



Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

The Hayesbery
1-11 Hayes Road
Rosebery NSW 2018

Prepared by:

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1.0	6 May 2026	F Iolini, V Bertoldo	Trevor Meers	Rev A – SSDA Submission



Basis of Report

This report has been prepared by SLR Consulting Australia Pty Ltd (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Goodman Property Services (Aust) Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

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Executive Summary

This Biodiversity Development Assessment Report (BDAR) will accompany a State Significant Development Application (SSDA) for a proposed data centre at Eastern Creek, NSW. The following is a summary of the information required for decision-making by the consent authority:

- The proposed development involves demolition of existing buildings, structures and vegetation followed by construction of a data centre and associated Offsite Enabling Infrastructure (OEI).
- A BDAR is required under the Secretary's Environmental Assessment Requirements (SEARs).
- Measures to avoid and minimise impacts include designing the OEI to avoid areas of native vegetation and retaining planted native vegetation along the western boundary of the data centre.
- The subject land does not contain any native vegetation, but the wider study area contains 3.5 ha of Plant Community Type (PCT) 3320 Cumberland Shale Plains Woodland; this vegetation corresponds to:
 - *Cumberland Plain Woodland in the Sydney Basin Bioregion* - a Critically Endangered Ecological Community (CEEC) listed under the NSW *Biodiversity Conservation Act 2016* (BC Act); and
 - *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest* - a CEEC listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
- The study area also contains 0.05 ha of *PCT 3975 Southern Lower Floodplain Freshwater Wetland*, which, due to the artificial nature of the drainage area, does not represent *Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions* listed under the BC Act and is not listed under the EPBC Act.
- The areas of PCT 3320 within the study area represent known or potential habitat for the following threatened species: the Cumberland Plain Land Snail, *Deyeuxia appressa* and *Marsdenia viridiflora* subsp. *viridiflora*. However, no species credits are generated for these species due to the proposed avoidance and mitigation measures.
- The proposed development will involve impacts on biodiversity values, including:
 - Indirect impacts, being potential impacts on downstream or adjoining habitats; and
 - Prescribed impacts, including removal of human-made structures, non-native vegetation, as well as potential impacts to habitat connectivity and hydrology.
- Residual indirect and prescribed impacts will be minimised through mitigation measures including vegetation clearing protocols, construction management measures (e.g. protective fencing, light shielding), and rehabilitation.



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Acronyms, Abbreviations and Definitions

Short Form	Long Form
APZ (s)	Asset Protection Zone (s)
Assessment Area	In accordance with the BAM (DPIE, 2020a), the Assessment Area includes the subject land and the area of land within the 1500 m buffer zone surrounding the subject land (or 500 m buffer zone for linear proposals) that is determined as per Subsection 3.1.2 (of BAM 2020).
BAM	Biodiversity Assessment Method (DPIE, 2020a)
BAM-C	Biodiversity Assessment Method Calculator
BC Act	<i>Biodiversity Conservation Act 2016</i> (NSW)
BC Regulation	Biodiversity Conservation Regulation 2017 (NSW)
BDAR	Biodiversity Development Assessment Report
BOAMS	Biodiversity Offsets and Agreement Management System
BOM	Bureau of Meteorology
BOS	Biodiversity Offsets Scheme
CEEC (s)	Critically Endangered Ecological Community (s)
Commonwealth DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water - applicable from 1 July 2022
Construction Footprint	As required by the BAM (DPIE, 2020a), this is defined as the proportion of the development footprint, including temporary and ancillary construction facilities. The proposed development does not indicate any temporary features.
Council	Blacktown City Council
Data centre site	The property boundary of the proposed data centre, being Lot 553 in DP 71110447 (10 Roberts Road, Eastern Creek)
DBH	Diameter at Breast Height
Development Footprint	In accordance with the BAM (DPIE, 2020a), this refers to the area of land directly impacted by the proposed development, including access roads and zones designated for storing construction materials.
DPE	Department of Planning and Environment (NSW) applicable from 21 December 2021 to 1 January 2024
DPHI	Department of Planning, Housing and Infrastructure (NSW) applicable from 1 January 2024
DPIE	Department of Planning, Industry and Environment (NSW) applicable from 1 July 2019 to 21 December 2021
EC (s)	Ecological Community (s) listed under the EPBC Act
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
GIS	Geographic Information System



Short Form	Long Form
Ha	Hectare
Hollow-bearing tree (s)	In accordance with the BAM (Department of Planning, Industry and Environment, 2020a), this refers to 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 entrance width is at least 5cm; (c) the hollow appears to have depth (i.e. solid wood cannot be seen beyond the entrance); and (d) the hollow is at least 1m above the ground. Trees must be examined from all angles.
HTW (s)	High Threat Weed (s)
IBRA	Interim Biogeographic Regionalisation for Australia
km	Kilometers
LLS Act	<i>Local Land Services Act 2013</i> (NSW)
MNES	Matters of National Environmental Significance
NPW Act	<i>National Parks and Wildlife Act 1974</i> (NSW)
NSW	New South Wales
NSW DCCEEW	NSW Department of Climate Change, Energy, the Environment and Water - applicable from 1 January 2024
OEH	Office of Environment and Heritage (NSW) applicable from 4 April 2011 to 1 July 2019
OEI	Offsite Enabling Infrastructure
OEI site	The area of land that was investigated for the proposed OEI infrastructure, including Part Lot 22 DP 1246626 (200 Wallgrove Road, Eastern Creek), Part Lot 20 DP 1157491, Part Lot 21 DP 1246626 and sections of 'Old Wallgrove Road' and 'Lenore Drive' road reserves.
Operational Footprint	As required by the NSW BAM (DPIE, 2020a) this is defined as the proportion of the development footprint that will remain operational following construction. For this assessment, the operational footprint incorporates the whole of the data centre footprint at 10 Roberts Road, as well as the OEI infrastructure alignment.
PCT (s)	Plant Community Type (s)
PMST	Protected Matters Search Tool
Proponent	Goodman Property Services (Aust) Pty Ltd
Proposal/Proposed development	In accordance with the BAM (DPIE, 2020a), this refers to any of the following types of proposals: • Development that requires consent under Part 4 of the EP&A Act. • An activity that requires approval under Part 5, Division 5.1 (where the proponent has opted in to the Biodiversity Offsets Scheme) of the EP&A Act. • Development that requires approval under Part 5, Division 5.2 of the EP&A Act. • Clearing that requires approval under Part 5A of the LLS Act; or a permit under the Vegetation SEPP. • Biodiversity certification of land and related development in the case of an application for biodiversity certification under the BC Act. • A biodiversity stewardship site in the case of an application for a biodiversity stewardship agreement under the BC Act.



Short Form	Long Form
	In the case of this project the 'proposal' or 'proposed development' requires consent under Part 4 of the EP&A Act. The proposed development is for a new data centre located at 10 Roberts Road, Eastern Creek, NSW 2766, as described in Section 1.1.3 and shown in Figure 3.
SAII	Serious and Irreversible Impact
SAT	Spot Assessment Technique
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SSD	State Significant Development
SSDA	State Significant Development Application
Study Area	The study area for the BDAR includes all locations investigated during the project design phase, including the data centre site and OEI site. It incorporates adjoining portions of land within the property boundaries that retain high biodiversity values.
Subject Land	In accordance with the BAM (DPIE, 2020a), this refers to land subject to a development, activity, clearing, biodiversity certification or a biodiversity stewardship proposal. In the case of this BDAR the subject land is the development footprint.
SVTM	State Vegetation Type Map
TBDC	Threatened Biodiversity Data Collection
TEC (s)	Threatened Ecological Community (s)
Vegetation SEPP	<i>State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017</i> (NSW)



DECLARATIONS

i. Certification under clause 6.15 *Biodiversity Conservation Act 2016*

I certify that this report has been prepared based on the requirements of, and information provided under, the Biodiversity Assessment Method and clause 6.15 of the *Biodiversity Conservation Act 2016* (BC Act).

Signature: _____

Date: 6 May 2026

BAM Assessor Accreditation no: BAAS19042

This BDAR has been prepared to meet the requirements of BAM 2020. Appendix A provides an assessment of compliance with the minimum information requirements outlined in BAM Appendix K.

ii. Details and experience of author/s and contributors

Table DC1 Authors and contributors

Name	BAM Accreditation No.	Position/ Role	Tasks Performed	Relevant Qualifications
Trevor Meers	BAAS18119	Principal Botanist	Document review	Doctor of Philosophy (Restoration Ecology), University of Melbourne, 2007 Bachelor of Applied Science (Honours) in Natural Resource Management, Deakin University, 2002
Fiona Iolini	BAAS19042	SLR Associate Ecologist, Project Director	Report preparation, BAM-C data entry and analysis, BAM Plot surveys, targeted threatened flora surveys, targeted threatened fauna surveys	Bachelor of Environmental Science and Management, University of Newcastle, 2007 Certificate III in Conservation and Land Management, TAFE NSW, 2015
Vander Bertoldo	n/a	SLR Project Ecologist, Project Manager	Project management, BAM Plot surveys, targeted threatened flora surveys, targeted threatened fauna surveys, report writing	Master of Marine & Environmental Science and Management, Southern Cross University, 2022 Diploma in Business and Management, Lexis School, 2019 Bachelor of Biological Sciences (Honours), UNESC University, 2013
Daniel Santana	n/a	SLR Project Ecologist	Habitat constraint assessment (data centre site)	Postdoctoral Degree in Zoology, Federal University of Paraíba (Brazil), 2018



Name	BAM Accreditation No.	Position/ Role	Tasks Performed	Relevant Qualifications
				PhD in Biological Sciences (Zoology), Federal University of Paraíba (Brazil), 2016 Master in Ecology and Conservation, Federal University of Sergipe (Brazil), 2012 Bachelor of Biological Sciences (Honours), Federal University of Sergipe (Brazil), 2009
James Hugo	n/a	SLR Senior Project Consultant GIS	Figure preparation	Master of Environmental Management and Sustainability, University of Newcastle, 2020 Bachelor of Science (Honours), University of Newcastle, 2016

iii. Conflict of interest

I declare that I have considered the circumstances and there is no actual, perceived or potential conflict of interest. This declaration has been made in the interests of full disclosure to the decision-maker. Full disclosure has also been provided to the client.

Signature: *James Hugo*

Date: 6 May 2026

BAM Assessor Accreditation no: BAAS19042



STAGE 1: BIODIVERSITY ASSESSMENT

1.0 Introduction

1.1 Proposed Development

1.1.1 Development Overview

Goodman Property Services (Aust) Pty Ltd is proposing to develop a new data centre at 10 Roberts Road, Eastern Creek, NSW, with associated Offsite Enabling Infrastructure (OEI) at 220 Wallgrove Road (see Figure 1). The study area for the BDAR includes all locations investigated during the project design phase; however, following the application of avoidance and mitigation measures, a smaller subject land/development footprint was ultimately selected that avoids all biodiversity values. The study area is located within the existing M7 Business Hub and TransGrid Sydney West 330/132kV Substation.

This project is classified as State Significant Development (SSD) under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act), which triggers the Biodiversity Offset Scheme (BOS) under the *Biodiversity Conservation Act 2016* (BC Act). As a result, a Biodiversity Development Assessment Report (BDAR) is required unless waived by the Planning Agency Head and Environment Agency Head or their delegates.

A preliminary ecological site inspection of 10 Roberts Road was conducted on 23 September 2025. Updated project advice on 3 October 2025 identified additional potential impacts to mapped native vegetation for the OEI, requiring preparation of a standard BDAR (rather than a BDAR waiver) to accompany the SSD application.

This BDAR has been written in accordance with the BDAR template (DPE, 2022a) and the checklist of BDAR requirements are included in Appendix A.

1.1.2 Location

The study area is located at Eastern Creek within the Blacktown Local Government Area, approximately 35 km west of the Sydney CBD (see Figure 2).

The 'data centre site' comprises Lot 553 in DP 71110447 (10 Roberts Road, Eastern Creek). The OEI will be installed within Part Lot 22 DP 1246626 (200 Wallgrove Road, Eastern Creek), Part Lot 20 DP 1157491, Part Lot 21 DP 1246626 and sections of 'Old Wallgrove Road' and 'Lenore Drive' road reserves (the 'OEI site') – see Figure 1.

The proposed development footprint areas form the subject land within the broader study area. The broader study area was assessed to inform the avoidance and mitigation of potential impacts.

1.1.3 Proposed Development and the Subject Land

The proposed development includes demolition, bulk earthworks, construction and fit-out of two three-level data centre buildings, ancillary office and amenities, utilities (diesel storage, water tanks, substations), vehicle access for semi-trailers, landscaping, and installation of site services and drainage.

As the Sydney West bulk supply point in the adjacent substation is at full capacity, an extension is required. While that extension will be delivered under a separate development application, this proposal includes the necessary high-voltage pathway alignment (the OEI) to connect to the future substation extension.



All areas within the development footprint form part of the operational footprint, and no temporary construction footprint areas are associated with the proposal.

The data centre site currently contains a concrete hardstand, warehouse, and planted vegetation, all proposed for removal. The OEI footprint includes cleared areas such as roads, reserves, and driveways. It also intersects areas of native vegetation; however, these sections are proposed to be underbored. Therefore, these portions of proposed under boring do not constitute the subject land, and these areas have not been assessed for direct clearing impacts.

1.1.4 General Description of the Study Area

The study area covers 26 ha and is shown in Figure 1. It lies within the Sydney Basin IBRA region and Cumberland subregion. Topography is generally flat (~80 m) around the existing warehouse, transitioning to gently undulating land (65-75 m) across the OEI area. While no mapped watercourses occur on the site, drainage depressions and wet areas are present near the existing substation, including vegetation characteristic of periodic inundation (e.g. *Typha orientalis*).

The study area occurs within the Blacktown soil landscape (NSW DCCEEW, 2026d). Blacktown soils occur on gently rolling hills with local relief of 10-30 m and slopes generally greater than 5%, forming part of the wider Wianamatta shale landscape. The underlying geology includes Ashfield Shale, Bringelly Shale, and minor Minchinbury Sandstone, which weather into clay-rich soils. These soils become deeper and heavier downslope, often featuring slow-draining grey and mottled clays with hard setting surfaces and generally low to moderate fertility. Seasonal waterlogging, shrink-swell behaviour, and localised erosion are common characteristics of this soil landscape.

Current land uses are industrial for the data centre site which has historically been completely cleared and developed in its entirety by 2005. The OEI site has electricity infrastructure land uses and has been used for this purpose since at least the 1960's.

1.1.5 Other Documentation

The following key documents submitted with the proposed development and relevant to biodiversity have been considered in preparing this BDAR:

- Blackash Bushfire Consulting 2026, *Bushfire Hazard Assessment, Project Atlas Data Centre 10 Roberts Road, Eastern Creek*, Version: 1.0, 11 February 2026
- Civica 2026, *Arboricultural Impact Assessment Report, Goodman Project Atlas, 10 Roberts Road Eastern Creek NSW*, Version 1.0, 9 February 2026
- Grimshaw 2026a, *Project Atlas, SSDA Submission, Demolition Plan*, REV A, 26.02.2026
- Grimshaw 2026b, *Project Atlas, SSDA Submission, General Arrangement Plan - Ground Floor*, REV A, 26.02.2026

1.2 Project SEARS - Biodiversity Offsets Scheme Entry

Under s7.9(2) of the BC Act, the BOS automatically applies to all SSD applications unless specifically excluded under s7.9(2A). As no exclusion applies to the project, the proposal enters the BOS by default.

This BDAR has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued on 16 January 2026 for SSD-101067971 (Project Atlas Data



Centre). In particular, this report responds to the biodiversity-related SEARs summarised in Table 1, which require assessment of biodiversity impacts in accordance with the BC Act and the BAM, including assessment of the OEI and application of the avoid-minimise-offset framework. Additional SEARs considerations are assessed in Section 10.0.

Entry into the BOS is further triggered by the presence of biodiversity values within the study area and subject land. The NSW Biodiversity Values Map intersects parts of the OEI corridor, and results from the Biodiversity Values Map and Threshold Tool indicate that BAM assessment is required. Biodiversity values are mapped in Figure 4 and thresholds are presented in Appendix B. As the proposal is SSD the test of significance (Appendix C) is not an applicable entry into the BOS and does not apply.

As the proposal is SSD assessed under Part 4 of the EP&A Act, the Part 5 opt-in pathway does not apply.

Table 1: SEARs That Relate to Biodiversity

Body	Biodiversity Requirement
Department of Planning, Housing and Infrastructure	The EIS must address the following specific matters: - Biodiversity – including: - an assessment of the proposal's biodiversity impacts in accordance with the <i>Biodiversity Conservation Act 2016</i>, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted - an assessment of the off-site enabling infrastructure options and the measures adopted to avoid impacts on any Critically Endangered Ecological Communities.
Conservation Programs, Heritage and Regulation (CPHR) Group	Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2016</i> (BC Act), the Biodiversity Assessment Method 2020 (BAM), and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the BC Act (s.6.12), <i>Biodiversity Conservation Regulation 2017</i> (s.6.8), and the BAM, including an assessment of the impacts of the proposal (including and assessment of impacts prescribed by the regulations). The BDAR must document the application of the avoid, minimise and offset framework, including assessing all direct, indirect and prescribed impacts in accordance with the BAM. The BDAR must include details of the measures proposed to address the offset obligation as follows: - The total number and classes of biodiversity credits required to be retired for the development/project. - Any proposal to make a payment to the Biodiversity Conservation Fund. The BDAR case is to be submitted to the consent authority by adding 'Greater Sydney - Compliance & Regulation' within the Biodiversity Offsets and Agreement Management System (BOAMS). All digital files associated with the BDAR must be uploaded to BOAMS in accordance with the Biodiversity Assessment Method (BAM).



Body	Biodiversity Requirement
	The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method and the <i>Biodiversity Assessment Method Order 2017</i> , under s.6.10 of the BC Act.
Blacktown City Council	A BDAR is to be submitted in accordance with the <i>Biodiversity Conservation Act 2016</i> and the Biodiversity Assessment Method 2020. It is to be prepared by an accredited assessor. The BDAR is to cover all demolition, earthworks, access and construction impacts inclusive of the offsite enabling infrastructure proposal.

1.3 Excluded Impacts

There are no excluded impacts, such as Category 1-exempt land as defined under Part 5A of the *Local Land Services Act 2013* (LLS Act), applicable to this biodiversity assessment. The determination of excluded impacts (Appendix D) does not apply.

1.4 Matters of National Environmental Significance

Under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), actions likely to significantly impact a Matter of National Environmental Significance (MNES) require referral to the Commonwealth Department of Climate Change, Energy, the Environment and Water (Commonwealth DCCEEW). An assessment of EPBC Act matters and a Protected Matters Search Report are provided in Appendix E, and MNES are also addressed throughout relevant sections of the BDAR. The assessment concludes that the project will not have a significant impact on any matters listed under the EPBC Act and as such, no referral is to be lodged.

1.5 Information Sources

The following key information sources were used in preparing this BDAR, consistent with BAM 2020 and the requirements of BAM Subsection 1.4.1:

- BAM 2020 (DPIE, 2020a)
- NSW BioNet (NSW DCCEEW, 2026a) and Protected Matters Search Tool (Commonwealth DCCEEW, 2026a) for locality records of threatened species, populations, and ecological communities.
- The NSW BioNet Threatened Biodiversity Data Collection (TBDC - NSW DCCEEW, 2026a), Final Determinations (NSW Scientific Committee, 2026) and Species Profile and Threats Database (Commonwealth DCCEEW, 2026b) for information on threatened species, populations, and ecological communities.
- BioNet Vegetation Classification (NSW DCCEEW, 2026b) for Plant Community Type (PCT) mapping and descriptions.
- Additional relevant reports, spatial datasets, and regulatory documents referenced throughout the BDAR.

A full list of resources is provided in Section 13.0.



2.0 Methods

2.1 Site Context Methods

2.1.1 Landscape Features

Desktop review included analysis of the State Vegetation Type Map (SVTM), GIS datasets for wetlands, topography, watercourses, and planning overlays, as well as other spatial layers available via the SEED portal (NSW DCCEEW, 2026c) and recent aerial imagery (Nearmap, 2026).

Field reconnaissance was undertaken by SLR ecologists between September 2025 and April 2026 to confirm the extent and condition of landscape features. During surveys, cliff lines, rock outcrops, watercourses, wetlands, native vegetation, and cleared or disturbed areas were recorded where present.

Landscape features are described in Section 3.2, consistent with the BAM (DPIE, 2020a).

2.1.2 Native Vegetation Cover

Desktop assessment involved reviewing SVTM mapping (NSW DCCEEW, 2025a) and December 2025 Nearmap imagery (Nearmap, 2026) to identify the extent and condition of native vegetation cover. Imagery was interpreted to confirm vegetation boundaries and recent disturbance.

Field reconnaissance was undertaken to ground-truth vegetation extent and assess condition. Where access was not possible (i.e. across the assessment area), vegetation extent and condition were inferred from aerial imagery and SVTM mapping, based on visible canopy continuity and landscape context.

2.2 Native Vegetation, Threatened Ecological Communities and VI Methods

2.2.1 Existing Information

Existing information was reviewed to assist with identifying vegetation communities, BC Act-listed Threatened Ecological Communities (TECs), and EPBC Act-listed Ecological Communities (ECs) within the study area. This included examination of the SVTM (NSW DCCEEW, 2025a) and the BioNet Vegetation Classification Database (NSW DCCEEW, 2026b), which provided regional vegetation context, diagnostic characteristics and relevant TEC associations.

Additional spatial datasets, such as aerial imagery, soil landscape mapping, hydrological layers and previous ecological reporting for the broader area, were reviewed to understand landscape setting, disturbance history and factors influencing vegetation distribution.

For TEC/EC assessment, Final Determinations of the NSW Scientific Committee and EPBC Act listing and conservation advice documents were consulted to interpret diagnostic features and condition thresholds applicable to vegetation on the subject land.

Together, these information sources informed the design of field surveys and the classification of vegetation communities and TECs presented in Sections 4.2 and 4.3.



2.2.2 Mapping Native Vegetation Extent

The native vegetation extent was mapped in accordance with Section 4.2 of the BAM (DPIE, 2020a). Existing spatial information was reviewed prior to fieldwork, and a qualified ecologist verified vegetation boundaries onsite. Areas of native vegetation were assessed in accordance with the definition in Section 1.6 of the BC Act, which defines native vegetation as any tree, understorey plant, groundcover or wetland plant that is native to NSW (including regrowth and saplings). Boundaries of vegetation types and communities (where present) were assessed using aerial imagery (Nearmap, 2026) and survey data, which were subsequently mapped using GIS.

2.2.3 Plot-based Vegetation Surveys

A systematic plot-based floristic vegetation survey was undertaken in accordance with BAM Subsection 4.2.1. Two 20 m by 20 m plots were established and assessed for species composition, growth form, cover and abundance following BAM survey requirements. The plot location was selected using BAM-recommended stratified sampling to capture expected environmental variation and to target the most likely PCT while addressing gaps in existing mapping. All native and exotic species within the plot were recorded to the required taxonomic level. The BAM plot data is presented in Appendix F with the location of the BAM plots presented in Figure 6.

2.2.4 Vegetation Integrity Survey

Two VI plots were sampled using methods consistent with BAM Subsection 4.3.4. These included two standard 20 m by 50 m (1,000 m²) BAM plots containing nested 20 m by 20 m floristic subplots.

As there are no direct impacts on native vegetation a vegetation integrity survey is not required for this assessment and information regarding native vegetation mapping has been incorporated to inform avoidance and mitigation measures and assessment of indirect and prescribed impacts.

2.3 Threatened Flora Survey Methods

2.3.1 Review of Existing Information

The BAM calculator (App version 1.5 dated 24/10/2024; Data version 94, dated 9/04/2026) was used to identify threatened flora species relevant to the study area, and the TBDC was reviewed to determine habitat constraints and potential microhabitats (see Section 5.1) associated with these species within the mapped PCTs.

2.3.2 Habitat Constraints Assessment

Habitat constraints assessments were undertaken on 23 September 2025 (of the data centre site) and 23 October 2025 and 8 April 2026 (of the OEI site) by qualified ecologists as identified in Table DC1 to identify suitable habitat features, microhabitats, or potential occurrences of threatened flora.

Surveys involved systematic ground-based inspection of native vegetation, assessing vegetation structure and condition, dominant species, percent cover, disturbance indicators, recruitment, and proximity to water-dependent features. Any potential habitat for threatened flora was recorded with field notes and georeferenced photographs.



Field observations were used to inform the likelihood of target threatened flora species and their microhabitats (Section 5.1).

2.3.3 Field Surveys

Field survey methods for flora species targeted (as detailed in Section 5.3) were undertaken as follows:

- October target species: *Acacia pubescens*, *Dillwynia tenuifolia*, *Eucalyptus benthamii*, *Eucalyptus glaucina*, *Grevillea juniperina* subsp. *juniperina*, *Hibbertia puberula*, *Micromyrtus minutiflora*, *Persoonia nutans*, *Pimelea curviflora* var. *curviflora*, *Pimelea spicata*, *Pomaderris brunnea*, *Pterostylis saxicola*, *Pultenaea parviflora* and *Pultenaea pedunculata*.

Systematic parallel transects (DPIE, 2020b) were conducted across areas of native vegetation within the study area. Survey effort focused on species identified through the BAM-C candidate species list, habitat constraints noted during the preliminary site visit (23 September 2025), relevant PCT associations (particularly PCT 3320 Cumberland Shale Plains Woodland), and seasonal suitability.

Any threatened flora detected would have been recorded with GPS coordinates, photographs, and population extent; however, no EPBC Act or BC Act-listed threatened flora species were observed during the surveys.

Refer to Figure 6 for field survey locations.

2.4 Threatened Fauna Survey Methods

2.4.1 Review of Existing Information

The BAM calculator (App version 1.5 dated 24/10/2024; Data version 94, dated 9/04/2026) was used to identify threatened fauna species relevant to the study area, and the TBDC was reviewed to determine habitat constraints and potential microhabitats (see Section 5.1) associated with these species within the mapped PCTs.

2.4.2 Habitat Constraints Assessment

Various field surveys to assess habitat constraints and microhabitats (see Section 5.1) were undertaken in 2025/2026 by SLR personnel listed in Table DC1. Assessments included:

- Systematic habitat survey, documenting vegetation structure and condition, proximity to water and wetlands, hollow-bearing trees, fallen logs, rock outcrops, disturbance evidence, and availability of nectar, fruit, and foraging resources, as well as seedling recruitment, litter, bare ground, and weed cover.
- Opportunistic fauna observations, including direct sightings, calls, and indirect evidence such as scats, tracks, scratches, burrows, and diggings.
- Inspection of built structures, particularly within the data centre site for microbat roost potential (e.g. crevices, gaps, access points, thermal refuges). No suitable roost features were identified.

2.4.3 Field Surveys

Surveys undertaken in 2025/2026 by SLR personnel listed in Table DC1 to target threatened fauna species (see Section 5.3) include:



- Diurnal bird/habitat surveys (including for nests) on 23 October 2025 targeting Eastern Osprey and Grey-headed Flying-fox.
- Four nights of aural/visual frog surveys on 24 November 2025, 25 November 2025, 11 December 2025, 15 December 2025 targeting the Green and Golden Bell Frog.
- Snail shell survey on 23 October 2025 targeting Cumberland Plain Land Snail.
- One night of call playback on 23 October 2025 targeting the Koala.
- One night of spotlighting on 23 October 2025 targeting the Koala and Squirrel Glider.
- 106 nights of arboreal remote camera recording (53 nights, two cameras) from 23 October 2025 to 15 December 2025 targeting the Squirrel Glider.
- Koala Spot Assessment Technique (SAT) survey on 8 April 2026.

Targeted threatened fauna survey locations are shown in Figure 6.

2.5 Weather Conditions

General environmental conditions in the lead up to and during field surveys were shaped by a strong negative Indian Ocean Dipole and phases of a weak La Niña causing one of Australia's warmest and more hydrologically variable years on record, marked by very high temperatures, mixed rainfall patterns, declining water storage, and record-warm oceans (BOM, 2026a). Weather conditions during the surveys are summarised in Table 2.

With respect to weather conditions required for target threatened species:

- Koala SAT surveys must be conducted following three consecutive days without rain. Conditions leading up to the surveys on 8 April 2026 were mostly dry, with a small amount of rain recorded on the 5 April (7.2 mm) and 6 April (0.2 mm).



Table 2: Environmental Conditions During Threatened Species Surveys

Survey Undertaken (e.g. Method / Targeted Species)	Date	Time	Temp (Min. & Max.)	Wind (Light, Mod...)	Rainfall (mm)	Other Conditions Relevant to Species
General habitat assessment (data centre site only)	23 September 2025	9am+24hrs	5.5-19	Light to moderate	9.6	Cool morning: recent light rain and damp ground
Diurnal bird/habitat survey, BAM plots, call playback surveys, spotlighting and camera trap recording	23 October 2025	9am+24hrs	15.9-22.6	Moderate	0	Warm, dry conditions; with clear visibility.
Aural visual frog survey, camera trap recording	24 October 2025	9am+24hrs	14.2-25.6	Light to moderate	0	n/a
Aural visual frog survey, camera trap recording	25 October 2025	9am+24hrs	12.2-25.9	Light	0	n/a
Camera trap recording	26 October 2025	9am+24hrs	14.5-26.8	Light to strong	0	n/a
Camera trap recording	27 October 2025	9am+24hrs	13-25.4	Moderate	0.2	n/a
Camera trap recording	28 October 2025	9am+24hrs	11.2-15.2	Light	0	n/a
Camera trap recording	29 October 2025	9am+24hrs	10.8-17.5	Light	0.4	n/a
Camera trap recording	30 October 2025	9am+24hrs	13-24.3	Light	9.4	n/a
Camera trap recording	31 October 2025	9am+24hrs	13-26.8	Light	0	n/a
Camera trap recording	1 November 2025	9am+24hrs	14.3-22.1	Light to moderate	15	n/a
Camera trap recording	2 November 2025	9am+24hrs	13.7-26.1	Light	0	n/a
Camera trap recording	3 November 2025	9am+24hrs	16-34.2	Moderate to strong	0.2	n/a
Camera trap recording	4 November 2025	9am+24hrs	16.6-22.2	Moderate to strong	3.2	n/a
Camera trap recording	5 November 2025	9am+24hrs	11.2-26.4	Light to moderate	0	n/a
Camera trap recording	6 November 2025	9am+24hrs	9.2-27.1	Light to moderate	0	n/a



Survey Undertaken (e.g. Method / Targeted Species)	Date	Time	Temp (Min. & Max.)	Wind (Light, Mod...)	Rainfall (mm)	Other Conditions Relevant to Species
Camera trap recording	7 November 2025	9am+24hrs	14.6-30.9	Light	0	n/a
Camera trap recording	8 November 2025	9am+24hrs	17-35.2	Moderate	0	n/a
Camera trap recording	9 November 2025	9am+24hrs	14.5-23.6	Moderate	0	n/a
Camera trap recording	10 November 2025	9am+24hrs	11.3-26.3	Ligh to moderate	0	n/a
Camera trap recording	11 November 2025	9am+24hrs	10.7-28.2	Moderate to strong	0	n/a
Camera trap recording	12 November 2025	9am+24hrs	6.6-23.9	Moderate	0	n/a
Camera trap recording	13 November 2025	9am+24hrs	8.7-31	Light to moderate	0	n/a
Camera trap recording	14 November 2025	9am+24hrs	14.7-25.4	Moderate	0	n/a
Camera trap recording	15 November 2025	9am+24hrs	17.3-30.2	Light to moderate	0	n/a
Camera trap recording	16 November 2025	9am+24hrs	18-31.7	Light to moderate	3.2	n/a
Camera trap recording	17 November 2025	9am+24hrs	15.3-24.2	Moderate	0.2	n/a
Camera trap recording	18 November 2025	9am+24hrs	9.4-29.3	Light to moderate	0	n/a
Camera trap recording	19 November 2025	9am+24hrs	11.7-33.6	Light to moderate	0	n/a
Camera trap recording	20 November 2025	9am+24hrs	15.4-26.8	Moderate	0	n/a
Camera trap recording	21 November 2025	9am+24hrs	14.4-20.1	Light	0.2	n/a
Camera trap recording	22 November 2025	9am+24hrs	15-21.6	Light	1.2	n/a
Camera trap recording	23 November 2025	9am+24hrs	17.6-33.2	Light	14.4	n/a
Aural visual frog survey and camera trap recording	24 November 2025	9am+24hrs	15.1-26.8	Moderate	0	n/a
Aural visual frog survey and camera trap recording	25 November 2025	9am+24hrs	16.5-34.8	Light to moderate	0	n/a
Camera trap recording	26 November 2025	9am+24hrs	17.7-34.4	Strong	0	n/a



Survey Undertaken (e.g. Method / Targeted Species)	Date	Time	Temp (Min. & Max.)	Wind (Light, Mod...)	Rainfall (mm)	Other Conditions Relevant to Species
Camera trap recording	27 November 2025	9am+24hrs	14.6-31.4	Moderate to strong	6.4	n/a
Camera trap recording	28 November 2025	9am+24hrs	15.3-33.3	Light to moderate	0	n/a
Camera trap recording	29 November 2025	9am+24hrs	17.6-32	Strong	0	n/a
Camera trap recording	30 November 2025	9am+24hrs	14.5-28	Moderate to strong	0	n/a
Camera trap recording	1 December 2025	9am+24hrs	10.2-24.9	Moderate	0	n/a
Camera trap recording	2 December 2025	9am+24hrs	12.1-23.2	Moderate	0	n/a
Camera trap recording	3 December 2025	9am+24hrs	9.6-29.3	Moderate	0	n/a
Camera trap recording	4 December 2025	9am+24hrs	13.2-34.9	Moderate	0	n/a
Camera trap recording	5 December 2025	9am+24hrs	14-39	Light	0	n/a
Camera trap recording	6 December 2025	9am+24hrs	18.4-40.8	Light	0	n/a
Camera trap recording	7 December 2025	9am+24hrs	19.6-23.8	Moderate	0	n/a
Camera trap recording	8 December 2025	9am+24hrs	15.9-29.9	Light to moderate	0	n/a
Camera trap recording	9 December 2025	9am+24hrs	15.9-36.3	Moderate	0	n/a
Camera trap recording	10 December 2025	9am+24hrs	18.6-28.2	Light to moderate	0	n/a
Aural visual frog survey and camera trap recording	11 December 2025	9am+24hrs	17.4-23.4	Light to moderate	2.6	Summer conditions with warm evening
Camera trap recording	12 December 2025	9am+24hrs	17.3-23.4	Moderate	22.2	n/a
Camera trap recording	13 December 2025	9am+24hrs	14.9-30	Light	9.6	n/a
Camera trap recording	14 December 2025	9am+24hrs	17.8-34.2	Moderate	9.2	n/a
Aural visual frog survey and camera trap recording	15 December 2025	9am+24hrs	16.5-25.4	Light to moderate	0	Warm evening; good conditions for spotlighting.
Lead up to Koala SAT survey	5 April 2026	9am+24hrs	14.7-22	Light to moderate	7.2	n/a



Survey Undertaken (e.g. Method / Targeted Species)	Date	Time	Temp (Min. & Max.)	Wind (Light, Mod...)	Rainfall (mm)	Other Conditions Relevant to Species
Lead up to Koala SAT survey	6 April 2026	9am+24hrs	11.1-20.3	Light	0.2	n/a
Lead up to Koala SAT survey	7 April 2026	9am+24hrs	12.4-31.1	Light	0	n/a
Habitat survey, Koala SAT survey	8 April 2026	9am+24hrs	15.9-28	Light	0	n/a
# Weather data sourced from Bureau of Meteorology (BOM, 2026b). Temperature, wind and rainfall data sourced from Horsley Park Equestrian Centre AWS station (number 067119) located approximately 4 km southeast of the study area.						



2.6 Limitations

Given the duration and timing of the field surveys, it is likely that some of the species that may occur within the study area (i.e. permanently, seasonally or transiently) were not detected.

Targeted surveys for the Koala and the Cumberland Plain Land Snail were limited by weather conditions. Koala SAT surveys are typically required to be undertaken following three consecutive days of dry weather; however, a small amount of rain (7.4 mm) was recorded at the nearest weather station during the three days preceding the surveys. This minor rainfall is unlikely to have affected the scat survey outcomes. During the survey, intact macropod scats were observed; however, no other fauna scats were detected. This aligns with the nocturnal survey results, which similarly indicated an absence of nocturnal fauna records.

Nocturnal searches for live Cumberland Plain Land Snails require spotlighting under rainfall conditions, which could not be achieved during the survey periods. Nonetheless, snail shells were recorded; therefore, the Cumberland Plain Land Snail has been determined to be present within areas of suitable habitat.

Surveys for *Deyeuxia appressa* and *Marsdenia viridiflora* subsp. *viridiflora* also could not be conducted at the appropriate times. Follow-up surveys have not been conducted due to the proposed avoidance and mitigation measures for the project, which have resulted in no direct or indirect impacts on areas of native vegetation that provide potential habitat for these species based on the associated PCTs.

Site conditions (including the presence of threatened species of flora and fauna) may change after the date of this report. SLR does not accept responsibility arising from, or in connection with, any change to the site conditions. SLR is also not responsible for updating this report if the site conditions change.

The SLR ecology team operates under a Scientific Licence (Licence No. SL100176) issued under the *Biodiversity Conservation Act 2016*, which authorises field staff to trap, capture, harm, hold and release plants and animals protected under the BC Act and the *National Parks and Wildlife Act 1974*. Surveys were also undertaken in accordance with an Animal Research Authority issued by the Secretary of the NSW Animal Care and Ethics Committee (of DCCEE). Soft copies of data files relating to the SLR surveys have been filed on the SLR project server.



3.0 Site Context

3.1 Assessment Area

The assessment area is the area of land within the 1,500 m buffer zone surrounding the subject land and is presented in Figure 2. The assessment area covers a total of 1,017 ha.

3.2 Landscape Features

Landscape features are shown on Figure 1 and Figure 2, respectively. A discussion of relevant landscape features is provided below.

3.2.1 IBRA Bioregions and IBRA Subregions

The study area and subject land lie within the Sydney Basin IBRA Bioregion and wholly within the Cumberland IBRA Subregion. The Sydney Basin is a temperate region extending from north of Batemans Bay to Nelson Bay (NPWS, 2003). The Cumberland Subregion comprises low rolling hills and broad valleys underlain by Triassic shales and sandstones of the Wianamatta Group (NPWS, 2003). It supports vegetation on shale-derived soils, including Cumberland Plain Woodland and associated derived grasslands, much of which has been extensively cleared and is now listed as endangered.

3.2.2 Rivers, Streams, Estuaries and Wetlands

The study area and subject land lie within the Hawkesbury-Nepean Catchment. The assessment area contains two third-order streams, Ropes Creek and Reedy Creek, and surface flows from the site are likely to enter these systems or the local drainage network.

Ropes Creek is located approximately 1.3 km west of the western edge of the study area and flows northwest for about 10 km before entering South Creek, which then continues north to the Hawkesbury River. A small upper tributary of Ropes Creek extends toward the study area; at its closest point, this tributary is a vegetated first-order stream situated about 200 m from the site (see Photo 1).

Reedy Creek is located approximately 700 m east of the eastern edge of the study area and flows northeast for about 2 km before entering Eastern Creek. From there, it continues northward to South Creek and further north until finally meeting the Hawkesbury River at Windsor.

A minor ephemeral artificial drainage line is present in the OEI site (see Photo 2). It flows southeast and functions as an ephemeral stormwater drain that intermittently holds water and supports emergent vegetation (e.g. *Typha orientalis*). Downstream, this stormwater is likely to flow east toward Reedy Creek. However, no direct hydrological connectivity between this drainage feature and Eastern Creek was observed during field surveys, and the local drainage network appears to be highly modified and piped in sections.

Within the assessment area, two reservoirs have also been identified on the NSW wetland layer (NSW DCCEEW, 2010) (see Figure 2).



Photo 1: Upper Tributary of Ropes Creek 200 m West of the Study Area



Photo 2: Artificial Drain on the Study Area



3.2.3 Habitat Connectivity

The study area and subject land are situated within a highly fragmented urban-industrial landscape where habitat connectivity is substantially constrained by built infrastructure, major roads, and large areas of clearing. Some limited connectivity persists along roadside vegetation and powerline easements, particularly in the western portion of the site where remnant vegetation adjoins these linear features. Although narrow and disturbed, these corridors may function as stepping-stone habitat for mobile fauna such as birds, bats, and small ground-dwelling mammals.

An ephemeral artificial drainage line in the OEI site also provides a minor linear feature that may facilitate local movement for threatened aquatic species, including frogs.

At the broader 1,500 m scale, regional habitat corridors are mapped along Reedy Creek and Ropes Creek (see Figure 2). However, connectivity between these regional corridors and the study area is limited due to the surrounding urban development and landscape fragmentation.

3.2.4 Karst, Caves, Crevices, Cliffs, Rocks or Other Geological Features of Significance

No karst formations, caves, crevices, cliffs, rock outcrops, or other significant geological features were identified within the subject land, study area or the 1,500 m assessment area.

The site lies on Wianamatta Group shales, which support low-relief terrain and are not associated with karstic or cavernous geology. Field surveys confirmed the land is predominantly level to gently undulating, with areas of fill and previously disturbed ground.

No escarpments, exposed rock, or natural crevices were observed, and the site does not provide any geological features of biodiversity significance.

3.2.5 Areas Of Outstanding Biodiversity Value

There are no areas of outstanding biodiversity value, as defined under the BC Act, within the subject land, study area or the assessment area.

3.2.6 NSW (Mitchell) Landscape

Apart from a very small area of Sydney Basin Diatremes in the wider assessment area, the subject land, study area and assessment area occur entirely within the Cumberland Plain NSW (Mitchell) landscape (see Figure 2).

The Cumberland Plain landscape is characterised by low rolling hills and valleys in the rain shadow between the Blue Mountains and the coast. It is underlain by Triassic shales and sandstones and is partly influenced by volcanic intrusions and older river gravels (NSW DCCEEW, 2025b). Elevations range from approximately 30-120 m, with about 50 m of local relief. Soils vary from red and brown clays on volcanic rises to texture-contrast soils on hills and harsher yellow soils in valleys. Vegetation includes woodlands and open forests dominated by grey box, forest red gum, ironbark, stringybark, cabbage gum, and broad-leaved apple, with swamp oak and paperbark occurring in saline valley floors.

3.2.7 Additional Landscape Features Identified in SEARs

The SEARs for SSD-101067971, dated 16 January 2026 do not identify any additional landscape features requiring assessment in relation to the BDAR.



3.2.8 Soil Hazard Features

As the proposed development does not involve the clearing of vegetation (i.e. a development requiring approval from the Native Vegetation Panel under Part 5A of the LLS Act or under the Vegetation State Environmental Planning Policy or 'Vegetation SEPP' – part of SEPP Resilience and Hazards), soil hazard features are not relevant.

3.3 Native Vegetation Cover

Native vegetation cover within the assessment area was mapped using regional vegetation mapping (NSW DCCEE, 2025a) and a review of aerial imagery (Nearmap, 2026). Table 3 provides a summary of the extent of native vegetation cover in the assessment area, and Figure 2 illustrates its distribution.

Table 3: Native Vegetation Cover in The Assessment Area

Assessment area (ha)	1,017
Total area of native vegetation cover (ha)	89.23
Percentage of native vegetation cover (%)	9
Class (0-10, >10-30, >30-70 or >70%)	0-10



4.0 Native Vegetation, Threatened Ecological Community and Vegetation Integrity

4.1 Native Vegetation Extent

The study area covers 26 ha, with native vegetation occupying 5 ha (approximately 19%). The subject land covers 16 ha, with native vegetation occupying 0.75 ha (approximately 5%). The native vegetation extent includes planted native vegetation and is shown in Figure 7.

4.1.1 Changes to the Mapped Native Vegetation Extent

All areas of vegetation shown by the aerial imagery (Nearmap, 2026) used in figures for this BDAR currently match the mapped actual extent of native vegetation shown in Figure 7. The vegetation extent in the study area and subject land is mostly in line with the vegetation extent mapped by regional mapping (SVTM - NSW DCCEEW, 2025a) with minor changes shown in Figure 7. The mapping in this Figure is supported by field reconnaissance by SLR in October, November and December 2025, and April 2026.

4.1.2 Areas That Are Not Native Vegetation

Areas that are not native vegetation are indicated on Figure 7 and include:

- Cleared / developed land – sealed hardstand, buildings and infrastructure associated with the Sydney West Substation and Coles Myer Distribution Centre (Photo 3).
- Exotic vegetation – areas dominated by exotic grasses (e.g. *Pennisetum clandestinum*, *Chloris gayana*, *Eragrostis curvula*, *Juncus acutus*) with scattered exotic shrubs and trees, mainly *Acacia saligna*, were identified as exotic vegetation (Photo 4, Photo 5, Photo 6).

These areas have been excluded by regional mapping (SVTM - NSW DCCEEW, 2025a) and have been verified by SLR in 2025/2026.



Photo 3: Cleared and Developed Land within the Data Centre Site



Photo 4: Exotic Grasses and *Acacia saligna* between BESS and Substation



Photo 5: Exotic Vegetation Growing on Artificial Soil Mound



Photo 6: Exotic Sharp Rush and Grasses beside the BESS and Substation



4.1.3 Planted Native Vegetation

The study area and subject land include two distinct areas of planted native vegetation:

- Data centre site - This area contains planted native vegetation in narrow strips along the site boundaries. Based on historic aerial imagery review and site survey, the site appears to have been entirely cleared and subsequently replanted as part of landscaping works. This area is assessed further below and in Table 4.
- OEI site - This area contains planted native vegetation that appears to have been established for regeneration purposes and includes a mosaic of planted and remnant vegetation. This area is assessed as native vegetation, and a PCT is applied for this area in Section 4.2.

The decision-making key outlined in Section D.1 of Appendix D of the BAM provides a framework for determining whether the streamlined assessment module for planted native vegetation can be applied to a site.

Table 4 sets out the application of the decision-making key to the planted native vegetation within the data centre site. It was determined that subsection 5 applies, as the relevant vegetation has been planted in an urban setting for aesthetic purposes and does not provide important habitat for threatened species.

Table 4: Decision-making Key for Planted Native Vegetation

Assessment Criteria	Response/Action
1. Does the planted native vegetation occur within an area that contains a mosaic of planted and remnant native vegetation and which can be reasonably assigned to a PCT known to occur in the same IBRA subregion as the proposal?	ii. No..... Go to 2.
Is the planted native vegetation: a) planted for the purpose of environmental rehabilitation or restoration under an existing conservation obligation listed in BAM Section 11.9(2.), and b) the primary objective was to replace or regenerate a plant community type or a threatened plant species population or its habitat?	ii. No..... Go to 3.
Is the planted/translocated native vegetation individuals of a threatened species or other native species planted/translocated for the purpose of providing threatened species habitat under one of the following: c) a species recovery project d) Saving our Species project e) other types of government funded restoration project f) condition of consent for a development approval that required those species to be planted or translocated for the purpose of providing threatened species habitat g) legal obligation as part of a condition or ruling of court. This includes regulatory directed or ordered remedial plantings (e.g. Remediation Order for clearing without consent issued under the BC Act or the Native Vegetation Act) h) ecological rehabilitation to re-establish a PCT or TEC that was, or is carried out under a mine operations plan, or	ii. No..... Go to 4.



Assessment Criteria	Response/Action
i) <i>approved vegetation management plan (e.g. as required as part of a Controlled Activity Approval for works on waterfront land under the NSW Water Management Act 2000)?</i>	
<i>Was the planted native vegetation (including individuals of a threatened flora species) undertaken voluntarily for revegetation, environmental rehabilitation or restoration without a legal obligation to secure or provide for management of the native vegetation?</i>	ii. No..... Go to 5.
<i>Is the native vegetation (including individuals of a threatened flora species) planted for functional, aesthetic, horticultural or plantation forestry purposes? This includes examples such as: windbreaks in agricultural landscapes, roadside plantings (including street trees, median strips, roadside batters), landscaping in parks, gardens and sport fields/complexes, macadamia plantations or farms?</i>	i. Yes The vegetation has been planted for landscape purposes (aesthetics). Go to D.2 Assessment of planted native vegetation for threatened species habitat (the use of Chapters 4 and 5 of the BAM are not required to be applied).
<i>Is the planted native vegetation a species listed as a widely cultivated native species on a list approved by the Secretary of the Department (or an officer authorised by the Secretary)?</i>	n/a
<i>D.2 Assessment of planted Native Vegetation for Threatened Species Habitat. The assessor must assess the suitability of the planted native vegetation for use by threatened species and record any incidental sightings or evidence (e.g. scats, stick nests) of threatened species credit species (flora and fauna) using, inhabiting or being part of the planted native vegetation. If there is evidence that threatened species are using the planted native vegetation as habitat, the assessor must apply Section 8.4 of the BAM to mitigate and manage impacts on these species. Species credits are not required to offset the proposed impacts. The steps taken to assess threatened species habitat and all reasonable measures proposed to be taken to mitigate or minimise impacts must be set out in the BDAR or BCAR.</i>	The Planted Native Vegetation has the potential to provide foraging habitat for mobile threatened species but is not considered to be important to any threatened species long-term survival. Section 5.0 includes an assessment of threatened species habitats and Section 6.0 and 7.0 contain further details on avoidance, impacts and minimisation measures to be implemented.

4.2 Plant Community Types

4.2.1 Overview

Vegetation within the study area has been assessed as aligning with the BioNet Vegetation Classification PCTs identified within Table 5 and their extent is shown in Figure 8. Detailed descriptions of each PCT are provided in the following subsections. There are no PCTs within the subject land/development footprint.



Table 5: PCTs Identified within the Study Area

PCT ID	PCT Name	Area within Study Area (ha)
3320	Cumberland Shale Plains Woodland	3.5
3975	Southern Lower Floodplain Freshwater Wetland	0.05
Total area		3.55

4.2.2 PCT 3320 - Cumberland Shale Plains Woodland

4.2.2.1 PCT Overview

Table 6: PCT 3320 - Cumberland Shale Plains Woodland

PCT ID	3320
PCT Name	Cumberland Shale Plains Woodland
Vegetation Formation	Grassy Woodland
Vegetation Class	Coastal Valley Grassy Woodlands
Per cent Cleared Value (%)	93
Extent within Study Area (ha)	3.5 (0 ha within subject land)

The BioNet Vegetation Classification (NSW DCCEEW, 2026b) describes PCT 3320 as a tall sclerophyll open forest or woodland found on the Wianamatta shale plains of western Sydney. The canopy commonly features *Eucalyptus tereticornis* and *E. moluccana*, with ironbark's (*E. crebra*, *E. fibrosa*) sometimes prominent. The sparse shrub layer typically includes *Bursaria spinosa* and several Acacia species - particularly *A. parramattensis*, *A. decurrens* and *A. falcata* - which help distinguish it from PCT 3319.

The ground layer is usually a mix of grasses, forbs and small ferns, with *Microlaena stipoides* almost always present and species such as *Themeda triandra* and *Glycine tabacina* very frequent (NSW DCCEEW, 2026b).

This PCT is the most widespread on the Cumberland Plain, generally occurring below 120 m asl but reaching 200 m asl in parts of the Nepean-Campbelltown area. It often persists as small, disturbed patches in rural and urban landscapes. West of the Nepean River it is replaced by PCT 3319, and on shallower shale margins it grades into PCT 3321, where ironbark's and *Eucalyptus punctata* are more common (NSW DCCEEW, 2026b).

Within the study area, three discrete patches of PCT 3320 were identified through field surveys conducted in accordance with the BAM 2020. These surveys included two 20 m by 50 m BAM plots (BAM_01 and BAM_02), which captured representative floristic and structural attributes.

Field data and photographic evidence confirmed the presence of key canopy species such as *Eucalyptus moluccana* and *Eucalyptus tereticornis*, with midstorey layers dominated by *Bursaria spinosa* and *Acacia parramattensis*, and groundcover composed of native grasses including *Themeda triandra* and *Microlaena stipoides*, interspersed with exotic species such as *Eragrotis curvula*.

Despite moderate weed invasion and evidence of past disturbance (e.g. clearing, urban edge effects), the overall floristic composition, structural indicators, and vegetation integrity



scores from BAM plot surveys support the classification of these patches as PCT 3320 in accordance with the BioNet Vegetation Classification Database and BAM benchmarks.

4.2.2.2 Condition States

Within the study area, PCT 3320 occurs in two distinct condition states:

- Moderate (Photo 7): areas that contain a mature regrowth canopy with a native shrub layer and ground layer that are variously disturbed by past clearing and weeds.
- Low (Photo 8):
 - an area of native vegetation that was planted for regeneration/compensation purposes containing limited native shrubs and ground layer plants; or
 - isolated trees and small copses in exotic grassland, with limited native shrub and ground layer presence. Weeds are often dominant and include high threat weed species such as *Eragrostis curvula* and *Bidens pilosa*.

These condition states are reflected in the assigned BAM vegetation zones and were used to inform the assessment of vegetation integrity and biodiversity values under the BAM.

Photo 7: PCT 3320 Cumberland Shale Plains Woodland - Moderate



Photo 8: PCT 3320 Cumberland Shale Plains Woodland - Low



4.2.2.3 Justification of PCT Selection

The classification of vegetation within the study area as PCT 3320 is supported by a combination of field survey data and alignment with the BioNet Vegetation Classification Database (NSW DCCEEW, 2026c). This PCT is the only community mapped within the study area by regional vegetation mapping (SVTM - NSW DCCEEW, 2025a) and is a dominant PCT within the broader assessment area.

The PCT 3320 vegetation on the study area is characterised by a canopy dominated by *Eucalyptus tereticornis* and *Eucalyptus moluccana*, with lower abundances of *Eucalyptus fibrosa*, *Eucalyptus crebra* and *Corymbia maculata* (the latter species present only as planted occurrences). Small trees and shrubs, where present, are predominately *Acacia parramattensis*, *Acacia decurrens*, *Bursaria spinosa* and *Dillwynia sieberi*. Dominant groundcovers include grasses such as *Microlaena stipoides* and *Lomandra filiformis*, along with forbs including *Dichondra repens*, *Goodenia hederacea* and *Brunoniella australis*.

An analysis of survey data alignment with PCTs in the BioNet Vegetation Classification is provided in Table 7.

Table 7: PCT 3320 Selection

Search Term	Selection
IBRA Bioregion	Sydney Basin
IBRA Subregion	Cumberland
Vegetation Formation	Grassy Woodlands
Vegetation Class	Coastal Valley Grassy Woodlands



Search Term	Selection
Tree Growth Form Group Species	<i>E. moluccana</i> , <i>E. tereticornis</i>
Short list	Returned a list of four PCTs: 3318, 3319, 3320, 3321
Selection	PCT 3318 was discarded due to: vegetation structure being tall to very tall sclerophyll woodland to open forest; species composition, lacking species such as <i>Breynia oblongifolia</i>, <i>Rubus parvifolius</i>, <i>Clerodendrum tomentosum</i>, and <i>Cayratia clematidea</i>; landscape position, as it occurs on protected aspects (such as lower slopes) of steeper shale hills and rises; and its distribution in the southern half of the Cumberland Plan. PCT 3319 was discarded due to: vegetation structure, being tall to very tall sclerophyll woodland to open forest; landscape position, occurring on rises and upper slopes of shale hills in warm, moist climates at 90-300 m elevation; and its distribution in the southwest of the Cumberland Plan, south of Cecil Hills. PCT 3321 was discarded due to: vegetation structure, being tall sclerophyll open forest; species composition, with the study area lacking sandstone-associated species such as <i>Persoonia linearis</i>; and landscape position and distribution occurring at the fringes of the Cumberland Plain where sandstone and shale soils intergrade. PCT 3320 is the closest aligning PCT because: the vegetation structure is tall sclerophyll open forest or woodland; landscape position is on undulating shale plains on clay soils; the species composition includes <i>Bursaria spinosa</i> and <i>Acacia parramattensis</i>; and the distribution is within the Cumberland Plain.

4.2.2.4 Alignment with TECs

PCT 3320 is associated with the following two TECs within the BioNet Vegetation Classification:

- *Cumberland Plain Woodland in the Sydney Basin Bioregion* (critically endangered)
- *Shale Gravel Transition Forest in the Sydney Basin Bioregion* (endangered)

Table 8 and Table 9 summarise and assess key information from the Final Determinations for these communities (NSW Scientific Committee 2009; 2011). The assessment demonstrates that the PCT 3320 vegetation within the study area meets the criteria for Cumberland Plain Woodland (CPW).

Although the Final Determination does not clearly state that planted native vegetation qualifies as CPW, for the purposes of this assessment the planted native vegetation within the OEI site is included in the TEC as it can be considered to meet all criteria, contains understorey species that appear to have naturally seeded in the area (such as *Acacia* spp. and *Pimelea curviflora* var. *gracilis*) and is contiguous with the areas of adjacent CPW.

None of the vegetation meets the criteria for Shale Grave Transition Forest, as the vegetation fails to meet requirements at Step 2 (soils) and Step 7 (transition vegetation), and the species assemblage does not align sufficiently (Step 4 and 5).



Table 8: Assessment of Vegetation within the Study Area against the BC Act Final Determination for Cumberland Plain Woodland

Step	Condition	Assessment	Notes/Definitions
1	Is the vegetation located on clay soils of the Wianamatta Group or (less commonly) alluvial substrates on the Cumberland Plain?	"Yes", the study area is on the Cumberland Plain, and the vegetation is on clay soils.	Occurs in the Sydney Basin Bioregion on clay soils derived from Wianamatta geology; typically, in rain shadow areas receiving 700-900 mm rainfall.
2	Is the site within typical landform and elevation ranges: flat to undulating or hilly terrain up to ~350 m?	"Yes", site elevation is 65-80 m.	Can also occur on locally steep sites and at slightly higher elevations.
3	Does the site contain characteristic canopy species, including <i>Eucalyptus moluccana</i> , <i>E. tereticornis</i> , commonly with <i>E. crebra</i> , <i>E. eugenioides</i> , <i>Corymbia maculata</i> , <i>Angophora</i> spp., or other less frequent eucalypts?	"Yes", the site contains <i>E. moluccana</i> , <i>E. tereticornis</i> , <i>E. crebra</i> , <i>E. fibrosa</i> and <i>C. maculata</i> , which are all characteristic species listed in the determination.	Woodland or forest structure; canopy may be open or dense depending on disturbance. Regrowth stands dominated by saplings still qualify.
4	Does the ground layer include a near-continuous cover of native grasses and forbs, including species characteristic of the community (e.g., <i>Themeda australis</i> , <i>Microlaena stipoides</i> , <i>Aristida ramosa</i> , forbs such as <i>Asperula conferta</i> , <i>Wahlenbergia gracilis</i>)?	"Yes", a native ground layer is present, although sparse in planted areas and affected by weeds particularly invasive grasses. There are no areas of derived native grassland outside of the canopy areas.	Where canopy or shrubs have been removed, derived native grasslands remain part of the community if characteristic ground layer species are present. The ground layer may be sparse where tree/shrub density is high.
5	Is the shrub layer present (even sparsely) and comprised of species typical of the community, e.g. <i>Bursaria spinosa</i> , <i>Dodonaea viscosa</i> , <i>Daviesia ulicifolia</i> , <i>Dillwynia sieberi</i> , <i>Indigofera australis</i> ?	"Yes", an abundant shrub layer is present at 3220_Moderate. A very sparse layer is present at 3320_Low, including <i>A. parramattensis</i> .	Shrubs may be locally dense, patchy, or absent depending on grazing/fire history or clearing. Absence does not exclude CPW.
6	Does the vegetation contain a representative subset of the full species assemblage provided in the Determination? (Full list spans canopy, shrubs, grasses, forbs, graminoids.)	"Yes", the species present are representative in both 3320_Moderate and 3320_Low., although diversity is limited at 3320_Low.	Species presence fluctuates due to drought, fire, grazing, seasonality; soil seedbanks and dormant structures may hold species not currently visible. Disturbed sites may still qualify.
7	Is the vegetation structurally consistent with woodland, forest, shrub-reduced regrowth, or derived native	"Yes", vegetation is open forest to woodland in both mature regrowth and planted	The determination explicitly states CPW includes woodland, forest, regrowth stands dominated by



Step	Condition	Assessment	Notes/Definitions
	grassland forms of the community?	form. The structure is poor quality at the planted areas.	saplings, and derived native grasslands where characteristic non-woody species persist. Degraded vegetation still qualifies if key species or seedbank/structural indicators remain.
8	If the site is highly modified, does it still contain native grasses, forbs, or characteristic species listed in the Determination, even if tree or shrub strata are absent?	n/a – there are no areas of native grassland	Some degraded remnants retain high diversity of native species and remain valid examples of CPW; absence of the woody layer does not exclude the community if diagnostic ground layer species remain.

Table 9: Assessment of Vegetation within the Study Area against the BC Act Final Determination for Shale Gravel Transition Forest

Step	Condition	Assessment	Notes/Definitions
1	Is the vegetation located within the Sydney Basin Bioregion?	"Yes", the vegetation within the study area is located within the Sydney Basin Bioregion.	Community is restricted to the Sydney Basin Bioregion.
2	Are there shallow Tertiary alluvial deposits over shale soils and/or iron-indurated gravel present?	"No", the soil landscape is Blacktown, which consists of Wianamatta shale parent material and is typically absent of alluvial materials or extensive gravelly sediments. Soils observed during the site survey exhibited a high clay content with minimal gravel.	Key environmental setting for Shale Gravel Transition Forest.
3	Does the vegetation exhibit an open-forest structure dominated by <i>Eucalyptus fibrosa</i> , <i>E. moluccana</i> or <i>E. tereticornis</i> ?	"Yes", vegetation contains all three species.	Typical canopy composition and structure.
4	Is there a sparse shrub layer (e.g. <i>Bursaria spinosa</i> , <i>Daviesia ulicifolia</i> , <i>Lissanthe strigosa</i>)?	"No", while <i>B. spinosa</i> is present, the remaining species are not. There is a sparse shrub layer, but the assemblage does not match.	Shrub layer may be reduced in disturbed sites
5	Are diagnostic ground-layer species present (e.g., <i>Microlaena stipoides</i> , <i>Themeda australis</i> , <i>Cheilanthes sieberi</i> , <i>Lomandra multiflora</i>)?	"Partially", some species are present, such as <i>M. stipoides</i> , <i>T. australis</i> , <i>Opercularia diphylla</i> , <i>Aristida vagans</i> and <i>Wahlenbergia gracilis</i> , but the	Ground species vary with disturbance and time since fire.



Step	Condition	Assessment	Notes/Definitions
		following are absent: <i>C. sieberi</i> , <i>L. multiflora</i> and <i>P. purpurascens</i> .	
6	Does the site show evidence that soil and seedbank remain intact, allowing assisted natural regeneration?	"Yes", the soil seedbank is intact, and there is minor evidence of understorey regeneration at the planted area.	Disturbed remnants still form part of the TEC if regeneration potential exists.
7	Are typical landscape associations present (e.g. transition to Cumberland Plain Woodland or Castlereagh vegetation types)?	"No" SVTM (NSW DCCEEW, 2025a) vegetation mapping indicates the assessment area contains only PCT 3320, with riparian communities confined to watercourses; therefore, transitional vegetation communities are considered unlikely to occur.	Community commonly grades into neighbouring ecosystems.

4.2.2.5 Alignment with EPBC Act listed ECs

PCT 3320 is associated with an EC listed under the EPBC Act within the BioNet Vegetation Classification, being *Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest* (Cumberland Plain Shale Woodland). This community is listed as critically endangered. Appendix E assesses the relevant thresholds and condition criteria required for this vegetation to qualify under the EPBC Act listing, and it has been determined that the vegetation meets these criteria.

4.2.3 PCT 3975 - Southern Lower Floodplain Freshwater Wetland

4.2.3.1 PCT Overview

Table 10: PCT 3975 - Southern Lower Floodplain Freshwater Wetland

PCT ID	3975
PCT Name	Southern Lower Floodplain Freshwater Wetland
Vegetation Formation	Freshwater Wetlands
Vegetation Class	Coastal Freshwater Lagoons
Per cent Cleared Value (%)	93%
Extent within Study Area (ha)	0.05 (0 ha in subject land)

The BioNet Vegetation Classification (NSW DCCEEW, 2026b) describes PCT 3975 as a tall to very tall freshwater sedgeland or forbland occurring in depressions on Quaternary alluvial deposits - mainly backswamps with organic-rich mud, silt or clay - on the coastal floodplains of the Central Coast and South Coast. It typically occurs below 10 m asl, though it can extend to higher elevations in long-inundated lagoons such as Ellalong Lagoon near Cessnock (~100 m asl).

This PCT describes non-woody freshwater wetlands on Quaternary alluvium south of the Hunter Valley that are not dominated by *Phragmites australis* or *Eleocharis equisetina*. Within this environmental range it supports diverse sedgeland and aquatic forb



assemblages. *Persicaria decipiens* is very frequent, usually with sparse cover. *Cynodon dactylon*, *Paspalum distichum* and *Typha orientalis* are common with sparse cover, while *Eleocharis sphacelata* is occasional but often forms mid-dense patches where present (NSW DCCEEW, 2026b).

A variety of other sedges, rushes and aquatic forbs may occur, including *Persicaria hydropiper*, *Cychnogeton microtuberosum*, *Ludwigia peploides* subsp. *montevidensis*, *Alternanthera denticulata* and *Juncus* spp. Some sites are dominated by individual sedge species such as *Machaerina articulata*, *Fimbristylis velata*, *Eleocharis acuta* or *Bolboschoenus* spp., reflecting the PCT's floristic variability. A very sparse emergent tree layer may be present, including *Casuarina glauca*, melaleucas, or rarely overhanging eucalypts (NSW DCCEEW, 2026b).

This community often occurs in disturbed settings and may include derived states, so assessment of new plots should prioritise environmental context. PCT 4055 also occurs on alluvium on the far South Coast but is found at higher elevations (100-200 m asl) and includes species such as *Isachne globosa*, *Lachnagrostis filiformis*, *Carex gaudichaudiana* and *Cyperus sphaeroideus*, which are absent or rare in PCT 3975.

Within the study area this PCT is highly degraded and occurs because of modified drainage. The community forms a narrow band along an artificial drainage ditch between substation and newly constructed BESS. It is characterised by dense *Typha orientalis* growing in the channel, with occasion other wet tolerant species such as *Epilobium hirtigerum*, *Ficinia nodosa*, *Carex appressa*, *Juncus usitatus* and *Alternanthera denticulata*.

Photo 9: PCT 3975 - Southern Lower Floodplain Freshwater Wetland



4.2.3.2 Condition States

Within the study area, PCT 3975 occurs as one low condition state. Species richness is poor and there is a high occurrence of weeds.

4.2.3.3 Justification of PCT Selection

The classification of vegetation within the study area as PCT 3975 is supported by a combination of field survey observation, geomorphological context, and alignment with the BioNet Vegetation Classification Database (NSW DCCEEW, 2026c). The evidence-based justification for PCT selection is provided in Table 11. This PCT is the only wetland community mapped within the wider assessment area by regional vegetation mapping (SVTM - NSW DCCEEW, 2025a).

Table 11: PCT 3975 Selection

Search Term	Selection
IBRA Bioregion	Sydney Basin
IBRA Subregion	Cumberland
Vegetation Formation	Freshwater Wetland
Vegetation Class	Coastal Freshwater Lagoons
Elevation (m)	65-70
Short list	Returned one PCT 3975
Selection	PCT 3975 is the best fit PCT based on site species composition including <i>Typha orientalis</i> and <i>Juncus</i> sp. This community can also occur at up to 100m elevation.

4.2.3.4 Alignment with TECs

PCT 3975 is associated with the following TEC in the BioNet Vegetation Classification: *Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions* (Freshwater Wetland TEC).

Table 12 summarises and assesses key information from the Final Determination for this community (NSW Scientific Committee, 2004). None of this vegetation meets the criteria for Freshwater Wetland TEC, as the PCT 3975 vegetation fails to meet requirements at Step 3 (soils and geomorphic setting) and Step 8 (artificial wetland).

Table 12: Assessment of Vegetation within the Study Area against the BC Act Final Determination for Freshwater Wetland

Step	Condition	Assessment	Notes/Definitions
1	Is the site located within the NSW North Coast, Sydney Basin, or South East Corner bioregions, and on a coastal floodplain?	"Yes", the site is in the Sydney Basin bioregion	Floodplains are level landforms subject to active erosion and aggradation by flood flows with ~100-year recurrence.
2	Is the site periodically or semi-permanently inundated by freshwater (minor saline influence possible)?	"Yes" the vegetation is periodically inundated by freshwater	Inundation determines species composition, standing water often present.



Step	Condition	Assessment	Notes/Definitions
			Applies to natural wetlands, not artificial ones.
3	Is the substrate composed of silts, muds, or humic loams in depressions, flats, drainage lines, backswamps, lagoons, or lakes?	"No" based on the Blacktown soil landscape description (NSW DCCEEW, 2026d) the soil is not likely to be an alluvial or wetland-environment soil type	Typical geomorphic settings include coastal depressions, floodplain hollows and backswamps.
4	Is the elevation generally below 20 m?	"No" the elevation is 65-70 m	Most occurrences lie below 20 m, though elevation is not exclusive if floristic and hydrological signatures remain.
5	Is vegetation dominated by herbaceous wetland species, including sedges, grasses, forbs, floating/emergent/submerged aquatic plants?	"Yes" the vegetation is dominated by the wetland grass <i>Typha orientalis</i>	Woody species are generally scarce or absent in this community. Structure varies between sedgeland, reedland, herbfield, amphibious plant turf, and aquatic vegetation.
6	Are characteristic wetland species present, drawn from key groups such as <i>Eleocharis</i> spp., <i>Baumea</i> spp., <i>Carex appressa</i> , <i>Paspalum distichum</i> , <i>Leersia exandra</i> , <i>Myriophyllum</i> spp., <i>Hydrilla verticillata</i> , <i>Nymphaea gigantea</i> , <i>Nymphoides</i> spp.?	"Yes" <i>Typha orientalis</i> , and <i>Carex appressa</i> are present	The determination lists extensive species; only a subset is required. Presence varies with hydrology, rainfall, disturbance, season, and sampling.
7	Does the vegetation reflect hydrological zonation typical of freshwater wetlands (e.g. amphibious plants in shallow margins, emergent sedges in mid-depth areas, floating/submerged species in deeper zones)?	"Yes" the vegetation is subject to regular inundation, with <i>Typha orientalis</i> present in the channel and occasional lower-growing sedges and rushes along the edges or in shallow depressions	Depth, duration and frequency of inundation drive vegetation structure. Wetlands may shift between sedgeland and aquatic phases.
8	Is the wetland naturally occurring rather than artificial and on previously dry land	"No" the wetland is not natural – it has been artificially created for drainage purposes therefore does not qualify as the TEC	Artificial wetlands created on previously dry land specifically for purposes such as stormwater management are not regarded as part of this community
9	Are woody species absent or scarce (i.e. the site is a treeless or near-treeless freshwater wetland rather	"Yes" woody species are absent or scarce	Absence of woody species is a key diagnostic difference from adjoining swamp forest or swamp oak communities.



Step	Condition	Assessment	Notes/Definitions
	than swamp oak, swamp sclerophyll, or river-flat forest)?		
10	If degraded or modified, does the site still support characteristic wetland plant species, hydrological regimes, or soil/water indicators consistent with freshwater floodplain wetlands?	"Yes" although degraded the vegetation meets these criteria	Degraded wetlands still qualify: species may be absent above ground but present in seedbanks; hydrological regime and geomorphic setting remain diagnostic. Wetlands may have exotic species or altered structure but remain within the community definition if core wetland characteristics persist.

4.2.3.5 Alignment with EPBC Act listed ECs

PCT 3975 does not have an associated EC listed under the EPBC Act.

4.3 Threatened Ecological Communities

TECs and where relevant, ECs identified within the study area are listed in Table 13 and their extent is shown on Figure 9. There are no TECs/ECs within the subject land/development footprint.

Table 13: TECs within the Study Area

TEC Name	Profile ID (From TBDC)	BC Act Status	EPBC Act Status	Associated Vegetation Zones Within the Study Area	Area in (Ha)
Cumberland Plain Woodland in the Sydney Basin Bioregion	10191	CE	CE	3320_Low, 3320_Moderate	3.5
CE=critically endangered					

4.4 Vegetation Zones

Vegetation zones were identified and delineated for the study area in accordance with BAM 2020 Section 4.3.1. It is noted that none of the vegetation zones occur within the subject land or development footprint; however, the vegetation zone assessment was undertaken to inform avoidance and mitigation, as well as potential indirect impacts.

Vegetation was grouped into broad condition states based on field survey data, structural layer integrity, disturbance to growth form groups, and weed cover. Two condition states, moderate and low, were mapped across the study area.

The moderate condition class includes areas of PCT 3320 with all structural layers present and low to moderate weed cover.

The low condition class of PCT 3320 includes:

- A patch of PCT 3320 with planted canopy trees, minimal native understorey, and high weed cover.



- Small, isolated PCT 3320 canopy patches with minimal native understorey and high weed cover.
- Small isolated PCT 3320 shrub and grass patches with no tree layer.

A separate low condition class applies to PCT 3975 for artificial drainage areas colonised by *Typha orientalis* with high weed cover.

Patch size was determined following BAM 2020 Section 4.3.2, using the definition of a “patch” as native vegetation occurring within ≤100 m of the next patch (≤30 m for non woody ecosystems). Patch size was calculated for each vegetation zone and assigned to one of the following BAM classes:

- <5 ha
- 5-<25 ha
- 25-<100 ha
- ≥100 ha

All vegetation zones on the study area fall within the 5-<25 ha patch size class.

Refer to Table 14 and Figure 10 for mapped vegetation zones and patch size assessment.

Table 14: Vegetation Zones and Patch Sizes for the Study Area

PCT ID Number and Name	Vegetation Zone ID	Defining Features	Area (ha)	Patch Size Class (<5, 5-<25, 25-<100, ≥100)	No. VI Plots Needed	No. VI Plots Done	No. VI Plots Used	Plot ID
3320 Cumberland Shale Plains Woodland	3320_Low	Planted, high weeds	1	5 - <25 ha	1	1	1	BAM_01
	3320_Moderate	All layers present, low-mod weeds	2.5	5 - <25 ha	2	1	1	BAM_02
3975 Southern Lower Floodplain Freshwater Wetland	3975_Low	Artificial, high weeds	0.05	5 - <25 ha	1	0	0	n/a

4.5 Vegetation Integrity (Vegetation Condition)

4.5.1 Vegetation Integrity Survey Plots

Two VI plots were undertaken for this assessment:

- One plot was completed in Vegetation Zone 3320_Moderate, where two plots were required under BAM Table 3.
- One plot was completed in Vegetation Zone 3320_Low, where one plot was required.



Although only one of the two required plots was completed for the 3320_Moderate zone, and no plots were completed for 3975_Low, no impacts on native vegetation are proposed as part of the project. Therefore, the reduced number of plots does not affect the assessment outcomes, as no loss or modification of native vegetation is predicted.

4.5.2 Scores

The vegetation integrity scores for each vegetation zone are presented in Table 15.

Table 15: Vegetation Integrity Scores

Vegetation Zone ID	Composition Condition Score	Structure Condition Score	Function Condition Score (where relevant)	Vegetation Integrity Score	Hollow Bearing Trees Present?
3320_Low	50.4	23.2	54.7	40	No
3320_Moderate	76.1	51	54.7	59.6	No

4.5.3 Use of Benchmark Data

Vegetation benchmarks used in the calculation of the VI score were not amended and were adopted as per the BAM Calculator at the time of the assessment.



5.0 Habitat Suitability for Threatened Species

5.1 Identification of Threatened Species for Assessment

5.1.1 Ecosystem Credit Species

Table 16 lists all ecosystem credit species predicted to occur on or use the study area (based on the PCTs present), and:

- Identifies the source of information (e.g. automatically populated in BAM-C, recently listed under the BC Act, and not yet added to the TBDC, previous ecological reports).
- Justifies species added to the BAM-C auto-populated list or removed from the list in accordance with BAM Subsections 5.2.1 and 5.2.2.
- Includes the sensitivity to gain class (from the TBDC).

None of the predicted ecosystem credit species occur within the subject land or development footprint. For the broader study area:

- None of the predicted ecosystem credit species have been excluded based on the TBDC habitat constraints, nor have they been assessed differently across vegetation zones.
- No additional species (such as those that may have been recorded on site) have been added to the assessment.



Table 16: Predicted Ecosystem Credit Species

Common Name	Scientific Name	Listing Status		Dual Credit Species (Yes/ No)	Sources (BAM-C/ TBDC/ survey)	Species Retained? (Yes/ No/ Partial)	Reason For Exclusion (Geographic limitations/ Habitat constraint/ Vagrant)	Vegetation Zone ID	Sensitivity To Gain Class (Very High/ High/ Moderate/ Low)
		BC Act	EPBC Act						
Australasian Bittern	<i>Botaurus poiciloptilus</i>	E	E	No	BAM-C	Yes	n/a	3975_Low	Moderate
Australian Painted Snipe	<i>Rostratula australis</i>	E	E	No	BAM-C	Yes	n/a	3975_Low	Moderate
Black Falcon	<i>Falco subniger</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	Moderate
Black-necked Stork	<i>Ephippiorhynchus asiaticus</i>	E	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	Moderate
Black-tailed Godwit	<i>Limosa limosa</i>	E	E	Yes	BAM-C	Yes	n/a	3975_Low	High
Blue-billed Duck	<i>Oxyura australis</i>	V	V	No	BAM-C	Yes	n/a	3975_Low	Moderate
Brown Treecreeper	<i>Climacteris picumnus victoriae</i>	V	V	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod	High
Comb-crested Jacana	<i>Irediparra gallinacea</i>	V	-	No	BAM-C	Yes	n/a	3975_Low	Moderate
Curlew Sandpiper	<i>Calidris ferruginea</i>	CE	CE	Yes	BAM-C	Yes	n/a	3975_Low	High
Diamond Firetail	<i>Stagonopleura guttata</i>	V	V	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod	Moderate
Dusky Woodswallow	<i>Artamus cyanopterus cyanopterus</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	Moderate



Common Name	Scientific Name	Listing Status		Dual Credit Species (Yes/ No)	Sources (BAM-C/ TBDC/ survey)	Species Retained? (Yes/ No/ Partial)	Reason For Exclusion (Geographic limitations/ Habitat constraint/ Vagrant)	Vegetation Zone ID	Sensitivity To Gain Class (Very High/ High/ Moderate/ Low)
		BC Act	EPBC Act						
Eastern Coastal Free-tailed Bat	<i>Micronomus norfolkensis</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
Eastern Osprey	<i>Pandion cristatus</i>	V	-	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	Moderate
Flame Robin	<i>Petroica phoenicea</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod	Moderate
Freckled Duck	<i>Stictonetta naevosa</i>	V	-	No	BAM-C	Yes	n/a	3975_Low	Moderate
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	V	V	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
Large Bent-winged Bat	<i>Miniopterus orianae oceanensis</i>	V	-	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
Latham's Snipe	<i>Gallinago hardwickii</i>	V	V	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
Little Bent-winged Bat	<i>Miniopterus australis</i>	V	-	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
Little Lorikeet	<i>Parvipsitta pusilla</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod	High



Common Name	Scientific Name	Listing Status		Dual Credit Species (Yes/ No)	Sources (BAM-C/ TBDC/ survey)	Species Retained? (Yes/ No/ Partial)	Reason For Exclusion (Geographic limitations/ Habitat constraint/ Vagrant)	Vegetation Zone ID	Sensitivity To Gain Class (Very High/ High/ Moderate/ Low)
		BC Act	EPBC Act						
Regent Honeyeater	<i>Anthochaera phrygia</i>	CE	CE	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod	High
Scarlet Robin	<i>Petroica boodang</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	Moderate
South-eastern Glossy Black-Cockatoo	<i>Calyptorhynchus lathami lathami</i>	V	V	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod	High
Speckled Warbler	<i>Pyrrholaemus sagittatus</i>	V	-	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod	High
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	V	E	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
Swift Parrot	<i>Lathamus discolor</i>	E	CE	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	Moderate
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	V	-	Yes	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
White-fronted Chat	<i>Hirundapus caudacutus</i>	V	V	No	BAM-C	Yes	n/a	3975_Low	Low
White-throated Needletail	<i>Hirundapus caudacutus</i>	V	V	No	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low	High
V=vulnerable, E=endangered, CE=critically endangered, "-" = not listed									



5.1.2 Species Credit Species

The species credit species assessment applies to the broader study area, and no species credit species habitats occur within the subject land or proposed development footprint.

For the study area:

- All species credit species (e.g. those automatically populated in BAM-C, recently listed under the BC Act or not yet added to the TBDC) and their relevant sources of information (e.g. previous ecological reports, environmental impact statements, scientific literature, Council reports, site survey etc.) are listed in this section.
- No additional species (such as those that may have been recorded on site) have been added to the assessment.

Predicted flora species credit species are listed in Table 17 and fauna species are listed in Table 18.

The following species were excluded based on geographic limitations:

- *Pomaderris prunifolia* - endangered population. This endangered population is limited to the following LGAs: Parramatta, Auburn, Strathfield, and Bankstown. The study area is within the Blacktown LGA and therefore does not meet this geographic requirement.
- *Wahlenbergia multicaulis* - endangered population. This endangered population is limited to the following LGAs: Auburn, Bankstown, Baulkham Hills, Canterbury, Hornsby, Parramatta, and Strathfield. The study area is within the Blacktown LGA and therefore does not meet this geographic requirement.

Most species of flora are only associated with PCT 3320 and based on site conditions targeted surveys are required in areas of 3320_Low and 3320_Moderate for these species.

The following are the only three flora species associated with PCT 3975 and were excluded based on “habitat degraded”:

- Dwarf Kerrawang (*Commersonia prostrata*)
- *Maundia triglochinoides*
- Tall Knotweed (*Persicaria elatior*)

These species are not associated with PCT 3320 and do not require assessment within these areas.

The following species of fauna have been excluded from further assessment because the TBDC habitat constraints are not met within the study area:

- The TBDC habitat constraints for the Regent Honeyeater (*Anthochaera phrygia*), Curlew Sandpiper (*Calidris ferruginea*), Swift Parrot (*Lathamus discolor*), and Black-tailed Godwit (*Limosa limosa*) are “Other: As per Important Habitat Map”. The Important Habitat Map does not identify any areas of habitat for these species (or others) within the study area.
- The TBDC habitat constraints for South-eastern Glossy Black-Cockatoo (*Calyptorhynchus lathami lathami*) are “Hollow bearing trees; Living or dead Eucalypt tree species with hollows at least 8 m above the ground, tree stems with a DBH of ≥30 cm, hollow diameter ≥15 cm, the hollow bearing stem/branch is angled skywards vertically, or near vertically to approximately 45 degrees from vertical”. The



vegetation within the subject land is regrowth or planted and there are no such hollow-bearing trees within the study area.

- The TBDC habitat constraints for the Little Bent-winged Bat (*Miniopterus australis*) are “Caves; Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records in BioNet with microhabitat code ‘IC – in cave’; observation type code ‘E nest-roost’; with numbers of individuals >500; or from the scientific literature”. There are no caves or similar breeding structures for the Little Bent-winged Bat within the study area.
- The TBDC habitat constraints for the Large Bent-winged Bat (*Miniopterus orianae oceanensis*) are “Caves; Cave, tunnel, mine, culvert or other structure known or suspected to be used for breeding including species records with microhabitat code “IC - in cave;” observation type code “E nest-roost;” with numbers of individuals >500”. There are no caves or similar breeding structures for the Large Bent-winged Bat within the study area.
- The TBDC habitat constraints for Southern Myotis (*Myotis macropus*) are “Waterbodies; Waterbodies with permanent pools/stretches 3m or wider, including rivers, large creeks, billabongs, lagoons, estuaries, dams and other waterbodies, on or within 200 m of the site”. The study area contains a small drainage line and is nearby to a small tributary (200 m to the west), but these features do not contain 3 m wide permanent pools and are therefore unsuitable for the Southern Myotis breeding habitat.
- The TBDC habitat constraint for Grey-headed Flying-fox (*Pteropus poliocephalus*) is “Other; Breeding camps”. There was no evidence of breeding camps within the study area during habitat assessment surveys or other surveys.

The following species that were retained for assessment are not associated with PCT 3975 which is largely a treeless vegetation type: White-bellied Sea Eagle, Cumberland Plain Land Snail, Squirrel Glider and Koala. These species do not need to be assessed within the PCT 3975 areas.



Table 17: Predicted Flora Species Credit Species

Common Name	Scientific Name	Listing Status		Source (BAM-C / TBDC / Survey)	Species Retained? (Yes / No / Partial)	Exclusion Reason (1. Geographic Limitations 2. Habitat Constraints 3. Microhabitats)	Veg Zone ID Species Retained Within (Including PCT ID)
		BC Act	EPBC Act				
Downy Wattle	<i>Acacia pubescens</i>	V	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Dwarf Kerrawang	<i>Commersonia prostrata</i>	E	-	BAM-C	No	Microhabitats (habitat degraded)	n/a
n/a	<i>Deyeuxia appressa</i>	E	E	BAM-C	Yes	n/a	3320_Low, 3320_Mod
n/a	<i>Dillwynia tenuifolia</i>	V	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Camden White Gum	<i>Eucalyptus benthamii</i>	CE	CE	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Slaty Red Gum	<i>Eucalyptus glaucina</i>	V	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Juniper-leaved Grevillea	<i>Grevillea juniperina</i> subsp. <i>juniperina</i>	V	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
n/a	<i>Hibbertia puberula</i>	E	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
<i>Marsdenia viridiflora</i> R. Br. subsp. <i>viridiflora</i> population in the Bankstown, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool and Penrith LGAs	<i>Marsdenia viridiflora</i> subsp. <i>viridiflora</i> - endangered population	EP	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
n/a	<i>Maundia triglochinosoides</i>	V	-	BAM-C	No	Microhabitats (habitat degraded)	n/a
n/a	<i>Micromyrtus minutiflora</i>	E	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Tall Knotweed	<i>Persicaria elatior</i>	V	V	BAM-C	No	Microhabitats (habitat degraded)	n/a
Nodding Geebung	<i>Persoonia nutans</i>	E	E	BAM-C	Yes	n/a	3320_Low, 3320_Mod



Common Name	Scientific Name	Listing Status		Source (BAM-C / TBDC / Survey)	Species Retained? (Yes / No / Partial)	Exclusion Reason (1. Geographic Limitations 2. Habitat Constraints 3. Microhabitats)	Veg Zone ID Species Retained Within (Including PCT ID)
		BC Act	EPBC Act				
n/a	<i>Pimelea curviflora</i> var. <i>curviflora</i>	V	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Spiked Rice-flower	<i>Pimelea spicata</i>	E	E	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Brown Pomaderris	<i>Pomaderris brunnea</i>	E	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod
<i>P. prunifolia</i> in the Parramatta, Auburn, Strathfield and Bankstown Local Government Areas	<i>Pomaderris prunifolia</i> - endangered population	EP	-	BAM-C	No	Geographic limitations	n/a
Sydney Plains Greenhood	<i>Pterostylis saxicola</i>	E	E	BAM-C	Yes	n/a	3320_Low, 3320_Mod
n/a	<i>Pultenaea parviflora</i>	E	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Matted Bush-pea	<i>Pultenaea pedunculata</i>	E	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Tadgell's Bluebell in the LGAs of Auburn, Bankstown, Baulkham Hills, Canterbury, Hornsby, Parramatta and Strathfield	<i>Wahlenbergia multicaulis</i> - endangered population	E	-	BAM-C	No	Geographic limitations	n/a
Listing status: V=vulnerable, E=endangered, EP=endangered population, "-" = not listed							

Table 18: Predicted Fauna Species Credit Species

Common Name	Scientific Name	Listing Status		Sources (BAM-C/ TBDC/ Survey)	Species Retained? (Yes / No / Partial)	Exclusion Reason (1. Geographic Limitations, 2. Habitat Constraints, 3. Microhabitats)	Vegetation Zone ID Species Retained Within
		BC Act	EPBC Act				
Regent Honeyeater	<i>Anthochaera phrygia</i>	CE	CE	BAM-C	No	Habitat constraints	n/a
Curlew Sandpiper	<i>Calidris ferruginea</i>	CE	CE	BAM-C	No	Habitat constraints	n/a



Common Name	Scientific Name	Listing Status		Sources (BAM-C/ TBDC/ Survey)	Species Retained? (Yes / No / Partial)	Exclusion Reason (1. Geographic Limitations, 2. Habitat Constraints, 3. Microhabitats)	Vegetation Zone ID Species Retained Within
		BC Act	EPBC Act				
South-eastern Glossy Black-Cockatoo	<i>Calyptorhynchus lathami lathami</i>	V	V	BAM-C	No	Habitat constraints	n/a
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	V	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Swift Parrot	<i>Lathamus discolor</i>	E	CE	BAM-C	No	Habitat constraints	n/a
Black-tailed Godwit	<i>Limosa limosa</i>	E	E	BAM-C	No	Habitat constraints	n/a
Green and Golden Bell Frog	<i>Litoria aurea</i>	E	V	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low
Cumberland Plain Land Snail	<i>Meridolum corneovirens</i>	E	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Little Bent-winged Bat	<i>Miniopterus australis</i>	V	-	BAM-C	No	Habitat constraints	n/a
Large Bent-winged Bat	<i>Miniopterus orianae oceanensis</i>	V	-	BAM-C	No	Habitat constraints	n/a
Southern Myotis	<i>Myotis macropus</i>	V	-	BAM-C	No	Habitat constraints	n/a
Eastern Osprey	<i>Pandion cristatus</i>	V	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod, 3975_Low
Squirrel Glider	<i>Petaurus norfolcensis</i>	V	-	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Koala	<i>Phascolarctos cinereus</i>	E	E	BAM-C	Yes	n/a	3320_Low, 3320_Mod
Barking Owl	<i>Ninox connivens</i>	V	-	BAM-C	No	Habitat constraints	n/a
Grey-headed Flying-fox	<i>Pteropus poliocephalus</i>	V	V	BAM-C	No	Habitat constraints	n/a
V=vulnerable, E=endangered, CE=critically endangered, “-“ = not listed							



5.2 Presence of Candidate Species Credit Species

In accordance with BAM Subsection 5.2.4, candidate species listed in Table 19 and Table 20 are assessed for presence within the study area based on:

- Assumed presence
- An important habitat map (for dual credit species)
- Targeted threatened species surveys
- An expert report

For the candidate species listed below, presence was determined through targeted surveys or assumed presence. No species were identified present based on the Important Habitat Map or expert report. The Cumberland Plain Land Snail was recorded within the broader study area as empty shells, and no other species subject to targeted surveys were recorded. Two species, *Deyeuxia appressa* and *Marsdenia viridiflora* subsp. *viridiflora* (endangered population), are assumed to be present within the wider study area; however, they are not expected to occur within the subject land/development footprint due to the absence of suitable habitat.



Table 19: Presence of Candidate Flora Species within the Study Area

Common Name	Scientific Name	Listing Status		Method Used to Determine Presence (Target Survey/ Assumed Present/ Important Habitat Mapped Area/ Expert Report)	Present? (Yes/ No/ Assumed Present)	Further Assessment Required? (BAM Subsections 5.2.5 and 5.2.6) (Yes/ No)
		BC Act	EPBC Act			
Downy Wattle	<i>Acacia pubescens</i>	V	V	Target survey	No	No
n/a	<i>Deyeuxia appressa</i>	E	E	Assumed present	Assumed present	Yes
n/a	<i>Dillwynia tenuifolia</i>	V	-	Target survey	No	No
Camden White Gum	<i>Eucalyptus benthamii</i>	CE	CE	Target survey	No	No
Slaty Red Gum	<i>Eucalyptus glaucina</i>	V	V	Target survey	No	No
Juniper-leaved Grevillea	<i>Grevillea juniperina</i> subsp. <i>juniperina</i>	V	-	Target survey	No	No
n/a	<i>Hibbertia puberula</i>	E	-	Target survey	No	No
<i>Marsdenia viridiflora</i> R. Br. subsp. <i>viridiflora</i> population in the Bankstown, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool and Penrith LGAs	<i>Marsdenia viridiflora</i> subsp. <i>viridiflora</i> - endangered population	EP	-	Assumed present	Assumed present	Yes
n/a	<i>Micromyrtus minutiflora</i>	E	V	Target survey	No	No
Nodding Geebung	<i>Persoonia nutans</i>	E	E	Target survey	No	No
n/a	<i>Pimelea curviflora</i> var. <i>curviflora</i>	V	V	Target survey	No	No
Spiked Rice-flower	<i>Pimelea spicata</i>	E	E	Target survey	No	No
Brown Pomaderris	<i>Pomaderris brunnea</i>	E	V	Target survey	No	No
Sydney Plains Greenhood	<i>Pterostylis saxicola</i>	E	E	Target survey	No	No



Common Name	Scientific Name	Listing Status		Method Used to Determine Presence (Target Survey/ Assumed Present/ Important Habitat Mapped Area/ Expert Report)	Present? (Yes/ No/ Assumed Present)	Further Assessment Required? (BAM Subsections 5.2.5 and 5.2.6) (Yes/ No)
		BC Act	EPBC Act			
n/a	<i>Pultenaea parviflora</i>	E	V	Target survey	No	No
Matted Bush-pea	<i>Pultenaea pedunculata</i>	E	-	Target survey	No	No
Listing status: V=vulnerable, E=endangered, EP=endangered population, “-“ = not listed						

Table 20: Presence of Candidate Fauna Species within the Study Area

Common Name	Scientific Name	Listing status		Method Used to Determine Presence (Target Survey/ Assumed Present/ Important Habitat Mapped Area/ Expert Report)	Present? (Yes/ No/ Assumed Present)	Further Assessment Required? (BAM Subsections 5.2.5 and 5.2.6)
		BC Act	EPBC Act			
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	V	-	Target survey	No	No
Green and Golden Bell Frog	<i>Litoria aurea</i>	E	V	Target survey	No	No
Cumberland Plain Land Snail	<i>Meridolum corneovirens</i>	E	-	Target survey	Yes	Yes
Eastern Osprey	<i>Pandion cristatus</i>	V	-	Target survey	No	No
Squirrel Glider	<i>Petaurus norfolcensis</i>	V	-	Target survey	No	No
Koala	<i>Phascolarctos cinereus</i>	E	E	Assumed present	Assumed present	Yes
V=vulnerable, E=endangered, CE=critically endangered, “-“ = not listed						



5.3 Threatened Species Surveys

This section lists details of targeted threatened species surveys completed to date for candidate species. Targeted threatened flora surveys, as detailed in Section 2.3, were undertaken with reference to the BAM *Surveying threatened plants and their habitats* guide (DPIE, 2020b) and survey notes within the TBDC.

Habitat suitability for relevant species is summarised below:

- *Acacia pubescens* occurs on alluviums, shales and at the intergrade between shales and sandstones. The soils are characteristically gravelly, often with ironstone.
- *Deyeuxia appressa* grows in moist conditions and is thought to be extinct.
- *Dillwynia tenuifolia* occurs in Castlereagh Ironbark Forest and Shale Gravel Transition Forest on tertiary alluvium or laterised clays.
- *Eucalyptus benthamii* requires deep alluvial sands and a flooding regime that supports seedling establishment. Recruitment is most successful on bare silt deposits in rivers and streams.
- *Eucalyptus glaucina* grows on deep, moderately fertile, well-watered soils.
- *Grevillea juniperina* subsp. *juniperina* occurs on reddish clay to sandy soils derived from Wianamatta Shale and Tertiary alluvium, typically with lateritic gravels.
- *Hibbertia puberula* typically occurs in dry sclerophyll woodland on sandy soil and is often associated with sandstone or clay.
- *Micromyrtus minutiflora* grows in Castlereagh Scribbly Gum Woodland, Ironbark Forest, Shale/Gravel Transition Forest, and open forest on tertiary alluvium and consolidated river sediments.
- The endangered population of *Marsdenia viridiflora* R. Br. subsp. *viridiflora* occurs in the Bankstown, Blacktown, Camden, Campbelltown, Fairfield, Holroyd, Liverpool, and Penrith LGAs. It grows in vine thickets and open shale woodland.
- *Persoonia nutans* inhabits Agnes Banks and Castlereagh woodlands on sandy soils in the north and alluvium but extends into shale-sandstone and Ironbark forests in the south.
- *Pimelea curviflora* var. *curviflora* occurs on shaley/lateritic soils over sandstone and shale-sandstone transition soils on ridgetops and upper slopes in woodlands.
- *Pimelea spicata* is found on well-structured clay soils, often associated with Grey Box communities with Blackthorn and Kangaroo Grass.
- *Pomaderris brunnea* grows in moist woodland or forest on clay and alluvial soils of floodplains and creek lines.
- *Pterostylis saxicola* occurs at the ecological gradient from clay soils derived from Ashfield Shale to humus rich sandy soils on Hawkesbury Sandstone sheets and rock shelves.
- *Pultenaea parviflora* prefers Castlereagh Ironbark Forest and Shale Gravel Transition Forest on tertiary alluvium or laterised clays.
- *Pultenaea pedunculata* is largely confined to loamy soils in dry gullies in the Windellama area. In the Cumberland Plain, it favours clay or sandy-clay soils on



Wianamatta Shale, usually near Tertiary Alluvium or the shale-sandstone interface.
All sites have lateritic influence with ironstone gravels.

Threatened fauna surveys (as detailed in Section 2.4) must be undertaken in accordance with TBDC survey notes and with consideration of the following guidelines:

- Koala BAM survey guide (DPE, 2022b)
- NSW Survey Guide for Threatened Frogs (DPIE, 2020d)

Survey requirements and habitat considerations are summarised below:

- White-bellied Sea-Eagle (*Haliaeetus leucogaster*): Surveys target nests and adult presence. Suitable breeding habitat includes large live trees within 1 km of major waterbodies.
- Green and Golden Bell Frog (*Litoria aurea*): Habitat includes waterbodies with emergent vegetation and without *Gambusia holbrooki* (although breeding can still occur in its presence). Aural visual surveys involve 5-min listening and 4-min call playback every 50 m along the transect, as well as 5-min spotlighting between each 50 m. Effort requires 480 minutes per 500 m and four repeat surveys.
- Cumberland Plain Land Snail (*Meridolum corneovirens*): Surveys involve diurnal and nocturnal meandering transects targeting refugia. Diurnal surveys may be conducted in any weather conditions, whereas nocturnal surveys must be undertaken following rainfall. As diurnal surveys recorded empty shells of the Cumberland Plain Land Snail, the species is assessed as present within suitable habitat across the study area; therefore, additional nocturnal surveys are not required.
- Eastern Osprey (*Pandion cristatus*): Surveys involve searching for distinct stick nests. Diurnal bird and habitat surveys recorded no individuals or suitable nests.
- Squirrel Glider (*Petaurus norfolcensis*): Surveyable year-round, with extended survey effort in areas with bipinnate acacias or autumn-winter flowering species.
- Koala (*Phascolarctos cinereus*). Surveys must follow the Koala BAM Survey Guide and include SAT and spotlighting. Surveys have been completed and there is no evidence of Koala presence within the study area, therefore this species does not require further assessment.

Candidate flora species that have undergone targeted survey across the study area are listed in Table 21, while candidate fauna species surveys are listed in Table 22, along with details of the survey method, effort, and timing. Of the threatened species that were subject to targeted surveys, the Cumberland Plain Land Snail is the only species that was recorded.



Table 21: Threatened Flora Species Surveys

Common Name	Scientific Name	Threatened Flora Species Surveys				Present (Yes/No)	Assess Further? (BAM Subsections 5.2.5 and 5.2.6) (Yes/No)
		Survey Method (e.g. Transects or Grids)	Required Survey Timing (Month)	Timing Within Survey Period? (BAM-C / TBDC) (Yes/No, Date)	Effort (Hours & No. People)		
Downy Wattle	<i>Acacia pubescens</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No
n/a	<i>Dillwynia tenuifolia</i>	Transects	August, September, October	Yes - 23 October 2025	5 hrs, 1 person	No	No
Camden White Gum	<i>Eucalyptus benthamii</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No
Slaty Red Gum	<i>Eucalyptus glaucina</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No
Juniper-leaved Grevillea	<i>Grevillea juniperina</i> subsp. <i>juniperina</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No
n/a	<i>Hibbertia puberula</i>	Transects	October, November, December	Yes - 23 October 2025	5 hrs, 1 person	No	No
-	<i>Micromyrtus minutiflora</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No
Nodding Geebung	<i>Persoonia nutans</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No
Spiked Rice-flower	<i>Pimelea curviflora</i> var. <i>curviflora</i>	Transects	October, November, December, January, February, March	Yes - 23 October 2025	5 hrs, 1 person	No	No
Spiked Rice-flower	<i>Pimelea spicata</i>	Transects	All months of the year	Yes - 23 October 2025	5 hrs, 1 person	No	No



Common Name	Scientific Name	Threatened Flora Species Surveys				Present (Yes/No)	Assess Further? (BAM Subsections 5.2.5 and 5.2.6) (Yes/No)
		Survey Method (e.g. Transects or Grids)	Required Survey Timing (Month)	Timing Within Survey Period? (BAM-C / TBDC) (Yes/No, Date)	Effort (Hours & No. People)		
Brown Pomaderris	<i>Pomaderris brunnea</i>	Transects	August, September, October	Yes - 23 October 2025	5 hrs, 1 person	No	No
Sydney Plains Greenhood	<i>Pterostylis saxicola</i>	Transects	October	Yes - 23 October 2025	5 hrs, 1 person	No	No
n/a	<i>Pultenaea parviflora</i>	Transects	September, October, November	Yes - 23 October 2025	5 hrs, 1 person	No	No
Matted Bush-pea	<i>Pultenaea pedunculata</i>	Transects	September, October, November	Yes - 23 October 2025	5 hrs, 1 person	No	No

Table 22: Threatened Fauna Species Surveys

Common Name	Scientific Name	Threatened Fauna Species Surveys				Present (Yes/No)	Assess Further? (BAM Subsections 5.2.5 and 5.2.6) (Yes/No)
		Survey Method (e.g. Harp Trap, Elliott Trap, Bioacoustics, etc.)	Required Survey Timing (Month)	Timing Within Survey Period? (BAM-C / TBDC) (Yes/No, Date)	Effort (Hours & No. People)		
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	Diurnal bird/habitat surveys	July, August, September, October, November, December	Yes - 23 October 2025	5 hrs, 2 persons	No	No
Green and Golden Bell Frog	<i>Litoria aurea</i>	Aural visual surveys	November, December, January, February, March	Yes - 24, 25 November 2025, 11 and 15 December 2025	3 hrs, 1 person	No	No
Cumberland Plain Land Snail	<i>Meridolum corneovirens</i>	Diurnal shell searches	All months of the year	Yes – 23 October 2025 and 8 April 2026	6 hrs, 1 person	Yes	Yes



Common Name	Scientific Name	Threatened Fauna Species Surveys				Present (Yes/No)	Assess Further? (BAM Subsections 5.2.5 and 5.2.6) (Yes/No)
		Survey Method (e.g. Harp Trap, Elliott Trap, Bioacoustics, etc.)	Required Survey Timing (Month)	Timing Within Survey Period? (BAM-C / TBDC) (Yes/No, Date)	Effort (Hours & No. People)		
Eastern Osprey	<i>Pandion cristatus</i>	Diurnal bird/habitat surveys	April, May, June, July, August, September, October, November	Yes - 23 October 2025	5 hrs, 2 persons	No	No
Squirrel Glider	<i>Petaurus norfolcensis</i>	Spotlighting	All months of the year	Yes – 23 October 2025	2 hrs, 2 persons	No	No
		IR camera recording		Yes – 23 October to 15 December 2025	106 nights; 53 nights 2 cameras		
Koala	<i>Phascolarctos cinereus</i>	Spotlighting and call playback	All months of the year	Yes - 23 October 2025	2 hrs, 2 persons	No	No
		Koala SAT		Yes – 8 April 2026	4 hrs, 1 person		



5.4 Expert Reports

No expert reports have been used to determine species presence/absence.

5.5 More Appropriate Local Data (where relevant)

More appropriate local data has not been adopted for this assessment and the decision-maker authorisation to use more appropriate local data (Appendix G) is not required.

5.6 Species Polygon

All species polygons represent the total area of suitable habitat within the study area, and none of these areas occur within the subject land or proposed development footprint.

Species polygons are indicated in Figure 11. Results for candidate species for the broader study area are summarised in Table 23, while results for candidate species listed under the EPBC Act are provided in Table 24.



Table 23: Candidate Species Recorded within the Study Area

Common Name	Scientific Name	Biodiversity Risk Weighting (BAM-C & TBDC) (Very High 3, High 2, Moderate 1.5, Low 1)	SAL Entity (BAM-C & TBDC)	Habitat Constraints / Microhabitats Present in Vegetation Zone	Abundance – No. Individual Plants (Flora with Unit of Measure of Count)	Extent (ha) of Suitable Habitat (Flora or Fauna with Unit of Measure of Area)	TBDC Species Specific Recommendations e.g. Buffers, General Comments (Where Relevant)	Habitat Condition (VI Score for Vegetation Zones in the Polygon)
n/a	<i>Deyeuxia appressa</i>	Very High (3)	Yes	3320_Low, 3320_Moderate	n/a	3.5	Species is typically assessed using unit measure count, however applying an “assumed present” determination required incorporating the entire area of suitable habitat	3320_Low = 40 3320_Mod = 59.6
n/a	<i>Marsdenia viridiflora</i> subsp. <i>viridiflora</i>	High (2)	No	3320_Low, 3320_Moderate	n/a	3.5	n/a	
Cumberland Plain Land Snail	<i>Meridolum corneovirens</i>	High (2)	No	3320_Low, 3320_Moderate	n/a	3.5	n/a	

Table 24: EPBC Act Listed Species Recorded within the Study Area

Common Name	Scientific Name	Extent (ha) of Suitable Habitat Present within Study Area
n/a	<i>Deyeuxia appressa</i>	3.5



6.0 Identifying Prescribed Impacts

Prescribed impact features are identified in Table 25 and mapped on Figure 1, Figure 2 Figure 7 and Figure 10.

Table 25: Prescribed Impacts Identified

Feature	Present (Yes/No)	Description of Feature Characteristics and Location	Threatened Entities That Use, Are Likely to Use, or are Part of the Habitat Feature. Where Relevant, Threatened Species or Fauna that are Part of a TEC or EC, that are at Risk of Vehicle Strike
Example: Karst, caves, crevices, cliffs, rocks or other geological features of significance	No	n/a	n/a
Human-made structures	Yes	Buildings, sheds, BESS infrastructure, stormwater pipes and a transmission line tower (see Figure 1)	Threatened microbats (e.g. Large Bent-winged Bat, Little Bent-winged Bat, Southern Myotis, Eastern Coastal Free-tailed Bat)
Non-native vegetation	Yes	Various patches of planted native vegetation and exotic vegetation (see Figure 7)	Mobile threatened species, particularly species with nearby records such as Barking Owl, Dusky Woodswallow, Brown Treecreeper, White-bellied Sea-Eagle, Eastern Coastal Free-tailed Bat, and Flying-fox
Habitat connectivity	Yes	Planted native vegetation along the southern and western edges of the data centre site, along with adjoining native vegetation, may facilitate movements in a southeast to northwest direction, although connectivity is limited beyond these areas (see vegetation/habitat patches on Figure 10)	Mobile threatened species, particularly species with nearby records such as Barking Owl, Dusky Woodswallow, Brown Treecreeper, White-bellied Sea-Eagle, Eastern Coastal Free-tailed Bat, and Flying-fox
Waterbodies, water quality and hydrological processes	No	Native vegetation and artificial drainage line downslope of the OEI pathway (see Figure 1 and Figure 2)	CPW TEC/EC and mobile threatened species, particularly species with nearby records such as Barking Owl, Dusky Woodswallow, Brown Treecreeper, White-bellied Sea-Eagle, Eastern Coastal Free-tailed Bat, and Flying-fox
Wind turbine strikes (wind farm only)	No	n/a	n/a



Feature	Present (Yes/No)	Description of Feature Characteristics and Location	Threatened Entities That Use, Are Likely to Use, or are Part of the Habitat Feature. Where Relevant, Threatened Species or Fauna that are Part of a TEC or EC, that are at Risk of Vehicle Strike
Vehicle strikes	No	Existing driveway access to the BESS, as shown by the subject land polygon representing the northern HV pathway in Figure 1	Cumberland Plain Land Snail

The list of threatened entities was generated based on site survey, habitat assessment and consideration of the habitats described for each species in the TBDC.

Whilst there is currently no evidence of microbats using the human-made structures on the subject land, according to the TBDC it is possible that they could utilise buildings and structures for roosting from time to time (although caves and hollows are the primary breeding habitat).

Whilst there is currently no evidence of threatened species using the areas of non-native vegetation, relying on the vegetation for habitat connectivity, or using the artificial drainage line, several species may still roost or forage over the site from time to time.

Based on records of the Cumberland Plain Land Snail within the bushland north of the BESS access, and the presence of suitable habitat to the south of the BESS access, it is possible that snails could traverse the driveway when moving between these habitats and may therefore be at risk of vehicle strikes.

As no wind farm is proposed, the wind-farm-specific requirements - including to document protected animals that may use the site as a flyway or migration route - are not applicable.



STAGE 2: IMPACT ASSESSMENT

7.0 Avoid and Minimise Impacts

7.1 Avoid and Minimise Direct and Indirect Impacts

7.1.1 Project Location

The proposed development involves constructing a data centre and associated OEI on appropriately zoned land within an established industrial area and existing electricity substation. The site selection avoids areas of high biodiversity value (CPW TEC/EC and potential threatened species habitats – see Figure 9 and Figure 11), as far as practicable, and represents a strategic reuse of previously disturbed land, consistent with BAM's emphasis on minimising impacts through informed site selection.

Alternative sites were considered during the selection and due diligence process and were ultimately discounted due to key constraints, including existing customer tenure, increased distance from the bulk supply point (which would require additional infrastructure and greater land disturbance), and the presence of structurally sound buildings with substantial remaining service life.

In contrast, the building within the data centre site has reached the end of its functional life and is suitable for redevelopment. The proposed site was therefore identified as the most appropriate location, enabling the project to meet operational requirements while minimising unnecessary environmental impacts and avoiding direct impact to mapped biodiversity features (CPW and threatened species habitats).

7.1.2 Project Design

The project has been designed in accordance with the principles of the BAM, with a strong emphasis on avoiding and minimising both direct and indirect impacts on biodiversity values. The OEI pathway has been planned, as far as practicably possible, to avoid areas of high biodiversity value, including CPW TEC/EC (Figure 9) and threatened species habitats (Figure 11).

Although a direct connection to the existing Sydney West bulk supply at the southwest portion of the study area would avoid areas of biodiversity value in the north, connection to the existing Sydney West bulk supply point is not feasible as its capacity is fully exhausted.

To facilitate the required connection, an extension of the bulk supply point is necessary, which in turn requires the proposed HV pathway alignment. The cable pathway has been located within the existing BESS driveway and cleared areas, and sections intersecting native vegetation will be underbored to a suitable depth to avoid impacts on overhead trees and vegetation.

Horizontal directional drilling, also known as under boring, will be undertaken to install underground high-voltage electrical conduits along the connection corridor. It is a trenchless construction method that enables the installation of conduits beneath roads, drainage infrastructure and other sensitive surface features without the need for open-trench excavation.

This method has been selected to:

- Minimise surface disturbance and vegetation removal
- Avoid impacts to existing utilities and services



- Maintain traffic movements where crossings are required
- Reduce noise, dust and vibration compared to open-trench construction
- Avoid disturbance to waterways and stormwater infrastructure

7.2 Avoid and Minimise Prescribed Impacts

7.2.1 Project Location

Prescribed impact features identified in Section 6.0 include human-made structures, non-native vegetation, waterbodies, water quality and hydrological processes, habitat connectivity and vehicle strikes. Given the current urban nature of the subject land and surrounds, alternative project locations are not considered necessary as a measure to avoid and minimise prescribed impacts.

7.2.2 Project Design

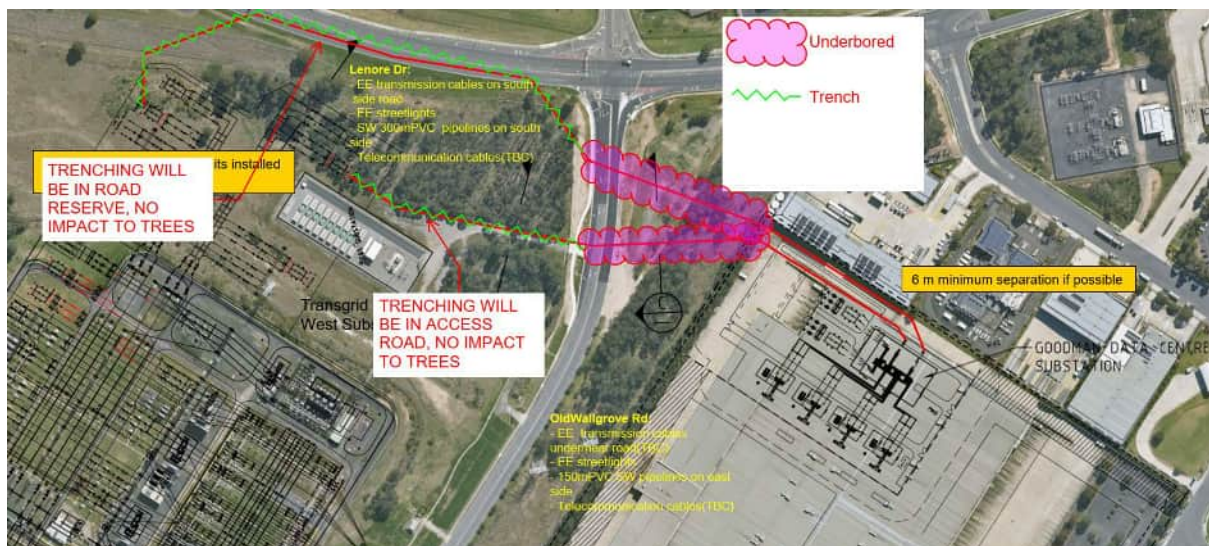
Potential impacts to threatened species due to clearing of planted native vegetation and habitat connectivity will be minimised by the retention and protection of a large strip of existing trees along the western boundary of the data centre site as outlined by the *Arboricultural Impact Assessment Report* (Civica, 2026).

It is not considered necessary to avoid and minimise impacts on the human-made structures, waterbodies or vehicle strikes, however, impacts must be mitigated during building demolition and construction (i.e. pre-clearance surveys, sediment controls, timing of works). Various flora and fauna management measures (such as pre-clearance surveys and monitoring) are proposed to minimise or mitigate direct and indirect impacts on threatened species associated with prescribed impacts (see Section 8.4).

7.3 Other Measures Considered

Measures that were evaluated but not selected, include alternative HV pathways as indicated in the extracts below. These designs were not feasible due to biodiversity impacts and other cable design constraints.

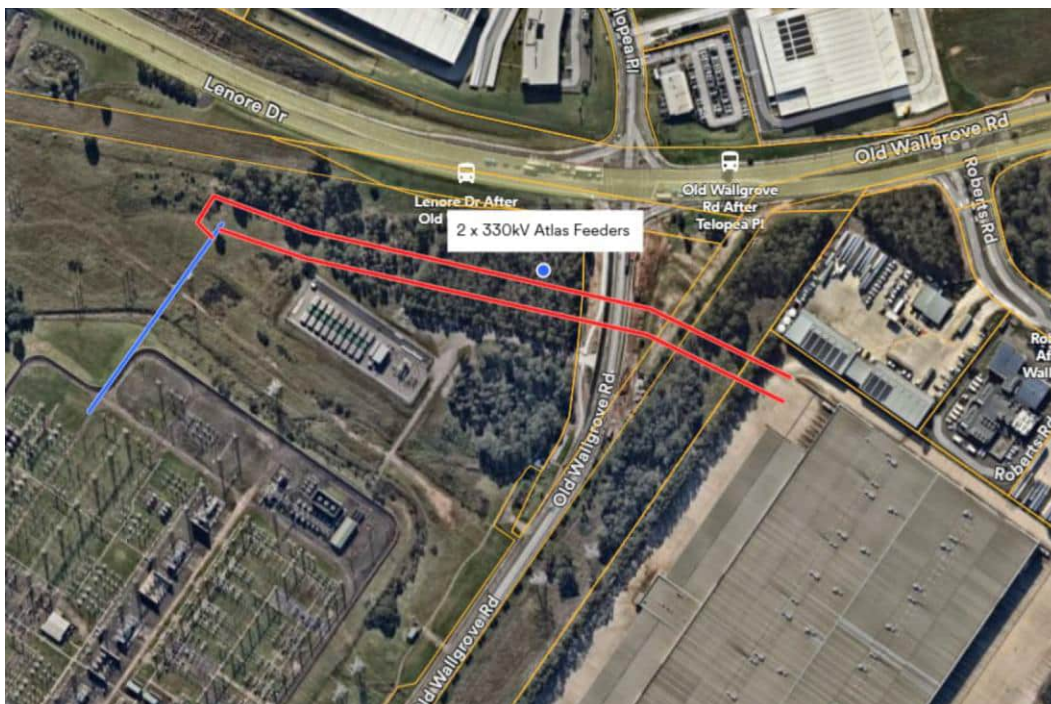
Extract 1: Alternative Feeder Alignments (received 12 February 2026)



Extract 2: Alternative Feeder Alignments (received 16 January 2026)



Extract 3: Alternative Feeder Alignments (received 3 October 2025)



7.4 Summary of Measures to Avoid and Minimise Impacts

Table 26 documents the measures to avoid and minimise direct, indirect and prescribed impacts.

Table 26: Measures to Avoid and Minimise Direct, Indirect and Prescribed Impacts

Action	Outcome (Describe the Outcome of Implementing the Measure, With Reference to Specific Entities Identified in Sections 4 And 5)	Timing	Responsibility
Re-use previously built-up portions of the study area	Avoids disturbance to areas of high biodiversity value through strategic reuse of already disturbed land	During site selection and design	Proponent, designers
Design OEI cable pathway within existing BESS driveway and road reserves and under bore cable sections where native vegetation occurs	Avoid direct impacts on TEC/EC vegetation and threatened species habitats (Figure 9, Figure 11)	Design phase	Proponent, designers, engineers
Retain and protect planted vegetation along the western edge of the data centre site	Minimise impacts on threatened species potentially using planted native vegetation and habitat connections within the study area	Design phase and construction	Proponent, designers, construction contractor, arborist
Implementation of flora and fauna management measures outlined in this BDAR	Reduces direct, indirect and prescribed impacts on threatened fauna (including microbats, snails) and prevents degradation of habitats from sediment or pollution	Prior to and during construction	Proponent, ecologist, construction contractor



8.0 Impact Assessment

8.1 Direct Impacts

8.1.1 Residual Direct Impacts

Because the project avoids clearing of all areas of native vegetation there are no residual direct impacts likely to occur on the subject land after steps are taken to avoid and minimise impacts.

8.1.2 Change in Vegetation Integrity Score

Because the project avoids clearing of any native vegetation there are no changes in vegetation integrity for residual direct impacts on native vegetation, TECs, threatened species and their habitat that were identified on the subject land.

8.2 Indirect Impacts

Table 27 documents the residual indirect impacts (likely to occur on native vegetation, threatened entities and their habitat beyond the development footprint). Indirect impact areas are identified on Figure 12 where relevant.



Table 27: Summary of Residual Indirect Impacts

Indirect Impact (Describe Impact, e.g. Transport of Weeds and Pathogens From the Site to Adjacent Vegetation)	Impacted Entities (PCT/Threatened Entity and Their Habitats and Where Relevant, EPBC Act Listing)	Extent (ha or Zone Reference)	Frequency	Duration (Long-Term/ Short-Term/ Medium-Term)	Project Phase/ Timing of Impact (e.g. Construction, Operation, Rehabilitation)	Likelihood and Consequences
2a. Inadvertent impacts on adjacent habitat or vegetation	PCT 3320, PCT 3975	3320_Low, 3320_Mod, 3975_Low	Daily for the duration of construction (12-24 months).	Short-term	Construction	Low likelihood. Reduced condition of vegetation and habitats.
2b. Reduced viability of adjacent habitat due to edge effects	Cumberland Plain Land Snail and non-surveyed species with potential habitat (<i>D. appressa</i> , <i>M. viridiflora</i> ssp. <i>viridiflora</i>). Ecosystem credit species in Section 5.1.1	3320_Low, 3320_Mod, 3975_Low	Daily for the duration of construction (12-24 months) and annually during operation	Short-term and long-term	Construction and operation	Low likelihood. Reduced condition of vegetation and habitats.
2c. Reduced viability of adjacent habitat due to noise, dust or light spill	Cumberland Plain Land Snail and non-surveyed species with potential habitat (<i>D. appressa</i> , <i>M. viridiflora</i> ssp. <i>viridiflora</i>). Ecosystem credit species in Section 5.1.1	3320_Low, 3320_Mod, 3975_Low	Daily for the duration of construction (12-24 months) and annually during operation	Short-term	Construction	Low likelihood. Reduced condition of vegetation and habitats.
2d. Transportation of weeds and pathogens from the site to adjacent vegetation	PCT 3320, PCT 3975	3320_Low, 3320_Mod, 3975_Low	Monthly for the duration of construction (12-24 months).	Short-term	Construction	Low likelihood. Reduced condition of vegetation and habitats.
2e. Increased risk of starvation or exposure, and loss of shade or shelter	n/a	n/a	n/a	n/a	n/a	n/a



Indirect Impact (Describe Impact, e.g. Transport of Weeds and Pathogens From the Site to Adjacent Vegetation)	Impacted Entities (PCT/Threatened Entity and Their Habitats and Where Relevant, EPBC Act Listing)	Extent (ha or Zone Reference)	Frequency	Duration (Long-Term/ Short-Term/ Medium-Term)	Project Phase/ Timing of Impact (e.g. Construction, Operation, Rehabilitation)	Likelihood and Consequences
<i>2f. Loss of breeding habitat</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2g. Trampling of threatened flora species</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2h. Inhibition of nitrogen fixation and increased soil salinity</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2i. Fertiliser drift</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2j. Rubbish dumping</i>	PCT 3320, PCT 3975	3320_Low, 3320_Mod, 3975_Low	Potentially daily or weekly	Short-term	Construction	Low likelihood. Reduced vegetation condition.
<i>2k. Wood collection</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2l. Removal and disturbance of rocks, including bush rock</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2m. Increase in predators</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2n. Increase in pest animal populations</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2o. Changed fire regimes</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2p. Disturbance to specialist breeding and foraging habitat (e.g. beach nesting for shorebirds).</i>	n/a	n/a	n/a	n/a	n/a	n/a



8.3 Prescribed Impacts

8.3.1 Human-made Structures

- Nature: Removal of several buildings and structures within the data centre site could affect threatened micro-bats, such as Large Bent-winged Bat and Little Bent-winged Bat (if present).
- Extent: Human-made structures are mapped in Figure 1 and include one large existing warehouse primarily composed of metal clad and concrete materials, and a series of smaller structures (such as the gatehouse and tanks) to be demolished at the data centre site. The remaining structures are to remain unaffected by the proposal.
- Duration: Short-term loss of potential bat roosting habitat. It is not expected that a long-term impact would occur unless bats were killed during demolition.
- Consequences: Bats killed during demolition.

8.3.2 Non-native Vegetation

- Nature: Removal of non-native vegetation could affect foraging and roosting behaviours of the ecosystem credit species which could forage/perch in small patches of non-native vegetation across the subject land (such as White-bellied Sea-Eagle, Grey-headed Flying Fox, Eastern Osprey, microbats).
- Extent: Non-native vegetation represents various patches of planted vegetation and weeds that occur across the subject land.
- Duration: Short-term during construction.
- Consequences: Removal of potential foraging and perching habitats could result in overall reduction in available foraging habitat for a species. There are many other areas of non-native vegetation that represent potential foraging and roosting habitat for threatened fauna species in the locality. As such, the consequence for local threatened fauna species of removing non-native vegetation within the subject land is minor.

8.3.3 Habitat Connectivity

- Nature: Habitat connectivity that has been artificially created through landscape planting will be reduced due to proposed tree removals along the southern edge of the data centre site.
- Extent: The area of reduced habitat connectivity is approximately 15 m by 125 m and is shown in Figure 12 (location along the southern boundary where the proposed development impacts planted native vegetation).
- Duration: Short-term during construction and long-term during operation.
- Consequences: Reduced habitat connectivity for threatened mammals may result in decreased foraging and breeding success. However, the associated impacts are considered minor due to the small, isolated nature of the wider vegetation patch and the location of the trees along its southeastern edge.



8.3.4 Waterbodies, Water Quality and Hydrological Processes

- Nature: Impacts to water bodies, water quality and hydrological processes could affect the condition of receiving waters and adjoining native vegetation, as well as watering habitat for threatened species of fauna.
- Extent: The extent of retained native vegetation which is down slope of the proposed development is approximately 3.5 hectare. The artificial drainage line is downslope of the subject land and is narrow and approximately 100 to 200 m length.
- Duration: Short-term during construction.
- Consequences: Impacts on water bodies, water quality and hydrological processes could lead to erosion, sedimentation, pollution, increased phosphorous in soils, weed invasion and changes to native species composition. Mitigation measures are proposed and associated impacts are considered minor, especially when considering that the study area currently has significant areas of modified surfaces that have already altered hydrological processes.
- Maximum Predicted Offset Liability – as the proposed development does not comprise longwall mining, calculation of the maximum predicted offset liability is not required.

8.3.5 Vehicle Strikes

Table 28 documents residual predicted impacts of vehicle strikes on threatened fauna identified in Section 6.0 and provides evidence-based justification for the predicted level of impacts.

Table 28: Residual Prescribed Impacts – Vehicle Strikes

Threatened Fauna or Protected Fauna That Are Part of a TEC That Are at Risk of Vehicle Strike (Identified In Section 6.0)	SAIL Entity	Likelihood	Estimated Vehicle Strike Rates	Consequences
Cumberland Plain Land Snail (<i>Meridolum corneovirens</i>)	No	Low – studies indicate that the Cumberland Plain Land Snail exhibits limited movement, strong site fidelity and a reliance on coarse woody debris and litter habitats (Ridgeway <i>et al.</i> , 2014). Construction activities are of short duration and are unlikely to occur during wet evening periods when the Cumberland Plain Land Snail is most active. This substantially limits temporal overlap between snail activity and vehicle movements, reducing the likelihood of incidental vehicle strike during construction.	Negligible	A small number of individual snails could be incidentally killed during construction, with a low likelihood of localised population-level effects.



8.4 Mitigating Residual Impacts - Management Measures and Implementation

Proposed mitigation and management measures are identified in Table 29 and further details are provided in Table 30. Residual direct impacts require further assessment for SAIL (BAM Section 9.1) and to determine a credit requirement (BAM Section 9.2). Residual indirect or prescribed impacts for which no mitigation measures are proposed require an adaptive management strategy (BAM Section 8.5). Other indirect and prescribed impacts that remain after the avoid, minimise and mitigate have been applied, may be offset using additional biodiversity credits (above the credit requirement generated by the BAM-C for direct impacts) and/or other conservation measures.

8.5 Adaptive Management Strategy for Uncertain Impacts (Where Relevant)

An adaptive management plan can be used to address impacts that are infrequent or difficult to measure. These include indirect or prescribed impacts, or other remaining biodiversity impacts. The proponent must develop an adaptive management plan to address any remaining impacts where mitigation measures have not been proposed. SLR is of the opinion that all indirect, prescribed, or other residual biodiversity impacts are minor in nature and/or will be sufficiently mitigated and managed by implementing measures outline in this BDAR. As such an adaptive management plan is not proposed.



Table 29: Summary of Proposed Mitigation and Management Measures for Residual Impacts (Direct, Indirect and Prescribed)

Mitigation Measure (Specify if None Proposed and Ensure an Adaptive Management Strategy is Developed and Addressed in Section 1.1)	Method/ Technique	Timing	Frequency	Responsibility	Likely Efficacy (Including Risk of Failure)	MNES (When Relevant)
Fauna displacement (BAM 8.4.1, 2)						
<i>2a. Timing works to avoid critical life cycle events, such as breeding or nursing</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>2b. Instigating clearing protocols, including pre-clearing surveys, daily surveys and staged clearing, and using a trained ecologist or licensed wildlife handler during clearing events</i>	Pre-clearance surveys of native vegetation	1-2 weeks before site clearing	One off	Proponent, construction team, ecologist	High efficacy, low risk	n/a
	Wildlife rescue	Site clearing	Daily	Proponent, construction team, ecologist	High efficacy, low risk	n/a
<i>2c. Relocating habitat features (e.g. fallen timber, hollow logs) from the development or clearing site, to adjacent retained vegetation</i>	n/a	n/a	n/a	n/a	n/a	n/a
Indirect impacts on native vegetation and habitats (BAM 8.4.1, 3)						
<i>3a. Adoption of clearing protocols that identify vegetation to be retained, prevent inadvertent damage and reduce soil disturbance; for example, a chainsaw is preferable to heavy machinery to remove native vegetation for partial clearing</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>3b. Using noise barriers, or daily/seasonal timing of construction and operational activities to reduce impacts of noise</i>	n/a	n/a	n/a	n/a	n/a	n/a



Mitigation Measure (Specify if None Proposed and Ensure an Adaptive Management Strategy is Developed and Addressed in Section 1.1)	Method/ Technique	Timing	Frequency	Responsibility	Likely Efficacy (Including Risk of Failure)	MNES (When Relevant)
<i>3c. Using light shields, or daily/seasonal timing of construction and operational activities to reduce impacts of light spill</i>	Use of light shields and limiting evening lighting	Construction and operation	Daily	Proponent, construction team, site management	High efficacy, low risk	n/a
<i>3d. Using adaptive dust management and monitoring programs to control air quality</i>	Dust management and monitoring surveys	Construction	One off	Proponent, construction team	High efficacy, low risk	CPW
<i>3e. Scheduling the timing of construction activities to avoid impacts (e.g. timing the construction for when migratory species are not at the site, or when particular species known to, or likely to use the habitat on the site, are not breeding or nesting)</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>3f. Erecting temporary fencing to protect significant environmental features, such as riparian zones</i>	Protection fencing to be erected around retained native vegetation	Construction	One off	Proponent, construction team	High efficacy, low risk	CPW
<i>3g. Using hygiene protocols to prevent the spread of weeds or pathogens between infected and uninfected areas</i>	Proper weed disposal, machinery wash-down prior to site entry	Construction	Daily	Proponent, construction team	High efficacy, low risk	CPW



Mitigation Measure (Specify if None Proposed and Ensure an Adaptive Management Strategy is Developed and Addressed in Section 1.1)	Method/ Technique	Timing	Frequency	Responsibility	Likely Efficacy (Including Risk of Failure)	MNES (When Relevant)
<i>3h. Training staff and conducting site briefings to communicate environmental features to be protected and measures to be implemented</i>	Environmental site briefings identifying areas of retained native vegetation	Construction	One off	Proponent, construction team	High efficacy, low risk	CPW
<i>3i. Preparing a vegetation management plan to regulate activity in vegetation and habitats adjacent to residential developments. The plan may include controls on pet ownership, rubbish disposal, wood collection, fire management, and disturbance to nests and other niche habitats</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>3j. Providing for the ecological restoration, rehabilitation and/or ongoing maintenance of retained native vegetation habitat on, or adjacent to, the development or clearing site</i>	Rehabilitation survey and implementation	Post-construction	One off	Proponent, construction team, ecologist	High efficacy, low risk	CPW
Prescribed Impacts (BAM 8.4.2, 1)						
<i>1a. Scheduling the timing of construction activities to avoid critical life cycle events (e.g. timing construction activities to avoid migratory species on site, or using the site)</i>	Installation of the OEI infrastructure during daylight hours and under dry conditions	Construction	Daily	Proponent, construction team	High efficacy, low risk	n/a
<i>1b. Instigating clearing protocols, including pre-clearing surveys, daily surveys and staged clearing, and using a trained ecologist or licensed wildlife handler during clearing,</i>	Pre-clearance survey of human-made structures and	Site clearing	One off	Proponent, construction team, ecologist	High efficacy, low risk	n/a



Mitigation Measure (Specify if None Proposed and Ensure an Adaptive Management Strategy is Developed and Addressed in Section 1.1)	Method/ Technique	Timing	Frequency	Responsibility	Likely Efficacy (Including Risk of Failure)	MNES (When Relevant)
<i>construction and maintenance activities for human-made structures and non-native vegetation</i>	non-native vegetation					
<i>1c. Retaining habitat features (e.g. fallen timber, hollow logs, rocks) within the subject land, or relocating them to adjacent retained remnant vegetation</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>1d. Installing artificial connectivity measures (e.g. glider poles, rope crossings, habitat bridges) to re-establish connections between habitat and favoured transport corridors</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>1e. Erecting temporary fencing to protect significant environmental features, such as karst, caves, rock outcrops and water bodies</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>1f. Replacing habitat provided by human-made structures and non-native vegetation with alternative habitat</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>1g. Using sediment barriers or sedimentation ponds to control the quality of water released from the site into the receiving environment</i>	Sediment barriers and ponds, where recommended by engineer	Construction and operation	One off	Proponent, construction team, engineer, site operator	High efficacy, low risk	CPW
<i>1h. Training staff and conducting site briefings to communicate environmental features to be protected and the measures implemented to protect them</i>	n/a	n/a	n/a	n/a	n/a	n/a



Mitigation Measure (Specify if None Proposed and Ensure an Adaptive Management Strategy is Developed and Addressed in Section 1.1)	Method/Technique	Timing	Frequency	Responsibility	Likely Efficacy (Including Risk of Failure)	MNES (When Relevant)
<i>1i. Ecological restoration, rehabilitation actions and/or maintenance of retained native vegetation on, or adjacent to, the subject land</i>	n/a	n/a	n/a	n/a	n/a	n/a
<i>1j. Development control measures that regulate the types of activities that can occur in native vegetation and habitat adjacent to residential development, including prohibiting the collection of bush rocks</i>	n/a	n/a	n/a	n/a	n/a	n/a

Table 30: Mitigation and Management Measure – Implementation

Mitigation Measure	Action	Monitoring and Evaluation Strategy (Data, Frequency, Timing and Reporting)	Performance Criteria (Linked to Monitoring and Evaluation Strategy)	Adaptive Management Threshold (Trigger for Adaptive Management Plan/Actions)	Adaptive Management Response (When Triggered)
2b. Instigating Clearing Protocols	Ecological pre-clearance survey	Once before construction; report outcomes	No fauna deaths during clearing	Breeding evidence found	Delay clearing; implement fauna rescue plan
	Monitor and rescue fauna	Daily during clearing; report outcomes	No fauna deaths	Wildlife injury or displacement	Relocate/rehabilitate fauna; dismantle trees sectionally
3c Reduce Lighting Spill	Use directional lighting; switch off unnecessary lights	Evening inspections; post-construction report	No visible light spill; no disruption to nocturnal fauna	Light spill into adjoining vegetation	Adjust lighting setup; continue monitoring
3d Reduce Dust	Enforce speed limits; use water tankers on unpaved roads; cover or treat soil stockpiles	Inspect vegetation; post-construction report	No visible dust on vegetation	Dust observed on vegetation	Enhance dust control measures and continue monitoring



Mitigation Measure	Action	Monitoring and Evaluation Strategy (Data, Frequency, Timing and Reporting)	Performance Criteria (Linked to Monitoring and Evaluation Strategy)	Adaptive Management Threshold (Trigger for Adaptive Management Plan/Actions)	Adaptive Management Response (When Triggered)
3f Temporary Fencing	Install chain mesh fencing around retained vegetation	Inspect and photograph pre- and during construction	Fencing remains intact; no accidental clearing	Fencing failure or clearing occurs	Repair fencing; rehabilitate disturbed area
3g Hygiene Protocols	Clean vehicles, equipment, footwear, and clothing before site entry	6-monthly weed surveys; post-construction report	No additional weed encroachment into retained vegetation	Weeds detected in retained vegetation	Construction team to remove weeds
	Dispose of weeds appropriately during construction	Site inspections every 6-months; outcomes in post-clearing report	No weeds on site	Weeds detected on-site	Construction team to remove weeds
3h Environmental Site Briefings	Highlight sensitive areas in all briefings	Inspect retained vegetation every 6 months during construction; report in post-clearing report	No staff-related damage to retained vegetation	Signs of staff-related damage (e.g. dumping, stockpiling)	Rehabilitate areas; reinforce briefings; add signage if needed
3j Management of Retained Native Vegetation Habitat	Rehabilitation survey and implementation	Ecologist to inspect retained vegetation during and after construction, mapping and photographing any disturbances for rehabilitation	Minimal change in vegetation condition, no disturbance recorded	Reduction in condition detected	Intensify rehabilitation and maintenance activities
1a Construction timing	Undertake cable installation during daylight hours in dry conditions	Record daily weather conditions and conduct ecological inspections during OEI installation; report in compliance reports	No live Cumberland Plain Land Snails observed during works	Live Cumberland Plain Land Snails detected during construction	Suspend works, implement fauna rescue or relocation, and revise timing or methods prior to recommencing



Mitigation Measure	Action	Monitoring and Evaluation Strategy (Data, Frequency, Timing and Reporting)	Performance Criteria (Linked to Monitoring and Evaluation Strategy)	Adaptive Management Threshold (Trigger for Adaptive Management Plan/Actions)	Adaptive Management Response (When Triggered)
1b Clearing Protocols	Ecologist to inspect structures and vegetation 2 days before demolition	One-off survey of impact areas; report outcomes	No deaths of threatened species	Threatened species found	Suspend works, implement fauna rescue or relocation, and adjust timing or methods
1g Sediment Barriers or Ponds	Install and maintain sediment controls before and during works	Inspect weekly and after rain	No visible sediment	Evidence of sedimentation and erosion	Enhance sediment controls; review site drainage



9.0 Serious and Irreversible Impacts

Potentially relevant serious and irreversible impact entities (SAls) that occur within the broader study area include:

- Cumberland Plain Woodland; and
- *Deyeuxia appressa*

As the proposal avoids clearing and mitigates impacts on native vegetation there are no serious and irreversible impacts requiring further consideration.



10.0 Biodiversity Legislation

Legislation identified by the Project SEARs with potential relevance to biodiversity are considered below.

10.1 Biodiversity Conservation Act 2016

This BDAR provides the biodiversity assessment required under the BC Act for State Significant Development. It accompanies the application in accordance with the Act, as the proposal has not been deemed exempt from requiring a BDAR by the Planning Agency Head and Environment Agency Head.

10.2 Environment Protection and Biodiversity Conservation Act 1999

Matters under the EPBC Act relevant to biodiversity have been addressed in Appendix E and, where applicable, throughout this BDAR. As the project will not result in significant impacts on the CPW TEC/EC vegetation, the proposal does not trigger a significant impact under the EPBC Act. Accordingly, a referral to the commonwealth minister is not required.

10.3 State Environmental Planning Policy (Industry and Employment) 2021

In relation to clause 2.31 'Preservation of trees or vegetation' all trees and vegetation proposed for removal to facilitate the data centre and OEI infrastructure have been assessed in this BDAR in accordance with the requirements of the SEPP (Industry and Employment) 2021.

In relation to clause 2.43 'Consent for clearing native vegetation', the subject land is zoned IN General Industrial and SP Special Infrastructure. Therefore, clause 2.43 of the SEPP (Industry and Employment) 2021 does not apply to the proposed development. Notwithstanding this, the project has been designed to avoid impacts on native vegetation and TECs, with avoidance measures outlined in Section 7.0, and mitigation measures detailed in Section 8.4

10.4 Blacktown DCP

Regarding clause 8.3 'Biodiversity Conservation Areas', '8.4 Management Strategies' and '11.8 Cut and Fill', there are no known conservation areas or riparian corridors within the study area or directly adjacent land. In accordance with the BAM, the proposed development has been designed to avoid and minimise impacts in biodiversity values, including retaining and protecting all areas of CPW CEEC and mitigating prescribed impacts, such as hydrological impacts.



11.0 Impact Summary

11.1 Determine an Offset Requirement for Impacts

11.1.1 Impacts on Native Vegetation and TECs or ECs (Ecosystem Credits)

There are no impacts on native vegetation and TECs or ECs that do, or do not require an offset (as per BAM Subsection 9.2.1(1.) and 9.2.1(3.)).

Thresholds for assessment and offsetting impacts are identified in Figure 15.

11.1.2 Impacts On Threatened Species and Their Habitat (Species Credits)

There are no impacts on threatened species (species credits) that require an offset (as per BAM Subsection 9.2.2(2.)).

11.1.3 Indirect and Prescribed Impacts

The retirement of biodiversity credits may be used with other conservation measures to mitigate prescribed impacts or the indirect impacts of a proposal on areas of native vegetation, TECs and/or threatened species, or their habitat adjacent to the subject land. SLR is of the opinion that all indirect and prescribed impacts are minor in nature and/or will be sufficiently mitigated and managed by implementing measures outlined in this BDAR.

As such, additional biodiversity credits to mitigate indirect or prescribed impacts are not proposed.

11.2 Impacts That Do Not Need Further Assessment

Table 31 identifies impacts that do not need further assessment for ecosystem credits (as per BAM Section 9.3(1-2)). These areas are also identified Figure 15.

Table 31: Impacts That Do Not Need Further Assessment for Ecosystem Credits

Impact	Location Within Subject Land	Justification Why No Further Assessment Is Required
Cleared land and exotic vegetation	Most of the proposed development footprint	No native vegetation or habitats for threatened species present



12.0 Biodiversity Credit Report

As there are no impacts on native vegetation or threatened species habitat, biodiversity credits (ecosystem or species) are not required for this project. The biodiversity credit reports (Appendix H) are not required for this assessment.



13.0 References

Blackash Bushfire Consulting 2026, *Bushfire Hazard Assessment, Project Atlas Data Centre 10 Roberts Road, Eastern Creek*, Version: 1.0, 11 February 2026

Bureau of Meteorology (BOM) 2026a, *Australia's Climate in 2025*,
<https://www.bom.gov.au/climate/current/annual/aus/> (viewed February 2026)

Bureau of Meteorology (BOM) 2026b, *Climate Data Online*,
<http://www.bom.gov.au/climate/data/> (viewed February 2026)

Civica 2026, *Arboricultural Impact Assessment Report, Goodman Project Atlas, 10 Roberts Road Eastern Creek NSW*, Version 1.0, 9 February 2026

Commonwealth Department of Climate Change, Energy, the Environment and Water (Commonwealth DCCEEW) 2026a, *EPBC Act Protected Matters Search Tool*, Commonwealth of Australia, Canberra, ACT, <http://www.environment.gov.au/epbc/pmst> (viewed February 2026)

Commonwealth Department of Climate Change, Energy, the Environment and Water (Commonwealth DCCEEW) 2026b, *Species Profile and Threats Database*, Commonwealth of Australia, Canberra, ACT, <http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl> (viewed February 2026)

Department of the Environment and Energy (DEE) 2017, *EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species*

Department of Environment and Conservation (DEC) 2004, *Threatened Species Survey and Assessment: Guidelines for developments and activities (working draft)*, Department of Environment and Conservation, Hurstville, NSW

Department of the Environment (DoE) 2013, *Matters of National Environmental Significance, Significant Impact Guidelines 1.1, Environment Protection and Biodiversity Conservation Act 1999*

Department of the Environment (DoE) 2015, *Draft referral guideline for 14 migratory birds listed under the EPBC Act*

Department of the Environment and Energy (DEE) 2019, *Draft Wildlife Conservation Plan for Seabirds*

Department of Planning and Environment (DPE) 2022a, *Guidance for the Biodiversity Development Assessment Report Template*,
<https://www.environment.nsw.gov.au/sites/default/files/biodiversity-development-assessment-report-template-guide-220209.pdf> (viewed February 2026)

Department of Planning and Environment (DPE) 2022b, *Koala (Phascolarctos cinereus) Biodiversity Assessment Method Survey Guide*,
<https://www.environment.nsw.gov.au/publications/koala-phascolarctos-cinereus-biodiversity-assessment-method-survey-guide> (viewed February 2026).

Department of Planning and Environment (DPE) 2022b, *Biodiversity Assessment Method 2020 Operational Manual - Stage 1*,
<https://www.environment.nsw.gov.au/publications/biodiversity-assessment-method-2020-operational-manual-stage-1> (viewed February 2026)



Department of Planning and Environment (DPE) 2023, *Biodiversity Assessment Method Operational Manual Stage 2*, <https://www.environment.nsw.gov.au/publications/biodiversity-assessment-method-operational-manual-stage-2> (viewed February 2026)

Department of Planning, Industry and Environment (DPIE) 2019, *Guidance to assist a decision-maker to determine a serious and irreversible impact*, <https://www.environment.nsw.gov.au/publications/guidance-assist-decision-maker-determine-serious-and-irreversible-impact> (viewed February 2026)

Department of Planning, Industry and Environment (DPIE) 2020a, *Biodiversity Assessment Method 2020*, <https://www.environment.nsw.gov.au/publications/biodiversity-assessment-method-2020> (viewed February 2026)

Department of Planning, Industry and Environment (DPIE) 2020b, *Surveying threatened plants and their habitats*, <https://www.environment.nsw.gov.au/publications/surveying-threatened-plants-and-their-habitats-bam-survey-guide> (viewed February 2026)

Department of Planning, Industry and Environment (DPIE) 2020c, *Biodiversity Assessment Method 2020 Operational Manual - Stage 3*, <https://www.environment.nsw.gov.au/publications/biodiversity-assessment-method-2020-operational-manual-stage-3> (viewed February 2026)

Department of Planning, Industry and Environment (DPIE) 2020d, *NSW Survey Guide for Threatened Frogs*, <https://www.environment.nsw.gov.au/publications/nsw-survey-guide-threatened-frogs> (viewed February 2026).

Department of Planning, Industry and Environment (DPIE) 2021, *'Species credit' threatened bats and their habitats NSW survey guide for the Biodiversity Assessment Method*, <https://www.environment.nsw.gov.au/publications/species-credit-threatened-bats-and-their-habitats> (viewed February 2026)

Department of the Environment, Water, Heritage and the Arts (DEWHA) 2009, *Approved Conservation Advice for Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest ecological community*, <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/112-conservation-advice.pdf>. In effect under the EPBC Act from 09-Dec-2009.

Grimshaw 2026a, *Project Atlas, SSDA Submission, Demolition Plan*, REV A, 26.02.2026

Grimshaw 2026b, *Project Atlas, SSDA Submission, General Arrangement Plan - Ground Floor*, REV A, 26.02.2026

Nearmap, 2026, *Nearmap Aerial Imagery Platform*, Nearmap Australia Pty Ltd, <https://www.nearmap.com/au> (viewed February 2026)

National Parks and Wildlife Services (NPWS) 2003, *The Bioregions of New South Wales - their biodiversity, conservation and history*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/bioregions/about> (viewed February 2026)

NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2010, *NSW Wetlands*, <https://datasets.seed.nsw.gov.au/dataset/36c734bd-1c9c-40b9-966a-0ad0f7500a09> (viewed February 2026)

NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2025a, *NSW State Vegetation Type Map*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet/state-vegetation-type-map> (viewed February 2026)



NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2025b, *Landscape Descriptions*, <https://datasets.seed.nsw.gov.au/dataset/7a1658be-a632-4d4c-8e94-5f9b3be31055/resource/2b459ccd-7002-481f-9f7c-2e8ed4a6bf13/download/nsw-landscapes-descriptions.pdf> (viewed February 2026)

NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2026a, *BioNet Atlas of NSW Wildlife*, <https://www.bionet.nsw.gov.au> (viewed February 2026)

NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2026b, *BioNet Vegetation Classification Database*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/bionet-vegetation-classification> (viewed February 2026)

NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) 2026c, *SEED Portal*, <https://www.seed.nsw.gov.au/> (viewed February 2026)

NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW), 2026d, *Soil Landscapes of Central and Eastern NSW - v3.0.1*, <https://datasets.seed.nsw.gov.au/dataset/published-soil-landscapes-of-central-and-eastern-nsw37d37> (viewed February 2026)

NSW Department of Planning, Industry and Environment (DPIE), 2021, *Guidelines for Interpreting Listing Criteria for Areas of Outstanding Biodiversity Value*, <https://www.environment.nsw.gov.au/sites/default/files/guidelines-interpreting-listing-criteria-areas-outstanding-biodiversity-value-200094.pdf> (viewed February 2026)

NSW Scientific Committee 2004, *Freshwater wetlands on coastal floodplains of the NSW North Coast, Sydney Basin and South East Corner bioregions – endangered ecological community listing: Final Determination*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/2004-2007/freshwater-wetlands-coastal-floodplains-endangered-ecological-community-listing> (viewed February 2026).

NSW Scientific Committee 2009, *Cumberland Plain Woodland in the Sydney Basin Bioregion – critically endangered ecological community listing: Final Determination*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/2008-2010/cumberland-plain-woodland-critically-endangered-ecological-community-listing> (viewed February 2026)

NSW Scientific Committee 2011, *Shale Gravel Transition Forest in the Sydney Basin Bioregion – Determination to make a minor amendment to Part 3 of Schedule 1 of the Threatened Species Conservation Act*, <https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/nsw-threatened-species-scientific-committee/determinations/final-determinations/2011-2012/shale-gravel-transition-forest-in-the-sydney-basin-bioregion-minor-amendment-determination> (viewed February 2026)

Ridgeway, P.A., Lindsay, K., Pou, D. & Visintin, A. (2014). *Indications of diverse behavioural ecologies in the morphologically conservative Australian land snails Pommerhelix and Meridolum (Stylommatophora: Camaenidae)*. Molluscan Research, 34(1), 25-39. <https://doi.org/10.1080/13235818.2013.866179> (viewed April 2026).

Royal Botanic Gardens and Domain Trust (RBGDT) 2026, *PlantNET (The NSW Plant Information Network System)*, <http://plantnet.rbg Syd.nsw.gov.au> (viewed February 2026)

Threatened Species Scientific Committee (TSSC) 2009, *Commonwealth Listing Advice on Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest*,



<http://www.environment.gov.au/biodiversity/threatened/communities/pubs/112-listing-advice.pdf>. In effect under the EPBC Act from 09-Dec-2009. (viewed February 2026)



FIGURE 1

LEGEND

- ▬ Study Area
- ▬ Data Centre Site
- ▬ OEI Site
- ▬ Subject Land
- ▬ Human-made Infrastructure
- ▬ Proposed Underbore
- ▬ Contour (mAHD)
- ▬ Indicative Artificial Drainage Line
- Existing Powerline
- ▬ Watercourse

NSW Mitchell Landscapes

- ▬ Cumberland Plain

Data Sources:
 NSW SS
 Aerial imagery: Nearmap (March 2026)
 Contours: derived from LIDAR DEM obtained from DCS
 Spatial Services (2019)
 Mitchell Landscapes: NSW DCCEEW (2016)
 IBRA regions: Commonwealth DCCEEW (2012)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 28-Apr-2026

Drawn by: JH

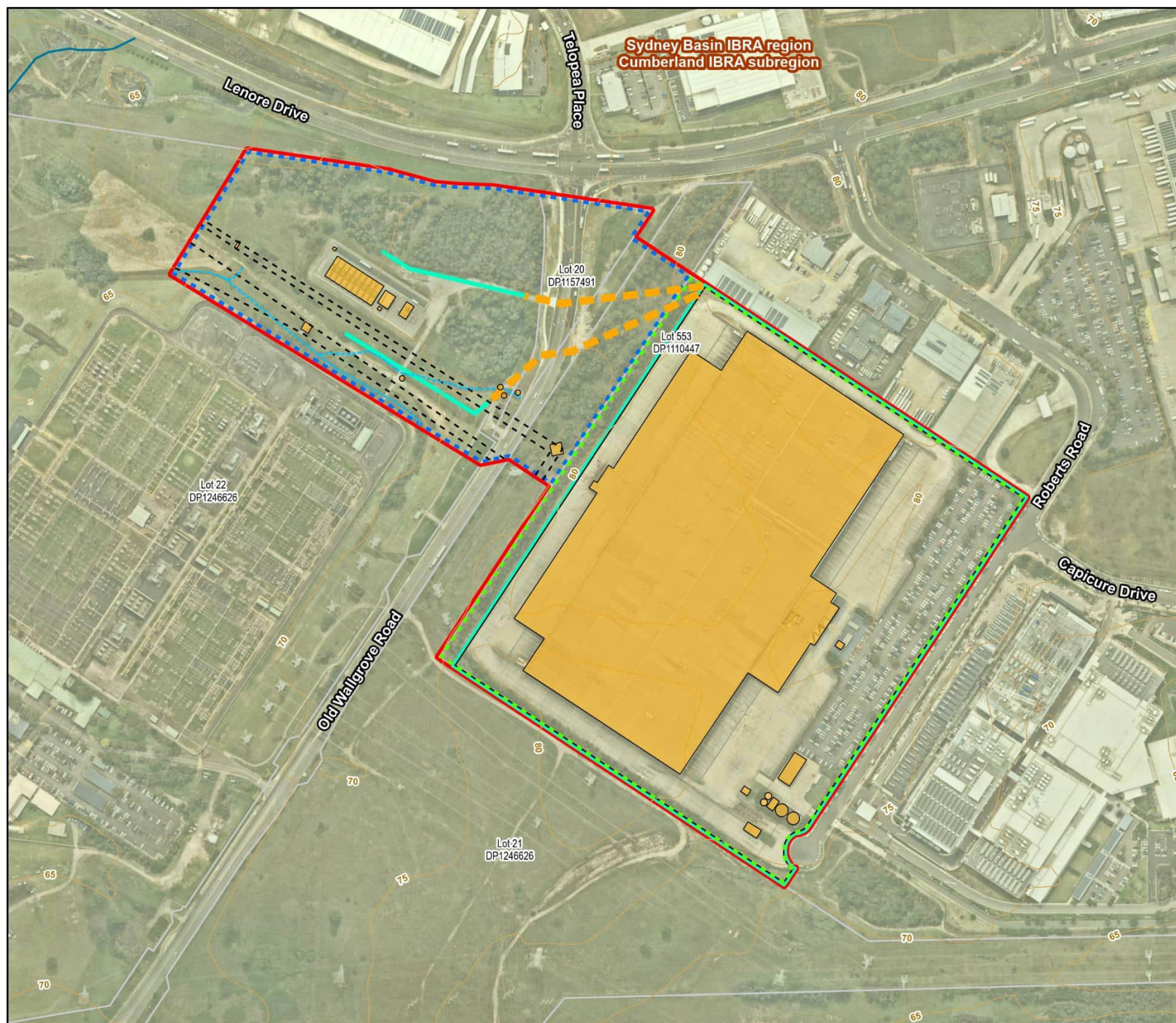


FIGURE 2

LEGEND

- Study Area
 - Subject Land
 - Assessment Area (1,017.40 ha)
 - Native Vegetation (89.23 ha)
 - Cumberland Subregion BIO Map
 - Biodiversity Corridors of Regional Significance
 - Wetland
 - Suburb
 - Proposed Underbore
 - Major Road
 - Watercourse (Strahler Stream Order)
- NSW Mitchell Landscapes**
- Cumberland Plain
 - Hawkesbury - Nepean Channels and Floodplains
 - Sydney Basin Diatremes

Data Sources:

NSW SS
 Aerial imagery: Nearmap (March 2026)
 Native vegetation derived from SVTM Version C2.0.M2.1 (NSW DCCEEW 2024)
 Mitchell Landscapes: NSW DCCEEW (2016)
 IBRA regions: Commonwealth DCCEEW (2012)
 BIO Map: NSW DCCEEW (2015)
 Wetlands: NSW DCCEEW (2010)

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Coordinate System: GDA2020 MGA Zone 56

Scale: 1:22,500 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

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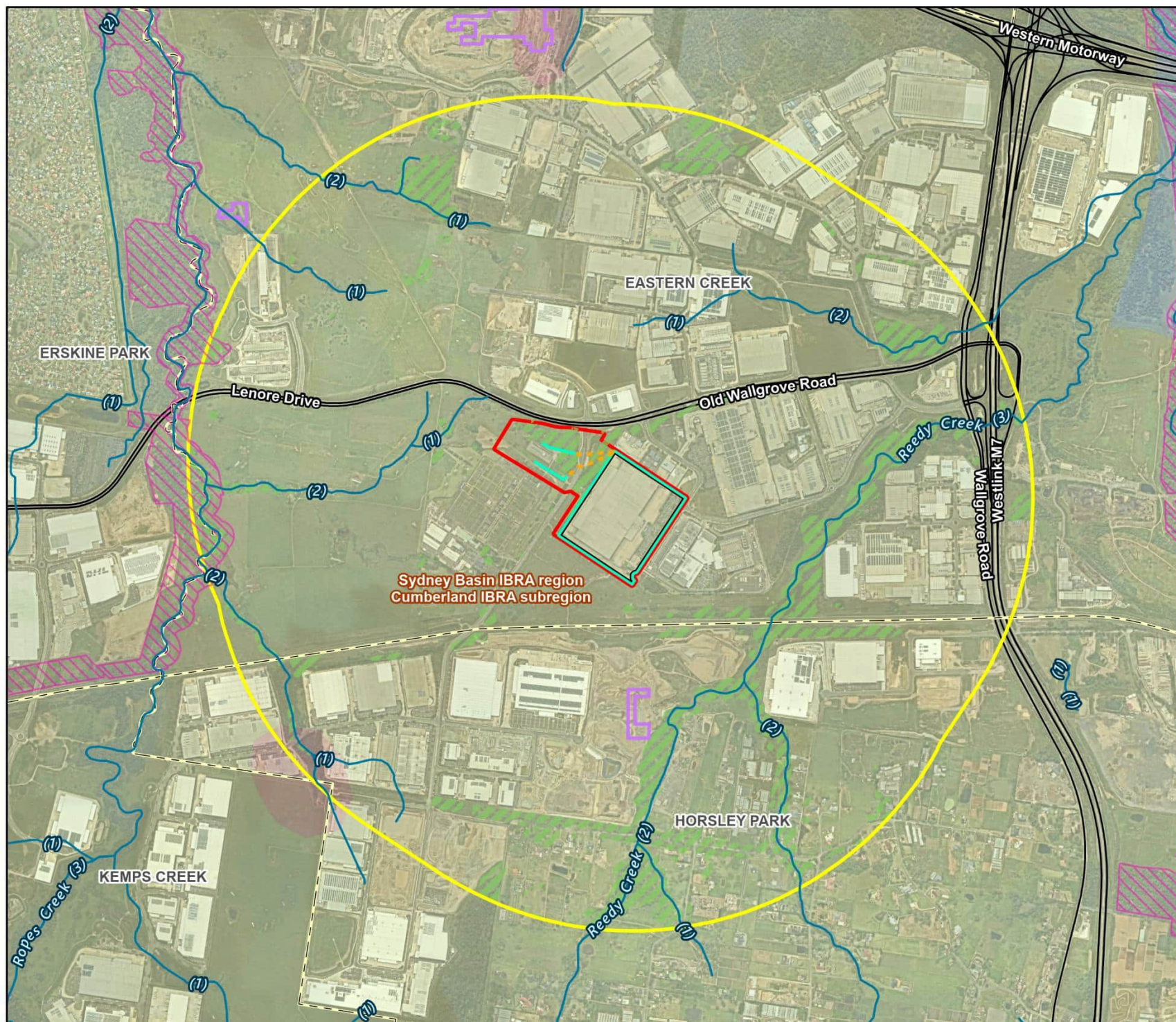


FIGURE 3

LEGEND

- ▬ Study Area
- ▬ Subject Land
- ▬ Proposed Offsite Infrastructure
- ▬ Proposed Underbore
- ~ Proposed Trenching

Data Sources:
Development layout provided by Grimshaw Architects,
Revision A (06/02/2026)

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Coordinate System: GDA2020 MGA Zone 56

Scale: 1:4,000 at A4

Project Number: 610.033079

Date Drawn: 06-May-2026

Drawn by: JH

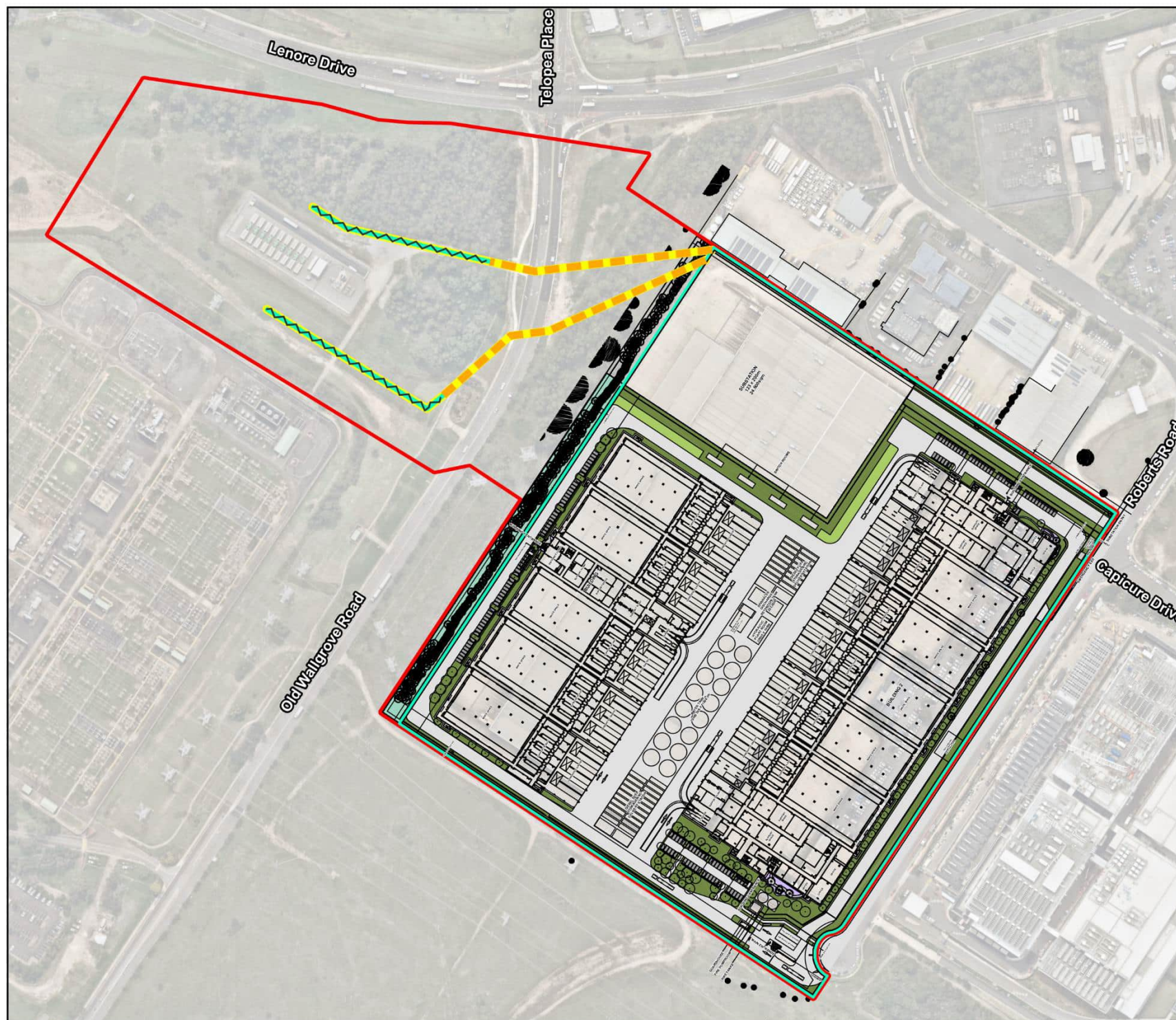


FIGURE 4

LEGEND

-  Study Area
-  Subject Land
-  Biodiversity Values
-  Proposed Underbore



Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)
Biodiversity Values: NSW DCCEEW (2025)

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Coordinate System: GDA2020 MGA Zone 56

Scale: 1:8,000 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH



Figure 5 Excluded Impacts (n/a)



FIELD SURVEY LOCATIONS
FLORA AND FAUNA
(excluding Koala)

FIGURE 6a

LEGEND

- ▭ Study Area
- ▭ Subject Land
- BAM Plot
- ▬ Proposed Underbore
- ▬ Flora Transect (October 2025)
- ▬ Frog Survey
- IR Camera Location
- ▲ Call Playback Location

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

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Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 28-Apr-2026

Drawn by: JH



FIELD SURVEY LOCATIONS
KOALA

FIGURE 6b

LEGEND

- Study Area
- Subject Land
- SAT Grid
- Native Vegetation
- Proposed Underbore
- SAT Site
- SAT Trees

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

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Coordinate System: GDA2020 MGA Zone 56

Scale: 1:1,250 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH



NATIVE VEGETATION EXTENT

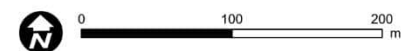
FIGURE 7

LEGEND

- Study Area
- Subject Land
- Proposed Underbore
- Vegetation**
- Native Vegetation
- Non-native Vegetation
- Cleared Land

Data Sources:
NSW SS
Aerial Imagery: Nearmap (March 2026)

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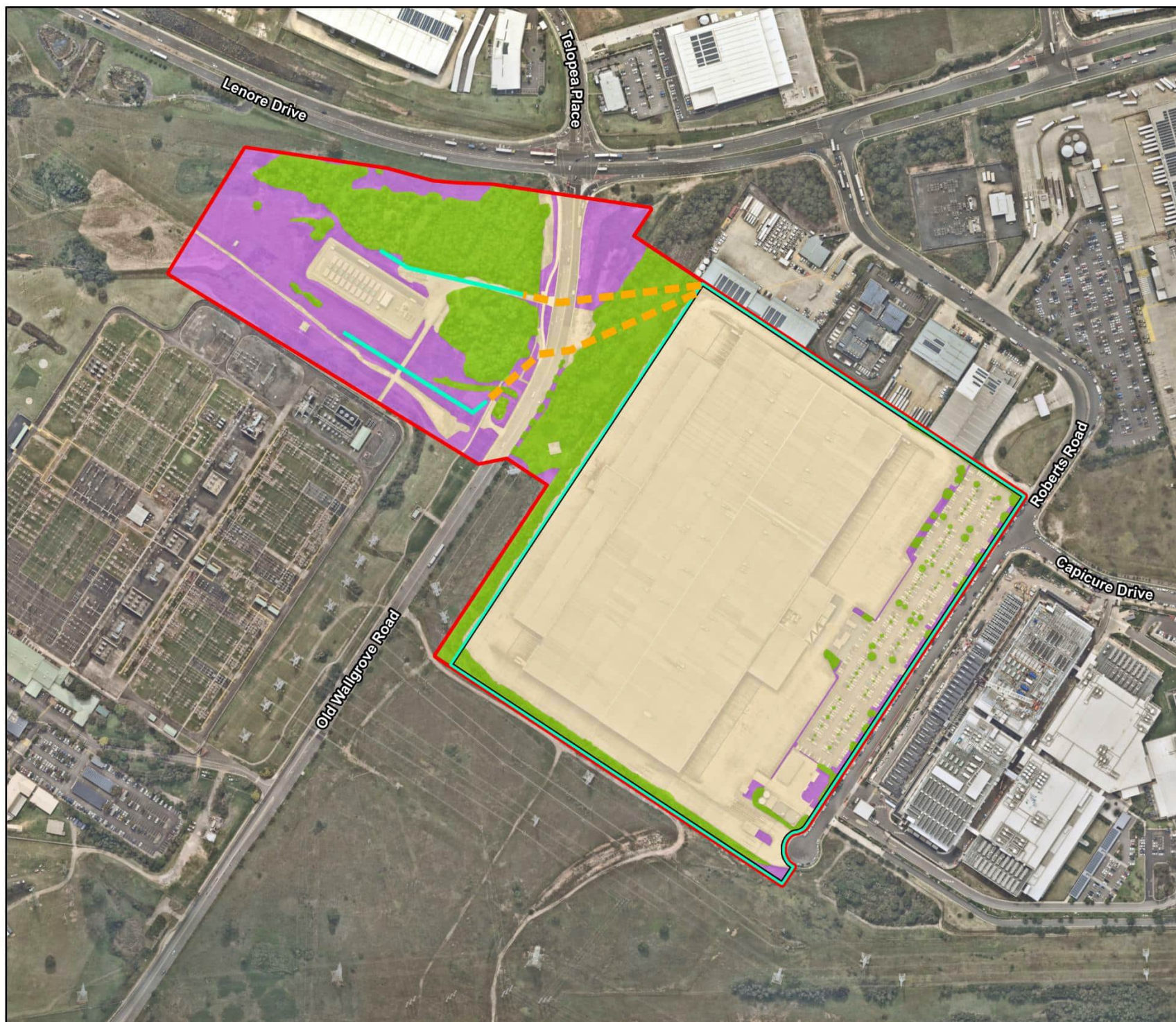
Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH



PLANT COMMUNITY TYPES

FIGURE 8

LEGEND

- Study Area
- Subject Land
- Proposed Underbore

Plant Community Type (PCT)

- PCT 3320 - Cumberland Shale Plains Woodland
- PCT 3975 - Southern Lower Floodplain Freshwater Wetland

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH



THREATENED ECOLOGICAL
COMMUNITIES AND ECOLOGICAL
COMMUNITIES

FIGURE 9

LEGEND

- Study Area
- Subject Land
- Proposed Underbore

Threatened Ecological Communities

Cumberland Plain Woodland in the Sydney Basin Bioregion (BC Act – Critically Endangered); Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest (EPBC Act – Critically Endangered)

Data Sources:
NSW SS
Aerial Imagery: Nearmap (March 2026)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

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Drawn by: JH



VEGETATION ZONES

FIGURE 10

LEGEND

- Study Area
- Subject Land
- Proposed Underbore
- Patch Size (5 - <25 ha)

Vegetation Zone

- 3320_Low
- 3320_Moderate
- 3975_Low

Data Sources:
 NSW SS
 Aerial imagery: Nearmap (March 2026)
 Patch size derived from field-verified vegetation mapping within the Subject Land and SVTM Version C2.0.M2.1 (NSW DCCEEW 2024) outside of Subject Land

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



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Project Number: 610.033079

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Drawn by: JH



CANDIDATE SPECIES CREDIT SPECIES RECORDS AND SPECIES POLYGONS

FIGURE 11

LEGEND

- Study Area
 - Subject Land
 - Proposed Underbore
 - *Meridolum corneovirens*
(Cumberland Plain Land Snail)
 - Species Polygon (refer to species list below)
- *Deyeuxia appressa* - Endangered (BC Act & EPBC Act)
 - *Marsdenia viridiflora* subsp. *viridiflora* - Endangered Population (BC Act)
 - *Meridolum corneovirens* (Cumberland Plain Land Snail) - Endangered (BC Act)

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 28-Apr-2026

Drawn by: JH



FINAL IMPACTS LIKELY TO OCCUR
ON THE SUBJECT LAND

FIGURE 12

LEGEND

- Study Area
- Subject Land
- Proposed Underbore

Plant Community Type (PCT)

- PCT 3320 - Cumberland Shale Plains Woodland
- PCT 3975 - Southern Lower Floodplain Freshwater Wetland

Other

- Cleared Land
- Non-native Vegetation
- Planted Native Vegetation

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH

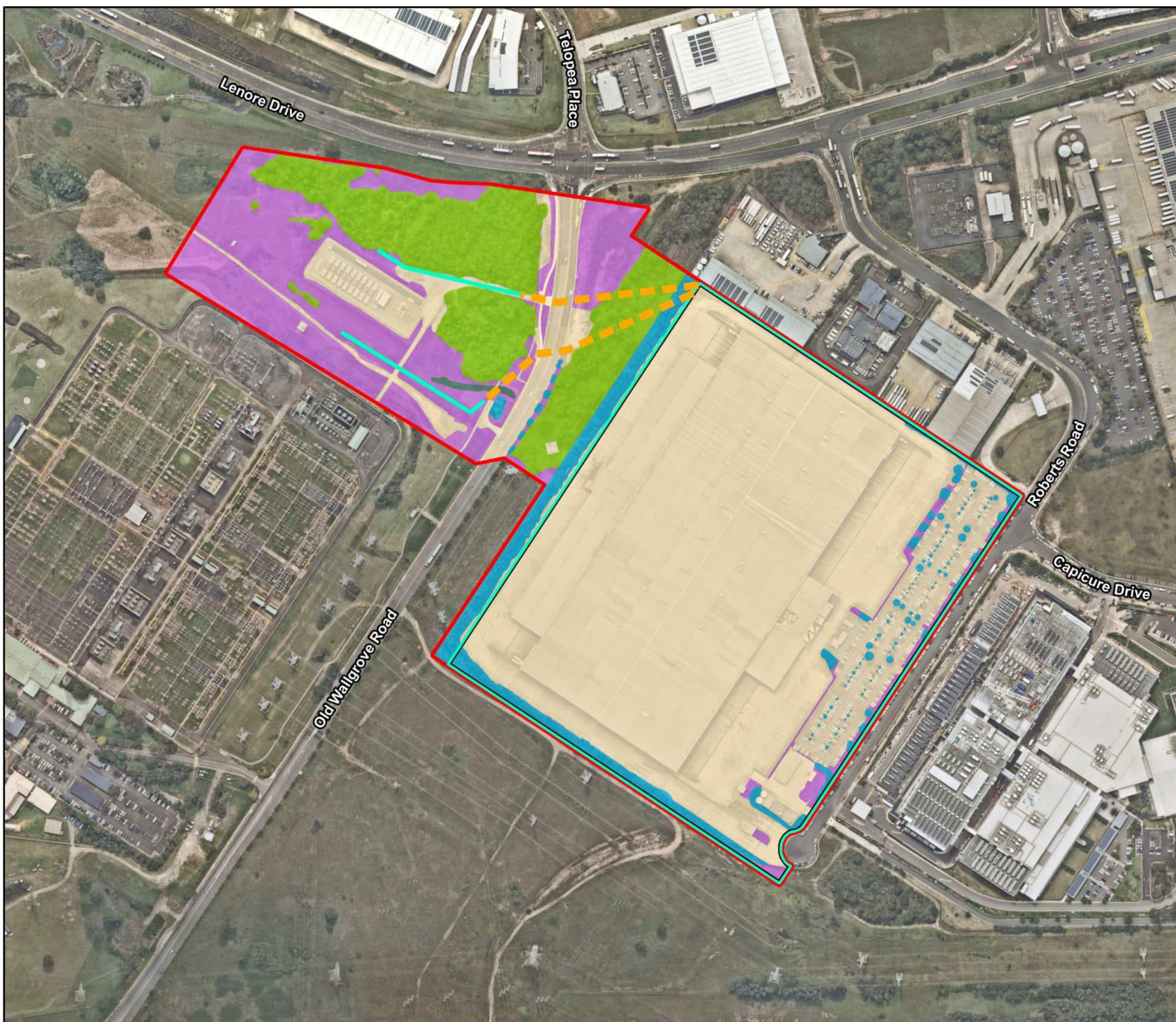


Figure 13 Wind Turbine Disturbance Zone (n/a)



SERIOUS AND IRREVERSIBLE
IMPACTS

FIGURE 14

LEGEND

- Study Area
- Subject Land
- Proposed Underbore

SAIL Entity*

- PCT 3320 - Cumberland Shale
- Plains Woodland & *Deyeuxia appressa*

*Note: No impacts to SAIL entities are proposed.

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.



Coordinate System: GDA2020 MGA Zone 56

Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH



THRESHOLDS FOR ASSESSING
AND OFFSETTING IMPACTS

FIGURE 15

LEGEND

- Study Area
- Subject Land
- Proposed Underbore

Vegetation

- Areas not requiring an offset
- Areas not requiring further assessment

SAIL Entity*

- PCT 3320 - Cumberland Shale
- Plains Woodland & *Deyeuxia appressa*

*Note: No impacts to SAIL entities are proposed.

Data Sources:
NSW SS
Aerial imagery: Nearmap (March 2026)

DISCLAIMER: All information within this document may be based on external sources. SLR Consulting Pty Ltd makes no warranty regarding the data's accuracy or reliability for any purpose.

 0 100 200 m

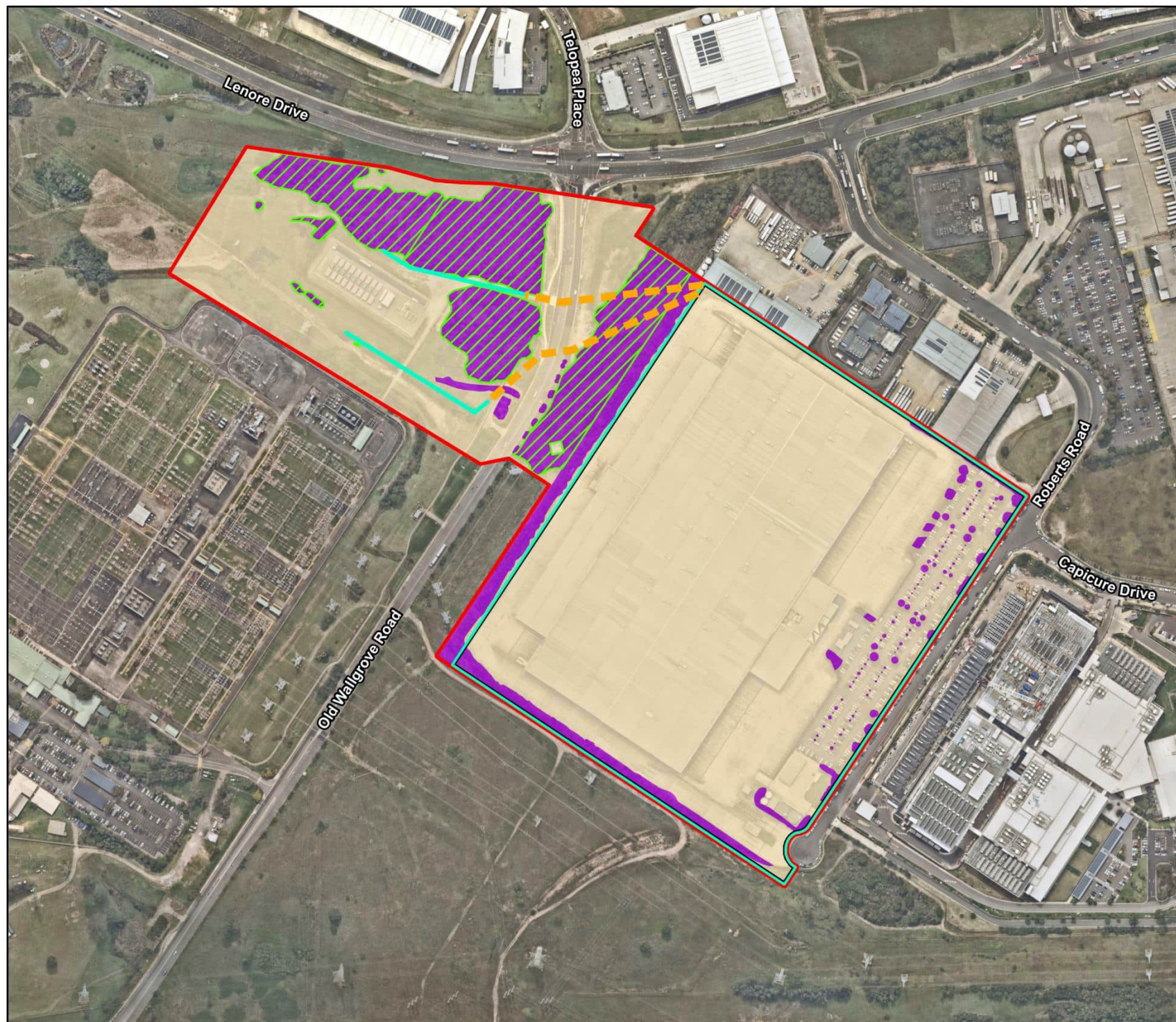
Coordinate System: GDA2020 MGA Zone 56

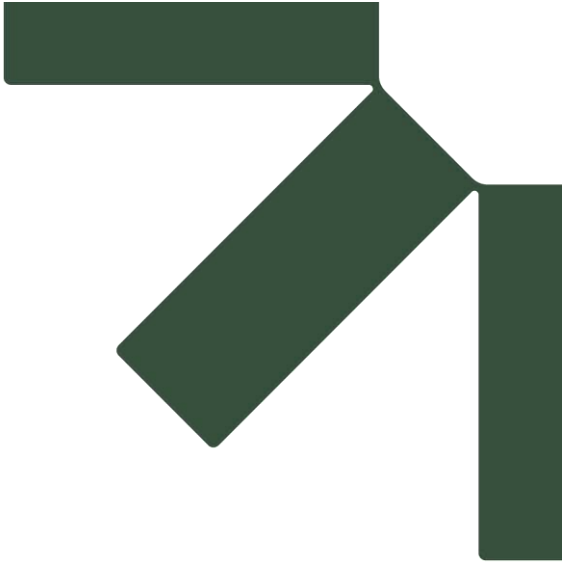
Scale: 1:5,000 at A4

Project Number: 610.033079

Date Drawn: 15-Apr-2026

Drawn by: JH





Appendix A BDAR Requirements Compliance

Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

SLR Project No.: 610.033079.00001

6 May 2026

Table A-1: Compliance of Introduction Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapters 2 And 3)

Information Type	BAM Requirement	Section in BDAR
Information	Introduction to the biodiversity assessment including:	-
	☒ brief description of the proposal	1.1.1
	☒ identification of subject land boundary, including: ☒ operational footprint ☒ construction footprint indicating clearing associated with temporary/ancillary construction facilities and infrastructure	1.1.3
	☒ general description of the subject land	1.1.3
	☒ sources of information used in the assessment, including reports and spatial data	1.5
	☒ identification and justification for entering the BOS	1.2
Maps and Table	Map of the subject land boundary showing the final proposal footprint, including the construction footprint for any clearing associated with temporary/ancillary construction facilities and infrastructure	Figure 1

Table A-2: Compliance of Landscape Chapter with BDAR Minimum Information Requirements (BAM Reference: Sections 3.1 And 3.2, Appendix E)

Information Type	BAM Requirement	Section in BDAR
Information	Identification of site context components and landscape features, including:	—
	☒ general description of subject land topographic and hydrological setting, geology and soils	1.1.3
	☒ per cent native vegetation cover in the assessment area (as described in BAM Section 3.2)	2.1.2
	☒ IBRA bioregions and subregions (as described in BAM Subsection 3.1.3(2.))	3.2.1
	☒ rivers and streams classified according to stream order (as described in BAM Subsection 3.1.3(3.) and Appendix E)	3.2.2
	☒ wetlands within, adjacent to and downstream of the site (as described in BAM Subsection 3.1.3(3.))	3.2.2
	☒ connectivity of different areas of habitat (as described in BAM Subsection 3.1.3(5–6.))	3.2.3
	☒ karst, caves, crevices, cliffs, rocks and other geological features of significance and for vegetation clearing proposals, soil hazard features (as described in BAM Subsections 3.1.3(7.) and 3.1.3(12.))	3.2.4
	☒ areas of outstanding biodiversity value occurring on the subject land and assessment area (as described in BAM Subsection 3.1.3(8–9.))	3.2.5



Information Type	BAM Requirement	Section in BDAR
	☒ any additional landscape features identified in any SEARs for the proposal	3.2.7
	☒ NSW (Mitchell) landscape on which the subject land occurs	3.2.6
	☒ details of field reconnaissance undertaken to confirm the extent and condition of landscape features and native vegetation cover (as described in Operational Manual Stage 1 Section 2.4)	2.1
Maps and tables	☒ Site Map ☒ Property boundary ☒ Boundary of subject land ☒ Cadastre of subject land (including labelling of Lot and DP or section plan if relevant) ☒ Landscape features identified in BAM Subsection 3.1.3	Figure 1
	☒ Location Map ☒ Digital aerial photography at 1:1,000 scale or finer ☒ Boundary of subject land ☒ Assessment area (i.e. the subject land and either 1500 m buffer area or 500 m buffer for linear development) ☒ Landscape features identified in BAM Subsection 3.1.3 ☒ Additional detail (e.g. local government area boundaries) relevant at this scale	Figure 2
	Landscape features identified in BAM Subsection 3.1.3 and to be shown on the Site Map and/or Location Map include: ☒ IBRA bioregions and subregions ☒ rivers, streams and estuaries ☒ wetlands and important wetlands ☒ connectivity of different areas of habitat ☒ karst, caves, crevices, cliffs, rocks and other geological features of significance and if required, soil hazard features ☒ areas of outstanding biodiversity value occurring on the subject land and assessment area ☒ any additional landscape features identified in any SEARs for the proposal ☒ NSW (Mitchell) landscape on which the subject land occurs	Figure 1 and Figure 2
Data	☒ All report maps as separate jpeg files	-
	Individual digital shape files of:	-
	☒ subject land boundary	-
	☒ assessment area (i.e. subject land and 1500 m buffer area) boundary	-
	☒ cadastral boundary of subject land	-
	☒ areas of native vegetation cover	-



Information Type	BAM Requirement	Section in BDAR
	☒ landscape features	-

Table A-3: Compliance of Native Vegetation Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 4, Appendix A And Appendix H)

Information Type	BAM Requirement	Section in BDAR
Information	☒ Identify native vegetation extent within the subject land, including cleared areas and evidence to support differences between mapped vegetation extent and aerial imagery (as described in BAM Section 4.1(1-3.) and Subsection 4.1.1)	4.1 and Figure 7
	☒ Provide justification for all parts of the subject land that do not contain native vegetation (as described in BAM Subsection 4.1.2)	4.1.2
	☒ Review of existing information on native vegetation including references to previous vegetation maps of the subject land and assessment area (described in BAM Section 4.1(3.) and Subsection 4.1.1)	2.2
	☒ Describe the systematic field-based floristic vegetation survey undertaken in accordance with BAM Section 4.2	2.2.3
	☒ Where relevant, describe the use of more appropriate local data, provide reasons that support the use of more appropriate local data and include the written confirmation from the decision-maker that they support the use of more appropriate local data (as described in BAM Subsection 1.4.2 and Appendix A)	5.5 and Appendix G
	For each PCT within the subject land, describe:	—
	☒ PCT name and ID	4.2 and Figure 8
	☒ vegetation class	4.2
	☒ extent (ha) within subject land	4.2
	☒ evidence used to identify a PCT including any analyses undertaken, references/sources, existing vegetation maps (BAM Section 4.2(1-3.))	4.2
	☒ plant species relied upon for identification of the PCT and relative abundance of each species	4.2
	☒ if relevant, TEC status including evidence used to determine vegetation is the TEC (BAM Subsection 4.2.2(1-2.))	4.2 , 4.3 and Figure 9
	☒ estimate of per cent cleared value of PCT (BAM Subsection 4.2.1(5.))	4.2
	Describe the vegetation integrity assessment of the subject land, including:	—



Information Type	BAM Requirement	Section in BDAR
	☒ identification and mapping of vegetation zones (as described in BAM Subsection 4.3.1)	4.4 and Figure 10
	☒ description of vegetation zones within the subject land (as described in Operational Manual Stage 1 Table 2 and Subsection 3.3.2)	4.4 and Figure 10
	☒ area (ha) of each vegetation zone	4.4
	☒ assessment of patch size (as described in BAM Subsection 4.3.2)	4.4
	☒ survey effort (i.e. number of vegetation integrity survey plots) as described in BAM Subsection 4.3.4(1-2.)	4.5.1
	☒ use of relevant benchmark data from BioNet Vegetation Classification (as described in BAM Subsection 4.3.3(5.))	4.5.3
	Where use of more appropriate local benchmark data is proposed (as described in BAM Subsection 1.4.2, BAM Subsection 4.3.3(5.) and BAM Appendix A): ☒ identify the PCT or vegetation class for which local benchmark data will be applied ☒ identify published sources of local benchmark data (if benchmarks obtained from published sources) ☒ describe methods of local benchmark data collection (if reference plots used to determine local benchmark data)	4.5.3
	☒ provide justification for use of local data rather than BioNet Vegetation Classification benchmark values	4.5.3
	☒ provide written confirmation from the decision-maker that they support the use of local benchmark data	Appendix G
Maps and tables	☒ Map of native vegetation extent within the subject land at scale not greater than 1:10,000 including identification of all areas of native vegetation including areas that are ground cover only , cleared areas (as described in BAM Section 4.1(1-3.)) and all parts of the subject land that do not contain native vegetation (BAM Subsection 4.1.2)	Figure 7
	☒ Map of PCTs within the subject land (as described in BAM Section 4.2(1.))	Figure 8
	☒ Map of vegetation zones within the subject land (as described in BAM Subsection 4.3.1)	Figure 10
	☒ Map the location of floristic vegetation survey plots and vegetation integrity survey plots relative to PCT boundaries	Figure 6
	☒ Map of TEC distribution on the subject land and table of TEC listing, status and area (ha)	Figure 9 and Table 13
	☒ Map of patch size locations for each native vegetation zone and table of patch size areas (as described in BAM Subsection 4.3.2)	Figure 10 and Table 14
	Table of current vegetation integrity scores for each vegetation zone within the site and including:	4.5



Information Type	BAM Requirement	Section in BDAR
	☒ composition condition score ☒ structure condition score ☒ function condition score ☒ presence of hollow bearing trees	
Data	☒ All report maps as separate jpeg files	-
	☒ Plot field data (MS Excel format)	Appendix F
	☒ Plot field datasheets	Appendix F
	Digital shape files of:	-
	☒ PCT boundaries within subject land	-
	☒ TEC boundaries within subject land	-
	☒ vegetation zone boundaries within subject land	-
	☒ floristic vegetation survey and vegetation integrity plot locations	-

Table A-4: Compliance of Threatened Species Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 5)

Information Type	BAM Requirement	Section in BDAR
Information	Identify ecosystem credit species likely to occur on the subject land, including:	-
	☒ list of ecosystem credit species derived from the BAM-C (as described in BAM Subsection 5.1.1 and Section 5.2(1.))	5.1.1
	☒ justification and supporting evidence for exclusion of any ecosystem credit species based on geographic limitations, habitat constraints or vagrancy (as described in BAM Subsections 5.2.1 and 5.2.2)	5.1.1
	☒ justification for addition of any ecosystem credit species to the list	5.1.1
	Identify species credit species likely to occur on the subject land, including:	-
	☒ list of species credit species derived from the BAM-C (as described in BAM Subsection 5.1.1)	5.1.2
	☒ justification and supporting evidence for exclusions based on geographic limitations, habitat constraints or vagrancy (as described in BAM Subsections 5.2.1 and 5.2.2)	5.1.2
	☒ justification and supporting evidence for exclusions based on degraded habitat constraints and/or microhabitats on which the species depends (as described in BAM Subsection 5.2.2)	5.1.2
	☒ justification for addition of any species credit species to the list	5.1.2
	From the list of candidate species credit species, identify:	5.2
	☒ species assumed present within the subject land (if relevant) (as described in BAM Subsection 5.2.4(2.a.))	



Information Type	BAM Requirement	Section in BDAR
	☒ species present within the subject land on the basis of being identified on an important habitat map for a species (as described in BAM Subsection 5.2.4(2.d.))	
	☒ species for which targeted surveys are to be completed to determine species presence (BAM Subsection 5.2.4(2.b.))	
	☒ species for which an expert report is to be used to determine species presence (BAM Subsection 5.2.4(2.c.))	
	Present the outcomes of species credit species assessments from:	-
	☒ threatened species survey (as described in BAM Section 5.2.4)	5.3
	☒ expert reports (if relevant) including justification for presence of the species and information used to make this determination (as described in BAM Subsection 5.2.4, Section 5.3, Box 3)	5.4
	Where survey has been undertaken include detailed information on:	-
	☒ survey method and effort (as described in BAM Section 5.3)	5.3
	☒ justification of survey method and effort (e.g. citation of peer-reviewed literature) if approach differs from the department's taxa-specific survey guides or where no relevant guideline has been published	5.3
	☒ timing of survey in relation to requirements in the TBDC or the department's taxa-specific survey guides. Where survey was undertaken outside these guides include justification for the timing of surveys	5.3
	☒ survey personnel and relevant experience	Declaration ii
	☒ describe any limitations to surveys and how these were addressed/overcome	5.3
	Where an expert report has been used in place of survey (as described in BAM Section 5.3, Box 3), include:	-
	☒ justification of the use of an expert report	5.4
	☒ identify the expert, provide evidence of their expert credentials and departmental approval of expert status	
	☒ all requirements of Box 3 have been addressed in the expert report	
	Where use of local data is proposed (BAM Subsection 1.4.2):	—
	☒ identify relevant species	5.5
	☒ identify data to be amended	
	☒ identify source of information for local data, e.g. published literature, additional survey data, etc.	
	☒ justify use of local data in preference to VIS Classification or TBDC data	
	☒ provide written confirmation from the decision-maker that they support the use of local data	Appendix G



Information Type	BAM Requirement	Section in BDAR
	Species polygon completed for species credit species present within the subject land (assumed present or determined on the basis of survey, expert report or important habitat map) ensuring that:	-
	☒ the unit of measure for each species is documented	5.6
	for species assessed by area:	-
	☒ the polygon includes the extent of suitable habitat for the target species within the subject land (as described in BAM Subsection 5.2.5)	5.6
	☒ a description of, and evidence-based justification for, the habitat constraints, features or microhabitats used to map the species polygon including reference to information in the TBDC for that species and any buffers applied	5.6
	for species assessed by counts of individuals:	-
	☒ the number of individual plants present on the subject land (as described in BAM Subsection 5.2.5(3.))	5.6
	☒ the method used to derive this number (i.e. threatened species survey or expert report) and evidence-based justification for the approach taken	5.6
	☒ the polygon includes all individuals located on the subject land with a buffer of 30 m around the individuals or groups of individuals on the subject land	5.6
	☒ Identify the biodiversity risk weighting for each species credit species identified as present within the subject land (as described in BAM Section 5.4)	5.6
Maps and tables	☒ Table showing ecosystem credit species in accordance with BAM Subsection 5.1.1, and identifying:	-
	☒ the ecosystem credit species removed from the list	5.1.1
	☒ the sensitivity to gain class of each species	5.1.1
	☒ Table detailing species credit species in accordance with BAM Section 5.2 and identifying:	-
	☒ the species credit species removed from the list of species because the species is considered vagrant, out of geographic range or the habitat or microhabitat features are not present	5.1.2
	☒ the candidate species credit species not recorded on the subject land as determined by targeted survey, expert report or important habitat map	5.2
	☒ Table detailing species credit species recorded or assumed as present within the subject land, habitat constraints or microhabitats associated with the species, counts of individuals (flora)/extent of suitable habitat (flora and fauna) (as described in BAM Subsection 5.2.6) and biodiversity risk weighting (BAM Section 5.4)	5.2, 5.6



Information Type	BAM Requirement	Section in BDAR
	☒ Map indicating the GPS coordinates of all individuals of each species recorded within the subject land and the species polygon for each species (as described in BAM Subsection 5.2.5)	Figure 11
Data	☒ Digital shape files of suitable habitat identified for survey for each candidate species credit species	-
	☒ Survey locations including GPS coordinates of any plots, transects, grids	-
	☒ Digital shape files of each species polygon including GPS coordinates of located individuals	-
	☒ Species polygon map in jpeg format	-
	☒ Expert reports and any supporting data used to support conclusions of the expert report	-
	☒ Field datasheets detailing survey information including prevailing conditions, date, time, equipment used, etc.	-

Table A-5: Compliance of Prescribed Impacts Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 6)

Information Type	BAM Requirement	Section in BDAR
Information	Identify potential prescribed biodiversity impacts on threatened entities, including:	-
	☒ karst, caves, crevices, cliffs, rocks and other geological features of significance (as described in BAM Subsection 6.1.1)	6.0
	☒ occurrences of human-made structures and non-native vegetation (as described in BAM Subsection 6.1.2)	
	☒ corridors or other areas of connectivity linking habitat for threatened entities (as described in BAM Subsection 6.1.3)	
	☒ waterbodies or any hydrological processes that sustain threatened entities (as described in BAM Subsection 6.1.4)	
	☒ protected animals that may use the proposed wind farm development site as a flyway or migration route (as described in BAM Subsection 6.1.5)	6.0
	☒ where the proposed development may result in vehicle strike on threatened fauna or on animals that are part of a threatened ecological community (as described in BAM Subsection 6.1.6)	6.0
	☒ Identify a list of threatened entities that may be dependent upon or may use habitat features associated with any of the prescribed impacts	6.0
	☒ Describe the importance of habitat features to the species including, where relevant, impacts on life cycle or movement patterns (e.g. Subsection 6.1.3)	6.0
	Where the proposed development is for a wind farm:	-



Information Type	BAM Requirement	Section in BDAR
	☒ identify a candidate list of protected animals that may use the development site as a flyway or migration route, including: resident threatened aerial species, resident raptor species and nomadic and migratory species that are likely to fly over the proposal area (as described in BAM Subsection 6.1.5)	6.0
	☒ provide details of targeted survey for candidate species of wind farm developments undertaken in accordance with BAM Subsection 6.1.5(2–3.)	6.0
	☒ predict the habitual flight paths for nomadic and migratory species likely to fly over the subject land and map the likely habitat for resident threatened aerial and raptor species (BAM Subsection 6.1.5(4.))	Figure 1 and Figure 2
	Where the proposal may result in vehicle strike:	–
	☒ identify a list of threatened fauna or protected fauna species that are part of a TEC and at risk of vehicle strike due to the proposal	6.0
Maps and tables	☒ Map showing location of any prescribed impact features (i.e. karst, caves, crevices, cliffs, rocks, human-made structures, etc.)	Figure 1 and Figure 2
	☒ Map showing location of potential vehicle strike locations	Figure 1
	☒ Maps of habitual flight paths for nomadic and migratory species likely to fly over the site and maps of likely habitat for threatened aerial species resident on the site (for wind farm developments only)	Figure 1 and Figure 2
Data	☒ Digital shape files of prescribed impact feature locations	–
	☒ Prescribed impact features map in jpeg format	–

Table A-6: Compliance of Avoid and Minimise Impacts Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 7)

Information Type	BAM Requirement	Section in BDAR
Information	Demonstration of efforts to avoid and minimise impacts on biodiversity values (including prescribed impacts) associated with the proposal location in accordance with Chapter 7, including an analysis of alternative:	-
	☒ modes or technologies that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed mode or technology	7.0
	☒ routes that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed route	7.0
	☒ alternative locations that would avoid or minimise impacts on biodiversity values and justification for selecting the proposed location	7.0



Information Type	BAM Requirement	Section in BDAR
	☒ 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	7.0
	☒ Describe efforts to avoid and minimise impacts (including prescribed impacts) to biodiversity values through proposal design (as described in BAM Sections 7.1 and 7.2)	7.0
	☒ Identification of any other site constraints that the proponent has considered in determining the location and design of the proposal (as described in BAM Subsection 7.2.1(3.))	7.0
	☒ Detail measures or options considered but not implemented because they are not feasible and/or practical (e.g. due to site constraints)	7.0
Maps and tables	☒ Table of measures to be implemented to avoid and minimise the impacts of the proposal, including action, outcome, timing and responsibility	7.0
	☒ Map of alternative footprints considered to avoid or minimise impacts on biodiversity values; and of the final proposal footprint, including construction and operation	7.3
	☒ Maps demonstrating indirect impact zones where applicable	Figure 12
Data	Digital shape files of:	-
	☒ alternative and final proposal footprint	-
	☒ direct and indirect impact zones	-
	☒ Maps in jpeg format	-

Table A-7: Compliance of Assessment of Impacts Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 8, Sections 8.1 And 8.2)

Information Type	BAM Requirement	Section in BDAR
Information	☒ Determine the impacts on native vegetation and threatened species habitat, including a description of direct impacts of clearing of native vegetation, threatened ecological communities and threatened species habitat (as described in BAM Section 8.1)	8.1
	Assessment of indirect impacts on vegetation and threatened species and their habitat including (as described in BAM Section 8.2):	-
	☒ description of the nature, extent, frequency, duration and timing of indirect impacts of the proposal	Table 27
	☒ documenting the consequences to vegetation and threatened species and their habitat including evidence-based justifications	8.2
	☒ reporting any limitations or assumptions, etc. made during the assessment	8.2



Information Type	BAM Requirement	Section in BDAR
	☒ identification of the threatened entities and their habitat likely to be affected	Table 27
	Assessment of prescribed biodiversity impacts (as described in BAM Section 8.3) including:	-
	assessment of the nature, extent frequency , duration and timing of impacts on the habitat of threatened species or ecological communities associated with:	-
	☒ karst, caves, crevices, cliffs, rocks and other features of geological significance	8.3
	☒ human-made structures	8.3.1
	☒ non-native vegetation	8.3.2
	☒ connectivity of different areas of habitat of threatened species that facilitates the movement of those species across their range	8.3.3
	☒ movement of threatened species that maintains their life cycle	8.3.3
	☒ water quality, waterbodies and hydrological processes that sustain threatened species and threatened ecological communities	8.3.4
	☒ assessment of the impacts of wind turbine strikes on protected animals	8.3
	☒ assessment of the impacts of vehicle strikes on threatened species of animals or on animals that are part of a TEC	8.3
	☒ evaluate the consequences of prescribed impacts	8.3
	☒ describe impacts that are uncertain	8.3
	☒ document limitations to data, assumptions and predictions	8.3
Maps and tables	☒ Table showing change in vegetation integrity score for each vegetation zone as a result of identified impacts	8.1.2
Data	N/A	-

Table A-8: Compliance of Mitigation and Management of Impacts Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 8, Sections 8.4 And 8.5)

Information Type	BAM requirement	Section in BDAR
Information	Identification of measures to mitigate or manage impacts in accordance with the recommendations in BAM Sections 8.4 and 8.5 including:	-
	☒ techniques, timing, frequency and responsibility	Table 29
	☒ identify measures for which there is risk of failure	
	☒ evaluate the risk and consequence of any residual impacts	
	☒ document any adaptive management strategy proposed	8.5
	Identification of measures for mitigating impacts related to:	-



Information Type	BAM requirement	Section in BDAR
	☒ displacement of resident fauna (as described in BAM Subsection 8.4.1(2.)) ☒ indirect impacts on native vegetation and habitat (as described in BAM Subsection 8.4.1(3.)) ☒ mitigating prescribed biodiversity impacts (as described in BAM Subsection 8.4.2)	8.4
	☒ Details of the adaptive management strategy proposed to monitor and respond to impacts on biodiversity values that are uncertain (BAM Section 8.5)	8.5
Maps and tables	☒ Table of measures to be implemented before, during and after construction to mitigate and manage impacts of the proposal, including action, outcome, timing and responsibility	Table 29
Data	N/A	

Table A-9: Compliance of Impact Summary Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 9)

Information Type	BAM Requirement	Section in BDAR
Information	Identification and assessment of impacts on TECs and threatened species that are at risk of a serious and irreversible impacts (SAIL, in accordance with BAM Section 9.1) including:	-
	☒ addressing all criteria in Subsection 9.1.1 for each TEC listed as at risk of an SAIL present on the subject land	9.0
	☒ for each TEC, report the extent of the TEC in NSW	9.0
	☒ addressing all criteria in Subsection 9.1.2 for each threatened species at risk of an SAIL present on the subject land	9.0
	☒ for each threatened species, report the population size in NSW	9.0
	☒ documenting assumptions made and/or limitations to information ☒ documenting all sources of data, information, references used or consulted ☒ clearly justifying why any criteria could not be addressed	9.0
	☒ Identification of impacts requiring offset in accordance with BAM Section 9.2	11.1.1
	☒ Identification of impacts not requiring offset in accordance with BAM Subsection 9.2.1(3.)	11.1.1
	☒ Identification of areas not requiring assessment in accordance with BAM Section 9.3	11.2
Maps and tables	☒ Map showing the extent of TECs at risk of an SAIL within the subject land	Figure 14
	☒ Map showing location of threatened species at risk of an SAIL within the subject land	Figure 14



Information Type	BAM Requirement	Section in BDAR
	Map showing location of:	-
	☒ impacts requiring offset	Figure 15
	☒ impacts not requiring offset	Figure 15
	☒ areas not requiring assessment	Figure 15
Data	Digital shape files of:	-
	☒ extent of TECs at risk of an SAIL within the subject land	-
	☒ location of threatened species at risk of an SAIL within the subject land	-
	☒ boundary of impacts requiring offset	-
	☒ boundary of impacts not requiring offset	-
	☒ boundary of areas not requiring assessment	-
	☒ Maps in jpeg format	-

Table A-10: Compliance of Impact Summary Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 10)

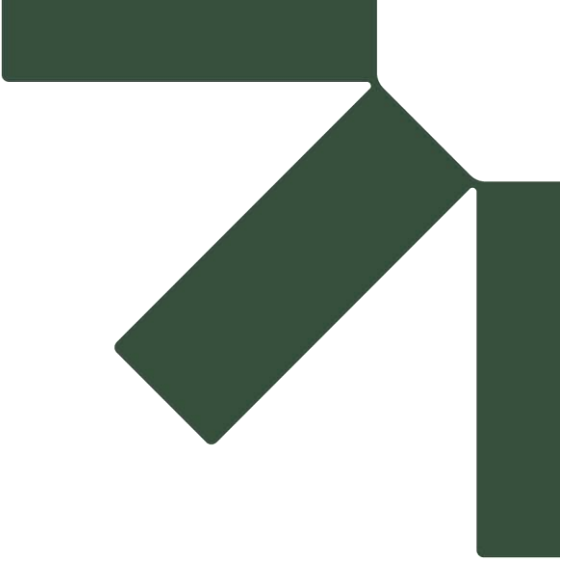
Information Type	BAM Requirement	Section in BDAR
Information	Ecosystem credits and species credits that measure the impact of the development on biodiversity values, including:	-
	☒ future vegetation integrity score for each vegetation zone within the subject land (Equation 25 and Equation 26 in BAM Appendix H)	11.1.1
	☒ change in vegetation integrity score (BAM Subsection 8.1.1)	
	☒ number of required ecosystem credits for the direct impacts of the proposal on each vegetation zone within the subject land (BAM Subsection 10.1.2)	
	☒ biodiversity risk weighting for each	11.1.1
Maps and tables	☒ number of required species credits for each candidate threatened species that is directly impacted on by the proposal (BAM Subsection 10.1.3)	11.1.2
	☒ Table of PCTs requiring offset and the number of ecosystem credits required	11.1.1
Data	☒ Table of threatened species requiring offset and the number of species credits required	11.1.1
	☐ Submitted proposal in the BAM Calculator	-



Table A-11: Compliance of Biodiversity Credit Report Chapter with BDAR Minimum Information Requirements (BAM Reference: Chapter 10)

Information Type	BAM Requirement	Section in BDAR
Information	☒ Description of credit classes for ecosystem credits and species credits at the development or clearing site or land to be biodiversity certified (BAM Section 10.2)	12.0
	☒ BAM credit report in pdf format	Appendix H
Maps and tables	☒ Table of credit class and matching credit profile	12.0
Data	☐ BAM credit report in pdf format	Appendix H





Appendix B Biodiversity Values Map and Threshold Tool Report

Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

SLR Project No.: 610.033079.00001

6 May 2026



Department of Planning and Environment

Biodiversity Values Map and Threshold Report

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

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

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

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

Biodiversity Values Map and Threshold Report		
Date of Report Generation		10/11/2025 12:32 PM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	Does the development Footprint intersect with BV mapping?	yes
1.2	Was ALL BV Mapping within the development footprint added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
1.3	Date of expiry of dark purple 90 day mapping	N/A
1.4	Is the Biodiversity Values Map threshold exceeded?	yes
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	Size of the development or clearing footprint	284,132.6 sqm
2.2	Native Vegetation Area Clearing Estimate (NVACE) (within development/clearing footprint)	43,752.5 sqm
2.3	Method for determining Minimum Lot Size	Lot size
2.4	Minimum Lot Size (10,000sqm = 1ha)	287 sqm
2.5	Area Clearing Threshold (10,000sqm = 1ha)	2,500 sqm
2.6	Does the estimate exceed the Area Clearing Threshold? (NVACE results are an estimate and can be reviewed using the Guidance)	yes
REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area? (Your local council will determine if a BDAR is required)		yes





Department of Planning and Environment

What do I do with this report?

- If the result above indicates the BOS Threshold has been exceeded, your local council **may require** a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>.
- If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is "likely to significantly affect threatened species" as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.
- If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.
- If **all** Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

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

Review Options:

- If you believe the Biodiversity Values mapping is incorrect please refer to our [BV Map Review webpage](#) for further information.
- If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the [Guide for reviewing area clearing threshold results from the BMAT Tool](#).

Acknowledgement

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

Signature: _____

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

Date: _____

10/11/2025 12:32 PM





Department of Planning and Environment

Biodiversity Values Map and Threshold Tool

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

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

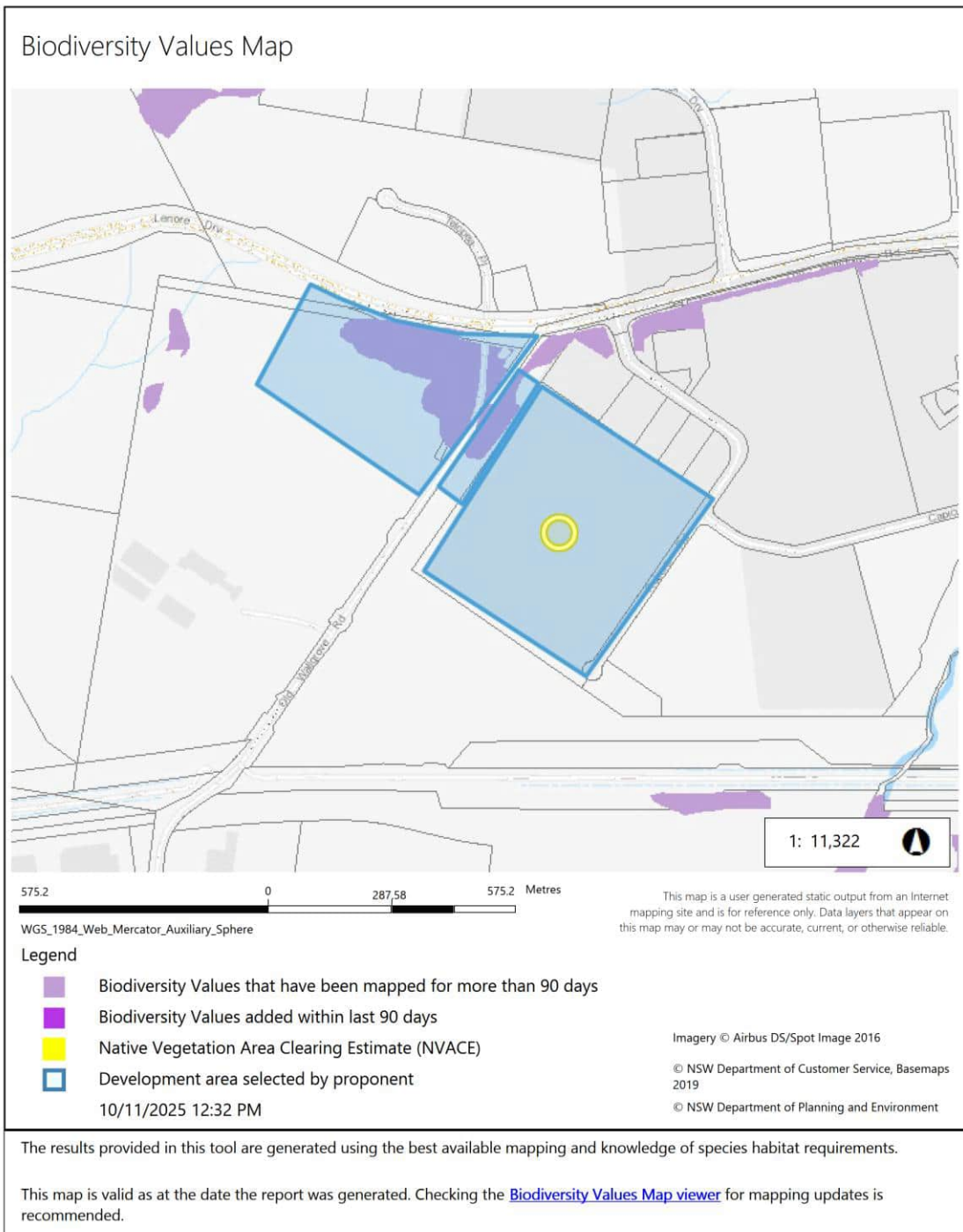
This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

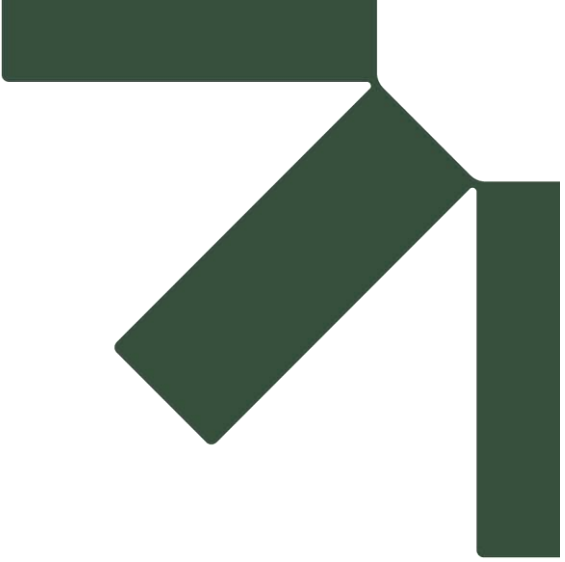
What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the [Biodiversity Values Map webpage](#).

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

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







Appendix C Test of Significance (n/a)

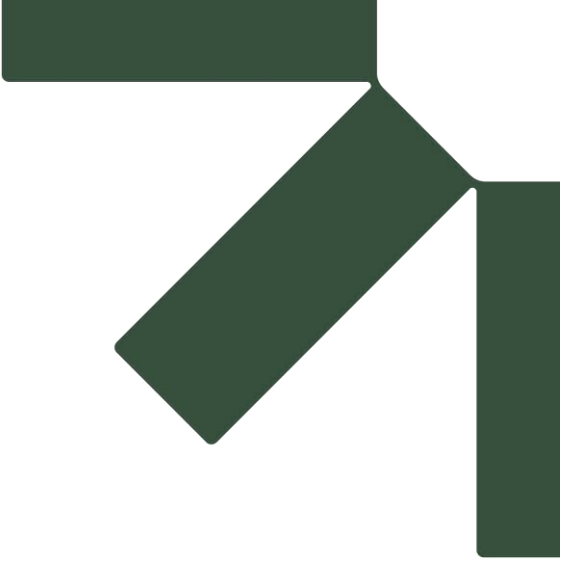
Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

SLR Project No.: 610.033079.00001

6 May 2026



Appendix D Determination of Excluded Impacts (n/a)

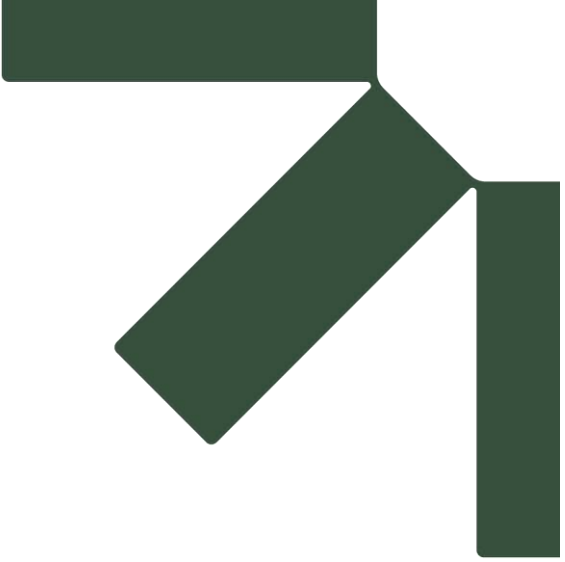
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Appendix E Matter of National Environmental Significance

Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

SLR Project No.: 610.033079.00001

6 May 2026

E.1 Overview of EPBC Act Protected Matters

Under the EPBC Act an action will require approval from the Australian Government Environment Minister (the 'minister') if the action has, will have, or is likely to have, a significant impact on a Matter of National Environmental Significance (MNES). The general test for significance is whether an impact is 'important, notable or of consequence, having regard to its context or intensity'.

The following section provides an assessment of the *Matters of National Environmental Significance Significant Impact Guidelines 1.1* (DoE, 2013) with respect to threatened species and communities, as well as migratory species that could utilise the vegetation and habitats within the study area. This assessment aims to assist the applicant to decide whether they should submit a referral to the Commonwealth Department of Climate Change, Energy, the Environment and Water for a decision by the minister on whether assessment and approval is required under the EPBC Act.

E.2 Relevant MNES

E.2.1 PMST Search Results

A search of the Protected Matters Search Tool (PMST) reveals that 63 threatened species, 12 migratory species (and/or their habitats) and eight threatened ecological communities listed in the EPBC Act are predicted to occur within a 10 km radius of the study area (see attached PMST report).

E.2.2 Threatened Species

In relation to the 63 threatened species listed under the EPBC Act that have been detected by the PMST most are also listed under the BC Act and are not associated with the PCTs that occur on the study area or are assessed in other sections of the BDAR.

Accordingly, the TBDC does not identify the following species as being associated with PCT 3320 or PCT 3975, and the vegetation and habitats within the study area do not represent potential habitat for these species: Southern Whiteface, Sharp-tailed Sandpiper, Latham's Snipe, Painted Honeyeater, South-eastern Hooded Robin, Blue-winged Parrot, Pilotbird, Common Greenshank, Parma Wallaby, Greater Glider, Yellow-bellied Glider, New Holland Mouse, Bynoe's Wattle, *Allocasuarina glareicola*, Thick-lipped Spider-orchid (*Caladenia tessellata*), Leafless Tongue-orchid (*Cryptostylis hunteriana*), White-flowered Wax Plant (*Cynanchum elegans*), *Darwinia biflora*, Yellow Gnat-orchid (*Genoplesium baueri*), Small-flower Grevillea (*Grevillea parviflora* subsp. *parviflora*), Wingless Raspwort (*Haloragis exalata* subsp. *exalata*), Woronora Beard-heath (*Leucopogon exolasius*), Deane's Melaleuca (*Melaleuca deanei*), *Micromyrtus blakelyi*, Illawarra Greenhood (*Pterostylis gibbosa*), Eastern Underground Orchid (*Rhizanthella slateri*), Scrub Turpentine (*Rhodamnia rubescens*), Native Guava (*Rhodomyrtus psidioides*), Magenta Lilly Pilly (*Syzygium paniculatum*), Austral Toadflax (*Thesium australe*) and Pink-tailed Worm-lizard (*Aprasia parapulchella*).

The vegetation within the study area is too degraded and isolated (i.e. small patch size class), such that it does not represent potential habitat for the following species which were excluded by the BAM-C:

- Gang-gang Cockatoo (*Callocephalon fimbriatum*)
- Red Goshawk (*Erythrorhynchus radiatus*)



- Grey Falcon (*Falco hypoleucos*)
- Eastern Curlew / Far Eastern Curlew (*Numenius madagascariensis*)
- Giant Burrowing Frog / Eastern Owl Frog (*Heleioporus australiacus australiacus*)
- Large-eared Pied Bat (*Chalinolobus dwyeri*)
- Brush-tailed Rock-wallaby (*Petrogale penicillata*)

The study area also does not represent 'important habitat' for Regent Honeyeater, Curlew Sandpiper, South-eastern Glossy Black-Cockatoo, Swift Parrot, Grey-headed Flying-fox and Tall Knotweed (*Persicaria elatior*) which were removed from assessment based on habitat constraints or degraded microhabitats.

The study area represents potential, mainly foraging habitat for the following species, which have been assessed for ecosystem credits: Australasian Bittern, Brown Treecreeper, Australian Painted Snipe, Diamond Firetail, Grey-headed Flying-fox, Regent Honeyeater, South-eastern Glossy Black-Cockatoo, Spotted-tailed Quoll, Swift Parrot and White-throated Needle-tail.

The following species have some potential to occur but were not detected during targeted surveys and/or site habitats are not considered suitable: Green and Golden Bell Frog, Koala, Downy Wattle (*Acacia pubescens*), Camden White Gum (*Eucalyptus benthamii*), *Micromyrtus minutiflora*, Nodding Geebung (*Persoonia nutans*), *Pimelea curviflora* var. *curviflora*, Spiked Rice-flower (*Pimelea spicata*), Rufous Pomaderris (*Pomaderris brunnea*), Sydney Plains Greenhood (*Pterostylis saxicola*) and *Pultenaea parviflora*.

For the remaining species listed under the EPBC Act only:

- The study area does not represent suitable habitat for aquatic species Macquarie Perch and Australian Grayling

As such, further assessment is required for ecosystem credit species retained in the assessment, being Australasian Bittern, Brown Treecreeper, Australian Painted Snipe, Diamond Firetail, Grey-headed Flying-fox, Regent Honeyeater, South-eastern Glossy Black-Cockatoo, Spotted-tailed Quoll, Swift Parrot and White-throated Needle-tail.

E.2.3 Migratory Species

The study area and assessment area do not contain 'important habitat' for migratory shorebirds including the Common Sandpiper, Sharp-tailed Sandpiper, Curlew Sandpiper, Pectoral Sandpiper, Latham's Snipe, Eastern Curlew and Common Greenshank. Important habitat for migratory shorebirds is defined as "those recognised as nationally or internationally important" (DEE, 2017).

Other migratory species include two non-breeding migrants from Asia (the Fork-tailed Swift and White-throated Needle-tail), as well as the Yellow Wagtail, which is an extremely uncommon migrant to Australia (DoE, 2015). The Fork-tailed Swift and White-throated Needle-tail are almost exclusively aerial, and the study area is unlikely to provide 'important habitat' for these species. It is highly unlikely that the study area represents important habitat for the Yellow Wagtail, based on its limited occurrence in Australia and the nature of the habitats within the study area.

The Osprey has undergone targeted survey and has not been recorded within the study area and is not expected to use the area for breeding purposes.

Accordingly, none of the migratory species detected by the PMST are considered relevant matters for further assessment.



E.2.4 Threatened Ecological Communities

The EPBC Act listing for Cumberland Plain Shale Woodland is accompanied by Listing Advice (TSSC, 2009) and Approved Conservation Advice (DEWHA, 2009), which contain diagnostic information and condition thresholds to assist in determining whether vegetation is representative of the nationally listed EC.

Key diagnostic characteristics identifying Cumberland Plain Shale Woodland are as follows (TSSC, 2009):

- Distribution is limited to the Sydney Basin Bioregion with most occurrences in the Cumberland Sub-region. This covers a geographic area commonly known as the Cumberland Plain, a rain shadow coastal valley in western Sydney.
- Most occurrences are on clay soils derived from Wianamatta Group geology, with limited to rare occurrences on soils derived from Tertiary Alluvium, Holocene Alluvium, the Mittagong Formation, Aeolian Deposits and Hawkesbury Sandstone.
- Upper tree layer species must be present with these features:
 - The minimum projected foliage cover of canopy trees is 10% or more; and
 - The tree canopy is typically dominated by *Eucalyptus moluccana* (Grey Box), *E. tereticornis* (Forest Red Gum) and/or *E. fibrosa* (Red Ironbark). Other canopy species may occur in association with the typical dominants and may be locally dominant at some sites.
- A sparse lower tree layer may be present, typically with young eucalypts of upper tree canopy species and species of *Acacia*, *Exocarpos* and *Melaleuca*.
- The understorey typically is dominated by the ground layer and shows these features:
 - The ground layer typically comprises a variety of perennial native graminoids and forbs;
 - Native graminoid species that are often present include: grasses *Aristida ramosa* (Purple Wiregrass), *A. vagans* (Threeawn Speargrass), *Cymbopogon refractus* (Barbed Wire Grass), *Dichelachne micrantha* (Plumegrass), *Echinopogon caespitosus* var. *caespitosus* (Tufted Hedgehog Grass), *Eragrostis leptostachya* (Paddock Lovegrass), *Microlaena stipoides* subsp. *stipoides* (Weeping Grass), *Paspalidium distans* and *Themeda triandra* (Kangaroo Grass), and other graminoids *Carex inversa* (Knob Sedge), *Cyperus gracilis* (Slender Sedge), *Lomandra filiformis* subsp. *filiformis* (Wattle Mat-rush) and *L. multiflora* subsp. *multiflora* (Many-flowered Mat-rush);
 - Native forb and other herb species present include: *Asperula conferta* (Common Woodruff), *Brunoniella australis* (Blue Trumpet), *Cheilanthes sieberi* (Poison Rock-Fern), *Desmodium varians* (Slender Tick-trefoil), *Dianella longifolia* (Blue Flax-Lily), *Dichondra repens* (Kidney Weed), *Glycine* spp., *Hardenbergia violacea* (Native Sarsparilla), *Oxalis perennans*, *Pratia purpurascens* (Whiteroot) and *Wahlenbergia gracilis* (Australian Bluebell); and
 - A shrub layer may be present, to variable extent, and is often dominated by *Bursaria spinosa* (Blackthorn) while other species include: *Daviesia ulicifolia* (Gorse Bitter Pea), *Dillwynia sieberi*, *Dodonaea viscosa* subsp. *cuneata* (Wedge-



leaf Hop-bush), *Indigofera australis* (Native Indigo) and *Lissanthe strigosa* (Peach Heath).

Assemblages of native species that do not meet the key diagnostic criteria for Cumberland Plain Shale Woodland are not considered part of the nationally listed EC. Table E1 outlines the criteria for the three eligible condition classes of Cumberland Plain Shale Woodland as defined in the Listing Advice (TSSC, 2009).

Table E1: Condition Classes and Thresholds (TSSC, 2009)

Condition Classes	Criteria Thresholds
Class A Core thresholds that apply under most circumstances: patches with an understorey dominated by natives and a minimum size that is functional and consistent with the minimum mapping unit size applied in NSW.	- Minimum patch* size is ≥ 0.5 ha; AND $\geq 50\%$ of the perennial understorey vegetation cover** is made up of native species.
Class B Larger patches which are inherently valuable due to their rarity.	- The patch* size is ≥ 5 ha; AND $\geq 30\%$ of the perennial understorey vegetation cover** is made up of native species.
Class C Patches with connectivity to other large native vegetation remnants in the landscape.	- The patch* size is ≥ 0.5 ha; AND $\geq 30\%$ of the perennial understorey vegetation cover** is made up of native species; AND - the patch is contiguous*** with a native vegetation remnant (any native vegetation cover where the largest area present is dominated by native species) that is ≥ 5 ha in area.
Class D Patches that have large mature trees or trees with hollows (habitat) that are very scarce on the Cumberland Plain.	- The patch size is ≥ 0.5 ha in size; AND $\geq 30\%$ of the perennial understorey vegetation cover is made up of native species; AND - the patch has at least one tree with hollows per hectare or at least one large tree (≥ 80 cm DBH) per hectare from the upper tree layer species outlined in the Description and Appendix A.
* A <i>patch</i> is defined as a discrete and continuous area that comprises the ecological community, outlined in the <i>Description</i>. Patches should be assessed at a scale of 0.04 ha or equivalent (e.g. 20m x 20m plot). The number of plots (or quadrats or survey transects) per patch must take into consideration the size, shape and condition across the site. Permanent man-made structures, such as roads and buildings, are typically excluded from a patch but a patch may include small-scale disturbances, such as tracks or breaks or other small-scale variations in native vegetation that do not significantly alter the overall functionality of the ecological community for instance easy movement of wildlife or dispersal of spores, seeds and other plant propagules. ** <i>Perennial understorey vegetation cover</i> includes vascular plant species of the ground and shrub layers (as outlined in the <i>Description</i> and Appendix A) with a life cycle of more than two growing seasons (Australian Biological Resources Study, 2007). Measurements of perennial understorey vegetation cover exclude annuals, cryptogams, leaf litter, or exposed soil (although these are included in a patch of the ecological community when they do not [sic] alter functionality as per footnote 3 and the <i>Description and Condition Thresholds</i> are met). *** <i>Contiguous</i> means the woodland patch is continuous with, or in close proximity (within 100m), of another patch of vegetation that is dominated by native species in each vegetation layer present.	

This assessment relies on floristic information from site data collected by SLR Consulting as follows:



- BAM Plot data sampled by Fiona Iolini in October 2025
- Random meander species list of study area collected by Fiona Iolini in October 2025

Due to favourable rainfall conditions during the recent survey's (i.e. non-drought conditions), these surveys are considered adequate for assessing the community.

Outcomes of the site surveys with respect to EPBC Act-listing criteria are summarised below in Table E2 and Table E3. The following exotic species were removed from the assessment as they are annuals: *Medicago polymorpha* and *Senecio madagascariensis*. Two annual native species were also removed: *Cyanthillium cinereum* and *Euchiton sphaericus*.

Table E2: Average Cover and Count of Understorey Perennial Species from BAM Plots

Variable	BAM_01 (3320_Low)	BAM_02 3320_Moderate)	Patch Average
HTW Total Cover	20.1	21.1	20.6
Non-HTW Total Cover	0.1	0.6	0.35
Exotic Total Cover	20.2	21.7	20.95
Native Total Cover	9.8	48.7	29.25
HTW Total Species	2	4	3
Non-HTW Total Species	1	6	3.5
Exotic Total Species	3	10	6.5
Native Total Species	14	25	19.5

Table E3: Native Species List from Study Area

Species Name	Common Name	Species in EC Listing Advice
<i>Acacia decurrens</i>	Black Wattle	Yes
<i>Acacia falcata</i>	-	Yes
<i>Acacia implexa</i>	Hickory Wattle	Yes
<i>Acacia parramattensis</i>	Parramatta Wattle	Yes
<i>Acacia prominens</i>	Gosford Wattle	No
<i>Aristida ramosa</i>	Purple Wiregrass	Yes
<i>Aristida vagans</i>	Threeawn Speargrass	Yes
<i>Brunoniella australis</i>	Blue Trumpet	Yes
<i>Bursaria spinosa</i>	Native Blackthorn	Yes
<i>Casuarina cunninghamiana</i>	River Oak	No
<i>Casuarina glauca</i>	Swamp Oak	No
<i>Centella asiatica</i>	Indian Pennywort	Yes
<i>Clematis glycinoides</i>	Headache Vine	Yes
<i>Corymbia maculata</i>	Spotted Gum	Yes



Species Name	Common Name	Species in EC Listing Advice
<i>Cyanthillium cinereum</i> [syn <i>Vernonia cinerea</i>]	Little Ironweed	Yes
<i>Cymbopogon refractus</i>	Barbed Wire Grass	Yes
<i>Cynodon dactylon</i>	Common Couch	No
<i>Dianella caerulea</i>	Blue Flax-lily	No
<i>Dianella longifolia</i>	Pale Grass-lily	Yes
<i>Dianella revoluta</i>	Blueberry Lily	No
<i>Dichelachne micrantha</i>	Shorthair Plumegrass	Yes
<i>Dichondra repens</i>	Kidney Weed	Yes
<i>Dillwynia sieberi</i>	-	Yes
<i>Eucalyptus crebra</i>	Narrow-leaved Ironbark	Yes
<i>Eucalyptus fibrosa</i>	Red Ironbark	Yes
<i>Eucalyptus moluccana</i>	Grey Box	Yes
<i>Eucalyptus tereticornis</i>	Forest Red Gum	Yes
<i>Euchiton sphaericus</i>	Star Cudweed	Yes
<i>Glycine clandestina</i>	Twining glycine	Yes
<i>Goodenia hederacea</i>	Ivy Goodenia	Yes
<i>Hardenbergia violacea</i>	False Sarsaparilla	Yes
<i>Lomandra filiformis</i>	Wattle Matt-rush	Yes
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush	No
<i>Microlaena stipoides</i>	Weeping Grass	Yes
<i>Opercularia diphylla</i>	Stinkweed	Yes
<i>Parsonsia straminea</i>	Common Silkpod	No
<i>Paspalidium distans</i>	-	Yes
<i>Phragmites australis</i>	Common Reed	No
<i>Phyllanthus virgatus</i>	Wiry Spurge	Yes
<i>Pimelea curviflora</i> var. <i>gracilis</i>		No
<i>Pultenaea microphylla</i>	-	Yes
<i>Rytidosperma bipartitum</i>	Wallaby Grass	No
<i>Themeda triandra</i>		Yes
<i>Tricoryne elatior</i>	Yellow Autumn-lily	Yes
<i>Typha orientalis</i>	Broad-leaved Cumbungi	No
<i>Wahlenbergia communis</i>	Tufted Bluebell	No
<i>Wahlenbergia gracilis</i>	Sprawling Bluebell	Yes
	Total Characteristic Species	34



Based on the key diagnostic criteria and the thresholds defined Table E1, the PCT 3320 vegetation within the study area in low and moderate condition meet the definitions for Cumberland Plain Shale Woodland due to the following reasons:

- It occurs within the Sydney Basin Bioregion and Cumberland Subregion, which is the bioregion and subregion in which the study area is located.
- The vegetation is growing on clay soils derived from Wianamatta Group geology, which is the characteristic soil for the EC.
- Upper tree layer species are present with these features:
 - At 25% the minimum projected foliage cover of canopy trees of 10% is exceeded; and
 - The tree canopy is dominated by the typical species: *Eucalyptus moluccana* (Grey Box), *E. tereticornis* (Forest Red Gum) and *E. fibrosa* (Red Ironbark).
- A sparse lower tree layer is present, with young eucalypts (regrowth *Eucalyptus moluccana* were noted at BAM_02) and *Acacia parramattensis* and *Acacia decurrens* which is typical of the community.
- The understorey is dominated by the ground layer exhibiting these features:
 - Perennial native graminoids and forbs form a diverse ground layer at the site;
 - There are at least eight of the 13 listed typical native graminoids: *Aristida ramosa* (Purple Wiregrass), *A. vagans* (Threeawn Speargrass), *Cymbopogon refractus* (Barbed Wire Grass), *Dichelachne micrantha* (Plumegrass), *Microlaena stipoides* subsp. *stipoides* (Weeping Grass), *Paspalidium distans* and *Themeda triandra* (Kangaroo Grass), *Lomandra filiformis* subsp. *filiformis* (Wattle Mat-rush);
 - There are at least seven of the 12 native forb and other herb species: *Brunoniella australis* (Blue Trumpet), *Dianella longifolia* (Blue Flax-Lily), *Dichondra repens* (Kidney Weed), *Glycine* spp., *Hardenbergia violacea* (Native Sarsparilla), *Opercularia diphylla* (Stinkweed), and *Wahlenbergia gracilis* (Australian Bluebell); and
 - There are two of the six typical shrubs: *Bursaria spinosa* (Blackthorn) and *Dillwynia sieberi*.

Further assessment for Cumberland Plain Shale Woodland is required.

E.2.5 Conclusion

Relevant matters for further assessment include Cumberland Plain Shale Woodland and the following threatened species: Koala, Australasian Bittern, Brown Treecreeper, Australian Painted Snipe, Diamond Firetail, Grey-headed Flying-fox, Regent Honeyeater, South-eastern Glossy Black-Cockatoo, Spotted-tailed Quoll, Swift Parrot and White-throated Needle-tail.

E.3 Impact and Avoidance for MNES

The proposed development has been designed to avoid and minimise direct impacts to threatened species and communities (see Section 0 of this BDAR). There is some potential for indirect impacts on the adjoining areas of native vegetation. This represents:

- Indirect impacts to 3.5 hectares of Cumberland Plain Woodland.



- Indirect impacts to 3.5 hectares of potential habitat, being primarily foraging habitat, for the following species Australasian Bittern, Brown Treecreeper, Australian Painted Snipe, Diamond Firetail, Grey-headed Flying-fox, Regent Honeyeater, South-eastern Glossy Black-Cockatoo, Spotted-tailed Quoll, Swift Parrot and White-throated Needletail.

E.4 Assessments of Significance

The following Assessments of Significance have been prepared according to the criteria listed in the Significant Impact Guidelines 1.1 (Department of the Environment, 2013) for the following MNES listed under the EPBC Act of relevance to the proposed action:

- Listed threatened species with potential to occur:
 - Threatened birds/bat:
 - Vulnerable: Grey-headed Flying-fox, Brown Treecreeper, Diamond Firetail, South-eastern Glossy Black-Cockatoo, White-throated Needletail
 - Endangered/Critically Endangered: Australasian Bittern, Australian Painted Snipe, Regent Honeyeater, Swift Parrot
 - Endangered mammals: Spotted-Tailed Quoll
- Critically Endangered Cumberland Plain Woodland EC

Species information for each species below is sourced from the TBDC.

E.4.1 Vulnerable Threatened Birds and Bat

The Grey-headed Flying-fox *Pteropus poliocephalus* is Australia's largest bat, measuring 23-29 cm with a wingspan up to 1 m. It has dark grey body fur, a lighter grey head, a distinctive russet collar, and black wing membranes, and can be identified by leg fur that reaches the ankles. Typically found within 200 km of Australia's eastern coast from Rockhampton to Adelaide, these bats may occasionally appear outside their usual range during natural food shortages.

The Brown Treecreeper *Climacteris picumnus victorae* is a grey-brown bird with black streaks on its lower breast and belly and barred undertail, found mainly in the eucalypt woodlands of inland eastern Australia. The subspecies *Climacteris picumnus victorae* occurs from Corowa through Wagga Wagga to Inverell, gradually blending into the more arid-zone subspecies further west. Typically, sedentary and resident year-round, these birds live in small, social groups, foraging actively on both trees and fallen timber - more on the ground than other treecreepers. They rely on hollows in dead or live trees for nesting.

The Diamond Firetail *Stagonopleura guttata* is a medium-sized finch with a bright red bill, eyes and rump, a white breast divided by a bold black band, and grey upperparts with ashy-brown wings. Found only in south-eastern Australia, it ranges from central Queensland to South Australia's Eyre Peninsula and is common across NSW. Birds roost in dense shrubs or small roosting nests. The species is mostly sedentary, though some southern populations make local movements.

The South-eastern Glossy Black-Cockatoo *Calyptorhynchus lathami lathami* is a small brown-black cockatoo with a large bill, red tail panels in males, and yellow-to-orange-red panels with pale head markings in females. Usually seen in pairs or small groups feeding in sheoaks, it is uncommon but widespread across suitable forests and woodlands from central



Queensland to East Gippsland, extending inland through NSW, with small populations in the Riverina and on Kangaroo Island.

The White-throated Needletail *Hirundapus caudacutus*, a large swift with a wingspan of about 50 cm, this mostly dark bird is marked by a white throat, forehead, and undertail coverts, and has a short, square tail tipped with the spines that give the species its name. It migrates to eastern Australia from October to April, breeding from June to August in forested regions of southeastern Siberia, Mongolia, the Korean Peninsula, and northern Japan.

There are no BioNet Atlas records of the Diamond Firetail or the South-eastern Glossy Black-Cockatoo within 10 km of the subject land; however, there are records of all other species. The Brown Treecreeper, White-throated Needletail and Grey-headed Flying-fox have records within approximately 5 km of the subject land. It is possible, though not particularly likely, that these species would utilise the subject land as part of a larger foraging or nesting area. Following surveys, none of these species have been recorded within the subject land or immediate vicinity. Based on available data, no important population of any EPBC-listed vulnerable species is known or likely to occur on the subject land. Therefore, many significance criteria, which rely on impacts to an important population, are not triggered.

Table E4 Assessment of Significant Impact Criteria for Vulnerable Species - Grey-headed Flying-fox, Brown Treecreeper, Diamond Firetail, South-eastern Glossy Black-Cockatoo, White-throated Needletail

Significant Impact Criteria	Response
Will the action lead to a long-term decrease in the size of an important population of a species	Most of the species are highly mobile and wide-ranging. The Brown Treecreeper and Diamond Firetail are largely sedentary but have not been recorded within the study area. Surveys have been completed, and there is no evidence of these species using the subject land or the immediate vicinity. Because no important population exists on or near the subject land, the action cannot cause a long-term decrease in the size of an important population. Accordingly, the proposed development is not likely to cause a long-term decrease in the size of an important population of these species.
Will the action reduce the area of occupancy of an important population	Given the lack of evidence of these species within the study area, and the presence of extensive foraging habitat within the broader assessment area that is likely to provide more suitable conditions, it is unlikely that the removal of vegetation from the subject land will reduce the area of occupancy of an important population for these species. There is no important population within the footprint; therefore, its area of occupancy cannot be reduced.
Will the action fragment an existing important population into two or more populations	The proposed action is unlikely to fragment an existing important population of these species. As mobile species that forage across large areas, they are not expected to be affected by the removal or modification of a small portion of available habitat. Therefore, habitat fragmentation is not anticipated to occur.
Will the action adversely affect habitat critical to the survival of a species	The proposed action is unlikely to adversely affect habitat critical to the survival of these species. The available habitat within the study area is considered to have only marginal value for foraging and shelter for these species due to poor vegetation structure and disturbance history.



Significant Impact Criteria	Response
Will the action disrupt the breeding cycle of an important population	Targeted bird and habitat surveys of the subject land did not record any of these species. In addition, the White-throated Needletail is largely aerial and does not breed within Australia. The study area is assessed as providing only sub-optimal potential habitat for these species and is likely to represent only temporary foraging habitat. Accordingly, the proposed action is considered unlikely to result in a significant impact on the breeding cycle of any important population of these species.
Will the action modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	These species have not been recorded within the study area. The habitat present is of marginal value and is likely to be used only intermittently, primarily as potential foraging habitat. No direct clearing of native vegetation will occur other than a narrow strip of planted native vegetation. Approximately 3.5 hectares of potential habitat may be affected by indirect impacts; however, various mitigation measures are proposed to reduce the likelihood of indirect and prescribed impacts. Overall, the proposed action is considered unlikely to modify, destroy, remove, isolate, or reduce the availability or quality of habitat to an extent that would cause these species to decline.
Will the action result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat	Invasive species such as foxes and weeds are already present within the study area due to past and current land uses. Management actions for the control of weed and feral species will be implemented as part of the proposal's mitigation measures to ensure construction practices avoid increasing invasive species spread. The proposed action is unlikely to introduce invasive species harmful to these species and is unlikely to facilitate the establishment of harmful species.
Will the action introduce disease that may cause the species to decline	The proposed development is unlikely to introduce diseases that could cause these species to decline.
Will the action interfere substantially with the recovery of the species	The species have not been recorded within the study area but are known to occur in the broader locality. Habitat within and adjacent to the proposed development footprint is of marginal value for these species. As mobile species, they are likely to use the study area only intermittently as part of a wider foraging range. Avoidance and mitigation measures will be implemented to minimise potential impacts. Consequently, the proposed action is considered unlikely to interfere with the species' recovery.

E.4.2 Critically Endangered and Endangered Threatened Birds

The Australasian Bittern *Botaurus poiciloptilus* is Endangered under both the NSW BC Act and Commonwealth EPBC Act. It is a large, stocky bird about 75 cm long, with mottled brown upper plumage, a buff underside streaked dark brown, a pale throat, and a brownish-yellow bill. It has yellow eyes, a pale eyebrow, and pale green legs. Although widespread across south-eastern Australia, it is uncommon and in NSW occurs throughout most of the state except the far north-west.

The Australian Painted Snipe *Rostratula australis* is Endangered under both the NSW BC Act and Commonwealth EPBC Act. The Australian Painted Snipe is a small freshwater wader with a slightly drooping bill; females have striking chestnut and white facial markings,



while males are smaller with greyer plumage and cream wing spots. Now recognised as a distinct species endemic to Australia, it occurs mainly in the south-east, especially the Murray–Darling Basin, with scattered records elsewhere. In NSW, key sites include the Paroo wetlands, Lake Cowal, the Macquarie Marshes, Fivebough Swamp, and wetlands in the Hawkesbury, Clarence, and lower Hunter valleys.

The Regent Honeyeater *Anthochaera phrygia* is listed as Critically Endangered under both the NSW BC Act and Commonwealth EPBC Act. It is a distinctive black-and-yellow woodland bird with bright yellow-edged wings and a pink or cream patch around the eye. Once widespread across south-eastern Australia, it is now mostly limited to a small area between north-eastern Victoria and south-eastern Queensland, with breeding mainly in Chiltern-Albury, the Capertee Valley, Mudgee/Wollar, the Lower Hunter, and Bundarra-Barraba. It lives in temperate woodlands and open forests, occasionally gathering in coastal woodlands when conditions suit.

The Swift Parrot *Lathamus discolor* is listed as Endangered under the NSW BC Act and Critically Endangered under the Commonwealth EPBC Act. It is a small, fast-flying, migratory parrot that breeds exclusively in Tasmania during spring and summer, then migrates to mainland south-eastern Australia, including coastal and south-western regions of NSW, from February to October. In NSW, it relies on flowering eucalypts and lerp-infested trees for food, particularly species like Swamp Mahogany, Spotted Gum, Red Bloodwood, and Forest Red Gum.

The Australasian Bittern, Australian Painted Snipe, Regent Honeyeater and Swift Parrot have not been recorded within the study area. There are no BioNet Atlas records of the Australasian Bittern or Australian Painted Snipe, within 10 km; however, there are records of the Regent Honeyeater and Swift Parrot. Important habitat areas have been mapped for these species, and these areas do not occur within the study area.

Table E5 Assessment of Significant Impact Criteria for Critically Endangered or Endangered Species - Australasian Bittern, Australian Painted Snipe, Regent Honeyeater, Swift Parrot

Significant Impact Criteria	Response
Will the action lead to a long-term decrease in the size of a population	Given the lack of evidence of these species within the study area, their high mobility and the presence of extensive foraging habitat within the broader assessment area, the proposed development is unlikely to result in a long-term decrease in the population size of these species.
Will the action reduce the area of occupancy of the species	Given the lack of evidence of these species within the study area, including no evidence of breeding or roosting, and the presence of extensive foraging habitat within the broader assessment area that is likely to provide more suitable conditions, it is unlikely that potential indirect and prescribed impacts on vegetation from the subject land will reduce the area of occupancy for these bird species.
Will the action fragment an existing population into two or more populations	The proposed action is unlikely to fragment the existing populations of these bird species. As highly mobile species that forage across large areas, they are not expected to be affected by the potential indirect and prescribed impacts on a small portion of available habitat. Therefore, habitat fragmentation is not anticipated to occur.



Significant Impact Criteria	Response
Will the action adversely affect habitat critical to the survival of a species	The proposed action is unlikely to adversely affect habitat critical to the survival of these birds. The available habitat on the subject land is considered to have only marginal value for foraging and shelter for these species.
Will the action disrupt the breeding cycle of a population	Targeted bird surveys of the study area did not record any of these birds. In addition, the Swift Parrot breeds exclusively within Tasmania and the Regent Honeyeater has known breeding locations. The subject land is assessed as providing only sub-optimal potential habitat for these species and represents only foraging habitat for the Swift Parrot and Regent Honeyeater. Accordingly, the proposed action is considered unlikely to result in a significant impact on the breeding cycle of these species.
Will the action modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	These species have not been recorded within the study area. The habitat within the subject land is considered to be of marginal value and likely to be used only intermittently, primarily as potential foraging habitat. Larger areas of more suitable native vegetation will remain in the locality. The proposed action is considered unlikely to modify, destroy, remove, isolate, or reduce the availability or quality of habitat to an extent that would cause these species to decline.
Will the action result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	Invasive species such as foxes and weeds are already present within the study area due to past and current land uses. Management actions for the control of weed and feral species will be implemented as part of the proposal's mitigation measures to ensure construction practices avoid increasing invasive species spread. The proposed action is unlikely to introduce invasive species harmful to these species and is unlikely to facilitate the establishment of harmful species.
Will the action introduce disease that may cause the species to decline	The proposed development is unlikely to lead to processes capable of introducing diseases that may cause these species to decline.
Will the action interfere with the recovery of the species	The four species of threatened birds have not been recorded within the study area but are known to occur in the broader locality. Habitat within the proposed development footprint is of marginal value for these species. As highly mobile birds, they are likely to use the site only intermittently as part of a wider foraging range. Avoidance and mitigation measures will be implemented to minimise potential impacts. Consequently, the proposed action is considered unlikely to interfere with the species' recovery.

E.4.3 Endangered Mammals

The Spotted-tailed Quoll *Dasyurus maculatus* is listed as Vulnerable under the NSW BC Act and Endangered under the Commonwealth EPBC Act. The Spotted-tailed Quoll is a cat-sized marsupial with rust-to dark-brown fur and white spots, now mainly found in eastern Australia and Tasmania. It shelters in hollow trees, logs, caves and burrows, with females ranging over 200-500 hectares and males covering much larger areas, often travelling along vegetated creek lines.



There are no valid records of the Spotted-tailed Quoll (Featherdale Wildlife Park record only) within the BioNet 10km search area and there is also a lack of evidence of the species occurring within the study area. It is therefore considered unlikely that this species would use the vegetation within the study area, except on very rare occasions as stepping-stone habitat, and even then, connectivity is limited.

Table E6 Assessment of Significant Impact Criteria for Critically Endangered or Endangered Species – Spotted-tailed Quoll

Significant Impact Criteria	Response
Will the action lead to a long-term decrease in the size of a population	Given the limited evidence for Spotted-tailed Quolls within the subject land, or the locality (i.e. within a 10-km radius of the BioNet Atlas), the minor nature of the proposed impacts, and the availability of suitable habitat within the broader assessment area, the proposed development is unlikely to result in a long-term decrease in the population size of these species.
Will the action reduce the area of occupancy of the species	Given the presence of habitat within the broader assessment area that is likely to offer more suitable conditions, it is unlikely that the removal of vegetation from the subject land will reduce the area of occupancy for the Spotted-tailed Quoll.
Will the action fragment an existing population into two or more populations	The proposed action is unlikely to fragment an existing population of the Spotted-tailed Quoll. As a mobile species that forage across large areas, the Spotted-tailed Quoll is not expected to be affected by the removal of a small portion of available habitat. Therefore, habitat fragmentation is not anticipated to occur.
Will the action adversely affect habitat critical to the survival of a species	The proposed action is unlikely to adversely affect habitat critical to the survival of the Spotted-tailed Quoll. The available habitat on the subject land is considered to have only marginal value for foraging and shelter for this species.
Will the action disrupt the breeding cycle of a population	Targeted fauna surveys did not detect any evidence of the Spotted-tailed Quoll using the subject land. The subject land is assessed as providing only sub-optimal potential foraging and denning habitat. Accordingly, the proposed action is considered unlikely to result in a significant impact on the breeding cycle of this species.
Will the action modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The Spotted-tailed Quoll has not been recorded on the subject land, and there is minimal evidence of their occurrence within the 10 km locality. The habitat within the development footprint is considered to be of marginal value and is likely to be used only intermittently, primarily as potential foraging habitat. A very small, narrow band of planted native vegetation will be removed, and indirect impacts could occur within approximately 3.5 hectares of potential habitat. Larger areas of more suitable native vegetation will remain in the locality. The proposed action is therefore considered unlikely to modify, destroy, remove, isolate, or reduce the availability or quality of habitat to an extent that would cause this species to decline.
Will the action result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat	Invasive species such as weeds and foxes are already present within the subject land due to past and current land uses. Management actions for the control of weed and feral species will be implemented as part of the proposal's mitigation measures. The proposed action is unlikely to introduce invasive species harmful to the Spotted-tailed Quoll and is unlikely to facilitate the establishment of harmful species.



Significant Impact Criteria	Response
Will the action introduce disease that may cause the species to decline	The proposed development is unlikely to lead to processes capable of introducing diseases that may cause this species to decline.
Will the action interfere with the recovery of the species	The Spotted-tailed Quoll has not been recorded within the subject land and there is minimal evidence of its occurrence within the broader 10 km locality. Habitat within the proposed development footprint is of marginal value for this species. As a mobile species, the site may potentially be used but only intermittently as part of a wider foraging range. Avoidance and mitigation measures will be implemented to minimise potential impacts. Consequently, the proposed action is considered unlikely to interfere with the species' recovery.

E.4.4 Critically Endangered Cumberland Plain Woodland

The Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest (Cumberland Plain Shale Woodland) EC is listed as critically endangered under the BC Act and EPBC Act. It is a grassy eucalypt woodland and forest community found on the shale hills and plains of the Sydney Basin, mainly within the Cumberland Sub-region. It ranges from open grassy woodland to denser forest, with an understorey that may be grass-dominated, shrub-dominated, or a mix of both. The canopy typically includes Grey Box, Forest Red Gum and Red Ironbark, often with a sparse smaller tree layer of young eucalypts or Acacia. The understorey generally features native perennial grasses and sometimes a shrub layer dominated by Blackthorn. To qualify as this Threatened Ecological Community under the EPBC Act, sites must meet condition thresholds based on patch size, vegetation structure or species composition.

Table E7 Assessment of Significant Impact Criteria for Critically Endangered or Endangered Communities – Cumberland Plain Shale Woodland

Significant Impact Criteria	Response
Will the action reduce the extent of an ecological community	No. The proposed action will not reduce the extent of the ecological community. While indirect impacts could occur within the 3.5 ha of Cumberland Plain Shale Woodland adjoining the development footprint, these impacts will be managed through mitigation measures. Therefore, it is unlikely that the proposal will reduce the extent of Cumberland Plain Shale Woodland.
Will the action fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines	No. The proposed development will not increase fragmentation of the Cumberland Plain Shale Woodland. The patch is already highly isolated within the landscape, and exchange of genetic material (e.g. seed and pollen dispersal) is expected to continue between the remaining patches.
Will the action adversely affect habitat critical to the survival of an ecological community	There are no areas of Cumberland Plain Shale Woodland formally listed as critical habitat, and there is no National Recovery Plan for the EPBC Act-listed ecological community. As the proposed development will not directly clear any Cumberland Plain Shale Woodland, the action is not considered likely to adversely affect habitat that is important, though not formally designated as critical, to the survival of the ecological community.
Will the action modify or destroy abiotic (non-living)	It is not expected that the proposed development will modify or destroy abiotic factors necessary for the ecological community's



Significant Impact Criteria	Response
factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns	survival. The 3.5 ha of retained areas will remain intact, with no anticipated reduction in groundwater levels or substantial alteration of surface water drainage patterns. Soil conditions, nutrient availability, and hydrological processes within the retained ecological community are expected to remain unaffected.
Will the action cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting	It is not expected that the proposed development will cause a substantial change in the species composition of an ecological community. No functionally important species are anticipated to decline, and the retained vegetation is expected to remain intact, with no reduction in species diversity. Mitigation measures, including preventing incidental clearing and managing the spread of weeds, will further minimise the likelihood of indirect impacts on the ecological community.
Will the action cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to: • assisting invasive species, that are harmful to the listed ecological community, to become established, or • causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community	It is not expected that the proposed development will cause a substantial reduction in the quality or integrity of the ecological community. The proposed development is not expected to alter the overall structure, species composition, or ecological function of the community within the 3.5 ha patch or the wider locality. The development is not expected to facilitate the establishment of invasive species, as appropriate construction and operational management measures will be implemented. No mobilisation of fertilisers, herbicides, pollutants, or other chemicals is anticipated. Additionally, no ongoing impacts, such as hydrological changes, fragmentation of intact habitat, or impairment of ecological processes, are expected. Therefore, the action is not considered likely to cause a substantial reduction in the quality or integrity of the ecological community.
Will the action interfere with the recovery of an ecological community.	The proposed action will not interfere with the recovery of the ecological community. There is no National Recovery Plan for the Cumberland Plain Shale Woodland. The proposed action will not reduce the extent of the ecological community on the site. No additional impacts, such as hydrological changes, weed invasion, or altered grazing, are anticipated that could interfere with the recovery of the community.

E.5 Mitigation Measures for MNES

Threatened species, migratory species and communities listed under the EPBC Act have been assessed for their relevance to the subject land and its habitats at Eastern Creek, NSW. Mitigation measures are presented in Section 8.4 of the BDAR.

A range of mitigation measures have been developed to mitigate potential indirect impacts that are unable to be avoided on biodiversity values, including MNES entities. These include



a range of measures to be undertaken before and during construction to limit the impact of the proposed development.

It is envisaged that these mitigations measures will form part of the conditions of consent for the proposal and all measures will be approved as part of the DA approval process.

E.6 Offsets for MNES

The Commonwealth requires offsets under the EPBC Act are calculated using the Offset Assessment Guide and guided by the Environmental Offsets Policy. These offsets can be delivered through land-based conservation or financial contributions, and NSW's BOS is often used under bilateral agreements.

As the proposal avoids impacts on biodiversity values and provides mitigation measures for indirect and prescribed impacts there are no credit or offset requirements for the proposed development.

E.7 Conclusion

Based on the above self-assessment, it is unlikely that the proposed development will have a significant impact on any vegetation or flora and fauna species listed as MNES under the EPBC Act. A referral to the Commonwealth Department of Climate Change, Energy, the Environment and Water is not required.





Australian Government

Department of Climate Change, Energy,
the Environment and Water

EPBC Act Protected Matters Report

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

Report created: 10-Nov-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	8
Listed Threatened Species:	63
Listed Migratory Species:	12

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Lands:	175
Commonwealth Heritage Places:	2
Listed Marine Species:	23
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

State and Territory Reserves:	4
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	85
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None



Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

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

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion	Endangered	Community likely to occur within area	In feature area
Coastal Swamp Oak (Casuarina glauca) Forest of New South Wales and South East Queensland ecological community	Endangered	Community likely to occur within area	In buffer area only
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community may occur within area	In feature area
Cooks River/Castlereagh Ironbark Forest of the Sydney Basin Bioregion	Critically Endangered	Community likely to occur within area	In feature area
Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest	Critically Endangered	Community likely to occur within area	In buffer area only
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community likely to occur within area	In feature area
Shale Sandstone Transition Forest of the Sydney Basin Bioregion	Critically Endangered	Community may occur within area	In buffer area only
Western Sydney Dry Rainforest and Moist Woodland on Shale	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species

[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia			
Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat may occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Erythrorhynchus radiatus Red Goshawk [942]	Endangered	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Hirundapus caudacutus</u> White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Lathamus discolor</u> Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
<u>Melanodryas cucullata cucullata</u> South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Neophema chrysostoma</u> Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Numenius madagascariensis</u> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Pycnoptilus floccosus</u> Pilotbird [525]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Rostratula australis</u> Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Stagonopleura guttata</u> Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Tringa nebularia</u> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
<u>Macquaria australasica</u> Macquarie Perch [66632]	Endangered	Species or species habitat may occur within area	In feature area
<u>Prototroctes maraena</u> Australian Grayling [26179]	Vulnerable	Species or species habitat may occur within area	In feature area
FROG			



Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Heleioporus australiacus australiacus</u> Giant Burrowing Frog, Eastern Owl Frog [92013]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Litoria aurea</u> Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat known to occur within area	In feature area
MAMMAL			
<u>Chalinolobus dwyeri</u> Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Dasyurus maculatus maculatus (SE mainland population)</u> Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Notamacropus parma</u> Parma Wallaby [89289]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Petauroides volans</u> Greater Glider (southern and central) [254]	Endangered	Species or species habitat may occur within area	In feature area
<u>Petaurus australis australis</u> Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Petrogale penicillata</u> Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Phascolarctos cinereus (combined populations of Qld, NSW and the ACT)</u> Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Pseudomys novaehollandiae</u> New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Pteropus poliocephalus</u> Grey-headed Flying-fox [186]	Vulnerable	Roosting known to occur within area	In feature area
PLANT			



Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Acacia bynoeana</u> Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Acacia pubescens</u> Downy Wattle, Hairy Stemmed Wattle [18800]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Allocasuarina glareicola</u> [21932]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Caladenia tessellata</u> Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Cryptostylis hunteriana</u> Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Cynanchum elegans</u> White-flowered Wax Plant [12533]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Darwinia biflora</u> [14619]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Eucalyptus benthamii</u> Camden White Gum, Nepean River Gum [2821]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
<u>Genoplesium baueri</u> Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat may occur within area	In feature area
<u>Grevillea parviflora subsp. parviflora</u> Small-flower Grevillea [64910]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<u>Haloragis exalata subsp. exalata</u> Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat may occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
Leucopogon exolasius Woronora Beard-heath [14251]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Melaleuca deanei Deane's Melaleuca [5818]	Vulnerable	Species or species habitat may occur within area	In feature area
Micromyrtus blakelyi [6870]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Micromyrtus minutiflora [11485]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Persoonia nutans Nodding Geebung [18119]	Endangered	Species or species habitat known to occur within area	In feature area
Pimelea curviflora var. curviflora [4182]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pimelea spicata Spiked Rice-flower [20834]	Endangered	Species or species habitat known to occur within area	In feature area
Pomaderris brunnea Rufous Pomaderris, Brown Pomaderris [16845]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pterostylis gibbosa Illawarra Greenhood, Rufa Greenhood, Pouched Greenhood [4562]	Endangered	Species or species habitat may occur within area	In feature area
Pterostylis saxicola Sydney Plains Greenhood [64537]	Endangered	Species or species habitat likely to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
Pultenaea parviflora [19380]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In feature area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Rhodomyrtus psidioides Native Guava [19162]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Syzygium paniculatum Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area

REPTILE

Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat may occur within area	In feature area
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Listed Migratory Species

[Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area

Migratory Terrestrial Species

Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands		[Resource Information]
The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.		
Commonwealth Land Name	State	Buffer Status
Communications, Information Technology and the Arts - Australian Postal Corporation		



Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Australian Postal Corporation [14619]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [14618]	NSW	In buffer area only
Commonwealth Land - Australian Postal Corporation [14602]	NSW	In buffer area only
Communications, Information Technology and the Arts - Telstra Corporation Limited		
Commonwealth Land - Australian Telecommunications Commission [16125]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14629]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14628]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14555]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14494]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13341]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [13342]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Commission [14252]	NSW	In buffer area only
Commonwealth Land - Australian Telecommunications Corporation [14601]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14512]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14511]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [15733]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [16429]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14592]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [15703]	NSW	In buffer area only
Commonwealth Land - Telstra Corporation Limited [14617]	NSW	In buffer area only
Defence		
Commonwealth Land - Defence Service Homes Corporation [14579]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14624]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14510]	NSW	In buffer area only



Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Service Homes Corporation [14231]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14509]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14562]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14561]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14546]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14590]	NSW	In buffer area only
Commonwealth Land - Defence Service Homes Corporation [14621]	NSW	In buffer area only
Commonwealth Land - Director of Defence Service Homes [14620]	NSW	In buffer area only
Commonwealth Land - Director of Defence Service Homes [14569]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10168]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10169]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10164]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10165]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10166]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10167]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10160]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10161]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10158]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10157]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10159]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10171]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10170]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10174]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10173]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10172]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10163]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10162]	NSW	In buffer area only



Commonwealth Land Name	State	Buffer Status
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10151]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10152]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10153]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10154]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10156]	NSW	In buffer area only
Defence - 1CAD ORCHARD HILLS KINGSWOOD [10155]	NSW	In buffer area only
Defence - AIRTC ST MARYS [10007]	NSW	In buffer area only
Defence - BLACKTOWN TRAINING DEPOT [10178]	NSW	In buffer area only
Defence - HMAS NIRIMBA [10031]	NSW	In buffer area only
Defence - HMAS NIRIMBA [10030]	NSW	In buffer area only
Defence - SIGNAL STRS DEPOT-KINGSWOOD [10209]	NSW	In buffer area only
Defence - Defence Housing Authority		
Commonwealth Land - Defence Housing Authority [14237]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14236]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14238]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14239]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14246]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14603]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14245]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14604]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14251]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14254]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14255]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14241]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14240]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [15675]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14591]	NSW	In buffer area only



Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Defence Housing Authority [14248]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14616]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14615]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13344]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [13345]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14242]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14243]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14244]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14247]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14249]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14536]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14250]	NSW	In buffer area only
Commonwealth Land - Defence Housing Authority [14535]	NSW	In buffer area only
Commonwealth Land - Deputy Director of War Service Homes [14566]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14565]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14570]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14578]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14564]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14567]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14517]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14513]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14516]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14515]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14233]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14514]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14232]	NSW	In buffer area only



Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Director of War Service Homes [14587]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14586]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14585]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14584]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14582]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14583]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14580]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14581]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14524]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14593]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14525]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14507]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14588]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14589]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14508]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14506]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14623]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14556]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14554]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14553]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14492]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14493]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14560]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14557]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14552]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14559]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14558]	NSW	In buffer area only



Commonwealth Land Name	State	Buffer Status
Commonwealth Land - Director of War Service Homes [14550]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14551]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14622]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14549]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14548]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14540]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14543]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14542]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14541]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14547]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14545]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14544]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14519]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14518]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14568]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13888]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [13889]	NSW	In buffer area only
Commonwealth Land - Director of War Service Homes [14563]	NSW	In buffer area only
Education, Science and Training - CSIRO		
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14606]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14607]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14605]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14609]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14608]	NSW	In buffer area only
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14613]	NSW	In buffer area only



Commonwealth Land Name	State	Buffer Status	
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14611]	NSW	In buffer area only	
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14610]	NSW	In buffer area only	
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14612]	NSW	In buffer area only	
Commonwealth Land - Commonwealth Scientific & Industrial Research Organisation [14614]	NSW	In buffer area only	
Transport and Regional Services - Airservices Australia			
Commonwealth Land - Airservices Australia [14230]	NSW	In buffer area only	
Unknown			
Commonwealth Land - [14100]	NSW	In buffer area only	
Commonwealth Land - [14627]	NSW	In buffer area only	
Commonwealth Land - [13338]	NSW	In buffer area only	
Commonwealth Land - [13103]	NSW	In buffer area only	
Commonwealth Land - [13336]	NSW	In buffer area only	
Commonwealth Land - [13337]	NSW	In buffer area only	
Commonwealth Land - [13102]	NSW	In buffer area only	
Commonwealth Land - [14102]	NSW	In buffer area only	
Commonwealth Land - [14103]	NSW	In buffer area only	
Commonwealth Land - [13334]	NSW	In buffer area only	
Commonwealth Land - [13335]	NSW	In buffer area only	
Commonwealth Land - [14105]	NSW	In buffer area only	
Commonwealth Land - [14104]	NSW	In buffer area only	
Commonwealth Land - [14625]	NSW	In buffer area only	
Commonwealth Land - [15422]	NSW	In buffer area only	
Commonwealth Land - [14626]	NSW	In buffer area only	
Commonwealth Land - [14101]	NSW	In buffer area only	
Commonwealth Land - [15453]	NSW	In buffer area only	
Commonwealth Heritage Places			
[Resource Information			
Name	State	Status	Buffer Status



Name	State	Status	Buffer Status
Natural			
Orchard Hills Cumberland Plain Woodland	NSW	Listed place	In buffer area only
Shale Woodland Llandilo	NSW	Listed place	In buffer area only

Listed Marine Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status

Bird			
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Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area	In feature area
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Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
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Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
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Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat likely to occur within area	In feature area
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Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
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Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
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Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
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Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
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Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat likely to occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In feature area



Scientific Name	Threatened Category	Presence Text	Buffer Status
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Sterna striata White-fronted Tern [799]		Migration route may occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Kemps Creek	Nature Reserve	NSW	In buffer area only
Prospect	Nature Reserve	NSW	In buffer area only
Wianamatta	Regional Park	NSW	In buffer area only
Yiraaldiya	National Park	NSW	In buffer area only

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status Buffer Status
1-51 Aldington Road Estate Industrial Warehouse and Distribution Facility	2023/09574		Assessment In buffer area only
Eastern Creek Business Hub Stage 3	2020/8715		Post-Approval In buffer area only
Multipurpose development	2002/751		Completed In buffer area only



Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Residential development, 35 Denis Winston Drive, Doonside, NSW	2018/8203		Referral Decision	In buffer area only
Senior Campus, Chifley Multi Campus College	2000/118		Completed	In buffer area only
Warragamba Dam Raising Project	2017/7940		Completed	In buffer area only
Controlled action				
Chapman Street Residential Development	2019/8552	Controlled Action	Post-Approval	In buffer area only
Construction and Operation of Western Sydney Airport, Badgerys Creek, NSW	2014/7391	Controlled Action	Post-Approval	In buffer area only
construction of a regional scale stormwater detention basin, spillway and outlet	2011/5819	Controlled Action	Post-Approval	In buffer area only
Eastern Creek Business Hub, NSW	2012/6617	Controlled Action	Post-Approval	In buffer area only
Industrial development on Lot 141 DP843899 and Lot 5 DP1094504, Erskine Park Emp	2006/3156	Controlled Action	Post-Approval	In buffer area only
Kemps Creek Warehouse, Logistics and Industrial Facilities Hub	2021/8926	Controlled Action	Post-Approval	In buffer area only
Light Horse Interchange Business Hub, Eastern Creek, NSW	2019/8395	Controlled Action	Post-Approval	In buffer area only
Lyn Parade Extension	2004/1392	Controlled Action	Post-Approval	In buffer area only
M12 Motorway Project, Luddenham, NSW	2018/8286	Controlled Action	Post-Approval	In buffer area only
Multipurpose Development-rural residential, a motel and a golf course	2002/585	Controlled Action	Completed	In buffer area only
Oakdale West Estate commercial development, NSW	2017/7952	Controlled Action	Post-Approval	In buffer area only
Rooty Hill Concrete Batching Plant and associated facilities	2003/949	Controlled Action	Completed	In buffer area only
Service centre, 6 Honeman Close, Huntingwood, NSW	2018/8290	Controlled Action	Post-Approval	In buffer area only
Subdivision of Lot 1 DP106143, 327-335 Burley Road, Horsley Park, NSW	2016/7744	Controlled Action	Post-Approval	In buffer area only



Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Sydney Metro, Western Sydney Airport - St Marys to Elizabeth Drive	2020/8687	Controlled Action	Post-Approval	In buffer area only
Twin Creeks Estate - stage 4 - 26 rural residentia	2004/1495	Controlled Action	Post-Approval	In buffer area only
Western Sydney International Dragway	2002/720	Controlled Action	Completed	In buffer area only
Not controlled action				
132kV electricity transmission lines	2002/865	Not Controlled Action	Completed	In feature area
18-hole, golf course development, west of Eastern Creek	2004/1757	Not Controlled Action	Completed	In feature area
Aldington Road Estate Industrial Development	2021/8982	Not Controlled Action	Completed	In buffer area only
Christ Catholic College - Loyola Campus - Building Construction and Redevelopment	2002/642	Not Controlled Action	Completed	In buffer area only
Clearance of 6.3ha of Cumberland Plain Woodland for industrial subdivision cnr of Old Walgrove and W	2004/1445	Not Controlled Action	Completed	In feature area
Clearance of 6ha Shale Plains Woodland	2004/1346	Not Controlled Action	Completed	In buffer area only
Clearance of vegetation for Warehouse Units	2003/994	Not Controlled Action	Completed	In buffer area only
Concrete Batching Plant and Associated Facilities	2005/2067	Not Controlled Action	Completed	In feature area
Conrad Road Residential Subdivision	2001/320	Not Controlled Action	Completed	In buffer area only
construction of a road linking Newbridge Road and Nuwarra Road	2004/1843	Not Controlled Action	Completed	In buffer area only
Development within Caddens Release Area	2010/5429	Not Controlled Action	Completed	In buffer area only
Duplication of the single rail line between Quakers Hill & Vineyard	2009/4872	Not Controlled Action	Completed	In buffer area only
Electricity Substation at Old Wallgrove Road	2005/2220	Not Controlled Action	Completed	In feature area
Erection of a dwelling and associated access and infrastructure, 19 Tidswell Str	2003/1078	Not Controlled Action	Completed	In feature area



Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Former CSIRO Clunies Ross Research Station	2002/803	Not Controlled Action	Completed	In buffer area only
gas main installation from Eastern Creek to Erskine Park	2005/2235	Not Controlled Action	Completed	In feature area
Green Valley NSW residential development	2003/1236	Not Controlled Action	Completed	In buffer area only
Greenway Park Stage 3 residential subdivision	2004/1622	Not Controlled Action	Completed	In buffer area only
hazard reduction burn	2003/1181	Not Controlled Action	Completed	In buffer area only
Hoxton Park Residential development	2011/6103	Not Controlled Action	Completed	In buffer area only
Huntingwood Industrial Estate Development	2002/834	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Industrial development of 24.8ha, including access road from Lenore Lane	2005/2326	Not Controlled Action	Completed	In buffer area only
Library Building and Underground Car Park Development - Corner of Alpha Street n	2001/483	Not Controlled Action	Completed	In buffer area only
Mountain View Classrooms Construction	2001/306	Not Controlled Action	Completed	In feature area
Multi User Depot	2002/562	Not Controlled Action	Completed	In buffer area only
No. 387 Blacktown Road Housing Development/EPBC 2000-92	2000/92	Not Controlled Action	Completed	In buffer area only
Northwest Transitways Project	2002/796	Not Controlled Action	Completed	In buffer area only
Oakhurst Residential Subdivision	2000/41	Not Controlled Action	Completed	In buffer area only
Proposed industrial Developments Bragham Drive, Eastern Creek	2012/6383	Not Controlled Action	Completed	In buffer area only
Proposed Rezoning of land at 60 Wallgrove Rd, Minchinbury, NSW	2009/5012	Not Controlled Action	Completed	In buffer area only



Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Removal of Trees	2010/5535	Not Controlled Action	Completed	In buffer area only
Residential development at Doonside Crescent Woodcroft, Blacktown LGA	2004/1378	Not Controlled Action	Completed	In feature area
Residential development within 2.08ha, Fyfe Road	2005/1966	Not Controlled Action	Completed	In buffer area only
Residential Subdivision	2001/304	Not Controlled Action	Completed	In buffer area only
Residential subdivision and conservation area	2011/5858	Not Controlled Action	Completed	In buffer area only
Residential Subdivision in Hampton Cr, Prospect, City of Blacktown	2008/3953	Not Controlled Action	Completed	In buffer area only
Residential subdivision Lot 1005 Conrad Road	2003/1054	Not Controlled Action	Completed	In buffer area only
Rezoning & Disposal of Quakers Hill property	2001/281	Not Controlled Action	Completed	In feature area
Riverstone Integrated Water Services Proposal	2007/3216	Not Controlled Action	Completed	In buffer area only
Rooty Hill Residential Subdivision	2002/651	Not Controlled Action	Completed	In buffer area only
Rural residential subdivision	2002/594	Not Controlled Action	Completed	In buffer area only
Second Ponds Creek urban development	2004/1905	Not Controlled Action	Completed	In buffer area only
Second Ponds Creek Urban Development of Precinct 1b	2005/1991	Not Controlled Action	Completed	In buffer area only
Site remediation and waste disposal	2002/837	Not Controlled Action	Completed	In buffer area only
Subdivision of Residential Lands, Greystanes Estate, western Sydney	2001/499	Not Controlled Action	Completed	In buffer area only
TransGrid Sydney West 330kV Substation Augmentation	2002/677	Not Controlled Action	Completed	In feature area
Vegetation Clearance	2001/481	Not Controlled Action	Completed	In buffer area only
Vegetation Clearance (revised)	2003/976	Not Controlled Action	Completed	In buffer area only



Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Waste Management Centre	2002/607	Not Controlled Action	Completed	In buffer area only
Western Sydney Parklands Bungarribee Precinct and Doonside residential developm	2007/3718	Not Controlled Action	Completed	In buffer area only
Wonderland Business Park Precinct, industrial development, Lot B1	2004/1627	Not Controlled Action	Completed	In buffer area only
Wonderland Business Park Precinct, Stage 1, Lot D1	2004/1626	Not Controlled Action	Completed	In feature area
Wonderland Business Park - Stage 3	2006/2817	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Replacement of flows with recycled water	2006/3050	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
St Mary's Rugby League Club upgrade	2011/6042	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Transfer of Airservices Australia property	2011/5809	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Keyhole Site Horsley Park	2021/9000	Referral Decision	Referral Publication	In buffer area only
St Marys Rugby League Club new training field	2011/5836	Referral Decision	Completed	In buffer area only
Sydney Science Park, Luddenham, NSW	2017/7971	Referral Decision	Completed	In buffer area only
Bioregional Assessments			[Resource Information]	
SubRegion	BioRegion	Website	Buffer Status	
Sydney	Sydney Basin	BA website	In feature area	



Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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



Acknowledgements

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

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

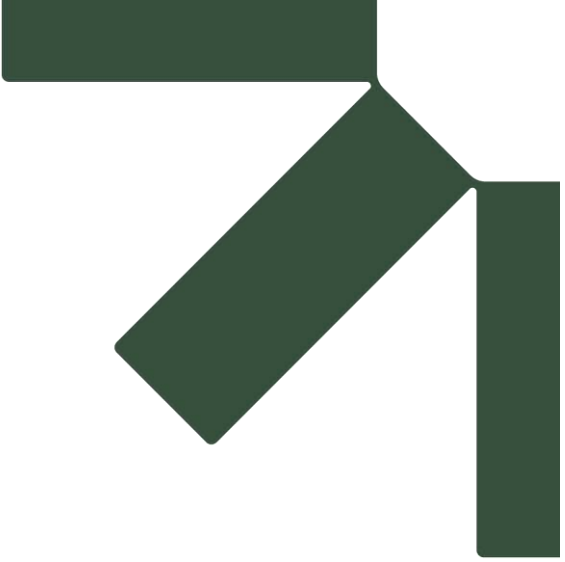
The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.



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

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Appendix F Vegetation Survey Data

Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

SLR Project No.: 610.033079.00001

6 May 2026

Table F-1: Vegetation Survey and Data – Plot Info

Plot	PCT	Area	Patch Size	Condition Class	Zone	Easting	Northing	Bearing	Plot-Based Vegetation Surveys (Yes/No)	Vegetation Integrity Surveys (Yes/No)
BAM01	3320	0.1	2	Low	56	299372.15	6256381.94	278	Yes	Yes
BAM02	3320	0.1	2	Moderate	56	299491.67	6256353.89	106	Yes	Yes

Table F-2: Vegetation Survey and Data – Composition

Plot	Tree	Shrub	Grass	Forb	Fern	Other
BAM01	5	0	6	8	0	1
BAM02	4	4	7	12	0	2

Table F-3: Vegetation Survey and Data – Structure

Plot	Tree	Shrub	Grass	Forb	Fern	Other
BAM01	23	0	4.2	5.6	0	0.1
BAM02	28	19	18.7	5.9	0	0.2

Table F-4: Vegetation Survey and Data – Function

Plot	Large Trees	Hollows Trees	Litter Cover	Length of Fallen Logs	Tree Stem 5-9	Tree Stem 10-19	Tree Stem 20-29	Tree Stem 30-49	Tree Stem 50-79	Tree Regen	High Threat Exotics
BAM01	1	0	66	0	Present	Present	Present	Present	Present	Present	20.2
BAM02	1	0	40	0	Present	Present	Present	Present	Present	Present	21.3



F-1

Time: 4:30-5:30pm

400 m ² floristics plot:	Survey name	Plot identifier	Recorders
Date 23/10/2025	10 Roberts Rd	BAM-01	Flora Folini

GF code	Species name Full species name, or a unique means of identifying separate taxa within a survey is mandatory. Data from here will be used to assign growth form richness and cover.	N, HTW or non-HTW	² Foliage cover	Abundance	Voucher
TG	<i>Eucalyptus moluccana</i>	N	5	10	
TG	<i>Eucalyptus crebra</i>	N	3	4	
TG	<i>Corymbia maculata</i>	N	5	15	
TG	<i>Eucalyptus teneticornis</i>	N	5	10	
NA	<i>Eragrostis curvula</i>	HTW	20	60	
FG	<i>Dichondra repens</i>	N	4	20	
GG	<i>Lomandra filiformis</i>	N	10	100	
GG	<i>Eragrostis Aristida ramosa</i>	N	1	10	
GG	<i>Aristida vagans</i>	N	1	10	
FG	<i>Dianella revoluta</i>	N	0.1	2	
GG	<i>Themeda triandra</i>	N	0.1	2	
NA	<i>Bidens pilosa</i>	HTW	0.1	1	
GG	<i>Cynodon dactylon</i>	N	0.1	2	
FG	<i>Cyanthillium cinereum</i>	N	0.1	1	
NA	<i>Senecio madagascariensis</i>	HTW	0.1	3	
TG	<i>Eucalyptus fibrosa</i>	N	5	10	
FG	<i>Pimella cuneiflora</i> var. <i>gracilis</i>	N	0.1	1	P
OG	<i>Clematis glycinoides</i>	N	0.1	1	
NA	<i>Briza subaristida</i>	N-HTW	0.1	2	
FG	<i>Caesia parviflora</i>	N	0.1	1	
FG	<i>Wahlenbergia gracilis</i>	N	0.1	2	
FG	<i>Phyllanthus virgatus</i>	N	0.1	1	
FG	<i>Goodenia hederaceae</i>	N	1	2	
GG	<i>Paspalidium distans</i>	N	1	10	

Print more copies of this page to allow for higher species counts at a plot. All vascular plant species in a plot need to be recorded.

GF Code: see growth form definitions in BAM 2020 Appendix F. N: native, HTW: high threat weed.

² Foliage cover: 0.1, 0.2, 0.3, ..., 1, 2, 3, 4, 5, 10, 15, 20, 25, ..., 100%; Note: 0.1% cover represents an area of approximately 63 x 63 cm or a circle about 71 cm across, 0.5% cover represents an area of approximately 1.4 x 1.4 m, and 1% = 2.0 x 2.0 m, 5% = 4 x 5 m, 25% = 10 x 10 m. Note the top 3 dominant native species within each GF group.

Abundance: Count 1, 2, 3 ..., when ≤10, estimate when >10, 20, 30 ... 100, 200, 300 ..., 1000, 2000, 3000 ... (as integer values).

[pg 1 of 1]





Site sheet #	1 of	Date	27/10/25	Survey Name	10 Meters N2.	Plot Identifier	02
Recorders		IBRA region		Veg zone ID			
Datum	Co-ordinate system	Projected or geographic	MGA Zone	X coordinates	Y coordinates		
Location description							
Plot dimensions		For composition & structure (400m2): 20 m x 20 m For function (1000m2): 20 m x 50 m		Orientation of midline from 0m line		Magnetic*	Photo #

Datum: AGD66, WGS84, GDA94, GDA2020 or Other (specify). MGA Zone (for Projected coordinate system only): 56 (Coastal NSW), 55 (Central NSW or 54 (Western NSW). X/Y coordinate: Long/Lat (for Projected coordinate system), Easting/Northing (for geographic coordinate system)

Vegetation integrity							
Composition and structure sum values may be completed after entering data into available tools. It is not required while in the field							
Composition (400 m ² plot)			Structure (400 m ² plot)		Function (1000 m ² plot)		
		Sum values		Sum values (%) (may sum to >100%)	³ Tree stem size class (DBH)	If data are to be used as more appropriate local data i.e. to generate local benchmarks, stems must be counted	
Total count of native plant species (richness) in each growth form group (not individual plants within each growth form)	Trees (TG)		Sum of foliage cover of native species by growth form group	Trees (TG)	80+ cm	Count	
	Shrubs (SG)			Shrubs (SG)	50-79 cm	Count (best practice)/tick. If large tree benchmark size > 50 cm count	
	Grasses (GG)			Grasses (GG)	30-49 cm	Count (best practice)/tick. If tree benchmark size > 50 cm count	
	Forbs (FG)			Forbs (FG)	20-29 cm	Count (best practice)/tick. If tree benchmark size > 50 cm count	
	Ferns (EG)			Ferns (EG)	10-19 cm	Count (best practice)/tick	
	Other (OG)			Other (OG)	5-9 cm	Count (best practice)/tick	
Total high threat weed cover				%	⁴ Tree regeneration <5cm	Tick	
					⁵ Length of fallen logs	Tally space	
					⁶ Hollow-bearing trees	Tick	
Vegetation integrity - function cont. (five 1m ² plots)		⁷ Litter cover (%)	Bare ground cover (%)		Cryptogam cover (%)		Rock cover (%)
Subplot scores		30 30 30 40 30	10 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0		5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Average of 5 subplots		40	3		1		0

These attributes require consideration of site observations and may be completed after field work:

Vegetation class	⁸ Large tree benchmark size	20/ 30/ 50/ 80 DBH	Confidence	H/ M/ L
Plant community type (PCT)	EEC	Tick	Confidence	H/ M/ L

Physiography and site features that may help in determining PCT and management zone (optional) or for BioNet systematic flora survey purposes

Morphological type	Landform element	Landform pattern	Microrelief																																				
Lithology	Soil surface texture	Soil colour	Soil depth																																				
Slope	Aspect	Site drainage	Distance to nearest water type																																				
Disturbance	Severity code	Age code	Brief site description or other notes																																				
Clearing (inc. logging)			<table border="1"> <tr> <th colspan="3">Emergent height</th> <th colspan="3">Upper stratum height</th> <th colspan="3">Middle stratum ht</th> <th colspan="3">Lower stratum ht</th> </tr> <tr> <td>Tp</td> <td>Md</td> <td>Bt</td> <td>Tp</td> <td>Md</td> <td>Bt</td> <td>Tp</td> <td>Md</td> <td>Bt</td> <td>Tp</td> <td>Md</td> <td>Bt</td> </tr> <tr> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> <td>m</td> </tr> </table>	Emergent height			Upper stratum height			Middle stratum ht			Lower stratum ht			Tp	Md	Bt	Tp	Md	Bt	Tp	Md	Bt	Tp	Md	Bt	m	m	m	m	m	m	m	m	m	m	m	m
Emergent height				Upper stratum height			Middle stratum ht			Lower stratum ht																													
Tp	Md	Bt		Tp	Md	Bt	Tp	Md	Bt	Tp	Md	Bt																											
m	m	m		m	m	m	m	m	m	m	m	m																											
Cultivation (inc. pasture)																																							
Soil erosion																																							
Firewood / CWD removal																																							
Grazing (id native/stock)																																							
Fire damage																																							
Storm damage																																							
Weediness																																							
Other																																							

Severity: 0=no evidence, 1=light, 2=moderate, 3=severe Age: R=recent (<3yrs), NR=not recent (3-10yrs), O=old (>10yrs)



+ Note - Red-clay soil Time: 6-7.15pm.

400 m² floristics plot: Survey name Plot identifier Recorders

Date 23/10/2025 10 Roberts Rd BAM-02 Fiona Iolin

GF code	Species name Full species name, or a unique means of identifying separate taxa within a survey is mandatory. Data from here will be used to assign growth form richness and cover.	N, HTW or non-HTW	² Foliage cover	Abundance	Voucher
TG	<i>Eucalyptus tereticornis</i>	N	8	10	
TG	<i>Eucalyptus moluccana</i>	N	10	50	(no growth present)
TG	<i>Acacia parramattensis</i>	N	5	4	
SG	<i>Acacia implexa</i>	N	3	10	
SG	<i>Acacia irrorata decurrens</i>	N	5	3	
SG	<i>Bursaria spinosa</i>	N	10	100	
SG	<i>Acacia falcata</i>	N	1	5	
SG	<i>Dillwynia sieberi</i>	N	5	15	
FG	<i>Goodenia hederacea</i>	N	2	10	
NA	<i>Seneccio madagascariensis</i>	HTW	0.2	2	
NA	<i>Eragrostis curvula</i>	HTW	15	100	
MG	<i>Cynodon dactylon</i>	N	0.2	5	
FG	<i>Pimelea curviflora</i> var. <i>gracilis</i>	N	0.1	1	
NA	<i>Bidens pilosa</i>	HTW	0.1	10	
FG	<i>Brunoniella australis</i>	N	2	30	
FG	<i>Wahlenbergia communis</i>	N	0.1	2	
FG	<i>Tricoryne elatior</i>	N	0.1	2	
FG	<i>Euchiton sphaericus</i>	N	0.1	3	
FG	<i>Operecularia diaphylla</i>	N	0.1	10	
FG	<i>Phyllanthus virgatus</i>	N	0.1	2	
FG	<i>Caesia parviflora</i>	N	0.1	1	
GG	<i>Lomandra filiformis</i>	N	5	50	
GG	<i>Aristida vagans</i>	N	1	20	
NA	<i>Briza subaristata</i>	N-HTW	0.1	2	
GG	<i>Byttospermum bipartitum</i>	N	0.5	5	✓
FG	<i>Dianella caerulea</i>	N	0.1	1	
FG	<i>Centella asiatica</i>	N	0.1	10	
GG	<i>Microlaena stipoides</i>	N	10	100	
OG	<i>Glycine clandestina</i>	N	0.1	2	
NA	<i>Chloris gayana</i>	HTW	3	30	
GG	<i>Dicellaechne micrantha</i>	N	1	5	
NA	<i>Lotus subbiflorus</i>	N-HTW	0.1	2	✓
NA	<i>Plantago lanceolata</i>	N-HTW	0.1	2	
OG	<i>Hardenbergia violacea</i>	N	0.1	1	
NA	<i>Medicago polymorpha</i>	N-HTW	0.1	1	✓

Print more copies of this page to allow for higher species counts at a plot. All vascular plant species in a plot need to be recorded.

GF Code: see growth form definitions in BAM 2020 Appendix F. N: native, HTW: high threat weed.

² Foliage cover: 0.1, 0.2, 0.3, ..., 1, 2, 3, 4, 5, 10, 15, 20, 25, ..., 100%; Note: 0.1% cover represents an area of approximately 63 x 63 cm or a circle about 71 cm across, 0.5% cover represents an area of approximately 1.4 x 1.4 m, and 1% = 2.0 x 2.0 m, 5% = 4 x 5 m, 25% = 10 x 10 m. Note the top 3 dominant native species within each GF group.

Abundance: Count 1, 2, 3 ..., when ≤10, estimate when >10, 20, 30 ..., 100, 200, 300 ..., 1000, 2000, 3000 ... (as integer values).

[pg 1 of 2]



400 m ² floristics plot:		Survey name	Plot identifier	Recorders		
Date	23/10/2025	10 Roberts Rd	BAM-02	Fiona Iolini		
GF code	Species name Full species name, or a unique means of identifying separate taxa within a survey is mandatory. Data from here will be used to assign growth form richness and cover.	N, HTW or non-HTW	² Foliage cover	Abundance	Voucher	
n/a	<i>Bryophyllum delagoense</i>	HTW	3	20		
F4	<i>Dianella revoluta</i>	N	1	5		
n/a	<i>Verbena borariensis</i>	N-HTW	0.1	1		
ag	<i>Cymbopogon refractus</i>	N	1	20		
n/a	<i>Hypochaeris radicata</i>	N-HTW	0.1	5		
n/a	<i>Cirsium vulgare</i>	N-HTW	0.1	2		
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Print more copies of this page to allow for higher species counts at a plot. All vascular plant species in a plot need to be recorded.

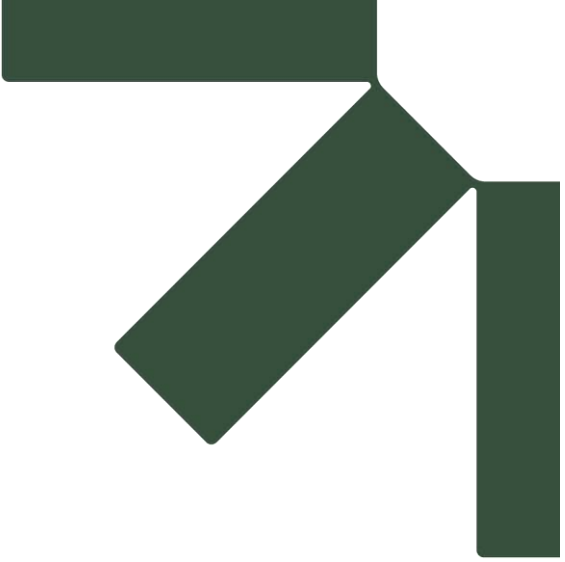
GF Code: see growth form definitions in BAM 2020 Appendix F. N: native, HTW: high threat weed.

² Foliage cover: 0.1, 0.2, 0.3, ..., 1, 2, 3, 4, 5, 10, 15, 20, 25, ...100%; Note: 0.1% cover represents an area of approximately 63 x 63 cm or a circle about 71 cm across, 0.5% cover represents an area of approximately 1.4 x 1.4 m, and 1% = 2.0 x 2.0 m, 5% = 4 x 5 m, 25% = 10 x 10 m. Note the top 3 dominant native species within each GF group.

Abundance: Count 1, 2, 3 ..., when ≤10, estimate when >10, 20, 30 ... 100, 200, 300 ..., 1000, 2000, 3000 ... (as integer values).

[pg 2 of 2]





Appendix G Decision-maker Authorisation to Use More Appropriate Local Data (n/a)

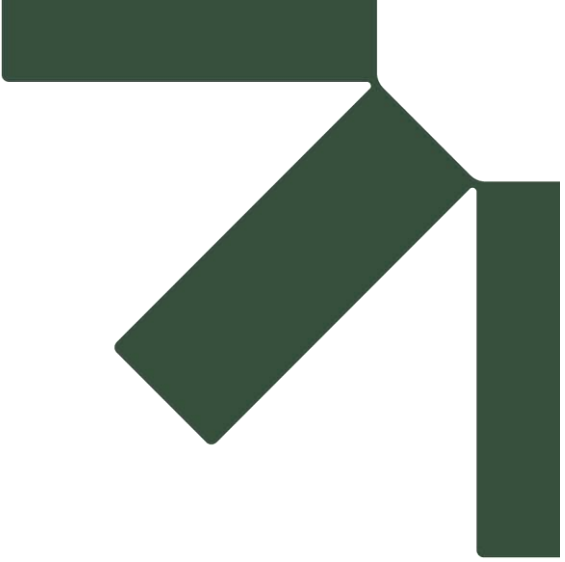
Biodiversity Development Assessment Report

**SSD-101067971 Proposed Data Centre
Eastern Creek**

Goodman Property Services (Aust) Pty Ltd

SLR Project No.: 610.033079.00001

6 May 2026



Appendix H Credit Reports (n/a)

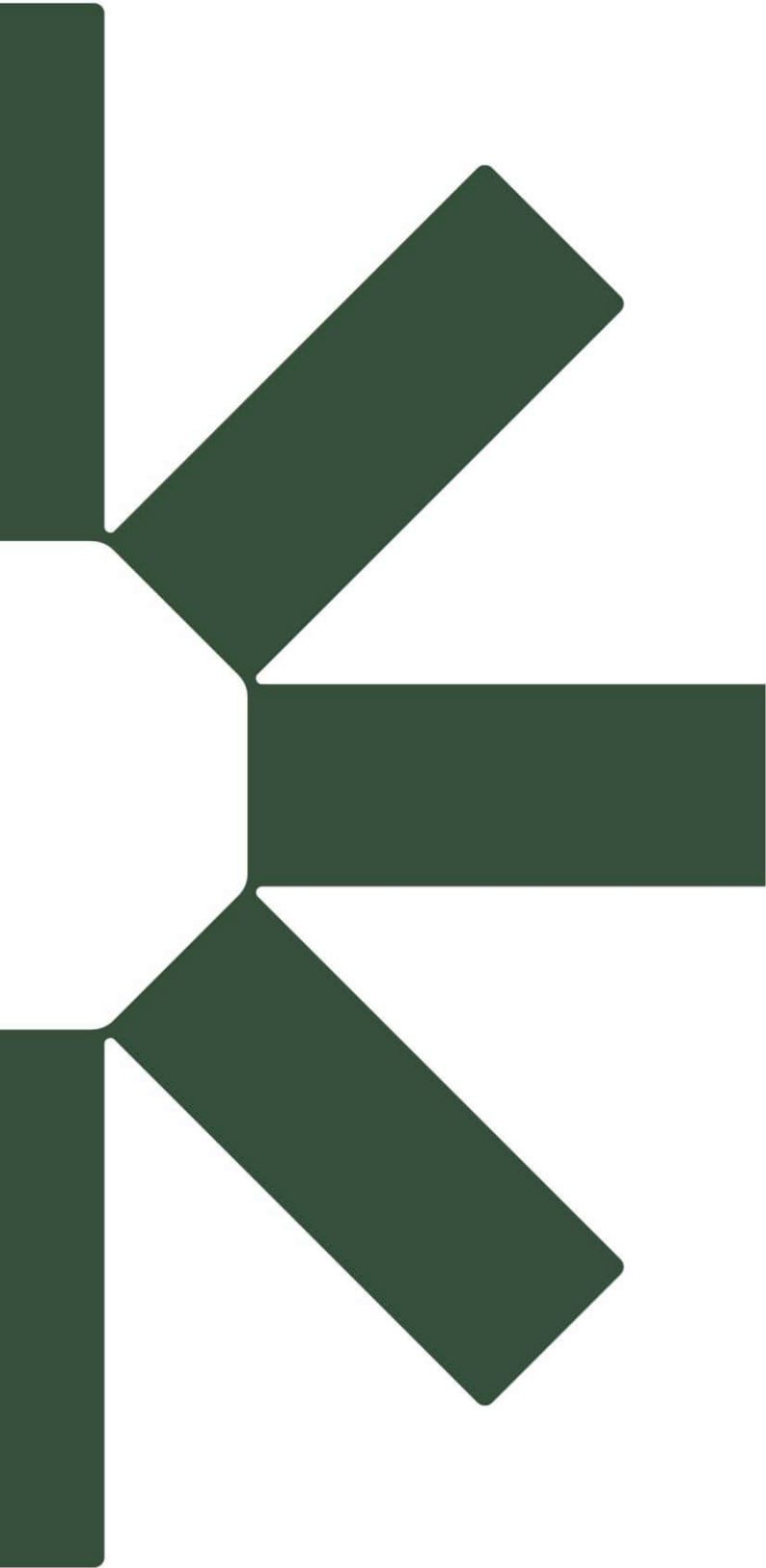
Biodiversity Development Assessment Report

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