Flora and Fauna Assessment Report

75 Cheryl Crescent, Newport NSW 2106

Report prepared by Narla Environmental for

Alan Kent

November 2024

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Prepared for:	Alan Kent
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Report Certification

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Glossary

Acronym/Term	Definition
BAM	Biodiversity Assessment Methodology
BC Act	New South Wales Biodiversity Conservation Act 2016
CEEC	Critically Endangered Ecological Community
DA	Development Application
DAFF	Federal Department of Agriculture, Fisheries, and Forestry (formerly DAWE)
DAWE	Federal Department of Agriculture, Water, and the Environment (now DAFF)
DCCEEW	Federal Department of Climate Change, Energy, the Environment, and Water
Development	The use of land, and the subdivision of land, and the carrying out of a work, and the demolition of a building or work, and the erection of a building, and any other act, matter, or thing referred to in Section 26 that is controlled by an environmental planning instrument but does not include any development of a class or description prescribed by the regulations for the purposes of this definition (Environmental Planning and Assessment Act 1979)
DPE	Department of Planning and Environment (now NDCCEEW)
DPI	Department of Primary Industries
DPIE	Department of Planning, Industry, and Environment (became DPE, now NDCCEEW)
EEC	Endangered Ecological Community
EP&A Act	Environmental Planning & Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
FFA	Flora and Fauna Assessment
ha	Hectares
km	Kilometre
LGA	Local Government Area
Locality	A 10km x 10km cell centered on the Subject Property
m	metres
mm	millimetres
Native Vegetation	Any of the following types of plants native to New South Wales: (a) trees (including any sapling or shrub), (b) understorey plants, (c) groundcover (being any type of herbaceous vegetation) and (d) plants occurring in a wetland.
NDCCEEW	NSW Department of Climate Change, Energy, the Environment, and Water (formerly DPE)
NSW	New South Wales

Acronym/Term	Definition
OEH	Office of Environment and Heritage (became DPE, now NDCCEEW)
PDCP	Pittwater Development Control Plan 2014
PLEP	Pittwater 21 Local Environmental Plan 2021
SEPP	State Environmental Planning Policy
Subject Property	75 Cheryl Crescent, Newport NSW 2106 (Lot 22/-/DP237019)
Subject Site	All areas associated with the proposed development.
Threatened species, populations, and ecological communities	Species, populations, and ecological communities specified in Schedules 1 and 2 of the BC Act 2016
TPZ	Tree Protection Zone

1. Introduction

1.1 Project Background

Narla Environmental Pty Ltd (Narla) was engaged by Progressive Plans on behalf of Alan Kent ('the proponent') to undertake a Flora and Fauna Assessment (FFA) for the proposed development at 75 Cheryl Crescent, Newport NSW 2106 (Lot 22, DP 237019), hereafter referred to as the 'Subject Property', **Figure 1**). The proposed development involves alterations to an existing dwelling within the Subject Property. All areas associated with the proposed development are hereafter referred to the 'Subject Site' (**Figure 1**, **Appendix C**).

Narla have produced this report in order to assess any potential impacts associated with the proposed development on terrestrial ecology (biodiversity), particularly threatened species, populations, and ecological communities listed under the Biodiversity Conservation Act 2016 (BC Act) and Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). The report will also recommend appropriate measures to mitigate any potential impacts in line with all relevant State Environmental Planning Policies (SEPPs) and local government plans, namely the Pittwater Local Environmental Plan 2014 (PLEP) and Pittwater 21 Development Control Plan 2004 (PDCP).

1.2 Site Description and Location

The Subject Property is located on Cheryl Crescent in the suburb of Newport in the Northern Beaches Local Government Area (LGA) and covers an area of approximately 0.07ha. It currently contains an existing dwelling, associated landscaped garden vegetation, and remnant native vegetation in the Eastern portion of the property. The property boundary has been defined by cadastral boundaries provided on the NSW Government Land & Property Information Spatial Information Exchange map viewer (SIX Maps 2024). The Subject Site is located largely across the existing decking and covers an area of approximately 0.006ha.

1.2.1 Topography, Geology, and Soil

The Subject Property is located on a southwest-facing slope with elevation ranging from approximately 89m above sea level (asl) in the eastern extent to 83m asl in the western extent (Google Earth 2024). The Subject Property is situated on the Watagan soil landscape as indicated on the Soil Landscapes of the Sydney 1:100,000 Sheet (Chapman et al 2009).

The Watagan Soil Landscape is characterized by undulating to rolling rises and low hills on Hawkesbury Sandstone. Local relief ranges between 60 – 120 m, slopes are typically >25%. Narrow, convex crests and ridges, steep colluvial sideslopes, occasional sandstone boulders and benches. Tall eucalypt open-forest with closed-forest (rainforest) in sheltered positions (Chapman et al 2009).

1.2.2 Hydrology

There are no mapped or unmapped watercourses within the Subject Property.

1.3 Scope of Assessment

The objectives of this flora and fauna assessment were to:

- Establish the likelihood of occurrence of migratory species, threatened species, endangered populations, and threatened ecological communities as listed under the New South Wales BC Act and/or the Commonwealth EPBC Act;
- Assess any potential impacts to species and/or communities listed under the BC Act and EPBC Act;
- Identify and map the distribution of vegetation communities in the Subject Property;
- Record presence and the extent of any known or potential fauna habitat features such as nests, drays, caves, crevices, culverts, pools, soaks, flowering trees, fruiting trees, and hollow-bearing trees and provide recommendations for on-going management of these habitat features and any fauna present;
- Record presence and the extent of any Priority Weeds or weed infestations and provide recommendations for on-going management; and
- Recommend any controls or additional actions to be taken to protect or improve environmental outcomes of the proposed development.

1.4 Study Limitations

This study was not intended to provide a complete inventory of all flora and fauna species with potential to occur on the Subject Property. The species list provided for the site in this report was restricted to what was observed during the site visit by the Narla Ecologist. The timing of the survey may not have coincided with emergence times of some species of flora and fauna, such as seasonally flowering herbs, seasonal migratory fauna, or nocturnal fauna.

To account for those species that could not be identified during the field surveys, detailed habitat assessments were combined with desktop research and local ecological knowledge to establish an accurate prediction of the potential for such species to occur on or adjacent to the Subject Property.

Figure 1. Components of the Subject Site.

Figure 2. Biodiversity Values Mapping

1.5 Relevant Legislation and Policy

The legislation and policy that are addressed in this report are listed in **Table 1-1.**

Table 1-1. Relevant legislation and policy addressed.

Legislation/ Policy	Relevant Ecological Feature on Site	Triggered	Action Required
Environmental Planning and Assessment Act 1979 (EP&A Act)	All threatened species, populations, and ecological communities and their habitat that occur or are likely to occur within the Subject Property during all or part of their lifecycle.	Yes	This FFA and all subsequent recommendations relevant to the planning process under 'Part 4: Development Assessment and Consent'.
New South Wales Biodiversity Conservation Act 2016 (BC Act)	The BC Act listed TEC Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion was observed along the eastern portion of the Subject Property during the site assessment. No BC Act listed threatened species were identified within the Subject Property during the site assessment, however suitable habitat was identified.	Yes	This FFA, particularly the likelihood tables for threatened fauna and flora species occurring or potentially occurring within the Subject Property, as well as severity of potential direct and indirect impacts that may occur as a result of the proposed development.
Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) (Commonwealth)	No EPBC Act listed threatened ecological communities were observed within the Subject Property during the site assessment. No EPBC Act listed threatened species were identified within the Subject Property during the site assessment, however suitable habitat was identified.	Yes	This FFA, particularly the likelihood tables for EPBC Act listed fauna and flora species occurring or potentially occurring within the Subject Property, as well as severity of potential direct and indirect impacts that may occur as a result of the proposed development.
Biosecurity Act 2015 (Bio Act)	Two (2) Priority Weeds for the Greater Sydney region were identified within the Subject Property: ▪ *Lantana camara* (Lantana); and	Yes	All Priority Weeds must be managed in accordance with the Biosecurity Act.

Legislation/ Policy	Relevant Ecological Feature on Site	Triggered	Action Required
	▪ *Olea europaea subsp. cuspidata* (African Olive)		
State Environmental Planning Policy (Biodiversity and Conservation) 2021 – Chapter 4 Koala Habitat Protection 2021	The Subject Property is located in an LGA listed in Schedule 2 of the SEPP, however it does not encompass an area greater than 1ha. Therefore, this chapter of the SEPP does not apply.	No	None.
State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 2 Coastal Management	No areas mapped as 'Coastal Use Area' and 'Coastal Environment Area' occur within the Subject Property. The western corner of the Subject Property is located on the Proximity Area for Littoral Rainforest mapped to the west (**Figure 3**).	Yes.	Whilst the property contains land mapped within the proximity to Littoral rainforest. This area equates to <10m^2 of the Subject Property and is outside of the development footprint. Furthermore, no vegetation is proposed to be removed, therefore no further assessment under the SEPP is required.
Fisheries Management Act 1994 (FM Act)	No areas within the Subject Property are listed as Key Fish Habitat under the FM Act.	No	None.
Water Management Act 2000	No mapped or unmapped hydrolines occur within or in close proximity to the Subject Property.	No	None.

Figure 3. SEPP (Resilience and Hazards) 2021 - Littoral Rainforest Area Map

1.6 Biodiversity Assessment Pathway

The requirements of the BC Act and Biodiversity Conservation Regulation 2017 are mandatory for all development applications assessed pursuant to Part 4 of the EP&A Act submitted in the Northern Beaches LGA.

The Biodiversity Values (BV) Map (NDCCEEW 2024a) identifies land with high biodiversity values that are particularly sensitive to impacts from development and clearing. The map forms part of the Biodiversity Offsets Scheme Entry Threshold which is one of the triggers for determining whether the Biodiversity Offset Scheme (BOS) applies to a clearing or development proposal. The map has been prepared by the Department of Planning and Environment (DPE) under Part 7 of the Biodiversity Conservation Act 2016 (BC Act). While the Subject Property contains land mapped as 'Biodiversity Values' within the Biodiversity Values Map, (**Figure 2**) this area is located within eastern portion of Subject Property, which will be retained (**Plate 1**). No native vegetation mapped within the BV Map will be impacted directly or indirectly as a result of the proposed development.

The BC Act and its regulations also stipulate clearing 'area threshold' values (**Table 1-2**) that determine whether a development is required to be assessed in accordance with the 'Biodiversity Offset Scheme' (BOS). Minimum entry thresholds for vegetation clearing depend on the minimum lot size (shown in the Lot Size Maps made under the relevant Local Environmental Plan (LEP)), or actual lot size (where there is no minimum lot size provided for the relevant land under the LEP).

The minimum lot size prescribed to the Subject Property is 700m². To avoid triggering the BOS the proponent must avoid the clearing/management of native vegetation in excess of 0.25ha (**Table 1-2**). The entire Subject Property only encompasses an area of approximately 0.07ha, therefore the clearing threshold cannot be reached.

Therefore, the Biodiversity Offset Scheme is not triggered and a Biodiversity Development Assessment Report (BDAR) is not required. As such, a standard Flora and Fauna Assessment Report (this report) has been produced to assess the impact of the proposed DA.

Table 1-2. Biodiversity Offset Scheme Entry Thresholds. Bold text indicates the clearing threshold applicable to the proposed development.

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

Plate 1. Native Vegetation in the Eastern Section of the Subject Property

1.7 State Environmental Planning Policy (Resilience and Hazards) 2021 – Chapter 2 Coastal Management

This chapter of the SEPP aims promote an integrated and coordinated approach to land use planning in the coastal zone in a manner consistent with the objects of the Coastal Management Act 2016. The Subject Property does not lie within land mapped as 'Coastal Use Area' and 'Coastal Environmental Area' mapping. Therefore, Division 4 of Chapter 2 is not applied to the development. As such, no further action should be required.

1.8 Pittwater Local Environmental Plan 2014 (PLEP)

1.8.1 Zoning

The Subject Property is contained within land zoned as 'C4: Environmental Living'. The Pittwater LEP requires that the development satisfies this zone objectives which are as follows:

- To provide for low-impact residential development in areas with special ecological, scientific, or aesthetic values.
- To ensure that residential development does not have an adverse effect on those values.
- To provide for residential development of a low density and scale integrated with the landform and landscape.
- To encourage development that retains and enhances riparian and foreshore vegetation and wildlife corridors.

1.8.2 Biodiversity

The Subject Property contains land mapped as 'Biodiversity' under Clause 7.6 of the Pittwater LEP (**Figure 4**). Therefore, this clause applies to the proposed development.

The objective of this clause is to maintain terrestrial, riparian, and aquatic biodiversity by:

- protecting native fauna and flora, and
- protecting the ecological processes necessary for their continued existence, and
- encouraging the conservation and recovery of native fauna and flora and their habitats.

Before determining a development application for development on land to which this clause applies, the consent authority must consider:

- whether the development is likely to have:
    - any adverse impact on the condition, ecological value, and significance of the fauna and flora on the land, and
    - any adverse impact on the importance of the vegetation on the land to the habitat and survival of native fauna, and
    - any potential to fragment, disturb, or diminish the biodiversity structure, function, and composition of the land, and
    - any adverse impact on the habitat elements providing connectivity on the land, and
- any appropriate measures proposed to avoid, minimise, or mitigate the impacts of the development.

Development consent must not be granted to development on land to which this clause applies unless the consent authority is satisfied that:

- the development is designed, sited and will be managed to avoid any significant adverse environmental impact, or
- if that impact cannot be reasonably avoided by adopting feasible alternatives—the development is designed, sited, and will be managed to minimise that impact, or
- if that impact cannot be minimised—the development will be managed to mitigate that impact.

The proposed development is unlikely to have significant adverse environmental impact. The proposed works are situated largely within the area covered by an existing structure and any impacts to vegetation will be restricted to exotic dominated landscaped vegetation.

1.9 Pittwater Development Control Plan 2021 (PDCP)

1.9.1 Clause B4.1: Landscape and Flora and Fauna Conservation Category 3 Land

The objectives of this clause are as follows:

- The long-term viability and enhancement of locally native flora and fauna and their habitats

Controls:

- Development shall retain and enhance habitat for threatened species, endangered populations, endangered ecological communities, and locally native species.
- Development shall provide flora and fauna habitat by active restoration, regeneration, and/or creation.
- Development shall result in no significant onsite loss of canopy cover or a net loss in native canopy trees.

This development will not significantly impact any vegetation, canopy species, or potential foraging habitat within the Subject Property beyond the removal of small amounts of exotic dominated landscaped vegetation. Landscape planning must consider the controls listed above.

1.9.2 Clause B4.7: Pittwater Spotted Gum Forest – Endangered Ecological Community

The objectives of this clause are as follows:

- Conservation of intact Pittwater Spotted Gum Forest Endangered Ecological Community

Controls:

- Development shall not have an adverse impact on Pittwater Spotted Gum Endangered Ecological Community.
- Development shall restore and/or regenerate Pittwater Spotted Gum Endangered Ecological Community and provide links between remnants.
- Development shall be in accordance with any Pittwater Spotted Gum Forest Recovery Plan.
- Development shall result in no significant onsite loss of canopy cover or a net loss in native canopy trees.
- Development shall retain and enhance habitat and wildlife corridors for locally native species, threatened species and endangered populations.
- Caretakers of domestic animals shall prevent them from entering wildlife habitat.
- Fencing shall allow the safe passage of native wildlife.
- Development shall ensure that at least 80% of any new planting incorporates native vegetation (as per species found on the site or listed in Pittwater Spotted Gum Endangered Ecological Community).
- Development shall ensure any landscaping works are outside areas of existing Pittwater Spotted Gum Endangered Ecological Community and do not include Environmental Weeds.

The native vegetation community mapped in the western portion of the Subject Property is Hunter Coast Lowland Spotted Gum Moist Forest, which is associated with the BC Act listed Endangered ecological community: Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion. This development will not significantly impact any vegetation or potential foraging habitat within the Subject Property beyond the removal of small amounts of exotic dominated landscaped vegetation. Landscape planning must consider the controls listed above.

Figure 4. Terrestrial Biodiversity Mapping within and around the Subject Property.

2. Methodology

2.1 Desktop Assessment and Literature Review

A thorough literature review of local information relevant to the Northern Beaches LGA was undertaken. Searches using NSW Wildlife Atlas (BioNet; NDCCEEW 2024b) and the Commonwealth Protected Matters Search Tool (DCCEEW 2024) were conducted to identify all current threatened flora and fauna, as well as migratory fauna records within a 10km x 10km cell search area centered on the Subject Property. These data were used to assist in establishing the presence or likelihood of any ecological values as occurring on or adjacent to the Subject Property and helped inform our Ecologist on what to look for during the site assessment.

Soil landscape and geological mapping was examined to gain an understanding of the environment on the Subject Property and assist in determining whether any threatened flora or ecological communities may occur there (Chapman et al. 2009).

2.2 Ecological Site Assessment

2.2.1 General Survey

A site assessment was undertaken on Friday the 18th of October by Narla Ecologist Patrick Santos. During the site assessment, the following activities were undertaken:

- Identifying and recording the vegetation communities present on the Subject Property, with focus on identifying any threatened ecological communities (TEC);
- Recording a list of flora species encountered on the Subject Property, with a focus on threatened species, species diagnostic of threatened ecological communities, and Priority Weeds;
- Identifying the potential for Core Koala Habitat;
- Recording opportunistic sightings of any fauna species seen or heard on or within the immediate surrounds of the Subject Property;
- Targeted surveys for threatened flora;
- Identifying and recording the locations of notable fauna habitat such as important nesting, roosting, or foraging microhabitats;
- Targeting the habitat of any threatened and regionally significant fauna including:
    - Tree hollows (habitat for threatened large forest owls, parrots, cockatoos, and arboreal mammals);
    - Caves and crevices (habitat for threatened reptiles, small mammals, and microbats);
    - Termite mounds (habitat for threatened reptiles);
    - Soaks (habitat for threatened frogs);
    - Wetlands (habitat for threatened fish, frogs, and water birds);
    - Drainage lines (habitat for threatened fish and frogs);
    - Fruiting trees (food for threatened frugivorous birds and mammals);
    - Flowering trees (food for threatened nectivorous mammals and birds);
    - Trees and shrubs supporting nest structures (habitat for threatened birds and arboreal mammals); and
    - Any other habitat features that may support fauna (particularly threatened) species.
- Assessing the connectivity and quality of the vegetation within the Subject Property and surrounding area.

2.2.2 Weather Conditions

Weather conditions recorded at the nearest weather station, Terry Hills AWS (Station 066059), prior to and during the general flora and fauna survey period are provided in **Table 2-1** (BOM 2024). The data revealed mild temperatures with 14.6mm of rainfall in the lead up to the site assessment. These weather conditions are conducive to the emergence of annual flora.

Table 2-1. Weather conditions for Terry Hills AWS (Station 066059) preceding and during the survey period (survey dates in bold).

Survey Date	Day	Minimum Temp. (°C)	Maximum Temp. (°C)	Rainfall (mm)
12/10/2024	Saturday	14.2	16.5	0
13/10/2024	Sunday	10.9	19.6	0.2
14/10/2024	Monday	12.1	24.8	0
15/10/2024	Tuesday	13.7	16.9	11.2
16/10/2024	Wednesday	11.7	17.2	2.0
17/10/2024	Thursday	10.8	22.3	0.2
18/10/2024	**Friday**	**15.8**	**23.8**	**1.2**

2.3 Mapping and Analysis of Vegetation Communities

Narla examined local satellite imagery, geological mapping, soil landscape mapping, and topographic mapping, in addition to existing vegetation mapping, to stratify the Subject Property and guide the site assessment survey efforts. The following documents were consulted during assessment to assist with the identification of vegetation communities present within the Subject Property:

- eSPADE v2.2 (NDCCEEW 2024d);
- Chapman G.A., Murphy C.L., Tille P.J., Atkinson G. and Morse R.J., 2009, Soil Landscapes of the Sydney 1:100,000 Sheet map, Ed. 4, Department of Environment, Climate Change and Water, Sydney; and
- Department of Planning and Environment (DPE) (2022) NSW State Vegetation Type Map.

2.4 Impact Assessment

Locally occurring threatened species were assessed for their potential to occur within the Subject Property (**Table 4-1; Table 4-3**). Owing to the small scale of development and/or the lack of suitable habitat within the Subject Property for these species, it was determined that no further impact assessment (Test of Significance; 5-part Test) was required.

3. Native Vegetation

3.1 Vegetation Communities

3.1.1 Historically Mapped Vegetation Communities

Vegetation mapping from the State Vegetation Type Map (DPE 2022) indicated the presence of two (2) vegetation communities within and surrounding the Subject Property (**Figure 5**):

- PCT 3234 – Hunter Coast Lowland Spotted Gum Moist Forest
- Unmapped Vegetation

3.1.2 Field Validated Vegetation Communities

The field survey conducted by the Narla Ecologist identified two (2) vegetation communities within the Subject Property:

- PCT 3234 – Hunter Coast Lowland Spotted Gum Moist Forest
- Exotic Dominated Landscaped Vegetation

The vegetation community found within the Subject Property is detailed in **Table 3-1** and displayed in **Figure 6**.

Figure 5. Historical Vegetation Mapping within and around the Subject Property.

Figure 6: Field-validated Vegetation Mapping within the Subject Property.

Table 3-1. Description of Hunter Coast Lowland Spotted Gum Moist Forest

PCT 3234: Hunter Coast Lowland Spotted Gum Moist Forest	
	
Total area within the Subject Property (approximate)	0.02ha
Total extent to be impacted by the proposed development	0.0ha
Description of the Vegetation within the Subject Property	
The vegetation within the eastern portion of the Subject Property is characterised by a native remnant canopy, native understorey with exotic growth. The canopy species include: *Eucalyptus punctata,* and *Corymbia gummifera*. The shrub layer included: *Livistona australis*, *Glochidion ferdinandii,* and *Backhousia myrtifolia*. Native groundcovers included *Geranium homeanum*, *Commelina cyanea*, and *Lobelia purpurascens*. Exotic species growing amongst natives within this zone included: *Ageratina adenophora*, *Cardiospermum grandiflorum*, *Tradescantia fluminensis, Ipomea purpurea*, *Ehrharta erecta, Ligustrum sinense, Setaria palmifolia*, and *Syagrus romanzoffiana*.	

PCT 3234: Hunter Coast Lowland Spotted Gum Moist Forest	
The Priority Weeds *Lantana camara* (Lantana) and *Olea europaea* subsp. *cuspidata* (African Olive) were also found within this zone. The vegetation within this zone will not be removed or impacted, as it does not occur within the Subject Site. The scale and ground impacts of the proposed deck will not result in the removal of any native species associated with this community	
Justification of Vegetation Community	This vegetation composition and geology were conducive to PCT 3234: Hunter Coast Lowland Spotted Gum Moist Forest.
BC Act Status	This community is associated with the BC Act listed Endangered Ecological Community (EEC), Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion.
EPBC Act Status	Not Listed.
References	Department of Planning and Environment (DPE) (2022) BioNet Vegetation Classification. https://www.environment.nsw.gov.au/research/Visclassification.htm Office of Environment and Heritage (OEH) (2016) The Native Vegetation of the Sydney Metropolitan Area. Volume 2: Vegetation Community Profiles. Version 3.0

Table 3-2.PCT 3234: Hunter Moist Spotted Gum Forest

Exotic Dominated Landscaped Vegetation	
	
Extent within the Subject Property (approximate)	0.01ha
Total extent to be impacted by the proposed development	<0.01ha
Description of the Vegetation within the Subject Property	
The vegetation within this zone predominantly consists of exotic groundcover species and occupies the southwestern boundary of the proposed development. There are no canopy species. Planted mature shrubs overhang from the neighbouring property over the southern boundary of the Subject Property these species consist of *Ligustrum sinense,* and *Callistemon viminalis*. The groundlayer consists of *Ipomea purpurea*, *Tradescantia fluminensis*, *Parietaria judaica*, *Conyza bonariensis*, *Sonchus oleraceus*, *Setaria palmifolia*, *Solanum mauritianum* and *Bidens pilosa*. The Priority Weeds *Lantana camara* (Lantana) and *Olea europaea* subsp. *cuspidata* (African Olive) were also found within this zone.	

Exotic Dominated Landscaped Vegetation	
Justification of Vegetation Community	This vegetation community lacked a native canopy and consisted of an exotic, largely planted shrub layer and groundcover layer. As the vegetation could not be assigned to a locally occurring vegetation community it has been classified as Exotic Dominated Landscaped Vegetation.
BC Act Status	Not Listed.
EPBC Act Status	Not Listed.

4. Threatened Entities

4.1 Threatened Ecological Communities (TECs)

4.1.1 BC Act listing: Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion EEC

The vegetation mapped as Pittwater Spotted Gum Forest within the Subject Property contained characteristic species of the Endangered Ecological Community (ECC) Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion, as indicated by the Final Determination (NSW Scientific Committee 2013). Characteristic tree species of this EEC are *Corymbia maculata* and *Eucalyptus paniculata*, associated trees include *Angophora costata, Corymbia gummifera, Eucalyptus umbra, Eucalyptus punctata, Syncarpia glomulifera*, *Eucalyptus botryoides,* and *Angophora floribunda.* Of which *Corymbia maculata* and *Eucalyptus punctata* are present withing the Subject Property.

This vegetation community occurs on shale-derived soils with high rainfall on lower hillslopes on the Narrabeen group - Newport Formation, on the Barrenjoey Peninsula and western Pittwater foreshores. The structure of the community was originally open-forest but may now exist as woodland or as remnant trees (NSW Scientific Committee 2013). The Subject Property is mapped as being on the Erina and Watagan soil landscapes (Chapman et al. 2009) which are consistent with the soil landscapes associated with this EEC.

No native vegetation conforming to Pittwater and Wagstaffe Spotted Gum Forest in the Sydney Basin Bioregion within the Subject Site is to be impacted as part of the development. As such a Biodiversity Conservation Act 2016 Test of Significance (5-part Test) is not required.

This Threatened Ecological Community is not listed under the EPBC Act 1999.

4.1 Threatened Flora

Desktop analysis revealed a range of threatened flora as occurring or having the potential to occur on or within a 10km x 10km cell centered on the Subject Property. Thorough targeted surveys were undertaken throughout the Subject Property for potentially occurring threatened flora whose survey period coincided within the time of the site assessment (**Figure 7**). No threatened flora were identified at the time of the site assessment.

A comprehensive list of flora species identified during the site assessment is presented in **Appendix A**. The following locally occurring species were assessed for their potential to occur within the Subject Property (**Table 4-1**). Based on unsuitable habitat, geographic distribution, and/or the small scale of the development, it was determined that the proposed works are unlikely to significantly impact upon these species. Therefore, no further assessment of impacts pursuant the BC Act (e.g. Biodiversity Development Assessment Report [BDAR]) and/or EPBC Act Referral to Commonwealth will be required.

Table 4-1. Threatened Flora Likelihood of Occurrence within the Subject Property.

Species	BC Act	EPBC Act	Habitat Requirements	Likelihood of Occurrence within the Subject Property	Further Impact Assessment Required?
Boronia umbellata (Orara Boronia)	Vulnerable	Vulnerable	This species grows in and around gullies in wet open forest.	**Absent.** Found at only a few locations between Glenreagh and Lower Bucca, north of Coffs Harbour, but it is locally common in the restricted area where it occurs. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Callistemon linearifolius (Netted Bottle Brush)	Vulnerable	-	Grows in dry sclerophyll forest on the coast and adjacent ranges. There are currently only 5-6 populations remaining from the 22 populations historically recorded in the Sydney area. Three of the remaining populations are reserved in Ku-ring-gai Chase National Park, Lion Island Nature Reserve, and Spectacle Island Nature Reserve. The species has also been recorded from Yengo National Park.	**Low.** The Subject Property is does not contain dry sclerophyll forest habitat and does not fall close to the known distribution of this species. Given the species' highly constrained range, its presence within the Subject Property is highly unlikely.	No
Chamaesyce psammogeton (Sand Spurge)	Endangered	-	Grows on fore-dunes, pebbly strandlines, and exposed headlands, often with *Spinifex sericeus* and *Zoysia macrantha*.	**Absent.** The Subject Property does not contain fore-dunes, pebbly strandlines, or exposed headlands. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Cryptostylis hunteriana (Leafless Tongue Orchid)	Vulnerable	Vulnerable	Does not appear to have well defined habitat preferences. Larger populations typically occur in woodland dominated by *Eucalyptus racemosa*, *Eucalyptus sieberi*, *Corymbia gummifera* and *Allocasuarina littoralis*; appears to prefer open areas in the understorey of this community and is often found in association with *Corymbia subulata* and *Corymbia erecta*.	**Low.** One *Corymbia gummifera* is present within the Subject Property, however the area beneath is highly disturbed and dominated by exotic weedy groundcovers. It is unlikely that this species is present.	No

Species	BC Act	EPBC Act	Habitat Requirements	Likelihood of Occurrence within the Subject Property	Further Impact Assessment Required?
Epacris purpurascens var. purpurascens	Vulnerable	-	Found in a range of habitat types, most of which have a strong shale soil influence. Recorded from Gosford in the north, to Narrabeen in the east, Silverdale in the west and Avon Dam vicinity in the South.	**Low.** The Subject Property is not located on shale soil, making the presence of this species unlikely.	No
Eucalyptus camfieldii (Camfield's Stringybark)	Vulnerable	Vulnerable	Occurs mostly in small scattered stands near the boundary of tall coastal heaths and low open woodland of the slightly more fertile inland areas. Associated species frequently include stunted species of *Eucalyptus oblonga*, *E. capitellata,* and *E. haemastoma*.	**Absent.** No associated species were present within the Subject Property for this species and the vegetation was highly modified. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Eucalyptus nicholii (Narrow-leaved Black Peppermint)	Vulnerable	Vulnerable	Typically occurs in dry grassy woodland, on shallow soils of slopes and ridges. Found primarily on infertile soils derived from granite or metasedimentary rock.	**Absent**. Dry grassy woodland is not present on site. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Genoplesium baueri (Bauer's Midge Orchid)	Endangered	Endangered	Grows in dry sclerophyll forest and moss gardens over sandstone.	**Low.** The Subject Property does not contain dry sclerophyll forest or moss garden habitat and the shrub and ground layers are highly modified. The presence of this species is therefore unlikely.	No
Grevillea caleyi (Caley's Grevillea)	Critically Endangered	Critically Endangered	This species is restricted to an 8km square area around Terrey Hills. All sites occur on the ridgetop between elevations of 170 to 240m above sea level, in association with laterite soils and a vegetation community of open forest, generally dominated by *Eucalyptus sieberi* and *E. gummifera*. Commonly found in the endangered Duffys Forest ecological community.	**Absent.** No suitable habitat was found within the Subject Property for this species. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Kunzea rupestris	Vulnerable	Vulnerable	Grows in shallow depressions on large flat sandstone rock outcrops. Characteristically found in short to tall shrubland or heathland.	**Absent**. Potential habitat is present on site. However, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No

Species	BC Act	EPBC Act	Habitat Requirements	Likelihood of Occurrence within the Subject Property	Further Impact Assessment Required?
Lasiopetalum joyceae	Vulnerable	Vulnerable	Grows in heath on sandstone. Has a restricted range occurring on lateritic to shaley ridgetops on the Hornsby Plateau south of the Hawkesbury River.	**Absent.** The Subject Property does not contain heath on sandstone and does not fall within the known distribution of this species, making its presence highly unlikely.	No
Melaleuca deanei (Deane's Paperbark)	Vulnerable	Vulnerable	The species occurs mostly in ridgetop woodland, with only 5% of sites in heath on sandstone. Flowers appear in summer but seed production appears to be small and consequently the species exhibits a limited capacity to regenerate.	**Absent.** No suitable habitat was found within the Subject Property for this species. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Microtis angusii (Angus's Onion Orchid)	Endangered	Endangered	All currently known records of the species are located within Northern Beaches LGA in disturbed areas, with most individuals recorded in road verges. Occurs on soils that have been modified but were originally those of the restricted ridgetop lateritic soils in the Duffys Forest - Terrey Hills - Ingleside and Belrose areas. These soils support a specific and distinct vegetation type, the Duffys Forest Vegetation Community, which ranges from open forest to low open forest and rarely woodland.	**Low.** The Subject Property does not occur on the restricted ridgetop lateritic soils required by this species or contain the vegetation type Duffys Forest. Given the limited distribution of this species, it is unlikely that this species would be present within the Subject Property.	No
Persoonia hirsuta (Hairy Geebung)	Endangered	Endangered	Found in clayey and sandy soils in dry sclerophyll open forest, woodland, and heath, primarily on the Mittagong Formation and on the upper Hawkesbury Sandstone. It is usually present as isolated individuals or very small populations.	**Absent.** No suitable habitat was found within the Subject Property for this species and the vegetation was highly modified. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Pimelea curviflora var. curviflora	Vulnerable	Vulnerable	Occurs on shaley/lateritic soils over sandstone and shale/sandstone transition soils on ridgetops and upper slopes amongst woodlands. Also recorded in Illawarra Lowland Grassy Woodland habitat at Albion Park on the Illawarra coastal plain.	**Absent.** No suitable habitat was found within the Subject Property for this species and the vegetation was highly modified. Furthermore, a targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified..	No

Species	BC Act	EPBC Act	Habitat Requirements	Likelihood of Occurrence within the Subject Property	Further Impact Assessment Required?
Rhodamnia rubescens (Scrub Turpentine)	Critically Endangered	Critically Endangered	Occurs in littoral, warm temperate and subtropical rainforest and wet sclerophyll forest usually on volcanic and sedimentary soils.	**Absent.** A targeted survey was conducted during the approved survey period for this species (Year-Round) and no individuals were identified.	No
Syzygium paniculatum (Magenta Lilly Pilly)	Endangered	Vulnerable	On the south coast the Magenta Lilly Pilly occurs on grey soils over sandstone, restricted mainly to remnant stands of littoral (coastal) rainforest. On the central coast Magenta Lilly Pilly occurs on gravels, sands, silts and clays in riverside gallery rainforests and remnant littoral rainforest communities.	**Low.** The Subject Property does not contain littoral rainforest habitat, making the presence of this species unlikely.	No
Tetratheca glandulosa	Vulnerable	-	Associated with shale-sandstone transition habitat where shale-cappings occur over sandstone. Topographically, the plant occupies ridgetops, upper-slopes, and to a lesser extent mid-slope sandstone benches. Vegetation structure varies from heaths and scrub to woodlands/open woodlands, and open forest.	**Low.** The Subject Property is not located within shale-sandstone transition habitat. Furthermore, a targeted survey was conducted during the approved survey period for this species (August – November) and no individuals were identified.	No

4.2 Threatened Fauna Species

Details of the fauna habitat recorded within the Subject Property are included in Table 4-2. The likelihood of occurrence of threatened fauna species within the Subject Property is presented in Table 4-3.

Furthermore, based on unsuitable habitat, geographic distribution, and/or the disturbed nature of the Subject Property, it was determined that the proposed works are unlikely to significantly impact upon a local viable population or occurrence of any other threatened species. Therefore, no BDAR or EPBC Act Referral to the Commonwealth is required for the proposed development.

A small suite of fauna species were identified surrounding the Subject Property during the site assessment. All native fauna species encountered were listed as 'protected' under the BC Act. The list of fauna recorded during the site visit was produced opportunistically (Appendix B).

Table 4-2. Fauna habitat values identified within and surrounding the Subject Property.

Habitat Component	Site Values
Coarse woody debris	Absent.
Rock outcrops, bush rock, caves, crevices, and overhangs	Present.
Culverts, bridges, mine shafts, or abandoned structures	Absent.
Nectar/lerp-bearing trees	Present.
Nectar-bearing shrubs	Present.
Large stick nests	Absent.
Sap and gum sources	Present.
She-oak fruit (Glossy Black Cockatoo feed)	Absent.
Soft-fruit-bearing trees	Present. Exotic fruit-bearing trees occur within the Subject Property.
Dense shrubbery and leaf litter	Present. Dense and leaf litter was present within the Subject Property.
Tree hollows	Present.
Decorticating bark	Absent.
Wetlands, soaks, and streams	Absent.
Open water bodies	Present.
Estuarine, beach, mudflats, and rocky foreshores	Present.

4.2.1 Migratory Fauna Species

Desktop analysis revealed the following EPBC Act listed migratory terrestrial fauna species as having the potential to utilize habitat within the Subject Property (e.g. foraging or passage) during part of their lifecycles:

- *Actitis hypoleucos* (Common Sandpiper);
- *Anous stolidus* (Common Noddy);
- *Apus pacificus* (Fork-tailed Swift);
- *Ardenna carneipes* (Flesh-footed Shearwater);
- *Ardenna grisea* (Sooty Shearwater);
- *Ardenna pacifica* (Wedge-tailed Shearwater);
- *Ardenna tenuirostris* (Short-tailed Shearwater);
- *Calidris acuminata* (Sharp-tailed Sandpiper);
- *Fregata ariel* (Lesser Frigatebird);
- *Gallinago hardwickii* (Latham's Snipe);
- *Hirundapus caudacutus* (White-throated Needletail)
- *Hydroprogne caspia* (Caspian Tern);
- *Numenius madagascariensis* (Eastern Curlew);
- *Numenius phaeopus* (Whimbrel);
- *Pluvialis fulva* (Pacific Golden Plover);
- *Pluvialis squatarola* (Grey Plover);
- *Sterna hirundo* (Common Tern);
- *Thalasseus bergii* (Crested Tern); and
- *Tringa brevipes* (Grey-tailed Tattler)

It was determined that the proposed works are unlikely to have a significant impact on these species. Therefore, a Referral to Commonwealth pursuant to the EPBC Act is not required.

Table 4-3. Threatened Fauna Likelihood of Occurrence within the Subject Property.

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Anthochaera phrygia (Regent Honeyeater)	CE	CE	Low	A generalist forager, although it feeds mainly on the nectar from a relatively small number of eucalypts that produce high volumes of nectar. Key eucalypt species include Mugga Ironbark, Yellow Box, White Box and Swamp Mahogany. Other tree species may be regionally important. For example, the Lower Hunter Spotted Gum forests have recently been demonstrated to support regular breeding events. No suitable habitat was found within the Subject Property.	This species typically occupies woodlands that have a significantly large number of mature trees, high canopy cover and abundance of mistletoes. There are only four known breeding areas in NSW – Capertee Valley, Lower Hunter Valley, Mudgee/Wollar, and Bundarra-Barraba regions. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species. The Subject Property is not mapped on the Important Areas Map for this species.	No
Artamus cyanopterus (Dusky Woodswallow)	V	-	Low	Inhabit dry, open eucalypt forests and woodlands, including mallee associations, with an open or sparse understorey of eucalypt saplings, acacias, and other shrubs, and ground-cover of grasses or sedges and fallen woody debris. It has also been recorded in shrublands, heathlands and very occasionally in moist forest or rainforest. Also found in farmland, usually at the edges of forest or woodland. No suitable habitat was found within the Subject Property.	Nest is an open, cup-shape, made of twigs, grass, fibrous rootlets and occasionally casuarina needles, and may be lined with grass, rootlets or infrequently horsehair, occasionally unlined. Nest sites vary greatly, but generally occur in shrubs or low trees, living or dead, horizontal or upright forks in branches, spouts, hollow stumps or logs, behind loose bark or in a hollow in the top of a wooden fence post. No nests were identified within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Burhinus grallarius (Bush Stone-curlew)	E	-	Low	Inhabits open forests and woodlands with a sparse grassy groundlayer and fallen timber. No suitable habitat was found within the Subject Property.	Nest on the ground in a scrape or small bare patch. No nests were identified within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No
Callocephalon fimbriatum (Gang-gang Cockatoo)	E	E	Low	Generally found in tall mountain forests and woodlands, particularly in heavily timbered and mature wet sclerophyll forests. In autumn and winter, the species often moves to lower altitudes in drier more open eucalypt forests and woodlands, particularly box-gum and box-ironbark assemblages, or in dry forest in coastal areas and often found in urban areas. Feeds mainly on seeds of native and introduced trees and shrubs, with a preference for Eucalypts, Wattles and introduced Hawthorns. Potential foraging habitat was found within the Subject Property.	Favours old growth forest and woodland attributes for nesting and roosting. Nests are located in hollows that are 10cm in diameter or larger and at least 9m above the ground in eucalypts. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No
Calyptorhynchus lathami (Glossy Black-Cockatoo)	V	V	Low	This species feeds almost exclusively on the seeds of several species of she-oak (Casuarina and Allocasuarina species). Inhabits open forest and woodlands of the coast and the Great Dividing Range where stands of she-oak occur. No suitable habitat was found within the Subject Property.	Dependent on large hollow-bearing eucalypts for nest sites. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Cercartetus nanus (Eastern Pygmy-possum)	V	-	Low	Found in a broad range of habitats from rainforest through sclerophyll (including Box-Ironbark) forest and woodland to heath, but in most areas woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest. They may occupy small patches of vegetation in fragmented landscapes and although the species prefers habitat with a rich shrub understory, they are known to occur in grassy woodlands and the presence of Eucalypts alone is sufficient to support populations in low densities. Feeds largely on nectar and pollen collected from banksias, eucalypts and bottlebrushes; soft fruits are eaten when flowers are unavailable. Also feeds on insects throughout the year. Some foraging habitat may be present within the Subject Property. However, the proposed development will not impact any native vegetation within the Subject Property.	Shelters in tree hollows, rotten stumps, holes in the ground, abandoned bird-nests, Ringtail Possum (*Pseudocheirus peregrinus*) dreys or thickets of vegetation, (e.g. grass-tree skirts); nest-building appears to be restricted to breeding females; tree hollows are favoured but spherical nests have been found under the bark of eucalypts and in shredded bark in tree forks. No suitable habitat was found within the Subject Property.	As the proposed development will be restricted to the cleared area against the dwelling. No impact to potential foraging or breeding habitat anticipated. Site assessment in October 2024 did not detect this species.	No
Chalinolobus dwyeri (Large-eared Pied Bat)	E	E	Low	Found mainly in areas with extensive cliffs, caves and well-timbered areas containing gullies. Likely to hibernate through the coolest months. This species probably forages for small, flying insects below the forest	Roosts in caves (near their entrances), crevices in cliffs, old mine workings and in the disused, bottle-shaped mud nests of the Fairy Martin (*Petrochelidon ariel*),	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
				canopy. No suitable habitat was found within the Subject Property.	frequenting low to mid-elevation dry open forest and woodland close to these features. No suitable habitat was found within the Subject Property.		
Daphoenositta chrysoptera (Varied Sittella)	V	-	Low	Inhabits eucalypt forests and woodlands, especially those containing rough-barked species and mature smooth-barked gums with dead branches, mallee and *Acacia* woodland. Feeds on arthropods gleaned from crevices in rough or decorticating bark, dead branches, standing dead trees and small branches and twigs in the tree canopy. Potential habitat occurs within the Subject Property.	This species builds a cup-shaped nest of plant fibres and cobwebs in an upright tree fork high in the living tree canopy, and often re-uses the same fork or tree in successive years. No nests were identified within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No
Dasyurus maculatus (Spotted-tailed Quoll)	V	E	Low	Recorded across a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Consumes a variety of prey, including gliders, possums, small wallabies, rats, birds, bandicoots, rabbits, reptiles and insects. Also eats carrion and takes domestic fowl. Potential prey items may occur within the Subject Property.	This species uses hollow-bearing trees, fallen logs, small caves, rock outcrops and rocky-cliff faces as den sites. No suitable habitat was found within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development. No anticipated impact to potential breeding habitat. Site assessment in October 2024 did not detect this species.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Diomedea exulans (Wandering Albatross)	E	V	Low	This species spends the majority of their time in flight, soaring over the southern oceans. Feeding in pelagic, offshore, and inshore waters. Potential foraging habitat does not occur within the Subject Property.	Breeds on a number of islands just north of the Antarctic Circle: South Georgia Island, Prince Edward, and Marion Islands, and Kerguelen Islands and Macquarie Island. Breeding takes place on exposed ridges and hillocks amongst open and patch vegetation. No suitable habitat does not occur within the Subject Property.	No impact to foraging or breeding habitat anticipated from the proposed development. The Subject Property does not contain suitable habitat for this species. Site assessment in October 2024 did not detect this species.	No
Esacus magnirostris (Beach Stone-curlew)	CE	-	Low	This species is found exclusively along the coast on a wide range of beaches, islands, reefs, and in estuaries, and may often be seen at the edges of or near mangroves. Foraging in the intertidal zone of beaches and estuaries, on islands, flats, banks, and spits of sand, mud, gravel or rock, and among mangroves. Foraging habitat does not occur within the Subject Property.	Breed above the littoral zone at the backs of beaches or on sandbanks and islands, among low vegetation of grass, scattered shrubs or low trees, also among open mangroves. Breeding habitat does not occur within the Subject Property.	No impact to foraging or breeding habitat anticipated from the proposed development. The Subject Property does not contain suitable habitat for this species. Site assessment in October 2024 did not detect this species.	No
Falsistrellus tasmaniensis (Eastern False Pipistrelle)	V	-	Low	Prefers moist habitats, with trees taller than 20 m. Hunts beetles, moths, weevils and other flying insects above or just below the tree canopy. Potential habitat is present within the Subject Property.	Generally, roosts in eucalypt hollows, but has also been found under loose bark on trees or in buildings. Some potential habitat is present within the Subject Property in the form of existing buildings which will be retained throughout	No anticipated impact to potential foraging habitat or breeding habitat. The development will not impact vegetation or any buildings that this species may inhabit.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
					development (with minor alterations).		
Glossopsitta pusilla (Little Lorikeet)	V	-	Low	Forages primarily in the canopy of open Eucalyptus Forest and woodland, yet also finds food in Angophora, Melaleuca, and other tree species. Riparian habitats are particularly used, due to higher soil fertility and hence greater productivity. Feeds mostly on nectar and pollen, occasionally on native fruits such as mistletoe, and only rarely in orchards. Some foraging habitat may be present within the Subject Property.	Nests in proximity to feeding areas, if possible, most typically selecting hollows in the limb or trunk of smooth-barked Eucalypts. Entrance is small (3cm) and usually high above the ground (2–15m). A medium tree hollows were identified within the Subject Property however this will be retained.	Minimal anticipated impact to potential suboptimal foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment in October 2024 did not detect this species.	No
Haematopus fulginosus (Sooty Oystercatcher)	V	-	Low	Favours rocky headlands, rocky shelves, exposed reefs with rock pools, beaches, and muddy estuaries. Forages on exposed rock or coral at low tide for foods such as limpets and mussels. Such habitat does not occur within the Subject Property.	Breeds in spring and summer, almost exclusively on offshore islands, and occasionally on isolated promontories. The nest is a shallow scrape on the ground, or small mounds of pebbles, shells or seaweed when nesting among rocks. Such habitat does not occur within the Subject Property.	No anticipated impact to potential foraging habitat or breeding habitat. The development will not impact vegetation or any buildings that this species may inhabit. Site assessment in October 2024 did not detect this species.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Haliaeetus leucogaster (White-bellied Sea-Eagle)	V	-	Low	Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. Occurs at sites near the sea or sea-shore, such as around bays and inlets, beaches, reefs, lagoons, estuaries and mangroves; and at, or in the vicinity of freshwater swamps, lakes, reservoirs, billabongs and saltmarsh. Such habitat may be present within the Subject Property.	Breeding habitat consists of mature tall open forest, open forest, tall woodland, and swamp sclerophyll forest close to foraging habitat. Nests are large structures built from sticks and lined with leaves or grass. No nests were identified within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment in August 2024 did not detect this species.	No
Heleioporus australiacus (Giant Burrowing Frog)	V	V	Low	Whilst in non-breeding habitat (within 300m of creeks), this species burrows below the soil surface or in the leaf litter near creeks. Individual frogs occupy a series of burrow sites, some of which are used repeatedly. It has a generalist diet of invertebrates including ants, beetles, cockroaches, spiders, centipedes and scorpions. No suitable habitat was found within the Subject Property.	Breeding habitat of this species is generally soaks or pools within first or second-order streams. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Hieraaetus morphnoides (Little Eagle)	V	-	Low	Occupies open eucalypt forest, woodland or open woodland. She-oak or Acacia woodlands and riparian woodlands of interior NSW are also used. Preys on birds, reptiles and mammals, occasionally adding large insects and carrion. Potential prey items may occur within the Subject Property.	Nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter. No nests were identified within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
						in October 2024 did not detect this species.	
Isoodon obesulus obesulus (Southern Brown Bandicoot (eastern))	E	E	Low	Southern Brown Bandicoots are largely crepuscular (active mainly after dusk and/or before dawn). They are generally only found in heath or open forest with a heathy understorey on sandy or friable soils. They feed on a variety of ground-dwelling invertebrates and the fruit-bodies of hypogeous (underground-fruiting) fungi. Their searches for food often create distinctive conical holes in the soil. No suitable habitat was found within the Subject Property.	Nest during the day in a shallow depression in the ground covered by leaf litter, grass or other plant material. Nests may be located under grass trees, blackberry bushes and other shrubs, or in rabbit burrows. The upper surface of the nest may be mixed with earth to waterproof the inside of the nest. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Ixobrychus flavicollis (Black Bittern)	V	-	Low	Inhabits both terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation. Where permanent water is present, the species may occur in flooded grassland, forest, woodland, rainforest and mangroves. Feeds on frogs, reptiles, fish and invertebrates, including snails, dragonflies, shrimps and crayfish, with most feeding done at dusk and at night.	During the day, roosts in trees or on the ground amongst dense reeds. When disturbed, freezes in a characteristic bittern posture (stretched tall, bill pointing up, so that shape and streaked pattern blend with upright stems of reeds), or will fly up to a branch or flush for cover where it will freeze again.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No
Lathamus discolor (Swift Parrot)	E	CE	Low	On the mainland they occur in areas where eucalypts are flowering profusely or where there are abundant lerp (from sap-sucking	N/A. This species breeds in Tasmania.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
				bugs) infestations. No suitable habitat was found within the Subject Property.		assessment in October 2024 did not detect this species.	
Litoria aurea (Green and Golden Bell Frog)	E	V	Low	This species inhabitats marshes, dams, and stream-sides, particularly those containing bullrushes (*Typha* spp.) or spikerushes (*Eleocharis* spp.). Tadpoles feed on algae and other plant-matter; adults eat mainly insects, but also other frogs. No suitable habitat was found within the Subject Property.	This species breeds in marshes, dams, and stream-sides, particularly those containing bullrushes (*Typha* spp.) or spikerushes (*Eleocharis* spp.). No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Lophoictinia isura (Square-tailed Kite)	V	-	Low	The species is a specialist hunter of passerines, especially honeyeaters, and most particularly nestlings, and insects in the tree canopy. Potential prey items may occur within the Subject Property.	Nest sites generally located along or near watercourses, in a fork or on large horizontal limbs. No nests were identified within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment in October 2024 did not detect this species.	No
Macronectes halli (Northern Giant-Petrel)	V	V	Low	There are marked differences in diet between the sexes. Females obtain most of their prey live from the sea, while males also scavenge from the carcases of penguins and seals on land. At sea, both sexes are aggressive opportunists, feeding on fish, cephalopods, birds and crustaceans, including euphausiids or	Breeding in Australian territory is limited to Macquarie Island and occurs during spring and summer. Seldom breed in colonies but rather as dispersed pairs, often amidst tussocks in dense vegetation and areas of broken terrain. Breeding habitat	No anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
				krill, and regularly scavenge on fishing vessels. Foraging habitat does not occur within the Subject Property.	does not occur within the Subject Property.	in October 2024 did not detect this species.	
Miniopterus australis (Little Bent-winged Bat)	V	-	Low	Found in moist eucalypt forest, rainforest, vine thicket, wet and dry sclerophyll forest, Melaleuca swamps, dense coastal forests and banksia scrub. Generally found in well-timbered areas. At night, forage for small insects beneath the canopy of densely vegetated habitats. Potential foraging habitat was found within the Subject Property.	This species primarily breeds in caves but has been known to utilise tree hollows, abandoned mines, stormwater drains, culverts, bridges and sometimes buildings. Some potential habitat is present within the Subject Property in the form of existing buildings which will be retained throughout development (with minor alterations).	No anticipated impact to potential foraging habitat. Minor impact to potential breeding habitat due to the proposed works, however the habitat is of low quality, the scale of impact is very small, and large regions of superior habitat will remain in the broader locality.	No
Miniopterus orianae oceanensis (Large Bent-winged Bat)	V	-	Low	Hunt in forested areas, catching moths and other flying insects above the tree tops. No suitable habitat was found within the Subject Property.	This species only breeds in caves. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Myotis macropus (Southern Myotis)	V	-	Low	This species forages over streams and pools catching insects and small fish by raking their feet across the water surface. No suitable habitat was found within the Subject Property.	Generally, roost in groups of 10 - 15 close to water in caves, mine shafts, hollow-bearing trees, storm water channels, buildings, under bridges and in dense foliage. Some potential habitat is present within the Subject Property in the form of existing buildings which will be retained throughout	No anticipated impact to potential foraging habitat. Minor impact to potential breeding habitat due to the proposed works, however the existing dwelling will be retained.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
					development (with minor alterations).		
Neophema pulchella (Turquoise Parrot)	V	-	Low	Prefers to feed in the shade of a tree and spends most of the day on the ground searching for the seeds or grasses and herbaceous plants, or browsing on vegetable matter. Some potential habitat was found within the Subject Property.	Nests in tree hollows, logs or posts, from August to December. It lays four or five white, rounded eggs on a nest of decayed wood dust. One tree hollow was found within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment in October 2024 did not detect this species.	No
Ninox connivens (Barking Owl)	V	-	Low	Inhabits woodland and open forest, including fragmented remnants and partly cleared farmland. Preferentially hunts small arboreal mammals such as Squirrel Gliders and Common Ringtail Possums, but when loss of tree hollows decreases these prey populations the owl becomes more reliant on birds, invertebrates and terrestrial mammals such as rodents and rabbits. Potential prey items may occur within the Subject Property.	Roost in shaded portions of tree canopies, including tall midstorey trees with dense foliage such as Acacia and Casuarina species. During nesting season, the male perches in a nearby tree overlooking the hollow entrance. One tree hollow was found within the Subject Property however this will be retained.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat.	No
Ninox strenua (Powerful Owl)	V	-	Low	Inhabits a range of vegetation types, from woodland and open sclerophyll forest to tall open wet forest and rainforest. The main prey items are medium-sized arboreal marsupials, particularly the Greater Glider,	Powerful Owls nest in large tree hollows (at least 0.5m deep), in large eucalypts (diameter at breast height of 80-240cm) that are at least 150 years old. One tree hollow in a small tree was	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
				Common Ringtail Possum and Sugar Glider. As most prey species require hollows and a shrub layer, these are important habitat components for the owl. Potential suitable habitat was found within the Subject Property.	found within the Subject Property. However, the hollow is small and is located a significant distance from the development footprint.		
Pandion cristatus (Eastern Osprey)	V	-	Low	Favour coastal areas, especially the mouths of large rivers, lagoons and lakes. Feed on fish over clear, open water. Foraging habitat does not occur within the Subject Property.	This species breeds from July to September in NSW. Nests are made high up in dead trees or in dead crowns of live trees, usually within one kilometre of the sea. Such habitat features do not occur within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat.	No
Petaurus norfolcensis (Squirrel Glider)	V	-	Low	Inhabits mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest west of the Great Dividing Range and Blackbutt-Bloodwood forest with heath understorey in coastal areas. Diet varies seasonally and consists of Acacia gum, eucalypt sap, nectar, honeydew and manna, with invertebrates and pollen providing protein. Some foraging habitat may be present within the Subject Property.	Requires abundant tree hollows for refuge and nest sites. One tree hollow is present within the Subject Property. However, this is located a significant distance from the development footprint.	Minimal anticipated impact to potential suboptimal foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat.	No
Petroica boodang (Scarlet Robin)	V	-	Low	Lives in dry eucalypt forests and woodlands. The understorey is usually open and grassy with few	Nest is an open cup made of plant fibres and cobwebs and is built in the fork of tree usually	Minimal anticipated impact to potential suboptimal foraging	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
				scattered shrubs. Forage from low perches, fence-posts or on the ground, from where they pounce on small insects and other invertebrates which are taken from the ground, or off tree trunks and logs; they sometimes forage in the shrub or canopy layer. Potential foraging habitat may be present within the Subject Property.	more than 2 metres above the ground; nests are often found in a dead branch in a live tree, or in a dead tree or shrub. No nests were found within the Subject Property.	habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment in October 2024 did not detect this species.	
Phascolarctos cinereus (Koala)	E	E	Low	Inhabit eucalypt woodlands and forests. Feed on the foliage of more than 70 eucalypt species and 30 non-eucalypt species, but in any one area will select preferred browse species. Two Koala use tree species (*E. punctata* and *Corymbia gummifera*) were found within the Subject Property.	Spend most of their time in trees, but will descend and traverse open ground to move between trees. Two Koala use tree species (*E. punctata* and *Corymbia gummifera*) were found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated as all trees will be retained. Site assessment in October 2024 did not detect this species.	No
Pseudomys novaehollandiae (New Holland Mouse)	-	V	Low	Known to inhabit open heathlands, woodlands and forests with a heathland understorey and vegetated sand dunes. No suitable habitat was found within the Subject Property.	Lives predominantly in burrows shared with other individuals. No burrows were found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Pseudophryne australis (Red-crowned Toadlet)	V	-	Low	Disperses outside the breeding period where they are found under rocks and logs on sandstone ridges and forage amongst leaf-litter. Some foraging habitat may be present within the Subject Property.	Breeding congregations occur in dense vegetation and debris beside ephemeral creeks and gutters. No suitable habitat was found within the Subject Property.	Minimal anticipated impact to potential suboptimal foraging habitat due to the small scale of development. No anticipated impact to potential breeding habitat.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Pteropus poliocephalus (Grey-headed Flying-fox)	V	V	Low	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops. Feed on the nectar and pollen of native trees, in particular Eucalyptus, Melaleuca and Banksia, and fruits of rainforest trees and vines. Suitable foraging habitat was found within the Subject Property, which is located outside of the development footprint.	No breeding camps were identified within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Ptilinopus regina (Rose-crowned Fruit-Dove)	V	-	Low	Rose-crowned Fruit-doves occur mainly in sub-tropical and dry rainforest and occasionally in moist eucalypt forest and swamp forest, where fruit is plentiful. They feed entirely on fruit from vines, shrubs, large trees and palms, and are thought to be locally nomadic as they follow the ripening of fruits. Some foraging habitat was found within the Subject Property.	Nest is a flimsy platform of twigs and tendrils in a fork in a rainforest mid-storey shrub, sapling or vine. No nests were found within the Subject Property.	No anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment in October 2024 did not detect this species.	No
Ptilinopus superbus (Superb Fruit-dove)	V	-	Low	Inhabits rainforest and similar closed forests where it forages high in the canopy, eating the fruits of many tree species such as figs and palms. It may also forage in eucalypt or acacia woodland where there are fruit-bearing trees. Some foraging habitat was found within the Subject Property.	Breeding takes place from September to January. The nest is a structure of fine interlocked forked twigs, giving a stronger structure than its flimsy appearance would suggest, and is usually 5-30m up in rainforest and rainforest edge tree and shrub species. No nests were	No anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat. Site assessment	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
					found within the Subject Property.	in October 2024 did not detect this species.	
Rostratula australis (Australian Painted Snipe)	E	E	Low	Prefers fringes of swamps, dams and nearby marshy areas where there is a cover of grasses, lignum, low scrub or open timber. Forages nocturnally on mud-flats and in shallow water. Feeds on worms, molluscs, insects and some plant-matter. Such habitat features were not found within the Subject Property.	Nests on the ground amongst tall vegetation, such as grasses, tussocks or reeds. The nest consists of a scrape in the ground, lined with grasses and leaves. No nests were found within the Subject Property.	No anticipated impact to potential foraging or breeding. Site assessment in October 2024 did not detect this species.	No
Saccolaimus flaviventris (Yellow-bellied Sheathtail-bat)	V	-	Low	Forages for insects in most habitats across its very wide range, with and without trees; appears to defend an aerial territory. Some foraging habitat may be present within the Subject Property.	Roosts singly or in groups of up to six, in tree hollows and buildings; in treeless areas they are known to utilise mammal burrows. Some potential habitat is present within the Subject Property in the form of existing buildings which will be retained throughout development (with minor alterations).	No anticipated impact to potential foraging habitat. Minor impact to potential breeding habitat due to the proposed works, however the habitat is of low quality, the scale of impact is very small, and large regions of superior habitat will remain in the broader locality.	No
Scoteanax rueppellii (Greater Broad-nosed Bat)	V	-	Low	Forages after sunset, flying slowly and directly along creek and river corridors. No suitable habitat was found within the Subject Property.	This species usually roosts in tree hollows. No tree hollows were found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Stictonetta naevosa (Freckled Duck)	-	V	Low	This species rests in dense cover during the day, usually in deep water. Feeds at dawn and dusk and at night on algae, seeds and vegetative parts of aquatic grasses and sedges and small invertebrates.	Nesting usually occurs between October and December but can take place at other times when conditions are favourable. Nests are usually located in dense vegetation at or near water level.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No
Thalassarche cauta (Shy Albatross)	E	E	Low	Forages by seizing prey from the water's surface while swimming, landing on top of prey, diving for prey beneath the water, and by scavenging behind fishing vessels.	Known breeding locations include Albatross Island off Tasmania, Auckland Island, Bounty Island and The Snares, off New Zealand, where nesting colonies of 6-500 nests occur and may contain other species such as the Australian Gannet. Located on sheltered sides of islands, on cliffs and ledges, in crevices and slopes, nests are used annually and consist of a mound of mud, bones, plant matter and rocks.	Negligible. No impact to potential foraging or breeding habitat is anticipated. Site assessment in October 2024 did not detect this species.	No
Thalassarche melanophris (Black-browed Albatross)	V	V	Low	This species spends most of its time at sea, feeding on fish, crustaceans, offal and squid and often forages in flocks with other seabirds. Such foraging habitat does not occur within the Subject Property.	Breeds on small isolated islands. This species nests annually on a mound of soil and vegetation, on the cliffs or steep slopes of vegetated antarctic and subantarctic islands	Negligible. Neither foraging or breeding habitat occur within the Subject Property. Site assessment in October 2024 did not detect this species.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Tyto novaehollandiae (Masked Owl)	V	-	Low	Lives in dry eucalypt forests and woodlands from sea level to 1100m. A forest owl, but often hunts along the edges of forests, including roadsides. The typical diet consists of tree-dwelling and ground mammals, especially rats. Potential prey items may occur within the Subject Property.	Roosts and breeds in moist eucalypt forested gullies, using large tree hollows or sometimes caves for nesting. No suitable habitat was found within the Subject Property.	Minimal anticipated impact to potential foraging habitat due to the small scale of development and the mobility of the species. No anticipated impact to potential breeding habitat.	No
Tyto tenebricosa (Sooty Owl)	V	-	Low	Occurs in rainforest, including dry rainforest, subtropical and warm temperate rainforest, as well as moist eucalypt forests. Potential suboptimal foraging habitat was found within the Subject Property.	Nests in very large tree-hollows. No appropriate tree hollows were found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No
Varanus rosenbergi (Rosenberg's Goanna)	V	-	Low	Found in heath, open forest and woodland. Individuals require large areas of habitat. Feeds on carrion, birds, eggs, reptiles and small mammals. No suitable habitat was found within the Subject Property.	Shelters in hollow logs, rock crevices and in burrows, which they may dig for themselves, or they may use other species' burrows, such as rabbit warrens. Lays up to 14 eggs in a termite mound; the hatchlings dig themselves out of the mounds. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No

Species	BC Act	EPBC Act	Likelihood of Occurrence	Foraging Habitat Present Within the Subject Land	Breeding Habitat Present Within the Subject Land	Anticipated Impact	Further Impact Assessment Required?
Vespadelus troughtoni (Eastern Cave Bat)	V	-	Low	Found along cliff-lines in wet eucalypt forest and rainforest. No suitable habitat was found within the Subject Property.	Cave-roosting species that is usually found in dry open forest and woodland, near cliffs or rocky overhangs; has been recorded roosting in disused mine workings, occasionally in colonies of up to 500 individuals. No suitable habitat was found within the Subject Property.	Negligible. No impact to potential foraging or breeding habitat is anticipated.	No

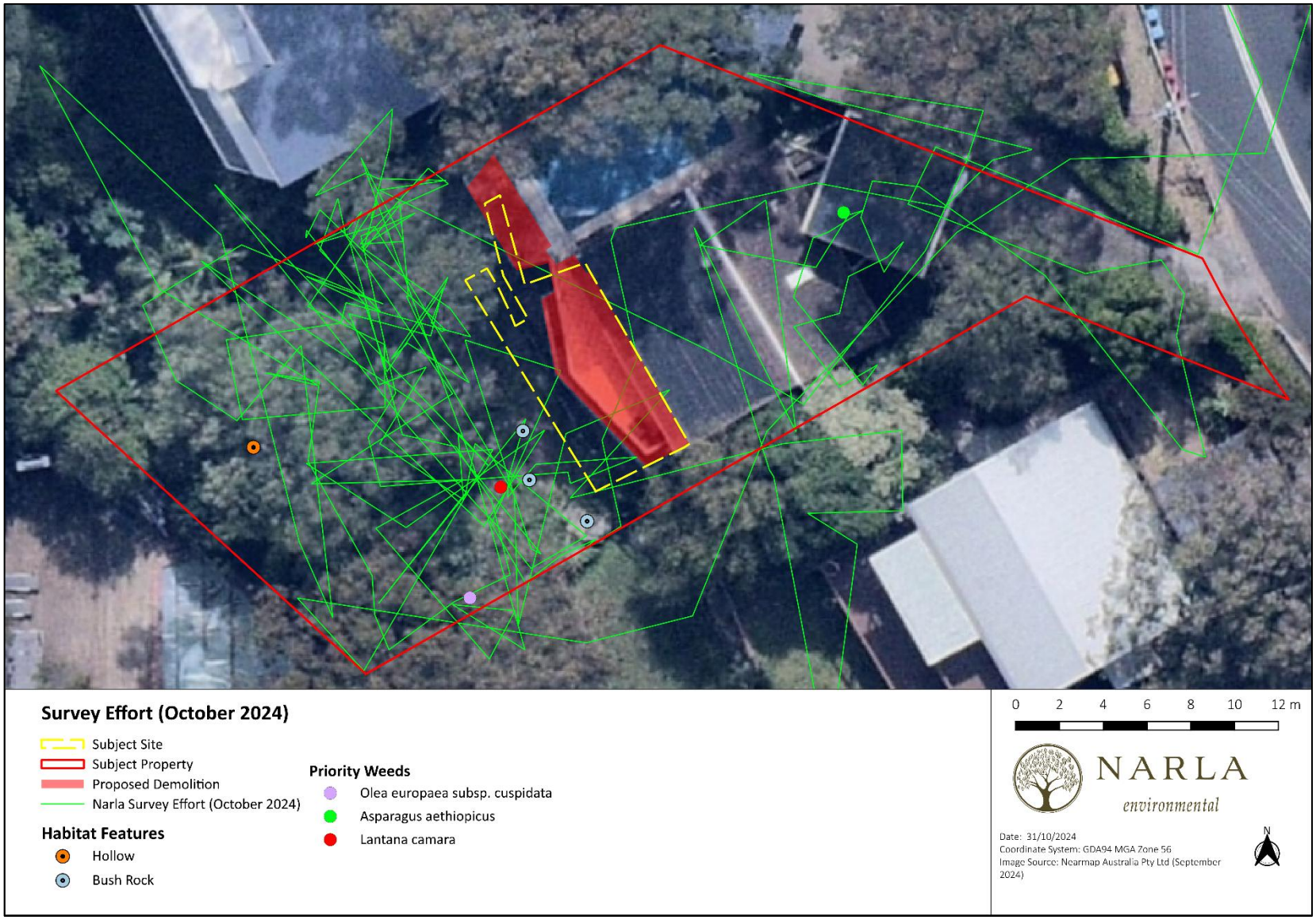

Figure 7. Narla Survey Effort within the Subject Property (August 2024).

5. Impact Summary

5.1 Vegetation

5.1.1 Vegetation Loss

The proposed development occurs largely across the site of the existing deck within the Subject Property. Any vegetation to be impacted by the development works will be <0.01ha in size (approximately 52m²). One (1) native canopy tree *Corymbia gummifera* is overhanging the Subject Site and will be retained and protected. Impacts will be restricted to exotic dominated landscaped vegetation.

5.2 Threatened Species

The Subject Property offers minimal habitat for any threatened fauna beyond small amounts of sub-optimal foraging habitat (owing to its largely exotic and managed nature), and a medium sized tree hollow located in the western boundary of the Subject Property. It was deemed that the proposed works will not result in a significant impact such that a local viable population or occurrence of any of the threatened species with the potential to occur within the Subject Property will be placed at risk of extinction. Therefore, no BDAR or EPBC Act Referral to Commonwealth should be required for the proposed development.

6. Recommendations

6.1 Impact Mitigation and Minimisation Recommendations

This section of the report details recommended efforts to avoid and minimise impact on biodiversity values associated with the proposed development. Measures to be implemented before, during, and after construction to avoid and minimise the impacts of the project are detailed in **Table 6-1.**

Table 6-1. Table of measures to be implemented before, during, and after construction to avoid and minimise the impacts of the project.

Action	Outcome	Timing	Responsibility
Project Location, Design, and Planning	The proposed development is situated predominately within the site of the existing deck. Impacts to vegetation will be restricted to small areas of exotic dominated landscaped vegetation.	Pre-construction phase	Proponent
Tree Protections	Australian Standard 4970 (2009) Protection of Trees on Development Sites (AS-4970) outlines that a Tree Protection Zone (TPZ) is the principal means of protecting trees on construction sites. It is an area isolated from construction disturbance so that the tree remains viable. Ideally, works should be avoided within the TPZ. A Minor Encroachment is less than 10% of the TPZ and is outside the Structural Root Zone (SRZ). A Minor Encroachment is considered acceptable by AS-4970 when it is compensated for elsewhere and contiguous within the TPZ. A Major Encroachment is greater than 10% of the TPZ or inside the SRZ. Major Encroachments generally require root investigations undertaken by non-destructive methods or the use of tree sensitive construction methods. Trees proposed for retention should be delineated by temporary fencing by the Project Arborist. Temporary fencing should be erected at a minimum distance of the structural root zone of each tree proposed for retention.	Pre-construction phase	Proponent Project Arborist
Landscaping	Where possible, future landscaping efforts within the Subject Property should incorporate locally ingenious species representative of the locally-occurring 3234: Hunter Coast Lowland Spotted Gum Moist Forest that occurs in the surrounding locality.	Post-construction phase	Proponent

Action	Outcome	Timing	Responsibility
Erosion and Sedimentation	An erosion and sediment control plan should be prepared for the proposed development. The applicant must ensure that adequate erosion and sediment measures are in place at all times during construction activity. Always follow best practice guidelines (Landcom 2004).	Construction phase	Proponent Construction Contractor
Storage and Stockpiling (Soil and Materials)	Allocate all storage, stockpile, and laydown sites away from any vegetation that is planned to be retained. Avoid importing any soil from outside the site as this can introduce weeds and pathogens to the site in order to avoid the potential of incurring indirect impacts on biodiversity values.	Construction phase	Construction Contractors

7. Conclusion

This assessment indicates that the relevant provisions of the BC Act 2016 and the EPBC Act 1979 have been satisfied and that the proposed development has been appropriately located within the area identified as having the least ecological impact.

In total, the area of proposed works covers approximately 0.006ha, of which approximately <0.01ha will include impacts to exotic dominated landscaped vegetation.

The proposed development is considered unlikely to result in any significant impacts to adjoining land or to any threatened species within the Subject Property. It is anticipated that any direct or indirect impacts to threatened fauna will be minimal.

If the appropriate recommendations in this report are followed the proposed development should have minimal ecological impact.

8. References

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9. Appendices

Appendix A. Flora species identified within and surrounding the Subject Property.
Appendix B. Fauna species identified within and surrounding the Subject Property.
Appendix C. Demolition Plans: 75 Cheryl Crescent, Newport (Progressive Plans 2024).
Appendix D. Development Plans: 75 Cheryl Crescent, Newport (Progressive Plans 2024).

Appendix A. Flora species identified within and surrounding the Subject Property.

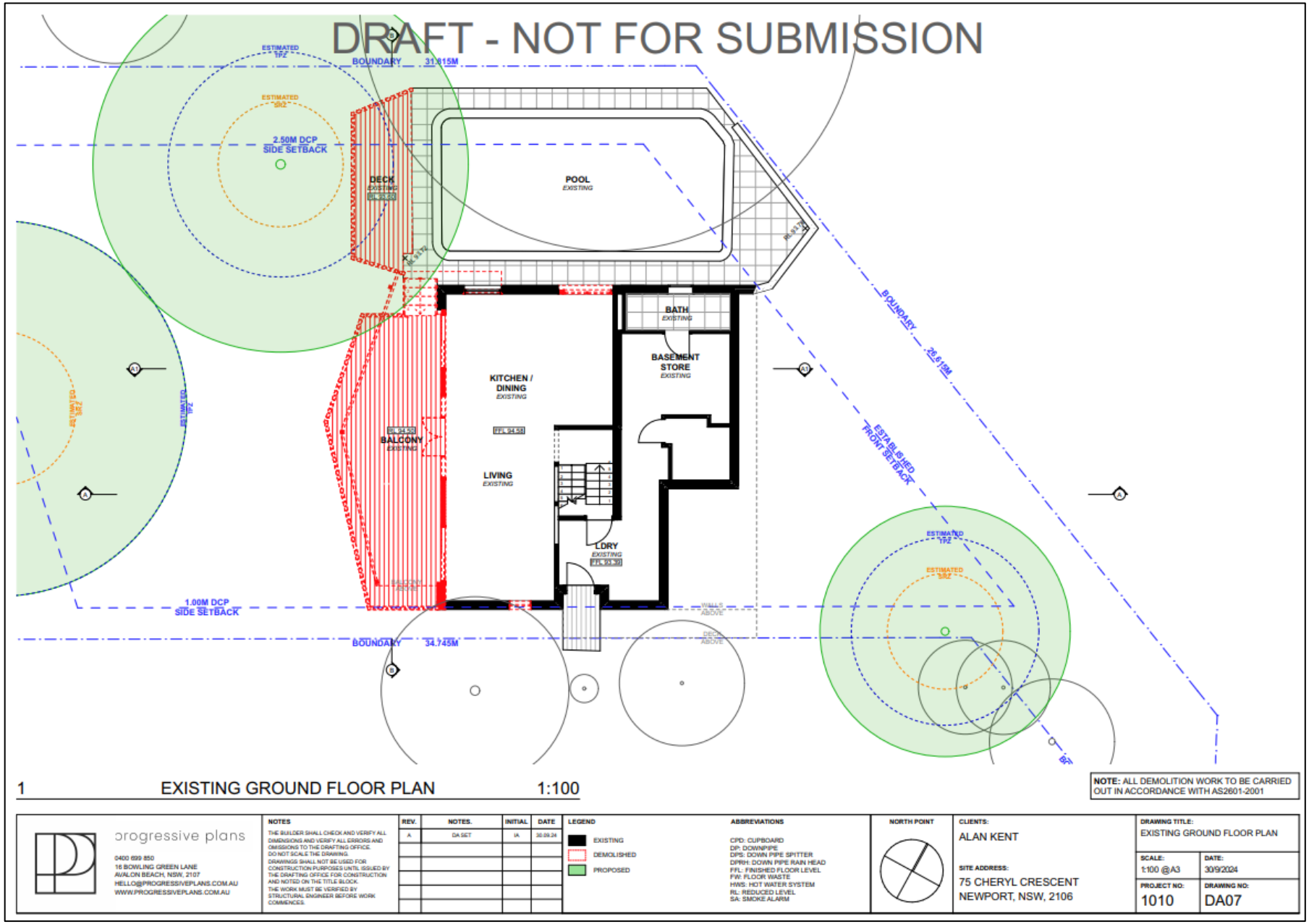
Scientific Name	Canopy	Mid-storey	Groundcover
Corymbia gummifera	X		
Eucalyptus punctata	X		
*Solanum mauritianum**		X	
Olea europaea subsp. *cuspidata***		X	
*Asparagus aethiopicus***			X
*Setaria palmifolia**			X
*Cardiospermum grandiflorum**			X
*Ehrharta erecta**			X
Dianella spp.*			X
*Chlorophytum comosum**			X
*Chamaesyce hirta**			X
*Ligustrum sinense**			X
*Hedera helix**			X
*Gallium aparine**			X
*Tradescantia fluminensis**			X
*Bidens pilosa**			X
*Sonchus oleraceus**			X
*Nothoscordum borbonicum**			X
*Salvia rosmarinus**			X
*Lantana camara***			X
*Conyza bonariensis**			X
*Ageratina Adenophora**			X
*Solanum nigrum**			X
*Ipomea purpurea**			X

** Denotes exotic species, ** Denotes Priority Weed.*

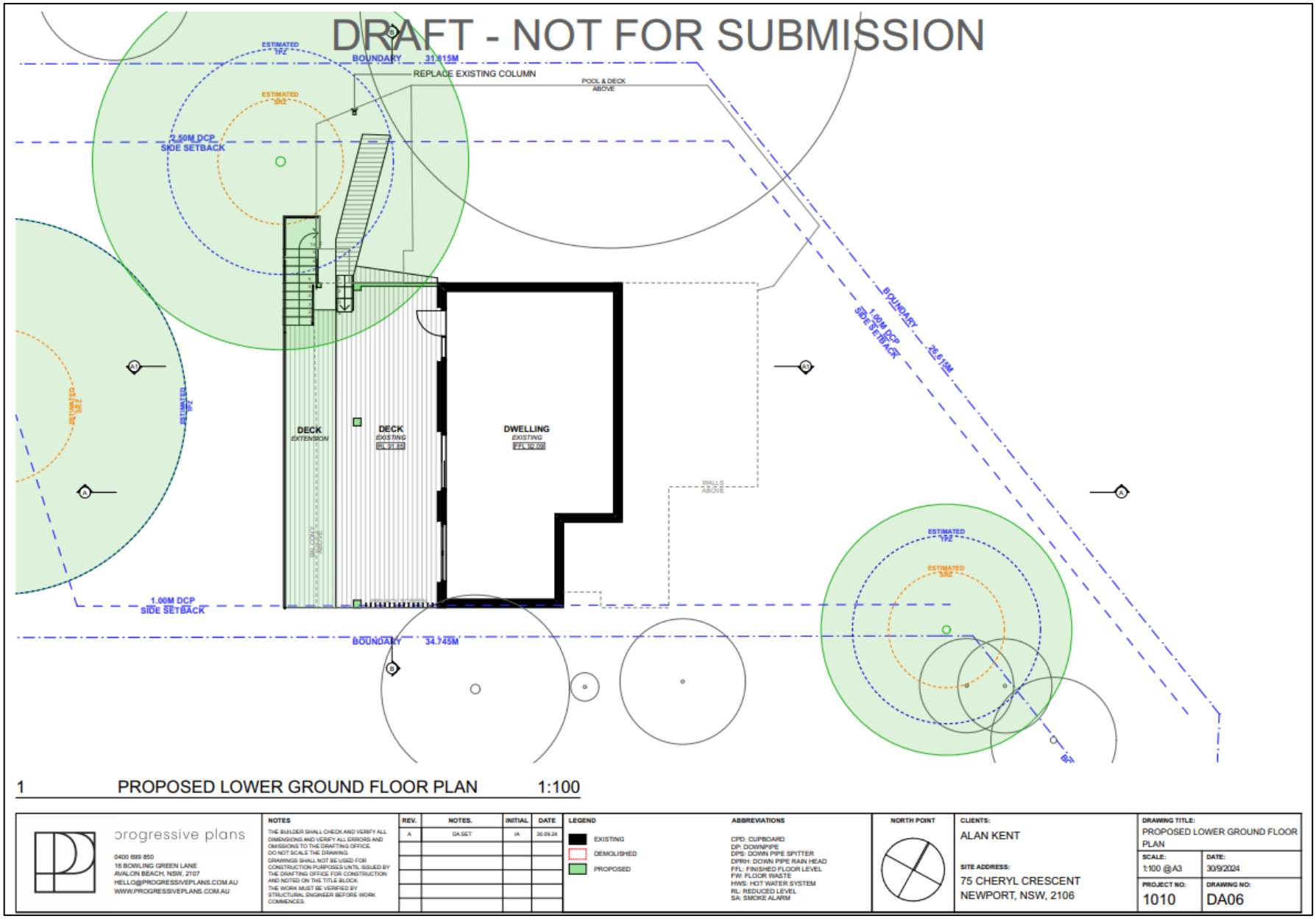
Appendix B. Fauna species identified within and surrounding the Subject Property.

Class	Scientific Name	Common Name	Status
Aves	*Trichoglossus moluccanus*	Rainbow Lorikeet	Protected
	Cracticus torquatus	Grey Butherbird	
	Cacatua calerita	Sulpher-crested Cockatoo	
	Manorina melanocephala	Noisy Miner	
	Eudynamys orientalis	Eastern Koel	

Appendix C. Demolition Plans: 75 Cheryl Crescent, Newport (Progressive Plans 2024).



Appendix D. Development Plans: 75 Cheryl Crescent, Newport (Progressive Plans 2024).



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