## Biodiversity Development Assessment Report

1, 3, and 5 Nelson Road

Lindfield Ku-ring-gai LGA

For: Castle Hill No. 3 Pty Ltd

**REF: KMC 25-1293** 

23rd May 2025





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#### 23rd May 2025

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Author: Elizabeth Ashby

CERTIFICATION
I certify that this BDAR has been prepared on the basis of the requirements of (and information provided under) the current
Biodiversity Assessment Method (2020).
Elizabeth ashlay
Assessor Number BAAS17045
23 <sup>rd</sup> May 2025

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<b>Keystone Ecolog</b> Flora and Fauna S	<b>zical</b> Specialists	<b>Cover photograph:</b> Frontages of the existing properties.
Mail: Email: ABN:	PO Box 5095 Empire Bay NSW 2257 office@keystone-ecological.com.au 13 099 456 149	Photo: E. Ashby, 23 <sup>rd</sup> April 2025.

#### DEFINITIONS

Some terms require definition for the Biodiversity Development Assessment Report and largely include those as per the *Biodiversity Conservation (BC) Act 2016* and Biodiversity Assessment Method (2020) for matters listed under NSW legislation.

BAM: The Biodiversity Assessment Method (2020).

**Critically endangered ecological community (CEEC):** an ecological community specified as critically endangered in Schedule 2 of the *BC Act 2016* and/or listed under Part 13, Division 1, Subdivision A of the *EPBC Act 1999*.

**Development:** has the same meaning as development at section 4, or an activity in Part 5, or development as defined in section 115T of the *NSW Environmental Planning and Assessment Act* 1979 (*EPA Act* 1979).

**Development footprint:** the area of land that is directly impacted on by a proposed development, including access roads, and areas used to store construction materials.

**Development site:** an area of land that is subject to a proposed development that is under the *EPA Act 1979*. It is also taken to include the clearing footprint, except where the reference is to a small area development or major project development.

**DIWA:** Directory of Important Wetlands.

**Endangered ecological community (EEC):** an ecological community specified as endangered in Schedule 2 of the *BC Act 2016*, or listed under the *EPBC Act 1999*.

**Habitat:** an area or areas occupied, or periodically or occasionally occupied, by a species or ecological community, including any biotic or abiotic component.

Habitat component: the component of habitat that is used by a threatened species for breeding, foraging, or shelter.

**High threat exotic plant cover:** plant cover composed of vascular plants not native to Australia that if not controlled will invade and outcompete native plant species. Also referred to as high threat weeds or high threat exotic vegetation. Plants considered to be high threat weeds are listed on the high threat weeds list published in the BAM-C.

**Hollow-bearing tree:** a living or dead tree that has at least one hollow. A tree is considered to contain a hollow if: (a) the entrance can be seen; (b) the minimum entrance width is at least 5cm; (c) the hollow appears to have depth (i.e. you cannot see solid wood beyond the entrance); (d) the hollow is at least 1m above the ground. Trees must be examined from all angles.

**IBRA region:** a bioregion identified under the Interim Biogeographic Regionalisation for Australia (IBRA) system, which divides Australia into bioregions on the basis of their dominant landscape-scale attributes.

IBRA subregion: a subregion of a bioregion identified under the IBRA system.

Major project: State Significant Development and State Significant Infrastructure.

**Native ground cover:** all native vegetation below 1 metre in height, including all such species native to NSW (i.e. not confined to species indigenous to the area).

Native ground cover (grasses): native ground cover composed specifically of native grasses.

**Native ground cover (other):** native ground cover composed specifically of non-woody native vegetation (vascular plants only) less than 1 m in height that is not a grass (e.g. herbs, ferns).

**Native ground cover (shrubs):** native ground cover composed specifically of native woody vegetation less than 1 m in height.

**Native mid-storey cover:** all vegetation between the over-storey stratum and a height of 1m (typically tall shrubs, under-storey trees and tree regeneration) and including all species native to NSW (i.e. native species not local to the area can contribute to mid-storey structure).

**Native over-storey cover:** the tallest woody stratum present (including emergent) above 1m and including all species native to NSW (i.e. native species not local to the area can contribute to over-storey structure). In a woodland community the over-storey stratum is the tree layer, and in a shrubland community the over-storey stratum is the tallest shrub layer. Some vegetation types (e.g. grasslands) may not have an over-storey stratum.

**Native vegetation:** species endemic to NSW as defined in Section 1.6 of the *BC Act 2016* and Section 60B of the *LLS Act 2013*.

Number of trees with hollows: a count of the number of living and dead trees that are hollow bearing.

**Prescribed impact:** means the prescribed impacts identified in clause 6.1 of the BC Regulation. Prescribed impacts can be direct or indirect impacts.

Subject lot(s): The lot(s) within proposed works as identified by the Lot number and Deposited Plan (DP) number.

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## **1** INTRODUCTION

Keystone Ecological has been contracted by Castle Hill No. 3 Pty Ltd to assess the likely impacts of a proposed development upon state-listed flora and fauna, and their habitats at the following five lots in Lindfield in the Ku-ring-gai Local Government Area (LGA):

- Lot 6 DP 9789, 1 Nelson Road
- Lot 7 DP 9789, 3 Nelson Road
- Lot 8 DP 9789, 5 Nelson Road

As a State Significant Development Application (SSDA), the Biodiversity Offsets Scheme is automatically triggered, and requires submission of a Biodiversity Development Assessment Report (BDAR) in accordance with the *Biodiversity Conservation (BC) Act 2016.* A BDAR waiver has not been sought for this project as it is anticipated that it will result in a small impact to native biodiversity.

The development site is currently zoned R2 Low Density Residential, and the subject lots occupy a total area of approximately 4,949 square metres (0.49 hectares). Each of the lots is developed with long established dwellings and formal gardens, including pools and tennis courts (see Figure 1). The proposal is for construction of a multi-storey residential development and is illustrated in Figure 2. The proposal comprises:

- Demolition of existing improvements;
- Clearing of the site;
- Construction of a multi-storey residential development comprising approximately 150 apartments and basement parking; and
- Landscaping of common spaces.



**Figure 1:** Most recent aerial imagery of the proposed development site (red outline, house numbers shown in yellow). Nearmap photomap, 20<sup>th</sup> January 2025.



Figure 2: Proposed site plan showing the extent of the footprint and existing trees.



The following external sources of information were relied upon for this BDAR, satisfying section 1.4.1 of the BAM 2020:

- BioNet Vegetation Classification (formerly known as the NSW Vegetation Information System Classification Database).
- BioNet Threatened Biodiversity Data Collection (TBDC, formerly known as the Threatened Species Profile Database).
- BioNet Atlas (formerly known as the NSW Wildlife Atlas).
- Directory of Important Wetlands in Australia.
- BioNet NSW (Mitchell) Landscapes Version 3.1.
- NSW Interim Biogeographic Regions of Australia (IBRA region and subregion) Ver 7.
- Biodiversity Assessment Method (2020). Biodiversity Assessment Method, Environment, Energy and Science, Department of Planning Industry and Environment, October 2020, Sydney NSW.
- NearMaps aerial imagery tool (http://maps.au.nearmap.com/).
- NSW Government SIXMaps Aerial Imagery Tool (https://maps.six.nsw.gov.au/).
- SEED (2024) Sharing and enabling environmental data online portal. NSW Government, Sydney

https://geo.seed.nsw.gov.au/vertigisstudio/web/?app=cabd04d595ec43c1aaf4298e80e 83ec2



*Figure 3:* Areas of Biodiversity Value (purple) mapped near the development site (red). BVMAT last accessed 9<sup>th</sup> April 2025.

### 2 LANDSCAPE AND SITE CONTEXT

Relevant landscape features are mapped in Figure 4.

The development site is located within the **Cumberland subregion** in the **Sydney Basin IBRA bioregion**.

The Sydney Basin IBRA Bioregion<sup>1</sup> occupies over 3.6 million hectares and extends from just north of Batemans Bay to Nelson Bay on the central coast, and almost as far west as Mudgee. It includes a significant proportion of the catchments of the Hawkesbury-Nepean, Hunter and Shoalhaven river systems, all of the smaller catchments of Lake Macquarie, Lake Illawarra, Hacking, Georges and Parramatta Rivers, and smaller portions of the headwaters of the Clyde and Macquarie rivers.

The Cumberland IBRA subregion<sup>2</sup> contains low rolling hills and wide valleys in areas of rain shadows below the Blue Mountains on Triassic Wianamatta shales and sandstones. It has intrusions by small volcanic vents that are partly covered by tertiary river gravels and sands, with quaternary alluvial soils occurring along the main streams.

Soils are typically red and yellow with brown clays on volcanics. At least three terrace levels are evident in gravel splays with volcanics occurring from low hills in shale landscapes. Swamps and lagoons occur in floodplain areas of the Nepean River.

Vegetation is typically divided by soil influences. *Eucalyptus moluccana* Grey Box, *Eucalyptus tereticornis* Forest Red Gum, *Eucalyptus crebra* Narrow-leaved Ironbark woodland with some *Corymbia maculata* Spotted Gum occurs on rolling shale hills. *Eucalyptus sclerophylla* Hard-leaved Scribbly Gum, *Angophora floribunda* Rough-barked Apple and *Banksia serrata* Old Man Banksia occur on alluvial sands and gravels. *Angophora subvelutina* Broad-leaved Apple, *Eucalyptus amplifolia* Cabbage Gum, and *Eucalyptus tereticornis* Forest Red Gum with abundant *Casuarina glauca* Swamp Oak occur on river flats, with tall rushes and *Eucalyptus parramattensis* Parramatta Red Gum in lagoons and swamps.

The centre of the site is approximately at **grid reference** 330815 E, 6261518 N (GDA 2020-MGA 56).

The site occurs within the **Pennant Hills Ridges** Mitchell Landscape.

The Pennant Hills Ridges Mitchell Landscape<sup>3</sup> occurs on rolling to moderately steep hills on horizontal shales and siltstones with an elevation between 10 metres to 90 metres ASL and a local relief of 60 metres ASL. Soils consist of deep red textured soils on narrow hillcrests with red to brown, yellow soils on slopes and becoming harsher in drainage areas.

Native vegetation is generally made up of tall open forest comprising *Eucalyptus saligna* Sydney

 $<sup>^1\</sup> Sydney\ Basin\ Bioregion, at\ http://www.environment.nsw.gov.au/bioregions/SydneyBasinBioregion.htm$ 

<sup>&</sup>lt;sup>2</sup> Sydney Basin – subregions, at http://www.environment.nsw.gov.au/bioregions/SydneyBasin-Subregions.htm

<sup>&</sup>lt;sup>3</sup> Department of Environment and Climate Change NSW (2002) Descriptions for NSW (Mitchell) landscapes, version 2, based on descriptions compiled by Dr. Peter Mitchell.

Blue Gum, *Syncarpia glomulifera* Turpentine, *Eucalyptus pilularis* Blackbutt, *Eucalyptus globoidea* White Stringybark, *Eucalyptus paniculata* Grey Ironbark, *Angophora floribunda* Rough-barked Apple, and *Allocasuarina torulosa* Forest Oak. Rainforest elements - including *Pittosporum undulatum* Sweet Pittosporum, *Glochidion ferdinandi* Cheese Tree, *Ficus coronata* Sandpaper Fig and *Callicoma serratifolia* Black Wattle - occur in the heads of protected moist gullies.

The **extent of native vegetation within the assessment area** is estimated to total 98.72 hectares, being that which has been classified and mapped as seven Plant Community Types (PCTs). This represents 13.16% of the total assessment area of 750.07 hectares.

The **pattern of native vegetation within the assessment area** is uneven, being comprised of a large area of intact riparian bushland at the head of the tributaries of Gordon Creek in Garigal National Park to the north east and similar (but smaller) patches of riparian vegetation riparian vegetation in the headwaters of tributaries of the Lane Cove River in Lane Cove National Park. In addition, native vegetation occurs in smaller patches more typical of urban vegetation such as on the development site. These are made up of street trees, parks and reserves, and trees in large backyards and may also include exotic species.

**Patch size** for the assessment area has been assessed in accordance with BAM 2020 and is estimated to be 0.12 hectares, which is within the <5 hectare class.

**Rivers and streams** recognised under the *Water Management Act 2010* are those shown as blue lines on 1:25,000 topographic maps. The significance of the streams and the protections they attract are determined by their stream order, according to the Strahler system. In essence, this is defined by the number and types of upper branches.

Within the buffer area of the development site there are a number of mapped streams, and their orders have been determined by inspection of the Hydroline Spatial Map associated with the *Water Management Act 2010*. The streams in the assessment area are shown in Figure 4.

The closest mapped stream to the development site is Gordon Creek, where its head is located in 295 metres to the south east. At that point it presents as a dry gully in a landscaped garden and as a first order stream, it attracts a protected riparian zone of 10 metres. The development site is located well outside of this area and therefore does not impose impacts to the hydrological function of this stream.

Stormwater is collected and piped from the catchment above the development site, and it exits at the site's northern corner. At this exit point, the water is discharged into a more natural-looking watercourse (with a sandstone bed and almost vertical banks), passing through the gardens of adjacent downslope properties.

There are no **wetlands** within the buffer area or otherwise nearby recognised under the *State Environmental Planning Policy Coastal Management 2018*.

No karsts, caves, crevices, cliffs rocks or other forms of **geological** features occur on site. There are no areas of formally or informally recognised geological significance within the buffer area or on the subject lot.

At the time of preparation of this BDAR, declared **Areas of Outstanding Biodiversity Values** (AOBVs) are confined to those already declared as Critical Habitat under the *Threatened Species Conservation Act 1995* (now repealed), being:

- Cabbage Tree Island, critical breeding habitat for Gould's Petrel near Port Stephens;
- Manly Cove, critical breeding habitat for Little Penguins;
- Stotts Island Nature Reserve, critical habitat for Mitchell's Rainforest Snail near Murwillumbah; and
- All known extant areas of the Wollemi Pine and the surrounding habitat in the catchment, occupying some 5,000 hectares within Wollemi National Park.

No areas of AOBV declared under the *Biodiversity Conservation Act 2016* occur within or near the site.



Figure 4: Landscape features in the assessment area including streams, mapped PCTs (small scattered fragmented patches of PCT 3262 and PCT 3136 mainly on the plateau), and potential movement corridors.

### **3 NATIVE VEGETATION**

The European history of Lindfield began in the early 1800s with land clearing for timber, which then evolved into farming of the cleared land (fruit trees and market gardens) in the late 1800s. These farms were then eventually cleared in turn to give way to urbanisation in the 1900s. Substantial dwellings and large gardens (including a tennis court at number 63) were established on the development site in the early 20th century; natural features of the site and surrounds have therefore been transformed by urbanisation for almost a century.

The development site is made up of long established dwellings and well maintained landscaped gardens dominated by exotic species. Native vegetation is restricted to a handful of trees and some scattered occurrences of forbs and grasses in the shadier parts of the lawns.

#### 3.1 Data Collection

A number of sources of information were used to aid in the sampling and identification of vegetation on site:

- Recent high quality aerial photography;
- BioNet atlas of NSW Wildlife for records of common and threatened species; and
- BioNet Vegetation Classification formerly known as the Vegetation Information System (VIS). This is the standard database for plant community types for NSW, and underpins the analytical tools applied as part of the BAM. The database facilitates vegetation classification by a series of queries of critical features (e.g. structure, location, canopy dominants), and inspection of all related data relevant to each recognised plant community type.
- Sharing and Enabling Environmental Data (SEED) for vegetation mapping information, flora plot survey records, flora and fauna records and threatened species records.

A BAM plot (Plot 1) was measured for this BDAR on 23<sup>rd</sup> April 2025. Its location is shown in Figure 5 and the data collected are provided in Table 1. It was located such that it captured one of the two locally-native natural-occurring trees on site that best represented the local vegetation type and occurred within one of the patches of BV.

#### 3.2 Vegetation Type Analysis

Given the nature of the formal gardens and the absence of native species (other than planted cultivars), no analysis was considered appropriate. Instead, the vegetation type was determined based on the species of mature / remnant trees on and around the site and their relationship to vegetation types modelled and mapped as part of the State Vegetation Type Map (extant vegetation shown in Figure 6, and vegetation as at 1750 shown in Figure 7).

This approach relied upon the following trees:

• *Angophora costata* (tree number 6), located in the garden at the edge of the tennis court in the rear of number 1 Nelson Road;

- *Livistona australis* (tree number 60) in number 9A Nelson Road, the adjacent property to the north; and
- *Syncarpia glomulifera* being trees on the development site (tree number 50 see Figure 8) in number 5 Nelson Road and 3 trees (tree numbers 62,63,64) in number 9A Nelson Road, the adjacent property to the north.

The analysis of additional features shown in Table 2 (such as geographic location, landscape position, and associated species) also supports the selection of PCT 3262 Sydney Turpentine Ironbark Forest as the best match.

PCT 3262 has an associated Threatened Ecological Community (TEC), the Critically Endangered Sydney Turpentine Ironbark Forest (STIF). This TEC has an equivalent listing under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but the federally-listed entity requires certain condition and area of occurrence thresholds to be met. The occurrence on site is far too small and modified to constitute this entity.

The overall condition of PCT 3262 is considered to be poor, with a highly simplified structure comprising only a few remnant trees and some native forbs and grasses within formal landscaped gardens.

The extent of PCT 3262 STIF is shown in Figure 9 and reflects the areas occupied by native STIF trees.

Only one Vegetation Zone (VZ1) has been defined. The measured vegetation integrity values for VZ1 are:

- Composition Integrity Score: 3.9
- Structural Integrity Score: 23.9
- Function Integrity Score: 35

These provide an overall Vegetation Integrity (VI) score for PCT 3262 on site of 14.9.



Figure 5: BAM plot location.



*Figure 6:* Extant vegetation map shows PCT 3262 Sydney Turpentine Ironbark Forest occurring in the site's north eastern corner.



Figure 7: Modelled vegetation in 1750 shows PCT 3136 in the front halves of the lots (now cleared and developed) and 3262 Sydney Turpentine Ironbark Forest across the rear halves of the lots.

Project	Nelson Rd Li	indfield			
Date	23-Apr-25	Plot ID	Q1	Recorder	Elizabeth Ashby

|--|

Zone	56	Datum	GDA2020
Easting	330801	Northing	6261534
Orientation of midline	65 <sup>0</sup>		
Dimensions		20x20m, 20	0x50m
Veg Zone ID	VZ 1		

		Species recorded in 20 x 20 n	n quadrat	
GF code	BAM GF Code	Species	N,E,HTW	Cover %
Т	TG	Syncarpia glomulifera	Ν	30
R	GG	Lomandra longifolia "Tanika"	Ν	0.2
D	GG	Oplismenus aemulus	Ν	0.1
Р	OG	Howea forsteriana	Ν	1
Q	OG	Cyathea cooperi	Ν	1
		Camellia japonica	Е	2
		Jacaranda mimosifolia	Е	35
		Phoenix canariensis	Е	5
		<i>Murraya</i> sp.	Е	1.5
		Stenotaphrum secundatum	E,HTW	65

COME	POSITION
Form	No. species
Trees	1
Shrubs	0
Grasses	2
Forbs	0
Ferns	0
Other	2

STR	UCTURE
Form	Cover total
Trees	30
Shrubs	0
Grasses	0.3
Forbs	0
Ferns	0
Other	2
HTW	65

	FUNCT	ΓΙΟΝ	
DBH	Euc	Non Euc	Hollows
80+ cm	1		
50-79cm			
30-49cm			
20-29cm			
10-19cm			
5-9cm			
<5cm			

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Natural Regeneration?

Litter plots							
	1	2	3	4	5		
%	0	0	0	0	0		
average	0						

No



Figure 7: Remnant Turpentine (tree 50) in the rear of number 5 Nelson Road.



*Figure 9:* Distribution of patches of Vegetation Zone 1 (green = PCT 3262) on site, totalling 232 square metres (0.02 hectares).

### 4 THREATENED SPECIES

Section 5 of BAM 2020 details the process for determining the habitat suitability for threatened species. For the purposes of assessing impact and offset obligations under the BAM, threatened species are separated into two types, 'ecosystem' and 'species' credit species:

- **Ecosystem credit species** are those threatened species whose occurrence can generally be predicted by vegetation surrogates and/or landscape features, or that have a low probability of detection using targeted surveys. The Threatened Biodiversity Data Collection (TBDC) identifies the threatened species assessed for ecosystem credits. A targeted survey is not required to identify or confirm the presence of ecosystem credit species; and
- **Species credit species** are threatened species for which vegetation surrogates and/or landscape features cannot reliably predict the likelihood of their occurrence or components of their habitat. These species are identified in the TBDC. A targeted survey or an expert report is required to confirm the presence of these species on the subject land. Alternatively, for a development, activity, clearing or biodiversity certification proposal only, the proponent may elect to assume the species is present.

Some threatened species may be identified as both ecosystem and species credit species, with different aspects of the habitat and life cycle representing different credit types. Commonly, threatened fauna species may have foraging habitat as an ecosystem credit, while their breeding habitat represents a species credit.

#### 4.1 Predicted Species

A list of predicted ecosystem credit species derived from the BAM-C is provided in Table 3. All but 5 of the species identified in the BAM-C were retained for the analysis (see below), as habitat attributes relevant to each are present and therefore could not reasonably be excluded.

The 5 excluded species and the reasons for their exclusion are:

- *Calyptorhynchus lathami* Glossy Black-Cockatoo. Foraging habitat for this species is specifically noted as the habitat constraint that contributes to offset ecosystem credits. It is a specialist feeder on the seeds of *Allocasuarina* species and (to a lesser degree) on *Casuarina* species. Neither of these tree species occur on site and therefore this species is excluded.
- *Ephippiorhynchus asiaticus* Black-necked Stork. Key habitat for this species includes floodplain wetlands (swamps, billabongs, watercourses and dams) of the major coastal rivers. Secondary habitat comprise minor floodplains, coastal sandplain wetlands and estuaries. The presence of such habitats on site or within 300 metres of the site are detailed in the BAM-C as habitat constraints that require inclusion of this species for the calculation of ecosystem offsets. No such habitats occur on or near the site and therefore this species is excluded.
- *Grantiella picta* **Painted Honeyeater.** This species is a specialist feeder on Mistletoe fruit and Mistletoes must be present at a density of greater that five mistletoes per hectare for

a site to be considered to be suitable and counted as requiring offset consideration. There are no Mistletoes present on site and therefore this species is excluded.

- *Haliaeetus leucogaster* White-bellied Sea-Eagle. Foraging habitat for this species is specifically noted as the feature that contributes to credits. Foraging habitat is defined as occurring in or within 1 kilometre of rivers, lakes, large dams, or other waterbodies. The site is not within 1 kilometre of such critical habitat features, nor does it contain such habitat. and therefore this species is excluded
- *Ixobrychus flavicollis* Black Bittern. This species relies on well-vegetated waterbodies for foraging, breeding, and sheltering. The BAM-C defines areas with such habitat features and those within 40 metres of such habitat features as being relevant for consideration and offsetting. However, as the development site and surrounds do not support waterbodies of any kind, this species is excluded.

No additional predicted species were included in the BAM-C.

#### 4.2 Candidate Species

The potential candidate threatened species (species credit species) are detailed in Table 3, and have arisen from them being associated with PCT 3262, the vegetation type identified on the development site. All have been excluded from analysis, with justifications detailed within the table.

No additional candidate species were included in the BAM-C.

Species (Habitat element)	Included or excluded from consideration	Geographic Limitations	Habitat Constraints	Sensitivity to gain
Anthochaera phrygia Regent Honeyeater (foraging habitat)	Included	None	None	High
Artamus cyanopterus cyanopterus Dusky Woodswallow	Included	None	None	Moderate
<i>Callocephalon fimbriatum</i> Gang-gang Cockatoo	Included	None	None	Moderate
Calyptorhynchus lathami Glossy Black-Cockatoo	Excluded	None	• Presence of Allocasuarina and Casuarina species	High
<i>Chthonicola sagittata</i> Speckled Warbler	Included	None	None	High
<i>Climacteris picumnus victoriae</i> Brown Treecreeper (eastern subspecies)	Included	None	None	High
Daphoenositta chrysoptera Varied Sittella	Included	None	None	Moderate
Dasyurus maculatus Spotted-tailed Quoll	Included	None	None	High
Ephippiorhynchus asiaticus Black-necked Stork	Excluded	None	<ul> <li>Swamps</li> <li>Shallow open freshwater or saline wetlands or shallow edges of deeper wetlands within 300m of these swamps / waterbodies</li> <li>Shallow lakes, lake margins and estuaries within 300m of these waterbodies</li> </ul>	Moderate
<i>Glossopsitta pusilla</i> Little Lorikeet	Included	None	None	High
<i>Grantiella picta</i> Painted Honeyeater	Excluded	None	Mistletoes present at a density of greater that five mistletoes per hectare	Moderate
Haliaeetus leucogaster White-bellied Sea-Eagle (foraging habitat)	Excluded	None	• Within 1 km of rivers, lakes, large dams, or other waterbodies	High
<i>Hieraaetus morphnoides</i> Little Eagle	Included	None	None	
Hirundapus caudacutus White-throated Needletail	Included	None	None	High
<i>Ixobrychus flavicollis</i> Black Bittern	Excluded	None	• Waterbodies	Moderate

 Table 2: Predicted threatened species generated by the BAM-C.

Species (Habitat element)	Included or excluded from consideration	Geographic Limitations	Habitat Constraints	Sensitivity to gain
			• Land within 40m of freshwater and estuarine wetlands, in areas of permanent water and dense vegetation	
Lathamus discolor Swift Parrot (foraging habitat)	Included	None	None	Moderate
Lophoictinia isura Square-tailed Kite	Included	None	None	Moderate
Melanodryas cucullata cucullata Hooded Robin (south-eastern form)	Included	None	None	Moderate
<i>Micronomus norfolkensis</i> Eastern Coastal Free-tailed Bat	Included	None	None	High
Miniopterus australis Little Bent-winged Bat (foraging habitat)	Included	None	None	High
Miniopterus orianae oceanensis Large Bent-winged Bat (foraging habitat)	Included	None	None	High
Pandion cristatus Eastern Osprey	Included	None	None	
<i>Petroica phoenicea</i> Flame Robin	Included	None	None	Moderate
Pteropus poliocephalus Grey-headed Flying fox (foraging habitat)	Included	None	None	High
Saccolaimus flaviventris Yellow-bellied Sheathtail-bat	Included	None	None	High
Stagonopleura guttata Diamond Firetail	Included	None	None	

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
<i>Acacia prominens</i> - endangered population Gosford Wattle	No	Moderate	Geographic limitations	Endangered population defined in Final Determination as occurring in the Hurstville and Kogarah LGAs plus Georges River LGA.	Development site is not within relevant LGAs.
<i>Acacia pubescens</i> Downy Wattle	No	High	Habitat degraded	Occurs on alluviums, shales and at the intergrade between shales and sandstones in n open woodland and forest, in a variety of open woodlands / forests but principally Cooks River/Castlereagh Ironbark Forest, Shale/Gravel Transition Forest and Cumberland Plain Woodland. The soils are characteristically gravely soils, often with ironstone., and concentrated around the Bankstown-Fairfield- Rookwood area and the Pitt Town area, with outliers occurring at Barden Ridge, Oakdale and Mountain Lagoon.	The development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site and given the known habitat features of this species, it may never have provided suitable habitat.
<i>Anthochaera phrygia</i> Regent Honeyeater	Yes	High	Habitat constraints (breeding)	• As per the important habitat map	The development site does not support an area identified as important habitat for this species nor is it within an area where breeding has been recorded.
<i>Burhinus grallarius</i> Bush Stone-curlew	No	High	Habitat constraints	• Fallen / standing dead timber including logs.	The development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site.
<i>Callistemon linearifolius</i> Netted Bottle Brush	No	Moderate	Habitat degraded	Grows in dry sclerophyll forest.	The development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site and given the known habitat features of this species, it may never

### Table 3: Candidate threatened species.

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
					have provided suitable habitat.
<i>Callocephalon fimbriatum</i> Gang-gang Cockatoo	No	High	Habitat constraints (breeding)	<ul> <li>Hollow-bearing trees</li> <li>Eucalypt tree species with hollows at least 3m above the ground and with hollow diameter of 7cm or larger</li> </ul>	The development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No hollow-bearing trees occur on the development site.
<i>Calyptorhynchus lathami lathami</i> South-eastern Glossy Black Cockatoo	No	High	Habitat constraints (breeding)	<ul> <li>Hollow-bearing trees</li> <li>Living or dead tree with hollows greater than 15cm diameter and higher than 8m above the ground</li> </ul>	The development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No hollow-bearing trees occur on the development site.
<i>Cercartetus nanus</i> Eastern Pygmy-possum	No	High	Habitat degraded	This species occurs in a broad range of vegetation types but relies on the availability of sufficient supplies of nectar and pollen and a relatively predator-free environment. Urban records are restricted to locations adjacent to bushland. They also require suitable shelter sites (such as tree hollows, holes in the ground, possum dreys or thickets of vegetation). occurred where relied on proximity The closest record dates from 2004 and is over 2km away in Stony Creek gully, which is part of a large network of reserved bushland.	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. Any suitable habitat for this species on or near the development site has been cleared and profoundly changed long ago.
<i>Chalinolobus dwyeri</i> Large-eared Pied Bat	Yes	Very High	Habitat constraints	<ul> <li>Cliffs</li> <li>Within 2 km of rocky areas containing caves, overhangs, escarpments, outcrops, or crevices</li> <li>Within 2 km of old mines or tunnels</li> </ul>	The development site does not conform with the required habitat constraints.
Darwinia peduncularis	No	High	Habitat constraints	• Rocky areas or within 50m of same	The development site does not conform with the required habitat constraints.
Epacris purpurascens var. purpurascens	No	Moderate	Habitat degraded	Found in a range of habitat types, most of which have a strong shale soil	This is a candidate species because it has been associated with PCT 3262.

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
				influence.	However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. Local records are all associated with substantial areas of intact bushland. Any suitable habitat for this species on or near the development site has been cleared and profoundly changed long ago.
<i>Haliaeetus leucogaster</i> White-bellied Sea-Eagle	No	High	Habitat constraints (breeding)	• Living or dead mature trees within suitable vegetation within 1km of rivers, lakes, large dams or creeks, wetlands and coastlines	This species is highly selective in nesting locations and the development site does not conform with the required habitat constraints.
Haloragodendron lucasii	Yes	Very High	Habitat constraints Geographic limitations	<ul> <li>Seepage zone or within 100m of same</li> <li>Within Hornsby and Ku-ring-gai LGAs</li> </ul>	While the development site is within an appropriate LGA, it does not conform with the required habitat constraints.
<i>Hibbertia puberula</i> Hibbertia puberula	No	High	Habitat degraded	It typically occurs in dry sclerophyll woodland communities, low heath on sandy soils or rarely in clay.	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site and given the known habitat features of this species, it may never have provided suitable habitat.
<i>Hibbertia spanantha</i> Julian's Hibbertia	Yes	High	Habitat degraded	Restricted to six known locations in bushland on shale - sandstone soil transition.	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
					species occurs on site.
<i>Hieraaetus morphnoides</i> Little Eagle	No	Moderate	Habitat constraints (breeding)	<ul> <li>Nest tree – live (occasionally dead) large old treed within vegetation</li> </ul>	The development site does not conform with the required habitat constraints.
<i>Lasiopetalum joyceae</i> Lasiopetalum joyceae	No	Moderate	Habitat degraded	Grows in heath on sandstone on lateritic to shaley ridgetops, restricted to the Hornsby Plateau south of the Hawkesbury River.	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site and given the known habitat features of this species, it may never have provided suitable habitat.
<i>Lathamus discolor</i> Swift Parrot	Yes	Moderate	Habitat constraints (breeding)	• As per the important habitat map	The development site does not support an area identified as important habitat for this species nor is it within an area where breeding has been recorded as it breeds in Tasmania.
Leucopogon fletcheri subsp. fletcheri	No	High	Habitat constraints	<ul> <li>Slopes nearby rocky areas or within 50m of same</li> <li>Rocky areas, weathered laterite over sandstone on sandstone ridges, outcrops</li> </ul>	The development site does not conform with the required habitat constraints.
<i>Litoria aurea</i> Green and Golden Bell Frog	No	High	Habitat constraints	<ul> <li>Semi-permanent / ephemeral wet areas or within 1 km of same</li> <li>Swamps, within 1km of same</li> <li>Waterbodies, within 1km of same</li> </ul>	The development site does not conform with the required habitat constraints.
<i>Lophoictinia isura</i> Square-tailed Kite	No	Moderate	Habitat constraints (breeding)	Nest trees	The development site does not conform with the required habitat constraints.
Marsdenia viridiflora subsp. viridiflora – endangered population	No	Moderate	Geographic limitations	Endangered population defined in Final Determination as occurring in the Bankstown, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool and Penrith local government areas	Development site is not within relevant LGAs.
Meridolum corneovirens	No	High	Habitat degraded	Primarily inhabits Cumberland Plain	This is a candidate species because it

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
Cumberland Plain Land Snail				Woodland and requires the presence of at least native bark and leaf litter although it will shelter under rubbish.	has been associated with PCT 3262. There are no records of this species within 10km of the development site. No habitat for this species occurs on site.
<i>Miniopterus australis</i> Little Bent-winged Bat	Yes	Very High	Habitat constraints (breeding)	<ul> <li>Caves</li> <li>Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding</li> <li>Bionet records with descriptors "in cave" or "nest-roost", or with numbers of individuals &gt;500</li> <li>Records from the scientific literature</li> </ul>	The development site does not conform with the required habitat constraints.
<i>Miniopterus orianae oceanensis</i> Large Bent-winged Bat	Yes	Very High	Habitat constraints (breeding)	<ul> <li>Caves</li> <li>Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding</li> <li>Bionet records with descriptors "in cave" or "nest-roost", or with numbers of individuals &gt;500</li> </ul>	The development site does not conform with the required habitat constraints.
<i>Myotis macropus</i> Southern Myotis	No	High	Habitat constraints	<ul> <li>Waterbodies</li> <li>Waterbodies with permanent pools / stretches 3m or wider, including rivers, large creeks, billabongs, lagoons, estuaries, dams and other waterbodies, on or within 200m of the site</li> </ul>	The development site does not conform with the required habitat constraints.
<i>Ninox connivens</i> Barking Owl	No	High	Habitat constraints	<ul> <li>Hollow-bearing trees, a living or dead tree with a hollow &gt;20cm diameter that occurs &gt;4m above the ground</li> </ul>	The development site does not conform with the required habitat constraints.
Ninox strenua Powerful Owl	No	High	Habitat constraints	<ul> <li>Hollow-bearing trees, a living or dead tree with a hollow &gt;20cm diameter that occurs &gt;4m above the ground</li> </ul>	The development site does not conform with the required habitat constraints.

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
Pandion cristatus Eastern Osprey	No	Moderate	Habitat constraints (breeding)	• Presence of stick nests in living and dead trees (>15m) or artificial structures within 100m of a floodplain for nesting	The development site does not conform with the required habitat constraints.
Perameles nasuta - endangeredpopulationLong-nosedBandicootpopulation in inner westernSydney	No	High	Geographic limitation	Endangered population defined in Final Determination as occurring in the Marrickville, Canada Bay, Canterbury, Ashfield, and Leichhardt LGAs.	Development site is not within relevant LGAs.
<i>Petaurus norfolcensis</i> Squirrel Glider	No	High	Habitat degraded	Inhabits mature or old growth woodlands and forest west of the Great Dividing Range forest with heath understorey in coastal areas. Prefers mixed species stands with a shrub or Acacia midstorey. Relies on large old trees with abundant hollows for breeding and sheltering. These trees are also critical for movement and typically need to be closely-connected (i.e. no more than 50 m apart).	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site.
Phascolarctos cinereus Koala	No	High	Habitat constraints	• Presence of Koala use trees per Threatened Biodiversity Data Collection	The only tree on site known as a Koala use tree is tree 43 <i>Syncarpia</i> <i>glomulifera</i> . However, this tree is isolated from other available habitat by hostile development – houses, fenced yards, backyard pools, and roads. The development site is located within a large block identified as having a low likelihood (0.00-0.25) of containing Koalas. The nearest sighting occurred in Garigal NP at Forestville in 1940. No habitat for this species occurs on site.
Pomaderris prunifolia - endangered population	No	High	Geographic limitation	Endangered population defined in Final Determination as occurring in the Parramatta, Auburn, Strathfield and Bankstown Local Government Areas	Development site is not within relevant LGAs.
Pommerhelix duralensis Dural Land Snail	No	High	Habitat degraded	This species is a shale-influenced- habitat specialist, and occurs in low	This is a candidate species because it has been associated with PCT 3262.

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
				densities along the western and northwest fringes of the Cumberland IBRA subregion on shale-sandstone transitional landscapes. favours sheltering under rocks or inside curled- up bark. It does not burrow nor climb. Migration and dispersal is limited.	The closest record of this species dates from 2025 in shale-sandstone vegetation 7km away near Terrys Ck. No habitat for this species occurs on site.
<i>Pseudophryne australis</i> Red-crowned Toadlet	No	Moderate	Habitat degraded	This species inhabits periodically wet drainage lines below sandstone ridges that often have shale lenses or cappings. It shelters under rocks and amongst masses of dense vegetation or thick piles of leaf litter.	This is a candidate species because it has been associated with PCT 3262. However, no habitat for this species occurs on site.
<i>Pteropus poliocephalus</i> Grey-headed Flying-fox	No	High	Habitat constraints (breeding)	• Breeding camps	A long-term significant maternity camp of this species occurs in Stony Ck gully over 2 km to the north of the development site. No breeding habitat for this species occurs on site.
<i>Rhizanthella slateri</i> Eastern Australian Underground Orchid	Yes	High	Habitat degraded	This is a highly cryptic species recorded from a number of different vegetation types with a broad distribution from SE Qld to SE NSW. However, as it spends it entire life cycle underground, the absence of soil disturbance is likely to be critical to its survival. Also, it is considered to rely on a highly specialised pollinator.	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. Such profound and long-term changes undoubtedly wrought on the soil structure has removed any potential habitat that the site may have contained.
<i>Rhodamnia rubescens</i> Scrub Turpentine	Yes	Very High	Habitat degraded	This is species that was once common in moist forest and rainforest but is now Critically Endangered due to its susceptibility to Myrtle Rust, a threat that is classifies as "beyond control".	This is a candidate species because it has been associated with PCT 3262. However, the development site has been transformed from its natural state to one that supports substantial dwellings and formal landscaped (chiefly exotic) gardens for at least almost a century. No habitat for this species occurs on site.

Species	SAII potential	Sensitivity to gain	Reason for exclusion	Particulars of Habitat Constraints or Known Requirements	Justification
<i>Tyto novaehollandiae</i> Masked Owl	No	High	Habitat constraints	<ul> <li>Hollow-bearing trees, a living or dead tree with a hollow &gt;20cm diameter that occurs &gt;4m above the ground</li> </ul>	The development site does not conform with the required habitat constraints.

### 5 PRESCRIBED IMPACTS

Impacts for which there is not a formal offset procedure are "prescribed impacts" as per Part 6 Division 6.1 of the BCR 2017. Prescribed impacts are detailed in Chapter 6 of the BAM and each discussed below.

**Karst, caves, crevices, cliffs, rocks and other geological features of significance.** The site does not support any such features.

**Human-made structures and non-native vegetation.** All of the existing improvements on the development site will be removed along with the formal gardens that includes some exotic vegetation. The dwellings are well maintained and unsuitable for native fauna. The exotic trees to be removed may provide shelter and foraging resources for some common urban fauna species (particularly birds), and the mature *Phoenix canariensis* Canary Island Date Palms may provide foraging resources used by *Pteropus poliocephalus* Grey-headed Flying-fox.

**Habitat connectivity.** This is considered to be a minor consideration, as local connectivity is primarily provided by vegetation that occurs offsite. This is illustrated in Figure 4: vegetation along the head of the gully of Gordon Creek to the north east is loosely connected to Garigal National Park via patches of exotic and native vegetation in neighbouring properties. The major local connections are via riparian habitats leading down to the large reserves of Garigal National Park and Lane Cove National Park, away from the upper slope occupied by the development site

**Water bodies, water quality and hydrological processes.** The development area does not have recognised drainage lines or other features associated with natural water bodies. However, there is a piped stormwater drain that exits at the site's north eastern corner. This will be retained.

**Wind farm developments.** This is not a wind farm development, and so any such related indirect impacts are not relevant.

**Vehicle strikes.** The proposed development occurs in an already urbanised area with established traffic loads. Its proximity to public transport is an important feature of the proposal, and so additional vehicle movements are considered to be minimal. While the development may potentially increase the numbers of vehicle movements, there are no threatened species likely to use the site that would be adversely affected by traffic movements to and from the site.

### 6 AVOID AND MINIMISE IMPACTS

The *Biodiversity Conservation Act 2016* requires as a legislative imperative that impacts are to be avoided, then minimised by implementation of ameliorative measures, with offsetting only of unavoidable impacts. Prior to the commencement of this Act, this cascade of principles was only good practice and not enforceable.

Chapter 7 of the BAM details a number of ways in which a proposed development can demonstrate avoidance and minimisation of impacts. Relevant to this small areas assessment is the analysis of alternatives, including:

- Modes or technologies that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed mode or technology;
- Alternative locations that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed location; and
- Alternative sites within a property on which the proposal is located that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed site.

The site supports 0.02 hectares of PCT 3262, comprising two canopy trees on site and overhanging canopy from trees in adjacent properties, all within formal well-maintained gardens. The direct impact of the proposed development on this PCT is illustrated in Figure 10.

This site is constrained by its sloping nature requiring considerable cut and fill. The most valuable areas of biodiversity are the two remnant STIF trees, T50 and T6. Because T50 occurs close to the centre of the site, its retention impractical. If retained, it would be surrounded by tall buildings and be within in a shady well. This tree would not survive such severe changes in their environment and therefore its removal as part of a redevelopment proposal is considered unavoidable.

Nevertheless the other tree on site that is characteristic of STIF will be retained and the adjacent STIF trees will remain unaffected. The loss of 1 STIF tree will be mitigated by the implementation of the Landscape Plan with replacement tree planting and enrichment of both floristics and vegetation structure.

These measures and outcomes are considered adequate in satisfying the "avoid and minimise" rule.



*Figure 10:* The extent of PCT 3262 (VZ1, red and green polygons). The impact of the footprint is demonstrated in the colour of the VZ1 polygons (red = direct loss, 1 tree, 0.01 hectares; green = retained, 2 trees, 0.01 hectares).

### 7 ASSESSMENT OF IMPACTS

#### 7.1 Vegetation

Direct impacts comprise the removal of native vegetation:

• 0.01 hectare of PCT 3262, which is associated with a TEC, Sydney Turpentine Ironbark Forest.

This will result in the following reduction in VI score:

• VZ 1 (PCT 3262) current VI of 14.9 will be reduced to zero.

This score is too low to generate an offset obligation for ecosystem credits.

#### 7.2 Threatened Species

The site does not provide habitat for any candidate threatened species. Therefore, no offset obligation is generated for species.

#### 7.3 Indirect Impacts

The following indirect impacts have the potential to occur during or as a result of the proposed works:

- Presence of companion animals.
- Potential establishment of nuisance plant species from landscape areas into VMP area or nearby PCT 3262 Sydney Turpentine Ironbark Forest.
- Increased nutrients in runoff from development area into the retained on site PCT 3262 trees, potentially favouring weed species.
- Intensification of stormwater runoff.
- Erosion and mobilisation of soil with stormwater runoff during construction.
- Spread of weeds during civil works.
- Introduction of soil pathogens.

### 8 MITIGATION AND MANAGEMENT OF IMPACTS

A number of mitigation measures have been identified that will be implemented to minimise impacts of the proposal – see Table 4 for a complete list.

**Retain and restore native vegetation.** The opportunities for retention of locally native trees are few, given their scarcity and distribution across the development site. However, the opportunity for restoration and enrichment of native vegetation is afforded in the areas of deep soil to be the subject of the Landscape Plan. The planting palette will rely heavily on species characteristic of the CEEC STIF and PCT 3262. Importantly, a diverse understorey can be restored with all structural layers planted. This will deliver a significant qualitative improvement in the composition of PCT 3262 pre-development.

**Retain, replace, and enhance fauna habitat.** The replacement plantings and enrichment plantings will provide long term habitat and the boundary plantings will connect with offsite vegetation, thus enhancing local connectivity.

**Protect resident fauna.** The Project Ecologist will supervise the removal of all trees and potential fauna habitat. A thorough pre-clearing / pre-demolition inspection shall be undertaken prior to clearing. Fauna will be removed from harm's way, relocated into suitable on-site habitat, or placed into veterinarian care if injured.

**Erosion/sedimentation.** Standard sedimentation and erosion control measures will be installed, and checked regularly.

**Exotic weed species.** Due to its close horticultural management, few significant weeds occur on site. However, ongoing weed control must be implemented during all phases of the development. Any weeds removed are not to be stockpiled but instead disposed of at a suitable green waste facility. All loads are to be covered during transportation to minimise the risk of spread.

**Pathogens and disease.** Although no pathogens were in evidence, to avoid the introduction and/or spread of soil borne pathogens and disease, appropriate hygiene procedures as recommended will minimise the risk of any significant impacts as a result of the proposal.

Impact	Extent	Timing and Frequency	Mitigation
Direct impact to resident individuals of fauna species residing in habitat in the development footprint.	May occur anywhere across the works area.	During civil works. Once off.	Clearing to be conducted under ecological supervision. Adaptive management strategies to be employed such as pre-clearing surveys, relocation of individuals, care for injured wildlife, and euthanasia of feral species in
Potential impact to fauna species potentially occupying tree hollows and / or other specific habitat features.	No hollows observed, but there is the potential for hollow sections to occur that cannot be observed from the ground.	During civil works. Once off.	Clearing to be conducted under ecological supervision and using a professional bee rescue service in accordance with appropriate licences and approvals.
Potential adverse impacts on native wildlife due to the increased presence of humans, presence of uncontrolled companion animals (particularly Cats). Potential impacts include abandonment or avoidance of previously occupied or otherwise suitable habitat and retreat into other areas. For territorial species, this can further result in antagonistic behaviours with conspecifics.	Potentially relevant to all of the retained vegetation and vegetated landscaped areas on site that provide wildlife habitat.	Any time and infrequent. Ongoing.	Educational material is to be provided to all residents regarding the potential impacts to biodiversity of uncontrolled pets and human activity. Residents to be encouraged to keep Cats indoors or within an enclosure at all times and not allowed to roam.
Landscaping species becoming a nuisance in the nearby bushland.	The extent of potential incursions of propagules depend on the species present.	Any time and infrequent. Ongoing	The Landscape Plan to rely on planting species consistent with those that occur naturally in STIF or those that are not known to have weed potential. Regular sweeps for weeds and low impact controls to be implemented per the Landscape Plan and scheduled maintenance.

Table 4: Measures to avoid and minimise impacts.

Impact	Extent	Timing and Frequency	Mitigation		
Landscaped areas induce disruptions to foraging guilds of birds, encouraging a super abundance of aggressive Noisy Miners.	This effect may occur across the whole site.	Daily and ongoing. Ongoing	The Landscape Plan not to rely heavily on species (e.g. Grevilleas) known to favour Noisy Miners.		
Increased spill over of noise, activity, scent, and light into the nearby bushland areas.	The STIF patches are currently embedded in an urban matrix and so resident fauna are likely to be habituated to these disturbances. However, additional lights can interfere with foraging activities of fauna (particularly bats).	Daily and ongoing. Duration and timing of these disturbances related to seasons and weather. In perpetuity.	Install external lighting only where necessary for safety. Prohibit external uplights, lights directed into the retained trees, or any bright lighting that spills into nearby bushland.		
Introduction of soil-borne pathogens, particularly <i>Phytophthora cinnamomi</i> .	All native vegetation is susceptible to disease to some degree.	During works that involve exposure and movement of soil and vehicles. During landscaping, diseased plant material can be introduced.	Standard hygiene controls are to be observed as part of the civil management works plan. All plant material to be introduced to the site must be certified as disease-free.		
Increased soil nutrients from changes to runoff that may provide further opportunities for weed infestations.	Likely to have minor impacts given the shale soils and long history of urban use of the site.	Anytime and infrequent. More likely after heavy rainfall events. Ongoing.	Weeds arising from this potential impact to be controlled by actions detailed in the Landscape Plan and as part of ongoing maintenance.		
Possible impacts on water quality in remaining native habitats, with pollutants in runoff (herbicides / fertilisers) carried from landscaped areas to nearby habitats.	Likely to have minor impacts on the edges of vegetated landscape zone.	Anytime and infrequent. Ongoing.	A carefully chosen planting palette using native species will require fewer chemical inputs. Therefore, it is important that the planting list in the Landscape Plan is appropriate to serve to mitigate this potential impact at its source.		

## 9 THRESHOLDS

The potential for Serious and Irreversible Impacts (SAIIs) to arise from the proposed development works must be considered in terms of the following four SAII principles:

- Principle 1 Species or ecological community currently in a rapid rate of decline;
- Principle 2 Species or ecological communities with very small population size;
- Principle 3 Species or area of ecological community with very limited geographic distribution; and
- Principle 4 Species or ecological community that is unlikely to respond to management and is therefore irreplaceable.

BAM 2020 requires additional information to be provided to help guide the decision maker in their determination whether the proposal will result in a Serious and Irreversible Impact (SAII). Within the development site, the only entity that occurs that is classified as at risk of a SAII is Sydney Turpentine Ironbark Forest (STIF), being the TEC associated with PCT 3262.

The information required for this SAII assessment is detailed in Table 5.

#### Table 5: Additional impact assessment provisions for threatened ecological communities at risk of an SAII.

Ecological community:

Sydney Turpentine Ironbark Forest (STIF)

SAII information for STIF

Principle	Current SAII Status	SAII Fields	BAM 2020 summary data <u>prior</u> to any additional assessment impact
Principle 1	Yes	-	≥80% reduction in distribution over a 50-year period
Principle 2	Yes	-	Reduction in ecological function. Community with very high levels of either environmental degradation or disruption of biotic processes, and interactions have an increased risk of failure to sustain their characteristic native species assemblages. >95% cleared.
Principle 3	No	A00, E00, or Locations?	-
		A00 (km2)	1200
		E00 (km2)	4479
		Locations	unknown
		Total extent (ha)	1038
Principle 4	-	-	-

#### Applying Section 9.1.1 of the BAM for this scenario

Avoid and minimise (9.1.1(1))							
Refer to BDAR section '6: Avoid and minimise impacts' for actions taken to avoid and minimise impacts to STIF.							
Current Status (9.1.1(2))							
SAII Principle	SAII risk	BAM criteria	Current status of Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion				
Principle 1	At risk	(2.a) Reduction in geographic distribution	Clearing of STIF for agricultural development commenced in the inner west of Sydney soon after European settlement and accelerated following the expansion of Sydney's suburbs in the nineteenth and early twentieth centuries (Benson and Howell 1994). Although the pre European extent of STIF is uncertain, there is general agreement among sources that the reduction in extent exceeds 90%. Recent mapping indicates that up to 2940 ha may remain (rather than the 1038 ha quoted above), but it is agreed that less than 10% of its original extent remains, its condition is severely fragmented, and remnants are mostly small isolated pockets. Notwithstanding the potential increase in known area remaining, STIF still meets SAII				

			Principles 1 and 2 due to the significant reduction in geographic distribution and ecological function.
Principle 2	At risk	(2.b) Reduction in ecological function	STIF's remaining area is highly fragmented, highly restricted, and is poorly represented in the formal reserve network. Ongoing threats include continuing attrition through clearing for routine land management practices (e.g. fencing, APZs) due to the majority of remnants being located in close proximity to rural land or urban interfaces. Remnant are subject to ongoing weed invasion exacerbated by the proximity of remnants to areas of rural and urban development and the associated influx of both weed propagules from gardens and nutrients contained in stormwater runoff, dumped garden refuse, and animal droppings.
Principle 3	Not currently at risk	(2.c.i) EOO	EOO is currently estimated at 4479 km <sup>2</sup> or 447,900 (as per DPIE dataset).
		(2.c.ii) A00	A00 is currently estimated at 1200 km <sup>2</sup> or 120,000 (as per DPIE dataset).
		(2.c.iii) Threat-defined locations	Threat-defined locations currently unknown (as per DPIE dataset).
Principle 4	-	-	-
Projected Impacts (	(9.1.1(3,4,5))	-	
Impacts from the proposal	SAII risk	BAM criteria	Projected impact to Sydney Turpentine Ironbark Forest in the Sydney Basin Bioregion
		(3) Data deficient	The TEC is not data deficient.
		(4.a.i) In hectares	The geographic extent of the proposal is 0.01 hectares.
Impact on geographic extent and distribution (Principles 1 and 3)	At risk	(4.a.ii) As a percentage of geographic extent in NSW	The current geographic extent of STIF in NSW is estimated at 1038 hectares (BioNet Vegetation Classification for PCT 3262) or 2940 hectares (per figures quoted in the 2019 Final Determination). The proposal will therefore reduce the current geographic extent of STIF in NSW by between 0.001% and 0.0003%.
Impact on environmental degradation or	At risk	(4.b.i) Estimated size of remaining (but now isolated) areas	An area of 0.01 hectares of STIF will be impacted, which represents 0.000002% of its EOO and 0.000008% of its AOO.

biotic processes (Principle 2)		(4.b.ii) Connectivity and fragmentation of remaining areas	The proposal will remove almost all of the current extent of STIF on site. STIF is already highly fragmented in its local occurrence. These do not represent important areas of habitat and therefore the loss of the small isolated patches on site will not significantly increase fragmentation or isolation. Connectivity across the landscape will be virtually unaltered with no appreciable increase in distance between fragments in the immediate vicinity due to the very small size of the patches on site and the retention of STIF trees around the edge of the proposed development.
	(4.b.iii) Score		The TEC's current vegetation integrity score is 14.9 on the subject land. This low VI score is a result of the occurrence of STIF on site being restricted to a few canopy trees (some remnant) and some ground covers within the context of formal well-maintained gardens.
		(4.b.iii) Composition Condition Score	The Composition Condition Score is 3.9 for the subject land's single Vegetation Zone.
		(4.b.iii) Structure Condition Score	The Structure Condition Score is 23.9 for the subject land's single Vegetation Zone.
		(4.b.iii) Function Condition Score	The Function Condition Score is 35 for the subject land's single Vegetation Zone.

### 10 NO NET LOSS

The proposal will result in the following potential impacts:

• Direct impact to a maximum of 0.01 hectares of PCT 3262.

The proposal has been assessed in accordance with BAM 2020 and it is determined that offset obligations for ecosystem or species credits are not required to achieve no net loss as its VI score is too low and the habitats provided are too poor.

The BAM-C credit reports are provided at Appendix 1.

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**APPENDIX 1** 

**BAM-C REPORTS** 



Proposal	Details
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Assessment Id	Proposal Name	BAM data last updated *
00057681/BAAS17045/25/00057682	SSDA Nelson Road Lindfield	28/10/2024
Assessor Name	Report Created	BAM Data version *
Elizabeth Ashby	23/05/2025	Current classification (live - default) (80)
Assessor Number	BAM Case Status	Date Finalised
Assessor Number BAAS17045	Finalised	23/05/2025
Assessor Number BAAS17045 Assessment Revision	BAM Case Status Finalised	23/05/2025 Assessment Type

\* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.

#### Ecosystem credits for plant communities types (PCT), ecological communities & threatened species habitat

Zone	Vegetatio	TEC name	Current	Change in	Are	Sensitivity to	Species	BC Act Listing	EPBC Act	Biodiversit	Potenti	Ecosyste
	n		Vegetatio	Vegetatio	а	loss	sensitivity to	status	listing status	y risk	al SAII	m credits
	zone		n	n integrity	(ha)	(Justification)	gain class			weighting		
	name		integrity	(loss /								
			score	gain)								



## **BAM Credit Summary Report**

Sydne	ey Turpenti	ne Ironbark Forest										
1	3262_low	Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion	14.9	14.9	0.01	Population size	High Sensitivity to Gain	Critically Endangered Ecological Community	Not Listed	2.50	True	0
											Subtot al	0
											Total	0

## Species credits for threatened species

Vegetation zone	Habitat condition	Change in	Area	Sensitivity to	Sensitivity to	BC Act Listing	EPBC Act listing	Potential	Species
name	(Vegetation	habitat	(ha)/Count	loss	gain	status	status	SAII	credits
	Integrity)	condition	(no.	(Justification)	(Justification)				
			individuals)						



## **BAM Candidate Species Report**

#### **Proposal Details**

Assessment Id	Proposal Name	BAM data last updated *
00057681/BAAS17045/25/00057682	SSDA Nelson Road Lindfield	28/10/2024
Assessor Name	Report Created	BAM Data version *
Elizabeth Ashby	23/05/2025	Current classification (live - default) (80)
Assessor Number	Assessment Type	BAM Case Status
BAAS17045	Major Projects	Finalised
Assessment Revision		Date Finalised
1		23/05/2025

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## List of Species Requiring Survey

Name	Presence	Survey Months

#### **Threatened species Manually Added**

None added

#### **Threatened species assessed as not on site** Refer to BAR for detailed justification

Common name	Scientific name	Justification in the BAM-C
Barking Owl	Ninox connivens	Habitat constraints
Bush Stone-curlew	Burhinus grallarius	Habitat constraints
Cumberland Plain Land Snail	Meridolum corneovirens	Habitat degraded
Darwinia peduncularis	Darwinia peduncularis	Habitat constraints
Downy Wattle	Acacia pubescens	Habitat degraded
Dural Land Snail	Pommerhelix duralensis	Habitat degraded
Eastern Australian Underground Orchid	Rhizanthella slateri	Habitat degraded
Eastern Osprey	Pandion cristatus	Habitat constraints
Eastern Pygmy-possum	Cercartetus nanus	Habitat degraded

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# **BAM Candidate Species Report**

Epacris purpurascens var. purpurascens	Epacris purpurascens var. purpurascens	Habitat degraded
Gang-gang Cockatoo	Callocephalon fimbriatum	Habitat constraints
Gosford Wattle, Hurstville and Kogarah Local Government Areas	Acacia prominens - endangered population	Refer to BAR
Green and Golden Bell Frog	Litoria aurea	Habitat constraints
Grey-headed Flying-fox	Pteropus poliocephalus	Habitat constraints
Haloragodendron lucasii	Haloragodendron lucasii	Habitat constraints Geographic limitations
Hibbertia puberula	Hibbertia puberula	Habitat degraded
Julian's Hibbertia	Hibbertia spanantha	Habitat degraded
Koala	Phascolarctos cinereus	Habitat degraded Habitat constraints
Large Bent-winged Bat	Miniopterus orianae oceanensis	Habitat constraints
Large-eared Pied Bat	Chalinolobus dwyeri	Habitat constraints
Lasiopetalum joyceae	Lasiopetalum joyceae	Habitat degraded
Leucopogon fletcheri subsp. fletcheri	Leucopogon fletcheri subsp. fletcheri	Habitat constraints
Little Bent-winged Bat	Miniopterus australis	Habitat constraints
Little Eagle	Hieraaetus morphnoides	Habitat constraints
Long-nosed Bandicoot population in inner western Sydney	Perameles nasuta - endangered population	Refer to BAR
Marsdenia viridiflora R. Br. subsp. viridiflora population in the Bankstown, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool and Penrith local government areas	Marsdenia viridiflora subsp. viridiflora - endangered population	Refer to BAR
Masked Owl	Tyto novaehollandiae	Habitat constraints
Netted Bottle Brush	Callistemon linearifolius	Habitat degraded
P. prunifolia in the Parramatta, Auburn, Strathfield and Bankstown Local Government Areas	Pomaderris prunifolia - endangered population	Refer to BAR
Powerful Owl	Ninox strenua	Habitat constraints



# **BAM Candidate Species Report**

Red-crowned Toadlet	Pseudophryne australis	Habitat degraded
Regent Honeyeater	Anthochaera phrygia	Habitat constraints
Scrub Turpentine	Rhodamnia rubescens	Habitat degraded
South-eastern Glossy Black- Cockatoo	Calyptorhynchus lathami lathami	Habitat constraints
Southern Myotis	Myotis macropus	Habitat constraints
Square-tailed Kite	Lophoictinia isura	Habitat constraints
Squirrel Glider	Petaurus norfolcensis	Habitat degraded
Swift Parrot	Lathamus discolor	Habitat constraints
White-bellied Sea-Eagle	Haliaeetus leucogaster	Habitat constraints



## **BAM Predicted Species Report**

Proposal Details		
Assessment Id	Proposal Name	BAM data last updated *
00057681/BAAS17045/25/00057682	SSDA Nelson Road Lindfield	28/10/2024
Assessor Name	Report Created	BAM Data version *
Elizabeth Ashby	23/05/2025	Current classification (live - default) (80)
Assessor Number	Assessment Type	BAM Case Status
BAAS17045	Major Projects	Finalised
Assessment Revision		Date Finalised
1		23/05/2025

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# Threatened species reliably predicted to utilise the site. No surveys are required for these species. Ecosystem credits apply to these species.

Common Name	Scientific Name	Vegetation Types(s)
Brown Treecreeper (eastern subspecies)	Climacteris picumnus victoriae	3262-Sydney Turpentine Ironbark Forest
Diamond Firetail	Stagonopleura guttata	3262-Sydney Turpentine Ironbark Forest
Dusky Woodswallow	Artamus cyanopterus cyanopterus	3262-Sydney Turpentine Ironbark Forest
Eastern Coastal Free-tailed Bat	Micronomus norfolkensis	3262-Sydney Turpentine Ironbark Forest
Eastern Osprey	Pandion cristatus	3262-Sydney Turpentine Ironbark Forest
Flame Robin	Petroica phoenicea	3262-Sydney Turpentine Ironbark Forest
Gang-gang Cockatoo	Callocephalon fimbriatum	3262-Sydney Turpentine Ironbark Forest
Grey-headed Flying- fox	Pteropus poliocephalus	3262-Sydney Turpentine Ironbark Forest
Large Bent-winged Bat	Miniopterus orianae oceanensis	3262-Sydney Turpentine Ironbark Forest
Little Bent-winged Bat	Miniopterus australis	3262-Sydney Turpentine Ironbark Forest

Assessment Id

Proposal Name



## **BAM Predicted Species Report**

Little Eagle	Hieraaetus morphnoides	3262-Sydney Turpentine Ironbark Forest
Little Lorikeet	Glossopsitta pusilla	3262-Sydney Turpentine Ironbark Forest
Regent Honeyeater	Anthochaera phrygia	3262-Sydney Turpentine Ironbark Forest
South-eastern Hooded Robin	Melanodryas cucullata cucullata	3262-Sydney Turpentine Ironbark Forest
Speckled Warbler	Chthonicola sagittata	3262-Sydney Turpentine Ironbark Forest
Spotted-tailed Quoll	Dasyurus maculatus	3262-Sydney Turpentine Ironbark Forest
Square-tailed Kite	Lophoictinia isura	3262-Sydney Turpentine Ironbark Forest
Swift Parrot	Lathamus discolor	3262-Sydney Turpentine Ironbark Forest
Varied Sittella	Daphoenositta chrysoptera	3262-Sydney Turpentine Ironbark Forest
White-throated Needletail	Hirundapus caudacutus	3262-Sydney Turpentine Ironbark Forest
Yellow-bellied Sheathtail-bat	Saccolaimus flaviventris	3262-Sydney Turpentine Ironbark Forest

**Threatened species Manually Added** 

None added

#### Threatened species assessed as not within the vegetation zone(s) for the PCT(s)

Common Name	Scientific Name	Plant Community Type(s)
Black Bittern	Ixobrychus flavicollis	3262-Sydney Turpentine Ironbark Forest
Black-necked Stork	Ephippiorhynchus asiaticus	3262-Sydney Turpentine Ironbark Forest
Painted Honeyeater	Grantiella picta	3262-Sydney Turpentine Ironbark Forest
South-eastern Glossy Black- Cockatoo	Calyptorhynchus Iathami lathami	3262-Sydney Turpentine Ironbark Forest
White-bellied Sea- Eagle	Haliaeetus leucogaster	3262-Sydney Turpentine Ironbark Forest

#### **Threatened species assessed as not within the vegetation zone(s) for the PCT(s)** Refer to BAR for detailed justification

Common Name	Scientific Name	Justification in the BAM-C
Black Bittern	Ixobrychus flavicollis	Habitat constraints
Black-necked Stork	Ephippiorhynchus asiaticus	Habitat constraints

Assessment Id

Proposal Name



# **BAM Predicted Species Report**

Painted Honeyeater	Grantiella picta	Habitat constraints
South-eastern Glossy Black-Cockatoo	Calyptorhynchus lathami lathami	Habitat constraints
White-bellied Sea-Eagle	Haliaeetus leucogaster	Habitat constraints



## **BAM Vegetation Zones Report**

### **Proposal Details**

Assessment Id	Assessment name	BAM data last updated *
00057681/BAAS17045/25/00057682	SSDA Nelson Road Lindfield	28/10/2024
Assessor Name	Report Created	BAM Data version *
Elizabeth Ashby	23/05/2025	Current classification (live - default) (80)
Assessor Number	Assessment Type	BAM Case Status
BAAS17045	Major Projects	Finalised
Assessment Revision		Date Finalised
1		23/05/2025

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## Vegetation Zones

#	Name	PCT	Condition	Area	Minimum number of plots	Management zones
1	3262_low	3262-Sydney Turpentine Ironbark Forest	low	0.01	1	

Assessment Id

Proposal Name



## **BAM Biodiversity Credit Report (Like for like)**

#### **Proposal Details**

Assessment Id	Proposal Name	BAM data last updated *
00057681/BAAS17045/25/00057682	SSDA Nelson Road Lindfield	28/10/2024
Assessor Name	Assessor Number	BAM Data version *
Elizabeth Ashby	BAAS17045	Current classification (live - default) (80)
Proponent Names	Report Created	BAM Case Status
	23/05/2025	Finalised
Assessment Revision		Assessment Type
1		Major Projects
Date Finalised * 23/05/2025	* Disclaimer: BAM data last updated may indicate either complete or partial update of the BAM calculator database. BAM calculator database may not be completely aligned with Bionet.	

## Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID
Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion	Critically Endangered Ecological Community	3262-Sydney Turpentine Ironbark Forest
Species		
Nil		

Assessment Id

Proposal Name

00057681/BAAS17045/25/00057682

SSDA Nelson Road Lindfield

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## **BAM Biodiversity Credit Report (Like for like)**

#### Additional Information for Approval

PCT Outside Ibra Added
None added

#### PCTs With Customized Benchmarks

PCT

No Changes

#### Predicted Threatened Species Not On Site

Name
Calyptorhynchus lathami lathami / South-eastern Glossy Black-Cockatoo
Ephippiorhynchus asiaticus / Black-necked Stork
Grantiella picta / Painted Honeyeater
Ixobrychus flavicollis / Black Bittern
Haliaeetus leucogaster / White-bellied Sea-Eagle

#### Ecosystem Credit Summary (Number and class of biodiversity credits to be retired)

Name of Plant Community Type/ID	Name of threatened ecological community	Area of impact	HBT Cr	No HBT Cr	Total credits to be retired
3262-Sydney Turpentine Ironbark Forest	Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion	0.0	0	0	0

Assessment Id

Proposal Name

00057681/BAAS17045/25/00057682



## **BAM Biodiversity Credit Report (Like for like)**

3262-Sydney Turpentine Ironbark Forest	Like-for-like credit retirement options						
	Name of offset trading group	Trading group	Zone	HBT	Credits	IBRA region	
	Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion This includes PCT's: 3262	-	3262_low	No	C	Cumberland, Burragorang, Pittwater, Sydney Cataract, Wollemi and Yengo. or Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.	

#### Species Credit Summary

No Species Credit Data

**Credit Retirement Options** 

Like-for-like credit retirement options

Assessment Id

Proposal Name

00057681/BAAS17045/25/00057682

SSDA Nelson Road Lindfield

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## **BAM Biodiversity Credit Report (Variations)**

#### Proposal Details

Assessment Id	Proposal Name	BAM data last updated *			
00057681/BAAS17045/25/00057682 SSDA Nelson Road Lindfield		28/10/2024			
Assessor Name	Assessor Number	BAM Data version *			
Elizabeth Ashby	BAAS17045	Current classification (live - default) (80)			
Proponent Name(s)	Report Created				
	23/05/2025	BAM Case Status			
		Finalised			
Assessment Revision		Assessment Type			
1		Major Projects			
Date Finalised	* Disclaimer: BAM data last undated may indicate either com	plete or partial update of the BAM			
23/05/2025	calculator database. BAM calculator database may not be completely aligned with Bionet.				

## Potential Serious and Irreversible Impacts

Name of threatened ecological community	Listing status	Name of Plant Community Type/ID				
Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion	Critically Endangered Ecological Community	3262-Sydney Turpentine Ironbark Forest				
Species						
Nil						
Additional Information for Approval						

PCT Outside Ibra Added

None added



## **BAM Biodiversity Credit Report (Variations)**

PCTs With Customized Benchmarks

PCT
No Changes
Predicted Threatened Species Not On Site
Name
Calyptorhynchus lathami lathami / South-eastern Glossy Black-Cockatoo
Ephippiorhynchus asiaticus / Black-necked Stork
Grantiella picta / Painted Honeyeater
Ixobrychus flavicollis / Black Bittern
Haliaeetus leucogaster / White-bellied Sea-Eagle

#### Ecosystem Credit Summary (Number and class of biodiversity credits to be retired)

Name of Plant Community Type/ID		Name of threatened ecological community			Area of impact	HBT Cr	No HBT Cr	Total credits to be retired	
3262-Sydney Turpentine Ironbark Forest		Sydney Turpentine-Ironbark Forest in the Sydney Basin Bioregion			0.0	0	0	0.00	
3262-Sydney Turpentine	Like-for-like credit retirement options								
Ironbark Forest	Class	Trading group	Zone	HBT	Credits	IBRA region			
	Sydney Turpentine- Ironbark Forest in the Sydney Basin Bioregion This includes PCT's: 3262	-	3262_low	No	0	<ul> <li>Cumberland, Burragorang, Pittwater, Sydney Cataract, Wollemi and Yengo. or</li> <li>Any IBRA subregion that is within 100 kilometers of the outer edge of the impacted site.</li> </ul>			

**Species Credit Summary** 

Assessment Id



## **BAM Biodiversity Credit Report (Variations)**

No Species Credit Data

Credit Retirement Options Like-for-like options

Assessment Id