIRDS										
Acridotheres tristis	Indian Myna							x	Exotic	
Aquila audax	Wedge-tail Eagle	x							Native	
Cacatua galerita	Sulphur-crested Cockatoo						x		Native	
Chenonetta jubata	Australian Wood Duck	x	x					x	Native	
Climacteris picumnus	Brown Treecreeper	x							Native	
Coracina novaehollandiae	Black-faced Cuckoo-shrike	x							Native	
Cormobates leucophaea	White-throated treecreeper	x							Native	
Corvus orru	Torresian Crow	x	x	x			x	x	Native	
Coturnix ypsilophora	Brown Quail	x					x		Native	
Cracticus nigrogularis	Pied Butcherbird	x	x				x		Native	



■ Ecological Assessment – Matters of National Environmental Significance

2025						2024	
<i>Cracticus torquatus</i>	Grey Butcherbird	x					Native
<i>Cracticus tibicen</i>	Australian Magpie	x			x		Native
<i>Dacelo novaeguineae</i>	Laughing Kookaburra	x	x	x	x	x	Native
<i>Dicrurus bracteatus</i>	Spangled Drongo					x	Native
<i>Entomyzon cyanotis</i>	Blue-faced Honeyeater	x			x	x	Native
<i>Eolophus roseicapilla</i>	Galah	x				x	Native
<i>Geopelia striata</i>	Peaceful Dove					x	Native
<i>Grallina cyanoleuca</i>	Magpie-lark				x	x	Native
<i>Gymnorhina tibicen</i>	Australian Magpie					x	Native
<i>Hirundo neoxena</i>	Welcome Swallow	x					Native
<i>Manorina melanocephala</i>	Noisy Miner	x	x		x	x	Native
<i>Meliphaga lewinii</i>	Lewin's Honey Eater					x	Native
<i>Merops ornatus</i>	Rainbow Bee-eater				x		Native
<i>Ocyphaps lophotes</i>	Crested Pigeon	x					Native

■ Ecological Assessment – Matters of National Environmental Significance

2025					2024	
<i>Oriolus sagittatus</i>	Oriolus sagittatus	x				Native
<i>Pardalotus striatus</i>	Striated Pardalote	x		x		Native
<i>Phaps chalcoptera</i>	Common Bronzewing			x	x	Native
<i>Philemon corniculatus</i>	Noisy Friarbird	x		x		Native
<i>Platycercus adscitus</i>	Pale-headed Rosella	x		x		Native
<i>Podargus strigoides</i>	Tawny Frogmouth		x	x	x	Native
<i>Rhipidura albiscapa</i>	Grey Fantail			x		Native
<i>Rhipidura leucophrys</i>	Willie Wagtail	x			x	Native
<i>Strepera graculina</i>	Pied Currawong	x	x		x	Native
<i>Threskiornis molucca</i>	Australian White Ibis	x				Native
<i>Todiramphus sanctus</i>	Sacred Kingfisher				x	Native
<i>Trichoglossus chlorolepidotus</i>	Scaly-breasted Lorikeet	x			x	Native
<i>Trichoglossus haematodus moluccanus</i>	Rainbow Lorikeet	x		x	x	Native
<i>Vanellus miles</i>	Masked Lapwing	x		x	x	Native

■ Ecological Assessment – Matters of National Environmental Significance

2025							2024	
MAMMALS								
<i>Canis lupus familiaris</i>	Domestic Dog						x	Exotic
<i>Cervus elaphus</i>	Red Deer			x				Exotic
<i>Felis catus</i>	Cat						x	Exotic
<i>Isodon macrourus</i>	Northern Brown Bandicoot			x	x			Native
<i>Lepus europaeus</i>	Hare							Exotic
<i>Macropus giganteus</i>	Eastern Grey Kangaroo	x		x	x	x	x	Native
<i>Macropus parryi</i>	Whiptail Wallaby				x	x	x	Native
<i>Macropus rufogriseus</i>	Red-necked Wallaby		x				x	Native
<i>Mus musculus</i>	Field Mouse						x	Exotic
—	Micro Bat	x	x					Native
<i>Perameles nasuta</i>	Long-nosed Bandicoot						x	Native
<i>Petaurus breviceps</i>	Sugar Glider	x						Native
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale						x	Native
<i>Phascolarctos cinereus</i>	Koala		x	x		x		Native

■ Ecological Assessment – Matters of National Environmental Significance

2025							2024	
<i>Pteropus alecto</i>	Black Flying-fox	x					x	Native
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	x	x					Native
<i>Trichosurus vulpecula</i>	Common Brushtail Possum	x	x	x	x	x	x	Native
<i>Wallabia bicolor</i>	Swamp wallaby			x		x		Native
<i>Vulpes vulpes</i>	Red Fox			x		x	x	Exotic
REPTILES								
<i>Intellagama lesueurii</i>	Australian Water Dragon						x	Native
<i>Pogona barbata</i>	Bearded Dragon						x	Native
<i>Varanus varius</i>	Lace Monitor						x	Native
AMPHIBIANS								
<i>Rhinella marina</i>	Cane Toad						x	Exotic
<i>Litoria fallax</i>	Eastern Sedgefrog		x					Native

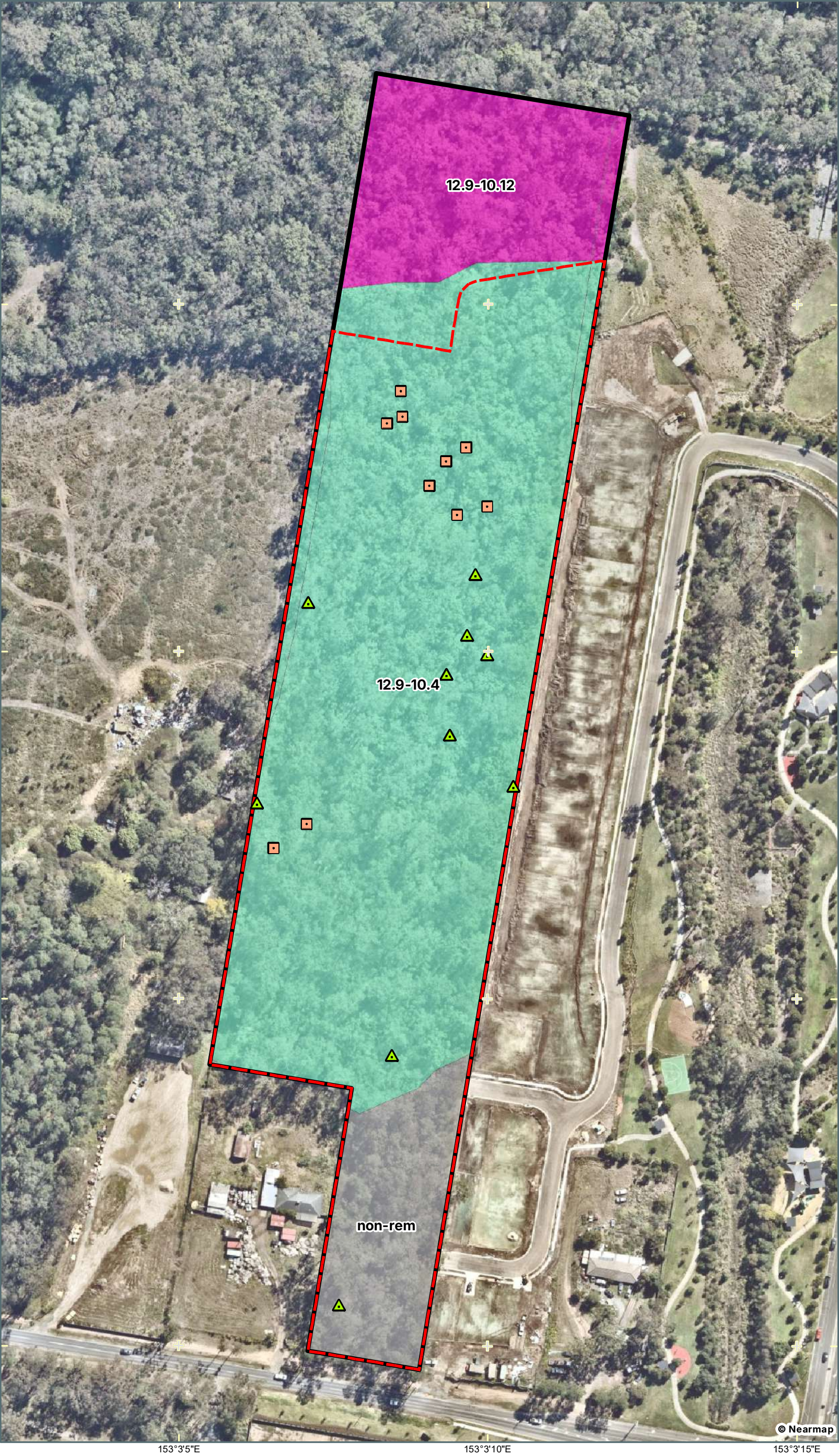


Photo set 5: Direct evidence of Koala caught by camera trap (left) and indirect evidence of Koala observed as scat during SAT survey (right).



Photo set 6: European Red Fox detected on-site via motion sensor camera traps.

05. FIELD SURVEY RESULTS



Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill. Unless a development approval states otherwise, this is not an approved plan.

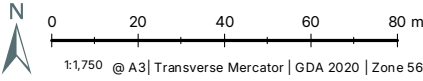
Layer Sources
Source: Esri, Vantor, Earthstar Geographics, and the GIS User Community
© State of Queensland (Department of Resources) 2026.
Updated data available at
<http://qldspatial.information.qld.gov.au/catalogue/>
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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- VMA Regional Ecosystems**
 - Category A or B area containing endangered regional ecosystems
 - Category A or B area that is a least concern regional ecosystem
 - Category C area containing endangered regional ecosystems
 - Category X area Non-remnant
- GPS Tree Plot**
 - Hollow bearing dead tree/stag
 - Hollow bearing tree (alive)



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP



Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 05 MNES Survey Results A



5.4. Threatened species and communities

5.4.1 Threatened Ecological Communities Assessment

Desktop analysis indicates that no REs representative of Threatened Ecological Communities (TEC) are mapped on-site. RE 12.3.11 associated with the TEC 'Subtropical eucalypt floodplain forest and woodland of the New South Wales and North Coast and South East Queensland bioregions' is mapped within 100 m of the boundary of the site. It was not possible to access this region for surveys. However, the development footprint will not come within 100m of the boundary of the mapped RE 12.3.11 as vegetation within the north of the site is to be retained as an environmental corridor. **Field surveys confirmed that no TECs are present on site and no potential TEC adjacent to the site will be impacted by the development.**

5.4.2 Threatened Flora Species Assessment

Several flora species including *Rhodamnia rubescens* (Scrub Turpentine) and *Rhodomyrtus psidioides* (Native Guava) were identified as being 'possible' to occur within the referral area. This assessment was based on the potential for remnant and regrowth eucalypt woodland and mapped RE associated with riparian vegetation being mapped on site in combination with recent (within 20 years) records within the locality.

Following field surveys, it was concluded that these species have are 'unlikely' to occur on site as there was no evidence of the species on-site despite thorough field surveys across the referral area. Furthermore, specific habitat requirements such as creeks and riparian vegetation were not observed on site. **No threatened flora species were recorded during detailed field surveys.**

5.4.3 Threatened Fauna Assessment

The following subsections present detailed findings on field results and potential habitat observed for threatened fauna listed under the EPBC Act, identified as 'possible' or higher likelihood to occur within the referral area. Where presence of a species is confirmed on-site or a likelihood of occurrence of 'possible' or 'likely/ known' has been applied, further assessment against the Significant Impact Guidelines may be required.

Glossy Black Cockatoo (*Calyptorhynchus lathami lathami*)

The Glossy Black Cockatoo relies on two specific habitat types for foraging and breeding. Foraging habitat is defined as vegetation containing Casuarina or Allocasuarina species. In South-east Queensland these are usually *Allocasuarina littoralis* (Black She-oak) and *Allocasuarina tortulosa* (Forest She-oak). The Glossy Black Cockatoo is known to be highly selective of individual feed trees, and a dense subcanopy of Casuarina or Allocasuarina species is required to provide suitable foraging habitat. Breeding habitat is understood to be equally selective with a preference for specific hollow characteristics, notably a minimum entrance diameter >15 cm.

The referral area does contain relatively intact eucalypt woodland that is dominated by *Corymbia intermedia* (Pink Bloodwood) with *Corymbia citriodora* (Spotted Gum), *Eucalyptus siderophloia* (Grey Ironbark), *Eucalyptus seeana* (Narrow-leaved Red Gum), *Angophora leiocarpa* (Smooth-barked Apple), *Eucalyptus racemosa* (Scribbly Gum) and *Eucalyptus tereticornis* (Forest Red Gum). The sub-canopy is dominated by native species, however, is sparse throughout the referral area with only very few scattered *Allocasuarina* species (predominantly *Allocasuarina littoralis*, Black She-oak) present. Glossy Black



Cockatoo is highly selective of individual food trees and therefore requires a dense stand of *Allocasuarina*. Given the minimal individual specimens observed are scattered across the referral area they are unlikely to provide adequate foraging habitat for the species. Furthermore, the ample availability of large areas of foraging habitat within Karawatha Forest, Greenbank Army Training Area and White Rock Conservation Park, where the species is known to occur, are far more likely to be utilised than low-value habitat within the referral area. Field surveys recorded all hollow-bearing trees across the referral, and 20 trees were recorded as containing potentially suitable hollows for the species (10 of which were dead/stag trees). Regardless, it is considered highly unlikely that the species would utilise the limited breeding habitat given the general lack of foraging resources. There are 5 records of the species within 5 km of the site, none of which were within 2 km.

No sightings of Glossy Black Cockatoo were recorded within the referral area, and it is not expected to provide sufficient foraging or breeding habitat for the species. Further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is not required.

Yellow-bellied Glider (*Petaurus australis australis*)

The Yellow-bellied Glider occur in tall mature eucalypt forest and den, often in family groups, in hollows of large trees usually more than one metre in diameter. The species is very mobile and occupy large home ranges between 20 to 85 ha to encompass dispersed and seasonally variable food resources. The referral area is mapped as containing remnant vegetation, however on-ground field surveys identified a minimal number of living trees with hollows. A total of twenty (20) hollow-bearing trees were recorded, ten (10) of which are dead/stag trees.

The referral area consists of a 5.65 ha patch with significantly limited habitat connectivity as a result of current residential developments and roads. There is one record of this species located approximately 3.3 km to the south-east. The absence of on-site sightings may be due to the sites high level of surrounding disturbance. The species was not observed within the referral area despite multiple targeted searches. Evidence of the species in the form of characteristic V-shaped cuts were also not observed during detailed individual tree surveys.

No sightings of Yellow-bellied Glider were recorded within the referral area, and it is not expected to provide habitat for this species. However, the presence of records within the referral area locality means further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is required. Refer to Section 8.5.

Swift Parrot (*Lathamus discolor*)

The Swift Parrot migrates to the mainland where it follows a nomadic existence linked to the availability and timing of flowering trees. The species has a specific preference of large mature trees for feeding. The referral area contains predominantly remnant vegetation, however, limited large trees were identified on site. There are no records of the species within the locality. Notably, given this species is Critically Endangered, the location of recorded sightings are generalised to 10 km.

While suitable forage for Swift Parrot was present on site, namely winter flowering species *Corymbia maculata* (Spotted Gum), the species preferred forage species *Eucalyptus robusta* (box-ironbark) was not observed.



The overall small referral area (5.65 ha) coupled with relatively low value habitat and limited recorded sightings in the locality indicates that it is highly unlikely that the vegetation within the referral area would be utilised by the species. Furthermore, the availability of habitat surrounding the site is limited by current residential developments. It is considered far more likely that vegetation associated with White Rock Conservation park further west would provide preferential habitat for the species.

No sightings of Swift Parrot were recorded within the referral area, and it is not expected to provide habitat for this species due to the relatively small area. Further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is not required.

Koala (*Phascolarctos cinereus*)

The Koala occurs in a range of environments containing eucalypt forest or woodland. The referral area does support habitat for the species associated with remnant and regrowth eucalypt dominated vegetation. Spot Assessment Technique (SAT) surveys were utilised to detect evidence of Koala activity across the referral area and to determine the likelihood of occurrence on-site. Four (4) SATs were carried out across the referral area which involves searching the base of the nearest 30 trees to a central point for scats. Evidence of Koala activity in the form of scats was recorded within the referral area (SAT 4, 3 out of 30 trees), indicating a 'low use' of the referral area by the species. Furthermore, direct observations of the species were made via camera traps and during spotlighting.

The species is known to be present within the locality and within the referral area. Koala habitat was confirmed within the referral area. The referral area retains minimal connectivity value to the south, west and east by current roads and residential developments. Connectivity value is present within the north of the site adjoining where the environmental open space area is to be situated. Notably, evidence of predatory species (Fox) was observed within the referral area.

Direct and Indirect evidence of Koala were recorded within the referral area. Further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is required. Refer to Section 8.2.

Grey-headed Flying-fox (*Pteropus poliocephalus*)

Pteropus poliocephalus (Grey-headed Flying-fox) requires foraging resources and roosting sites to persist. The species is known to use a wide variety of habitats including subtropical and temperate rainforests, tall sclerophyll forest and woodlands, heaths, swamps and also urban and agricultural areas where food trees have been cultivated.

The species is highly adaptive with its diverse native diet, which it can supplement with introduced species. It is known to forage within a variety of habitat areas as each resource does not produce food throughout the entire year. No Grey-headed Flying-fox roosts were observed within or directly adjacent to the referral area. The nearest roost to the referral area is located approximately 2.2 km north-west of the site (Regent Park, Emerald Drive (433)). This roost is of national significance with a population level of three or above and has had recent activity. Given the availability of suitable foraging habitat within the broader area, it is considered unlikely that the species would utilise the relatively small area of 5.65 ha associated with the referral area.



Grey-headed Flying-fox were recorded during both nights of spotlighting, on one of the two spotlighting nights a Grey-headed Flying-fox was observed to be foraging within the canopy of vegetation within the referral area. Due to the small size of the site it is considered to only provide marginal foraging habitat due to the availability of more extensive areas of vegetation within the broader region, namely White Rock Conservation Park, Greenbank military training area and Karawatha Forest.

Due to observations of this species utilising vegetation within the referral area further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is required. Refer to Section 8.3.

Greater Glider (*Petauroides volans*)

The Greater Glider is largely restricted to eucalypt forests and woodlands of eastern Australia. It is typically found in highest abundance in taller, montane, moist eucalypt forests on fertile soils, with relatively old trees and abundant hollows associated with Category B (remnant) vegetation. While the referral area does contain mapped Category B (remnant) vegetation of eucalypt dominated communities, on-ground assessments observed minimal levels of hollow-bearing trees and therefore limited suitable shelter habitat exists. A total of twenty (20) hollow-bearing trees were recorded, ten (10) of which are dead/stag trees and twelve (12) of which contained suitably sized hollows for Greater Glider. This represents approximately 2.12 hollow bearing trees per hectare which is within the 2-4 hollows per 2 hectares required by the species. However, the species prefers hollows in living trees of which only 10 trees were recorded and just three (3) contained suitably sized hollows for Greater Glider.

The site is also situated within neighbouring established and emerging residential development resulting in high levels of disturbance. Nocturnal surveys (spotlighting) were conducted across the referral area on two separate nights. Greater Glider sightings have been recorded by the ALA within 5 km of the referral area but none of these were within 2 km of the referral area. The absence of on-site sightings may be due to the sites high level of surrounding disturbance to which this species is highly sensitive. The evidence suggests that the referral area is not currently utilised by Greater Glider and is considered poor habitat for the species that is highly susceptible to disturbance and edge effects.

As stated in the Conservation Advice for *Petauroides volans* (Greater Glider (southern and central)) 2022, the species is particularly sensitive to disturbance associated with forest clearance and fragmentation and disperse poorly. The referral area is located in a landscape that has been partially subject to modification for past and on-going land-uses resulting in a mixture of undisturbed and highly disturbed environments. The referral area lacks suitable habitat for the species, retains limited connectivity potential and is located adjacent to highly modified areas.

No sightings of Greater Glider were recorded within the referral area, and it is not expected to provide significant or high value habitat for this species. However, the presence of potential habitat within the referral area means further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is required. Refer to Section 8.4.

Regent Honeyeater (*Anthochaera phrygia*)

Regent Honeyeaters mostly occur in dry Box-Ironbark Eucalypt woodland and dry sclerophyll forest associations in areas of low to moderate relief, wherein they prefer moister, more fertile sites. These areas are generally associated with creek flats and river valleys and foothills. These woodlands have



significantly large numbers of mature trees, high canopy cover and abundance of mistletoes. They are a generalist forager, which mainly feed on nectar from a wide range of eucalypts and mistletoes.

The referral area consists of *Corymbia intermedia* (Pink Bloodwood) dominated woodland with *Corymbia citriodora* (Spotted Gum), *Eucalyptus siderophloia* (Grey Ironbark), *Eucalyptus seeana* (Narrow-leaved Red Gum), *Angophora leiocarpa* (Smooth-barked Apple), *Eucalyptus racemosa* (Scribbly Gum) and *Eucalyptus tereticornis* (Forest Red Gum). *Eucalyptus siderophloia* (Grey Ironbark), *Eucalyptus seeana* (Narrow-leaved Red Gum), *Angophora leiocarpa* (Smooth-barked Apple), *Eucalyptus racemosa* (Scribbly Gum) and *Eucalyptus tereticornis* (Forest Red Gum), *Corymbia maculata* (spotted gum) is a preferred foraging species for Regent Honeyeater. It is noted that in Queensland *Corymbia citriodora* is recognised synonymously with *Corymbia maculata*. *Corymbia citriodora* was identified as part of the vegetation communities on site. Despite remnant mapping over the majority of the referral area, detailed site survey identified only limited very large trees. There are no records from the last 20 years recorded on ALA of Regent Honeyeater within the locality.

No sightings of Regent Honeyeater were recorded within the referral area, and it is not expected to provide significant or high value habitat for this species.

5.4.4 Migratory Species Assessment

Database searches returned seven (7) migratory fauna species listed as threatened under the EPBC Act and/or NC Act, as having been previously recorded six predicted to occur within 20 km of the referral area. Following the likelihood of occurrence assessment, six (6) of these species were considered 'unlikely' to occur within the referral area with the exception of the White-throated Needletail. This is predominantly a result of few sightings in the broader locality and a lack of suitable habitat such as vegetated gully lines, marine environments, wetlands or rainforests.

White-throated Needletail (*Hirundapus caudacutus*)

The species inhabits mistletoes in Eucalypt forests/woodlands, riparian woodlands of Black Box and River Red Gum, Box-ironbark-yellow Gum woodlands, *Acacia*-dominated woodlands, Paperbarks, Casuarinas, *Callitris*, and trees on farmland or gardens. The species prefers woodlands which contain a higher number of mature trees, as these host more mistletoes. It is more common in wider blocks of remnant woodland than in narrower strips. Although they occur over most types of habitat, they are probably recorded most often above wooded areas, including open forest and rainforest, and may also fly between trees or in clearings, below the canopy, but they are less commonly recorded flying above woodland. They also commonly occur over heathland, but less often over treeless areas, such as grassland or swamps.

The referral area contains wooded areas including open forests. A review of Queensland WildNet and ALA identified several records of the species within 5 km of the site within the last 20 years. Mapped remnant vegetation is present over the majority of the site however field surveys identified that the majority of the vegetation displays evidence of disturbance from historical land-uses and thus does not resemble old growth forest. Although the species has been observed within close proximity to the referral area and potential habitat was observed throughout the remnant vegetation on-site, the minimal number of hollow-bearing trees suitable for breeding and the species highly mobile state indicates the unlikelihood to occur within the referral area during roosting periods.

No sightings of White-throated Needletail were recorded within the referral area, and it is not expected to provide significant or high value habitat for this species. However, the presence of a potential habitat



within the referral area means further consideration of impacts to the species from the action, including assessment against the EPBC Act significant impact criteria, is required. Refer to Section 8.6.

5.5. Post Field Survey MNES Assessment

A tabulated assessment of the potential for the nine MNES to occur within the referral area or be impacted by the action is provided in **Table 13**. This assessment is based on the desktop and field survey results and makes the distinction between MNES that have either nil or a very low potential to be impacted by the project and those that have some potential and were investigated further. The likelihood of assessment has been finalised following completing of field survey (refer **Appendix C**).

Table 13 Potential for the proposed action to impact MNES

MNES	Description	Relevance to Site	Assessment
World Heritage Properties	A 'declared World Heritage property' is an area that has been included in the World Heritage list or declared by the minister to be a World Heritage property. World Heritage properties are places with natural or cultural heritage values which are recognised to have outstanding universal value.	The closest World Heritage Site is the Gondwanan Rainforests of Australia which is approximately 66 km south-west of the referral area.	There is no potential for the proposed action to impact on a World Heritage Property. Further assessment is not required.
National Heritage Places	The National Heritage List contains places or groups of places with outstanding heritage value to Australia – whether natural, Indigenous or historic or a combination of these.	The closest National Heritage Place is the Gondwanan Rainforests of Australia which is approximately 66 km south-west of the referral area.	There is no potential for the proposed action to impact on a National Heritage Place. Further assessment is not required.
Wetlands of international importance (Ramsar)	A 'declared Ramsar wetland' is an area that has been designated under Article 2 of the Ramsar Convention or declared by the minister to be a declared Ramsar wetland under section 16 of the EPBC Act.	Moreton Bay is approximately 10-20km upstream of the development area.	There is no potential for the proposed action to impact on a Wetland of International Importance (Ramsar). Further assessment is not required.



MNES	Description	Relevance to Site	Assessment
Nationally threatened species and ecological communities	An action will require approval if the action has, will have, or is likely to have a significant impact on a species listed in any of the following categories: ▪ extinct in the wild ▪ critically endangered ▪ endangered, or ▪ vulnerable. An action will also require approval if the action has, will have, or is likely to have a significant impact on an ecological community listed in any of the following categories: ▪ critically endangered, or ▪ endangered.	The PMR identified fifty-four (54) listed threatened species and seven (7) TECs with the potential to occur in the development area or within 5 km of the proposed action.	Based on the desktop and field survey results, the following species have potential to be impacted by the action therefore require assessment against the relevant EPBC Act significant impact criteria: 1. <i>Phascolarctos cinereus</i> (Koala); 2. <i>Pteropus poliocephalus</i> (Grey-headed Flying-fox); 3. <i>Petaurus australis</i> (Yellow-bellied Glider) 4. <i>Petauroides volans</i> (Greater Glider); and 5. <i>Hirundapus caudacutus</i> (White-throated Needle-tail). Further assessment against the significant impact criteria is required for these MNES. All other nationally threatened species and ecological communities were considered and concluded as unlikely to undergo a significant impact as a result of the proposed development.
Migratory species	An action will require approval if the action has, will have, or is likely to have a significant impact on a listed migratory species.	The PMR identified seven (7) listed migratory species with the potential to occur in the development area or within 5 km of the proposed action.	It is considered unlikely that the development area has habitat critical for any migratory species with the exception of <i>Hirundapus caudacutus</i> (White-throated Needle-tail) as stated above. Further assessment against the significant impact criteria for all other migratory species is not required.
Commonwealth marine areas	Marine protected areas are marine areas which	The action is not being undertaken in or adjacent to	It is considered unlikely for the proposed action to impact



MNES	Description	Relevance to Site	Assessment
	are recognised to have high conservation value. Actions in or near marine protected areas, or other areas with high conservation value, have a greater likelihood of significant impacts on the Commonwealth marine environment.	a Commonwealth marine area. The proposed action development area is located approximately 53km west from the nearest Commonwealth marine area.	on Commonwealth Marine Areas. Further assessment is not required.
The Great Barrier Reef Marine Park	The Great Barrier Reef Marine Park is established under the <i>Great Barrier Reef Marine Park Act 1975</i> . The GBRMP is an area recognised to have high conservation value and an action will require approval if it is likely to impact the environment.	The GBRMP is more than 200 km north of the development area.	There is no potential for the proposed action to impact on the GBRMP. Further assessment is not required.
Nuclear actions	A nuclear action (including uranium mining) will require approval if it has, will have, or is likely to have a significant impact on the environment.	The proposed action does not comprise a nuclear action.	This MNES does not apply.
A water resource, in relation to coal seam gas development and large coal mining development	Under the EPBC Act, an action which involves a CSG development or a large coal mining development requires approval from the Australian Government if the action has, will have, or is likely to have a significant impact on a water resource.	The proposed action does not comprise a CSG development or large coal mine.	This MNES does not apply.



6. Potential Impacts

6.1. *Potential Project Related Impacts*

The proposed action involves the establishment of a residential development including residential allotments, internal road, pedestrian links, environmental open space area and detention/drainage areas on land located Park Ridge Rd, Park Ridge, Queensland. This will involve the clearing of vegetation identified as Category X (non-remnant), and Category B (remnant) 'Least Concern' RE 12.9-10.4. Category B (remnant) and Category C (high-value regrowth) 'Endangered' RE 12.9-10.12 are mapped and were confirmed to be present on site. Regions of RE 12.9-10.12 are largely to be retained and rehabilitated as part of an environmental open space area. Category C 'Endangered' RE 12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a is also mapped on site but site surveys concluded it was reflective of Category B (remnant) RE 12.9-10.4. A total area of 4.58 ha of vegetation is to be removed under the proposed action.

6.1.1 Potential Direct Impacts

Vegetation Clearing

The project is predicted to directly impact 4.58 ha of the 5.65 ha referral site identified as Lot 4 on RP 868515. The proposed action sits adjacent to several other residential developments to cater for the increasing housing demands in SEQ. The proposed development footprint that is subject to this referral is a vacant patch of vegetation immediately adjacent to current residential development under construction and local roads. A breakdown of vegetation to be impacted is provided in **Plan 6**.

Habitat Loss

The Project has Council approval to impact locally mapped Primary Vegetation Area on site, which provides marginal habitat values for a range of native flora and fauna species. An impact area of 4.58 ha is anticipated on vegetation potentially constituting suitable habitat for MNES.

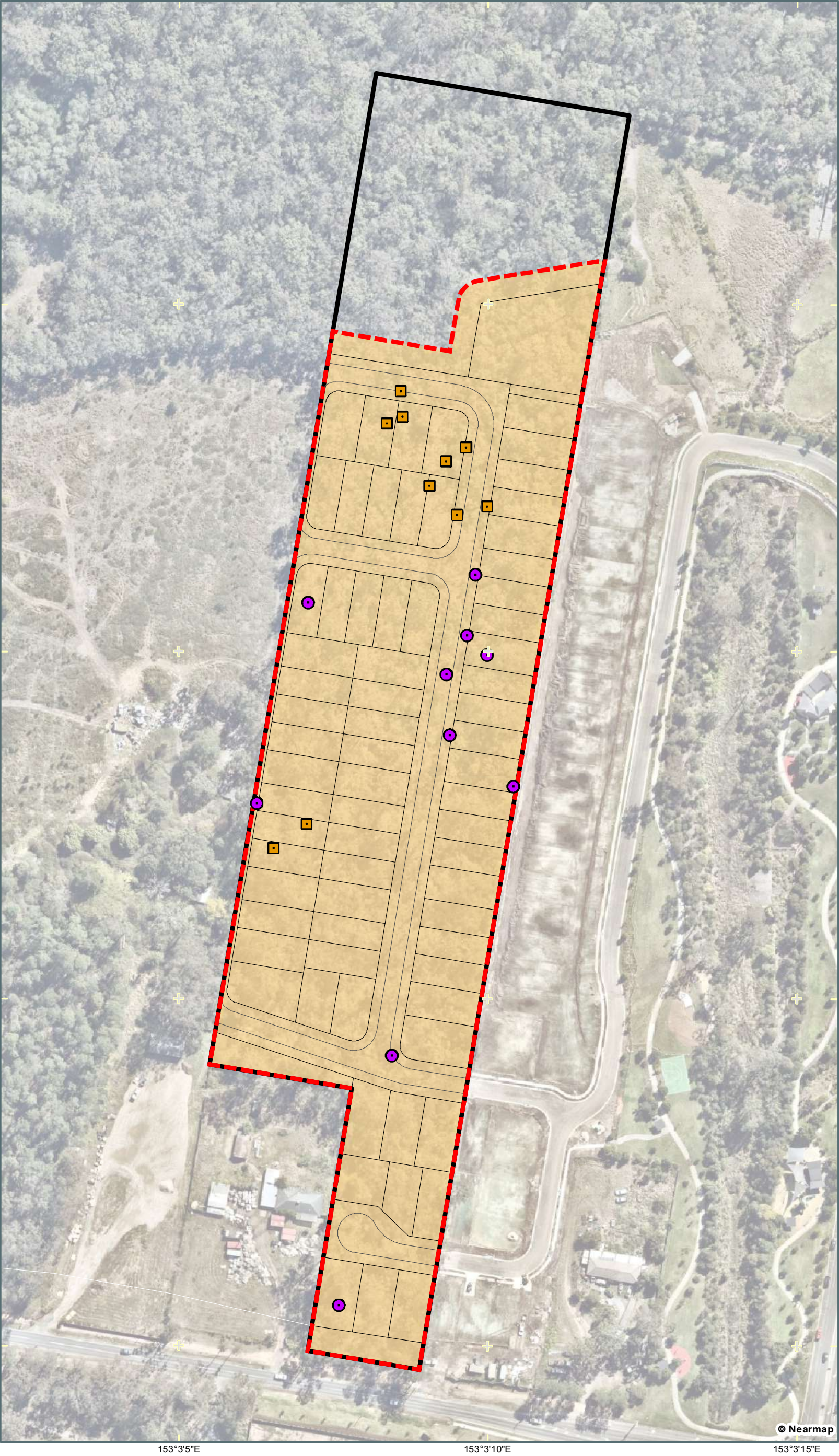
The MNES identified as having a possible and higher likelihood of occurrence based on a desktop and field assessments include Koala, Grey-headed Flying-fox, Greater Glider, Yellow-bellied Glider and White Throated Needletail. Subsequently, these species have been further assessed against the significant impact guidelines, refer **Section 8**.

The risk of impact is based on the potential extent of habitat loss resulting from the construction phase of the project and to a lesser degree the operational phase of the project. It considered, but was not limited to the following:

- The value of the impacted habitat to each respective matter;
- The amount of habitat to be directly impacted (lost) against that to be retained;
- Potential indirect impacts (e.g. dust, noise and soil erosion);
- Potential fragmentation of a population into two or more populations;
- Increased fragmentation of wildlife corridors in the Referral area;
- Risk of operational impacts (e.g. noise); and
- Each species ability (e.g. fauna) or inability (e.g. flora) to move away from areas of direct impact into retained habitat.



06. MNES - HABITAT IMPACT ANALYSIS



Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill. Unless a development approval states otherwise, this is not an approved plan.

Layer Sources
Source: Esri, Vantor, Earthstar Geographics, and the GIS User Community
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Updated data available at
<http://qldspatial.information.qld.gov.au/catalogue/>
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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- Lot layout
- Habitat impact area [4.58 ha]
- Hollow bearing stag (dead) to remove (15 hollows)
- Hollow bearing tree (alive) to remove (18 hollows)



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	01/07/2026	Preliminary	TC	IP

N
1:1,750 @ A3 | Transverse Mercator | GDA 2020 | Zone 56

Address / RPD: 4RP868515

Date: 01/07/2026

12014 E 06 MNES Impact Analysis A



6.1.2 Potential Indirect Impacts

Indirect impacts occur when project related activities affect vegetation or habitats in a manner other than a direct loss or clearing. Examples of indirect impacts include promotion of soil erosion, sedimentation of waterways, dust inhibiting plant pollination, provision of suitable seed bed for invasive plants, or increased noise activity within of directly adjacent to sensitive habitat areas.

The potential indirect impacts that may result from construction activities and/or the operational phase of the project have been identified below.

Weeds

Increased vehicle movement during the vegetation clearing phase has the potential to increase the spread of weeds in the area, however, adjacent land holdings are highly modified or completely cleared thus. With the implementation of standard mitigation measures, the project is likely to result in a negligible impact to ecological values due to the potential introduction/spread of weeds.

Vehicle Movement

During vegetation clearing, a number of vehicles will be required to access the referral area. Direct impacts from vehicle movements on threatened species and vegetation communities include:

- damage or destruction of vegetation or fauna habitat by vehicles traversing these areas; and
- fauna strike.
- Indirect impacts include:
 - interference of fauna through visual and noise impacts. This in turn can affect feeding, roosting, breeding or nesting behaviour;
 - introduction and/or spreading of weeds or feral animals carried on/in vehicles, resulting in deterioration or loss of vegetation and fauna habitat;
 - damage or destruction of vegetation and fauna habitat through smothering by dust generated by vehicles traversing the referral area.

The site is adjacent to two highly disturbed lots, with construction currently underway within the eastern lot at the time of surveys. Furthermore, to the south of the site is a highly trafficked road identified as Park Ridge Road where multiple cars and trucks were observed to be moving at a high rate of speed. With implementation of standard mitigation measures, such as exclusions fencing, the project is likely to result in a temporary and minor impact to ecological values due to vehicular movements. Further, ecological field surveys confirmed that most fauna species present on-site are common or highly mobile avifauna.

Earthworks

Construction activities have the potential to generate dust emissions. Dust emissions during construction will be temporary. The main sources of dust will be generated via:

- wheel-generated dust from the haul roads created for the construction phase;
- dust lift-off from exposed surfaces (e.g. construction roads and pads);
- earthworks, including construction of the embankments, and moving, dumping and shaping material; and



- vegetation and soil clearing of the land.

Excessive deposition of dust on leaves of plants can suppress their growth and photosynthesis, resulting in reduced habitat quality for fauna. High levels of airborne dust can irritate the respiratory systems of fauna and potentially result in ingestion of dust-coated seeds and other foods. Excessive deposition of dust on open water bodies may also degrade water quality and overall habitat quality for fauna. Notably the referral area exists within a relatively urbanised environment with surrounding areas developed for residential purposes. Surrounding properties are highly modified or mostly cleared, with the implementation of standard mitigation measures, the project is likely to result in a temporary and minor impact to ecological values due to the generation of dust.

Light Emissions During Construction

Artificial light can affect both nocturnal and diurnal animals by disrupting behavioural patterns, with quality of light (e.g. wavelength, colour), intensity and duration potentially evoking different faunal responses. Impacts from increased light levels include disorientation from, or attraction toward, artificial sources of light; mortality from collisions with structures, and effects on light-sensitive cycles of species (e.g. breeding and migration for fauna and flowering in plants). An artificial increase in lighting can also affect abundance of predators.

Presence and intensity of artificial light in the referral area will temporarily increase during the construction phase; however, night works will not be common. Lighting will be directed to construction areas within the project site. Some light spillage will be inevitable and is likely to be contained. Potential impacts associated with light emissions will be temporary and are unlikely to be significant given the general lack of surrounding vegetation.

Noise and Vibration

Noise levels greater than existing ambient noise levels are expected during the construction within the referral area. Sources of noise are likely to consist of short, intense pulses from mobile plant equipment, and more prolonged noise, with consistent vibration, pitch and volume from generators, excavators and pumps, in addition from noise from vehicles.

Both steady continuous and single noise events have the potential to lead to ecological impacts. Construction noise is expected to elicit some avoidance response from fauna using the surrounding vegetation, albeit limited. Furthermore, the referral area is situated centrally in a region where significant development is occurring. Therefore, noise and vibration introduced as a result of the project are likely to be a temporary and negligible minor impact.

Waste Disposal

Inappropriate disposal of non-hazardous wastes can attract vermin and other wildlife to site. This may exacerbate potential impacts (e.g. road mortality). Litter may also enter surrounding environments. With implementation of standard mitigation measures, the project is likely to result in a negligible impact to ecological values due to the generation and handling of waste. Due to the temporary nature of the construction phase, waste generation opportunities will be limited.

Hazardous and Dangerous Goods

Spills and leaks from transfers (e.g. fuel and/or chemicals) and inadequate storage of dangerous goods and hazardous wastes could result in point-source contamination of surrounding land. Direct adverse impacts could include toxic impacts on vegetation (resulting in degradation or loss of vegetation and



habitats), direct toxic impacts on fauna (from contact, inhalation or ingestion) or indirect impacts on threatened and migratory species from habitat loss. Direct adverse impacts on surface and groundwater quality are also possible.

With the application of standard mitigation and management measures, impacts from liquid and solid waste disposal will be avoided or localised and small in scale. Further to this, the likelihood of significant spillages is considered extremely low. Therefore, the project is likely to result in a negligible impact to ecological values due to potential spills and leaks.

Increased Human Presence

Increased human activity during the construction of the project has the potential to disturb fauna within adjacent habitat areas. Resulting impacts to fauna include heightened vigilance and predator avoidance, which can disrupt foraging and roosting efficiency or deter wildlife from using particular areas. Impacts essentially represent a reduction in habitat availability due to edge effects. Given the referral area is situated within a locality which is already highly urbanised and with a number of current and future developments occurring, it is likely that the increase in human presence will be negligible on fauna.



7. Avoidance, Mitigation and Management Measures

7.1. *Clearing and Site Establishment Phase*

General mitigation measures to be implemented during the construction phase of the Project are outlined below.

7.1.1 Vegetation Clearing and Management Plan

A Vegetation Clearing and Management Plan (VCMP) will form part of the broader management document for the proposed action. The VCMP will cover clearing of all vegetation within the referral area and include details on:

- Vegetation to be removed.
- All civil works likely to impact on existing vegetation.
- Temporary and permanent exclusion and protection fencing.
- Roles and responsibilities for site contractors, the developer and the consultant group.
- Stockpiling and site access locations.
- A clearing sequence plan showing the commencement of clearing and direction of removal (this will be in conjunction with the Fauna Management Plan to allow for the appropriate flushing of fauna towards safe havens and/or the application of an appropriate relocation program).
- Links to weed management and revegetation proposals.
- The stock piling and reuse of cleared vegetation.

7.1.2 Fauna Management Plan

A Fauna Management Plan (FMP) will be prepared for potential impacts of the construction phase covering the loss of vegetated areas, isolated trees and likely barriers and impediments to local dispersal. The FMP will link closely with the VCMP and include details on:

- Species surveyed as using the site with a focus on those most likely impacted by development works.
- A list of relevant State and Commonwealth legislation constraints and controls for the above listed fauna.
- A plan showing existing habitat opportunities and locations.
- Details of the threats to existing fauna species.
- Clearing sequence plan from the VCMP.
- Management and mitigation measures.
- Fauna spotter role, contacts and certification.



- Specific fauna management procedures for potential or known habitat trees.

7.1.3 Fauna Spotter Catcher

A registered and suitability qualified Fauna Spotter Catcher/Ecologist will need to be employed for clearing works to implement a protocol of best management practises. Significant habitat features, should any be identified on site, will be flagged prior to clearing events and these areas supervised by an appropriately experienced Ecologist. Identified within the clearing supervision protocol should be flagging of hollow bearing trees, if present, followed by the removal of vegetation surrounding them. After 24 to 72 hours, these trees should then be removed.

The objective of this is to enable hollow dependant fauna an opportunity to move on their own accord as many species utilise multiple den/roost sites within a given home range should they occur. Where required, native fauna situated within areas to be cleared will be relocated to a secure area of similar habitat prior to the commencement of vegetation clearance works by a registered fauna spotter/catcher. Should any removal and relocation of nests be required, it is to be undertaken by a suitably qualified and experienced person and advice sought where necessary.

7.1.4 Existing Offsets

The proposed action maintains approvals at the Local and State level that require substantial financial offsets for lost habitat values. These include an offset for impacts to State mapped Koala habitat totalling \$1,313,565.98 and a financial offset of \$429,082.11 will also be paid to local Council for impacts on the same habitat values, meaning a total of \$1,742,648.09 in financial offsets costs have already been imposed. These financial payments are in support of habitat regeneration by the relevant Government agencies.



8. Significant impact assessments

8.1. Significant Impact Assessment Definitions

The Significant Impact Guidelines 1.1 provides specific definitions for '*a population of a species or important population of a species*' and '*habitat critical to the survival of a species or ecological community*'. This definition is a key consideration when conducting significant impact assessments for a threatened species or ecological community listed under the EPBC Act. The definitions are presented below.

8.1.1 Population of a species

A 'population of a species' is defined by the Significant Impact Guidelines as:

"An occurrence of the species in a particular area. In relation to critically endangered, endangered or vulnerable threatened species, occurrences include but are not limited to:

- *A geographically distinct regional population, or collection of local populations*
- *A population, or collection of local populations, that occurs within a particular bioregion.*

8.1.2 Important population

An 'important population' is a population that is necessary for a species' long-term survival and recovery. This may include populations identified as such in recovery plans, and/or that are:

- key source populations either for breeding or dispersal
- populations that are necessary for maintaining genetic diversity, and/or
- populations that are near the limit of the species range.

8.1.3 Habitat critical to the survival of a species or ecological community

The Significant Impact Guidelines provide the following definition for '*habitat critical to the survival of a species*'

"Habitat critical to the survival of a species or ecological community' refers to areas that are necessary:

- *For activities such as foraging, breeding, roosting or dispersal*
- *For the long-term maintenance of the species or ecological community (including the maintenance of species essential to the survival of the species or ecological community, such as pollinators)*
- *To maintain genetic diversity and long-term evolutionary development*
- *For the reintroduction of populations or recovery of the species or ecological community.*

Such habitat may be, but is not limited to:

- *Habitat identified in a recovery plan for the species or ecological community as habitat critical for that species or ecological community*
- *Habitat listed on the Register of Critical Habitat maintained by the minister under the EPBC Act.*



8.2. *Phascolarctos cinereus* (Koala)

8.2.1 Conservation Status

The Koala is listed as Endangered under the EPBC Act.

8.2.2 Description

Koalas (*Phascolarctos cinereus*) are native Australian tree-dwelling marsupials with predominantly grey coloured fur.

8.2.3 Distribution

The Koala is found from north-east Queensland to the south-east corner of South Australia. As a consequence of translocations, the Koala are found outside their historic range, for example, Kangaroo Island. The distribution of the Koala is influenced by altitude, temperature and leaf moisture. The density of the Koala population in coastal regions is generally greater than inland areas. Koalas are known to naturally inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by *Eucalyptus* sp.

8.2.4 Habitat

Koala habitat can be broadly defined as any forest or woodland containing species that are known Koala food trees, or shrubland and emergent food trees. Preferred food and shelter trees are naturally abundant on fertile clay soils. Along the Great Dividing Range and the coastal belt throughout the species' range, Koalas inhabit moist forests and woodlands mostly dominated by *Eucalyptus* sp.

Koalas are highly territorial, and individuals maintain their own home range which may overlap with other individuals. Home ranges are variable depending on the location, with those in "poorer" habitats being larger than in higher quality habitats. There is little evidence for longer movements in most cases, though dispersing individuals, mostly young males, may occasionally cover distances of several kilometres over land with little vegetation. In SEQ, the average distance between natal and breeding home ranges was similar for males and females, at approximately 3.5 km. Maximum dispersal distances were up to approximately 10 km for males and females. Other studies have reported movement of up to 16 km in rural SEQ.

8.2.5 Threats

Habitat loss and fragmentation, vehicle strike and predation by domestic or feral dogs are the main threats to the Koala. Extreme environmental events, such as drought, can also cause significant mortality.

8.2.6 Significant Impact Assessment

As of 12 February 2022, the EPBC Act referral guidelines for the vulnerable Koala have been redacted following the elevation of the Koala listing status under the EPBC Act to Endangered. As such, the Federal Significant Impact Guidelines are to be utilised in the interim to determine if a significant impact on Koala may occur as a result of the proposed action. The assessment methodology included referral area surveys and consideration of Commonwealth, State and Local Government environmental database searches.

To determine whether the proposed action is likely to have a significant impact on the Koala, an assessment against the *EPBC Significant Impact Guidelines 1.1* is provided in **Table 14**. The results of this



assessment determined that there is potential that the proposed development may have a significant impact on the Koala. It should be noted that a dedication of land to a total of 1.2 ha identified as environmental open space area to council has been endorsed. Further, the proposal has been thoroughly assessed by the State and Council and they have provided approval based on the conditions outlined in **Appendix E** and **Appendix F**. The State has identified that the project will result in impacts to 1,832 Non-Juvenile Koala Habitat Trees and has approved this impact on the condition that a financial offset is provided. In order to offset impacts to State Koala habitat the proponent will provide a \$1,313,565.98 payment to the State. In addition to the dedication of land and State financial offset, a financial offset of \$429,082.11 will be paid to local Council for impacts on the same habitat.



Table 14 EPBC Significant impact criteria for critically endangered and endangered species – Koala

Significant Impact Criteria	Assessment	Impact
An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:		
6. Lead to a long-term decrease in the size of a population	Under the Queensland Vegetation Management Act 1999, the referral area is mapped as containing predominantly Category B (remnant) vegetation, containing RE 12.9-10.4 and 12.9-10.12 with smaller regions of Category C (high-value regrowth) mapped as RE12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a and RE 12.9-10.12. The species associated with these RE's are known to provide habitat and forage for Koala. Non-juvenile Koala Habitat Trees (NJKHTs) were observed to be present across the referral area including <i>Angophora leiocarpa</i> (Smooth Bark-Apple), <i>Corymbia citriodora</i> (Spotted Gum), <i>Corymbia intermedia</i> (Pink Bloodwood), <i>Eucalyptus fibrosa</i> (Broad-leaved Red Ironbark), <i>Eucalyptus major</i> (Grey Gum), <i>Eucalyptus propinqua</i> (Small-fruited Grey Gum), <i>Eucalyptus racemosa</i> (Scribbly Gum), <i>Eucalyptus seeana</i> (Narrow-leaved Red Gum), <i>Eucalyptus siderophloia</i> (Grey Ironbark), <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Lophostemon suaveolens</i> (Swamp Box). A review of ALA indicates that local Koala sightings have been recorded in locations surrounding the site, mostly to the north of the Browns Plains Road and south of Granger Road (refer Plan 7). Field assessments within the referral area detected indirect evidence of Koala in the form of scats at one of the four SAT locations, and direct observations of the species during spotlighting and camera trapping. Despite relatively intact vegetation within the referral area, this vegetation provides limited connectivity potential given surrounding properties to the east, west, and south are, or are expected to be almost completely cleared or are currently observed to be highly disturbed with minimal vegetation present. The lot to the east is entirely clear of non-juvenile trees. The lots to the west identified as 3RP868515 and 1RP170091 were observed to be mostly cleared with a high level of disturbance including extensive areas of construction material and rubbish. The Lot identified as 2RP170091 was observed to have some regions of vegetation that would be considered Koala habitat however majority of the area was lawn/paddock with a high presence of WONS <i>Lantana camara</i> (Lantana). Lot 2RP170091 has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that majority	A significant impact is not likely

Significant Impact Criteria	Assessment	Impact
	of the site is to be cleared with a retained environmental open space area within the north of the site which aligns with the proposed environmental open space area within the referral area. A financial contribution of \$1,742, 648.09 will be paid by the proponent to the Council & State for the removal of local and state mapped SEQ Koala Habitat. This contribution will be used to fund conservation activities that will improve the quality and availability of habitat for Koala and other native species. While Koala habitat is present within the referral area, consideration should be given to the overall size and location of the referral area within a region of Park Ridge that has seen significant increase in development for residential use within the last decade to meet the growing housing requirements of the SEQ population. The 5.65 ha referral site is not believed to support a population of Koala's but is currently used as opportunistic forage and dispersal habitat as indicated by the 'low usage' result of SAT surveys. It is considered unlikely that the removal of 4.58 ha of vegetation that is potentially suitable habitat for Koala within the referral area would affect the viability or size of any Koala populations in the area. Therefore, the removal of vegetation on site is considered not likely to result in a long-term decrease in the size of any Koala population.	
7. Reduce the area of occupancy of the species	Detailed studies utilising both direct and indirect survey methods to detect evidence of Koala within the referral area were conducted. Direct and indirect evidence of Koala was identified through the detection of scats at 3 of the 120 trees assessed and a Koala observed during spotlighting and on camera trap footage. As such the presence of this species has been confirmed within the referral area. The referral area is limited in sizes (5.65 ha) and does not occur on the outer extent of the known distribution of Koala. Furthermore, it is likely that the vegetation within the referral area is only used by transient individuals for opportunistic foraging and dispersal as evidenced by the 'low usage' result of SAT surveys. The proposal has been thoroughly assessed and approved at a State and Council level, which has deemed the impact acceptable on the condition that a financial offset is paid for the removal of State mapped Koala Habitat and Locally mapped habitat.	A significant impact is not likely due to existing offsets

Significant Impact Criteria	Assessment	Impact
	A 1.2 ha area within the north of the site is to be retained as an environmental open space area. This region will be rehabilitated to provide high-value habitat and connectivity to larger areas of less impacted Koala habitat. Furthermore, a financial contribution of \$1,742,648.09 to offset impacts to state mapped Koala habitat and locally mapped Significant Vegetation is to be paid by the proponent to the state and council. Due to the small size and location of the referral area it unlikely that the removal of vegetation on site will result in a significant reduction in the area of occupancy for Koala and the impacts are already offset. As such a significant impact is considered unlikely.	
8. Fragment an existing population into two or more populations	The development layout is proposed to remove vegetation within the south of the referral area and retain vegetation within the north. No viable Koala habitat is available directly to the south of the site due to a residential development surrounded by non-fauna friendly fencing. To the east of the referral area is a lot that is currently entirely cleared of non-juvenile vegetation, though it appears revegetation and restoration plantings may be occurring within the northern most region of that site. The lots to the west of the site are highly disturbed, mostly consisting of lawn/paddock and with high levels of weed incursion. The lot to the west identified as 2RP170091 has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that majority of the site is to be cleared with a retained environmental open space area within the north of the site. This retained region aligns with the proposed environmental open space area within the referral area. The vegetation present within the south of lot 2RP170091 may constitute habitat suitable for Koala, however, it was observed to be highly disturbed and only a small region is mapped by the state as Koala habitat. Furthermore, under the approved development plan for Lot 2 on RP170091 this region of vegetation will be cleared. It is unlikely considering the referral areas small size (5.65 ha) that it currently supports a viable population of Koala's. It is likely the site is only being used by transient individuals as opportunistic foraging and dispersal habitat. This is supported by SAT survey results indicating 'low usage' of the site. However, to avoid the isolation of any individuals on site from larger populations clearing of Koala habitat trees will be carried out in accordance with sequential clearing conditions. Vegetation clearing will occur in a south to north direction. This will result in any potential Koala's on site being dispersed in a northward direction into the	A significant impact is not likely

Significant Impact Criteria	Assessment	Impact
	retained and rehabilitated environmental open space area and away from sources of disturbance to the south, southwest and southeast. As such the removal of vegetation within the referral area is not anticipated to lead to the isolation of Koala populations within the referral area or on adjacent sites. The proposal has been thoroughly assessed and approved at a State and Council level, which has deemed the impact acceptable on the condition that a financial offset is paid for the removal of state mapped Koala Habitat and Locally mapped habitat. A financial offset of \$1,313,565.98 will be paid to the State for impacts on 1,832 Non-Juvenile Koala Habitat Trees and \$429,082.11 to Council for the removal of the same habitat. These funds will contribute to conservation and management activities which will improve the quality and abundance of Koala habitat.	
9. Adversely affect habitat critical to the survival of a species	Under the Queensland Vegetation Management Act 1999, the referral area is mapped as containing predominantly Category B (remnant) vegetation, containing RE 12.9-10.4 and 12.9-10.12 with smaller regions of Category C (high-value regrowth) mapped as RE12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a and RE 12.9-10.12. The species associated with these RE's are known to provide suitable Koala Habitat. The proposed action will result in the removal of tree species known to be used by the Koala such as <i>Angophora leiocarpa</i> (Smooth Bark-Apple), <i>Corymbia citriodora</i> (Spotted Gum), <i>Corymbia intermedia</i> (Pink Bloodwood), <i>Eucalyptus fibrosa</i> (Broad-leaved Red Ironbark), <i>Eucalyptus major</i> (Grey Gum), <i>Eucalyptus propinqua</i> (Small-fruited Grey Gum), <i>Eucalyptus racemosa</i> (Scribbly Gum), <i>Eucalyptus seeana</i> (Narrow-leaved Red Gum), <i>Eucalyptus siderophloia</i> (Grey Ironbark), <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Lophostemon suaveolens</i> (Swamp Box). Direct evidence, via spotlighting and camera trapping, and indirect evidence, via SAT Surveys, of Koala usage of the site was detected during surveys. SAT surveys results indicated 'low usage' of the site, and it is therefore considered that the referral area is likely only used as opportunistic forage and dispersal habitat by the species. Furthermore, high levels of disturbance to the south, east and west of the site have resulted in connectivity being restricted to a region within the north of the site which is to be retained and rehabilitated as environmental open space area.	There is potential for a significant impact, however, this is likely mitigated due to existing offsets

Significant Impact Criteria	Assessment	Impact
	A total of 4.58 ha of vegetation potentially constituting habitat suitable for Koala is to be removed, of which most is mapped by the State as Koala Habitat. 1.2 ha of the referral area is to be dedicated as environmental open space area and rehabilitated. The proposal has been thoroughly assessed and approved at a State and Council level, which has deemed the impact acceptable on the condition that a financial offset is paid for the removal of state mapped Koala Habitat and Locally mapped habitat. An offset of \$1,313,565.98 will be paid to the State for impacts on 1,832 Non-Juvenile Koala Habitat Trees and \$429,082.11 will be paid to local Council for impacts on the same habitat. This large financial contribution will be used for further conservation and restoration activities that will result in uplifts in habitat quality supporting Koala and other native species. Due to the removal of non-juvenile Koala habitat trees which under the conservation advice meet the definition of Koala habitat it is considered that there is potential for the proposed action to adversely affect habitat critical to the survival of the species, however, there are already substantial financial offsets in play.	
10. Disrupt the breeding cycle of a population	Direct and indirect evidence of Koala usage of the site was detected during surveys. Koala was directly observed on site during spotlighting and via camera trapping. Due to the small size of the referral area (5.65 ha) it is unlikely that it is large enough to support a viable Koala population. Sightings of Koala indicate that individuals, part of a larger population, on occasion utilise the site. However, it is considered that usage is opportunistic and not regular as evidenced by SAT surveys results indicating 'low usage' of the site. Low usage of the referral area is possibly due to the high level of disturbance present in the surrounding area including presence of traffic and construction noise, limited dispersal opportunities and presence of predators known to prey on Koala, including Foxes. It is considered unlikely that Koala is or would rely on the site for breeding purposes considering the high level of disturbance in the surrounding area. This is supported by the low-usage result of SAT's. Removal of Koala habitat on site is to be offset on a local level by the retention of a 1.2 ha area within the north of the site as environmental open space area. As already mentioned, substantial financial offset for impacts to habitat have already conditioned. Due to observations on site, namely the small patch size, presence of high levels of noise disturbance caused by traffic and construction and observed predators of Koala within the	A significant impact is not likely

Significant Impact Criteria	Assessment	Impact
	referral area, the site is considered unsuitable for breeding. The 'low usage' results of SATS support the conclusion that the site is not currently used regularly by Koala. It is therefore considered unlikely that the proposed action will disrupt the breeding cycle of any Koala population.	
11. Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The proposed action results in the removal of tree species known to be used by the Koala. Furthermore, at the time of surveys Koala was detected on site both via direct and indirect methods. It is considered that vegetation on site has marginal use by Koala as SAT surveys returned a 'low usage' result. While direct impact and loss of habitat will occur on site a 1.2 ha area within the north of the site will be dedicated to council as environmental open space area. This region will be rehabilitated and as such is anticipated to generate an uplift in the quality of habitat for Koala. As already mentioned, substantial financial offset for impacts to habitat have already conditioned. These funds will contribute to conservation and management activities. It is therefore not anticipated that the proposed development will remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	A significant impact is not likely
12. Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	The referral area is situated within a region of Park Ridge that continues to experience a significant increase in urbanisation to meet the growing housing requirements within SEQ. A number of major threats to the Koala species are present within the local region, including major and arterial roads, nearby construction and residential housing likely to home domestic dogs. Notably, analysis of camera trap data revealed Red Fox within the referral area, which is a known predator to Koala. Therefore, the proposed action is not anticipated to result in the introduction or increase of invasive species that are harmful to the Koala or Koala habitat as these threats are already present within and adjacent to the referral area.	A significant impact is not likely
13. Introduce disease that may cause the species to decline, or	Diseases including chlamydial disease and Koala retrovirus (KoRV) are prevalent among Koala populations in South East Queensland. The 5.65 ha referral area, is not anticipated to significantly decrease the availability of habitat in the local region nor fragment a population causing stress, which is directly linked to increasing outbreak of disease. In undertaking	A significant impact is not likely

Significant Impact Criteria	Assessment	Impact
	directional clearing which allows fauna to move into surrounding areas of intact bushland under the guidance of qualified fauna spotter catcher the proposed action will take all precautions in limiting stress on individuals in the area. It is considered unlikely that the proposed action will introduce disease to the area.	
14. Interfere substantially with the recovery of the species.	The proposed action will impact areas containing Koala habitat trees. Detailed studies utilising both direct and indirect survey methods to detect evidence of Koala within the referral area were conducted. Direct and indirect evidence of Koala was identified. As such the presence of this species has been confirmed within the referral area. SAT survey results returned a 'low usage' result indicating that the site is only occasionally used likely for opportunistic foraging or dispersal. It is possible that Koala's are demonstrating avoidance of the site due to high levels of disturbance within the locality, namely traffic and construction noise and the presence of predators within the referral area. The action is unlikely to interfere substantially with the recovery of the Koala as the proposed action will result in the removal of a relatively small area of vegetation (4.58 ha) surrounded by threatening processes within the locality. Despite relatively intact vegetation within the referral area, vegetation within majority of the site provides limited connectivity potential given surrounding properties to the west, south and east are highly disturbed and are currently or expected to be, mostly cleared. A region of potential higher-value connectivity is present within the north of the referral area and identified on Logan City Council mapping as environmental corridor. This region is to be retained and rehabilitated and dedicated to council as a 1.2 ha environmental open space area. The proposal has been thoroughly assessed and approved at a State and Council level, which has deemed the impact acceptable on the condition that a financial offset is provided. As mentioned, a financial offset of \$1,742, 648.09 will be provided to Council and State for the removal of locally mapped habitat that is also State mapped Koala habitat. It is unlikely that that the proposed action will interfere substantially with the recovery of the species as habitat on-site is of a small total area and the dedication and rehabilitation of a 1.2 ha environmental open space area and significant financial offset paid for the removal will contribute positively to the conservation targets set for Koala. Refer below for an assessment against the EPBC Act Recovery Plan for the Koala.	A significant impact is not likely

The EPBC Act National Recovery Plan for the Koala was published in March 2022. This recovery plan for the listed Koala replaces the National Koala Conservation and Management Strategy (2009-2014) (NRM Ministerial Council 2009). It has been developed with relevant State and Territory Governments to provide an overarching national conservation framework for the listed Koala that aligns with local, state and territory government plans, programs and strategies. However, it does not replace Local, State and Territory Government plans, programs and strategies. It is the first recovery plan for the nationally listed Koala.

The overall goal of the National Recovery Plan is 'to stop the trend of decline in population size of the listed Koala, by having resilient, connected, and genetically healthy metapopulations across its range, and to increase the extent, quality and connectivity of habitat occupied'.

Three (3) key objectives of the Draft National Recovery Plan are provided below with responses relevant to the proposed action:

1. The area of occupancy and estimated size of populations that are declining, suspected to be declining, or predicted to decline are instead stabilised and then increased. The area of occupancy and estimated size of populations that are suspected and predicted to be stable are maintained or increased.

The referral area is mapped as predominantly Category B (remnant) vegetation identified as 'least concern' RE 12.9-10.4. The referral area itself has remained relatively unchanged being reflective of remnant vegetation with a canopy, sub-canopy and ground layer mostly dominated by natives. Some disturbance is present throughout the site as indicated by weed incursion and the low abundance of *E. racemosa* (Scribbly Gum) believed to be a result of historical selective logging. Disturbance is significantly higher within the south of the site within the mapped Category X area which was observed as containing a high number of introduced species in the canopy, sub-canopy and ground layer. Recent clearing of the lot to the east of the referral area has occurred and lots to the west are largely cleared. The lot to the west identified as 2RP170091 has current approvals for reconfiguration under application number RL/51/2024 and the approved plan indicates that vegetation within the south of the site is to be cleared. As such any future connectivity between the referral area and vegetation within the greater locality is restricted to the north. This region of the referral area is dominated by Category B (remnant) vegetation identified as endangered RE12.9-10.12 and is to be retained and rehabilitated as environmental open space area. The environmental open space area within the referral area adjoins a planned environmental open space area within lot 2RP170091 and will add to existing environmental corridor within the greater locality.

At present the site is being utilised by Koala, however, based on SAT surveys returning a 'low usage' result it is likely the habitat is only used occasionally for opportunistic foraging and dispersal. It is possible that Koala are avoiding the site due to high levels of disturbance in the surrounding lots, namely construction and traffic noise to the south and east as well as the presence of predators within the referral area. By retaining and rehabilitating the vegetation within the retained open space area and via financial compensation for the removal of Locally mapped habitat and State Koala habitat it is anticipated that this impact will be offset. The site sits within the known distribution of Koala and is relatively small in size, 5.65 ha of which 4.58 ha is to be removed and 1.2ha is to be retained and rehabilitated. A reduction in the estimated size of the population is not expected due to the marginal use of the site by Koala, small overall size of impact and high levels of disturbance within the locality.

2. Metapopulation processes are maintained or improved.



Detailed studies utilising both direct and indirect survey methods to detect evidence of Koala within the referral area were conducted. Koala was observed to be utilising the site both via direct observation during spotlighting and camera trapping and indirectly via the detection of Koala scat during SAT surveys. Koala usage of the site was determined to be 'low' based on the results of SAT surveys.

The referral area is located in a highly modified landscape and is adjacent to existing and future residential developments, including highly trafficked roads. Clearing of the relatively small referral area directly adjacent to existing residential development will not further fragment areas of vegetation. Furthermore, retention and rehabilitation of the environmental open space area will lead to improved habitat quality and connectivity within the north of the referral area. It is therefore considered unlikely that the project will impact metapopulation processes for the Koala. This is due to the maintenance and improvement of dispersal opportunities and small area of the referral site.

3. Partners, communities, and individuals have a greater role and capability in listed Koala monitoring, conservation, and management.

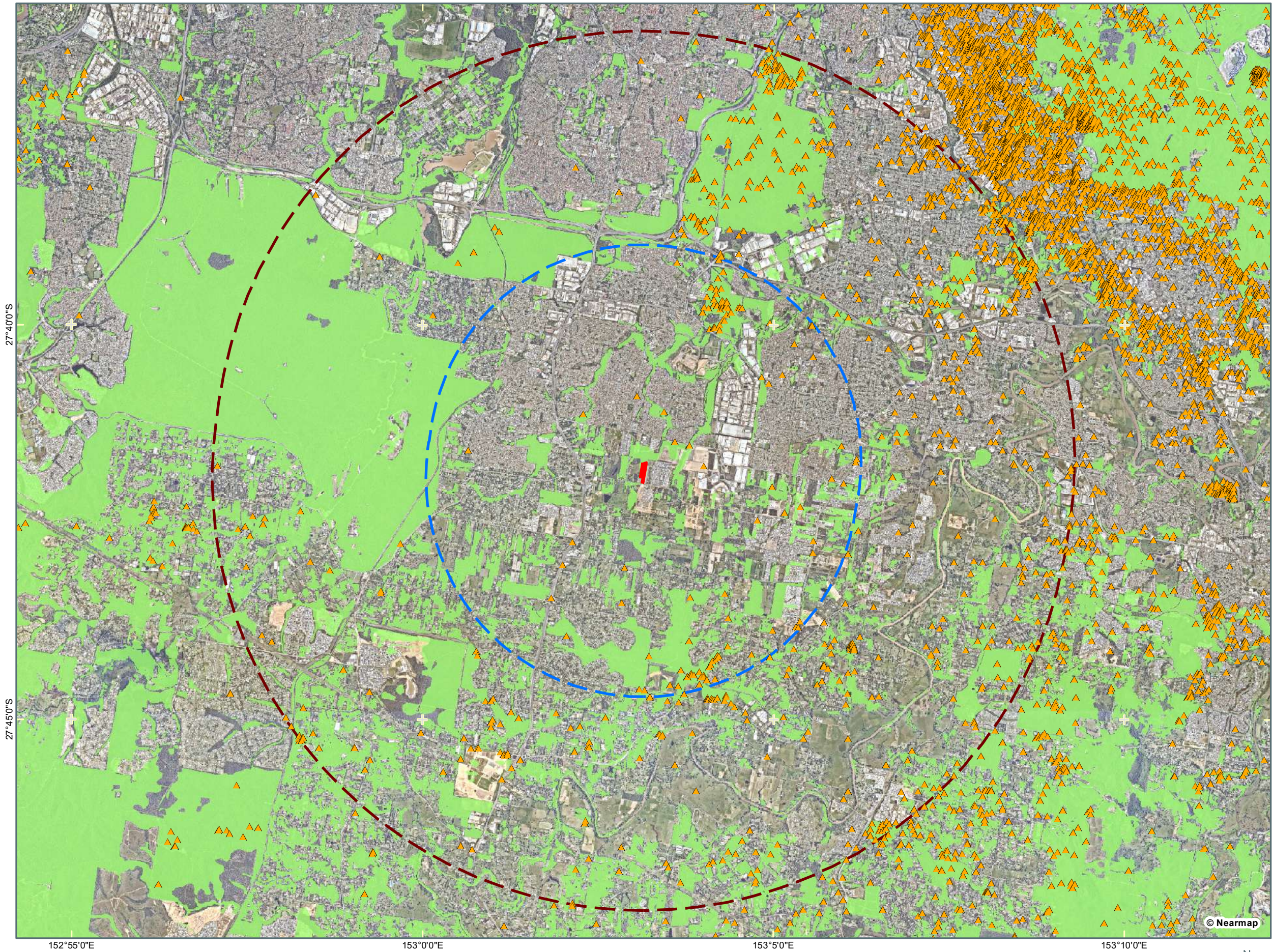
The proposed action will impact areas containing Koala habitat trees. Detailed studies utilising both direct and indirect survey methods to detect evidence of Koala within the referral area were conducted. Koala was observed to be utilising the site both via direct observation during spotlighting and camera trapping and indirectly via the detection of Koala scat during SAT surveys. Usage of the site was found to be 'low' based on the results of SAT surveys.

Although the proposed action will involve the removal of Koala habitat, the potential for a significant impact is mitigated by the small overall area of impact, the existing levels of disturbance in the local area and the protection and improvement of the environmental open space area which supports connectivity between larger regions of remnant vegetation. Furthermore the financial contribution of \$1,742, 648.09 to be paid by the 'proponent' to State and Council will positively contribute to monitoring, conservation and management of Koala.

The results of this assessment determined that there is no potential for the proposed action to have a significant impact on the recovery of Koala,



07. MNES KOALA HABITAT AND RECORDS

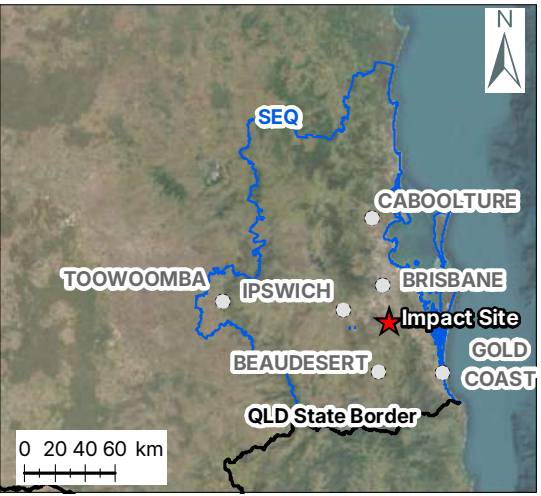


Notes:
The information on this plan is not suitable for any purpose other than the expressed use of the Client. Property dimensions, areas, numbers of lots and contours and other physical features may need verification if the development application is approved and development proceeds, and may change when a full survey is undertaken or in order to comply with development approval conditions. No reliance should be placed on the information on this plan for detailed design or for any financial dealings involving the land. Saunders Havill therefore disclaims any liability for any loss or damage whatsoever or howsoever incurred, arising from any party using or relying upon this plan for any purpose other than as a document prepared for the sole purpose of accompanying a development application and which may be subject to alteration beyond the control of Saunders Havill. Unless a development approval states otherwise, this is not an approved plan.

Layer Sources
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LEGEND

- Impact area
- Site 5km Buffer
- Site 10km Buffer
- Koala Habitat
- Koala sighting record (last 20 years)
- ALA, 2025



8.3. *Pteropus poliocephalus* (Grey-headed Flying-fox)

8.3.1 Conservation Status

The GHFF is listed as Vulnerable under the EPBC Act.

8.3.2 Description

The GHFF is the largest Australian bat with a wingspan of up to one metre. It has dark-grey body fur, a grey head, and a distinctive reddish-brown collar. It is also the only flying-fox with hairy legs right down to its ankles.

8.3.3 Distribution

The GHFF occurs along the south-east coast of Australia, from Rockhampton in central Queensland through New South Wales to western Victoria. During the last few years, the GHFF has also been recorded from Adelaide.

8.3.4 Habitat

The GHFF is heavily dependent on the availability of foraging resources and roost sites. As canopy feeding frugivores and nectarivores, GHFFs frequent fruiting and flowering trees in rainforests, open eucalypt forests, woodlands, *Melaleuca* sp. swamps and Banksia woodlands (Duncan *et al.* 1999). The GHFF is also known to forage in fruit crops and introduced tree species within urban environments. Roost sites for the GHFF are commonly within dense vegetation close to water, primarily rainforest patches, stands of *Melaleuca* sp., mangroves or riparian vegetation.

8.3.5 Recovery Actions

There is now an adopted Recovery Plan for this species at the federal level. It focuses mainly on managing adverse impacts to roosting sites, culling controls, fenced entanglement and public awareness, with reference to foraging habitat. From the recovery guidelines:

Where the existence of important winter and spring flowering vegetation communities is verified in the field, they are considered habitat critical to the survival of the Grey-headed Flying-fox. Back yard fruit trees, orchards or non-native trees that may be used for foraging are not considered to be habitat critical to the survival of the Grey-headed Flying-fox. Habitat critical to the survival of the Grey-headed Flying-fox may also be vegetation communities which:

- contain native species that are known to be productive as foraging habitat during the final weeks of gestation, and during the weeks of birth, lactation and conception (August to May)
- contain native species used for foraging and occur within 20 km of a nationally important camp as identified on the Department's interactive flying-fox web viewer, or
- contain native and or exotic species used for roosting at the site of a nationally important Grey-headed Flying-fox camp as identified on the Department's interactive flying-fox web viewer.

Habitat critical to the survival of the Grey-headed Flying-fox should be the focus for protection and any revegetation initiatives aimed to support the species.

Notably, the recovery plan lists habitat loss as a key threat to the Grey-headed Flying-fox. It is understood that mapping of habitat critical to the survival of the Grey-headed Flying-fox is an initiative of the recovery



plan. The referral area is not considered to maintain important foraging habitat for the Grey-headed Flying-fox (refer below).

The Queensland Government identifies the following recovery actions:

- Identify and map important foraging and roosting habitats
- Prevent the destruction and degradation of important forested habitat, through: identifying guidelines to protect habitat; appropriate zoning; identifying development alternatives and incentives to retain habitat and educating communities.
- Encourage community partnerships and initiatives that protect important habitats, and where possible re-vegetate with foraging trees for GHFF
- Work with orchardists to improve the image of GHFF, and to identify and implement non-destructive methods to protect fruit crops, such as: appropriate netting (not monofilament netting) that is not hung loose over trees (which can entangle bats and birds)
- Reduce negative public attitudes and conflict with humans
- Develop accurate methods for monitoring population size

8.3.6 Significant Impact Assessment

EPBC Act, Grey-headed Flying-fox populations are listed as Vulnerable. The species is not specifically listed under Queensland's *Nature Conservation Act 1992* (Qld) (NCA), however, retains a Least Concern status for the purposes of the Act. The *Referral guideline for management actions in grey-headed and spectacled flying-fox camps* summarise the decision process in considering the likelihood of a significant impact on the Grey-headed Flying-fox or Spectacled Flying-fox schematically. The Guidelines are specifically for the assessment of impacts on Flying-fox camps.

GHFFs are heavily dependent on the availability of foraging resources and roost sites. As canopy feeding frugivores and nectivores, GHFFs frequent fruiting and flowering trees in rainforests, open eucalypt forests, woodlands, *Melaleuca* sp. swamps and *Banksia* woodlands (Duncan et al. 1999). The GHFF is also known to forage in fruit crops and introduced tree species within urban environments. Roost sites for the GHFF are commonly within dense vegetation close to water, primarily rainforest patches, stands of *Melaleuca* sp., mangroves or riparian vegetation. The value of vegetation to the Grey-headed Flying-fox is difficult to assess due to the high mobility of the species in conjunction with timing of flowering of tree species within the assessment area. The maximum nightly foraging distance of GHFF is estimated at 50 kilometres, while most forage within a 15 km radius of daytime roost sites (Tidemann 1998).

Grey-headed Flying-foxes were not observed foraging or roosting within the assessment area during field survey efforts, nor were they observed as fly-over species. Suitable foraging habitat exists within the assessment area, therefore the GHFF has the potential to utilise the investigation area for foraging purposes.

The Referral guideline for management actions in grey-headed and spectacled flying-fox camps states that the guideline does not apply to the following relevant points:

- Actions in the vicinity of camps, such as development actions, firework displays or concerts, which may indirectly affect camps of EPBC Act-listed flying-fox species.
- Actions which may impact on the foraging habitat of EPBC Act-listed flying-fox species. Proponents of actions of this kind should refer to the significant impact guideline 1.1. (4.1.5).



To determine whether the proposed action is likely to have a significant impact on the Grey-headed Flying-fox, an assessment against the *EPBC Significant Impact Guidelines 1.1* is provided in **Table 15**.



Table 15 EPBC Significant impact criteria for vulnerable species – Grey-headed Flying-fox

Significant Impact Criteria	Description	Impact
An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:		
1. Lead to a long-term decrease in the size of an important population of a species	The site contains potential habitat values for the GHFF including winter flowering eucalypt species and other natives that are known to flower between August to May. It is noted one (1) individual was observed foraging during field surveys within the site, and one (1) fly-over observed. No roosts were identified within the referral based on review of the National Flying Fox Monitoring Viewer and field surveys. The nearest roost to the referral area is located approximately 2.2 km north-west of the site (Regent Park, Emerald Drive (433), refer Plan 8). This roost is of national significance with a population level of three or above and has had recent activity. The proposal will impact approximately 4.58 ha of potential foraging habitat for the GHFF. The proposed development will have the impact of removing vegetation that may be intermittently used for foraging at times as there are no roosts located on or directly adjoining the site. However, the surrounding landscape contains abundant and vast areas of potential foraging habitat, particularly to the west within the contiguous vegetation areas of White Rock Conservation Park and Greenbank Military Training Area which are likely to be used preferentially over the vegetation within the impact area and will allow for continued persistence of GHFF's within the region. The GHFF is not considered to occupy the site in any permanent capacity given there are no roosts located on or adjoining the site. Grey-headed Flying-fox roosts are often associated with creeks and streams. A tributary of Scrubby Creek is present north of the site. While no roost is currently recorded in this area the retention and rehabilitation of vegetation within the north of the referral area will enrich the habitat adjoining this waterway. Notably, the proposal will retain 1.2 ha of higher value potential foraging habitat in the north of the site that will continue to provide potential foraging habitat for the GHFF, and substantial offsets are required under existing approvals that will contribute substantially to the regeneration of Eucalypt woodlands at the State and Local level.	A significant impact is not likely



■ Ecological Assessment – Matters of National Environmental Significance

Significant Impact Criteria	Description	Impact
	Despite foraging habitat occurring within the referral area, the area is not considered to provide critical habitat supporting an important population of the species due to the small size of the referral area, significant availability of habitat in the wider region and lack of on-site roosts. For these reasons, the proposed action is unlikely to lead to a long-term decrease in the size of any local GHFF populations.	
2. Reduce the area of occupancy of an important population	South East Queensland contains a permanent population of GHFF that is considered an important population. The proposal will impact approximately 4.45 ha of potential foraging habitat for the GHFF as the proposed action will result in the removal of mature eucalypt vegetation that may be intermittently used for foraging. However, the surrounding landscape contains abundant and vast areas of potential foraging habitat, particularly to the west within the contiguous vegetation areas of White Rock Conservation Park and Greenbank Military Training Area which are likely to be used preferentially over the vegetation within the referral area and will allow for continued persistence of GHFF's within the region. The GHFF is not considered to occupy the site in any permanent capacity given there are no roosts located on or adjoining the site. While one (1) individual was observed foraging within the proposed impact site during the recent field surveys this is attributed to opportunistic foraging behaviour that may be fulfilled in the vegetation to be retained within the north of the referral area and in the surrounding vegetation. Furthermore, existing offsets will contribute significantly to habitat regeneration at the State and Local level. GHFF is not considered to regularly occupy the site as there are no roosts located on or adjoining the site where the species permanently occur. The proposed development is therefore not considered to reduce the area of occupancy of an important population of SEQ GHFF as no part of the proposed development will occur within an area known to be used as a roost by the species.	A significant impact is not likely



■ Ecological Assessment – Matters of National Environmental Significance

Significant Impact Criteria	Description	Impact
3. Fragment an existing important population into two or more	The SPRAT species profile outlines that while there are spatially structured colonies of GHFF, there are no separate or distinct populations due to the constant genetic exchange and movement between camps throughout the species' geographic range. Regardless, the high mobility of the species and significant availability of habitat in the wider region, indicate that the small overall impact area is unlikely to fragment a population into two or more populations.	A significant impact is not likely
4. Adversely affect habitat critical to the survival of a species	The National Recovery Plan for the Grey-headed Flying-fox <i>Pteropus poliocephalus</i> (DAWE, 2021) identifies habitat critical to the survival of the Grey-headed Flying-fox as: • vegetation communities containing winter and spring flowering trees due to their importance in fulfilling the life cycle requirements of the Grey-headed Flying-fox, • contain native species that are known to be productive as foraging habitat during • the final weeks of gestation, and during the weeks of birth, lactation and conception (August to May), • contain native species used for foraging and occur within 20 km of a nationally important camp as identified on the Department's interactive flying-fox web viewer, or • contain native and or exotic species used for roosting at the site of a nationally important Grey-headed Flying-fox camp as identified on the Department's interactive flying-fox web viewer. Suitable foraging habitat is present within the site in the form of stands of eucalypt vegetation. However, given the vast availability of similar vegetation communities containing winter flowering species within the broader landscape such as within White Rock Conservation Park and Greenbank Military Training area it is considered unlikely that the species would regularly utilise and rely on the relatively small area of mapped remnant and high-value regrowth vegetation proposed to be removed with the referral area. Furthermore, existing offsets will contribute significantly to habitat regeneration at the State and Local level.	A significant impact is not likely



Significant Impact Criteria	Description	Impact
	While there was evidence recorded during the recent field surveys of foraging behaviour within the site opportunistically, this area is unlikely to be relied upon to meet life cycle needs, with primary foraging needs ably met within the nearby remnant areas. The habitat on-site, is considered to have the potential to support GHFF in an opportunistic foraging capacity only. It is anticipated that the removal of approximately 4.58 ha of potential foraging habitat will not result in any adverse impacts to critical habitat to the GHFF.	
5. Disrupt the breeding cycle of an important population	The proposed development will require the removal of 4.58 ha of potential habitat containing winter foraging species. While recent field survey did identify one (1) GHFF individual utilising the site for foraging, no roost nor camp site evidence was sighted. Patterns of camp occupation vary, ranging from sites that are inhabited continuously to those that are inhabited only rarely, however, many camps have distinguishable seasonal patterns of occupation. It is therefore considered unlikely that a camp would be established within or immediately adjacent to the subject site. Further, there are plentiful resources located to the west within the contiguous vegetation areas of White Rock Conservation Park and Greenbank Military Training Area that provide more suitable foraging habitat for the species that will fulfil life cycle needs and support breeding. As a result, it is not anticipated that the proposed development will disrupt the breeding cycle of the South East Queensland population.	A significant impact is not likely
6. Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline.	The proposed development will have the impact of removing eucalypt vegetation which may be intermittently used for foraging at times as there are no roosts located on or directly adjoining the site. However, given the vast availability of similar vegetation communities containing winter flowering species within the broader landscape such as within White Rock Conservation Park and Greenbank Military Training Area, it is considered unlikely that the species would regularly utilise and rely on the relatively small volume of vegetation proposed to be removed with the referral area.	A significant impact is not likely



■ Ecological Assessment – Matters of National Environmental Significance

Significant Impact Criteria	Description	Impact
	Given the large areas of similar foraging resources in the broader locality, including within the nearby contiguous habitat areas, it is considered unlikely that the removal of vegetation within the referral area will result in a decline off the species.	
7. Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	GHFF have been identified to forage and roost in habitat that contains both native and exotic species. The recovery plan for GHFF does not specify invasive species that are significantly harmful or detrimental to the species. It is not considered likely that the proposed action will result in invasive species that are harmful to GHFF.	A significant impact is not likely
8. Introduce disease that may cause the species to decline	GHFF are highly mobile and transient within the landscape. The proposed impact is relatively small and not considered to have an impact on the population processes of the species including the transmission of disease. Given there is no camp on or immediately adjacent to the impact site, the project is considered unlikely to introduce disease into the area.	A significant impact is not likely
9. Interfere substantially with the recovery of the species	Recovery objective 1 of The National Recovery Plan for the Grey-headed Flying-fox <i>Pteropus poliocephalus</i> (DAWE, 2021) targets the protection of native foraging habitat, particularly winter and autumn foraging resources as they are a limiting resource for the species. Recovery objective 2 aims to protect and increase roosting habitat of Grey-headed Flying-fox camps. Conservation efforts have focused on protecting known camps and important habitat and halting widespread culling of the species. The site has not been identified as an important habitat or as hosting a known camp. The limited foraging habitat identified on-site was comprised of a mix of remnant and regrowth vegetation. Protected areas containing similar vegetation types are located west of the proposed site within the contiguous vegetation areas of White Rock Conservation Park and Greenbank Military Training area. To reiterate, the development will not impact on any established roosts, and these are considered unlikely to become established within the south of the site due to the high	A significant impact is not likely



■ Ecological Assessment – Matters of National Environmental Significance

Significant Impact Criteria	Description	Impact
	levels of surrounding disturbance. Suitable roosting locations may be present north of the site associated with a tributary of Scrubby Creek. Vegetation within the north of the referral area is to be retained and rehabilitated and as such will improve the habitat value of this area. Given the presence of contiguous foraging habitat in the locality that contains similar vegetation communities to those on-site, it is not considered that the proposal will interfere with the recovery of the species.	



The purpose of the National Recovery Plan for the Grey-headed Flying-fox is to set out the management and research actions necessary to stop the decline of, and support the recovery of the Grey-headed Flying-fox over the next 10 years. The overall objectives of this Grey-headed Flying-fox recovery plan are:

- to improve the Grey-headed Flying-foxes national population trend by reducing the impact of the threats outlined in this plan on Grey-headed Flying-foxes through habitat identification, protection, restoration and monitoring, and
- to assist communities and Grey-headed Flying-foxes to coexist through better education, stakeholder engagement, research, policy and continued support to fruit growers.

The plan addresses the key threats facing the Grey-headed Flying-fox and recovery objectives which are provided below with responses relevant to the proposed action:

1. Identify, protect and increase native foraging habitat that is critical to the survival of the Grey-headed Flying-fox

No roosts are present within the referral area or directly adjacent. A review of the National Flying-fox monitoring viewer identifying The nearest roost to the referral area is located approximately 2.2 km north-west of the site (Regent Park, Emerald Drive (433), refer Plan 8). This roost is of national significance with a population level of three or above and has had recent activity. Habitat critical to the survival of the species is considered important winter and spring flowering vegetation communities. Important winter and spring vegetation communities are those that contain *Eucalyptus tereticornis*, *E. albens*, *E. crebra*, *E. fibrosa*, *E. melliodora*, *E. paniculata*, *E. pilularis*, *E. robusta*, *E. seeana*, *E. sideroxylon*, *E. siderophloia*, *Banksia integrifolia*, *Castanospermum australe*, *Corymbia citriodora citriodora*, *C. eximia*, *C. maculata*, *Grevillea robusta*, *Melaleuca quinquenervia* or *Syncarpia glomulifera* (Eby and Law 2008; Eby 2016; Eby et al. 2019).

Of the species listed above, *Eucalyptus tereticornis*, *E. seeana*, *E. siderophloia*, *E. fibrosa*, *Corymbia citriodora*, *Banksia integrifolia*, *Grevillea robusta* and *Melaleuca quinquenervia* were recorded within the referral area. Therefore, there is potential for the species to occur within the vegetation of the referral area and one (1) Grey-headed Flying-fox individual was observed to be foraging on site during spotlight surveys and one fly-over. In general, the relatively small area (4.58 ha) of vegetation to be removed is unlikely to be habitat critical to the survival of the species especially considering larger contiguous vegetation within the regions to the west associated with Greenbank Military training area and White Rock Conservation Park.

Furthermore, higher value habitat will be retained and rehabilitated on site and existing offsets will contribute significantly to habitat regeneration at the State and Local level.

Therefore, despite foraging habitat occurring within the referral area, the area is not considered to provide critical habitat supporting an important population of the species due to the small size of the referral area, significant availability of habitat in the wider region and lack of evidence of roost on or adjacent to the referral area.

2. Identify, protect and increase roosting habitat of Grey-headed Flying-fox camps.

No roosts were identified within the comprehensive surveys of the referral area in 2025 with the nearest known active roost site located approximately 2.2 km north-west of the referral area. This species was



also not observed roosting within the referral area however one individual was observed to be foraging on site and one fly-over observed during spotlighting surveys.

Preferred roosting habitat for the Grey-headed Flying-fox is poorly understood. However, it is considered unlikely that the 5.65 ha referral area provides significant potential roosting habitat for the species.

3. Determine trends in the Grey-headed Flying-fox population so as to monitor the species' national distribution, habitat use and conservation status.

Not applicable. Mitigation measures will be implemented during construction and operation of the proposed action to reduce threats.

4. Build community capacity to coexist with flying-foxes and minimise the impacts on urban settlements from new and existing camps while avoiding interventions to move on or relocate entire camps.

Not Applicable. There are no observed roosts within the referral area, with the nearest known active roost site located approximately 2.2km north-west of the referral area. Therefore, impacts on GHFF camps as a result of the proposed development are considered highly unlikely.

5. Increase public awareness and understanding of Grey-headed Flying-foxes and the recovery program and involve the community in the recovery program where appropriate.

Not Applicable. There are no observed roosts within the referral area, with the nearest known active roost site located approximately 2.2km north-west of the referral area.

6. Improve the management of Grey-headed Flying-fox camps in areas where interaction with humans is likely.

Not Applicable. There are no observed roosts within the referral area, with the nearest known active roost site located approximately 2.2km north-west of the referral area. Therefore, human interaction with GHFF as a result of the proposed development is considered highly unlikely.

7. Significantly reduce levels of licenced harm to Grey-headed Flying-foxes associated with commercial horticulture.

Not applicable – proposed action is for a residential development not commercial horticulture.

8. Support research activities that will improve the conservation status and management of Grey-headed Flying-foxes.

Not applicable.

9. Reduce the impact on Grey-headed Flying-foxes of electrocution on power lines, and entanglement in netting and on barbed-wire.

The proposed action is for a residential development where the implementation of netting and barbed wire is unlikely. Additionally, the risk of entanglement and electrocution associated with the proposed action is considered minor due to the limited potential for GHFF to enter the referral area following the removal of vegetation.

At present, the potential for GHFF to enter the referral area is already considered minor due to the relatively small size of the referral area. Additionally, no roosts were identified within the referral area, and the nearest known roost site located approximately 2.2 km north-west of the referral area. Although vegetation within the referral area contains some important winter and spring foraging species for the



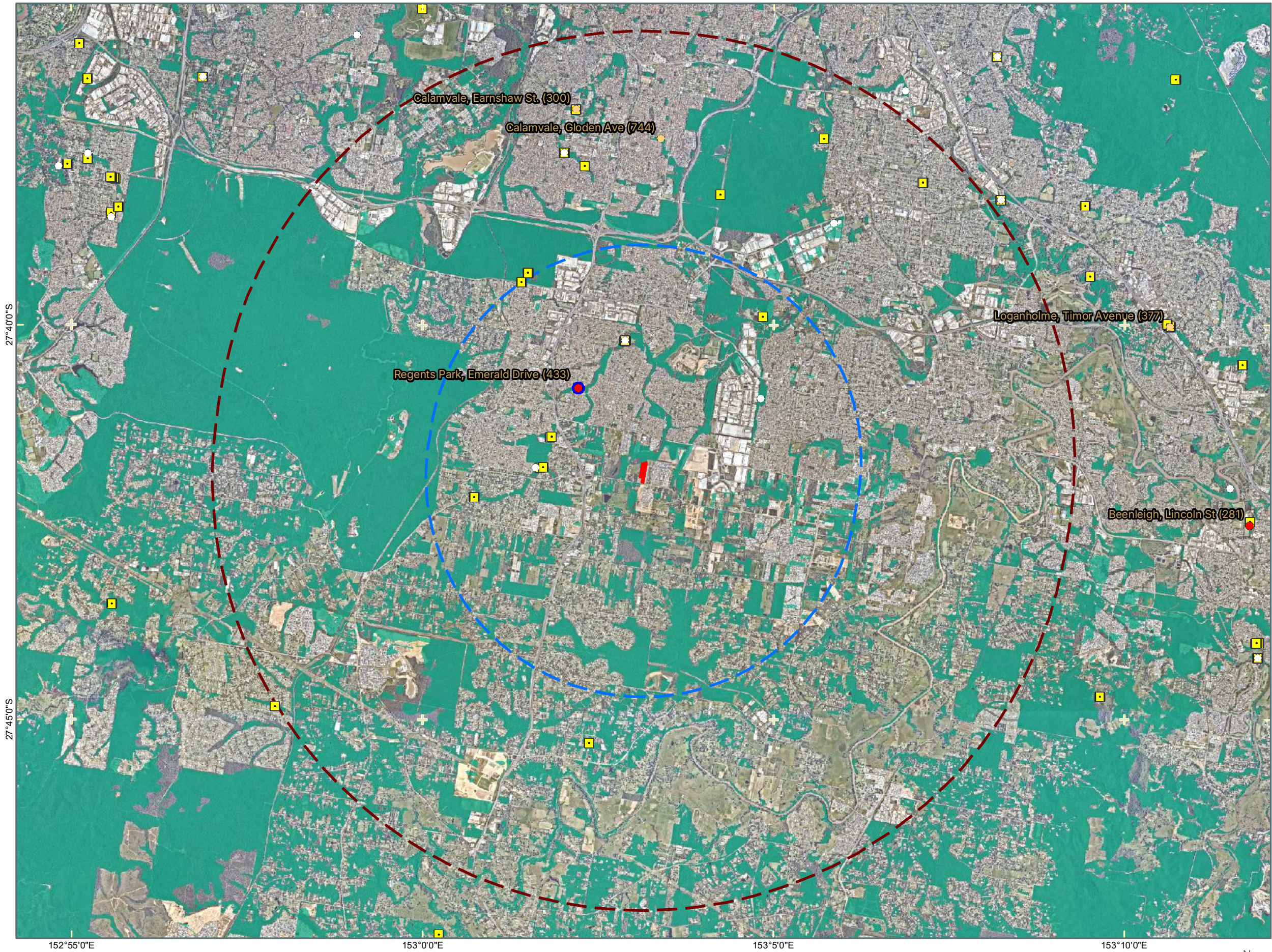
Grey-headed Flying-fox, the site and impact are relatively small. Surrounding areas of intact remnant and regrowth vegetation provide higher value potential foraging habitat for this species. Furthermore, the region of vegetation within the referral area with higher ecological value and greatest connectivity to contiguous patches of vegetation is to be retained and rehabilitated as an environmental open space area.

While the risk of entanglement and electrocution is considered unlikely due to the low likelihood individuals will enter the area, potential impacts will be managed through the implementation of mitigation measures and procedures outlined within future management documents including the VC&MP and FMP. As such, the proposed action is considered unlikely to impact the recovery of this species.

The results of this assessment determined that it is unlikely that the proposed action will have a significant impact on the Grey-headed Flying -fox.



08. MNES - GREY-HEADED FLYING-FOX HABITAT AND RECORDS



Notes:
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LEGEND

- Impact area
- Site 5km Buffer
- Site 10km Buffer
- Grey-headed Flying-fox foraging habitat
- Grey-headed Flying-fox sighting record (last 20 years) ALA, 2025

Grey Headed Flying Fox Camp Locations (last survey data published in 2024)

- Grey-headed Flying Fox roost inactive within recent surveys
- Grey-headed Flying Fox roost active within recent surveys
- Grey-headed Flying Fox roost active within recent surveys with a population level of 3 or above
- Nationally significant Grey-headed Flying Fox roost active within recent surveys
- Nationally significant Grey-headed Flying Fox roost active within recent surveys with a population level of 3 or above



8.4. *Petauroides Volans* (Greater Glider)

8.4.1 Conservation Status

The Greater Glider is listed as Endangered under the EPBC Act and NCA as of July 2022.

8.4.2 Description

The Greater Glider (southern and central) is the largest gliding possum in eastern Australia. It has a head and body length of 35–46 cm, tail length of 45–60 cm, and a weight range of 900–1700 g, with females being larger than males. The Greater Glider (southern and central) has thick fur that increases its apparent size. Its fur colour is white or cream below and varies from dark grey, dusky brown through to light mottled grey and cream above. It has a long furry tail, large furry ears and a short snout. Its tail is not prehensile, and the gliding membrane extends from the forearm to the tibia.

8.4.3 Distribution

The Greater Glider is restricted to eastern Australia, occurring from the Windsor Tableland in north Queensland through to central Victoria (Wombat State Forest), with an elevational range from sea level to 1200 m above sea level.

8.4.4 Habitat

The Greater Glider is largely restricted to eucalypt forest and woodlands. It is primarily folivorous with a diet mostly comprising of eucalypt leaves and occasionally flowers. It is typically found in highest abundance in taller, montane, moist eucalypt forests with relatively old trees and abundant hollows. The species favours forests with a diversity of eucalypt species, due to seasonal variation in its preferred tree species.

During the day it shelters in tree hollows, with a particular preference for large hollows in large, old growth trees (Smith et al., 2007). The presence of live, hollow-bearing trees is thought to be a limiting factor within otherwise suitable habitat. Large, continuous tracts of mature woodland and forest with a minimum of 2–4 suitable hollows per 2 ha is considered essential for sustaining a population (Eyre, 2002). The species is considered to be particularly sensitive to forest clearance and intensive logging practices (Kavanagh and Wheeler, 2004). Subsequently, Greater Gliders have relatively low persistence in small forest fragments and disperse poorly across vegetation that is not native forest. Modelling suggest that they require native forest patches of at least 160 km² to maintain viable populations (Eyre, 2002).

8.4.5 Threats

Key threats to the Greater Glider (southern and central) are frequent and intense bushfires, inappropriate prescribed burning, climate change, land clearing and timber harvesting (DCCEEW. 2022). In particular is the loss of breeding habitat (hollows) and loss and fragmentation of old-growth forests.

8.4.6 Significant Impact Assessment

Greater Glider was identified in the desktop assessment as a threatened species that has the potential to be impacted by the proposed development. Field surveys found the habitat on-site to be potentially suitable for this species but relatively fragmented, noting that the site maintains characteristics that may be viewed as habitat critical to the survival of the species as per the conservation advice, namely, large contiguous areas of Eucalypt forest that contain mature hollow-bearing trees and a diverse range of the



species' preferred food species in a particular region. The site does maintain Eucalypt woodland made up of suitable foraging species, however, is relatively fragmented and lacking in more mature vegetation that might maintain enough hollows resources.

While habitat on site could potentially meet the definition of habitat critical to the survival of the Greater Glider as per the conservation advice, it is important to consider its relative habitat quality and factors that may diminish the relative suitability of the site to support Greater Glider now and into the future. The following discussion provides context around relative suitability of the site for the species and supports the conclusion that significant impacts on the species are not likely.

Plan 9A shows the high level of fragmentation displayed by the potential habitat on site, noting in particular the relatively disturbed landscape between the site and records for the species. **Plan 9B** depicts the current disturbance adjoining the site and the edge effects imposed, including existing development to the west, south and east, roads either constructed or under construction to the east and south, and development further in all directions. It is clear that the impact site has remained a relatively small intact patch fragmented by historical clearing (refer **Plan 9C** and **Plan 9D**), noting only the site and equally fragmented areas to the north are now mapped by the State as remnant (refer **Plan 9E**). Of note, the Queensland Government defines Remnant Vegetation as meeting 70% of height and 50% of cover of the Regional Ecosystem benchmarks, and does not imply never cleared. As discussed above, this does not imply the area has never been cleared, rather it harbors trees that might meet remnant thresholds against the benchmarks for height and cover at the GIS scale.

Notably, the nearest records for the species within the last five years are 2.7 km to the south-south-east and severely fragmented from the impact site by historical clearing, major infrastructure, urban development and a lack of contiguous remnant (refer **Plan 9F**). This is not unexpected given the high levels of disturbance and fragmentation in and surrounding the impact area. This is further apparent in mapping by Griffith University, Queensland, of relative forest age that shows the remnant portion of the site is considered mostly 'young-intermediate' aged vegetation, with some relatively small patches of 'intermediate', 'intermediate to mature' and 'mature' aged vegetation around the periphery (Refer **Plan 9G**).

With respect to likelihood that the site will provide habitat for the species into the future, the site and surrounds are slated for future development (refer **Plan 9H**) and it is noteworthy that the site is significantly fragmented by existing and approved development, including EPBC Act approved residential development sites and limited extant contiguous vegetation (**Plan 9H**). The planning intent for the site and surrounds is to be developed for urban uses (refer **Plan 9I**). In consideration of existing and future development in and adjoining the site, it site is not considered a suitable fragment for future colonisation by the Greater Glider.

To determine whether the proposed action is likely to have a significant impact on the Greater Glider, an assessment against the *EPBC Significant Impact Guidelines 1.1* is provided in **Table 16**. The results of this assessment determined that a significant impact on the Greater Glider is not likely.



Table 16 EPBC Significant impact criteria for critically endangered and endangered species – Greater Glider

Significant Criteria	Impact	Assessment	Impact
An action is likely to have a significant impact on a critically endangered or endangered species if there is a real chance or possibility that it will:			
Lead to a long-term decrease in the size of a population		The referral area of 5.65 ha is mapped as containing predominantly Category B (remnant) vegetation. Native canopy species within the referral area include <i>Angophora leiocarpa</i> (Smooth Bark-Apple), <i>Corymbia citriodora</i> (Spotted Gum), <i>Corymbia intermedia</i> (Pink Bloodwood), <i>Eucalyptus fibrosa</i> (Broad-leaved Red Ironbark), <i>Eucalyptus major</i> (Grey Gum), <i>Eucalyptus propinqua</i> (Small-fruited Grey Gum), <i>Eucalyptus racemosa</i> (Scribbly Gum), <i>Eucalyptus seeana</i> (Narrow-leaved Red Gum), <i>Eucalyptus siderophloia</i> (Grey Ironbark), <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Lophostemon suaveolens</i> (Swamp Box). As such vegetation on site would meet the broad definition of habitat critical to the survival of the Greater Glider. The species was not observed on-site despite targeted nocturnal surveys. Potentially suitable foraging habitat exists on site in the form of Eucalypt woodland and hollow trees are present at low densities. It should be noted vegetation on site was not reflective of wet montane vegetation. Greater Glider is known to prefer large, mature trees for foraging and hollows within living trees for denning. Twenty (20) hollow-bearing trees were recorded within the referral area, ten (10) of which were dead/stag trees. Twelve (12) hollows of suitable size for Greater Glider were identified within the referral area. This gives a tree hollow density of 2.12 within the 2-4 hollows per 2 hectares. It should be noted only 3 hollows of suitable size for Greater Glider in live trees were present on site, resulting in a live den hollow density of 0.5. The vegetation on-site provides significantly limited connectivity potential given surrounding properties to the south, east and west are mostly or entirely cleared and highly disturbed (refer analysis earlier). The Lot identified as 2RP170091 to the west of the referral area has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that majority of the site is to be cleared apart from a region in the north of the lot that is to be retained as environmental open space area. This area aligns with the proposed environmental open space area within the referral area. Greater Glider is known to be particularly sensitive to areas of high disturbance and is unlikely to utilise vegetation close to these areas. The referral area is located adjacent to current residential developments and highly modified areas.	A significant impact is not likely

Significant Criteria	Impact	Assessment	Impact
		A 100 m disturbance buffer has been applied to the referral area from the east, south and west leaving less than 0.1 ha of vegetation within the site without impacts from surrounding disturbance. (Plan 9B). In addition to the retention and rehabilitation of the environmental open space area a financial contribution for the removal of locally mapped Primary Vegetation and State mapped Koala habitat will be paid to the State and Council totaling \$1,742,648.09. Suitable habitat for Koala and Greater Glider has significant overlap so the uplift in habitat quality resulting from the rehabilitation of the open space area and funds contributing towards conservation and management activities will also likely have a net benefit to Greater Glider. Furthermore, under State approval all hollows within the clearing area will be salvaged and installed as nest boxes within retained vegetation on site or within another approved lot. It is considered highly unlikely that the removal of vegetation within the referral area would affect the viability or size of any Greater Glider population given no population is recognised in the area, no evidence was found of the species occurring on-site and the level of disturbance is likely to deter the Greater Glider from dispersing to or through the site. Given the species' preference for live denning trees, it is considered highly unlikely that the site could support a breeding population of the species. As such it is considered unlikely that removal of vegetation within the referral area will result in a long-term decrease in the size of a population.	
Reduce the area of occupancy of the species		Targeted surveys did not detect any evidence of Greater Glider within the referral area, suggesting the vegetation is not utilised by the species. A review of ALA indicates there are fifty-four (54) recorded sightings of the species within 5 km of the site. The vast majority of these records are clustered within a large patch of vegetation approximately 2.7 km south-south-east of the site with effectively no connectivity between it and the referral area and multiple main roads dissecting vegetation corridors. Of the 5.65 ha referral area, less than 0.1 ha of vegetation is considered unaffected by a 100 m disturbance buffer on site. Furthermore, only 10 live hollow-bearing trees were present across the referral area and none were present outside of the disturbance buffer. No Greater Glider individuals were recorded on-site despite targeted surveys including extensive spotlighting. Therefore, it is anticipated that the removal of vegetation on-site will not reduce the area of	A significant impact is not likely

Significant Criteria	Impact	Assessment	Impact
		occupancy for Greater Glider. In addition, the region with the highest quality habitat value relative to the Greater Glider conservation advice within the referral area is proposed to be retained and rehabilitated as an environmental open space area.	
Fragment an existing population into two or more populations		There is no evidence that an existing population of Greater Glider is present on-site based on detailed contemporary field surveys and historical records, nor are they expected to occur in the future given fragmentation and planning intent. Less than 0.1 ha of vegetation within the site is not impacted by a 200 m disturbance buffer. Vegetation within the south of the site demonstrates the highest level of disturbance and has no connectivity due to existing and future anticipated land use. The lot to the east is currently entirely cleared of non-juvenile native trees and lots to the west are either highly disturbed or have approval for residential development. The area with the highest connectivity occurs within the north of the referral area. This region is to be retained and rehabilitated. Furthermore, under State approval all hollows within the clearing area will be salvaged and installed as nest boxes within retained vegetation on site or within another approved lot. In addition to the high levels of disturbance and the limited size of the subject area it is not anticipated to be able to support a population of Greater Glider. Nor is it connected to habitat that might support a population. As such it is considered unlikely that the project will fragment an existing population.	A significant impact is not likely
Adversely affect habitat critical to the survival of a species		Detailed targeted surveys did not detect any evidence of Greater Glider within the referral area, suggesting the vegetation on-site is not utilised by the species. A review of ALA indicates there are fifty-four (54) recorded sightings of the species within 5 km of the site. The vast majority of these records are clustered within a large patch of remnant vegetation approximately 2.7 km south-south-east of the site and with effectively no connectivity between the referral area and patch with multiple main roads and no continuous corridors of vegetation between them. While the referral area does contain vegetation types that constitute suitable forage habitat for Greater Glider and hollows are present on-site, the referral area contains a limited area (less than 0.1 ha) of vegetation not impacted by a 100 m disturbance buffer. Therefore, while habitat that meets the broad definition of habitat critical to the survival of the species occurs, it is not considered suitable for Greater	A significant impact is not likely

Significant Criteria	Impact	Assessment	Impact
		Glider. Disturbance within the locality is anticipated to increase with residential development currently occurring to the east of the site and an approved development to the west. The region of highest ecological value within the referral area occurs within the north of the site. This region is to be retained and rehabilitated as environmental open space area that will be dedicated to Council at the conclusion of the project. The vegetation within the referral is not considered to facilitate dispersal for the species given surrounding properties are already mostly clear of native vegetation. The <i>Petauroides volans</i> (Greater Glider (southern and central) Conservation Advice (DCCEE, 2022) defines habitat critical to the survival of the Greater Glider as: • large contiguous areas of eucalypt forest, which contain mature hollow-bearing trees and a diverse range of the species' preferred food species in a particular region; and • smaller or fragmented habitat patches connected to larger patches of habitat, that can facilitate dispersal of the species and/or that enable recolonization; and • cool microclimate forest/woodland areas (e.g. protected gullies, sheltered high elevation areas, coastal lowland areas, southern slopes); and • areas identified as refuges under future climate changes scenarios; and • short-term or long-term post-fire refuges (i.e. unburnt habitat within or adjacent to recently burnt landscapes) that allow the species to persist, recover and recolonize burnt areas. The referral area contains less than 0.01 ha of vegetation potentially not impacted by disturbance. The small size of the referral area (5.65 ha) and linear shape make it highly susceptible to edge effects. Greater Glider is highly sensitive to disturbance and is unlikely to utilise habitat impacted by edge effects. Therefore, while habitat critical to the survival of the species may occur, it is anticipated that the proposed development will not have a significant impact on the species.	
Disrupt the breeding cycle of a population		Detailed targeted surveys did not detect any evidence of Greater Glider within the referral area, suggesting the vegetation on-site is not utilised by Greater Glider. A review of ALA indicates there are fifty-four (54) recorded sightings of the species within 5 km of the site. The vast majority of these records are clustered within a large patch of remnant vegetation approximately 2.7 km south-south-east of the	A significant impact is not likely

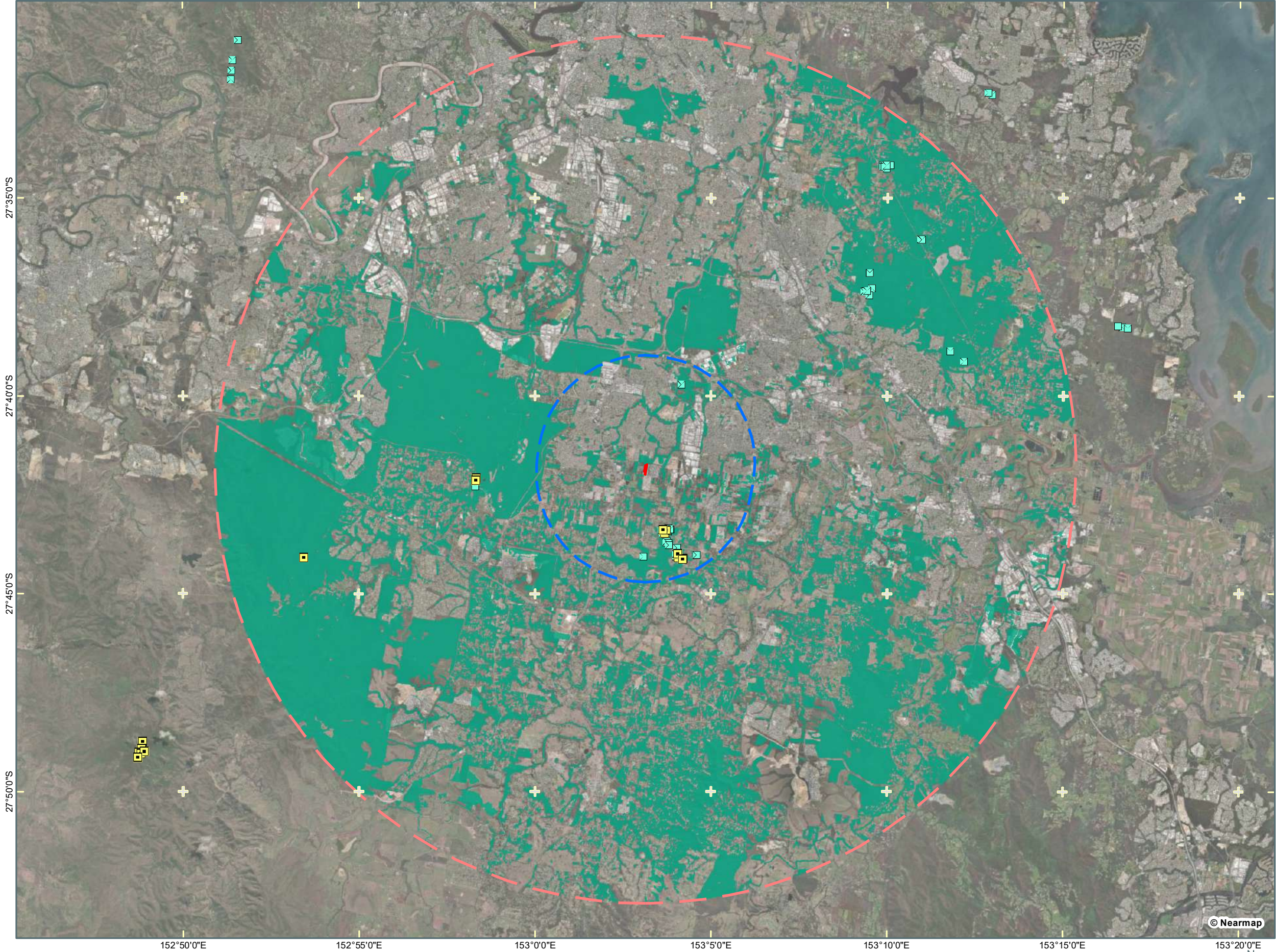
Significant Criteria	Impact	Assessment	Impact
		site and with effectively no connectivity between it and the referral area and with multiple main roads occurring between them and no continuous corridors of vegetation. Field surveys identified twenty (20) hollow bearing trees on site, containing a total of thirty-three (33) hollows, fifteen (15) that are within dead (stag) trees and eighteen (18) in living trees. Twelve (12) of the hollows in all trees on site were of suitable size for Greater Glider (over 100 mm). Hollows within living trees are known to be favored by the Greater Glider for denning of which only three (3) suitably sized hollows were identified. All hollows within the clearing area will be salvaged and installed as nest boxes within retained vegetation on site or within another approved lot. The referral area is highly disturbed and susceptible to edge effects. Greater Glider is highly susceptible to disturbance and is unlikely to utilise vegetation within 100 m of disturbance. Therefore, vegetation on site is not considered to be suitable for Greater Glider now or in the future. Furthermore, targeted spotlighting surveys of hollows within the referral area did not detect the presence of the species. It is not expected that Greater Glider is currently utilising the referral area due to the relatively small size of the site (5.65 ha), narrow status, limited connectivity and high levels of disturbance. As a result, it is not considered that the proposed action would disrupt the breeding cycle of a population of Greater Glider as there is a lack of indication of breeding population on or near the site and the area is considered small and of low probability to be utilised by the species. Furthermore, all hollows removed via clearing will be replaced as nest boxes meaning all potential breeding habitat lost will be replaced.	
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline		The proposed action will impact areas of the referral area containing eucalypt woodland, broadly considered as the potential foraging habitat for Greater Glider. However, the referral area contains less than 0.1 ha of vegetation not impacted by a 100 m disturbance buffer. This region is within the part of the site designated to retained as environmental open space area. Field surveys identified that the referral area does contain hollow bearing trees but hollows within live trees of adequate size were limited with only 10 being identified. Most of the vegetation within the referral area is not considered to facilitate dispersal for the species as properties to the west, south and east are almost entirely cleared with construction currently occurring to the east and Lot 2RP170091 having current approvals for reconfiguration under application	A significant impact is not likely

Significant Criteria	Impact	Assessment	Impact
		number RL/51/2024. A region within the north on the referral area is to be retained and rehabilitated as an environmental open space area. This region is connected to a network of retained vegetation identified on Logan City Council mapping as an environmental corridor. The environmental open space area will provide and maintain connectivity between remnant vegetation within the greater region. Furthermore, a financial contribution of \$1,742,648.09 is to be paid by the proponent to the Council and State to offset impacts to State mapped Koala habitat and locally mapped Primary Vegetation Management area. These funds will contribute to environmental management and restoration activities. Furthermore all hollows removed on site will be replaced with nest boxes within retained vegetation on site or within another approved lot. As there is no evidence a local Greater Glider population utilises the referral area now or in the future, it is considered that the proposed action will not impact the habitat on-site to the extent that the species is likely to decline.	
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat		The proposed action is not anticipated to significantly increase threats on site compared to baseline conditions as the referral area is located in a landscape that has been subject to extensive historical and contemporary modification. A number of major threats to the Greater Glider are present within the local region, including major and arterial roads and residential housing likely to have domestic dogs. Notably, analysis of motion camera data revealed Red Fox within the referral area, which is a known threat to Greater Glider populations. The proposed action is not anticipated to result in the introduction or increase of invasive species that are harmful to the Greater Glider as these species are already present within the referral area and a population of Greater Glider is considered highly unlikely to occur.	A significant impact is not likely
Introduce disease that may cause the species to decline, or		The project is unlikely to introduce disease into the area, and therefore no significant impact is considered to result from the proposed action.	A significant impact is not likely
Interfere substantially with the recovery of the species.		Detailed targeted surveys did not detect any evidence of Greater Glider within the referral area, suggesting the vegetation on-site is likely not utilised by Greater Glider. This is further supported by analysis that indicates that less than 0.1 ha of vegetation within the referral area is not impacted by a 100 m disturbance buffer. Greater Glider is highly	A significant impact is not likely

Significant Criteria	Impact	Assessment	Impact
		sensitive to disturbance and known to avoid habitat that is impacted by edge effects. The recovery actions of the Greater Glider are generally around preventing impacts from fires to the species and the removal and fragmentation of habitat. The proposed action is not considered to interfere with the recovery of the species because no habitat considered viable to support Greater Glider is present on site due to the small size and status of the referral area and the presence of significant disturbance to the south, east and west of the site. The region of the site that has the highest ecological value and potential to provide connectivity between more extensive areas of remnant vegetation within the region is to be retained and rehabilitated as an environmental open space area. Any hollows removed via clearing will be replaced one for one with nest boxes installed within the retained vegetation on site or within another approved lot. The proposed action will not Interfere substantially with the recovery of the species.	

The results of this assessment determined that it is unlikely that the proposed action will have a significant impact on Greater Glider.

09A. MNES - GREATER GLIDER HABITAT RECORDS



Notes:
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LEGEND

Impact area

Site 5km Buffer

Site 20km Buffer

Greater glider habitat within 20km of impact area

Petauroides volans (Greater Glider)

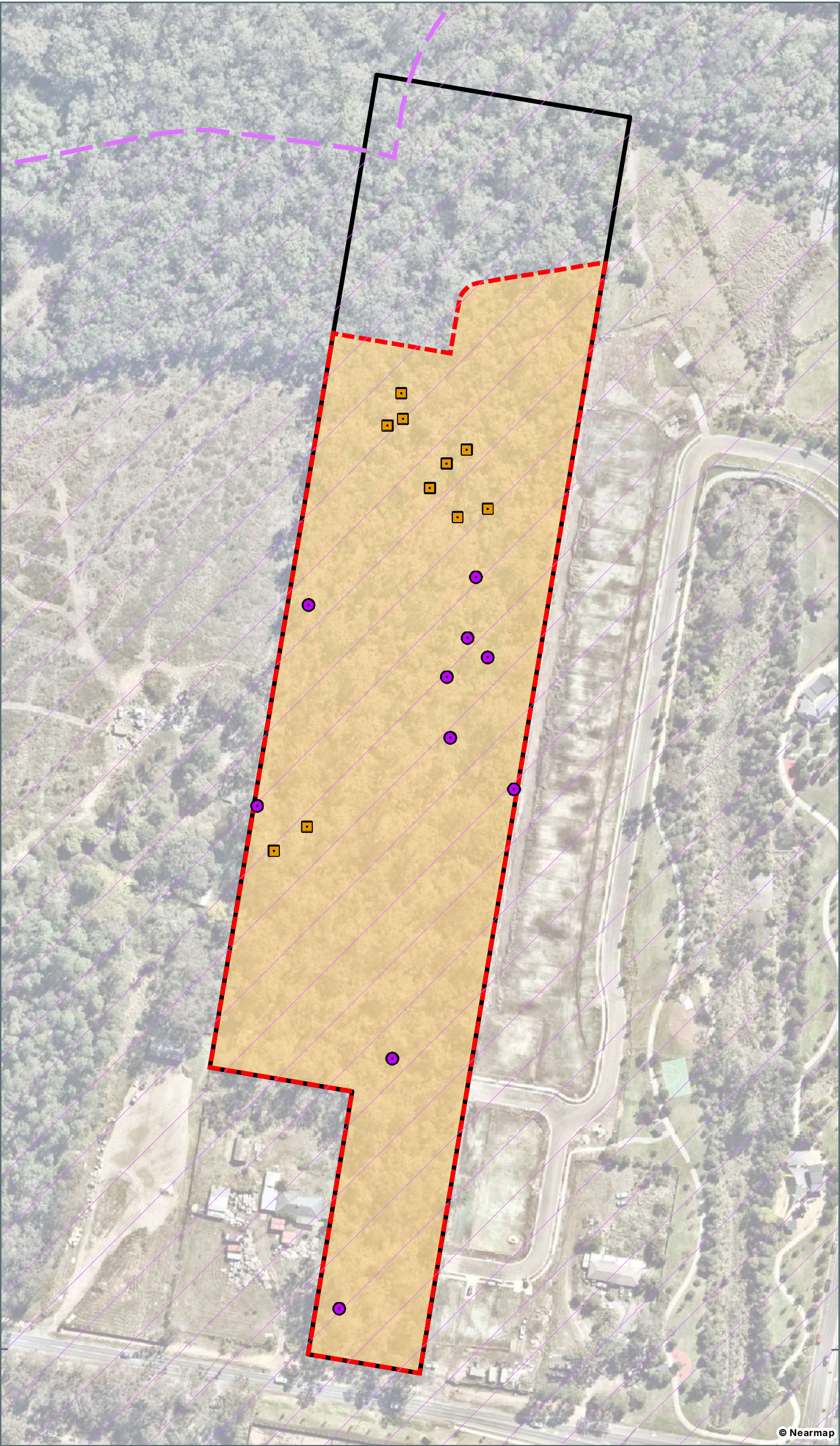
record from 2021 to present - 10 within 5km of Referral Area (ALA, 2026)

Petauroides volans (Greater Glider)
record from 2005 to 2020 - 29 within 5km of Referral Area (ALA, 2026)

*Obscured records have been filtered out of this plan



09b. MNES - GREATER GLIDER HABITAT IMPACT



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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- 100m existing disturbance buffer
- Greater Glider Habitat impact area [4.58 ha]
- Hollow bearing stag (dead) to remove (15 hollows)
- Hollow bearing tree (alive) to remove (18 hollows)



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP

N
1:1,750 @ A3 | Transverse Mercator | GDA 2020 | Zone 56

Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 09b MNES GG Impact A



09C. MNES - GREATER GLIDER CONTEMPORARY AERIAL



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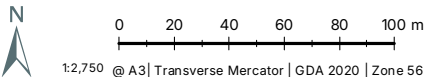
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LEGEND

-  Impact Site
-  Impact area



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP



Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 09c MNES GG Aerial A



09D. MNES - GREATER GLIDER 1982 AERIAL



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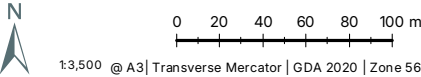
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LEGEND

- Impact Site
- Impact area



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP



Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 09d MNES GG Aerial A



09E. MNES - GREATER GLIDER VMA REMNANT



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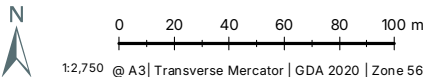
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LEGEND

- Impact Site
- Impact area
- VMA Remnant Vegetation



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP



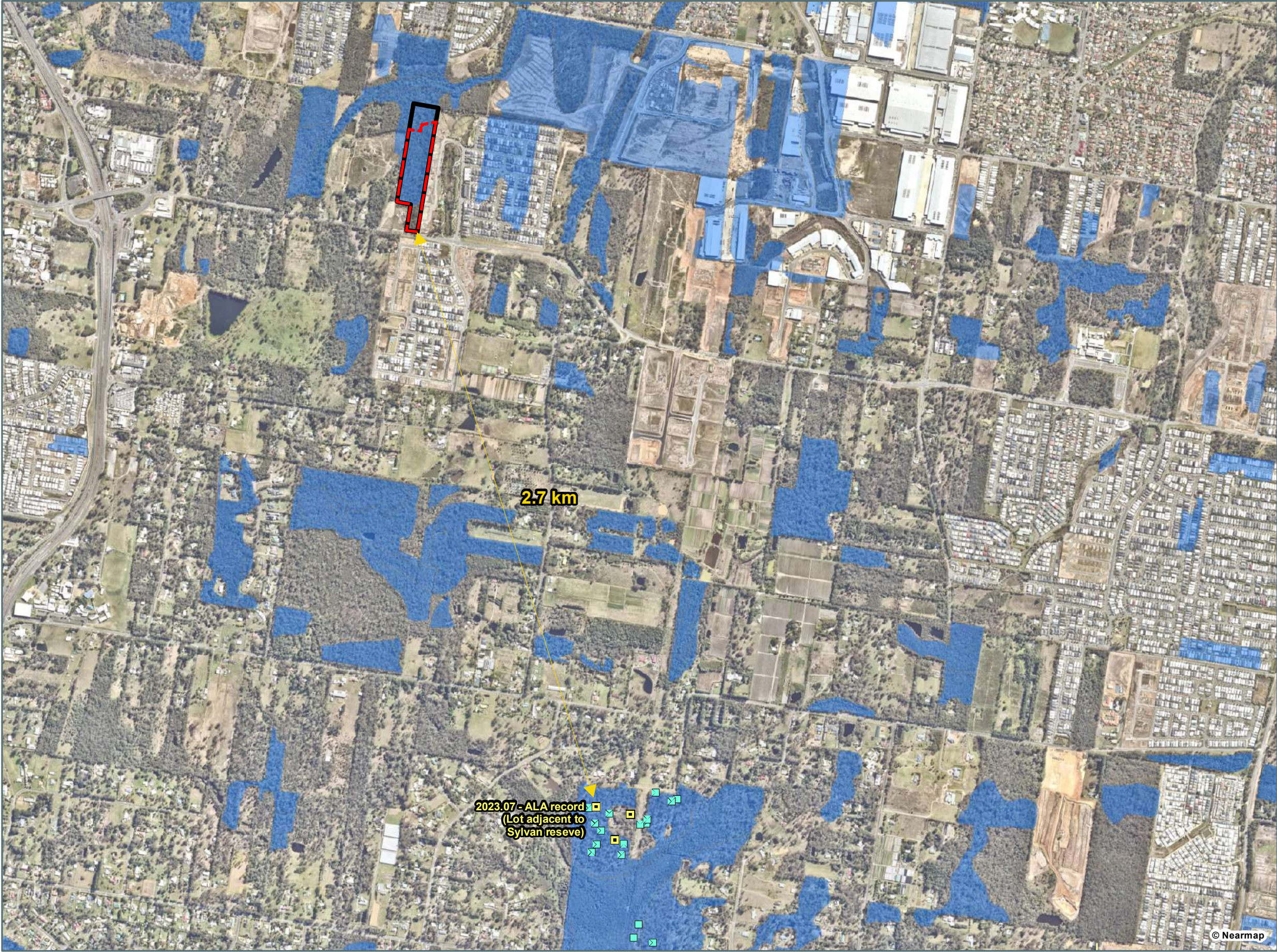
Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 09e MNES GG VMA A



09F. MNES - GREATER GLIDER RECORD DISTANCE



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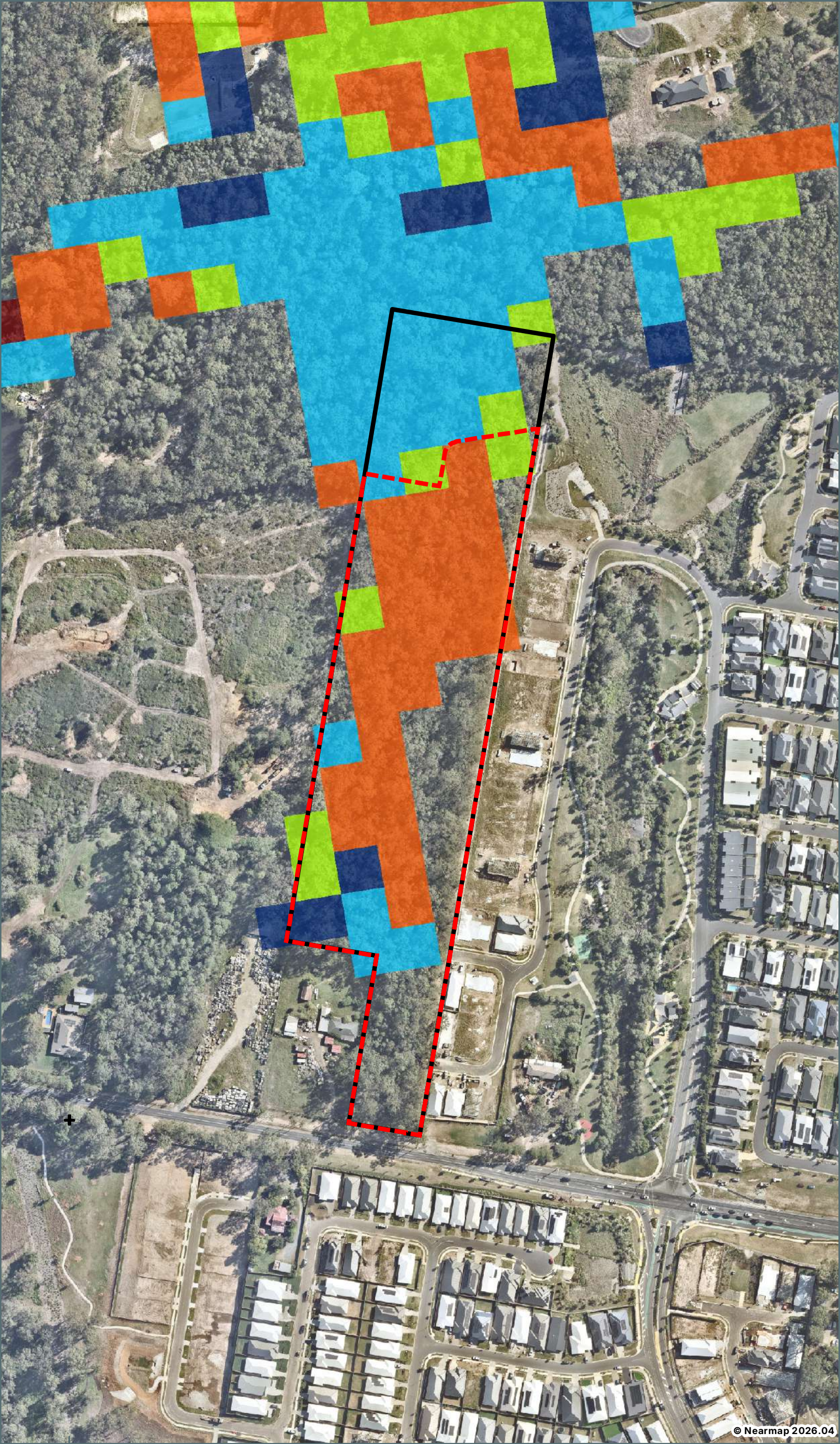
LEGEND

- Impact site
- Impact area
- VMA Remnant Vegetation
- Petauroides volans* (Greater Glider) record 2020 - present (ALA, 2026)
- Petauroides volans* (Greater Glider) record from 2005 to 2020 (ALA, 2026)

*Obscured records have been filtered out of this plan



09 G.MNES - GREATER GLIDER FOREST MATURE TYPE MAP (GRIFFITH UNIVERSITY)

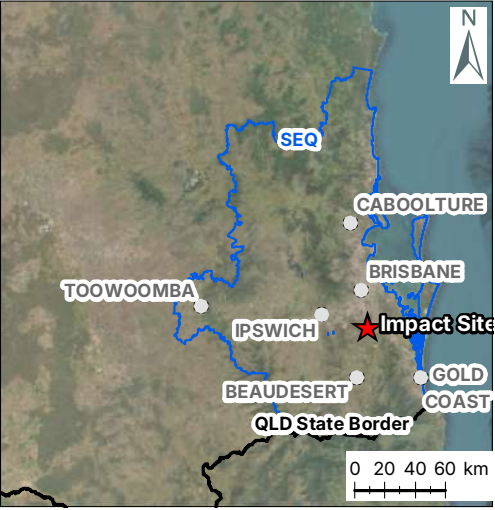


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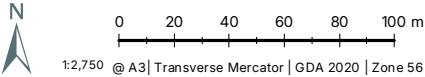
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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- Forest Maturity**
 - Mature Vegetation
 - " (Intermediate to Mature Aged Vegetation)
 - Intermediate Aged Vegetation
 - " (Young to Intermediate Aged Vegetation)
 - Young Vegetation



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP



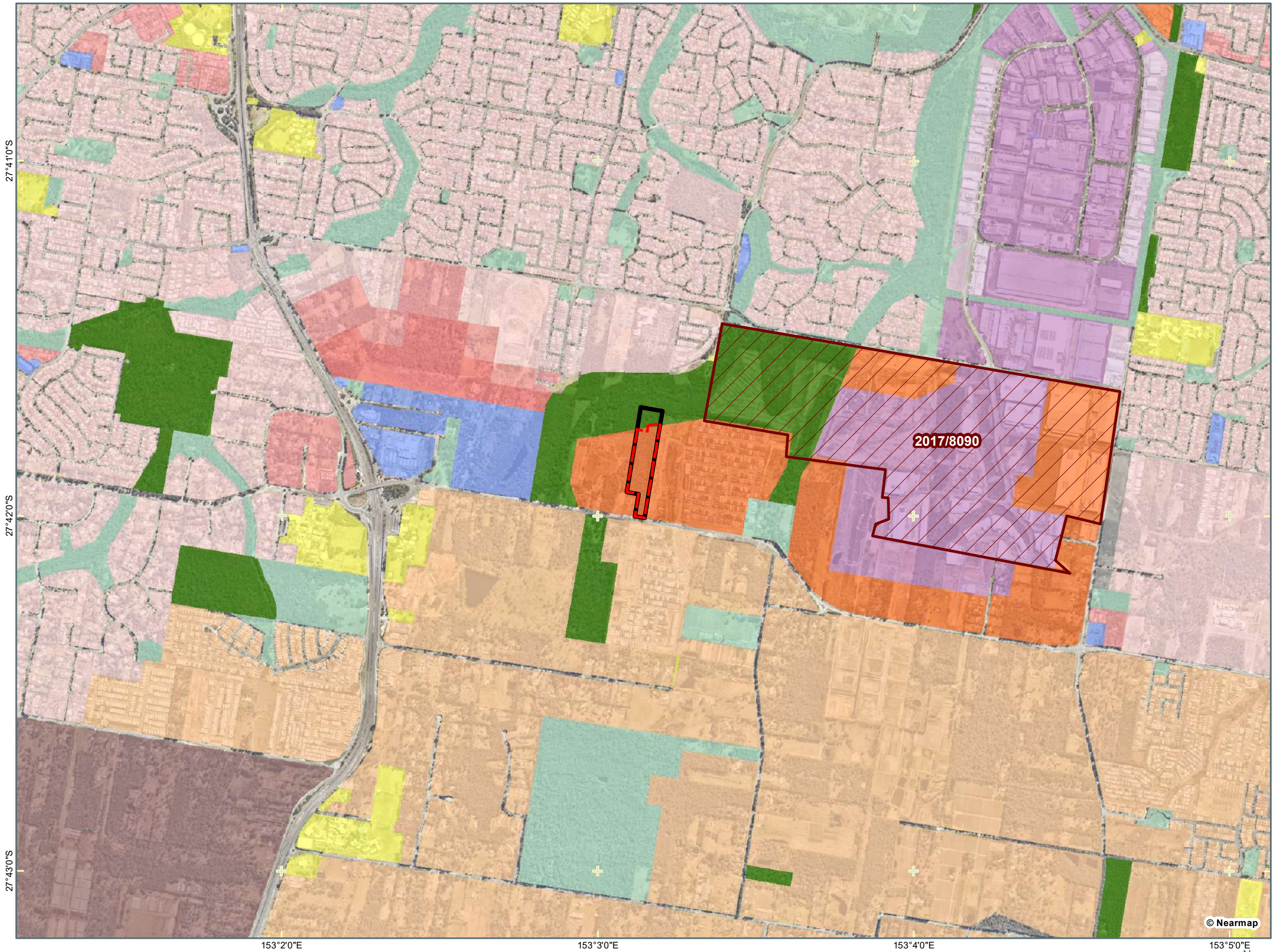
Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 09g MNES GG FMTP A



09H. MNES - GREATER GLIDER ZONING & EPBC APPROVALS



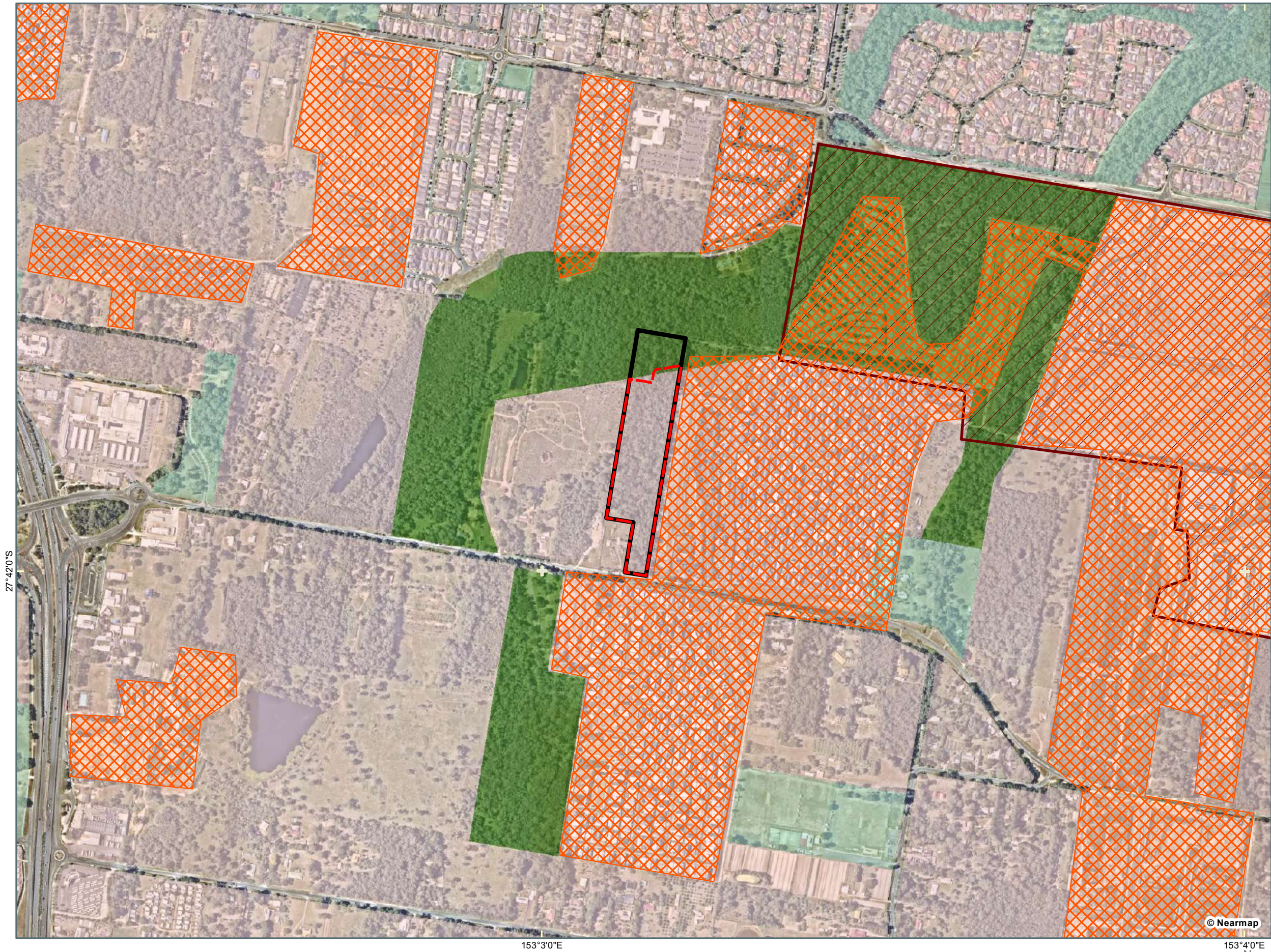
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- LEGEND
- Impact site
 - Impact area
 - EPBC approval area
- LCC Zoning
- Centre
 - Community facilities
 - Low density residential
 - Low-Medium density residential
 - Medium density residential
 - Medium impact industry
 - Mixed use
 - Emerging community
 - Recreation and open space
 - Environmental management & conservation



09I(1). MNES - GREATER GLIDER FRAGMENTATION ASSESSMENT



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LEGEND

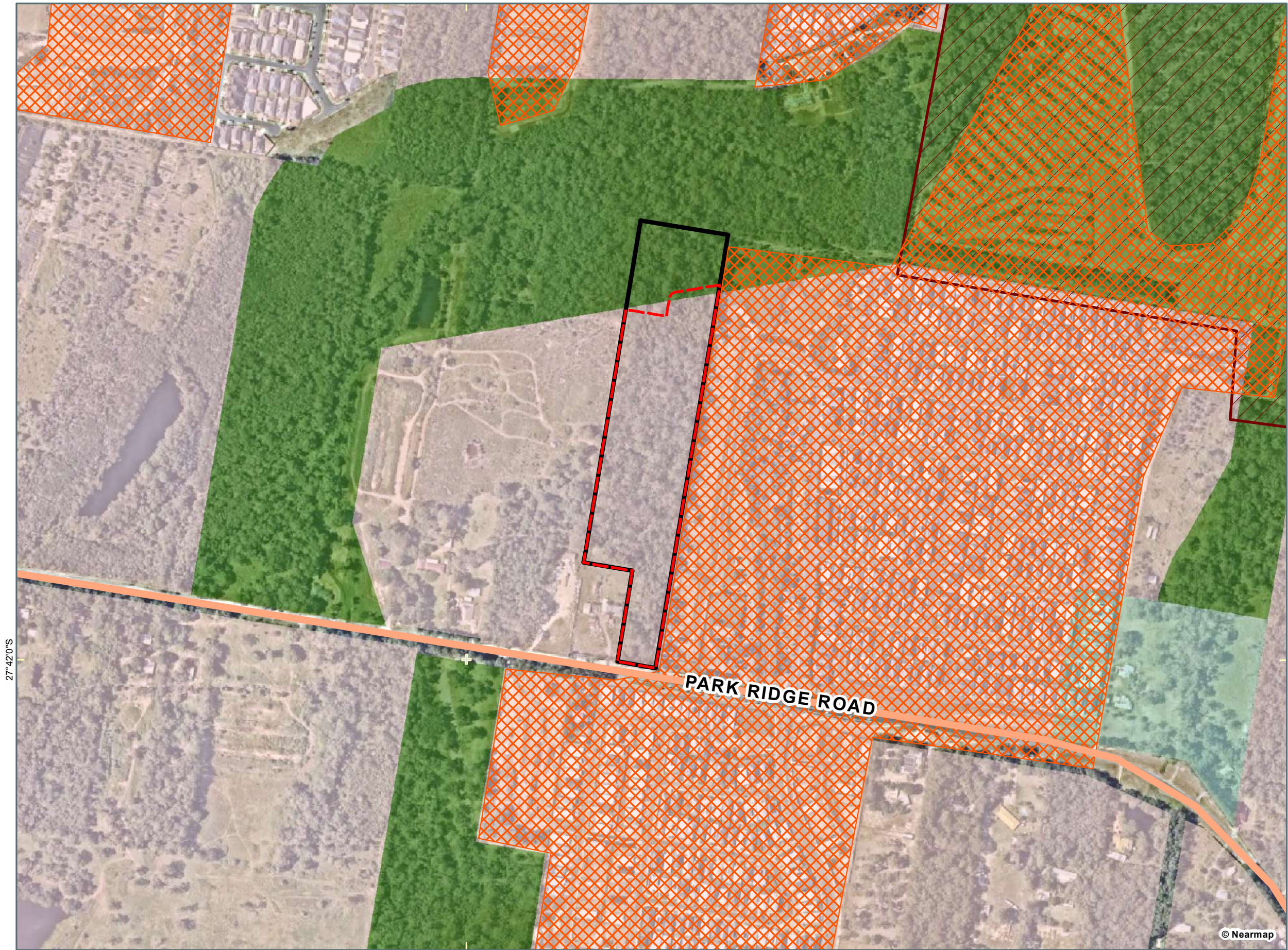
- Impact site
- Impact area
- EPBC approval area

LCC Zoning

- Development area
- Environmental management & conservation
- Recreation and open space
- Current development/ construction areas



09I(2). MNES - GREATER GLIDER FRAGMENTATION ASSESSMENT



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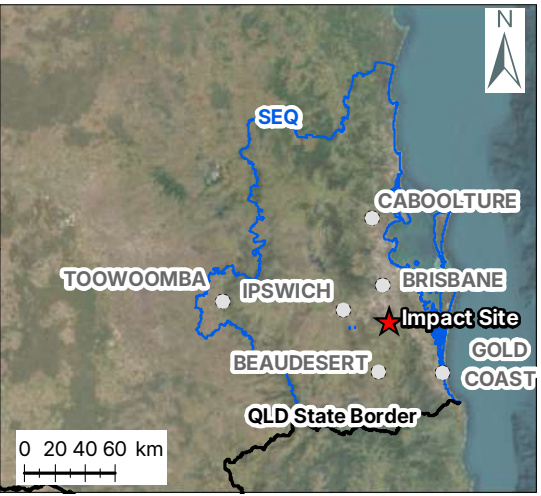
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LEGEND

- Impact site
- Impact area
- EPBC approval area

LCC Zoning

- Development area
- Environmental management & conservation
- Recreation and open space
- Current development/ construction areas



8.5. *Petaurus australis australis* (Yellow-bellied Glider (south-eastern))

8.5.1 Conservation Status

The Yellow-bellied Glider (south-eastern) is listed as Vulnerable under the EPBC Act and NCA as of March 2022.

8.5.2 Description

The Yellow-bellied Glider (south-eastern) is a medium-sized arboreal marsupial, the largest Australian petaurid (Russell 1995) and the second largest Australian glider. The head and body length have a range of 240–310 mm, with a 380–470 mm long tail. The body is a greyish-brown colour with a black stripe running down the back and extending to the tail. The tail is mostly black with grey edging at the base. Males weigh 470–725 g and females weigh 435–660 g, though the head and body length of males is only marginally longer than that of females, and females have longer tails. The belly is white to yellow, typically paler in young individuals and becoming more yellow with age. There are black markings on the feet, with a black stripe running down each thigh. There are also black markings along the edge of the gliding membrane. The ears are pale in colour and bare, featuring prominently on the head. This description was drawn from Goldingay (2008).

The two subspecies of Yellow-bellied Glider are similar in appearance, though the Yellow-bellied Glider (Wet Tropics) is typically smaller than the Yellow-bellied Glider (south-eastern) (Goldingay & Kavanagh 1991). The Wet Tropics subspecies may also be darker in colour on the back than the south-eastern subspecies and possesses less distinctly yellow belly fur (Brown et al. 2006).

8.5.3 Distribution

The Yellow-bellied Glider (south-eastern) is found at altitudes ranging from sea level to 1400 m above sea level and has a widespread but patchy distribution from south-eastern Queensland.

8.5.4 Habitat

The Yellow-bellied Glider (south-eastern) occurs in eucalypt-dominated woodlands and forests, including both wet and dry sclerophyll forests (Kavanagh et al. 1995; Rees et al. 2007). Abundance is highly dependent on habitat suitability, which is in turn determined by forest age and floristics (Woinarski et al. 2014).

The subspecies shows a preference for large patches of mature old growth forest that provide suitable trees for foraging and shelter (Milledge et al. 1991; Eyre & Smith 1997; Incoll et al. 2001; Eyre & Goldingay 2003; Eyre 2002, 2004; van der Ree et al. 2004; Kavanagh et al. 2021). There is also a clear preference for forests with a high proportion of winter-flowering and smooth-barked eucalypts (Kavanagh 1987a; Eyre & Smith 1997; Eyre 2004; Irish & Kavanagh 2011; Woinarski et al. 2014). Smooth-barked eucalypts are important due to the range of foraging substrates (and therefore food resources) they provide, as loose bark hanging in strips from these trees provides shelter for insect prey (Eyre & Smith 1997). Yellow-bellied Gliders (south-eastern) also require some level of floristic diversity to provide a year-round food supply, and they are unlikely to persist in forests dominated by only one or two tree species (Kavanagh 1987a).



The species also prefers to den in living hollow-bearing trees and in groups in large exclusive home ranges as foraging substrates are dispersed and variable through time and space, therefore large areas of forest are required to maintain population viability.

8.5.5 Threats

The Yellow-bellied Glider (south-eastern) is primarily threatened by climate change, altered fire regimes, clearing, fragmentation and timber harvesting. Invasive species have been recorded preying on the subspecies, though it is unknown if this is having a population-level impact. Other minor threats include mortality by barbed wire fencing and habitat degradation by feral deer (*Cervidae* spp.). Dieback caused by *Phytophthora cinnamomi* may also be impacting the subspecies through habitat degradation.

8.5.6 Recovery Actions

There is no adopted recovery plan for the Yellow-bellied Glider (south-eastern). Conservation actions for the species include protecting habitat from extensive severe fire, fragmentation and timber harvesting, mitigating known threats, retaining habitat connectivity and key habitat features (e.g., sap trees, hollow-bearing trees).

8.5.7 Significant Impact Assessment

Yellow-bellied Glider was identified in the desktop assessment as a threatened species that has the potential to be impacted by the proposed development. Field surveys found the habitat on-site to be potentially suitable for this species but relatively fragmented, noting that the site maintains characteristics that may be viewed as habitat critical to the survival of the species as per the conservation advice. The site does maintain Eucalypt woodland made up of suitable foraging species, however, it is relatively fragmented and lacking in more mature vegetation that might maintain enough hollows resources.

While habitat on site could potentially meet the definition of habitat critical to the survival of the Yellow-bellied Glider as per the conservation advice, it is important to consider its relative habitat quality and factors that may diminish the relative suitability of the site to support the species now and into the future. The following discussion provides context around relative suitability of the site for the species and supports the conclusion that significant impacts on the species are not likely.

Plan 10A shows the high level of fragmentation displayed by the potential habitat on site, noting in particular the relatively disturbed landscape between the site and records for the species. **Plan 10B** depicts the current disturbance adjoining the site and the edge effects imposed, including existing development to the west, south and east, roads either constructed or under construction to the east and south, and development further in all directions. It is clear that the impact site has remained a relatively small intact patch fragmented by historical clearing (refer **Plan 10C** and **Plan 10D**), noting only the site and equally fragmented areas to the north are now mapped by the State as remnant (refer **Plan 10E**). Of note, the Queensland Government defines Remnant Vegetation as meeting 70% of height and 50% of cover of the Regional Ecosystem benchmarks, and does not imply never cleared. As discussed above, this does not imply the area has never been cleared, rather it harbors trees that might meet remnant thresholds against the benchmarks for height and cover at the GIS scale.

Notably, the nearest records for the species within the last five years are 3.3 km to the south-east and severely fragmented from the impact site by historical clearing, major infrastructure, urban development



and a lack of contiguous remnant (refer **Plan 10F**). This is not unexpected given the high levels of disturbance and fragmentation in and surrounding the impact area. This is further apparent in mapping by Griffith University, Queensland, of relative forest age that shows the remnant portion of the site is considered mostly 'young-intermediate' aged vegetation, with some relatively small patches of 'intermediate', 'intermediate to mature' and 'mature' aged vegetation around the periphery (Refer **Plan 10G**).

With respect to the likelihood that the site will provide habitat for the species into the future, the site and surrounds are slated for future development (refer **Plan 10H**) and it is noteworthy that the site is significantly fragmented by existing and approved development, including EPBC Act approved residential development sites and limited extant contiguous vegetation (**Plan 10H**). The planning intent for the site and surrounds is to be developed for urban uses (refer **Plan 10I**). In consideration of existing and future development in and adjoining the site, it site is not considered a suitable fragment for future colonisation by the Yellow-bellied Glider.

Refer to **Table 17** for assessment against the significant impact criteria. The project is not considered likely to have a significant impact on the Yellow-bellied Glider.

Table 17 EPBC Significant impact criteria for vulnerable species – Yellow-bellied Glider (south-eastern)

Significant Impact Criteria	Assessment	Impact
An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:		
Lead to a long-term decrease in the size of an important population	The referral area of 5.65 ha is mapped as containing predominantly Category B (remnant) vegetation. Native canopy species within the referral area include <i>Angophora leiocarpa</i> (Smooth Bark-Apple), <i>Corymbia citriodora</i> (Spotted Gum), <i>Corymbia intermedia</i> (Pink Bloodwood), <i>Eucalyptus fibrosa</i> (Broad-leaved Red Ironbark), <i>Eucalyptus major</i> (Grey Gum), <i>Eucalyptus propinqua</i> (Small-fruited Grey Gum), <i>Eucalyptus racemosa</i> (Scribbly Gum), <i>Eucalyptus seeana</i> (Narrow-leaved Red Gum), <i>Eucalyptus siderophloia</i> (Grey Ironbark), <i>Eucalyptus tereticornis</i> (Forest Red Gum) and <i>Lophostemon suaveolens</i> (Swamp Box). Surrounding areas have been subjected to historical and ongoing modification to support increasing urbanisation within Park Ridge and meet the growing housing needs of the SEQ population. Site surveys indicate that the site has been subject to historical selective logging. As a result the presence of very large old growth trees are limited. Hollows were identified on site with a total of thirty-three (33) recorded, eighteen (18) of which were within living trees. Yellow-bellied Glider are known to have a preference for hollows that occur within live trees. Recent records (within past 20 years) of Yellow-bellied Gliders are limited to large patches of remnant vegetation, with the closet being approximately 3.3 km south-east of the impact area (Plan 10F). Yellow-bellied Glider (south-eastern) is documented to have a very low dispersal capability with an average	Significant impact not likely



Significant Impact Criteria	Assessment	Impact
	performance in low-canopy forest of 25.2 m (DCCEEW, 2022b) which prevents this species from dispersing through areas with a high level of disturbance. There is essentially no connectivity of vegetation between this record and the referral area it is unlikely that movement between these patches would occur due to the Yellow-bellied Glider's requirement for tall vegetation. Multiple regions of vegetation between this record and the referral area are characterised as mostly cleared rural residential lots and likely do not support the density of large old growth trees required for Yellow-bellied Glider movement. The Conservation Advice identifies sap feed trees are a critical habitat feature for the Yellow-bellied Glider, primarily Grey Gums that are present at only low densities within the site's vegetation. Targeted spotlighting surveys focused on hollows within the referral area did not detect any evidence of this species. Noting the above disturbance aspects and patterns of occurrence within the locality, it is considered that a local Yellow-bellied Glider population is not likely to be present within the area. Given the reduced landscape connectivity and lack of niche habitat values to support the species, it is considered unlikely that the referral area supports a population of Yellow-bellied Glider. Importantly, under State approval all hollows within the clearing area will be salvaged and installed as nest boxes within retained vegetation on site or within another approved lot. It is not anticipated that the removal of the relatively small area of vegetation on site will lead to a long-term decrease in the size of a population of Yellow-bellied Glider subspecies.	
Reduce the area of occupancy for an important population	The referral area is mapped predominantly Category B (remnant) vegetation 'Least concern' RE12.9-10.4 with small regions of Category C, mapped Endangered' RE 12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a which was identified on site as being reflective of RE12.9-10.4. Category B (remnant) and Category C (high-value regrowth) vegetation identified as 'endangered' RE12.9-10.12 is present within the north of the referral area and is proposed to be retained and rehabilitated as an environmental open space area. On ground surveys observed a lack of large old growth trees, particularly a reduced abundance of <i>E. racemosa</i> below what would be expected within RE12.9-10.4. This along with some weed incursion indicates a history of selective logging within the lot. The site is also subject to a high level of edge effects due to its small size and the presence of a main road and residential development to the south of the site, current construction to the	Significant impact not likely



Significant Impact Criteria	Assessment	Impact
	east of the site and highly disturbed sites to the west. The lot to the west identified as 2RP170091 has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that the majority of the site is to be cleared with a retained environmental open space area within the north of the site that aligns with the proposed environmental open space area within the referral area. With the high level of fragmentation within the surrounding landscape it is likely that the home range of Yellow-bellied Gliders (has contracted to the larger, more connected areas of habitat, such as the remnant vegetation fragmented to the south and west of the site. Given the limited dispersal capability of Yellow-bellied Glider within fragmented landscapes, it is considered unlikely that the proposed development will reduce the area of occupancy of the species. This is further supported by the high level of disturbance and fragmentation within and adjoining the referral area.	
Fragment an existing important population into two or more populations	The referral area is mapped predominantly as Category B (remnant) vegetation 'Least concern' RE12.9-10.4 with small regions of Category C, mapped Endangered' RE 12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a which was identified on site as being reflective of RE12.9-10.4. No connectivity to vegetation to the east of the site is present with the adjacent lot being fully cleared with residential developments currently under construction. To the north regions of Category B (remnant) vegetation adjoin the referral area. Vegetation within the referral area that adjoins remnant vegetation to the north is to be retained and rehabilitated as an environmental open space area. Vegetation mapped as Category X (non-remnant) is also present within the south of the western adjacent lot identified as 2RP170091. This lot has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that majority of the site is to be cleared including the region of adjoining vegetation within the south of the referral area. As such removal of connected vegetation within the subject area will not isolate any existing populations due to the anticipated removal of vegetation within the adjacent lot. Additionally, it is not expected that the subspecies would occur on or immediately around the site given the level of existing disturbance and lack of connectivity to known records of the species (Plan 10). It is considered that a local Yellow-bellied Glider population is more likely to be present within the contiguous remnant vegetation areas fragmented to the south	Significant impact not likely



Significant Impact Criteria	Assessment	Impact
	and west of the site that is consistent with recent records and preference for large areas of unlogged habitat. The proposed development is unlikely to fragment an existing population of Yellow-bellied Glider.	
Adversely affect habitat critical to the survival of a species	The Conservation Advice for <i>Petaurus australis</i> (Yellow-bellied Glider (south-eastern) (DCCEEW, 2022) defines habitat critical to the survival of the Yellow-bellied Glider subspecies as: • large contiguous areas of floristically diverse eucalypt forest, which are dominated by winter-flowering and smooth-barked eucalypts, including mature living hollow-bearing trees and sap trees; • areas identified as refuges under future climate change scenarios; • short or long-term post-fire refuges (i.e., unburnt habitat within or adjacent to recently burnt landscapes) that allow the species to persist, recover and recolonise burnt areas; • habitat corridors required to facilitate dispersal of the subspecies between fragmented habitat patches and/or that enable recolonization or movement away from threats. Yellow-bellied Gliders (south-eastern) have a glide ratio (horizontal distance/height dropped) of around 2.0, and corridors spanning gaps larger than the distance gliders are likely to be able to travel should be considered critical to the survival. There is not enough evidence to define the canopy and width characteristics of appropriate corridors. In the absence of such information, a precautionary approach should be taken to maximise dispersal by considering all habitat corridors in the species' range to be habitat critical to the survival; and • areas in which some trees have evidence of use for sap extraction by Yellow-bellied Glider (south-eastern). As previously discussed, the vegetation within the proposed impact area is predominantly mapped as Category B (Remnant) vegetation identified as 'least concern' RE 12.9-10.4. The site was confirmed via site surveys to contain floristically diverse eucalypt forest although grey gums that are preferred feeding species of Yellow-bellied Glider were limited on site. The referral area is a small sized lot (5.65 ha) which is generally reflective of mapped values. Disturbance on site is identified as high due to the small size of the lot and surrounding land uses. While the referral area has some connectivity to larger regions of remnant vegetation to the north of the site associated with retained vegetation within the Logan City Council's mapped	Significant impact not likely



Significant Impact Criteria	Assessment	Impact
	biodiversity corridors, there are no recent records of Yellow-bellied Glider within vegetation adjoining this region. The closest record of Yellow-bellied Glider occurs approximately 3.3 km south-east of the referral area. The dispersal requirement of Yellow-bellied Glider for continuous tall vegetation is unlikely to be met within the local area. As such, the value of the vegetation on-site for the subspecies is considered reduced for multiple reasons including: • The site is not considered a large, contiguous patch with high floristic diversity or contains mature living hollow-bearing trees and sap trees (i.e., grey gums) noting the historical disturbance and partial fragmentation to the vegetation patch. • The proposed impact area is located proximally to high levels of existing disturbance including current residential development to the east and future residential development to the west. These types of disturbance reduce the value of habitat on site as a means for broader landscape connectivity and encouraging avoidant behaviour. • The highest region of potential habitat value and connectivity within the north of the site is proposed to be retained and rehabilitated as environmental open space areas. • The proposed impact area is lacking a significant number of large trees and suitable denning resources (i.e., old growth trees with hollows) required to support a population. As a result, the proposed impact area is not considered to contain suitable connectivity to larger areas of intact vegetation that may provide suitable habitat for the subspecies and is unlikely to be utilised now or in the future. While the vegetation may meet aspects of the definition for habitat critical to the survival of the Yellow-bellied Glider, a significant Impact is not expected.	
Disrupt the breeding cycle of an important population	The potential for a breeding population to occur on-site relates to the potential of the site to support a population of Yellow-bellied Glider. The site is comprised predominantly of Category B (remnant) vegetation, however, is noticeably lacking significant numbers of large trees with evidence suggesting it has been historically selectively logged. As a result preferred denning habitat, identified as hollows within living trees, was limited to eighteen (18) hollows within ten (10) trees. Targeted spotlighting surveys and incidental surveys failed to detect any direct or indirect evidence of this species occurring on site. Furthermore, the site is subject to high levels of disturbance on	Significant impact not likely



Significant Impact Criteria	Assessment	Impact
	all sides making habitat on site less viable for Yellow-bellied Glider. Therefore, it is concluded that the referral area is unlikely to be used as breeding habitat for Yellow-bellied Glider and it is unlikely that the proposed development will disrupt the breeding cycle of an important population of Yellow-bellied Glider (south-eastern).	
Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The referral area is mapped predominantly as Category B (remnant) vegetation 'Least concern' RE12.9-10.4 with small regions of Category C, mapped Endangered' RE 12.9-10.4/12.9-10.12/12.9-10.17c/12.5.3a which was identified on site as being reflective of RE12.9-10.4. No connectivity to vegetation to the east of the site is present with the adjacent lot being fully cleared of non-juvenile native vegetation with residential developments currently under construction. To the west of the site within lot 2RP170091 regions of Category B (remnant) vegetation that adjoin the northern region of the referral area are present. This region is to be retained and rehabilitated as an environmental open space area. Vegetation mapped as Category X (non-remnant) is also present within the south of lot 2RP170091 that adjoins the boundary of the referral area. Lot 2RP170091 has current approvals for reconfiguration under application number RL/51/2024 and the design indicates that majority of the site is to be cleared including the region of adjoining vegetation within the south. As such removal of connected vegetation within the subject area will not isolate any patches of vegetation with the potential to constitute Yellow-bellied Glider habitat due to the existing and anticipated removal of vegetation within the adjacent lot. Additionally, it is not expected that the subspecies would occur on or immediately around the site given the level of existing disturbance and lack of connectivity to contemporary species records. It is considered that a local Yellow-bellied Glider population is more likely to be present within the contiguous remnant vegetation areas fragmented to the south and west of the site that is consistent with recent records and preference for large areas of unlogged habitat. The proposal to remove 4.58 ha of potential habitat within an established urban area is considered unlikely to contribute to the decline of the Yellow-bellied Glider.	Significant impact not likely

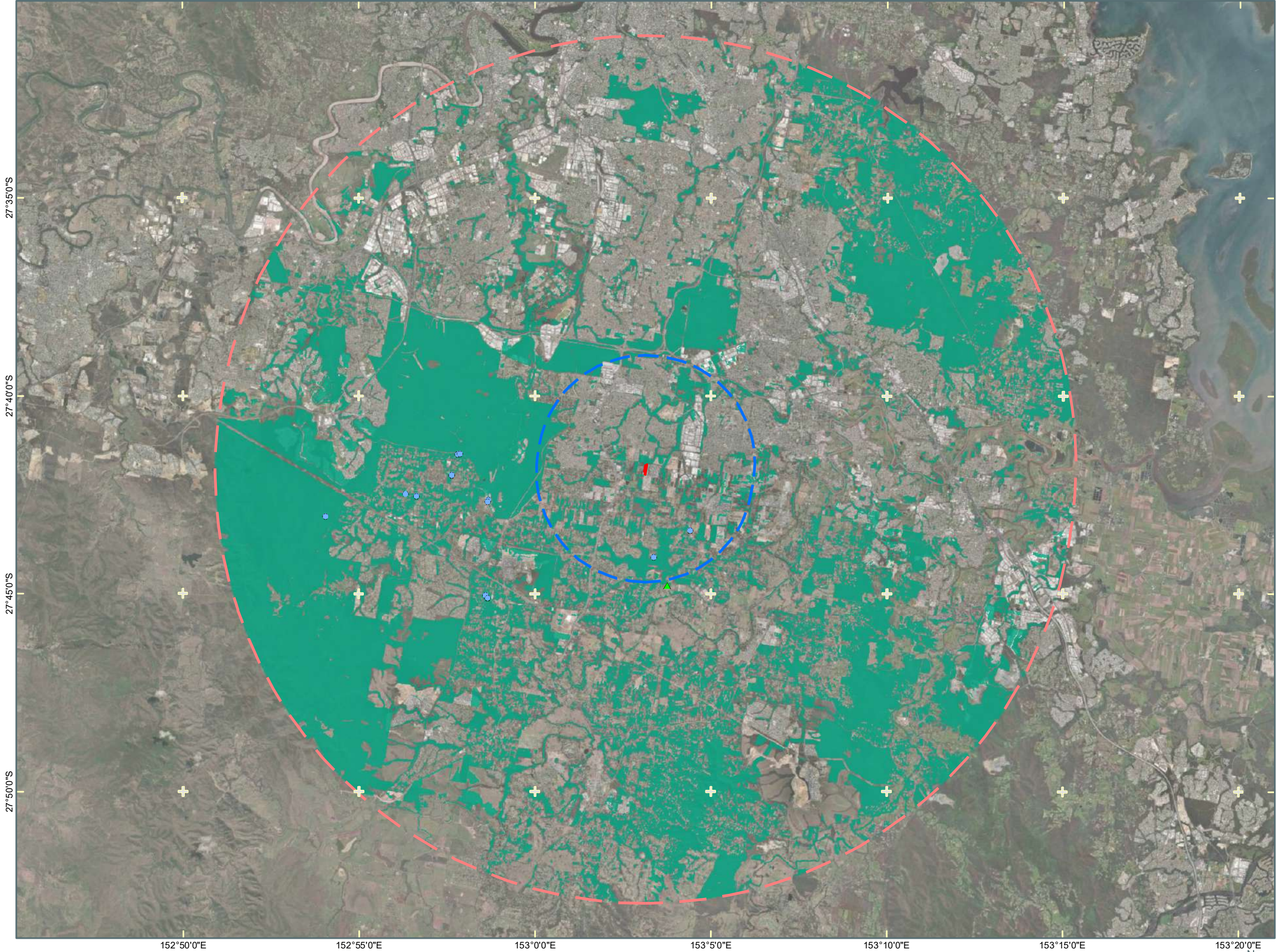


Significant Impact Criteria	Assessment	Impact
Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	Invasive species Red Fox (<i>Vulpes vulpes</i>) which is a known threat to the Yellow-bellied Glider was identified on site. Furthermore, domestic dogs are likely present or will be present in the current and emerging residential areas surrounding the referral area. It is considered unlikely that the proposed development will increase the occurrence of invasive species as they are already established in the area.	Significant impact not likely
Introduce disease that may cause the species to decline	It is unlikely that the proposed development will introduce disease that may harm the species.	Significant impact not likely
Interfere substantially with the recovery of the species	There is currently no recovery strategy available for the Yellow-bellied Glider (south-eastern) subspecies, however, conservation and recovery actions are listed in the Conservation Advice for <i>Petaurus australis australis</i> (Yellow-bellied Glider (south-eastern)) (DCCEEW, 2022b). Management priorities involve limiting habitat loss and fragmentation, reducing mortality and removal of hollow-bearing trees and implementing measures to limit the occurrence of wildfire in Yellow-bellied Glider (south-eastern) habitat. As the referral area is limited in size and subject to relatively high levels of disturbance and edge effects the site is unlikely to be located in a context or include habitats identified as priority for retention for the species' recovery. An area of contiguous remnant vegetation is located to the north of the referral area that forms part of a larger network of local environmental corridors, however, it is equally fragmented and also limited in size. Vegetation within the referral area adjoining this northern region is proposed to be retained and rehabilitated as an environmental open space area that will be dedicated to council and the conclusion of the project. It is anticipated that areas where Yellow-bellied Gliders are known to occur will provide ongoing support for the subspecies' population due to the relatively high level of protection bestowed on these areas and high ecological and cultural value. These broader retained and protected habitat areas constitute a substantial refuge area to buffer against potential climate change factors that may affect the subspecies' population in the future and as a result, a scenario where the habitat on-site becomes critical for the recovery of the species is considered highly unlikely. Particularly as the value of habitat on site to is presently compromised due to high levels of disturbance and urbanisation in the surrounding locality.	Significant impact not likely

With consideration to the above analysis, the proposed development is not considered to result in a significant impact on the Yellow-bellied Glider (south-eastern).



10A. MNES - YELLOW-BELLIED GLIDER HABITAT RECORDS



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LEGEND

Impact area

Site 5km Buffer

Site 20km Buffer

Yellow Bellied Glider habitat within 20km of Impact area

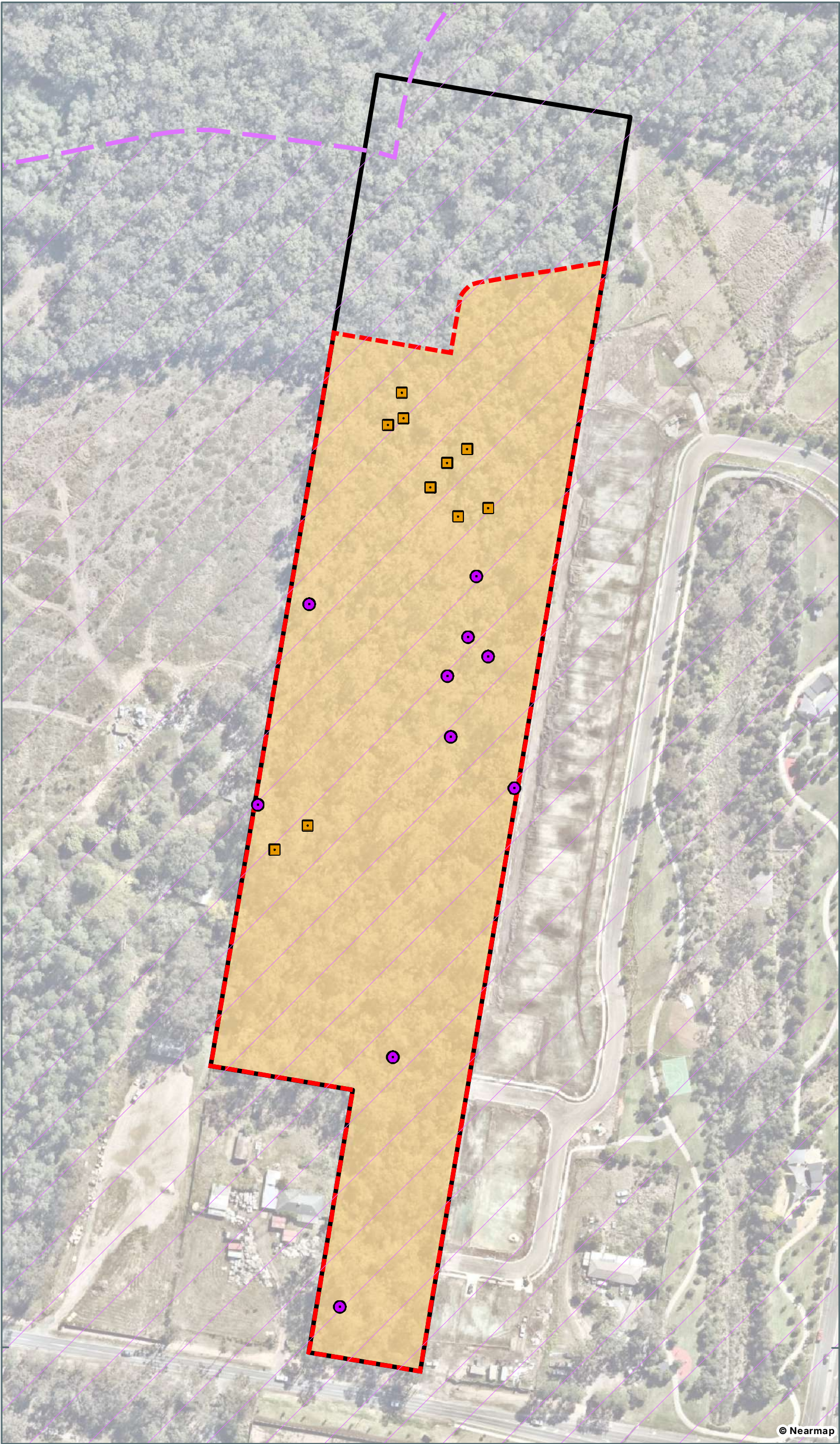
Petauroides australis (Yellow-bellied Glider) record since 2005 - 2 within 5km of Impact area (ALA, 2026)

Petauroides australis australis (Yellow bellied Glider) record since 2005 - 0 within 5km of Impact area (ALA, 2026)

*Obscured records have been filtered out of this plan



10b. MNES - YELLOW-BELLIED GLIDER HABITAT IMPACT



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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- 100m existing disturbance buffer
- Yellow-bellied Glider Habitat impact area [4.58 ha]
- Hollow bearing stag (dead) to remove (15 hollows)
- Hollow bearing tree (alive) to remove (18 hollows)



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP

N
1:1,750 @ A3 | Transverse Mercator | GDA 2020 | Zone 56

Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 10b MNES YGB Impact A



10C. MNES - GREATER GLIDER CONTEMPORARY AERIAL



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LEGEND

- Qld DCDB
- Impact Site
- Impact area



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP

N
1:1,750 @ A3 | Transverse Mercator | GDA 2020 | Zone 56

Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 10c MNES YBG Aerial A



10D. MNES - YELLOW BELLIED GLIDER 1982 AERIAL



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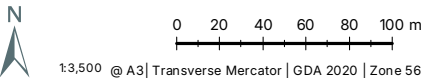
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LEGEND

- Impact Site
- Impact area



AMENDMENTS				
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Date: 30/06/2026

12014 E 10d MNES YBG Aerial A



10E. MNES - YELLOW-BELLIED GLIDER VMA REMNANT



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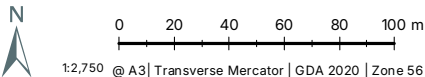
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LEGEND

- Impact Site
- Impact area
- VMA Remnant Vegetation



AMENDMENTS				
Issue	Date	Description	Drawn	Checked
A	30/06/2026	Preliminary	TC	IP



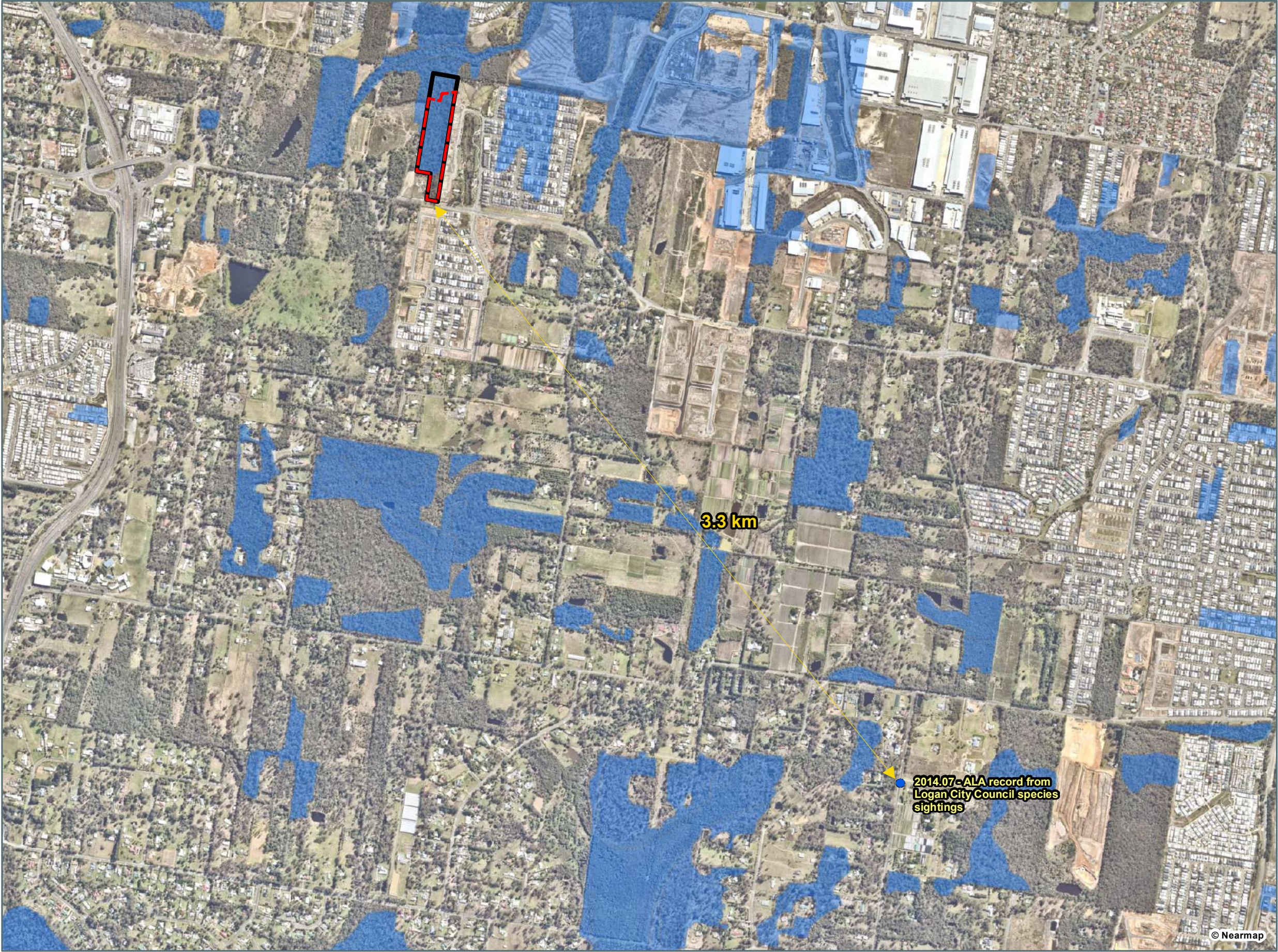
Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 10e MNES YBG VMA A



10F. MNES - YELLOW-BELLIED GLIDER RECORD DISTANCE



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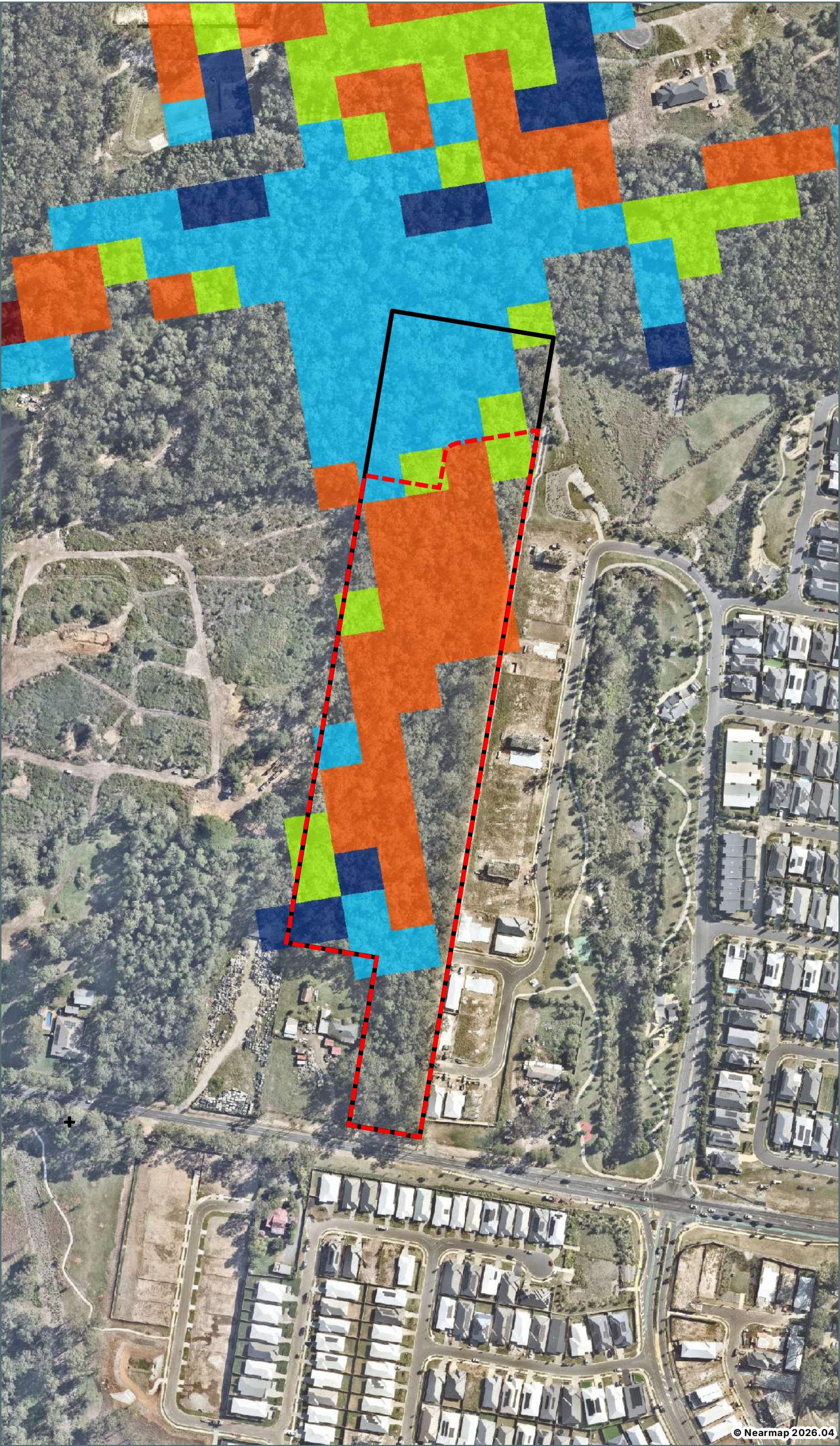
LEGEND

- Impact site
- Impact area
- VMA Remnant Vegetation
- Petauroides australis* (Yellow-bellied Glider) record since 2005 (ALA, 2026)

*Obscured records have been filtered out of this plan



10 G. MNES - YELLOW BELLIED GLIDER FOREST MATURE TYPE MAP (GRIFFITH UNIVERSITY)



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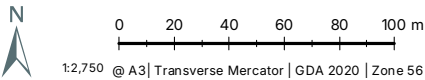
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LEGEND

- Qld DCDB
- Impact Site
- Impact area
- Forest Maturity**
 - Mature Vegetation
 - " (Intermediate to Mature Aged Vegetation)
 - Intermediate Aged Vegetation
 - " (Young to Intermediate Aged Vegetation)
 - Young Vegetation



AMENDMENTS				
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A	30/06/2026	Preliminary	TC	IP



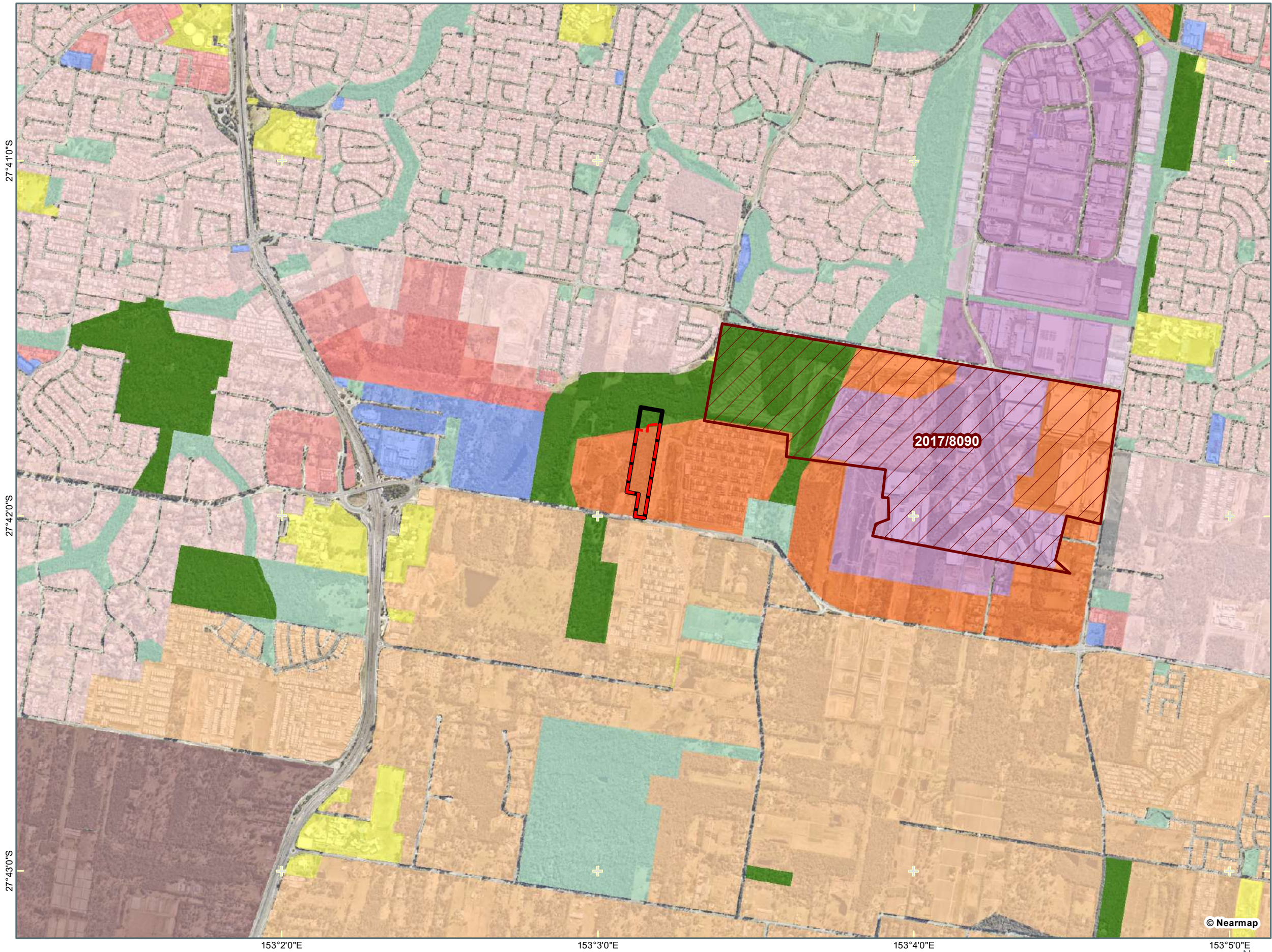
Address / RPD: 4RP868515

Date: 30/06/2026

12014 E 10g MNES YBG FMTP A



10H. MNES -YELLOW-BELLIED GLIDER ZONING & EPBC APPROVALS



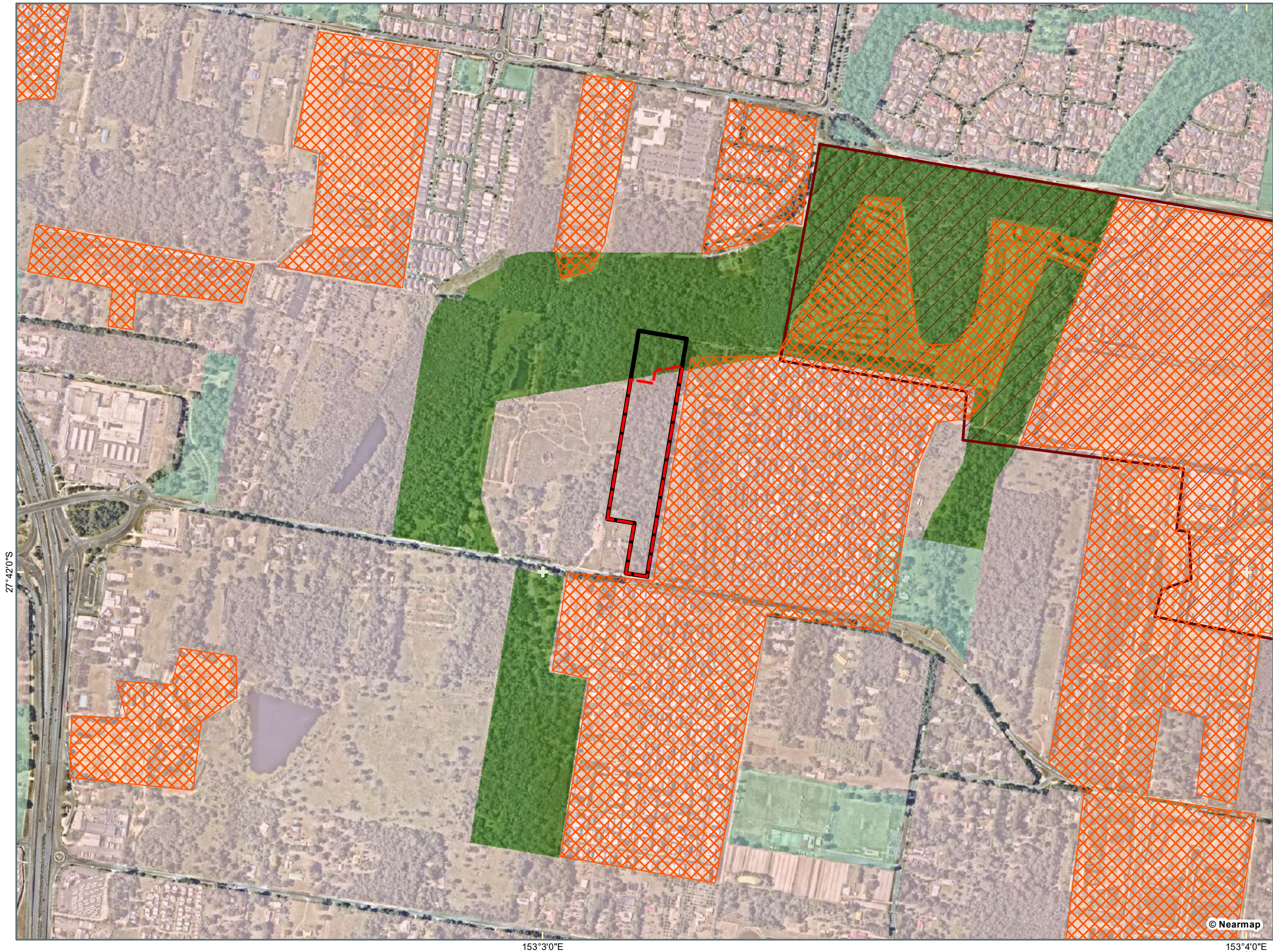
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- LEGEND**
- Impact site
 - Impact area
 - EPBC approval area
- LCC Zoning**
- Centre
 - Community facilities
 - Low density residential
 - Low-Medium density residential
 - Medium density residential
 - Medium impact industry
 - Mixed use
 - Emerging community
 - Recreation and open space
 - Environmental management & conservation



10I(1). MNES - YELLOW-BELLIED GLIDER FRAGMENTATION ASSESSMENT



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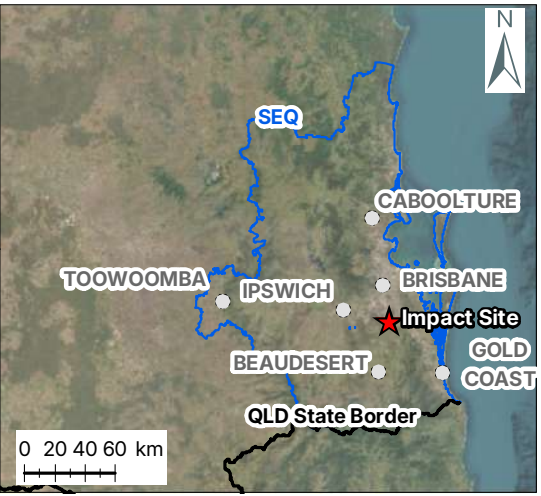
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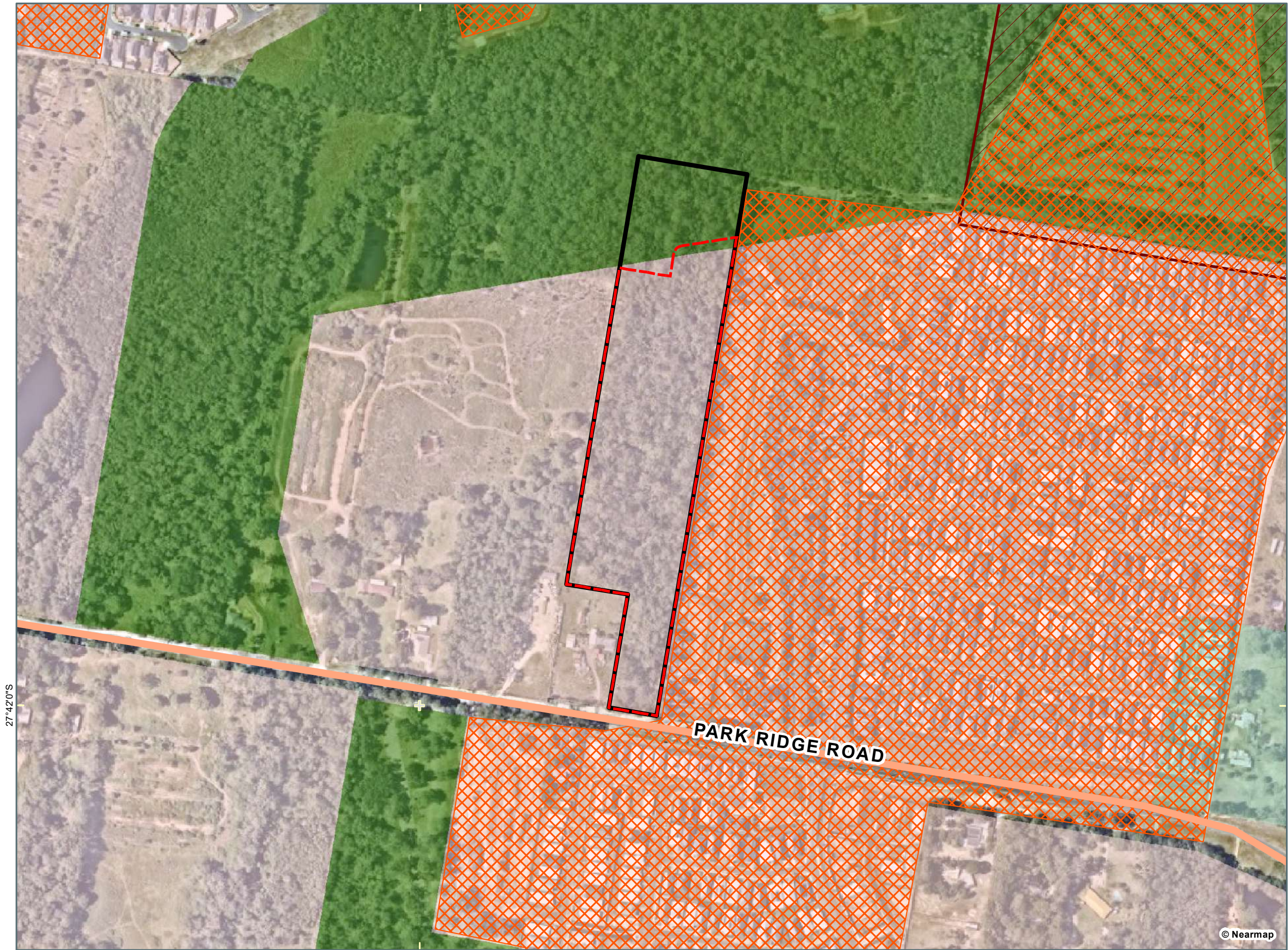
- Impact site
- Impact area
- EPBC approval area

LCC Zoning

- Development area
- Environmental management & conservation
- Recreation and open space
- Current development/ construction areas



09I(2). MNES - YELLOW-BELLIED GLIDER FRAGMENTATION ASSESSMENT



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LEGEND

- Impact site
- Impact area
- EPBC approval area

LCC Zoning

- Development area
- Environmental management & conservation
- Recreation and open space
- Current development/ construction areas



8.6. *Hirundapus caudacutus* (White-throated Needletail)

8.6.1 Conservation Status

The White-throated Needletail is listed as Vulnerable under the EPBC Act and NCA.

8.6.2 Description

The White-throated Needletail is a large swift with a thickset, cigar-shaped body, stubby tail and long pointed wings (20 cm in length and approximately 115–120 g in weight). Sexes are alike, with no seasonal variation in plumage. The adults have a dark-olive head and neck, with an iridescent gloss on the crown; the mantle and the back are paler, greyish; and the upperwings are blackish, sometimes with a greenish gloss, with a contrasting white patch at the base of the trailing edge; the uppertail is black with a greenish gloss.

8.6.3 Distribution

White-throated Needletails are widespread in eastern and south-eastern Australia. In eastern Australia, the species is recorded in all coastal regions of Queensland and New South Wales, extending inland to the western slopes of the Great Dividing Range and occasionally onto the adjacent inland plains. Further south on the mainland, it is widespread in Victoria, though more so on and south of the Great Dividing Range, and there are few records in western Victoria. The species occurs in adjacent areas of south-eastern South Australia, where it extends west to the Yorke Peninsula and the Mount Lofty Ranges. It is widespread in Tasmania.

8.6.4 Habitat

The White-throated Needletail is almost exclusively aerial which affects the ease of conventional habitat descriptions. Although they occur over most types of habitats, they are probably recorded most often above wooded areas, including open forest and rainforest, and may also fly between trees or in clearings, below the canopy, but they are less commonly recorded flying above woodland. They also commonly occur over heathland, but less often over treeless areas, such as grassland or swamps. White-throated Needletails almost always forage aerially, feeding primarily on insects, at heights up to 'cloud level', above a wide variety of habitats ranging from heavily treed forests to open habitats, such as farmland, heathland or mudflats. White-throated Needletails are known to roost in woodland and forest habitat, amongst canopy or in hollows. Being a migratory species, breeding habitat is located in the northern hemisphere.

8.6.5 Threats

In Australia, threats to the species include loss of invertebrate prey attributed to insecticide use and removal of woodland habitats that support prey species. Other potential threats include collision with infrastructure such as wind turbines, overhead wires, windows and lighthouses.

8.6.6 Recovery Actions

There is no recovery plan in place for the species. Conservation actions for the White-throated Needletail include international coordination with countries in East Asia to protect key breeding habitats and at a national scale, protecting important habitats in Australia.

8.6.7 Significant Impact Assessment

To determine whether the proposed action is likely to have a significant impact on the White-throated Needletail, an assessment against the *EPBC Significant Impact Guideline 1.1* is provide in **Table 18**. The result of this assessment determined that a significant impact on the White-throated Needletail is unlikely to occur.

Table 18 EPBC Significant impact criteria for vulnerable species – White-throated Needletail

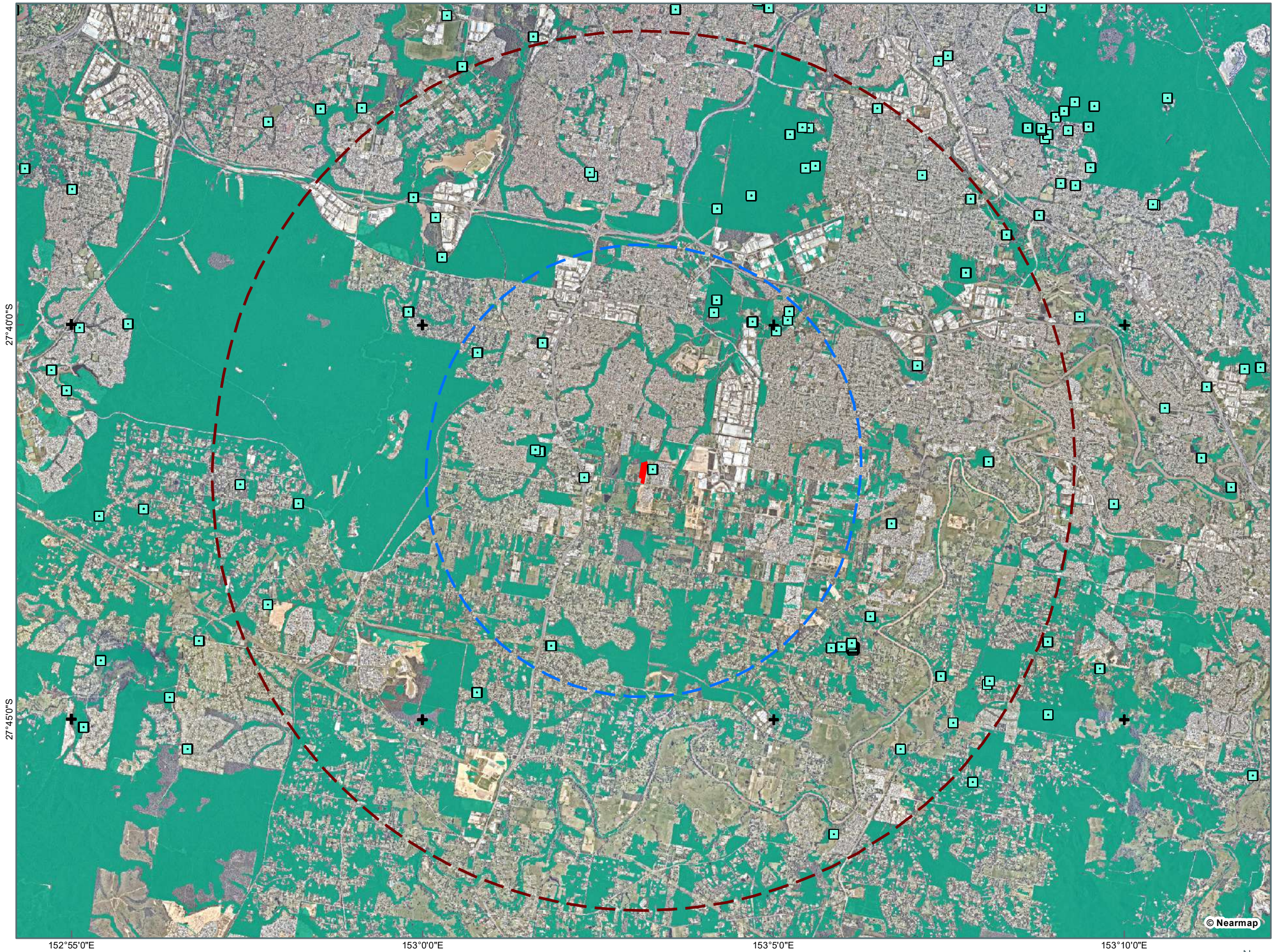
Significant Impact Criteria	Assessment	Impact
An action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:		
1. Lead to a long-term decrease in the size of an important population	The referral area is mapped predominantly as remnant vegetation characteristic of woodlands. Furthermore, a review of ALA indicates Thirty-three (33) records of this species within the locality four (4) of which were recorded within 2km (refer Plan 11). White-throated Needletails, being highly mobile and predominantly aerial, including while foraging, are unlikely to focus solely on one area of habitat. Potential foraging habitat for the White-throated Needletail is located on-site in the form of remnant Eucalypt woodland. Twenty (20) hollow bearing trees were identified within the referral area. However, the overall small area of the project and high levels of disturbance mean the site has only marginal value as to this species. Furthermore, areas of intact continuous habitat are present within the broader locality, notably at White Rock Conservation Park and Greenbank Military Training area to the west. While there are several records of the species within 5 km of the referral area, the site is not extensive (5.65 ha) and White-throated Needletail is known to occur more commonly above extensive regions of Eucalypt woodland and less commonly above narrow strips. The referral area is a linear and small patch. Extensive surveys both directly and indirectly targeting birds were conducted including two dusk bird surveys, one diurnal bird survey and over 18 hours of incidental survey time. Despite extensive surveys this species was not observed on site nor as a fly-over. The species was not observed during field surveys. The proposed development is unlikely to have a significant impact on the ability of White-throated Needletails to forage or roost in the landscape and, therefore; is not anticipated to lead to a long-term decrease in the size of an important population.	Significant impact not likely
2. Reduce the area of occupancy of an important population of the species	White-throated Needletails are predominantly aerial, however, require dense eucalypt woodland or hollows for roosting. Site surveys identified eucalypt woodland and trees containing hollows within the referral area. While there are several records of the species within 5 km of the referral area, the site is not extensive and White-throated Needletail is known to occur more commonly above extensive regions of Eucalypt woodland and less commonly above narrow strips, which the referral area is more reflective of. It is considered unlikely that the referral area would be utilised by the species in the context of the broader locality.	Significant impact not likely

Significant Impact Criteria	Assessment	Impact
	Specifically, it is considered that areas of intact continuous habitat are present within the broader locality, notably at White Rock Conservation Park, Greenbank Military area and Karawatha Forest. Furthermore, under State approval all hollows within the clearing area will be salvaged and installed as nest boxes within retained vegetation on site or within another approved lot. This will result in no net loss of hollows that could potentially be used by the species for roosting. The area of occupancy of the White-throated Needletail is not anticipated to be significantly reduced as a result of the proposal due to the highly mobile nature of the species and location of large areas of contiguous habitat within the greater region.	
3. Fragment an existing important population into two or more populations	White-throated Needletails are highly mobile and therefore do not require connected vegetation for dispersal. There is no evidence that the vegetation within the referral area would be utilised by the species nor is it expected to be given the small overall area and availability of more suitable habitat in the broader locality. It is therefore considered unlikely that the proposed action will fragment an existing population into two or more populations.	Significant impact not likely
4. Adversely affect habitat critical to the survival of a species	The vegetation within the referral is considered unlikely to be utilised by the species given the small overall area. As such the proposed removal of this vegetation is not considered to adversely affect habitat critical to the survival of a species	Significant impact not likely
5. Disrupt the breeding cycle of an important population	The White-throated Needletail breeds in East Asia. Therefore, the proposed development will not affect the breeding cycle of the White-throated Needletail.	Significant impact not likely
6. Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The White-throated Needletail is highly mobile and is able to forage over large expanses, thus reducing the individual importance of selected habitat fragments. The surrounding locality provides more substantial habitat including large contiguous vegetation areas that would adequately fulfil the foraging requirements of the species. Furthermore, under State approval all hollows within the clearing area will be salvaged and installed as nest boxes within retained vegetation on site or within another approved lot. As it is unlikely the species will utilise the small area of potentially suitable foraging habitat associated with the referral area, and any potential roosting hollows will be replaced it is considered unlikely that the project would decrease the availability of habitat to the extent the species would decline.	Significant impact not likely

Significant Impact Criteria	Assessment	Impact
7. Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	It is unlikely the proposed development would introduce an invasive species that would harm or displace the White-throated Needletail.	Significant impact not likely
8. Introduce disease that may cause the species to decline	It is unlikely the proposed development would introduce disease that would harm the White-throated Needletail.	Significant impact not likely
9. Interfere substantially with the recovery of the species	According to the <i>Hirundapus caudacutus</i> Conservation Advice, recovery actions within Australia focus on identifying areas of vegetation to protect that may provide important foraging and roosting habitat. The proposed development will remove an area of potential foraging and roosting habitat for the White-throated Needletail, however, it is unlikely to form important foraging and roosting habitat given the level of surrounding disturbance and overall small size. Due to the highly mobile nature of the species and the presence of larger areas of potential habitat in the greater region, including White Rock Conservation Area and the Greenbank Military Training area, it is not considered that the proposal will interfere substantially with the recovery of the species.	Significant impact not likely

The results of this assessment determined that it is unlikely that the proposed action will have a significant impact on White-throated Needletail

11. MNES - WHITE-THROATED NEEDLETAIL HABITAT AND RECORDS

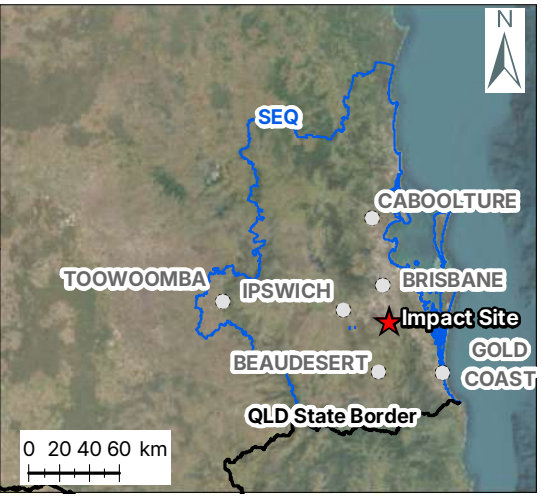


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LEGEND

- Impact area
- Site 5km Buffer
- Site 10km Buffer
- White-throated Needletail foraging habitat
- White-thoated Needletail sighting record (last 20 years) ALA, 2025



9. EPBC Act Determination Advice

9.1. EPBC Act Significant Impact Guidelines

This ecological assessment has identified Matters of National Environmental Significance (MNES) recorded or predicted to potentially occur on or near the referral area. It presents the design and mitigation measures employed to avoid and minimise project related impacts to the matters of conservation significance and quantifies the extent of potential residual impacts.

Desktop assessments and field surveys identified five (5) fauna species as possibly utilising vegetation within the referral area. However, the overall small size of the referral area (5.65 ha) and the location of the referral area adjacent to roads, residential developments and other highly disturbed areas reduce the value of vegetation on site as habitat for MNES species. A significant impact assessment was carried out for each of these five species and they concluded that the project is unlikely to have a significant impact on four (4) of the MNES species considered to have potential to occur on site. MNES species *Phascolarctos cinereus* (Koala) and *Pteropus poliocephalus* (Grey-headed Flying-fox) were identified within the referral area during field surveys. Significant impact to GHFF is not anticipated due to the high mobility of this species, lack of roosts identified on or adjacent to the site and abundance of suitable foraging and breeding habitat within the greater area. It is considered that the proposal has the potential to have a significant impact on Koala as it will result in the removal of 1,832 non-juvenile Koala habitat trees and Koala's were observed to be utilising the site during surveys. At present it is considered that the site only provides opportunistic foraging and dispersal habitat for Koala due to the 'low usage' result of SAT surveys conducted within the referral area.

The proposal has been thoroughly assessed and approved at both the State and Local level. It has been designed to avoid and retain the regions of highest ecological value within the referral area. An ecological open space area is proposed to be retained and rehabilitated within the north of the site associated with locally mapped biodiversity corridor. This region adjoins a large network of connected remnant vegetation within the greater locality and will retain this connectivity into the future. Any hollows removed as a result of the proposed action will be replaced at a rate of 1:1 with nest boxes installed within the environmental open space area or within another approved area. In addition, a substantial financial contribution of \$1,742,648.09 will be paid by the proponent to Council and State for impacts on environmental matters. The State has assessed impacts to the State and Federally listed species the Koala and approved the proposal on the basis that a substantial financial offset is paid for impacts. This relatively large financial contribution in association with the Council offset for lost habitat values will positively contribute to conservation monitoring and management of Koala as well as other native species.

It is considered that the project has '**moderate**' **potential to cause a significant impact on MNES as defined under significant impact guidelines**. However, the Proposed Action is recommended as a **Not a Controlled Action** due to being already extensively assessed and approved at a State and Local level with a substantial offset already being provided.

References

Department of Agriculture, Water and the Environment (2022) 'Conservation Advice for *Petaurus australis australis* (Yellow-bellied Glider (south-eastern))', Department of Agriculture, Water and the Environment.

Department of Agriculture, Water and the Environment (DAWE) (2022) 'Conservation Advice for *Phascolarctos cinereus* (Koala) combined populations of Queensland, New South Wales and the Australian Capital Territory'

Department of Agriculture, Water and the Environment (DAWE) (2022b). National Recovery Plan for the Koala *Phascolarctos cinereus* (combined populations of Queensland, New South Wales and the Australian Capital Territory). Department of Agriculture, Water and the Environment, Canberra, March 2022.

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Appendices

Appendix A

EPBC Act Protected Matters Search Tool Results

Appendix B

NCA Wildlife Online Search Results

Appendix C

Likelihood of Occurrence Assessment

Appendix D

Flora Species Lists

Appendix E

State Development Approval Documentation

Appendix F

Local Development Approval Documentation

Appendix G

SAT survey results

Appendix A

EPBC Act Protected Matters
Search Tool Results





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: 25-Aug-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	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	7
Listed Threatened Species:	54
Listed Migratory Species:	13

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:	3
Commonwealth Heritage Places:	1
Listed Marine Species:	24
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:	1
Regional Forest Agreements:	None
Nationally Important Wetlands:	2
EPBC Act Referrals:	24
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	Buffer Status
Moreton bay	10 - 20km upstream from Ramsar site	In feature area

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

Community Name	Threatened Category	Presence Text	Buffer Status
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community may occur within area	In feature area
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community likely to occur within area	In feature area
Lowland Rainforest of Subtropical Australia	Critically Endangered	Community may occur within area	In feature area
Poplar Box Grassy Woodland on Alluvial Plains	Endangered	Community may occur within area	In feature area
Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	Endangered	Community likely to occur within area	In feature area
Swamp Tea-tree (Melaleuca irbyana) Forest of South-east Queensland	Critically Endangered	Community may occur within area	In buffer area only
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species			[<u>Resource Information</u>]
Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.			
Number is the current name ID.			
Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Cyclopsitta diophthalma coxeni Coxen's Fig-Parrot [59714]	Critically Endangered	Species or species habitat may occur within area	In feature area
Erythroriorchis radiatus Red Goshawk [942]	Endangered	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Geophaps scripta scripta Squatter Pigeon (southern) [64440]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
Turnix melanogaster Black-breasted Button-quail [923]	Vulnerable	Species or species habitat likely to occur within area	In feature area
FISH			
Maccullochella mariensis Mary River Cod [83806]	Endangered	Translocated population known to occur within area	In buffer area only
FROG			
Mixophyes fleayi Fleay's Frog [25960]	Endangered	Species or species habitat may occur within area	In buffer area only
INSECT			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Argynnis hyperbius inconstans Australian Fritillary [88056]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat may occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat known to occur within area	In feature area
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	In feature area
Potorous tridactylus tridactylus Long-nosed Potoroo (northern) [66645]	Vulnerable	Species or species habitat may occur within area	In feature area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			
Arthraxon hispidus Hairy-joint Grass [9338]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bosistoa transversa Three-leaved Bosistoa, Yellow Satinheart [16091]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Coleus habrophyllus listed as Plectranthus habrophyllus [91378]	Endangered	Species or species habitat may occur within area	In buffer area only
Croton mamillatus Bahrs Scrub Croton [84796]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Cupaniopsis shirleyana Wedge-leaf Tuckeroo [3205]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dichanthium setosum bluegrass [14159]	Vulnerable	Species or species habitat may occur within area	In feature area
Fontainea venosa [24040]	Vulnerable	Species or species habitat may occur within area	In feature area
Gossia gonoclada Angle-stemmed Myrtle [78866]	Endangered	Species or species habitat known to occur within area	In buffer area only
Macadamia integrifolia Macadamia Nut, Queensland Nut Tree, Smooth-shelled Macadamia, Bush Nut, Nut Oak [7326]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macadamia tetraphylla Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia, Rough- leaved Queensland Nut [6581]	Vulnerable	Species or species habitat may occur within area	In feature area
Notelaea lloydii Lloyd's Olive [15002]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Notelaea x ipsviciensis listed as Notelaea ipsviciensis			
Cooneana Olive [93460]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Planchonella eerwah			
Shiny-leaved Condoo, Black Plum, Wild Apple [17340]	Endangered	Species or species habitat may occur within area	In feature area
Rhodamnia rubescens			
Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Rhodomyrtus psidioides			
Native Guava [19162]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Samadera bidwillii			
Quassia [29708]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thesium australe			
Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Coeranoscincus reticulatus			
Three-toed Snake-tooth Skink [59628]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Delma torquata			
Adorned Delma, Collared Delma [1656]	Vulnerable	Species or species habitat may occur within area	In feature area
Furina dunmalli			
Dunmall's Snake [59254]	Vulnerable	Species or species habitat may occur within area	In feature area
Hemiaspis damelii			
Grey Snake [1179]	Endangered	Species or species habitat likely to occur within area	In feature area
Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat may occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]		
The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.		
Commonwealth Land Name	State	Buffer Status
Defence		
Defence - GREENBANK TRAINING AREA [31009]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31010]	QLD	In buffer area only
Defence - GREENBANK TRAINING AREA [31014]	QLD	In buffer area only

Commonwealth Heritage Places [Resource Information]			
Name	State	Status	Buffer Status
Natural			
Greenbank Military Training Area (part)	QLD	Listed place	In buffer area only

Listed Marine Species [Resource Information]			
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anseranas semipalmata Magpie Goose [978]		Species or species habitat may occur within area overfly marine area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Sterna striata White-fronted Tern [799]		Migration route may occur within area	In feature area
Symposiachrus trivirgatus as Monarcha trivirgatus Spectacled Monarch [83946]		Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Berrinba Wetlands	Nature Refuge	QLD	In buffer area only

Nationally Important Wetlands			[Resource Information]
Wetland Name		State	Buffer Status
Greenbank Army Training Area C		QLD	In buffer area only
Karawatha Forest Park		QLD	In buffer area only

EPBC Act Referrals					[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	
Kagaru to Acacia Ridge and Bromelton Inland Rail Project	2021/8927		Completed	In buffer area only	
Land clearing for proposed industrial development	2022/09427		Completed	In buffer area only	
Logan West Upgrade Project	2025/10109		Referral Decision	In buffer area only	
Mirvac Greater Flagstone Project - Master Planned Development, Greenbank, Qld	2016/7817		Post-Approval	In buffer area only	
PD0038 Bayliss Road Trunk Gravity Sewer Extension	2023/09495		Completed	In feature area	

Controlled action				
Cedar Grove Connector Pipeline	2011/6013	Controlled Action	Completed	In buffer area only
Park Ridge residential, mixed use and medium impact industry precinct, Park Ridge, Queensland	2017/8090	Controlled Action	Post-Approval	In feature area
Rosia Park Multisport Precinct	2021/9082	Controlled Action	Further Information Request	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Berrinba Industrial Development, Berrinba, QLD	2018/8253	Not Controlled Action	Completed	In buffer area only
Clearing of vegetation for an Industrial Development - Pagewood Street, Berrinba	2013/6759	Not Controlled Action	Completed	In buffer area only
GCCC Northern Wastewater Strategy and associated Reclaimed Water Scheme - Stage	2001/282	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Logan Enhancement Project, Qld	2016/7683	Not Controlled Action	Completed	In buffer area only
Luggage Point to Goodna Pipeline Alignment	2007/3358	Not Controlled Action	Completed	In buffer area only
Marsden Parks Depot, Marsden, Qld	2018/8378	Not Controlled Action	Completed	In buffer area only
Residential Development, Beaudesert Road	2012/6595	Not Controlled Action	Completed	In buffer area only
Residential Development at 110 Bush Tucker Road, Berrinba	2013/6774	Not Controlled Action	Completed	In buffer area only
Residential Development including Drainage Swale as Stormwater Infrastructure	2009/4910	Not Controlled Action	Completed	In buffer area only
Residential subdivision Lots 15 & 16 and associated access roads	2011/5804	Not Controlled Action	Completed	In buffer area only
Roma to Brisbane Gas Transmission Pipeline Metropolitan Loop	2012/6660	Not Controlled Action	Completed	In buffer area only
Vegetation clearing for Berrinba industrial development	2012/6624	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Construction & Operation 275/330kV Transmission Line	2006/2820	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Referral decision				
Parkinson Residential Development, QLD	2012/6589	Referral Decision	Completed	In buffer area only
Rosia Park Multisport Precinct	2021/9016	Referral Decision	Completed	In feature area

Bioregional Assessments			[Resource Information]
SubRegion	BioRegion	Website	Buffer Status
Clarence-Moreton	Clarence-Moreton	BA website	In feature area

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

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

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Appendix B

NCA Wildlife Online Search Results



Scientific name	Common name	NCA status	EPBC status	Sighting records
<i>Crinia tinnula</i>	wallum froglet	V		3
<i>Hirundapus caudacutus</i>	white-throated needletail	V	V	1
<i>Ninox strenua</i>	powerful owl	V		4
<i>Ornithorhynchus anatinus</i>	platypus	SL		1
<i>Phascolarctos cinereus</i>	koala	E	E	140
<i>Petauroides volans volans</i>	southern greater glider	E	E	7
<i>Pteropus poliocephalus</i>	grey-headed flying-fox	C	V	25
<i>Burmannia disticha</i>		SL		1
<i>Christella dentata</i>	creek fern	SL		1
<i>Lobelia purpurascens</i>	white root	SL		2
<i>Lobelia quadrangularis</i>		SL		1
<i>Macadamia integrifolia</i>	macadamia nut	V	V	1
<i>Melaleuca irbyana</i>		E		1
<i>Pterostylis bicolor</i>		SL		1
<i>Stylidium debile</i>	frail trigger plant	SL		1

Appendix C

Likelihood of Occurrence
Assessment



Likelihood of occurrence	Assessment criteria ¹
Unlikely	The investigation area is beyond the known geographic range of the species. OR The investigation area does not contain critical habitat types² or resources known to be utilized by the species during any stage of its lifecycle. OR The investigation area is highly disturbed³. OR For plant, mammal and reptile species - no contemporary⁴ species observations or records of use within 5 km of the investigation area. For avian and bat species - no contemporary species observations or records of use within 20 km of the investigation area.
Possible	For plant, mammal and reptile species - There are contemporary species observations or records of use within 5 km of the investigation area, and it contains habitat types or resources known to be utilized by the species. For avian and bat species - There are contemporary species observations or records of use within 20 km of the investigation area, and it contains habitat types or resources known to be utilized by the species. OR There are contemporary species observations or records of use more than 5 km but within 20 km of the investigation area and the following criteria are met: • The investigation area contains habitat types or resources known to be utilized by the species; AND • No major barriers to dispersal⁵ for the species exist between the location of the record and the investigation area.

¹ Criteria should be used as a guide only. Site- and species-specific factors should be considered by the assessment.

² As defined by the species conservation advice or recovery plan.

³ Contains minimal vegetation cover with a land use incompatible with conservation such as development, extractive industries, agriculture or intensive grazing.

⁴ Within 20 years of the date of the assessment.

⁵ Barriers to dispersal will be species specific, but for tree or ground dwelling fauna may include major roads with no fauna crossing features or dense development.

Known / Likely

There are contemporary species records within 2 km of the investigation area and the following criteria are met:

- The investigation area contains critical habitat types or resources known to be utilized by the species; AND
- No major barriers to dispersal for the species between the location of the record and the investigation area.

OR

There are multiple contemporary species records within the investigation area and the site has not been highly disturbed after the records

OR

Species was observed or records of use identified during field surveys within or adjacent to the investigation area.

Listed Wetlands of International Importance

Matters of National Environmental Significance

Wetlands of National Importance

Name	Status	Type of presence	Description of the community/preferred habitat	Desktop & Field Likelihood of Occurrence (on-site)
MORETON BAY			The subject site is located 10 - 20km upstream from Ramsar site	Unlikely The subject site is a sufficient distance from Moreton Bay and therefore is unlikely to have a measurable effect on Moreton bay

Matters of National Environmental Significance

Threatened Ecological Communities

Name	Status	Type of presence	Description of the community/preferred habitat	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
Coastal Swamp Oak (<i>Casuarina glauca</i>) Forest of New South Wales and South East Queensland ecological community	E	May	In Queensland, this ecological community coincides with two regional ecosystem communities including Of Concern RE12.1.1 (<i>Casuarina glauca</i> +/- mangroves woodland) as well as areas where the canopy is dominated by <i>Casuarina glauca</i> within 12.3.20 (<i>Melaleuca quinquenervia</i> , <i>Casuarina glauca</i> +/- <i>Eucalyptus tereticornis</i> , <i>Eucalyptus siderophloia</i> open forest on low coastal alluvial plains).	Unlikely No RE's associated with this TEC are mapped on site nor within 100m of the site. Therefore, it is considered 'unlikely' that this species occurs on site	Unlikely The entire subject site was traversed by foot. While some of the species known to be associated with this TEC were identified on site the compositional elements of vegetation present on site were not reflective of this TEC.
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	E	Likely	The Coastal Swamp Sclerophyll Forests of South-eastern Australia is a type of forest or scrub associated with freshwater (to brackish) wetlands on low-lying coastal areas. Several regional ecosystem communities coincide with this TEC, including Least Concern RE 12.2.7 (<i>Melaleuca quinquenervia</i> or rarely <i>M. dealbata</i> open forest on sand plains), Of Concern RE 12.3.4/12.3.4a (<i>Melaleuca quinquenervia</i> , <i>Eucalyptus robusta</i> woodland on coastal	Unlikely No RE's associated with this TEC are mapped on site nor within 100m of the site. Therefore, it is considered 'unlikely' that this species occurs on site	Unlikely The entire subject site was traversed by foot. While some of the species known to be associated with this TEC were identified on site the compositional elements of vegetation present on site were not reflective of this TEC.

alluvium/*Eucalyptus bancroftii* open woodland often with *Melaleuca quinquenervia*), Least Concern RE 12.3.5 (*Melaleuca quinquenervia* open forest on coastal alluvium), Least Concern RE 12.3.6 (*Melaleuca quinquenervia* +/- *Eucalyptus tereticornis*, *Lophostemon suaveolens*, *Corymbia intermedia* open forest on coastal alluvial plain) and Endangered RE 12.3.20 (*Melaleuca quinquenervia*, *Casuarina glauca* +/- *Eucalyptus tereticornis*, *E. siderophloia* open forest on low coastal alluvial plain).

Lowland Rainforest of Subtropical Australia	CE	May	This TEC occurs mainly on basalt and alluvial soils and is characteristic of a low abundance of Eucalyptus, Melaleuca and Casuarina species. Specimens with buttress roots and a diversity of vines are common throughout this TEC. This community is usually associated Regional Ecosystems 12.3.1, 12.5.13, 12.8.3, 12.8.4, 12.11.1, 12.11.10, 12.12.1, and 12.12.16.	Unlikely No RE's associated with this TEC are mapped on site nor within 100m of the site. Therefore, it is considered 'unlikely' that this species occurs on site.	Unlikely The entire subject site was traversed by foot. The compositional and structural elements of vegetation present on site were not reflective of this TEC.
Poplar Box Grassy Woodland on Alluvial Plains	E	May	The Poplar Box Grassy Woodland on Alluvial Plains ecological community is typically a grassy woodland with a canopy dominated by <i>Eucalyptus populnea</i> and understorey mostly of	Unlikely No RE's associated with this TEC are mapped on site nor within 100m of the site. Therefore, it is considered	Unlikely The entire subject site was traversed by foot. The species, compositional elements of vegetation

			grasses and other herbs. The ecological community mostly occurs in gently undulating to flat landscapes and occasionally on gentle slopes on a wide range of soil types of alluvial and depositional origin. In Queensland, this TEC corresponds with 11.3.2, 11.3.17, 11.4.7, 11.4.12 and 12.3.10.	'unlikely' that this species occurs on site.	present on site were not reflective of this TEC.
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Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions	E	Likely	The Subtropical eucalypt floodplain forest and woodland of the New South Wales North Coast and South East Queensland bioregions occurs in the New South Wales North Coast (NNC) and South Eastern Queensland (SEQ) IBRA bioregions and on Curtis Island in the Brigalow Belt North (BBN) IBRA Bioregion (DoE 2013). The ecological community is found on alluvial landforms, including floodplains, the riparian zones of parent rivers and other order tributaries, alluvial flats, floodplain/alluvial terraces and periodically flooded depressions. Components of this ecological community are recognised as endangered under this framework, including; RE 12.3.2, 12.3.2a, 12.3.3, 12.3.3a, 12.3.3d, 12.3.4a, 12.3.7, 12.3.7c, 12.3.7d, 12.3.10, 12.3.11,	Possible RE 12.3.11 which is associated with the occurrence of this TEC is mapped within 100m of the site. Therefore, it is considered 'possible' that this TEC occurs on site.	Unlikely The entire subject site was traversed by foot. The species, compositional and structural elements of vegetation present on site were not reflective of this TEC
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12.3.11a, 12.3.11b, 12.3.12, 12.3.14a, 12.3.15, 12.3.19

Swamp Tea-tree (Melaleuca irbyana) Forest of South-east Queensland	CE	May	Low open forest dominated by dense thickets of Swamp Teatree, usually growing to about 8-12 m high. In south-east Queensland, Swamp Tea-tree occurs in monotypic stands uniquely linked to Tea Tree Clay soils which drain slowly after heavy rains, becoming waterlogged and forming temporary ponds. This ecological community comprises Queensland regional ecosystems 12.9-10.11 (Land Zone 9-10) and 12.3.3c (Land Zone 3) which are listed as endangered under the VMA.	Unlikely No RE's associated with this TEC are mapped on site nor within 100m of the site. Therefore, it is considered 'unlikely' that this species occurs on site.	Unlikely The entire subject site was traversed by foot. The species, compositional and structural elements of vegetation present on site were not reflective of this TEC
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	CE	May	Box – Gum Grassy Woodlands and Derived Grasslands are characterised by a species-rich understorey of native tussock grasses, herbs and scattered shrubs, and the dominance, or prior dominance, of White Box, Yellow Box or Blakely's Red Gum trees. In Queensland the ecological community can be a primary or minor component of the following Regional Ecosystems 11.3.23, 11.3.26, 11.5.20, 11.8.2, 11.8.2a, 11.8.8, 11.9.9a, 11.9.13, 12.8.16, 13.3.1, 13.3.4, 13.9.2, 13.11.2 , 13.11.3, 13.11.4, 13.11.8, 13.11.8a, 13.12.8, 13.12.9	Unlikely No RE's associated with this TEC are mapped on site nor within 100m of the site. Therefore, it is considered 'unlikely' that this species occurs on site.	Unlikely The entire subject site was traversed by foot. The species, compositional elements of vegetation present on site were not reflective of this TEC

Listed Threatened Species

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
Bird							
<i>Anthochaera phrygia</i>	Regent Honeyeater	CE	CE	82338	Regent Honeyeaters mostly occur in dry Box-Ironbark Eucalypt woodland and dry sclerophyll forest associations in areas of low to moderate relief, wherein they prefer moister, more fertile sites. These areas are generally associated with creek flats and river valleys and foothills. These woodlands have significantly large numbers of mature trees, high canopy cover and abundance of mistletoes. They are a generalist forager, which mainly feed on nectar from a wide range of eucalypts and mistletoes.	Possible 174 dated records within 20 km of site within past 20 years, 0 of which are within 5 km. From a desktop perspective the site may potentially contain the vegetation type that this species favours, being largely vegetated with mostly remnant vegetation and mapped as RE's associated with woodland structure. However there has been significant disturbance on site and in the surrounding area with a number of medium-density residential developments in the locality.	Unlikely Site surveys confirmed that vegetation on site may be suitable for this species. <i>Corymbia citriodora</i> (Spotted gum), a preferred foraging species of regent honey eater, was observed to be present within the referral area, however, the vegetation is highly disturbed and part of a small patch. The site is not extensive being approximately 5.65 ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						Due to the potential for the preferred habitat of this species being present on site and recent records within 20km it is considered 'possible' that this species occurs on-site.	across the site as indicated by weed invasion. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Based on field surveys it was decided to alter the likelihood of occurrence of this species on site to 'unlikely' due to the presence threats on site and lack of preferred forage species. No direct or indirect evidence of this species was observed on site.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
							Surveys confirmed that this species is unlikely to occur on site.
<i>Botaurus poiciloptilus</i>	Australasian Bittern	E	E	1001	The Australasian Bittern occurs in terrestrial wetlands and, rarely, estuarine habitats, mainly in the temperate south-east and south-west. It favours wetlands with tall dense vegetation, where it forages in still, shallow water up to 0.3 m deep, often at the edges of pools or waterways, or from platforms or mats of vegetation over deep water. It favours permanent and seasonal freshwater habitats, particularly those dominated by sedges, rushes and / or reeds or cutting grass growing over muddy or peaty substrate. The Australasian Bittern occurs in the far south-east of Queensland; it has been reported North to Baralaba and West to Wyandra, although in most years it is probably confined to a few coastal swamps. It is rarely recorded in Queensland,	Unlikely 0 dated records within 20 km of site within past 20 years. No waterbodies are apparent on site from aerials nor are any mapped on site under the VMA or Water Act 2000 however a waterbody may be concealed beneath the canopy vegetation. A review of eBird indicates that the site sits outside of the known range of this species. Due lack of records and being outside of known range of the species, it	Unlikely Site surveys confirmed no water bodies or evidence of ephemeral water sources were present on site. Vegetation was not observed to be reflective of wetland values. The entire site was traversed suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Surveys confirmed that it is unlikely that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					and possibly survives only in protected areas such as the Cooloola and Fraser regions.	is considered 'unlikely' to occur on-site.	
<i>Calyptrorhynchus lathamii</i>	South-eastern Glossy Black-Cockatoo	V	V	67036	This species prefers woodland areas dominated by she-oak <i>Allocasuarina</i> , or open sclerophyll forests and woodlands with a stratum of <i>Allocasuarina</i> beneath <i>Eucalyptus</i> , <i>Corymbia</i> or <i>Angophora</i> . Glossy black-cockatoos have also been observed in mixed <i>Allocasuarina</i> , <i>Casuarina</i> , cypress <i>Callitris</i> and brigalow <i>Acacia harpophylla</i> woodland assemblages. In SEQ west of the Great Dividing Range, they have been observed feeding in remnant <i>Allocasuarina cristata</i> and bulloak <i>Allocasuarina luehmannii</i> forests. This species is also known to utilise appropriate remnant woodlands, and individual or small pockets of <i>Allocasuarina</i> and <i>Casuarina</i> feed trees in urban areas.	Possible 71 dated records within 20 km of site within past 20 years, 5 of which are within 5 km none of which are within 2km. Vegetation has been identified on site via aerial imagery that may constitute habitat or resources used by this species. Some of the vegetation on site is identified as remnant and RE's mapped on site may contain species used as forage for this species. Due to the potential of suitable foraging habitat occurring on site and records in the	Unlikely Foraging species for Glossy Black-cockatoo, <i>Allocasuarina littoralis</i> (Black She-oak), was observed on site but was limited to four scattered mature individuals. Active searches for Orts were conducted within the vicinity of <i>Allocasuarina littoralis</i> trees. No direct observation or indirect evidence (including presence of orts) of Glossy Black-cockatoo was observed on site. Hollows, utilised by this Glossy black-cockatoo for roosting and rearing young, were present on site The entire site was traversed suitably qualified ecologists and no direct or indirect

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						surrounding area it is considered 'possible' that this species occurs on site.	evidence of this species was observed on site. The site is not extensive being approximately 5.65ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion. It was determined based on field surveys that this species is 'unlikely' to occur on site due to the lack of forage and high levels of edge effects on site.
<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)	V	V	67062	Found in eucalypt woodlands (including Box-Gum Woodland) and dry open forest of the inland slopes and plains inland of the	Unlikely 0 dated records within 20 km of site within past 20 years.	Unlikely Vegetation on site was reflective of woodlands/ open dry forest.

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					Great Dividing Range; mainly inhabits woodlands dominated by stringybarks or other rough-barked eucalypts, usually with an open grassy understorey, sometimes with one or more shrub species; also found in mallee and River Red Gum. It is less commonly found on coastal plains and ranges.	Based on desktop analysis and review of aerial imagery vegetation on site may constitute suitable habitat for this species. However, a review of eBird indicates subject site is outside of the range of this species. Due to the lack of records and being outside of the expected range of this species it is considered 'unlikely' to occur on-site.	The site is not extensive being approximately 5.65ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
							Field surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Cyclopsitta diophthalma coxeni</i>	Coxen's Fig-Parrot	CE	CE	59714	The Coxen's Fig Parrot occurs in rainforest habitats including subtropical rainforest, dry rainforest, littoral and developing littoral rainforest, and vine forest. Food is mainly taken from figs however other species fruit have been recorded in their diet including <i>Elaeocarpus grandis</i> , <i>Syzygium corynanthum</i> , <i>Litsea reticulata</i> and <i>Grevillea robusta</i> .	Unlikely 0 dated records within 20 km of site within past 20 years from ALA. A review of eBird indicates that the site sits outside of the known range of this species. No RE's associated with rainforest, dry rainforest or coastal heathlands are located on or in proximity to the site. Nor are any of the mapped current or pre-clear RE's on the site associated with rainforest, dry rainforest or coastal heathlands.	Unlikely Site surveys confirmed that no vegetation reflective of subtropical rainforest, dry rainforest, littoral and developing littoral rainforest, and vine forest were present on site. The site is not extensive being approximately 5.65ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						Due to the lack of records and low likelihood of potential habitat the species is 'unlikely' to occur on-site.	Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Field surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Erythrorchis radiatus</i>	Red Goshawk	E	E	942	A wide ranging and highly mobile species generally observed over eucalypt habitats. This species prefers forest and woodland with a mosaic of vegetation types, large prey populations (birds) and permanent water. The vegetation types include eucalypt woodland, open forest, tall open forest, gallery rainforest, swamp sclerophyll forest and rainforest margins. Habitat has to be open enough for fast attack and	Unlikely 0 dated records within 20 km of site within past 20 years. From an aerial perspective this site may contain the mosaic of vegetation types that this species favours, being largely vegetated. However, the site is not extensive being 5.65 ha.	Unlikely On ground surveys confirmed that some vegetation which constitutes the mosaic of vegetation types preferred by this species was present on site. However no evidence of permanent water was identified on site. The site is not extensive being approximately 5.65ha and is

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					manoeuvring in flight, but provide cover for ambushing of prey.	Furthermore the site is surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. A review of eBird indicates that the site sits outside of the known range of this species. Due to the lack of records, the species is considered 'unlikely' to occur on-site.	bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Field surveys confirmed that it is 'unlikely' that this species occurs on site.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
<i>Falco hypoleucos</i>	Grey Falcon	V	V	929	The Grey Falcon is a medium-sized, compact, pale falcon with a heavy, thick-set, deep-chested appearance. Usually restricted to shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast. Also occurs near wetlands where surface water attracts prey. Preys primarily on birds, especially parrots and pigeons, using high-speed chases and stoops; reptiles and mammals are also taken. Like other falcons it utilises old nests of other birds of prey and ravens, usually high in a living eucalypt near water or a watercourse; peak laying season is in late winter and early spring; two or three eggs are laid. The nests chosen are usually in the tallest trees along watercourses, particularly River Red Gum (<i>Eucalyptus camaldulensis</i>) and Coolibah (<i>E. coolabah</i>).	Unlikely 1 dated record within 20 km of site within past 20 years which is not within 5km of the site. From an aerial perspective this site may contain the habitat type that this species favours, being largely vegetated. However, the site is not extensive (~5.65 ha) and surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. A review of eBird indicates that the site sits outside of the	Unlikely Surveys confirmed that the site is reflective of eucalypt woodland and is largely vegetated and as such would constitute the preferred habitat of this species. The site is not extensive being approximately 5.65ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
						known range of this species. Due to the minimal records, the species is considered 'unlikely' to occur on site.	qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Field surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Geophaps scripta scripta</i>	Squatter Pigeon (southern)	V	V	64440	This species inhabits open grasslands and woodlands typically with a native understorey although may occur in artificial pasture.	Unlikely 0 dated records within 20 km within past 20 years. No significant regions of grasslands are apparent on site from review of site aerials. Therefore, it is unlikely that habitat suitable for this species occurs on site. A review of eBird indicates the subject site is outside of the known distribution of Squatter Pigeon.	Unlikely Site surveys confirmed that no regions of grassland are present on site the entire being lot being vegetated. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
						Due to the lack of records, it is considered 'unlikely' that this species occurs on-site.	Field surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Grantiella picta</i>	Painted Honeyeater	V	V	470	The species inhabits mistletoes in eucalypt forests/woodlands, riparian woodlands of black box and river red gum, box-ironbark-yellow gum woodlands, acacia-dominated woodlands, paperbarks, casuarinas, callitris, and trees on farmland or gardens. The species prefers woodlands which contain a higher number of mature trees, as these host more mistletoes. It is more common in wider blocks of remnant woodland than in narrower strips.	Unlikely 0 dated records within 20 km of site within past 20 years. Vegetation which may support mistletoe is potentially present on site. A review of eBird indicates the subject site is outside of the known distribution of this species. Due to the lack occurrence records nearby the species it is considered 'unlikely' to occur on-site.	Unlikely Site surveys confirmed that native vegetation that support mistletoes was present on site. However, no patches of mistletoe within trees were observed to be present. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Field surveys confirmed that it is 'unlikely' that this species occurs on site.

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<i>Lathamus discolor</i>	Swift Parrot	CE	E	744	The Swift Parrot breeds in Tasmania during spring to early summer. During autumn and winter the species migrates to the mainland where it follows a nomadic existence linked to the availability and timing of flowering of trees in various locations.	Possible 77 dated records within 20 km of site within past 20 years, 0 of which are within 5 km. Vegetation is observable on site via aerials and may constitute habitat or resources used by this species. However, the site is not extensive (~5.65 ha) and surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. A review of eBird indicates the subject site is within the known	Unlikely Site surveys confirmed that species which constitute potentially suitable forage for Swift Parrot are present on site namely winter flowering species <i>Corymbia maculata</i> (Spotted Gum). However, the species preferred forage species <i>Eucalyptus robusta</i> (box-ironbark) was not observed on site. The site is not extensive being approximately 5.65ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion.

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						distribution of this species. Due to potential for suitable foraging, being within the distribution range of this species and records within 20km it is considered 'possible' that this species occurs on site.	Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Based on field surveys it was decided to alter the likelihood of occurrence of this species on site to 'unlikely' due to the presence threats on site and lack of preferred forage species. Field surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Rostratula australis</i>	Australian Painted Snipe	E	E	77037	The Australian Painted Snipe is usually found in shallow inland wetlands, either freshwater or brackish, that are either permanently or temporarily filled.	Unlikely 6 dated records within 20 km of site within past 20 years, 0 of which are	Unlikely Site surveys confirmed that no body's of water were present on site.

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					The species has a scattered distribution throughout many parts of Australia, with a single record from Tasmania.	within 5 km of the subject site. A review of eBird indicates the subject site is within the known distribution of Painted Snipe. Water is not apparent on site via aerals however due to high levels of vegetation water may be present in the understory. No state mapped wetlands are present on site. Due to the improbability that the preferred habitat of this species is present on site and minimal occurrence records the species is considered 'unlikely' to occur on-site.	Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Based on field surveys it was decided to alter the likelihood of occurrence of this species on site to 'unlikely' due to the presence threats on site and lack of preferred forage species. confirmed that it is 'unlikely' that this species occurs on site.

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<i>Stagonopleura guttata</i>	Diamond Firetail	V	V	59398	Diamond Firetails are found in open grassy woodland, heath and farmland or grassland with scattered trees. Historical and ongoing clearing of native vegetation is the main reason for the decline of the species. Fragmentation of habitat and replacement of native perennial grasses with exotic annual grasses reduces food source availability.	Unlikely 0 dated records within 20 km of site within past 20 years. Based on site aerials the subject site is dominated by woodland/ forest vegetation. There are no areas on site reflective of grasslands, heath or farmland. A review of eBird maps the subject site as outside of the known distribution of Diamond Firetail. Due to the lack of records and falling outside of Diamond firetails known distribution the species is 'unlikely' to occur on-site.	Unlikely Site surveys confirmed no habitat reflective of open grassy woodland, heath and farmland or grassland with scattered trees. The site was confirmed to be vegetate with dense eucalypt woodland. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Based on field surveys it was decided to alter the likelihood of occurrence of this species on site to 'unlikely' due to the presence threats on site and lack of preferred forage species.

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							confirmed that it is 'unlikely' that this species occurs on site.
<i>Turnix melanogaster</i>	Black-breasted Button-quail	V	V	923	Typical habitat occurs in dry rainforest and vegetation immediately adjacent to rainforest. However, the species has also been recorded in a variety of low coastal heathlands around Fraser Island and nearby mainland. Deep leaf litter in which the species can forage appears to be particularly favoured.	Unlikely 3 dated records within 20 km of site within past 20 years, 0 of which are within 5km. The site is not coastal. No RE's associated with rainforest, dry rainforest or coastal heathlands are located on or in proximity to the site. A review of eBird maps the subject site as outside of the known distribution of this species. Due to the improbability that preferred habitat for this species is present it is considered 'unlikely'	Unlikely Site surveys confirmed that no vegetation reflective of rainforest, dry rainforest, coastal heathlands was present on site. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Based on field surveys it was decided to alter the likelihood of occurrence of this species on site to 'unlikely' due to the presence threats on site and

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						that the species occurs on-site.	lack of preferred forage species. confirmed that it is 'unlikely' that this species occurs on site.
Fish							
<i>Maccullochella mariensis</i>	Mary River Cod	E	E	83806	Found in southeast Queensland in the Mary River system, their ideal habitat is described as deep, shaded, slow flowing pools with plenty of snags and log-piles.	Unlikely 0 dated records within 20 km of site within past 20 years. No river systems are mapped on site or apparent from aerial imagery. Additionally, the site is located a significant distance from the Mary River system. Due to the lack of nearby occurrence records and improbability that the preferred habitat for this species is present the species is considered	Unlikely Site surveys confirmed that no water bodies were present on site. The entire site was traversed suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Surveys confirmed that it is 'unlikely' that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						'unlikely' to occur on-site.	
Insect							
<i>Argynnis hyperbius inconstans</i>	Australian Fritillary	CE	E	88056	Most specimens have been collected from river estuaries or swampy coastal areas at or near sea level. The Australian fritillary butterfly is restricted to open, swampy, coastal areas where the larval food plant, Viola betonicifolia, grows as a small, insignificant ground herb in association with Lomandra longifolia (Long Leaved Matrush) and grasses, especially the grass Imperata cylindrica (Bladey Grass). This habitat is called Melaleuca wetlands, although the larval food plant does not occur in all sub-types of this plant community.	Unlikely 0 dated records within 20 km of site within past 20 years. The site is not located close to the coast, therefore it is unlikely that there is suitable habitat for this species present on site. Due to the improbability that suitable habitat is present the species is considered 'unlikely' to occur on-site.	Unlikely Surveys confirmed that no values reflective of coastal vegetation were present on site. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Surveys confirmed that it is 'unlikely' that this species occurs on site.
Mammal							
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat	E	E	183	The Large-eared Pied Bat roosts on sandstone cliffs and fertile woodland valley habitat within close proximity of each other.	Unlikely 0 dated records within 20 km of site within past 20 years.	Unlikely Site surveys confirmed that no areas reflective of sandstone cliffs were present on site.

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					However, in South East Queensland habitat includes rainforest and moist eucalypt forest habitats at high elevations.	A review topographic mapping indicates that no landscape characteristics indicative of cliff faces occurs on site. Furthermore reviewing ALA the closest record of the species is over 71km south-west. Due to the improbability that preferred habitat for this species is present and lack of nearby records the species is considered 'unlikely' to occur on-site.	Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Dasyurus maculatus</i> (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern	E	E	75184	The Spot-tailed Quoll has a preference for mature wet forest habitat. Unlogged forest or forest that has been less disturbed by timber harvesting is also preferable. This predominantly nocturnal species rests during the	Unlikely 8 dated records within 20 km of site within past 20 years, 2 of which are within 5 km.	Unlikely Field surveys confirmed no suitable denning habitat to support this species occurs on-site, or in the nearby vicinity. Site surveys included baited camera traps. No

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	mainland population)				day in dens. Habitat requirements include suitable den sites such as hollow logs, tree hollows, rock outcrops or caves. Individuals require an abundance of food such as birds and small mammals, and large areas of relatively intact vegetation through which to forage.	Significant survey efforts to detect this species have been conducted within the locality in the past 10 years with the most significant survey effort demonstrated in a published study by Wildlife Preservation Society of Queensland (2015). Notably, the Wildlife Preservation Society of Queensland (Quoll Seeker's Network) in association with Logan City Council placed a number of wildlife cameras across the LGA over a 3-year program. Motion sensor cameras were located on private properties, Council Reserves, National Parks, Energex owned land and the Greenbank	observations of this species were recorded during surveys on site. Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Surveys confirmed that it is 'unlikely' that this species occurs on site

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						military airbase between 2011 and 2014 at 107 sites at 47 locations. They were placed in areas of reported sightings, or where detector dogs had indicated but direct searches were unable to substantiate evidence (e.g. scats). the site is not extensive (~5.65 ha) and surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. Due to the improbability that the adequate habitat for this species	

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						is present on site and lack of nearby recent records the species is considered 'unlikely' to occur on-site.	
<i>Macroderma gigas</i>	Ghost Bat	V	E	174	Ghost Bats have been recorded in both arid regions (Pilbara region) and rainforest areas (north Queensland). <i>Macroderma gigas</i> roost in caves, old mine tunnels and in deep cracks in rocks. This species is distributed widely however patchily across the northern half of Australia, being found in a variety of tropical habitats.	Unlikely 0 dated records within 20 km of site within past 20 years. Based on aerial imagery and topographic mapping there does not appear to be any regions of the site which could support cave systems or mine tunnels. The site does not occur within regions considered arid and no rainforest RE's are mapped nearby to the site nor were any of the pre-clear RE's on site	Unlikely Site surveys confirmed that no landscape features identified as caves, old mine tunnels or rocks with deep cracks were present on site. Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Surveys confirmed that it is 'unlikely' that this species occurs on site

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						associated with rainforest. Due to the improbability that the preferred habitat of this species is present on site and lack of recent nearby records the species is considered 'unlikely' to occur on-site.	
<i>Petauroides volans</i>	Greater Glider (southern and central)	E	V	254	The Greater Glider is an arboreal nocturnal marsupial that is mostly restricted to eucalypt forests and woodlands, although it occurs in highest abundance in taller, montane, moist eucalypt forests with abundant (large) hollow-bearing trees for shelter and a variety of eucalypt species for feeding. Diet consists of eucalypt leaves, and occasionally flowers. Small home ranges and low dispersibility make this species sensitive to clearing and fragmentation, with	Possible 152 dated records within 20 km of site within past 20 years, 54 of which are within 5 km, 0 of which are within 2 km. From an aerial perspective this site may constitute suitable habitat for this species, being largely vegetate, with previous records of hollow containing trees and majority of the site being mapped as	Unlikely Site surveys confirmed that the site is vegetated with eucalypt species which may potentially constitute suitable habitat for this species. It was also confirmed that hollows which this species uses for denning were present. A total of thirty-three (33) hollows were recorded twelve (12) of which were of suitable size for greater glider (Over 100mm). Greater Glider have a preference for hollows within living trees of which only three

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					low persistence in small forest fragments.	remnant. However, the site is not extensive (~5.65 ha) and surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. Given the species is highly susceptible to disturbance and edge avoidant behaviour, there is reduced potential for the species to occur on-site.	(3) of suitable size were identified. The site is not extensive being approximately 5.65 ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion. This species is highly susceptible to disturbance and as such is unlikely to use the site as habitat. However, there is potential the site may be used for dispersal particularly within the northern region which has high levels of connectivity to other larger patches of remnant vegetation.

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							Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Due to the presence of hollows on site and suitability of vegetation species to be used as forage using a precautionary approach site surveys indicate that it is 'possible' that this species occurs on site.
<i>Petaurus australis australis</i>	Yellow-bellied Glider (south-eastern)	V	V	87600	The Yellow-bellied Glider largely occurs in tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils. Forest type preferences vary with latitude and elevation; mixed coastal forests to dry escarpment forests in the north; moist coastal	Possible 45 dated records within 20 km of site within past 20 years, 5 of which are within 5 km, 1 of which are within 2 km.	Unlikely Site surveys confirmed that the site is vegetated with eucalypt species which may potentially constitute suitable habitat for this species. It should be noted that grey gum species which yellow-bellied

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					gullies and creek flats to tall montane forests in the south. Denning occurs within hollows of large trees, with the species preferring to live in family groups of two to six individuals. This species is very mobile and occupy large home ranges of 20 to 85 ha to encompass dispersed and seasonally available food resources.	From an aerial perspective this site may constitute suitable habitat for this species, being largely vegetate, with previous records of hollow containing trees and majority of the site being mapped as remnant. However, the site is not extensive (~5.65 ha) and surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. Given the species is highly susceptible to disturbance and edge avoidant behaviour, there is reduced	glider uses for sap feeding were limited on site. It was confirmed that hollows which this species uses for denning were present within the referral area. A total of thirty-three (33) hollows were recorded eighteen (18) of which were within living trees. Yellow-bellied Glider prefer hollows within living trees The site is not extensive being approximately 5.65 ha and is bordered by highly disturbed lots with limited vegetation to the east and west. The site is bordered on the south by a highly trafficked road. The shape of the lot makes it highly susceptible to edge effects being significantly longer than wide. Disturbance is evident across the site as indicated by weed invasion. This species is susceptible to disturbance and it's dispersal

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						potential for the species to occur on-site. Due to the nearby recent records of this species and hollow bearing trees present on site it is considered 'possible' that this species occurs on site.	capacity is limited by a requirement for dense tall vegetation. However, there is potential the site may be used for dispersal particularly within the northern region which has high levels of connectivity to other larger patches of remnant vegetation. Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. The species is considered unlikely to occur on site.
<i>Phascolarctos cinereus</i> (combined populations of	Koala (combined populations of Queensland,	E	E	85104	The Koala is found in a range of habitats, from coastal islands and tall eucalypt forests to low woodlands inland.	Likely/ Known 12119 dated records within 20 km of site within past 20 years, 117 of which are within 5	Likely/ Known Vegetation on site was observed constitute suitable foraging habitat for this species.

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<i>Qld, NSW and the ACT)</i>	New South Wales and the Australian Capital Territory)					km, 5 of which are within 2 km. Core Koala habitat is mapped over majority site. Koalas are known to occur within the surrounding locality within retained lineal corridors and connecting vegetation patches which is supported through public database records. However, the site is surrounded by existing and future infrastructure which limits the potential existing and future opportunity for connectivity to the vegetation on-site. 'Park Ridge Road' adjoins the southern boundary of the site and a highway identified as 'Mount Lindesay Highway' is present to the south	Direct and indirect evidence of this species was found on site. During one of the spotlighting night a Koala was observed within the canopy of a eucalypt tree. Koala was also observed on camera traps four separate times. SAT surveys found indirect evidence of this species which indicated 'low usage'. As this species was observed to be present on site the likelihood of occurrence was confirmed as 'likely/known'.

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						within the locality of the site. The greatest source of potential connectivity is present within the north of the site which adjoins vegetation forming a corridor to Karawatha Forest to the north-east, though this corridor is interrupted by several major roads. Due to the mapped Koala habitat and potential of vegetation observed via aerals to constitute suitable Koala foraging, this species is considered likely/known to occur on site.	
<i>Potorous tridactylus</i>	Long-nosed Potoroo (northern)	V	V	66645	The Long-nosed Potoroo inhabits coastal heaths and dry and wet sclerophyll forests. Dense understorey with occasional open	Unlikely 0 dated records within 20 km within past 20 years.	Unlikely Site surveys confirmed that vegetation on site was not reflective of coastal heaths

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					areas is an essential part of habitat, and may consist of grass-trees, sedges, ferns or heath, or of low shrub of tea-trees or melaleucas. A sandy loam soil is also a common feature.	Based on aerial imagery and review of relevant mapping vegetation on site may constitute suitable habitat for this species being reflective of sclerophyll forests. However, there are no recent records of this species within 20km of the site with the nearest record occurring 25km northwest. Due to the lack of nearby recent records the species is considered 'unlikely' to occur on-site.	and wet sclerophyll forests. Vegetation on site consisted of dense eucalypt woodland reflective of dry sclerophyll forests. However these are no recent records of this species occurring within proximity to this site. Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site. Due to the lack of recent records of this species within the locality of the referral area and no evidence of this species being present on site surveys confirmed that it is

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<i>Pseudomys novaehollandiae</i>	New Holland Mouse, Pookila	V	V	96	Across the species' range the New Holland Mouse is known to inhabit open heathlands, open woodlands with a heathland understorey and vegetated sand dunes. The New Holland Mouse is a social animal, living predominantly in burrows shared with other individuals. The home range of the New Holland Mouse ranges from 0.44 ha to 1.4 ha. The species peaks in abundance during early to mid stages of vegetation succession typically induced by fire.	Unlikely 0 dated records within 20 km of site within past 20 years. Based on aerial imagery and review of relevant mapping vegetation on site may constitute suitable habitat for this species being reflective of sclerophyll forests. However, there are no recent records of this species within 20km of the site with the nearest record occurring 77km west. Due to the lack of nearby recent records the species is considered 'unlikely' to occur on-site.	'unlikely' that this species occurs on site. Unlikely Site surveys confirmed that vegetation on site was not reflective of open heathlands, open woodlands with a heathland understorey and vegetated sand dunes. The site was confirmed to be reflective of eucalypt woodland but the understory was not populated by heathland species. Two-nights spotlighting were conducted on site and did not detect direct or indirect evidence of this species. The entire site was traversed by a suitably qualified ecologists and no direct or indirect evidence of this species was observed on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
							Due to the lack of recent records of this species within the locality of the referral area and no evidence of this species being present on site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	V	C	186	Species generally roosts in camps in trees adjacent to larger permanent watercourse. The Grey-headed flying fox (GHFF) requires foraging resources and roosting sites. It is a canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and Banksia woodlands. It also feeds on commercial fruit crops. The primary food source is blossom from Eucalyptus and related genera.	Likely/Known 363 dated records within 20 km of site within past 20 years, 29 of which are within 5 km, 0 of which are within 2 km. No waterways are mapped on site under state mapping. A waterway mapped under the Water Act 2000 is however present within adjoining vegetation to the south-east of the site. The site is mapped as mostly remnant vegetation and	Likely/ Known Vegetation on site was observed constitute suitable foraging habitat for this species. Direct evidence of this species was observed on site. Grey headed flying-fox was observed during both nights of spotlighting. One of the two night it was observed as a fly-over and on the other a grey-headed flying fox was observed to be foraging within vegetation within the referral area.

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						vegetation is observable on site via aerial imagery. RE's mapped on site are associated with being dominated by Eucalypt species known to provide forage for GHFF. A mapped Grey Headed Flying Fox roost is present 3km west of the subject site however the last recorded use of the camp was in 2019. Most recent surveys in 2022 observed no GHFF present. Due to the potential for foraging habitat, nearby recent records of the species and presence of a flying fox roost without recent usage it is considered 'likely/known' that the species occurs on site.	As this species was observed to be present on site the likelihood of occurrence was confirmed as 'likely/known'.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
Plant							
<i>Arthraxon hispidus</i>	Hairy-joint Grass	V	V	9338	Hairy-joint grass is found in or on the edges of rainforest and in wet eucalypt forest, often near creeks or swamps, as well as woodland.	Unlikely 0 dated records within 20 km of site within past 20 years. RE's onsite and mapped RE's in adjacent lots are not associated with rainforest. 12.6.3 is associated with the occurrence of this species and is mapped approximately 60m north-east of the subject site. However, reviewing ALA the closest records of this species is ~40 kilometres north-west of the site. Due to the lack of dated recent records within 5km of the site it is considered unlikely that this species occurs on site.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
<i>Bosistoa transversa</i>	Three-leaved Bosistoa, Yellow Satinheart	V	C	16091	The Three-leaved Bosistoa is conserved within Mt Warning National Park, Numbinbah Nature Reserve, Limpinwood Nature Reserve and Whian Whian State Forest. While population information is unavailable, it is thought to be common in its range. It generally grows in wet sclerophyll forest, dry sclerophyll forest and rainforest up to 300 metres in altitude. It is commonly associated with <i>Argyrodendron trifoliolatum</i> , <i>Syzygium hodgkinsoniae</i> , <i>Endiandra pubens</i> , <i>Dendrocnide photinophylla</i> , <i>Acmena ingens</i> , <i>Diploglottis australis</i> and <i>Diospyros mabacea</i> .	Unlikely 0 dated records within 20 km of site within past 20 years. RE's on site and surrounding the site are associated with dry sclerophyll forest. However, the closest record on ALA of this species is ~27km south east of the subject site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Coleus habrophyllus</i>		E	E	91378	Plants have been recorded growing on chert or sandstone outcrops, in open woodlands often in shaded situations near vine forest. Seven populations are known including: Oxley Creek, Greenbank; Opposum Creek,	Unlikely 44 dated records within 20 km of site within past 20 years 0 of which are within 5km.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					Springfield; Woogaroo Creek, Goodna; three populations within White Rock Conservation Park, incorporating Six Mile Creek Conservation Park near Ormeau (south of Beenleigh).	White Rock conservation park does occur close to the subject site. However, the closest record of this species on ALA is from 1995 and is 7km west of the subject site. Furthermore, this species is highly endemic to the region it occurs. Due to the lack of dated recent records within 5km of the site and the lack of vegetation on site as evidenced from aerial imagery it is considered 'unlikely' that this species occurs on site.	landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Croton mamillatus</i>	Bahrs Scrub Croton	CE	CR	84796	Croton mamillatus is only know from a few disjunct populations at Bahrs scrub, Mt French, Bahrs Hill and Caboolture. Croton mamillatus grows as an	Unlikely 6 dated records within 20 km of site within past 20 years, 1 of which is	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
					understorey shrub in remnants of dry microphyll or notophyll vineforest on red soil.	within 5km, o of which are within 2km. None of the current and pre-clear RE's on site or in adjacent areas are associated with rainforest. Due to the lack of dated recent records within 5km of the site and the lack of RE's associated with rainforest present on site it is considered unlikely that this species occurs on site.	site nor were any vegetive or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Cryptostylis hunteriana</i>	Leafless Tongue-orchid	V	–	19533	In Queensland, Leafless Tongue-orchid is known from a single plant near the village of Tinnanbar and four additional coastal populations north of the Glasshouse Mountains to Tin Can Bay (Logan, 1998). The Queensland populations have been recorded from sandy heathland (Logan, 1998). Leafless	Unlikely 0 records within 20 km within past 20 years. The subject site is not coastal and is therefore unlikely to be reflective of heathlands.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetive or landform characteristics associated with it.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
					Tongue-orchid occurs singly or more often in highly localised loose colonies and inhabits a range of habitats.	Due to the lack of recent records of this species within locality and the improbability of suitable habitat occurring it is considered unlikely that this species occurs on site.	The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Cupaniopsis shirleyana</i>	Wedge-leaf Tuckerroo	V	V	3205	The Wedge-leaf Tuckerroo occurs in a variety of dry rainforest vegetation types, including vine thicket communities on hillsides, stream beds and along riverbanks at altitudes up to 550 m above sea level. This species is also likely to occur on the margins of native vegetation in scrubby urbanised areas. Predominately found on dark brown sandy loams and sandy clay loams (pH 5-7.5) and rocky scree slopes. Generally, these soils have formed from volcanic parent materials (mainly granites and granodiorites, basalt and andesitic flows, and pyroclastics).	Unlikely 0 dated records within 20 km of site within past 20 years. No current or pre-clear RE's associated with rainforest or vine thicket are mapped on or immediately surrounding the site. RE 12.6.3 is associated with the occurrence of this species and is mapped approximately 60m north-east of the subject site. The nearest record of this species is	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						mapped 20km north of the subject site. Due to the lack of dated recent records within 5km of the site it is considered unlikely that this species occurs on site.	
<i>Dichanthium setosum</i>	Bluegrass	V	C	14159	In Queensland, bluegrass has been reported from the Leichhardt, Morton, North Kennedy and Port Curtis regions. <i>Dichanthium setosum</i> is associated with heavy basaltic black soils and stony red-brown hardsetting loam with clay. It can be found in moderately disturbed areas such as cleared woodland, grassy roadside remnants, grazed land and highly disturbed pasture. The extent to which this species tolerates disturbance is unknown.	Unlikely 0 dated records within 20 km of site within past 20 years. The closest record of this species occurs 50km south of the site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
<i>Fontainea venosa</i>		V	V	24040	Occurs in notophyll vine forest and vine thicket with a mean annual rainfall of 1000-1100 mm on soils derived from and containing abundant andesitic rocks, often on rocky outcrops or along creeks.	Unlikely 31 dated records within 20 km of site within past 20 years, 1 of which is within 5 km and 0 of which are within 2km. No current or pre-clear RE's associated with vine forest or vine thicket are mapped on or immediately surrounding the site. Due to the lack mapped RE's associated with the occurrence of this species on site it is considered 'unlikely' that this species occurs on site.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Gossia gonoclada</i>	Angle-stemmed Myrtle	E	CR	78866	<i>Gossia gonoclada</i> is recorded growing along watercourses. The species prefers to grow in lowland remnant riparian rainforest and notophyll vine forest in subtropical South-east	Unlikely 35 dated records within 20 km of site within past 20 years, 0 of which is within 5 km.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					Queensland. Some have been recorded in the ecotone areas between vine forest and rainforest vegetation and that of Eucalypts.	No current or pre-clear RE's associated with vine forest or vine thicket are mapped on or immediately surrounding the site. A watercourse is mapped north of the subject site and RE's mapped in association with this waterway are associated with the occurrence of <i>Gossia gonoclada</i> . The closest record of this species is 6km north of the site. Due to the lack of records of this species within 5km it is considered 'unlikely' that this species occurs on site.	landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Macadamia integrifolia</i>	Macadamia Nut, Queensland Nut Tree,	V	V	7326	The Macadamia Nut grows in remnant rainforest. It prefers to grow in mild frost-free areas with reasonably high rainfall.	Unlikely 110 dated records within 20 km of site within past 20 years, 4 of which are	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
	Smooth-shelled Macadamia, Bush Nut, Nut Oak				Vegetation communities range from notophyll mixed forest, extremely tall closed forest, simple notophyll mixed very tall closed forest to simple microphyll-notophyll mixed mid-high closed forest with Araucaria and Argrodendron emergents.	within 5 km and 2 of which are within 2km. Review of the source of these records indicates that they appear to be planted. Further evidence for this is that no current or pre-clear RE's associated with the occurrence of this species occur on site or in the surrounding area. Due to the improbability that suitable habitat for this species is present on site it is considered 'unlikely' that this species occurs on site.	species was not identified on site nor were any vegetive or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Macadamia tetraphylla</i>	Rough-shelled Bush Nut, Macadamia Nut, Rough-shelled Macadamia,	V	V	6581	This species generally occurs in subtropical rainforest and complex notophyll vineforest, at the margins of the forests and mixed sclerophyll forest. It occurs in restricted habitat, growing on	Unlikely 0 dated record within 20 km of site within past 20 years, 1 of which is within 5 km, 0 of which are within 2 km.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetive or

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
	Rough-leaved Queensland Nut				moderate to steep hillslopes on alluvial soils at well drained sites.	RE 12.5.3 which is associated with alluvial soils is present on site. However no current or pre-clear RE's associated with the occurrence of this species occur on site or in the surrounding area. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Notelaea lloydii</i>	Lloyd's Olive	V	V	15002	The species occurs on undulating to hilly terrain either in moist gullies or on gentle to steep dry slopes, but is rarely found on rocky outcrops. Soil types are mostly shallow, well drained and stony to very rocky in texture. Found in the ecotone between eucalypt open forests and vine thickets at 80-480 m above sea level (asl).	Unlikely 3 dated records within 20 km of site within past 20 years, 0 of which are within 5 km. RE 12.9-10.17 is associated with the occurrence of this species and is mapped on site. However, the	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						closest record of this specie occurs approximately 16km north-west of the site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Notelaea x ipsviciensis</i>	Cooneana Olive	CE	CR	93460	The Cooneana Olive survives as an understorey plant in degraded, eucalypt dominated dry sclerophyll vegetation communities. Soils in the area are of low fertility, depauperate and sandstone-based. This species prefers open woodland communities with open canopies. The known population is adjacent to subdivided, modified and developed land.	Unlikely 1 dated record within 20 km of site within past 20 years which is not within 5 km of the site. RE's on site are associated with dry sclerophyll vegetation communities and associated with a woodland structure. However no RE's associated with the occurrence of this	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						species are mapped on site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Planchonella eerwah</i>	Shiny-leaved Condoo, Black Plum, Wild Apple	E	E	17340	Rare tree with dense glossy foliage and scaly bark. It is restricted to three locations in southeastern Queensland, the Ipswich– Beaudesert area south-west of Brisbane; the Beenleigh– Ormeau–Pimpama area, south-east of Brisbane; and the Nambour–Maleny district on the Sunshine coast. It grows on rocky slopes in vine thickets and rainforest. Dominant associated species in southern populations include hoop pine (<i>Araucaria cunninghamii</i>), <i>Harpullia pendula</i> , and members of the genus <i>Flindersia</i> , and in the northern <i>Argyrodendron</i> species, <i>Atalaya</i>	Unlikely 40 dated records within 20 km of site within past 20 years, 2 of which are within 5 km and none of which are within 2km. RE's mapped on site are not associated with vine thicket or rainforest. No RE's associated with the occurrence of this species are present on site. Due to the lack of dated recent records within 5km of the site it is	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					<i>multiflora</i> , <i>Choricarpia subargentea</i> , <i>Excoecaria dallachyana</i> , and <i>Flindersia australis</i> .	considered 'unlikely' that this species occurs on site.	
<i>Rhodamnia rubescens</i>	Scrub Turpentine, Brown Malletwood	CE	CR	15763	Found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest usually on volcanic and sedimentary soils.	Possible 15 dated records within 20 km of site within past 20 years, 1 of which is within 2 km of the site. RE's mapped on site are not associated with rainforest. RE's on site are associated with sclerophyll vegetation. No RE's associated with the occurrence of this species are present on site. Soil type on site is associated with sedimentary soils. Due to the presence of a recent dated record within 2km of the site which appears to be in the wild it is considered	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. As a result of this species not being located on site despite extensive time on site it has been identified that it 'unlikely' that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						'possible' that this species occurs on site.	
<i>Rhodomirtus psidioides</i>	Native Guava	CE	CR	19162	Pioneer species found in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest often near creeks and drainage lines.	Possible 96 dated records within 20 km of site within past 20 years, 1 of which is within 5 km, 0 of which are within 2 km. Preclear RE's on site are not associated with this species occurrence. However, a record of this species is located within 5km of the subject site. Landzone 3 is located 60km north-east of subject site and this species is associated with riparian vegetation, although current and pre-clear mapping indicates that no RE's associated with rainforest are mapped	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. As a result of this species not being located on site despite extensive time on site it has been identified that it 'unlikely' that this species occurs on site.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
						on site or nearby to the subject site. It is therefore considered 'possible' that this species occurs on site.	
<i>Samadera bidwillii</i>	Quassia	V	V	29708	Quassia commonly occurs in lowland rainforest or on rainforest margins, but it can also be found in other forest types, such as open forest and woodland. Quassia is commonly found in areas adjacent to both temporary and permanent watercourses in locations up to 510 m altitude. The species occurs on lithosols, skeletal soils, loam soils, sands, silts and sands with clay subsoils.	Unlikely 0 dated records within 20 km of site within past 20 years. No RE's associated with rainforest are mapped on site or nearby to the subject site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	Unlikely The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
<i>Thesium australe</i>	Austral Toadflax, Toadflax	V	V	15202	Austral Toadflax is semi-parasitic on the roots of a range of grass species, notably <i>Themeda triandra</i> (Kangaroo Grass). It occurs in shrubland, grassland or woodland, often on damp sites.	Unlikely 0 dated records within 20 km of site within past 20 years. <i>Themeda triandra</i> may occur on site. However, the closest record of <i>Thesium australe</i> this species is approximately 30km north-west of the site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	Unlikely <i>Themeda triandra</i> was observed on site. The entire site was traversed multiple times by suitably qualified ecologists. This species was not identified on site nor were any vegetative or landform characteristics associated with it. The area of the site is not extensive (5.65 ha) and all areas were easily accessible and surveyable. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

Reptile

<i>Delma torquata</i>	Adorned Delma, Collared Delma	V	V	1656	In general, the species occurs on rocky hillsides on basalt and lateritic soils supporting open eucalypt and Acacia woodland with a sparse understorey of	Unlikely 0 dated record within 20 km of site within past 20 years.	Unlikely Site surveys confirmed that there was not habitat on site reflective of rocky hillside.
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<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					shrubs and tussocks or semi-evergreen vine thicket.	No regions of rocky areas are apparent from aerial imagery but may be concealed by canopy vegetation. However, the nearest record of this species on ALA is 21km west of the site. Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	The entire site was traversed suitably qualified ecologists and this species was not observed. Th Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Furina dunmalli</i>	Dunmall's Snake	V	V	59254	Dunmall's Snake has been found in a broad range of habitats, including forests and woodlands on black alluvial cracking clay and clay loams dominated by Brigalow other Wattles, native Cypress or Bull-oak, and various Blue Spotted Gum, Ironbark, White Cypress Pine and Bull oak open forest and woodland associations on sandstone derived soils. Dunmall's Snake occurs primarily	Unlikely 0 dated records within 20 km of site within past 20 years. Current and pre-clear RE's on site and in the surrounding area are not associated with Brigalow.	Unlikely Site surveys confirmed no vegetation reflective on brigalow was present on site. The entire site was traversed suitably qualified ecologists and this species was not observed.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
					in the Brigalow Belt region in the south-eastern interior of Queensland. Records indicate sites at elevations between 200–500 m above sea level. The snake is very rare or secretive with limited records existing. It has been recorded at Archokoora, Oakey, Miles, Glenmorgan, Wallaville, Gladstone, Lake Broadwater, Mount Archer, Exhibition Range National Park, roadside reserves between Inglewood and Texas, Rosedale, Yeppoon and Lake Broadwater Conservation Park.	Due to the lack of dated recent records within 5km of the site it is considered 'unlikely' that this species occurs on site.	Th Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Hemiaspis damelii</i>	Grey Snake	E	E	1179	In Queensland, grey snake habitat is Brigalow (<i>Acacia harpophylla</i>) and Belah (<i>Casuarina cristata</i>) woodlands on heavy, dark brown to black cracking clay soils, particularly in association with water bodies, areas with small gullies and ditches, and floodplain environments where the species	Unlikely 0 dated records within 20 km of site within past 20 years. Current and reclear RE's on site and in the surrounding area are not associated with Brigalow.	Unlikely Surveys confirmed no features of habitat to support this species present on site. No vegetation reflective of Brigalow was identified on site. The entire site was traversed suitably qualified ecologists and this species was not observed.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
					shelters beneath logs, rocks and soil cracks.	Due to the lack of dated recent records within 5km of the site it is considered unlikely that this species occurs on site.	The site surveys confirmed that it is 'unlikely' that this species occurs on site.
Frog							
<i>Mixophyes fleayi</i>	Fleay's Frog	E	E	25960	Fleay's Frog is associated with montane rainforest and open forest communities adjoining rainforest. The species occurs along stream habitats from first to third order streams (i.e. small streams close to their origin through to permanent streams with grades of 1 in 50) and is not found in ponds or ephemeral pools.	Unlikely 0 dated records within 20 km of site within past 20 years. RE's mapped on site are not associated with rainforest. Ther nearest record of this species is located 26km south-east of the site. Due to the lack of dated recent records within 5km of the site it is considered unlikely that this species occurs on site.	Unlikely No vegetation reflective of rainforest was observed on site. Furthermore no water sources or vegetation associated with water sources were identified on site. The entire site was traversed suitably qualified ecologists and this species was not observed. The site surveys confirmed that it is 'unlikely' that this species occurs on site.

Listed migratory species (not listed above)

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
Bird							
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	V	V	874	In Australia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh, and beach cast algae / seaweed or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline salt lakes inland. They also occur in salt works and sewage farms. They use flooded paddocks, sedgeland and other ephemeral wetlands, but leave when they dry. They use intertidal mudflats in sheltered bays, inlets, estuaries or seashores, and also swamps and creeks lined with mangroves.	Unlikely 128 dated records within 20 km of site within past 20 years, 0 of which are within 5 km. The site is not coastal, and no wetlands are mapped on site. No waterways or wetlands are mapped on site under the Va or Water Act 2000. Due to the lack of dated recent records within 5km of the site and lack of wetland and estuarian/ coastal influences mapped on site it is considered 'unlikely' that this species occurs on site.	Unlikely Site surveys confirmed no landscape features reflective of coastal values or saline influenced waterways were present on site. The site was confirmed to be highly disturbed with limited vegetation present. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
<i>Calidris ferruginea</i>	Curlew Sandpiper	CE	CR	856	Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms. They are also recorded inland, though less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. In Queensland, scattered records occur in the Gulf of Carpentaria, with widespread records along the coast south of Cairns.	Unlikely 0 dated records within 20 km of site within past 20 year. The subject site is not coastal and there are no waterways or wetlands mapped on site under the VMA or water Act. No water is apparent on site from aerial imagery. Due to the lack of dated recent records within 20km of the site it is considered unlikely that this species occurs on site.	Site surveys confirmed that it is 'unlikely' that this species occurs on site. Unlikely Site surveys confirmed no characteristics reflective of coastal values were present on site nor was there an other sources of water on site. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

<i>Scientific name</i>	<i>Common name</i>	<i>EPBC Act</i>	<i>NC Act</i>	<i>EPBC Code</i>	<i>Habitat and Distribution</i>	<i>Desktop Likelihood of Occurrence (on-site)</i>	<i>Field Survey Confirmed Likelihood of Occurrence (on-site)</i>
<i>Charadrius leschenaultii</i>	Greater Sand Plover, Large Sand Plover	V	V	877	In the non-breeding grounds in Australasia, the Greater Sand Plover is almost entirely coastal, inhabiting littoral and estuarine habitats. They mainly occur on sheltered sandy, shelly or muddy beaches with large intertidal mudflats or sandbanks, as well as sandy estuarine lagoons. They seldom occur at shallow freshwater wetlands.	Unlikely 0 dated records within 20 km of site within past 20 years. The site is not coastal. Due to the lack of dated recent records within 20km of the site it is considered 'unlikely' that this species occurs on site.	Unlikely Site surveys confirmed no landscape features reflective of coastal values were present on site. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	V	V	863	Latham's Snipe occurs in permanent and ephemeral wetlands. They usually inhabit open, freshwater wetlands with low, dense vegetation.	Unlikely 845 dated records within 20 km of site within past 20 years, 1 of which is	Unlikely Site surveys confirmed no landscape features

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						within 5 km, 0 of which are within 2 km. No records exist within 5km of the site and no wetlands or wetland values are mapped on site. Reviewing aerial imagery, no water is apparent on site. Due to no wetland values being mapped on site or apparent from aerial imagery it is considered 'unlikely' that this species occurs within the referral area.	reflective of wetland values were present on site. Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple times across two days and two nights and no direct or indirect evidence of this species was observed on site. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Hirundapus caudacutus</i>	White-throated Needletail	V	V	682	Although they occur over most types of habitat, they are probably recorded most often above wooded areas, including open forest and rainforest, and may also fly between trees or in clearings, below the	Likely/known 1092 dated records within 20 km of site within past 20 years, 33 of which are within 5 km, 4 of which are within 2 km.	Unlikely Site surveys confirmed vegetation on site was reflective of woodland. Furthermore, hollows utilised by this species for

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					canopy, but they are less commonly recorded flying above woodland. They also commonly occur over heathland, but less often over treeless areas, such as grassland or swamps.	From an aerial perspective this site may contain habitat type that this species favours, being largely vegetated. However, the site is not extensive (~5.65 ha) and surrounded by significant levels of disturbance with newly constructed medium density residential development within the locality to the west and an under construction residential development to the south. A review of eBird indicates that the site sits within the known range of this species. Due to the vegetation on site and records within 2km it is considered 'likely/known' that this species occurs on site.	roosting were identified on site. However, vegetation was found to not be extensive with high levels of disturbance within the locality of the site. There are areas of much more extensive vegetation within the greater region which would be more likely to be used by this species for forage and roosting such as Greenbank Military Training area and White Rock Conservation Park. There is however a region of vegetation within the north of the referral area which connects to more extensive areas of vegetation which is to be retained and rehabilitated as an environmental open space area. Two dusk bird surveys and one diurnal bird survey

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
							were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. However, to the proximity of recent records (within 20 years) and potential for vegetation on site to constitute suitable habitat it is considered 'possible' that this species occurs on site.
<i>Numenius madagascariensis</i>	Eastern Curlew, Far Eastern Curlew	CE	CR	847	The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often	Unlikely 1 dated record within 20 km of site within past 20 years, which is not within 5 km. The site is not coastal, and no wetlands are mapped	Unlikely Site surveys confirmed no landscape features reflective of coastal, wetland saltworks or sewage farms values were present on or adjacent to site.

Scientific name	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
					near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes use the mangroves. The birds are also found in saltworks and sewage farms.	on site. No saltworks and sewage farms are located on site or within the locality of the site. A review of eBird indicates that the site sits outside the known range of this species. Due to the lack of records and the site not being coastal it is considered 'unlikely' that this species occurs on site.	Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Site surveys confirmed that it is 'unlikely' that this species occurs on site.
<i>Tringa nebularia</i>	Common Greenshank , Greenshank	E	E	832	The Common Greenshank is found in a wide variety of inland wetlands and sheltered coastal habitats of varying salinity. The species is known to forage at the edges of wetlands in soft mud or mudflats.	Unlikely 0 dated records within 20 km of site within past 20 years. The site is not in a coastal region. Wetlands are not mapped on the subject site. Water is not apparent on site via aerals but may	Unlikely Site surveys confirmed no landscape features reflective of wetland values were present on site. The site was confirmed to be highly disturbed with limited vegetation present.

<i>Scientific name</i>	Common name	EPBC Act	NC Act	EPBC Code	Habitat and Distribution	Desktop Likelihood of Occurrence (on-site)	Field Survey Confirmed Likelihood of Occurrence (on-site)
						be present in the understory. Due to the improbability that suitable habitat is present on site and lack of recent records within the locality it is considered 'unlikely' that this species occurs on site.	Two dusk bird surveys and one diurnal bird survey were conducted on site and did not detect this species. The entire site was traversed suitably qualified ecologists multiple time across two days and two nights and no direct or indirect evidence of this species was observed on site. Site surveys confirmed that it is 'unlikely' that this species occurs on site.

Appendix D

Flora Species Lists



Native flora species list

<u>Scientific Name</u>	<u>Common Name</u>	<u>Conservation status EPBC Act</u>	<u>Conservation status NC Act</u>
<i>Acacia concurrens</i>	Black Wattle	—	Least Concern
<i>Acacia disparima</i>	Hickory Wattle	—	Least Concern
<i>Allocasuarina littoralis</i>	Black She-oak	—	Least Concern
<i>Alphitonia excelsa</i>	Soap Tree	—	Least Concern
<i>Angophora leiocarpa</i>	Smooth-barked Apple	—	Least Concern
<i>Aristida vagans</i>	Threeawn Speargrass	—	Least Concern
<i>Banksia integrifolia</i>	Coastal Banksia	—	Least Concern
<i>Boronia polygalifolia</i>	Dwarf Boronia	—	—
<i>Brachychiton acerifolius</i>	Illawarra Flame Tree	—	Special Least Concern
<i>Cheilanthes distans</i>	Bristle Cloak Fern	—	Least Concern
<i>Corymbia citriodora</i>	Spotted Gum	—	—
<i>Corymbia intermedia</i>	Pink Bloodwood	—	Least Concern
<i>Cryptocarya glaucescens</i>	Jackwood	—	Least Concern
<i>Cupaniopsis anacardioides</i>	Tuckeroo	—	Least Concern
<i>Cymbopogon refractus</i>	Barbed Wire Grass	—	Least Concern
<i>Dianella caerulea</i>	Blue Flax-lily	—	Least Concern
<i>Dichelachne micrantha</i>	Shorthair Plumegrass	—	Least Concern
<i>Entolasia stricta</i>	Wiry Panic	—	Least Concern
<i>Eucalyptus fibrosa</i>	Broad-leaved Ironbark	Red	Least Concern
<i>Eucalyptus major</i>	Grey Gum	—	Least Concern
<i>Eucalyptus propinqua</i>	Small-fruited Grey Gum	—	Least Concern
<i>Eucalyptus racemosa</i>	Scribbly Gum	—	Least Concern
<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	—	Least Concern
<i>Eucalyptus siderophloia</i>	Grey Ironbark	—	Least Concern
<i>Eucalyptus tereticornis</i>	Forest Red Gum	—	Least Concern
<i>Gahnia aspera</i>	Saw Sedge	—	Least Concern
<i>Goodenia rotundifolia</i>	Star Goodenia	—	Least Concern
<i>Grevillea robusta</i>	Silky Oak	—	Least Concern
<i>Hardenbergia violacea</i>	Native Sarsaparilla	—	Least Concern
<i>Imperata cylindrica</i>	Blady Grass	—	Least Concern



<u>Scientific Name</u>	<u>Common Name</u>	<u>Conservation status EPBC Act</u>	<u>Conservation status NC Act</u>
<i>Jagera pseudorhus</i>	Foam Bark	—	Least Concern
<i>Lepidosperma laterale</i>	Variable Sawsedge	—	Least Concern
<i>Leptospermum polygalifolium</i>	Wild May	—	Least Concern
<i>Lobelia purpurascens</i>	White Root	—	Special Least Concern
<i>Lomandra confertifolia</i>	Mat Rush	—	Least Concern
<i>Lomandra longifolia</i>	Long-leaved Mat Rush	—	Least Concern
<i>Lomandra multiflora</i>	Many Flowered Mat Rush	—	Least Concern
<i>Lophostemon suaveolens</i>	Swamp Box	—	Least Concern
<i>Melaleuca linariifolia</i>	Snow In Summer	—	Least Concern
<i>Melaleuca quinquenervia</i>	Broad-leaved Paperbark	—	Least Concern
<i>Ottocloa gracillima</i>	Graceful Grass	—	Least Concern
<i>Parsonsia straminea</i>	Monkey Rope	—	Least Concern
<i>Pittosporum ferrugineum</i>	Rusty Pittosporum	—	Least Concern
<i>Pseuderanthemum variabile</i>	Love Flower	—	Least Concern
<i>Themeda triandra</i>	Kangaroo Grass	—	Least Concern

Introduced flora species list

<u>Scientific Name</u>	<u>Common Name</u>	<u>Biosecurity Act Restricted</u>
<i>Ageratum houstonianum</i>	Blue Billy Goat Weed	—
<i>Asclepias curassavica</i>	Red-headed Cotton Bush	—
<i>Asparagus aethiopicus</i>	Asparagus Fern	Category 3
<i>Asparagus africanus</i>	Climbing Asparagus	Category 3
<i>Bidens pilosa</i>	Cobbler's Pegs	—
<i>Brachiaria decumbens</i>	Signal Grass	—
<i>Bryophyllum delagoense</i>	Mother-of-Millions	Category 3
<i>Cascabela thevetia</i>	Yellow Oleander	—
<i>Celtis sinensis</i>	Chinese Celtis	Category 3
<i>Cestrum parqui</i>	Green Cestrum	—
<i>Chloris gayana</i>	Rhodes Grass	—
<i>Coleus amboinicus</i>	Mexican Mint	—
<i>Corymbia torelliana</i>	Cadaghi	—
<i>Crassocephalum crepidioides</i>	Thickhead	—



<u>Scientific Name</u>	<u>Common Name</u>	<u>Biosecurity Act Restricted</u>
<i>Desmodium intortum</i>	Greenleaf Desmodium	—
<i>Emilia sonchifolia</i>	Emilia	—
<i>Eugenia uniflora</i>	Brazilian Cherry	—
<i>Heptapleurum actinophyllum</i>	Umbrella Tree	—
<i>Hypochaeris radicata</i>	Flatweed	—
<i>Hypoestes phyllostachya</i>	Polka-dot Plant	—
<i>Jacaranda mimosifolia</i>	Jacaranda	—
<i>Koelreuteria elegans</i>	Golden Rain Tree	—
<i>Lantana camara</i>	Lantana	Category 3
<i>Macroptilium atropurpureum</i>	Siratro	—
<i>Megathyrsus maximus</i>	Guinea Grass	—
<i>Melinis repens</i>	Red Natal Grass	—
<i>Murraya paniculata</i>	Mock Orange	—
<i>Ochna serrulata</i>	Ochna	—
<i>Paspalum mandiocanum</i>	Broad-leaved Paspalum	—
<i>Passiflora foetida</i>	Stinking Passionflower	—
<i>Passiflora suberosa</i>	Corky Passion Vine	—
<i>Pinus elliottii</i>	Slash Pine	—
<i>Ricinus communis</i>	Castor Oil	—
<i>Schefflera actinophylla</i>	Umbrella Tree	—
<i>Senna pendula</i>	Easter Cassia	—
<i>Sida rhombifolia</i>	Common Sida	—
<i>Solanum mauritianum</i>	Wild Tobacco	—
<i>Solanum seaforthianum</i>	Brazilian Nightshade	—
<i>Solanum torvum</i>	Devil's Fig	—
<i>Sphagneticola trilobata</i>	Singapore Daisy	Category 3
<i>Syagrus romanzoffiana</i>	Cocos Palm	—
<i>Tecoma stans</i>	Yellow Bells	—
<i>Trifolium repens</i>	White Clover	—



Appendix E

State Development Approval
Documentation





Our reference: 2411-43479 SRA & 2505-46115 SRA
Applicant reference: 12014
Council reference: COM/81/2024

25 June 2025

Chief Executive Officer
Logan City Council
development@logan.qld.gov.au

Dear Sir/Madam

SARA referral agency response—126-130 Park Ridge Road, Park Ridge

(Referral agency response given under section 56 of the *Planning Act 2016*)

The development application described below was confirmed as properly referred by the State Assessment and Referral Agency (SARA) on 22 November 2024 and 20 May 2025.

Response

Outcome:	Referral agency response - with conditions
Date of response:	25 June 2025
Conditions:	The conditions in Attachment 1 must be attached to any development approval.
Advice:	Advice to the applicant is in Attachment 2 .
Reasons:	The reasons for the referral agency response are in Attachment 3 .

Development details

Description:	Combined Application on the premises, under the <i>Logan Planning Scheme 2015</i> (version 9.1) for: • Preliminary Approval for a Material change of use for a Variation request to vary the effect of the <i>Logan Planning Scheme 2015</i>. • Development Permit for Reconfiguring a lot (1 into 73 lots + new roads & basin).
SARA role:	Referral agency
SARA trigger:	Planning Regulation 2017: • Schedule 10, Part 3, Division 4, Table 2, Item 1 – Reconfiguring a lot that involves clearing native vegetation. • Schedule 10, Part 3, Division 4, Table 3, Item 1 – Material change of use that involves clearing native vegetation. • Schedule 10, Part 10, Division 3, Subdivision 3, Table 1, Item 1

– Development interfering with koala habitat in koala habitat areas outside of koala priority areas.

SARA reference: 2411-43479 SRA and 2505-46115 SRA

Assessment Manager: Logan City Council

Street address: 126-130 Park Ridge Road, Park Ridge

Real property description: Lot 4 on RP868515

Applicant name: Chui Chuan Wang

Applicant contact details: Saunders Havill Group
andrewmclean@saundershavill.com

Human Rights Act 2019 considerations: A consideration of the 23 fundamental human rights protected under the *Human Rights Act 2019* has been undertaken as part of this decision. It has been determined that this decision does not limit human rights.

Representations

An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (s. 30 Development Assessment Rules). Copies of the relevant provisions are in **Attachment 4**.

A copy of this response has been sent to the applicant for their information.

For further information please contact Brianna Gosper, Senior Planning Officer on (07) 5644 3272 or via email SEQSouthPlanning@dsdilgp.qld.gov.au who will be pleased to assist.

Yours sincerely



Shane Spargo
Director, Planning Services

cc Chui Chuan Wang c/- Saunders Havill Group, andrewmclean@saundershavill.com

enc Attachment 1–Referral agency conditions
Attachment 2–Advice to the applicant
Attachment 3–Reasons for referral agency response
Attachment 4–Representations about a referral agency response provisions
Attachment 5–Documents referenced in conditions

Attachment 1—Referral agency conditions

(Under section 56(1)(b)(i) of the *Planning Act 2016* the following conditions must be attached to any development approval relating to this application) (Copies of the plans and specifications referenced below are found at Attachment 5)

Development Permit for Reconfiguring a lot		
Schedule 10, Part 3, Division 4, Table 2, Item 1 (Planning Regulation 2017)—The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of the Department of Natural Resources and Mines, Manufacturing, and Regional and Rural Development to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:		
1.	The reconfiguration of a lot must be carried out generally in accordance with the following plan: (a) Proposal Plan, prepared by Saunders Havill Group, dated 23/01/2024, reference 12014 P 05 and rev D.	Prior to submitting the Plan of Survey to the local government for approval.
Schedule 10, Part 10, Division 3, Subdivision 3, Table 1, Item 1 (Planning Regulation 2017)—The chief executive administering the <i>Planning Act 2016</i> nominates the Director-General of the Department of Environment, Tourism, Science and Innovation to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following conditions:		
2.	Interfering with koala habitat is limited to the clearing of 1,832 non-juvenile koala habitat trees as shown on SARA IRR: Exemption and Development Impacts Plan, prepared by Saunders Havill Group, dated 3/04/2025 and reference 12014 E01 SARA IR Exemption Plan A.	At all times.
3.	Fencing is to be installed at the locations identified on Rehabilitation Concept Zoning Plan, prepared by Saunders Havill Group, dated February 2025, reference 12014 and issue A, and must be designed and constructed in accordance with Table 1 of the Koala Sensitive Design Guideline Version 3, prepared by Department of Environment and Science and dated December 2022, including the following requirements: (a) One way exclusion fencing.	Prior to submitting the Plan of Survey to the local government for approval and to be maintained at all times.
4.	(a) Undertake rehabilitation in accordance with the Rehabilitation Concept Plan, prepared by Saunders Havill Group, dated February 2025, reference 12014 and issue A, including (but not limited to) the following: (i) Undertake weed management in accordance with Rehabilitation Concept Zoning Plan, prepared by Saunders Havill Group, dated February 2025, reference 12014 and issue A. (b) Submit confirmation by an appropriately qualified ecological that the rehabilitation works required by part (a) have been undertaken to Department of Environment, Tourism, Science and Innovation at koala.compliance@detsi.qld.gov.au or by post to PO Box 15187 City East Queensland 4002.	(a) Prior to submitting the Plan of Survey to the local government for approval and to be maintained at all times. (b) Within 20 business days after completion of the rehabilitation works in part (a). (c) In accordance with the Rehabilitation Management Plan.

	(c) Maintain the rehabilitation work detailed in (a). (d) Submit confirmation by an appropriately qualified ecologist that all elements of this condition have been complied with to Department of Environment, Tourism, Science and Innovation at koala.compliance@detsi.qld.gov.au or by post to PO Box 15187 City East Queensland 4002. <i>Note: Appropriately qualified person(s) means a person or persons who has professional qualifications, training, skills and experience relevant to ecology and land restoration and can give authoritative assessment, advice and analysis in relation to koalas using the relevant protocols, standards, methods or literature.</i>	(d) Within 20 business days after the timing relevant to part (c).
5.	Implement all measures and undertake any works in accordance with Koala Management Plan, prepared by Saunders Havill Group, dated 09.20224, reference 12014 and issue A.	During all clearing and construction activities.
6.	Transfer the area identified as Lot 900 on Proposal Plan, prepared by Saunders Havill Group, dated 23/01/2024, reference 12014 P 05 and rev D, to Logan City Council to be dedicated for the purpose of environmental conservation.	At the time of sealing the plan of subdivision with the local government.
7.	Enter into an agreed delivery arrangement to deliver an environmental offset in accordance with the <i>Environmental Offsets Act 2014</i> to counterbalance the significant residual impacts on the matter of state environmental significance being 1,832 non-juvenile koala habitat trees within mapped koala habitat area.	Prior to commencing any works that impact on the non-juvenile koala habitat trees with the mapped koala habitat area.

Attachment 2—Advice to the applicant

General advice	
1.	Terms and phrases used in this document are defined in the <i>Planning Act 2016</i> , its regulation or the State Development Assessment Provisions v3.1 (SDAP). If a word remains undefined it has its ordinary meaning.
Koalas	
2.	Section 16 of the <i>Environmental Offsets Act 2014</i> provides that when an offset condition is imposed on an authority, a number of deemed conditions are taken to apply. These deemed conditions are detailed in sections 19B, 22, 24 and 25 of the <i>Environmental Offsets Act 2014</i>. Contravention of a deemed condition is taken to be contravention of an imposed condition. More information on offset delivery can be found here: https://www.qld.gov.au/environment/pollution/management/offsets/delivering. Please send the notice of election to SEQSouthPlanning@dsdilgp.qld.gov.au.
3.	A Development Permit for Operational work to implement the Material change of use and Reconfiguring a lot may be required to be obtained before any interfering with koala habitat can be carried out, and the permit application must be lodged with the Chief Executive administering the <i>Planning Act 2016</i> .
4.	The Nature Conservation (Koala) Conservation Plan 2017 includes mandatory requirements that apply to all persons undertaking clearing of koala habitat trees, including that clearing be undertaken sequentially and in the presence of a koala spotter. Penalties for non-compliance apply. For further information please contact the Department of Environment, Tourism, Science and Innovation at koala.compliance@des.qld.gov.au .
5.	In addition to this development approval, other permits or approvals may be required for the clearing of koala habitat. To determine if the proposed clearing requires other approvals under other local, State or federal laws go to www.qld.gov.au (search 'vegetation clearing requirements'). It is the responsibility of the landowner to ensure that all necessary permits and approvals have been obtained before undertaking any clearing.
6.	Clearing of vegetation has the potential to disturb the roots of the trees of proposed retained vegetation thereby resulting in the death of trees not approved to be cleared under this development approval. It is recommended clearing and excavation activities be undertaken in accordance with the 'Australian Standards for the Protection of Trees on Development Sites (AS4970-2009)' to avoid any consequential unauthorised clearing.
7.	The development site contains habitat for threatened and special least concern fauna species. If the development requires tampering with a protected animal breeding place, a species management program may be required. More information on protected animal breeding places and species management programs can be found here: https://environment.des.qld.gov.au/licences-permits/plants-animals/species-management-program .

Attachment 3—Reasons for referral agency response

(Given under section 56(7) of the *Planning Act 2016*)

The reasons for SARA's decision are:

SARA assessed the development against the following code of the SDAP, version 3.1:

- State code 16: Native vegetation clearing (State code 16).
- State code 25: South East Queensland koala habitat areas (State code 25).

The development complies with State code 16 of the SDAP. Specifically, the development:

- avoids clearing, or where avoidance is not reasonably possible, minimises clearing to conserve vegetation, avoid land degradation, avoid the loss of biodiversity, and maintain ecological processes
- minimises contributions to greenhouse gas emissions
- for vegetation retention purposes, is undertaken in a manner that retains or regenerates vegetation by sustainably managing the impacts of the clearing on regional ecosystems, biodiversity and ecological processes over time
- is consistent with any notice requiring compliance on the land subject to the development application unless a better environmental outcome can be achieved
- is consistent with vegetation management requirements for particular regulated areas unless a better environmental outcome can be achieved
- avoids impacts on vegetation and minimises and mitigates impacts on vegetation where avoidance is not possible
- does not result in a significant residual impact on a matter of state environmental significance.

The development complies with the assessment benchmarks of State code 25 of SDAP (version 3.1).

Specifically, the development:

- does not cause an unacceptable impact on mapped koala habitat areas
- is designed and located to avoid impacts or, where the matters of state environmental significance cannot be reasonably avoided, impacts are reasonably minimised and mitigated
- counterbalances the significant residual impact on a matter of state environmental significance that is mapped koala habitat area through an environmental offset.

Material used in the assessment of the application:

- the development application material and submitted plans
- *Planning Act 2016*
- Planning Regulation 2017
- the SDAP
- the Development Assessment Rules
- SARA DA Mapping system
- section 58 of the *Human Rights Act 2019*.

Attachment 4—Representations about a referral agency response provisions

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Attachment 5—Documents referenced in conditions

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Appendix F

Local Development Approval
Documentation



DEVELOPMENT CONDITIONS



APPLICANT: C C WANG
APPLICATION NUMBER: COM/81/2024
TYPE & DESCRIPTION: COMBINED APPLICATION- PRELIMINARY APPROVAL FOR A MATERIAL CHANGE OF USE FOR A VARIATION REQUEST TO VARY THE EFFECT OF THE LOGAN PLANNING SCHEME 2015 AND RECONFIGURING A LOT (1 LOT INTO 70 LOTS, NEW ROADS & BASIN)

OFFICER DETAILS

The Assessment Manager for this application was:

Officer Name: Emily Hines
Contact Number: (07) 3412 5269
Please Quote: COM/81/2024
Document Number: 18803074

LAND

Development Conditions to apply to the following land:

Street Address: 126-130 Park Ridge Road, PARK RIDGE QLD 4125
Real Property Description: Lot 4 RP 868515

CONDITIONS OF DEVELOPMENT:

PART A - PRELIMINARY APPROVAL FOR A MATERIAL CHANGE OF USE TO VARY THE EFFECT OF THE LOGAN PLANNING SCHEME 2015 (VARIATION APPROVAL)

1. APPROVED PLANS OF DEVELOPMENT

Approved plans and documents

- 1.1. Undertake development generally in accordance with the following approved plan(s) of development and/or document(s); except as altered by other conditions of this development approval including any amendments wherever made in red on the approved plan(s) and/or document(s):

Title	Plan Number	Rev/Amd't	Date	Prepared
Proposal Plan (amended in Red)	12014 PO 5	D	23/01/2024	Saunders Group Havill
Vegetation Clearing Plan	12014 E 01	A	8/08/2025	Saunders Group Havill
Rehabilitation Concept Zoning Plan (amended in Red)	12014	A	February 2025	Saunders Group Havill

Prevailing conditions

- 1.2. The conditions of this Variation Approval prevail to the extent of any inconsistency with the Plan of Development.

2. VARIATION APPROVAL

Variation of effect of planning scheme

- 2.1. This Variation Approval, in accordance with section 61 of the *Planning Act 2016*, varies the effect of the Logan Planning Scheme 2015 only with respect to:

- 2.1.1. ZM-01.00 - Zone Map and ZM-02.00 – Zoning and precinct map (Version 9.2 with TLPI No.1/2024), for the Mixed use zone, is to be replaced with the Low density residential zone (Suburban precinct), only in respect to the subject site;
- 2.1.2. the categories of development and assessment, the assessment benchmarks for assessable development and the requirements for accepted development of the Low density residential zone (Suburban precinct) or equivalent of the Planning Scheme in effect at the time of lodging an application, applies for determining the categories of assessment and assessment requirements relating to a material change of use, reconfiguring a lot, operational work and/or building work, instead of the Mixed use zone, except as altered by other conditions of this development approval;
- 2.1.3. for the purposes of determining the categories of development and assessment, the assessment benchmarks for assessable development and the requirements for accepted development, the version of the Logan Planning Scheme 2015 or subsequent planning schemes which applies is the version in force at the time the development application is properly made/the accepted development is carried out, unless otherwise explicitly provided by conditions of this Variation Approval; and
- 2.1.4. overlay codes and provisions within the Dual occupancy and Dwelling house code relating to overlays, or equivalent of the Planning Scheme in effect at the time of lodging an application, will continue to apply, with the exception of the following:
 - 2.1.4.1. Biodiversity areas overlay, where compliance with the 'COM/81/2024 - 126-130 Park Ridge Road, Park Ridge QLD 4125 Infrastructure Agreement (Vegetation Clearing) 2025' and conditions of this development approval has been demonstrated.

Further advice:

This Variation Approval does not vary the effect of the planning scheme for development within the Environmental management and conservation zone (Conservation precinct) shown on ZM-01.00 - Zone Map and ZM-02.00 – Zoning and precinct map of the Logan Planning Scheme 2015 (Version 9.2 with TLPI No.1/2024). The categories of development and assessment, the assessment benchmarks for assessable development and the requirements for accepted development of the Environmental management and conservation zone (Conservation precinct) of the Logan Planning Scheme 2015 continue to apply to development for material change of use, reconfiguring a lot, operational work and/or building work.

- 2.2. Submit a copy of this Variation Approval with any material change of use development application relating to or arising from this Variation Approval.
- 2.3. Any application submitted to the Council under this Variation Approval must be consistent with this Variation Approval and where inconsistent, must be submitted to the Council instead under the Planning Scheme in effect at the date of application.

3. TOWN PLANNING

Planning scheme

- 3.1. Any application for a Development Permit is to be assessed against the relevant codes and policies in the Planning Scheme that are in effect at the time the application for a Development Permit is made, unless otherwise explicitly provided by conditions of this Variation Approval. Any references in this approval to 'Planning Scheme' is, unless otherwise explicitly stated, a reference to the Planning Scheme in effect at the time an application is made to the Council, or for what would be accepted development matters, at the time when a Development Approval for building works is granted. Where there are no assessment criteria for the development in question in the Planning Scheme in effect at the time, only then should reference be made to the Planning Scheme in effect at the date of this approval taking effect. In this condition, Development Permit applies to all aspects of development as defined in the *Planning Act 2016*.

Completion period

- 3.2. In accordance with section 88(c) of the *Planning Act 2016*, any development that is specified in this approval (or a development brought into effect by this approval) to be Accepted or Assessable Development must be completed within five (5) years (being the prescribed period) from the date this approval takes effect.

Terms

- 3.3. Interpret words and terms used in this development approval as having the meaning ascribed to them in the planning scheme under which this development approval has been given unless otherwise stated in a specific condition.

4. INFRASTRUCTURE AGREEMENT AND CHARGES

Infrastructure Agreement

- 4.1. Comply with the executed infrastructure agreement titled, 'COM/81/2024 - 126-130 Park Ridge Road, Park Ridge QLD 4125 Infrastructure Agreement (Vegetation Clearing) 2025'.
- 4.2. Comply with the executed infrastructure agreement titled, '126-130 Park Ridge Road, PARK RIDGE QLD 4125 Infrastructure Agreement 2025'.

5. VEGETATION MANAGEMENT

Environmental offset

- 5.1. Provide an environmental offset for the impact of clearing 34,618.74m² of native vegetation in vegetation management areas on Biodiversity areas overlay map OM-02.01 of the Logan Planning Scheme 2015.

Further advice:

This condition is imposed to offset the impact of the proposed development on a matter of local environmental significance being the vegetation management areas identified on Biodiversity areas overlay map OM-02.01 of the Logan Planning Scheme 2015 and to achieve compliance with the Biodiversity areas overlay code of the Logan Planning Scheme 2015.

Vegetation clearing

- 5.2. An operational works application is not required for vegetation clearing.
- 5.3. Vegetation clearing is to be in accordance with the approved plans of development/documents only.

Further advice:

Vegetation approved for removal does not include existing street trees and/or street trees shown on approved plans of development.

The applicant/s, landowner/s and/or contractor/s are responsible for any damage caused to Council infrastructure during development works. The applicant/s, landowner/s and/or contractor/s are urged to conduct a Dial Before You Dig search at www.1100.com.au before commencing development works to ensure that underground services are not impacted or damaged.

- 5.4. Ensure all vegetation cleared as a result of this development approval and requiring disposal is disposed of:
- 5.4.1. on the premises for landscaping and sediment and erosion control purposes (for example as mulch);
 - 5.4.2. at a waste disposal facility operated by Council; and
 - 5.4.3. ensure any vegetation cleared as a result of this development approval is not burnt or incinerated except where consistent with the local law or under a permit issued by the Queensland Fire and Emergency Services.
- 5.5. Ensure compliance with AS 4970 - 2009 Protection of trees on development sites, including, but not limited to, the implementation of a 'Tree Protection Zone' where trees are to be retained onsite and provide signs identifying the 'Tree Protection Zone' on exclusion fencing that are clearly visible from all areas within the development site within 20 metres of the exclusion fencing.

Vegetation clearing – Pre-start meeting

- 5.6. Prior to clearing:
- 5.6.1. complete a pre-clearing fauna survey;
 - 5.6.2. organise and hold a pre-start meeting between a suitably qualified fauna spotter catcher (Department Environment & Science), supervising arborist and site supervisor; and
 - 5.6.3. ensure all documentation from the pre-start meeting is provided to Council (emailed to ConstructionTaskforce@logan.qld.gov.au) at least three (3) days prior to clearing commencing, including but not limited to, meeting notes and minutes, photographs of tree protection fencing and fauna pre-clearing report.
- 5.7. A minimum of three business days prior to vegetation clearing commencing, submit to Council the following information (emailed to constructionTaskforce@logan.qld.gov.au):
- 5.7.1. the name and contact details of the person/s undertaking the vegetation clearing;
 - 5.7.2. the date of the proposed clearing;
 - 5.7.3. reference to the correct development approval; and
 - 5.7.4. written confirmation that the person/s undertaking the clearing have been provided a copy of the approved plan and development conditions.

Further advice:

The applicant/s, landowner/s and/or contractor/s are reminded of their general environmental duty under s319 of the Environmental Protection Act 1994 as they are responsible for ensuring they do not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm (the general environmental duty).

In particular, a person/s must not unlawfully deposit a prescribed water contaminant:

- *in waters; or in a roadside gutter or stormwater drainage; or*
- *at another place, and in a way, so that the contaminant could reasonably be expected to wash, blow, fall or otherwise move into waters, a roadside gutter or stormwater drainage; or*
- *unlawfully release stormwater run-off into waters, a roadside gutter or stormwater drainage that results in the build-up of earth in waters, a roadside gutter or stormwater drainage.*

- 5.8. Ensure that vegetation clearing at the interface of vegetation to be retained is undertaken under the supervision of a minimum AQF Level 5 Arborist.
- 5.9. Ensure that any mulch stockpiles are located in areas approved for vegetation clearing and external to environmentally sensitive areas such as tree protection zones and waterway buffers.
- 5.10. Ensure that appropriate erosion and sediment control measures are implemented at all times, and that any disturbed surfaces are stabilised at the completion of vegetation clearing by:
- 5.10.1. installing, monitoring and amending where necessary erosion and sediment control measures during all phases of the development to ensure all reasonable and practicable measures are taken to prevent environmental harm.
 - 5.10.2. ensuring prior to each rainfall event:
 - 5.10.2.1. concentrated stormwater flow paths are diverted around the site or conveyed through the site without causing erosion and without contaminating the flow and receiving waters;
 - 5.10.2.2. erosion control measures are implemented which prevent or minimise erosion; and sediment control measures are installed and implemented as necessary to maximise sediment capture.

Fauna Management

- 5.11. Ensure that a fauna spotter catcher is engaged to supervise all operational works on site and is currently licenced and holds a rehabilitation permit issued by the Department of Environment, Science, Tourism and Innovation, or relevant State Department responsible at the time.
- 5.12. During works for vegetation clearing on site, ensure the fauna spotter catcher:

- 5.12.1. is present to check all potential habitat prior to removal. Where native vertebrate animals are found, clearing must only continue in coordination with the fauna spotter catcher. All native vertebrate animals located within, on and amongst vegetation or areas of vegetation proposed to be harmed in accordance with this approval are only to be managed under the guidance of the fauna spotter catcher.
- 5.12.2. is provided with a copy of all approval documentation and development conditions;
- 5.12.3. undertakes the following:
 - 5.12.3.1. undertakes a wildlife load reduction measures through the pre-clearing trapping and relocation of wildlife 1-3 days prior to the approved clearing being conducted.
 - 5.12.3.2. at sites that support potential koala habitat (fodder/habitat trees) conducts a site inspection the night before and the morning that the clearing will commence to identify fauna species and fauna habitat, using binoculars or a spotting scope when observing trees larger than 4.0 metres tall;
 - 5.12.3.3. clearly marks (flag) vegetation found to contain fauna or fauna habitat (such as tree hollows, arboreal termite mounds, stick nests or possum drays with flagging tape), and visually and verbally communicate this information to the tree feller to ensure flagged trees are not felled until authorised by the fauna manager; and
 - 5.12.3.4. works in conjunction with a professional tree feller in the removal of any vegetation identified for removal.

Further advice:

Sequential clearing cannot be used as a primary fauna management measure where the remaining vegetation is insufficient to sustain the displaced fauna.

- 5.13. Schedule vegetation clearing to ensure that in order of preference:
 - 5.13.1. impacts on nesting and hatching avifauna and herpetofauna (designated as threatened/near threatened) are avoided;
 - 5.13.2. impacts on nesting and hatching avifauna and herpetofauna of Least Concern species are minimised;
 - 5.13.3. the likelihood of detection and capture of herpetofauna is maximised; and
 - 5.13.4. wildlife load reduction measures are most productive.
- 5.14. Implement directional clearing to flush fauna towards areas of retained vegetation.
- 5.15. Ensure vegetation and rubble piles are not left to serve as a refuge for displaced or roaming wildlife.
- 5.16. Prior to removal or destruction of piles of felled vegetation, all piles must be treated as potential wildlife habitat and must be inspected by a Fauna Spotter Catcher.
- 5.17. Ensure the type of equipment used is matched to the specific clearing task to minimise the risk of death or injury to fauna.
- 5.18. No more than one week prior to the commencement of vegetation clearing, prepare and submit a fauna pre-clearing report for the site.
- 5.19. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey) or within one month of the completion of vegetation clearing, whichever occurs last, prepare and submit accurate records of all animal captures, incidents and disposals for the site.
- 5.20. Ensure clearing is undertaken in a direction that allows fauna to disperse into areas of adjoining or nearby habitat that is being retained.
- 5.21. Any hollows identified within the clearing area are to be salvaged and installed as nest boxes in vegetation to be retained on site.

Advice note: Any hollows identified may be used within Lot 900.

Replanting and rehabilitation

- 5.22. As part of an application for operational works for either earthworks, stormwater management or civil works (where relevant), submit to Council for approval a Detailed Site Based Rehabilitation Plan for supplementary planting to any disturbed areas in Lot 900. The plan must be generally consistent with the approved Rehabilitation Concept Zoning Plan, and prepared by a suitably qualified environmental professional and must including the following:
- 5.22.1. description of site characteristics, including vegetation communities, native flora, environmental weeds and disturbances present;
 - 5.22.2. location of areas to be rehabilitated, and the proposed rehabilitation treatment/s to be implemented;
 - 5.22.3. details of rehabilitation planting palette/s and planting densities;
 - 5.22.4. description of maintenance schedules for rehabilitation areas;
 - 5.22.5. performance outcomes for rehabilitation areas and treatment types.
- 5.23. Implement any approved Site Based Rehabilitation Plan at all times during construction of the development and for any maintenance period identified in the Site Based Rehabilitation Plan except where altered by the conditions of this approval.
- 5.24. Ensure a legible copy of the approved Site Based Rehabilitation Plan and approval conditions are available on site at all times during construction and earthworks.

6. ENGINEERING

Engineering standard

- 6.1. Construct all works in accordance with the approved plan(s) of development and Council's adopted standards.

Further advice:

This approval does not include the sewer drain/s for proposed lots. The applicant is required to obtain a plumbing and drainage permit prior to commencement of any works on internal sewer and water reticulation.

Rectification

- 6.2. Undertake, at no cost to Council, any alteration or relocation necessary to any service, public utility, installation, plant, equipment, easements or other item belonging to, or under the control of, Council or other public utility provider, resulting from construction works required with the development.
- 6.3. Replace existing Council infrastructure (including but not limited to street trees, water, sewer, stormwater and footpaths) at the time the damage occurs as part of construction works, to Council's standards and at no cost to Council.

7. WATER AND SEWER

General

- 7.1. Design and construct, at no cost to Council, all water and sewerage infrastructure to be owned and operated by Council in accordance with the South East Queensland Water Supply and Sewerage Design and Construction Code (SEQ Code).
- This condition is imposed under section 145 of the Planning Act 2016.*
- 7.2. Obtain a development permit for operational works for the construction of any water and sewerage infrastructure works that is to be transferred to Council to own and/or operate.
- 7.3. Ensure that each proposed allotment is capable of being serviced by Council's water supply and/or sewerage network.

- 7.4. Lodge an application to Council for live works to be performed on Council's water and sewerage network.

PART B - DEVELOPMENT PERMIT FOR RECONFIGURING A LOT (1 LOT INTO 70 LOTS, NEW ROADS & BASIN)

8. APPROVED PLANS OF DEVELOPMENT

Approved plans and documents

- 8.1. Undertake development generally in accordance with the following approved plan(s) of development and/or document(s); except as altered by other conditions of this development approval including any amendments wherever made in red on the approved plan(s) and/or document(s):

Title	Plan Number	Rev/Amd't	Date	Prepared
Proposal Plan (amended in Red)	12014 PO 5	D	23/01/2024	Saunders Group Havill
Site Masterplan – Landscape Concept Plan (amended in Red)	12014	B	February 2025	Saunders Group Havill
Indicative Plant Palette – Landscape Concept Plan	12014	B	February 2025	Saunders Group Havill
Concept Roadworks and Drainage Plan (amended in Red)	SK06	F	15/08/2025	Civil 360 Engineering
Concept Sewer and Water Plan	SK13	D	1/08/2025	Civil 360 Engineering
Vegetation Clearing Plan	12014 E 01	A	8/08/2025	Saunders Group Havill
Rehabilitation Concept Zoning Plan (amended in Red)	12014	A	February 2025	Saunders Group Havill

Advice Note:

The Concept Sewer and Water Plan is approved in concept from a sewer and water perspective only and is still subject to detailed design as part of a future required Operational works application.

Title	Document Number	Rev/Amd't	Date	Prepared
Bushfire Management Plan	004.09.24	3	3.02.2025	Bushfire Planning & Design (BPAD)
Concept Stormwater Quality Management Plan (amended in Red)	2024096	2	April 2025	Civil 360 Engineering

Advice Note:

The Stormwater Management Plan is approved in concept from a Stormwater Quality perspective only and is still subject to detailed design as part of a future Operational works application.

9. TOWN PLANNING

Terms

- 9.1. Interpret words and terms used in this development approval as having the meaning ascribed to them in the planning scheme under which this development approval has been given unless otherwise stated in a specific condition.

General compliance

- 9.2. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey), ensure that:
- 9.2.1. the proposed Urban Access Road approved under RL/104/2023/A and OW/169/2024 at the eastern boundary of the site has been constructed and works accepted 'On Maintenance'; or
 - 9.2.2. the proposed Urban Access Street or Urban Access Road approved under RL/51/2024 (Stage 11a or Stage 12) at the western boundary of the site has been constructed and works accepted 'On Maintenance'.
- 9.3. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey) for Stage 2, ensure that the north-south road along the western boundary of the site has been constructed and works accepted 'On Maintenance' under RL/51/2024 (Stage 11a or Stage 12).
- 9.4. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey), comply with all conditions of this development approval at no cost to Council and ensure that compliance is maintained thereafter, unless otherwise stated in a specific condition.

Further advice:

This includes compliance with all applicable referral agency conditions attached to the decision notice.

Staging - Consecutive as per approved plans

- 9.5. Develop the site in accordance with the stages identified on the approved plan of development with the stages to be developed in the consecutive numeric or alphabetic order of each stage as identified on the plan, unless otherwise agree to in writing by Council.

10. INFRASTRUCTURE AGREEMENT AND CHARGES

Infrastructure Agreement

- 10.1. Comply with the executed infrastructure agreement titled, 'COM/81/2024 - 126-130 Park Ridge Road, Park Ridge QLD 4125 Infrastructure Agreement (Vegetation Clearing) 2025'.
- 10.2. Comply with the executed infrastructure agreement titled, '126-130 Park Ridge Road, PARK RIDGE QLD 4125 Infrastructure Agreement 2025'.

11. LAND DEDICATION

Road reserve (Frontage)

- 11.1. Dedicate to the State, the following land as road reserve:
- 11.1.1. a 9.5 metre wide strip of land along the full frontage of the site to Park Ridge Road identified on the approved plan of development as 'Road Widening'.

Further advice:

Documentation in relation to any land required to be registered to the benefit of Council is required to be prepared and carried out by Council's solicitors at the applicant's expense.

This condition is imposed under section 128 of the Planning Act 2016.

Land dedication

- 11.2. Dedicate to the State, at no cost to Council, land shown on the approved plan of development identified as follows as road reserve:
- 11.2.1. land identified as road;
 - 11.2.2. a 4.4 metre wide pathway connection, identified as Green Link;
 - 11.2.3. a 2.0 metre wide strip along the western boundary of the site adjoining lots 1, 9, and 12 to 24 as shown on the approved plan(s) of development to achieve a total future road reserve width of 15.5 metres; and
 - 11.2.4. a 6.0 metre radius by 3 chord truncation on the corner of intersections or as shown on the approved plan of development.

- 11.2.5. a 2.5 metre wide strip of land for the purposes of a landscape buffer along the full frontage of the site to Park Ridge Road, adjoining lots 68, 69 and 70, identified on the approved plan of development as 'Road Widening'.

Further advice:

Documentation in relation to any land required to be registered to the benefit of Council is required to be prepared and carried out by Council's solicitors at the applicant's expense.

This condition is imposed under section 145 of the Planning Act 2016.

Drainage

- 11.3. Dedicate to Council in fee simple on trust, at no cost to Council, for the purpose of drainage, land identified on the approved plan of development as detention / drainage.

Environmental Reserve

- 11.4. Dedicate to Council, at no cost to Council, land identified as environmental open space for the purposes of environmental reserve.

12. PROPERTY

Boundary fencing

- 12.1. Unless required otherwise by other conditions of this approval or works on site, install a 1.8 metre high fence at the applicant's expense:
- 12.1.1. on all shared property boundaries between the development site and private land unless it can be demonstrated to Council that a 1.8 metre high fence in good condition already exists or an adjoining land owner for the respective part of the property boundary advises the applicant in writing that the existing fence is not to be replaced;
 - 12.1.2. using quality materials and that if constructed using soft wood, the timber is CCA treated and 3 rails are used;
 - 12.1.3. that if there is any existing fence on the property boundary, replaces that fence and is not constructed as a second fence abutting the existing fence with a narrow gap between; and
 - 12.1.4. has a gap between the bottom of the fence and the finished ground level of no more than 100mm.

Further advice:

Where there is an existing 1.8 metre high fence in good condition that is proposed to be retained, supporting evidence must be provided to demonstrate the fence is in satisfactory condition, such as photos of all sections of the fencing to be retained.

- 12.2. Any proposed fencing along the eastern boundary of proposed Lots 40-61 is to be established on top of the single-tier retaining wall and not be located on the boundary.

13. EASEMENTS

- 13.1. At the same time as registering the Subdivision Plan (e.g. a Plan of Survey), lodge for registration at the Titles Office, the following easements:
- 13.1.1. a temporary access easement, at the end of any proposed road that does not end with a permanent turn around, to accommodate the turn around movements of a refuse vehicle or as otherwise determined in any approval for operational works, to the benefit of Council and its agents;

Further advice:

The temporary easement can be relinquished, once a permanent turnaround or road extension is constructed and operational.

- 13.1.2. a private stormwater drainage easement having a minimum width of 1.5 metres, or as determined in any approval for operational works, over any existing or proposed inter-allotment

drainage system wholly contained within the easement, burdening the relevant lots to the benefit of the upstream lots.

Further Advice:

Documentation in relation to any private easements proposed to be registered is required to be prepared and carried out by owner's solicitors at the owner's expense. Documentation in relation to any easement proposed to be registered to the benefit of Council is required to be prepared and carried out by Council's solicitors at the owner's expense.

Sewerage Easement

13.2. At the same time as registering the Subdivision Plan (e.g. Plan of Survey), at no cost to Council, lodge for registration at the Titles Office easements over any sewerage infrastructure within private property in accordance with the South East Queensland Water Supply and Sewerage Design and Construction Code (SEQ Code). The following easements are required to be registered:

- 13.2.1. 4.0m wide easement (Sewer and Stormwater) located at the rear of Lots 10, Lots 13 – 23 and Lots 38 and 39;
- 13.2.2. Minimum 4.35m wide easement (Sewer and Stormwater) located at the rear of Lots 40 – 61 and Lots 38 and 39; and
- 13.2.3. 1.0m access easements on Lots 10, 18, 23, 41, 50 and 59.

Access easement for sewer maintenance

13.3. At the same time as registering the Subdivision Plan (e.g. Plan of Survey), at no cost to Council, lodge for registration at the Titles Office a one metre wide access easement from a designated road reserve to the sewer maintenance structure, when the sewer maintenance structure is not located along the frontage of the proposed allotment.

Further advice:

Documentation in relation to any easement proposed to be registered to the benefit of Council is required to:

- a) *include Council's standard terms for easements (as amended from time to time), relevant at the time the request for Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey) is made. At time of writing, the Titles Registry Dealing Numbers for Council's standard terms documents are 716215253 for easements over freehold land and 716055287 for easements over trust and reserves; or*
- b) *be prepared and carried out by Council's solicitors at the owner's expense if Council's standard terms are not used, or not permitted by a condition of approval.*

14. STREET NUMBERING AND NAMING

Street address

- 14.1. Submit a copy of any street address approval for each proposed lot with any request to Council for approval of a Subdivision Plan (i.e. Survey Plan).
- 14.2. Submit to and have approved by Council a request for street addresses for each proposed lot.
- 14.3. Submit the approval for street addresses for each proposed lot to the Council with an application to the Council for approval of a Subdivision Plan (i.e. Survey Plan).

Street naming

- 14.4. Prior to, or concurrently with, any application for operational works for constructing a proposed new road, submit to and have approved by Council a request for naming any proposed new road. The request must include:
 - 14.4.1. a minimum of 3 proposed names for each new road;
 - 14.4.2. the reasons for selection of the proposed names; and
 - 14.4.3. proposed names that:
 - 14.4.3.1. are not offensive, profane or racist;

- 14.4.3.2. are not difficult to spell;
- 14.4.3.3. allow for logical and unambiguous street numbering in accordance with road/street hierarchy;
- 14.4.3.4. are single names rather than double or hyphenated names; and
- 14.4.3.5. enable Emergency Services to readily locate properties.

15. LANDSCAPING

Landscaping works operational works

- 15.1. An operational works application is required for landscaping.
- 15.2. As part of an application for operational works for earthworks, stormwater management, vegetation clearing or civil works (where relevant), submit to Council for approval, detailed landscape drawings generally consistent with the approved concept landscape plan and in accordance with Planning Scheme Policy 5 – Infrastructure, including, but not limited to:
 - 15.2.1. provide turf to the pedestrian pathway corridor as shown on the approved plans of development;
 - 15.2.2. provide a minimum 2 metre wide landscape buffer along the southern boundary adjoining Lot 3 on RP 868515 within the green link area, and provide turf to the remainder of the green link area, as shown on the approved plans of development;
 - 15.2.3. provide a minimum 2.5 metre wide landscape buffer, being primarily the planting of shrubs and small trees of species capable of reaching a minimum height of three metres at maturity, along the full Park Ridge Road frontage of the site, except where varied by other conditions of this development approval;
 - 15.2.4. provide safety rails and/or metal fencing, a minimum of 1.2 metres in height and be no less than 50% transparent, along all retaining walls which adjoin road reserve or drainage reserve;
 - 15.2.5. provide bollards, in accordance with Council's Standard Drawing - Single Bollard Detail - Drawing No: LCC 8-00247, with a maximum spacing of 1.5 metres, along the boundary of all road reserve which adjoins drainage reserve and environmental open space;
 - 15.2.6. provide location and design of vehicle access to proposed maintenance access points to the proposed bio-basins;
 - 15.2.7. provide an entry locking post and rail, in accordance with Council's Standard Drawing - Locking Post and Rail Detail - Standard Drawing No: LCC 8-00423, to all proposed maintenance access points to proposed bio-basins;
 - 15.2.8. provide appropriate landscape treatments to proposed bio-basins in accordance with Water by Design, Bioretention Design Guidelines, ensuring the basin batters and filter area have a minimum density of six plants per square metre; and
 - 15.2.9. provide street trees, species selection and locations with required clearance, spacings and setbacks in accordance with standard drawing LCC 8-00418 as identified in Table 8.2.1.1 – Standard drawings for landscaping in Part 8, Section 8.2.1 of Planning Scheme Policy 5 – Infrastructure. Setbacks to infrastructure and services are to be in accordance with Table 6.3.3.1 – Street tree setback requirements in Part 9, Standard specification No. 2 (Landscaping) 2015, Section 6.3.3 of Planning Scheme Policy 5 – Infrastructure.

This condition is imposed under section 145 of the Planning Act 2016.

Casual surveillance (pedestrian paths)

- 15.3. Design and construct pedestrian paths with clear end to end sightlines without truncations or sudden changes in grade.

Casual surveillance (landscaping)

- 15.4. Ensure landscaping does not reduce casual surveillance or create entrapment of any public space. This can be achieved by ensuring that:
 - 15.4.1. the canopy of a mature tree does not hang below two metres; and

- 15.4.2. groundcovers incorporated into or adjacent to public or communal open space are of a species that does not grow above a maximum height of 600mm.

Casual surveillance (fencing)

- 15.5. Ensure fencing, other than acoustic fencing, adjacent to a road, public or communal open space has a maximum height of:
- 15.5.1. 1.2 metres if the fence is not transparent; or
- 15.5.2. 1.8 metres if the fence has a minimum transparency of 50%.

Landscaping – Retaining wall appearance

- 15.6. Ensure that the single-tier retaining wall located along the eastern boundary incorporates a high standard of visual appearance through treatments such as:
- 15.6.1. block retaining walls that incorporate variations in coloured and textured masonry bricks to ensure visual interest;
- 15.6.2. concrete sleeper retaining walls that incorporate a coloured and textured finish;
- 15.6.3. sandstone or boulder retaining walls; or
- 15.6.4. other approved similar treatments as part of an application for operational works.

Further advice:

For the purpose of this requirement, concrete crib, grey besser brick and grey concrete sleeper retaining walls are not permitted in these locations.

16. VEGETATION MANAGEMENT

Environmental offset

- 16.1. Provide an environmental offset for the impact of clearing 34,618.74m² of native vegetation in vegetation management areas on Biodiversity areas overlay map OM-02.01 of the Logan Planning Scheme 2015.

Further advice:

This condition is imposed to offset the impact of the proposed development on a matter of local environmental significance being the vegetation management areas identified on Biodiversity areas overlay map OM-02.01 of the Logan Planning Scheme 2015 and to achieve compliance with the Biodiversity areas overlay code of the Logan Planning Scheme 2015.

Vegetation clearing – Infrastructure Agreement

- 16.2. Comply with the executed infrastructure agreement titled, 'COM/81/2024 - 126-130 Park Ridge Road, Park Ridge QLD 4125 Infrastructure Agreement (Vegetation Clearing) 2025'.

Vegetation clearing

- 16.3. An operational works application is not required for vegetation clearing.
- 16.4. Vegetation clearing is to be in accordance with the approved plans of development/documents only.

Further advice:

Vegetation approved for removal does not include existing street trees and/or street trees shown on approved plans of development.

The applicant/s, landowner/s and/or contractor/s are responsible for any damage caused to Council infrastructure during development works. The applicant/s, landowner/s and/or contractor/s are urged to conduct a Dial Before You Dig search at www.1100.com.au before commencing development works to ensure that underground services are not impacted or damaged.

- 16.5. Ensure all vegetation cleared as a result of this development approval and requiring disposal is disposed of:

- 16.5.1. on the premises for landscaping and sediment and erosion control purposes (for example as mulch);
 - 16.5.2. at a waste disposal facility operated by Council; and
 - 16.5.3. ensure any vegetation cleared as a result of this development approval is not burnt or incinerated except where consistent with the local law or under a permit issued by the Queensland Fire and Emergency Services.
- 16.6. Ensure compliance with AS 4970 - 2009 Protection of trees on development sites, including, but not limited to, the implementation of a 'Tree Protection Zone' where trees are to be retained onsite and provide signs identifying the 'Tree Protection Zone' on exclusion fencing that are clearly visible from all areas within the development site within 20 metres of the exclusion fencing.

Vegetation clearing – Pre-start meeting

- 16.7. Prior to clearing:
- 16.7.1. complete a pre-clearing fauna survey;
 - 16.7.2. organise and hold a pre-start meeting between a suitably qualified fauna spotter catcher (Department Environment & Science), supervising arborist and site supervisor; and
 - 16.7.3. ensure all documentation from the pre-start meeting is provided to Council (emailed to ConstructionTaskforce@logan.qld.gov.au) at least three (3) days prior to clearing commencing, including but not limited to, meeting notes and minutes, photographs of tree protection fencing and fauna pre-clearing report.
- 16.8. A minimum of three business days prior to vegetation clearing commencing, submit to Council the following information (emailed to constructionTaskforce@logan.qld.gov.au):
- 16.8.1. the name and contact details of the person/s undertaking the vegetation clearing;
 - 16.8.2. the date of the proposed clearing;
 - 16.8.3. reference to the correct development approval; and
 - 16.8.4. written confirmation that the person/s undertaking the clearing have been provided a copy of the approved plan and development conditions.

Further advice:

The applicant/s, landowner/s and/or contractor/s are reminded of their general environmental duty under s319 of the Environmental Protection Act 1994 as they are responsible for ensuring they do not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm (the general environmental duty).

In particular, a person/s must not unlawfully deposit a prescribed water contaminant:

- *in waters; or in a roadside gutter or stormwater drainage; or*
 - *at another place, and in a way, so that the contaminant could reasonably be expected to wash, blow, fall or otherwise move into waters, a roadside gutter or stormwater drainage; or*
 - *unlawfully release stormwater run-off into waters, a roadside gutter or stormwater drainage that results in the build-up of earth in waters, a roadside gutter or stormwater drainage.*
- 16.9. Ensure that vegetation clearing at the interface of vegetation to be retained is undertaken under the supervision of a minimum AQF Level 5 Arborist.
- 16.10. Ensure that any mulch stockpiles are located in areas approved for vegetation clearing and external to environmentally sensitive areas such as tree protection zones and waterway buffers.
- 16.11. Ensure that appropriate erosion and sediment control measures are implemented at all times, and that any disturbed surfaces are stabilised at the completion of vegetation clearing by:
- 16.11.1. installing, monitoring and amending where necessary erosion and sediment control measures during all phases of the development to ensure all reasonable and practicable measures are taken to prevent environmental harm.
 - 16.11.2. ensuring prior to each rainfall event:

- 16.11.2.1. concentrated stormwater flow paths are diverted around the site or conveyed through the site without causing erosion and without contaminating the flow and receiving waters;
- 16.11.2.2. erosion control measures are implemented which prevent or minimise erosion; and sediment control measures are installed and implemented as necessary to maximise sediment capture.

Fauna Management

- 16.12. Ensure that a fauna spotter catcher is engaged to supervise all operational works on site and is currently licenced and holds a rehabilitation permit issued by the Department of Environment, Science, Tourism and Innovation, or relevant State Department responsible at the time.
- 16.13. During works for vegetation clearing on site, ensure the fauna spotter catcher:
 - 16.13.1. is present to check all potential habitat prior to removal. Where native vertebrate animals are found, clearing must only continue in coordination with the fauna spotter catcher. All native vertebrate animals located within, on and amongst vegetation or areas of vegetation proposed to be harmed in accordance with this approval are only to be managed under the guidance of the fauna spotter catcher.
 - 16.13.2. is provided with a copy of all approval documentation and development conditions;
 - 16.13.3. undertakes the following:
 - 16.13.3.1. undertakes a wildlife load reduction measures through the pre-clearing trapping and relocation of wildlife 1-3 days prior to the approved clearing being conducted.
 - 16.13.3.2. at sites that support potential koala habitat (fodder/habitat trees) conducts a site inspection the night before and the morning that the clearing will commence to identify fauna species and fauna habitat, using binoculars or a spotting scope when observing trees larger than 4.0 metres tall;
 - 16.13.3.3. clearly marks (flag) vegetation found to contain fauna or fauna habitat (such as tree hollows, arboreal termite mounds, stick nests or possum drays with flagging tape), and visually and verbally communicate this information to the tree feller to ensure flagged trees are not felled until authorised by the fauna manager; and
 - 16.13.3.4. works in conjunction with a professional tree feller in the removal of any vegetation identified for removal.

Further advice:

Sequential clearing cannot be used as a primary fauna management measure where the remaining vegetation is insufficient to sustain the displaced fauna.

- 16.14. Schedule vegetation clearing to ensure that in order of preference:
 - 16.14.1. impacts on nesting and hatching avifauna and herpetofauna (designated as threatened/near threatened) are avoided;
 - 16.14.2. impacts on nesting and hatching avifauna and herpetofauna of Least Concern species are minimised;
 - 16.14.3. the likelihood of detection and capture of herpetofauna is maximised; and
 - 16.14.4. wildlife load reduction measures are most productive.
- 16.15. Implement directional clearing to flush fauna towards areas of retained vegetation.
- 16.16. Ensure vegetation and rubble piles are not left to serve as a refuge for displaced or roaming wildlife.
- 16.17. Prior to removal or destruction of piles of felled vegetation, all piles must be treated as potential wildlife habitat and must be inspected by a Fauna Spotter Catcher.
- 16.18. Ensure the type of equipment used is matched to the specific clearing task to minimise the risk of death or injury to fauna.
- 16.19. No more than one week prior to the commencement of vegetation clearing, prepare and submit a fauna pre-clearing report for the site.

- 16.20. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey) or within one month of the completion of vegetation clearing, whichever occurs last, prepare and submit accurate records of all animal captures, incidents and disposals for the site.
- 16.21. Ensure clearing is undertaken in a direction that allows fauna to disperse into areas of adjoining or nearby habitat that is being retained.
- 16.22. Any hollows identified within the clearing area are to be salvaged and installed as nest boxes in vegetation to be retained on site.

Advice note: Any hollows identified may be used within Lot 900.

Replanting and rehabilitation

- 16.23. As part of an application for operational works for either earthworks, stormwater management or civil works (where relevant), submit to Council for approval a Detailed Site Based Rehabilitation Plan for supplementary planting to any disturbed areas in Lot 900. The plan must be generally consistent with the approved Rehabilitation Concept Zoning Plan, and prepared by a suitably qualified environmental professional and must including the following:
 - 16.23.1. description of site characteristics, including vegetation communities, native flora, environmental weeds and disturbances present;
 - 16.23.2. location of areas to be rehabilitated, and the proposed rehabilitation treatment/s to be implemented;
 - 16.23.3. details of rehabilitation planting palette/s and planting densities;
 - 16.23.4. description of maintenance schedules for rehabilitation areas;
 - 16.23.5. performance outcomes for rehabilitation areas and treatment types.
- 16.24. Implement any approved Site Based Rehabilitation Plan at all times during construction of the development and for any maintenance period identified in the Site Based Rehabilitation Plan except where altered by the conditions of this approval.
- 16.25. Ensure a legible copy of the approved Site Based Rehabilitation Plan and approval conditions are available on site at all times during construction and earthworks.

17. BUSHFIRE

Bushfire management

- 17.1. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey) for Stage 2, as shown on the approved plans of development, submit to Council for approval a Bushfire Hazard Assessment (BHA) that demonstrates all proposed lots within Stage 2, as shown on the approved plans of development, achieve a bushfire hazard rating of BAL-29 or less.
- 17.2. Ensure construction of future dwelling houses and associated development works must be in accordance with the approved Bushfire Management Plan.
- 17.3. A Property Record Notation will be imposed on Lots 1-70 advising that an approved Bushfire Management Plan encumbers the property.

Further advice:

The Property Record Notation is to read as follows:

A Bushfire Management Plan is associated with this property to ensure protection from bushfire risk as far as practicable through mitigation and maintenance measures. A copy of the conditions of the development approval is available from Council. Landowners or purchasers are strongly advised to seek further details by contacting Council's Development Assessment Branch or accessing the conditions of approval via Council's website.

- 17.4. Implement any approved Bushfire Management Plan at all times during the construction and operational phases of the development.
- 17.5. Ensure a legible copy of the approved Bushfire Management Plan and approval conditions are available on site at all times during construction and earthworks.

- 17.6. Ensure the details of construction requirements and associated recommendations of the Bushfire Management Plan are to be included in all sales literature relating to the site.
- 17.7. Design and construct the development in accordance with the National Construction Code and the Australian Standard AS3959:2018 - Construction of Buildings in Bushfire Prone Areas, as assessed by an authorised Building Certifier.
- 17.8. Prior to completion of the building construction, ensure development has permanent access to an adequate water supply for bushfire fighting purposes. The permanent water supply must be connected to a reticulated water supply:
- 17.8.1. with sufficient flow and pressure for fire fighting purposes; and
- 17.8.2. designed and constructed in accordance with the SEQ Code for water supply such that there is a fire hydrant that is accessible by a fire appliance located within 90 metres of all parts of the development envelope area.

Further advice:

A reticulated water supply designed and constructed in accordance with the SEQ Code for water supply is deemed to provide the required pressure and flow for fire fighting.

Where a hydrant on the public reticulation system is not within 90 metres of all parts of the development envelope area, a privately owned extension from the water main shall be designed and built in accordance with the SEQ Code for water supply. The extension will extend into the property sufficiently length to comply with the 90 metre requirement.

Ensure the proposed dwelling achieves compliance with the relevant 'bushfire prone area' for the Building Code Of Australia (BCA) and the BCA codes for building in bushfire prone areas. Building Designers should refer to the document titled "Bushfire Resilient Building Guidance for Queensland Homes" by the Queensland Government and CSIRO.

The above conditions will remain applicable and must be complied with irrespective of any changes to hazardous vegetation which surrounds the site. Should hazardous vegetation patches that surround the site be removed, and where this results in the preparation of an amended Bushfire Hazard Assessment and Management Plan that reduces bushfire hazard ratings, the Bushfire Hazard Assessment must be approved by Council.

18. GENERAL ENGINEERING

Requirement for operational works

- 18.1. An operational works permit is required for roadworks, stormwater quantity, access, earthworks, erosion and sediment control, sewer and water and stormwater quality.
- 18.2. An operational works permit is not required for parking, electrical reticulation, vegetation clearing, and landscaping.

Engineering standard

- 18.3. Construct all works in accordance with the approved plan(s) of development and Council's adopted standards.

Further advice:

This approval does not include the sewer drain/s for proposed lots. The applicant is required to obtain a plumbing and drainage permit prior to commencement of any works on internal sewer and water reticulation.

Rectification

- 18.4. Undertake, at no cost to Council, any alteration or relocation necessary to any service, public utility, installation, plant, equipment, easements or other item belonging to, or under the control of, Council or other public utility provider, resulting from construction works required with the development.
- 18.5. Replace existing Council infrastructure (including but not limited to street trees, water, sewer, stormwater and footpaths) at the time the damage occurs as part of construction works, to Council's standards and at no cost to Council.

Erosion & Sediment Control

- 18.6. As part of an application for operational works, provide to Council for endorsement an Erosion and Sediment Control Plan certified by a Registered Professional Engineer Queensland (RPEQ) or Certified Professional in Erosion and Sediment Control (CPESC) and designed in accordance with the International Erosion Control Association (Australasia) Best Practice Erosion and Sediment Control Guidelines (2008).

19. EARTHWORKS

- 19.1. An operational works permit is required for earthworks.
- 19.2. Carry out earthworks in accordance with Australian Standard 3798 – Guidelines on earthworks for commercial and residential developments.
- 19.3. Supervise any bulk earthworks to Level 1 (Residential & Commercial) and have a frequency of field density testing done in accordance with Table 8.1 of Australian Standard 3798.
- 19.4. Ensure any fill placed adjacent to, or in proximity to, any site boundary:
- 19.4.1. is supported by a retaining structure designed in accordance with Planning Scheme Policy 5;
 - 19.4.2. does not adversely affect adjoining properties with respect to a loss of privacy and safety; and
 - 19.4.3. does not adversely impact on the natural drainage pattern or cause ponding on adjoining properties.
- 19.5. Ensure that each lot is self-draining and grassed.
- 19.6. Do not place earth fill on any adjoining parkland unless otherwise approved in writing by Council.

Retaining

- 19.7. An operational works permit is required for retaining structures.
- 19.8. Design and construct all retaining walls and associated footings:
- 19.8.1. to manufacturers specifications;
 - 19.8.2. that is structurally supported/fixed at ends and corners;
 - 19.8.3. with provision of a 100mm thick concrete strip in the areas between base of walls and boundary lines where access will be unable to be achieved to manufacturers specifications;
 - 19.8.4. without encroachment onto adjoining properties or public land;
 - 19.8.5. with the retaining wall wholly contained within a single allotment;
 - 19.8.6. to not cause any adverse effect on the stability and integrity of the neighbouring buildings, properties, utility services and infrastructures;
 - 19.8.7. to achieve a minimum long term factor of safety of 1.5; and
 - 19.8.8. in accordance with Planning Scheme Policy 5 - Infrastructure, unless otherwise agreed to in writing by Council.

Further advice:

Single tier retaining walls within lots along the development's eastern boundary are supported in principle. During an operational works application for earthworks, investigate lowering the road levels fronting Lots 40 to 61 to further reduce retaining wall heights along the eastern boundary to lessen the impact on visual amenity.

- 19.9. Provide temporary safety fencing to all retaining walls over 1.0 metre in height on allotment boundaries. Fencing is only required on the top wall in the case of multi-tiered walls.
- 19.10. Ensure the inspection and certification of the retaining structure(s) by a Registered Professional Engineer Queensland (RPEQ) at the following stages:
- 19.10.1. footing stage (including excavation and reinforcement); and

- 19.10.2. at the time of installing drainage behind the wall (including geo-fabric, backfill and perforated pipe that is connected to the underground stormwater system and achieves a lawful point of discharge).
- 19.11. Provide to Council design certification (Form 15) from a Registered Professional Engineer Queensland (RPEQ) confirming that all retaining structures have been designed in accordance with Council's Planning Scheme Policy 5 – Infrastructure, Australian Standard 3798 and Australian Standard 4678.

20. STORMWATER QUANTITY

Stormwater quantity – General

- 20.1. An operational works permit is required to address stormwater quantity design.

Stormwater quantity – Lawful point of discharge

- 20.2. The lawful point of discharge for the development is the existing stormwater infrastructure in Carvers Park.
- 20.3. Discharge all flows that fall or pass onto the site to the lawful point of discharge in accordance with the Queensland Urban Drainage Manual (QUDM) and the Planning Scheme.
- 20.4. Connect the development to the existing stormwater system, at no cost to Council.

Stormwater quantity – Design

- 20.5. Provide stormwater drainage for the development in accordance with the Queensland Urban Drainage Manual (QUDM), Australian Rainfall and Runoff (ARR) and the applicable section 3.6 of the Planning Scheme Policy 5, at no cost to Council. Where there is any inconsistency, the Planning Scheme takes precedence.
- 20.6. Provide measures to manage overland flows draining to and through the land to ensure no actionable nuisance is created to any person or premises, at no cost to Council. The development must not result in ponding on adjacent land, redirection of overland flows to other premises and/or blockage of an overland flow paths.
- 20.7. Ensure that all stormwater drainage through parkland is via underground pipes unless it is via a lawful waterway or otherwise approved in writing by Council.
- 20.8. Ensure that the development will achieve 'no worsening' as described in section 3.6 of Planning Scheme Policy 5 and not:
- 20.8.1. make material changes to the pre-development overland flows and/or peak flow; or
- 20.8.2. increase the pre-development, frequency or concentration of overland stormwater flow at the point of discharge to all downstream properties including road reserves and the like. This must be based on the full range of AEP design storms events including 39%, 18%, 10%, 5%, 2% and 1%.
- 20.9. Design and construct stormwater drainage, at no cost to Council, that provides:
- 20.9.1. for stormwater infrastructure to be included in easements, where the infrastructure is located in downstream properties;
- 20.9.2. a network that commands the whole of the site and provides for external upstream catchments;
- 20.9.3. pipeline connections to the upstream catchment;
- Further advice:
- The development will be required to cater for pre-developed upstream flows from Lot 1 on RP170091 and Lot 3 on RP868515.*
- 20.9.4. upgrades of the downstream stormwater infrastructure required to convey design flows to the lawful point of discharge;
- 20.9.5. inter-allotment drainage in accordance with QUDM and section 3.6 of Planning Scheme Policy 5; and

- 20.9.6. two drainage outlets (metal kerb adaptors) in the kerb and channel for each lot draining towards the road along its frontage.

Further advice:

Where a concrete path is existing or constructed a galvanised RHS is to be provided under the path.

- 20.10. As part of an application for operational works, submit to Council a detailed stormwater design, checked and certified by a Registered Professional Engineer of Queensland (RPEQ) for a major storm of 1% AEP. The design must have a minimum freeboard determined in accordance with the requirements of the Queensland Urban Drainage Manual (QUDM) for overland flow paths and detention basins/tanks and provide an underground drainage network design to cater for the minor storm in accordance with QUDM.

Stormwater Quantity – Extension

- 20.11. Design and construct a stormwater system extension, at no cost to Council, that:
- 20.11.1. connects to the existing stormwater system in Carvers Park;
 - 20.11.2. is constructed of a minimum 375mm diameter RCP; and
 - 20.11.3. is certified by a Registered Professional Engineer of Queensland (RPEQ) to be in accordance with the Queensland Urban Drainage Manual (QUDM) and the Planning Scheme.

21. STORMWATER QUALITY

- 21.1. An operational works permit is required for stormwater quality management.
- 21.2. Provide stormwater quality management for the site in accordance with Planning Scheme Policy 5 – Infrastructure, subject to detailed design and except as altered by the conditions of this development approval.

This condition is imposed under section 145 of the Planning Act 2016.

- 21.3. As part of an application for operational works, submit to Council for approval a final Detailed Stormwater Quality Management Plan (DSQMP) including all stormwater infrastructure, relevant landscaping and engineering designs and calculations. The final detailed stormwater management plan and designs are to be in accordance with Planning Scheme Policy 5 – Infrastructure and must include:
- 21.3.1. a copy of the MUSIC model undertaken in accordance with the MUSIC User Manual, MUSIC Modelling Guidelines and consistent with the final DSQMP, that demonstrates the proposed treatment train achieves Council's load based reduction water quality objectives; and
 - 21.3.2. an Operational Management and Maintenance Plan (OMMP) as a separable section of the DSQMP to provide an outline of the proposed long term operational management and maintenance requirements of the stormwater system on the site. The OMMP must include a plan showing the location of the individual components of the system.

Further advice:

The MUSIC model is only required if there are changes to the stormwater quality management plan submitted as part of this application in terms of treatment device specifications (e.g. bioretention filter area, extended detention depth) or catchments draining to or bypassing stormwater quality treatment devices.

The submitted Concept Stormwater Quality Management Plan is accepted in principle for the purpose of this development approval; however, a final DSQMP is to be submitted for operational works approval.

22. TRAFFIC AND TRANSPORT

Access restriction

- 22.1. Access the development at the locations shown on the approved plan(s) of development with no vehicle access permitted via Park Ridge Road.

Further advice:

A Property Record Notation will be imposed on Lots 68 to 70 advising that, for traffic management and safety reasons, direct vehicle access to/from Park Ridge Road is not permitted. The Property Record Notation is to read as follows:

Vehicular access to/from Park Ridge Road is not permitted to occur at any time. Vehicular access has been prevented by way of a condition of development approval. A copy of the conditions of the development approval is available from Council. Landowners or purchasers are strongly advised to seek further details by contacting Council's Development Assessment Branch or accessing the conditions of approval via Council's website.

Pedestrian access – General

- 22.2. An operational works permit is required for pedestrian access.
- 22.3. Construct a reinforced concrete pathway, at no cost to Council, having a minimum width of 1.2 metres through Lot 904 SP 323143 and connecting to the stormwater basin driveway, as shown on the approved plans of development and including all stormwater infrastructure as determined through the operational works approval.

This condition is imposed under section 145 of the Planning Act 2016.

23. ROADWORKS

Roadworks - General

- 23.1. An operational works permit is required for roadworks.
- 23.2. All water supply conduits to service the development, where proposed across any existing road, are to be constructed using thrust boring in accordance with Council's standards.

Urban access street

- 23.3. Design and construct, at no cost to Council, all new roads except the road fronting lots 800 and 900, as an urban access street and more specifically, include the following:
 - 23.3.1. a minimum road reserve width of 15.5 metres;
 - 23.3.2. concrete mountable (M3) kerb and channel on a 4.0 metre alignment from the road reserve boundary;
 - 23.3.3. a minimum carriageway width of 7.5 metres constructed using a compacted gravel pavement and an Asphaltic Concrete (AC) wearing course;
 - 23.3.4. a minimum intersection kerb return radii of 10.0 metres;
 - 23.3.5. provision for stormwater drainage, line marking, tapers to existing road pavement, signage and street lighting associated with the required road works;
 - 23.3.6. a minimum 1.2 metre wide reinforced concrete pedestrian path within the road verge coincident with the location of street lights wherever possible that connects into any existing paths adjacent to the site;
 - 23.3.7. disabled compliant kerb ramps at the road corners in accordance with LCC Standard Drawing LCC-8-00412;
 - 23.3.8. speed restriction devices in accordance with the Manual of Uniform Traffic Control Devices (MUTCD Part 13), with adjustments to the road reserve width to preserve minimum verge widths;
 - 23.3.9. a permanent cul de sac turning area at the road end designed to accommodate the turning movements of a 12.5 metre HRV to undertake a maximum 3-point turn;
 - 23.3.10. a minimum 4.0 metre wide verge around cul de sac ends;
 - 23.3.11. carriageway and road reserve transitions to any existing road designed in accordance with the requirements of the Councils Planning Scheme Policy 5 – Infrastructure and adopted standards including appropriate tapers designed for the road hierarchy and speed environment of the road; and
 - 23.3.12. bollards that prevent vehicle access across from the end of any proposed cul de sac through to another road and/or pathway connections through to another road.

Further advice:

The kerb ramp is to have the same width as the adjoining path.

Urban access road

- 23.4. Design and construct, at no cost to Council, the new road along the frontage of lots 800 and 900 as an urban access road and more specifically, include the following:
- 23.4.1. a minimum road reserve width of 15.5 metres;
 - 23.4.2. concrete mountable (M3) kerb and channel on a 4.0 metre alignment from the southern road reserve boundary;
 - 23.4.3. concrete barrier (B1) kerb and channel on a 4.0 metre alignment from the northern road reserve boundary;
 - 23.4.4. a minimum carriageway width of 7.5 metres constructed using a compacted gravel pavement and an Asphaltic Concrete (AC) wearing course;
 - 23.4.5. a minimum intersection kerb return radii of 10.0 metres;
 - 23.4.6. provision for stormwater drainage, line marking, tapers to existing road pavement, signage and street lighting associated with the required road works;
 - 23.4.7. a minimum 1.2 metre wide reinforced concrete pedestrian path within both verges that connects into any existing paths adjacent to the site;
 - 23.4.8. disabled compliant kerb ramps at the road corners in accordance with LCC Standard Drawing LCC-8-00412;
 - 23.4.9. speed restriction devices in accordance with the Manual of Uniform Traffic Control Devices (MUTCD Part 13), with adjustments to the road reserve width to preserve minimum verge widths;
 - 23.4.10. carriageway and road reserve transitions to any existing road designed in accordance with the requirements of the Councils Planning Scheme Policy 5 – Infrastructure and adopted standards including appropriate tapers designed for the road hierarchy and speed environment of the road; and
 - 23.4.11. bollards that prevent vehicle access across from the end of any proposed cul de sac through to another road and/or pathway connections through to another road.

Further advice:

The kerb ramp is to have the same width as the adjoining path.

Temporary turnarounds

- 23.5. An operational works permit is required for temporary turnarounds.
- 23.6. Design and construct, at no cost to Council, a temporary turnaround, consisting of a sealed gravel pavement in accordance with the approved pavement design for the adjacent road or a reinforced concrete pavement, at the end of any road that doesn't end with a permanent turnaround which is able to accommodate the turning movements of a 10.3 metre long, refuse collection vehicle (HRV) to undertake a maximum 3-point turn.
- 23.7. Provide R5-35 'No Stopping' signage to ensure that vehicles do not park on the street, within the area required for manoeuvring, on bin collection day only.

Further advice:

Any regulatory signage must restrict vehicle parking on bin collection day only.

Pedestrian pathway

- 23.8. An operational works permit is required for the proposed pedestrian pathway.
- 23.9. Construct a reinforced concrete pedestrian pathway, at no cost to Council:
- 23.9.1. within a minimum 4.4 metre wide reserve;

- 23.9.2. having a minimum width of 1.2 metres;
- 23.9.3. located within the area identified as green link between lots 800 and 40; and
- 23.9.4. in accordance with Council's standards.

24. SERVICING ACCESS AND PARKING

Redundant crossovers

- 24.1. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey), remove all redundant crossovers fronting the development site reinstate the kerb and channel, road pavement, services, verge and any footpath to Council's standards.

Further advice:

Any existing concrete paths are to remain.

Driveway crossover

- 24.2. An operational works permit is not required for driveway crossovers.
- 24.3. Design and construct all new crossovers in accordance with Council's Design standards within Planning Scheme Policy 5 - Infrastructure.

Vehicle access – basin

- 24.4. An operational works permit is required for basin access.
- 24.5. Construct a reinforced concrete basin access driveway:
 - 24.5.1. from the edge of the road pavement to the basin floor;
 - 24.5.2. having a minimum width of 3.0 metres;
 - 24.5.3. with a reinforced concrete driveway crossover, having a minimum width of 3.0 metres, in accordance with IPWEA Standard Drawings RSD-102.
- 24.6. Construct any new crossover in the location(s) shown on the approved plan(s) of development and in accordance with the following:
 - 24.6.1. the edge of the crossover must be no closer than 0.5 metres to any built infrastructure including any stormwater gully pit, manhole, service infrastructure (e.g. power pole, telecommunications pit) or road infrastructure (e.g. street sign, bus stop, street tree, etc);
 - 24.6.2. the edge of the crossover is not to be within 6 metres (measured from the kerb return tangent point) of an intersection of roads in accordance with AS2890.

25. WATER AND SEWER

Further permit required - Water and Sewer

- 25.1. Prior to Council's endorsement of any Subdivision Plan, obtain a development permit for operational works for the construction of any water and sewerage infrastructure works that is to be transferred to Council to own and/or operate.

Further permit required - Live works - Both water and sewerage

- 25.2. Lodge an application to Council for live works to be performed on Council's water and sewerage network.

General - Clearances QDC

- 25.3. Ensure that maintenance structures and property connections are open to the sky, have unrestricted street access and adjacent buildings and structures are in compliance with MP1.4 of the Queensland Development Code.

Water service connections

- 25.4. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey), provide separate water service connections to each proposed allotment within the development.
- 25.5. Ensure the DN200 and DN150 diameter water mains located on the eastern boundary constructed by others are on maintenance at the time of the proposed connection by the subject development.
- 25.6. Ensure that with the construction of any new Council water main, any required service connections and water meter boxes are provided for with a suitably sized property service connection and conduits where necessary. Any connection to Council's reticulation main is to be made with an approved tapping band.
- 25.7. Disused and/or redundant water meter connections must be removed by Logan City Council at the applicant's cost. The removal of property service connections and water meters for the development requires a lodgement of a "Water Meter Disconnection" application with Council Water Operations Branch via waterapplications@logan.qld.gov.au.

Road crossings – Conduits

- 25.8. Provide a suitably sized service conduit for any allotment where the water main is in the opposite side of the road.

Further advice:

The installation or removal of property service connections and water meters for the development requires a lodgement of a "Water Meter Connection OR Disconnection" application with Council Water Operations Branch via waterapplications@logan.qld.gov.au

Design and construct – Water extension

- 25.9. Prior to Council's endorsement of any Subdivision Plan, at no cost to Council, Council's water supply network must be extended to service the proposed development generally in accordance with the Concept Sewer and Water Plan in the approved plans of development to provide the water service to the proposed subdivision, subject to operational works approval. The proposed extension to the water supply infrastructure must:
 - 25.9.1. Ensure that each proposed allotment is capable of being serviced in accordance with the requirements of the South-East Queensland Water Supply and Sewerage Design and Construction Code;
 - 25.9.2. Construct the DN200, DN150 and DN100 as outlined in the approved Concept Sewer and Water Plan;
 - 25.9.3. Be designed to cater for the anticipated water demands for the ultimate water supply network;
 - 25.9.4. Be on-maintenance prior to the endorsement of survey plans; and
 - 25.9.5. Be provided at no cost to Council.

Further advice:

The proposed Services Plan is concept only and is still subject to detailed design as part of the required operational works application.

Water service – Wholly contained within allotment

- 25.10. Ensure that all internal private water services are wholly contained within the allotment being serviced or within a dedicated services easement.

Water service – Install in accordance with standards

- 25.11. Ensure, at no cost to Council, all water property connection components comply with Logan City Council's Standard Water Metering Guidelines and the South East Queensland Water Supply and Sewerage Design and Construction Code (SEQ Code) water service drawings.

This condition is imposed under section 145 of the Planning Act 2016.

Connection for adjacent properties

- 25.12. Ensure the extension of Council's water supply network makes allowance for any adjacent property requiring future connection, subject to Operational Works approval at the applicant's cost.

Sewerage connection location

- 25.13. Ensure that each lot is provided with a separate sewerage property connection to Council's sewerage reticulation network, prior to the endorsement of survey plans, at the applicant's cost.

Connection for adjacent properties

- 25.14. Ensure the extension of Council's sewerage network makes allowance for any adjacent property requiring future connection, subject to Operational Works approval at the applicant's cost.
- 25.15. Establish any external sewerage infrastructure required to connect the development to the Council's sewerage network, prior to the endorsement of survey plans, at no cost to Council.

Design and construct – Sewerage extension

- 25.16. Prior to Council's endorsement of any Subdivision Plan, at no cost to Council, extend Council's sewerage network generally in accordance with Concept Sewer and Water Plan located in the approved plans of development to provide the property service for the proposed subdivision, subject to operational works approval. The proposed extension to the sewerage infrastructure must:
- 25.16.1. Ensure that each proposed allotment is capable of being serviced in accordance with the requirements of the South-East Queensland Water Supply and Sewerage Design and Construction Code;
 - 25.16.2. Be designed to cater for the anticipated sewage loads for the ultimate sewer network;
 - 25.16.3. Construct the DN150 sewerage main and associated infrastructure as outlined in the approved Concept Sewer and Water Plan;
 - 25.16.4. Be extended to the upstream boundary of the proposed development;
 - 25.16.5. Be on-maintenance prior to the endorsement of survey plans; and
 - 25.16.6. Be provided at no cost to Council.

Further advice:

The proposed Concept Sewer Plan is concept only and is still subject to detailed design as part of the required operational works application.

Maintenance structure – Maintain access

- 25.17. Ensure access to the sewerage maintenance structures is available to Council at all times for maintenance purposes.

Sanitary drainage

- 25.18. Ensure that any sanitary house drainage is wholly contained within the lot being serviced.

General – Protection

- 25.19. During the construction phase, ensure that Council's sewerage infrastructure is protected. Measures must be put in place to physically protect and restrict access over any existing sewerage infrastructure to ensure protection from excessive crushing loads.
- 25.20. Ensure that any proposed detention basin/retaining wall does not adversely impact on the sewerage infrastructure, with details to be provided at Operational Works stage demonstrating this.
- 25.21. During the construction phase, the applicant is responsible for any damage caused to Council water and sewerage infrastructure.
- 25.22. Prior to the commencement of any remedial or rectification works, obtain approval from Council.
- 25.23. Undertake remedial or rectification works at no cost to Council.

26. ELECTRICAL AND TELECOMMUNICATIONS

Electricity and Telecommunications – General

- 26.1. An operational works permit is not required for electricity and telecommunications.
- 26.2. Design and provide underground electrical and telecommunications connections to proposed lots.
- 26.3. Design and provide any underground electricity supply and telecommunications to the development in accordance with the Planning Scheme Policy 5 - Infrastructure and the Energex - Underground Distribution Construction Manual. Ensure all conduits are located within the 0-750mm corridor measured from the road reserve boundaries.
- 26.4. Do not install property poles or flying fox overhead connections.
- 26.5. Remove all redundant electrical and telecommunications connections and reinstate the land.
- 26.6. Pay the cost of any alterations to electricity supply and telecommunications mains, services or installations required as a result of the development.
- 26.7. Do not install any electrical transformers or telephone control pillars within existing or proposed park unless otherwise approved by Council in writing.
- 26.8. Construct electrical and telecommunications conduits, where required under any existing road to service the development, by thrust boring.
- 26.9. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey) or the commencement of the use, whichever occurs first, submit to Council an Energex certificate of supply and written confirmation from an electricity provider that an agreement has been made for the supply of electricity to the development and where staged, written confirmation is required for each stage of the development.
- 26.10. Prior to Council's endorsement of any Subdivision Plan (e.g. a Plan of Survey), submit to Council a Certificate of practical completion, or as a minimum, a Letter of Conditional Approval (Provisioning Letter), from NBN, confirming that an agreement has been made for the supply of telecommunications to the development and where staged, confirmation is required for each stage of the development.

Electricity and Telecommunications - Street lighting

- 26.11. An operational works permit is not required for street lighting.
- 26.12. Prior to any roadworks being accepted as on-maintenance, design and install, where required and at no cost to Council, a street and path light system on all roads in accordance with Australian Standard AS1158 and on all footpaths/bikeways within park and road reserves associated with the development.
- 26.13. Design the street and path lighting system in accordance with the 'Crime Prevention through Environmental Design: Guidelines for Queensland' (CPTED) produced by the State.
- 26.14. The street and path light system is to be powered by underground electrical reticulation.
- 26.15. Street lighting is to be installed on the same side of the road that accommodates any footpath or bikeway.

FURTHER ADVICE TO THE APPLICANT

In relation to the application, the applicant is further advised:

1. The currency period for this approval is in accordance with Section 85 of the *Planning Act 2016*.
2. Authorised persons of the Council may enter the premises the subject of this approval at any reasonable time to ascertain whether the above conditions have been complied with (and/or whether the above requirements have been carried out).
3. All site works and earthworks must be carried out in accordance with the Standard Drawings and policies in the assessable Planning Scheme.
4. Prior to commencing work which will ultimately become the responsibility of Council; or work on adjacent roads or drainage schemes; Council is to be advised in writing of the name of the principal contractor and the contractor has received from Council a notice of appointment of principal contractor under the provisions of the *Workplace Health and Safety Act 2011*. The contractor is to execute the appropriate form for appointment of Principal Contractor prior to commencing work.
5. *Aboriginal Cultural Heritage Act 2003*

There may be a requirement to establish a Cultural Heritage Management Plan and/or obtain approvals pursuant to the *Aboriginal Cultural Heritage Act 2003*.

The *ACH Act* establishes a cultural heritage duty of care which provides that: "A person who carries out an activity must take all reasonable and practicable measures to ensure the activity does not harm Aboriginal cultural heritage."

It is an offence to fail to comply with the duty of care. Substantial monetary penalties may apply to individuals or corporations breaching this duty of care. Injunctions may also be issued by the Land Court, and the Minister administering the Act can also issue stop orders for an activity that is harming or is likely to harm Aboriginal cultural heritage or the cultural heritage value of Aboriginal cultural heritage.

You should contact the Cultural Heritage Unit on 07 3238 3838 to discuss any obligations under the *ACH Act*.

THE APPLICANT AND OWNER BE FURTHER ADVISED:-

It is the owner's and occupants responsibility under the *Environmental Protection Act 1994* to advise the Chief Executive of the Environmental Protection Agency, of any Notifiable Activity conducted on the site or contamination or suspected contamination which may cause a hazard to human health or the environment within 30 days of becoming aware of the operation of a Notifiable Activity on the site or of any contamination or suspected contamination. The Chief Executive, pursuant to the Act, is empowered to require that the development complies with the provisions of the Act, including the preparation of site investigation reports and if necessary the remediation of the site at the owners expense.

The landowner is advised of their responsibilities under the Local Government Act 2009 and Local Law No. 10. It is recommended vegetation cleared as a result of this development approval and requiring disposal is disposed of:

- on the premises for landscaping and sediment and erosion control purposes (for example as mulch);
- at a waste disposal facility operated by Council; and
- ensure any vegetation cleared as a result of this development approval is not burnt or incinerated except where consistent with the local law or under a permit issued by the Queensland Fire and Emergency Services.

Further, the landowner is advised of their responsibilities under the Nature Conservation Act 1992 that all vegetation that is to be removed is checked for wildlife prior to removal. Where native vertebrate animals are found, clearing must cease and a Wildlife Spotter Catcher (Department of Environment, Science, Tourism and Innovation, or relevant State Department responsible at the time approved) contacted. All native vertebrate animals located within, on and amongst plants or areas of plants proposed to be harmed in accordance with this approval are only to be managed under the guidance of a Wildlife Spotter Catcher (Department of Environment, Science, Tourism and Innovation, or relevant State Department responsible at the time approved).

The *Plumbing and Drainage Act 2018* requires a Plumbing and Drainage Permit for any regulated plumbing and drainage work. The Plumbing and Drainage application must be lodged and approved by Council's Plumbing Services section prior to the commencement of any plumbing and drainage work onsite.

Regulated work can be defined as plumbing and drainage works that will not become a service provider's asset. Examples are where:

- House drainage and/or water service is to be installed along an access driveway/easement to rear lots
- Existing dwellings require house drains and/or water services to be connected to new wastewater (sewer) and/or new water meters

In the case of a Dual Occupancy, a separate wastewater (sewer) connection, roof water and water meter connection must be provided for each unit within their own designated area

You are also advised that it is the developer's responsibility to ensure that all development should proceed in accordance with the Duty of Care Guidelines under the *Aboriginal Cultural Heritage Act 2003*. Penalties apply where the duty of care is breached.

For further information in regard to the provisions of the *Aboriginal Cultural Heritage Act 2003*, please contact the Cultural Heritage Coordination Unit, Department of Natural Resources and Water on (07) 3238 3838.

Appendix G

SAT survey results



Spot Assessment Technique (SAT)				
Date:	9/09/2025	Site: 12014	SAT ID:	1
Tree No.	Scientific Name	Common Name	DBH	Scats
1	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	180	No
2	<i>Eucalyptus siderophloia</i>	Grey Ironbark	20	No
3	<i>Lophostemon suaveolens</i>	Swamp Box	20	No
4	<i>Corymbia intermedia</i>	Pink Bloodwood	350	No
5	<i>Corymbia intermedia</i>	Pink Bloodwood	140, 130	No
6	<i>Corymbia intermedia</i>	Pink Bloodwood	230	No
7	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	130	No
8	<i>Lophostemon suaveolens</i>	Swamp Box	150	No
9	<i>Corymbia intermedia</i>	Pink Bloodwood	300	No
10	<i>Lophostemon suaveolens</i>	Swamp Box	100	No
11	<i>Lophostemon suaveolens</i>	Swamp Box	150	No
12	<i>Lophostemon suaveolens</i>	Swamp Box	130	No
13	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	120	No
14	<i>Lophostemon suaveolens</i>	Swamp Box	150	No
15	<i>Lophostemon suaveolens</i>	Swamp Box	130	No
16	<i>Lophostemon suaveolens</i>	Swamp Box	120	No
17	<i>Lophostemon suaveolens</i>	Swamp Box	130	No
18	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
19	<i>Lophostemon suaveolens</i>	Swamp Box	100	No
20	<i>Eucalyptus siderophloia</i>	Grey Ironbark	410	No
21	<i>Corymbia intermedia</i>	Pink Bloodwood	320	No
22	<i>Lophostemon suaveolens</i>	Swamp Box	110	No
23	<i>Lophostemon suaveolens</i>	Swamp Box	130	No
24	<i>Corymbia intermedia</i>	Pink Bloodwood	140	No
25	<i>Lophostemon suaveolens</i>	Swamp Box	110	No
26	<i>Corymbia intermedia</i>	Pink Bloodwood	180	No
27	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
28	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
29	<i>Corymbia intermedia</i>	Pink Bloodwood	140	No
30	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	150	No
Total Scats			0/30	
Percentage			0.00	
East Coast (med-high) Activity Category			Low	



Spot Assessment Technique (SAT)				
Date:	08.09.2025	Site: 12014	SAT ID:	2
Tree No.	Scientific Name	Common Name	DBH	Scats
1	<i>Corymbia intermedia</i>	Pink Bloodwood	210	No
2	<i>Corymbia intermedia</i>	Pink Bloodwood	210	No
3	<i>Corymbia intermedia</i>	Pink Bloodwood	320	No
4	<i>Corymbia intermedia</i>	Pink Bloodwood	220	No
5	<i>Corymbia intermedia</i>	Pink Bloodwood	120	No
6	<i>Corymbia intermedia</i>	Pink Bloodwood	110	No
7	<i>Corymbia intermedia</i>	Pink Bloodwood	110	No
8	<i>Corymbia intermedia</i>	Pink Bloodwood	280	No
9	<i>Corymbia intermedia</i>	Pink Bloodwood	270	No
10	<i>Eucalyptus siderophloia</i>	Grey Ironbark	400	No
11	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	230	No
12	<i>Corymbia intermedia</i>	Pink Bloodwood	300	No
13	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	210	No
14	<i>Corymbia intermedia</i>	Pink Bloodwood	110	No
15	<i>Corymbia intermedia</i>	Pink Bloodwood	110,120	No
16	<i>Corymbia intermedia</i>	Pink Bloodwood	90	No
17	<i>Corymbia intermedia</i>	Pink Bloodwood	170	No
18	<i>Corymbia intermedia</i>	Pink Bloodwood	140	No
19	<i>Corymbia intermedia</i>	Pink Bloodwood	130	No
20	<i>Eucalyptus siderophloia</i>	Grey Ironbark	140	No
21	<i>Corymbia intermedia</i>	Pink Bloodwood	190	No
22	<i>Corymbia intermedia</i>	Pink Bloodwood	380	No
23	<i>Corymbia intermedia</i>	Pink Bloodwood	300	No
24	<i>Lophostemon suaveolens</i>	Swamp Box	160,110	No
25	<i>Eucalyptus siderophloia</i>	Grey Ironbark	110	No
26	<i>Lophostemon suaveolens</i>	Swamp Box	160,100	No
27	<i>Lophostemon suaveolens</i>	Swamp Box	150	No
28	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
29	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	120	No
30	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	110	No
Total Scats			0/30	
Percentage			0.00	
East Coast (med-high) Activity Category			Low	



Spot Assessment Technique (SAT)				
Date:	08.09.2025	Site: 12014	SAT ID:	3
Tree No.	Scientific Name	Common Name	DBH	Scats
1	<i>Eucalyptus siderophloia</i>	Grey Ironbark	360	No
2	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
3	<i>Lophostemon suaveolens</i>	Swamp Box	100	No
4	<i>Lophostemon suaveolens</i>	Swamp Box	100	No
5	<i>Eucalyptus siderophloia</i>	Grey Ironbark	110	No
6	<i>Lophostemon suaveolens</i>	Swamp Box	100,110	No
7	<i>Eucalyptus siderophloia</i>	Grey Ironbark	120	No
8	<i>Lophostemon suaveolens</i>	Swamp Box	120	No
9	<i>Lophostemon suaveolens</i>	Swamp Box	120	No
10	<i>Eucalyptus siderophloia</i>	Grey Ironbark	100	No
11	<i>Corymbia intermedia</i>	Pink Bloodwood	110	No
12	<i>Alphitonia excelsa</i>	Soap tree	110	No
13	<i>Corymbia citriodora</i>	Spotted Gum	160	No
14	<i>Eucalyptus siderophloia</i>	Grey Ironbark	590	No
15	<i>Corymbia citriodora</i>	Spotted Gum	190	No
16	<i>Corymbia intermedia</i>	Pink Bloodwood	360	No
17	<i>Corymbia intermedia</i>	Pink Bloodwood	700	No
18	<i>Lophostemon suaveolens</i>	Swamp Box	320	No
19	<i>Melaleuca linariifolia</i>	Snow In Summer	280	No
20	<i>Corymbia citriodora</i>	Spotted Gum	110	No
21	<i>Lophostemon suaveolens</i>	Swamp Box	160	No
22	<i>Corymbia citriodora</i>	Spotted Gum	330	No
23	<i>Corymbia intermedia</i>	Pink Bloodwood	130	No
24	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	290	No
25	<i>Corymbia citriodora</i>	Spotted Gum	380	No
26	<i>Acacia disparrima</i>	Hickory Wattle	160	No
27	<i>Eucalyptus seeana</i>	Narrow-leaved Red Gum	580	No
28	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
29	<i>Corymbia intermedia</i>	Pink Bloodwood	200	No
30	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
Total Scats			0/30	
Percentage			0.00	
East Coast (med-high) Activity Category			Low	



Spot Assessment Technique (SAT)

Date:	08.09.2025	Site: 12014	SAT ID:	4
Tree No.	Scientific Name	Common Name	DBH	Scats
1	<i>Eucalyptus siderophloia</i>	Grey Ironbark	630	Yes
2	<i>Acacia concurrens</i>	Black Wattle	100	Yes
3	<i>Corymbia intermedia</i>	Pink Bloodwood	200	No
4	<i>Lophostemon suaveolens</i>	Swamp Box	110	No
5	<i>Angophora leiocarpa</i>	Smooth-barked Apple	140	No
6	<i>Corymbia intermedia</i>	Pink Bloodwood	440	No
7	<i>Corymbia intermedia</i>	Pink Bloodwood	100	No
8	<i>Eucalyptus siderophloia</i>	Grey Ironbark	930	No
9	<i>Corymbia intermedia</i>	Pink Bloodwood	240	No
10	<i>Corymbia citriodora</i>	Spotted Gum	340	No
11	<i>Lophostemon suaveolens</i>	Swamp Box	110	No
12	<i>Eucalyptus racemosa</i>	Scribbly Gum	340, 310	No
13	<i>Corymbia intermedia</i>	Pink Bloodwood	110	No
14	<i>Angophora leiocarpa</i>	Smooth-barked Apple	180	No
15	<i>Corymbia intermedia</i>	Pink Bloodwood	210	No
16	<i>Angophora leiocarpa</i>	Smooth-barked Apple	250	No
17	<i>Eucalyptus racemosa</i>	Scribbly Gum	230	No
18	<i>Eucalyptus racemosa</i>	Scribbly Gum	100	No
19	<i>Corymbia intermedia</i>	Pink Bloodwood	260	No
20	<i>Corymbia intermedia</i>	Pink Bloodwood	320	No
21	<i>Eucalyptus siderophloia</i>	Grey Ironbark	330	No
22	<i>Corymbia intermedia</i>	Pink Bloodwood	230	No
23	<i>Corymbia intermedia</i>	Pink Bloodwood	240	No
24	<i>Angophora leiocarpa</i>	Smooth-barked Apple	200	No
25	<i>Eucalyptus racemosa</i>	Scribbly Gum	720	Yes
26	<i>Angophora leiocarpa</i>	Smooth-barked Apple	140	No
27	<i>Corymbia intermedia</i>	Pink Bloodwood	400	No
28	<i>Corymbia intermedia</i>	Pink Bloodwood	140	No
29	<i>Corymbia intermedia</i>	Pink Bloodwood	180	No
30	<i>Corymbia intermedia</i>	Pink Bloodwood	200	No
Total Scats			3/30	
Percentage			10.00%	
East Coast (med-high) Activity Category			Low	

