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Burrah Park DHL Masterplan - Stage 1 & 2

Biodiversity Assessment Report

DHL Supply Chain (Australia) Pty Ltd

Document Tracking

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1	Courtney Blick	David Bonjer	David Bonjer	Final	25/09/2024

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Abbreviations

Abbreviation	Description
AOBV	Areas of Outstanding Biodiversity Value
BAM	Biodiversity Assessment Method
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
Biodiversity and Conservation SEPP	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>
CBD	Central Business District
CEEC	Critically endangered ecological community
CPCP	Cumberland Plain Conservation Plan
CPW	Cumberland Plain Woodland
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
DCP	Development Control Plan
DNG	Derived Native Grasslands
DPE	Department of Planning and Environment (NSW State Government)
ELA	Eco Logical Australia Pty Ltd
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
FM Act	<i>Fisheries Management Act 1994</i>
HBV	High Biodiversity Value
HTW	High Threat Weeds
LGA	Local Government Area
LLS Amendment Act	<i>Local Land Services Amendment Act 2016</i>
MNES	Matters of National Environmental Significance
PCT	Plant Community Type
RFEF	River-flat Eucalypt Forest
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SSD	State Significant Development
SSDA	State Significant Development Application
TEC	Threatened Ecological Community
TfNSW	Transport for New South Wales
Western Parkland City SEPP	<i>State Environmental Planning Policy (Precincts - Western Parkland City) 2021</i>
WM Act	<i>Water Management Act 2000</i>

Executive Summary

This Biodiversity Assessment Report (BAR) has been prepared by Eco Logical Australia Pty Ltd (ELA) for DHL Supply Chain (Australia) Pty Ltd (DHL) for the following State Significant Development Applications (SSDA) submitted to the NSW Department of Planning, Housing and Industry (DPHI):

- SSD-7081878 (Stage 1, southern half of DHL masterplan site)
- SSD-70817958 (Stage 2, northern half of DHL masterplan site)

The site is located within the Northern Gateway Precinct of the Western Sydney Aerotropolis at 1953-2109 Elizabeth Drive, Badgerys Creek NSW, within part of Lot 1 DP 1306448 (Figure 2). Industry specific Secretary’s Environmental Assessment Requirements (SEARs) apply in respect of the proposals. The SEARs require an assessment of environmental impacts on biodiversity. These requirements have been addressed in Table 1 below.

Table 1: Biodiversity SEARs

SEARs Biodiversity Requirements	How this report addresses the requirement
<ul style="list-style-type: none"> • Assess any biodiversity impacts associated with the development in accordance with the <i>Biodiversity Conservation Act 2016</i> and the <i>Biodiversity Assessment Method 2020</i>, including the preparation of a Biodiversity Development Assessment Report (BDAR), unless a waiver is granted, or the site is on biodiversity certified land. 	Not required. See below.
<ul style="list-style-type: none"> • If the development is on biodiversity certified land, provide information to identify the site (using associated mapping) and demonstrate the proposed development is consistent with the relevant biodiversity measure conferred by the biodiversity certification. 	The site is biodiversity certified under the <i>Order conferring strategic biodiversity certification – Cumberland Plain Conservation Plan July 2022</i> . This report demonstrates consistency with the certification and the relevant biodiversity measures.

This report describes the biodiversity values of the impacted land, describes such impacts, and confirms the biodiversity certification of the site. The impact area contains remnant native vegetation, planted native vegetation, exotic grassland, built/cleared land, and aquatic features (farm dams).

Two native Plant Community Types (PCTs) were identified within the site boundary:

- PCT 3320 Cumberland Shale Plains Woodland
- PCT 4025 Cumberland Red Gum Riverflat Forest

Mitigation measures have been recommended to ensure that development is carried out consistent with development controls and

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1. Introduction

This Biodiversity Assessment Report (BAR) has been prepared by Eco Logical Australia Pty Ltd (ELA) on behalf of DHL Supply Chain (Australia) Pty Ltd (DHL) for State Significant Development Application (SSDA) (SSD-70818708) submitted to the NSW Department of Planning, Housing and Industry (DPHI).

The SSDA constitutes a detailed development application (DA) insofar that it is linked to and is consistent with the concept plan (SSD-70316465) by seeking consent for the construction and operation of singular storey industrial buildings for use as a warehouse and logistics facility with 24 hour / seven day a week operation plus car parking and associated landscaping within part (25 hectares) of Lot 1 in Deposited Plan (DP) 1306448 at 1953-2109 Elizabeth Drive, Badgerys Creek known as the DHL Masterplan site.

This report describes two (2) SSDAs proposed by DHL and as part of the DHL Masterplan site, known as “the site”.

1.1. Site Description

The subject site is located within part of Lot 1 DP 1306448 at 1953-2109 Elizabeth Drive, Badgerys Creek. The site is approximately 25 ha in size and located north of the new Western Sydney Airport. It is located within the Penrith local government area (LGA) and is approximately 12.5 km from Penrith Central Business District (CBD), 27 km from Parramatta CBD, and 47 km from Sydney CBD.

The site is currently used for agricultural purposes and is largely cleared of vegetation with areas of dispersed grass and scattered natural and/or planted tree growth. The site contains several farm dams, primarily within the central and southern areas. The location context and aerial plans are depicted in Figure 2 and Figure 3.

1.2. Project Background

The DHL Masterplan site occupies approximately 25 hectares (ha) of the larger 171.84 ha site at 1953-2109 Elizabeth Drive, Badgerys Creek. The wider site is currently the subject of an existing SSDA (SSD-70316465).

SSD-70316465: 1953-2109 Elizabeth Drive ‘Burrah Park’

SSD-70316465 is an SSDA which was issued SEARs on the 22 May 2024 and is currently in the process of finalising the application for lodgement following Test of Adequacy with the DPHI in September 2024.

SSD-70316465 is seeking development consent for a concept plan including future development lots and building footprints. The development also seeks consent for the Stage 1 works which will include bulk earthworks across the site, infrastructure delivery, road access/intersections, internal road construction, civil infrastructure and utilities, stormwater infrastructure works and the construction of three (3) warehouse buildings.

The applicant for SSD-70316465 is the trustee for Burra Park Prop Trust 1 which is a joint venture entity, with ISPT Core Fund and UniSuper each holding an equal share.

DHL intend to develop part of the site for a logistics facility, the subject of this SSDA. The DHL Masterplan Site is known as Super lot 4a and 4b within the wider concept plan..

1.3. Project Description

The DHL Masterplan site occupies approximately 25 hectares (ha) of the larger 171.84 ha site at 1953-2109 Elizabeth Drive, Badgerys Creek. The wider site is currently the subject of an existing SSDA for 'Burrah Park' (SSD-70316465). The DHL Masterplan site consists of two SSDA proposals – Stage 1 (southern portion of the site) and Stage 2 (northern portion) as shown in Figure 2. These are described below.

The proposal aims to develop a world class warehouse and logistics facility which is fully integrated with its green infrastructure and Connection to Country. Informed by key landscape and Connecting to Country themes, the development can deliver on objectives that contribute to the Aerotropolis Vision:

- Achieve a landscape led approach and starting with Country- the project has been guided by Cultural Design Principals and local leaders in the Aboriginal community.
- Create a new global gateway which will be a regionally and nationally significant employment area by providing for warehouse and logistics land uses in a highly sought-after location adjacent to the new Western Sydney Airport.
- Design a cool, green new city with a landscape approach that increases urban tree canopy, provides useable open space areas throughout and restores key riparian corridors on the site.
- Transitioning to an Aerotropolis through a sustainable, orderly and transformational development in the Western Sydney Aerotropolis,
- Retaining a green, biodiverse landscape informed by Country and an indigenous lens on maintenance and land management.

1.3.1. Stage 1 – SSD-70818708

Specifically, the Stage 1 SSDA seeks consent for staged construction of warehouse buildings for use as a logistics centre with 24 hour/ day, seven days a week operation, comprising the following:

- Construction of two warehouses;
- Building fit out;
- Construction of hardstand, loading and carparking;
- Landscaping works; and
- Signage.

1.3.2. Stage 2 – SSD-70817958

Specifically, the Stage 2 SSDA seeks consent for staged construction of warehouse buildings for use as a logistics centre with 24 hour/ day, seven days a week operation, comprising the following:

- Construction of two warehouses;
- Building fit out;
- Construction of hardstand, loading and carparking;
- Landscaping works; and
- Signage.

1.4. Terms used in this report

1.4.1. Subject Site

The 'subject site' is shown on figures throughout this report as a solid red border and refers to the entirety of Lot 1 DP 1306448, also known as the 'Burrah Park' site. This is a broader area than the land subject to Stage 1 and 2 of the DHL masterplan (below).

1.4.2. Site Boundary / Site

The 'site boundary' refers to the area subject to direct and indirect impacts as a result of the DHL masterplan Stage 1 and Stage 2. The site boundary is defined in Figure 2 as a yellow dashed line and includes a 5 m construction buffer. This is the area for which impacts to biodiversity values have been assessed within this report.

The terms 'site' and 'development site' are used interchangeably in this report. The division of the development site into Stage 1 and Stage 2 is described in Figure 1 and Figure 2.

1.4.3. Development Footprint

Defined in Figure 2, 'development footprint' refers to the area encompassed by the Stage 1 and Stage 2 development plans, including the warehouses, internal roads and associated services.



Figure 1: DHL Masterplan Site



Figure 2: Site Map

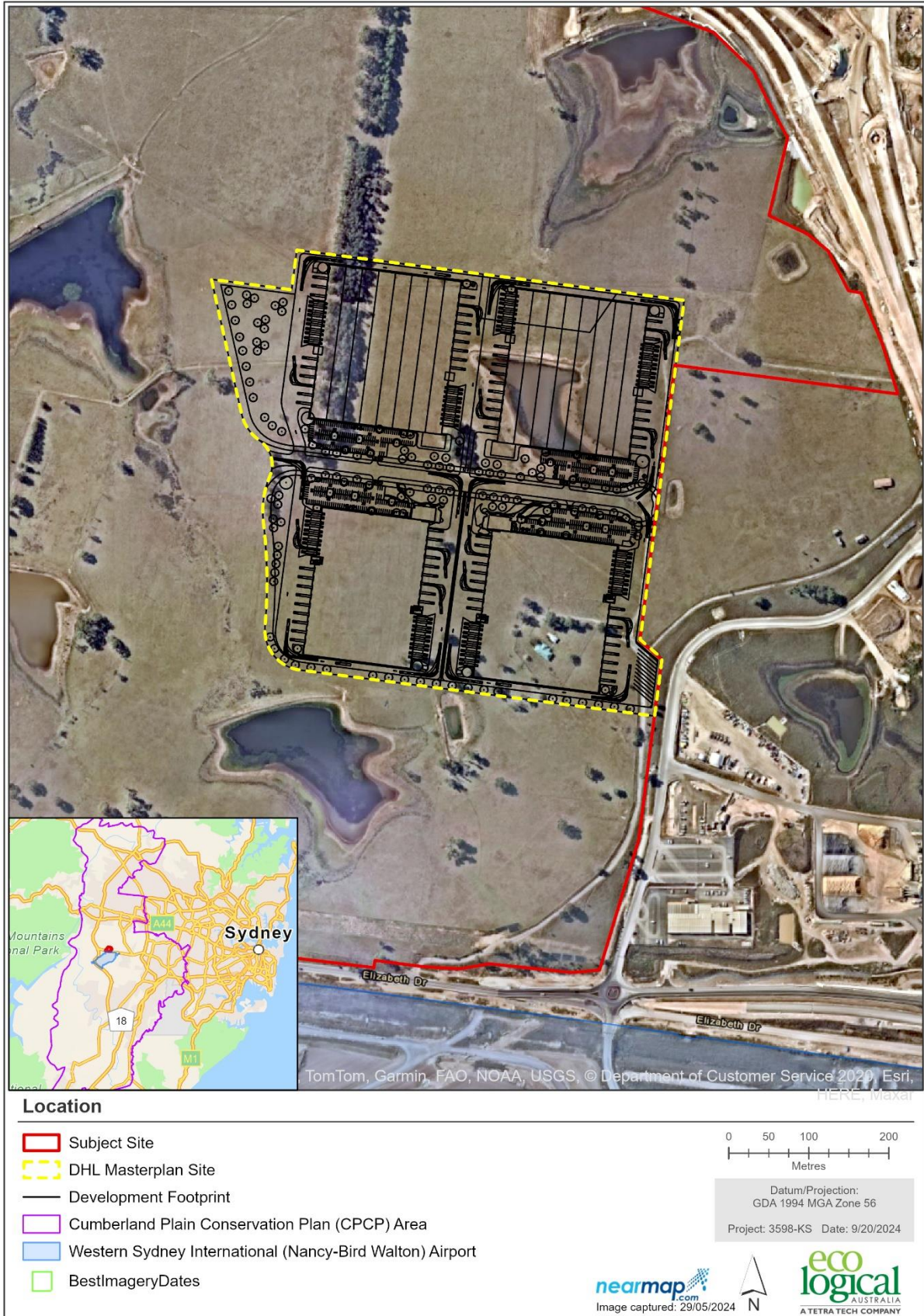


Figure 3: Location of the proposed works, showing the CPCP Area and WSI

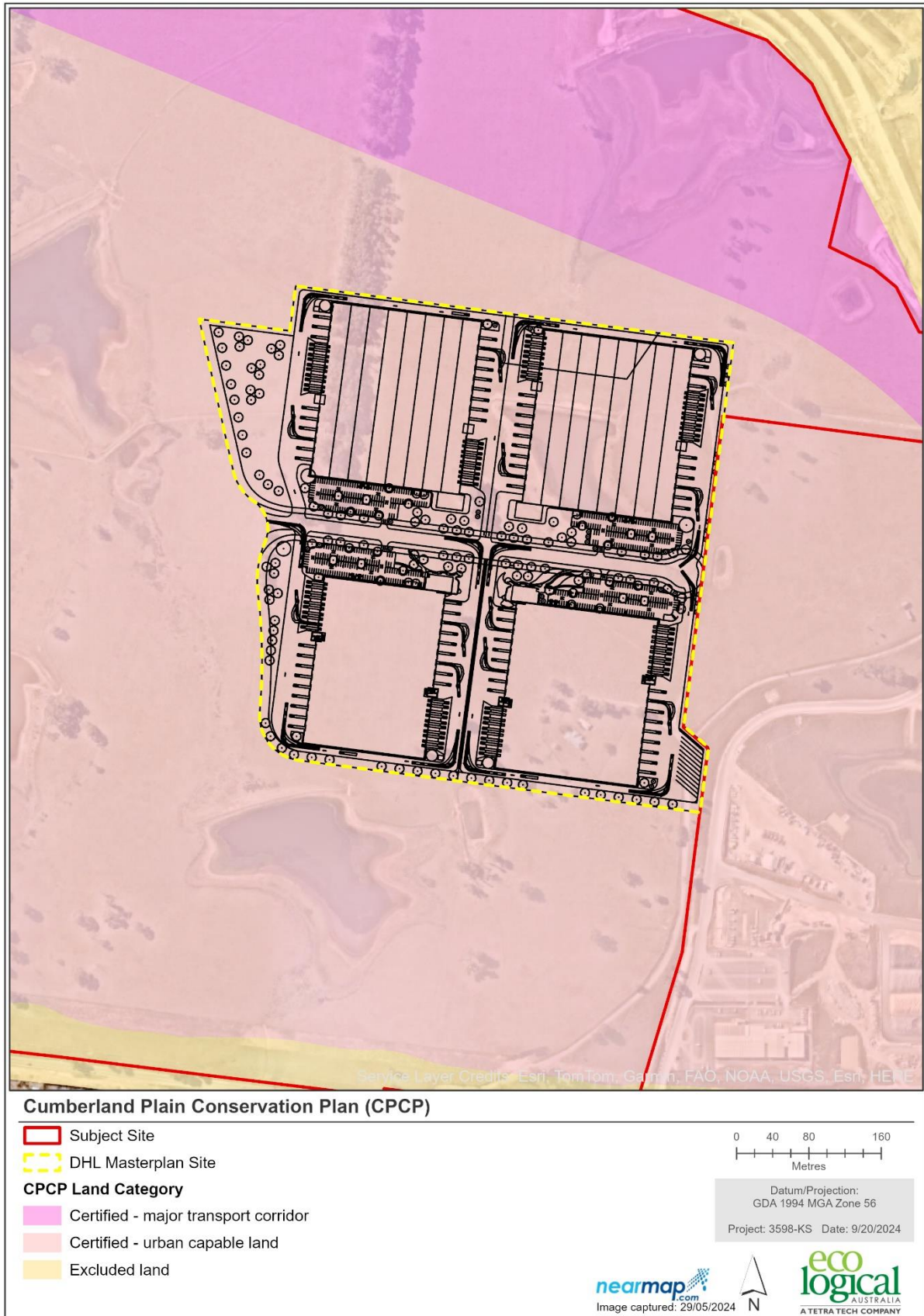


Figure 4: CPCP land categories

2. Statutory Framework

2.1. Commonwealth Legislation

Table 2: Commonwealth legislative context

Act	Relevance to Project
<p><i>Environmental Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)</p>	<p>The EPBC Act establishes a regime for assessing and regulating the environmental impact of activities (including development) where a Matters of National Environmental Significance (MNES) may be affected. Under the EPBC Act, any action which has, will have, or is likely to have a significant impact on a matter of MNES is defined as a “controlled action”, and requires approval from the Minister. The Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) is responsible for administering the EPBC Act.</p> <p>The process includes undertaking an Assessment of Significance for listed threatened species and ecological communities that represent a matter of MNES that will be affected as a result of the proposed action. The <i>Significant Impact Guidelines 1.1 – Matters of National Environmental Significance</i> (CoA 2013) provide overarching guidance on determining whether an action is likely to have a significant impact on a MNES.</p> <p>The NSW Department of Climate Change, Energy, the Environment and Water (NSW DCCEEW) approved the Cumberland Plain Conservation Plan (CPCP) in August 2022. The CPCP applies biodiversity certification and protection measures to areas of Western Sydney, discussed in further detail below. Certified-urban capable land and certified-major transport corridors identify land within the CPCP Area for future urban development.</p> <p>On 26 March 2024 the Commonwealth Environment minister granted approval for the actions described in the CPCP in accordance with Part 10 of the EPBC Act, which includes approval for urban and industrial development located on wholly certified land.</p> <p>The Commonwealth approval states that:</p> <p><i>‘Actions approved under this decision will not require separate referral, assessment or approval under the EPBC Act in order to be taken.’</i></p> <p>The site is located on certified-urban capable land (Figure 4). As such, no further assessment of Matters of National Environmental Significance (MNES) is required under the EPBC Act for the SSDA.</p>

2.2. NSW State Legislation

Table 3: State legislative context

Act	Relevance to Project
<p><i>Environmental Planning and Assessment Act 1979</i> (EP&A Act)</p>	<p>The EP&A Act is the principal planning legislation for NSW. It provides a framework for the overall environmental planning and assessment of development proposals.</p> <p>The proposed development is State Significant Development and is to be assessed under Part 4.12 of the EP&A Act. Industry Specific Secretary’s Environmental Assessment Requirements (warehouses and distribution centres) have been addressed.</p> <p>The site is biodiversity certified, removing the need for biodiversity assessment under the State legislation <i>Biodiversity Conservation Act 2016</i> (BC Act). Development in certified-urban capable land (Figure 4) does not require further site by site biodiversity assessment or approval under the BC Act, if consistent with the CPCP and its approvals.</p> <p>As such, this report has been prepared to provide evidence of certification under the CPCP and the Project’s consistency with Commonwealth and NSW legislation and planning instruments.</p>
<p><i>Biodiversity Conservation Act 2016</i> (BC Act)</p>	<p>The development site is located on land that is biodiversity certified under section 8.2 of the BC Act. <i>The Order conferring strategic biodiversity certification – Cumberland Plain Conservation Plan</i>, was signed by the NSW Minister for the Environment on 20 July 2022.</p> <p>The CPCP applies to the study area (Figure 3), and is wholly within certified-urban capable land (Figure 4). The definition of this category under the CPCP is as follows:</p> <ul style="list-style-type: none"> ● Certified urban-capable land is land identified under the CPCP for future urban development and is biodiversity certified under Part 8 of the BC Act.

Act	Relevance to Project
	Biodiversity certification removes the need for biodiversity assessment under BC Act (Figure 1). As such, this report was prepared to provide evidence of certification under the CPCP and assess MNES as discussed above.
<i>Local Land Services Amendment Act 2016</i> (LLS Amendment Act)	The LLS Amendment Act does not apply to the study area. In accordance with Section 600, the clearing of any native vegetation has been authorised by the CPCP biodiversity certification enacted under the BC Act.
<i>Fisheries Management Act 1994</i> (FM Act)	The objectives of the FM Act are to conserve, develop and share the fishery resources of the State for the benefits of present and future generations. The FM Act provides protection and approval processes for activities which may impact on threatened species, protected marine vegetation, or involve dredging, reclamation, or obstruction of fish passage. The development does not involve impacts to Key Fish Habitat, does not involve harm to marine vegetation, dredging, reclamation or obstruction of fish passage. A permit or consultation under the FM Act is not required.
<i>Water Management Act 2000</i> (WM Act)	In accordance with Part 4, Division 1.7, Section 4.41 (g) of the EP&A Act, a water use approval under Section 89, a water management work approval under Section 90 or an activity approval (other than an aquifer interference approval) under Section 91 of the WM Act is not required for SSD.

2.3. Environmental Planning Instruments (EPIs)

Table 4: EPIs relevant to the proposal

Instrument	Relevance to Project
<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i> Biodiversity and Conservation SEPP	<p>Strategic Conservation Planning</p> <p>Chapter 13 of the Biodiversity and Conservation SEPP applies to the study area. Section 13.4 provides definitions for terms used under the CPCP. Part 13.2 to 13.5 of the SEPP provides development controls for the CPCP land type classifications, which are described in Section 4.1 of this report.</p> <p>Koala Habitat Protection</p> <p>In accordance with Schedules 2 and 3 of the Biodiversity and Conservation SEPP, Chapter 3 'Koala Habitat Protection 2020' and Chapter 4 'Koala Habitat Protection 2021' do not apply to the City of Penrith.</p>
<i>State Environmental Planning Policy (Precincts - Western Parkland City) 2021</i> Western Parkland City SEPP	<p>Western Sydney Aerotropolis</p> <p>No land mapped as High Biodiversity Value (HBV) is within the site. The site is wholly zoned as ENT (Enterprise) (Figure 5) under the SEPP.</p> <p>ENT – Enterprise</p> <p>The objectives of ENT zoned land in accordance with the SEPP are as follows:</p> <ul style="list-style-type: none"> ● To encourage employment and businesses related to professional services, high technology, aviation, logistics, food production and processing, health, education and creative industries. ● To provide a range of employment uses (including aerospace and defence industries) that are compatible with future technology and work arrangements. ● To encourage development that promotes the efficient use of resources, through waste minimisation, recycling and re-use. ● To ensure an appropriate transition from non-urban land uses and environmental conservation areas in surrounding areas to employment uses in the zone. ● To prevent development that is not compatible with or that may detract from the future commercial uses of the land. ● To provide facilities and services to meet the needs of businesses and workers. <p>The proposed development is in accordance with the objectives of the ENT zone.</p>
Western Sydney Aerotropolis Precinct Plan 2022	The Precinct Plan provides further direction for development within the Aerotropolis. The Western Sydney Aerotropolis Precinct Plan establishes the strategic vision and general objectives, proposed land uses, performance criteria for development of land and the approach to both infrastructure and water cycle management. The Plan provides an open space

Instrument	Relevance to Project
	<p>framework indicating the requirement of riparian parks-creeks, open space and existing woodland to be rehabilitated or retained along Cosgroves Creek which is located to the west of the proposed impact area. In addition, it is stated the waterways and riparian corridors are to be retained and rehabilitated to a natural state.</p> <p>The proposal complies with this framework as described in Section 4.2.1.</p>
<p>Aviation Safeguarding Guidelines Western Sydney Aerotropolis and Surrounding Areas 2021</p>	<p>The Aviation Safeguarding Guidelines has been prepared to protect community safety, amenity and safeguard the 24-hour operations of the Western Sydney International (Nancy-Bird Walton). Chapter 4, Managing the risk of wildlife in the vicinity of Airports, provides measures to assess the risk of a proposed developments wildlife attraction potential and triggers for further assessment.</p> <p>Landscape plans must be reviewed in accordance with this section and an ecologist report provided if triggered through the proposed planting. The ecologist report is to assess the potential wildlife attracting characteristics of the proposed planting, provide justification for planting and provide measures to reduce the risk of wildlife impacting the operation of the airport. A Wildlife Hazard Assessment (WHA) and Wildlife Hazard Management Plan (WHMP) has been prepared by ELA for the broader Burrah Park SSDA (SSD- 70316465).</p>

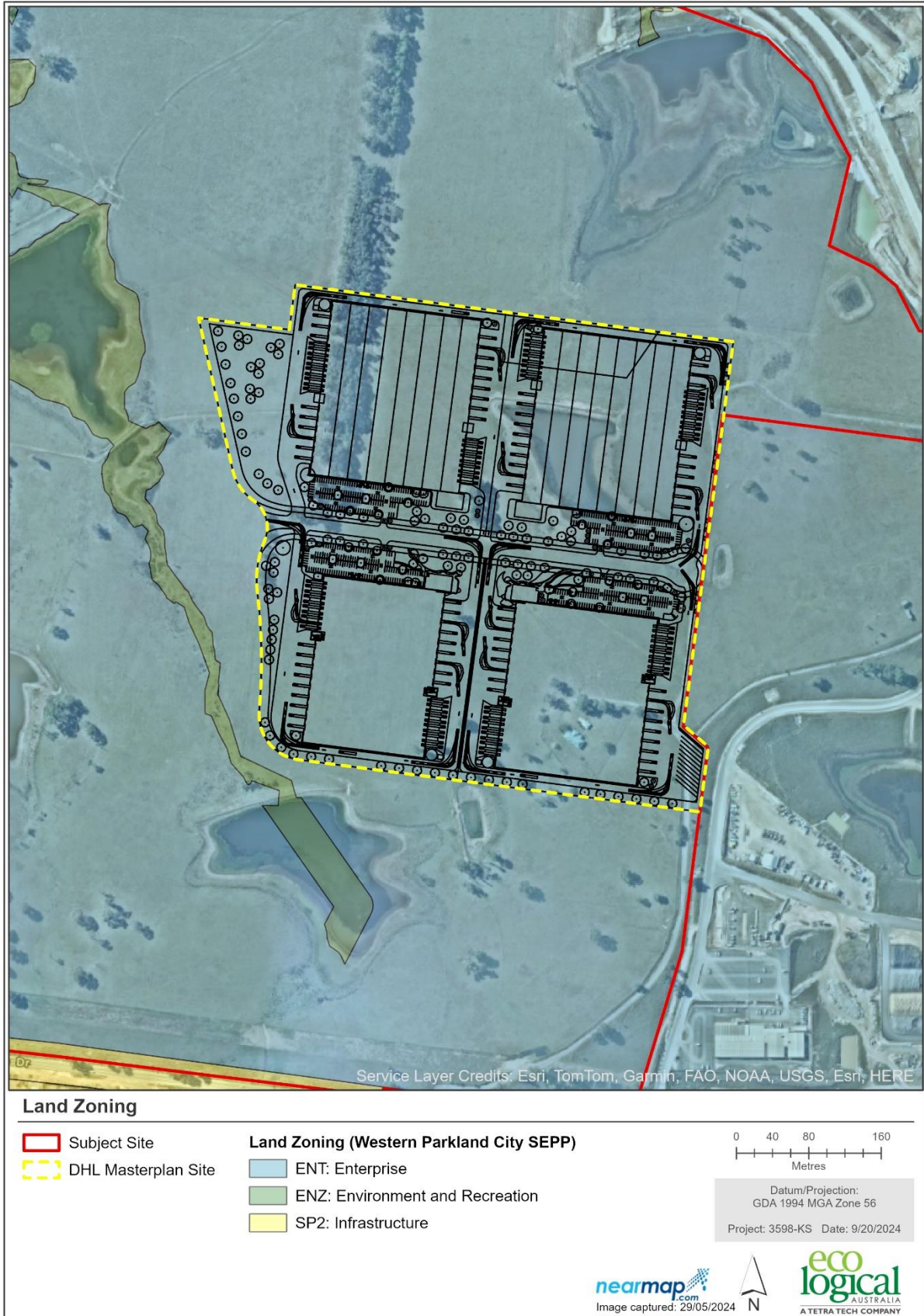


Figure 5: Land zoning under the Western Parkland City SEPP

3. Biodiversity Values

3.1. Landscape Features

The study area is located in the Sydney Basin IBRA region, within the Cumberland subregion (Figure 2). Under the NSW Mitchell landscapes classification, the study area is underlain by Cumberland Plain and Hawkesbury Nepean Channels and Floodplains.

One first order watercourse (Strahler classification) is located within the site boundary. Field validation of watercourses within the study area concluded that the mapped first order stream does not meet the definition of a 'river' under the WM Act (ELA 2024b). A second order watercourse is located approximately 10 m south east of the site boundary at its closest point (Figure 2). It is a tributary of South Creek, within the Hawkesbury-Nepean catchment.

One dam is located within the impact are. No important wetlands or key fish habitat have been mapped in the impact area. No native vegetation was identified in relation to the dam. It is understood that the dam will be subject to dewatering in accordance with the broader Burrah Park proposal (SSD-70316465).

The impact area does not contain any Areas of Outstanding Biodiversity Value (AOBV).

3.2. Vegetation Validation

Vegetation validation was undertaken between 2018 and 2021 by ELA Ecologists and included floristic and vegetation integrity plots.

3.2.1. Plant Community Types (PCTs)

The vegetation validation survey identified two PCTs across the impact area for DHL Stage 1 and 2 (ELA 2024a). A total of 9 full-floristic vegetation plots across the broader study area were surveyed to identify PCTs and TECs within the study area, although none of these were located in the subject site. This information has been used to inform PCT mapping for the impact area of this proposal, shown in Figure 6. The PCTs identified within the site boundary are:

- PCT 3320 Cumberland Shale Plains Woodland
- PCT 3320 Cumberland Shale Plains Woodland (Derived Native Grasslands)
- PCT 4025 Cumberland Red Gum Riverflat Forest

The PCTs described above do not conform to the condition criteria for listing under the EPBC Act due to a lack of native understorey (< 40%). Therefore, no further assessment of impacts to vegetation within the study area has been undertaken within this report as the entire site is biodiversity certified under the CPCP.

The areas of PCTs and non-native vegetation are summarised in Table 5 and displayed in Figure 6.

Table 5: Description of PCTs and non-native vegetation areas

PCT ID	PCT Name / Non-native Area	Vegetation Class	Vegetation Formation	Area (ha)
Native PCTs				
PCT 3320	Cumberland Shale Plains Woodland	Coastal Valley Grassy Woodlands	Grassy Woodlands	0.287
PCT 3320	Cumberland Shale Plains Woodland (Derived Native Grasslands)	Coastal Valley Grassy Woodlands	Grassy Woodlands	1.025
PCT 4025	Cumberland Red Gum Riverflat Forest (Mixed Understorey)	Coastal Floodplain Wetlands	Forested Wetlands	0.121
Planted vegetation and non-native areas				
-	Planted	-	-	1.362
-	Dams	-	-	1.958
-	Built	-	-	0.047
-	Roads	-	-	0.424
-	Exotic Grassland	-	-	21.324
		Total		26.547 ha



Figure 6: Plant Community Types (PCTs) within DHL Masterplan site

3.2.2. Summary of PCT Conditions and Fauna Habitats

A brief summary of the PCTs validated within the site are provided below. No further assessment is required under the BC Act or EPBC Act due to the effects of biodiversity certification under the CPCP, and no PCTs conform to a threatened ecological community listing under the EPBC Act. Information relating to vegetation and potential habitat has been described below to inform site management (e.g. pre-clearing activities).

PCT 3320 – Cumberland Shale Plains Woodland

PCT 3320 within the study area contained remnant native canopy species and was dominated by an exotic understorey (Figure 7). The overall condition assigned was Poor, and conditions varied from disturbed mid-storey and shrub layer to understorey, a weed-dominated mid-storey and shrub layer to areas with a managed understorey. Natural regeneration was present in some areas however was limited across the study area due to grazing.

The canopy provides foraging and perching habitat for birds and bats, limited mid-storey cover for small bird habitat and limited woody debris present for ground dwelling fauna. The canopy consisted of the following species:

- *Eucalyptus moluccana* (Grey Box)
- *Eucalyptus tereticornis* (Forest Red Gum)
- *Eucalyptus fibrosa* (Broad-leaved Ironbark)
- *Eucalyptus crebra* (Narrow-leaved Ironbark)

The midstorey included *Bursaria spinosa* var. *spinosa* (Native Blackthorn) which was present in low densities. Native groundcover consisted of, in low densities, the following species:

- *Microlaena stipoides* (Weeping Meadow Grass)
- *Themeda australis* (Kangaroo Grass)
- *Brunoniella australis* (Blue Trumpet)
- *Rytidosperma tenuis*
- *Aristida vagans* (Threeawn Speargrass)
- *Chloris ventricosa* (Plump Windmill Grass)
- *Bothriochloa macra* (Red Leg Grass)

CPW is listed as a critically endangered ecological community (CEEC) under the BC Act and EPBC Act, however due to lack of native species within the understorey (< 30%), this PCT 3320 within the site is not consistent with the EPBC Act condition criteria.

PCT 3320 – Cumberland Shale Plains Woodland derived native grassland

PCT 3320 – Derived Native Grassland (DNG) describes an area of remnant vegetation consisting of grasses, groundcover and shrub species derived from CPW but lacking a canopy (

Figure 8). Native groundcover was more than 50%. *Bursaria* was prominent and the groundcover was characterised by *Themeda australis*, *Bothriochloa macra*, and *Aristida ramosa*. DNG provides a shrubby mid-storey layer suitable for foraging and perching habitat for small bird species.

This vegetation zone did not meet the description of the critically endangered ecological community under the EPBC Act as set out in the Conservation Advice.

PCT 4025 – Cumberland Red Gum Riverflat Forest

PCT 4025 was present in a single isolated patch in centre of the site boundary. The canopy of this community consists of *Eucalyptus amplifolia* (Cabbage Gum), *Eucalyptus tereticornis* (Forest Red Gum), *Angophora floribunda* (Rough-barked Apple) and *Casuarina cunninghamiana* subsp. *cunninghamiana* (River Oak). The mid-storey was sparse throughout this community and dominated by high threat exotic species.



Figure 7: PCT 3320 – Cumberland Plain Woodland



Figure 8: PCT 3320 – Derived Native Grassland



Figure 9: PCT 4025 – RFEF (Modified understorey)

3.2.3. Threatened Ecological Communities under the EPBC Act

There are two threatened ecological communities (TECs) within the development site under the BC Act, neither of which conforms to an EPBC Act TEC listing. A summary of all PCTs and their associated TECs is presented in Figure 6.

PCT 3320 conforms to Cumberland Plain Woodland in the Sydney Basin Bioregion (CPW), a critically endangered ecological community (CEEC) listed under the EPBC Act, however due to the lack of native species within the understorey (< 30%), the CPW within the study area is not consistent with the EPBC condition criteria (DEWHA, 2009).

PCT 4025 conforms to *River-Flat Eucalypt Forest on Coastal Floodplains of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions*. River-flat Eucalypt Forest (RFEF) is also listed as a CEEC under the EPBC Act: *River-flat eucalypt forest on coastal floodplains of southern NSW and eastern Victoria*.

It was determined through analysis of plot data that the RFEF within the impact area does not meet the condition criteria under the *Conservation Advice for River-flat Eucalypt Forest* as the native vegetation cover did not contain the required ground cover richness (40% native perennial understorey and > 4 native species per 0.04 ha sample plot and occurs in a patch that is > 0.5 ha within a larger area of native vegetation > 5ha) (DAWE, 2020a).

As such, no ecological communities within the site are consistent with an EPBC Act listing.

3.3. Habitat features

3.3.1. Hollow-bearing trees (HBTs)

No hollow-bearing trees are located within the site boundary. The nearest hollow is approximately 25 m from the site boundary, which represents a 5 m construction buffer around the direct impact area.

3.3.2. Aquatic fauna

Some aquatic fauna may be present within the farm dam located in the site boundary. In order to prevent harm to aquatic fauna, mitigation measures during dam dewatering are provided in Section 5 of this report.

4. Consistency with Planning Framework

4.1. Biodiversity and Conservation SEPP

Chapter 13 ‘Strategic Conservation Planning’ of the Biodiversity and Conservation SEPP provides development controls for the land type classifications under the CPCP. Table 6 below provides responses to the development controls relevant to the proposed works.

Table 6: Biodiversity and Conservation SEPP Chapter 13

Development Control		Response
Part 13.2 Development controls – general		
13.6 Koala fences and fauna crossings	Development involving the erection, maintenance or modification of a fauna crossing or koala fence may be carried out by or on behalf of a public authority without development consent if the crossing or fence is consistent with the Cumberland Plain Conservation Plan	The CPCP identifies areas as ‘Protected Koala Habitat and Restoration’, however none of these areas are identified on the subject site. No previous records of Koala have been identified within 5 km of the study area. The development does not propose to erect, maintain or modify fauna crossings or Koala fencing.
Part 13.3 Development controls – Avoided Land		Not applicable to the site
Part 13.4 Development controls – Strategic Conservation Areas		Not applicable to the site
Part 13.5 Development on certified urban capable land		
13.15 Asset protection zones	Development consent must not be granted to development involving an asset protection zone on certified urban capable land unless the asset protection zone is located wholly on certified urban capable land.	A Bushfire Protection Assessment has been prepared addressing the APZ requirements (ELA 2024c). The proposed development, including its Asset Protection Zone, is wholly located within certified-urban capable land.
13.16 Mitigation Measures	Development consent must not be granted to development on certified urban capable land unless the consent authority has considered whether the development is consistent with the Cumberland Plain Conservation Plan Mitigation Measures Guideline.	The <i>CPCP Mitigation Measures Guideline</i> only applies to land within the Greater Macarthur Growth Area, and Greater Penrith to Eastern Creek Investigation Area. This clause does not apply.

4.2. Western Parkland City SEPP

4.2.1. Western Sydney Aerotropolis Precinct Plan

Part 4.7 of the Western Parklands City SEPP provisions for development of Precinct Plans and requires development within the Aerotropolis to be consistent with the Western Sydney Aerotropolis Precinct Plan (DPE 2023). The Precinct Plan was adopted in 2022 and updated (Amendment 1) in May 2023.

The study area is located in the Northern Gateway Precinct, immediately north of the Western Sydney International (Nancy-Bird Walton) Airport. Table 7 provides a comparison of the Aerotropolis Precinct Plan objectives and controls with the Project.

Please note that objectives relating to water cycle management, stormwater, landscaping or arboriculture have not been addressed in Table 7 below. Riparian provisions are addressed in the separate riparian report (ELA 2024b).

Table 7: Consistency with Aerotropolis Precinct Plan (DPE 2023)

Requirement	SSDA Compliance
4.5 Blue-Green Infrastructure Framework	
BG1 Development is to contribute to the establishment of the blue-green infrastructure framework for the Aerotropolis in accordance with Figure 5.	In accordance with Figure 5 of the Precinct Plan, the site is outside of land designated for stormwater infrastructure under the blue-green grid.
4.5.4 Biodiversity and vegetation corridors	
BG1 Existing Native Vegetation and other vegetation under the Cumberland Plain Conservation Plan (refer to Figure 7) is to be protected as required by the Aerotropolis SEPP. Development applications are to demonstrate, to the satisfaction of the consent authority, that measures are in place to protect and provide for the long term management of the vegetation to achieve biodiversity conservation outcomes under the Growth Centres Biodiversity Certification Order or the Cumberland Plain Conservation Plan as relevant.	Existing Native Vegetation (ENV), referred to as HBV within this precinct, and Avoided Land under the CPCP are located within the broader subject site. No ENV or Avoided Land are located within the site proposed for developed under the DHL masterplan.
BG2 Recreation facilities, pathways and other infrastructure are not to be located on land referred to in Requirement BG1.	Land referred to in BG1 (i.e. HBV and Avoided Land) does not occur within the site.
BG3 Revegetation and landscaping are designed and managed to account for future climatic conditions and include climate ready species. Resources relating to climate-ready species are available at https://www.mq.edu.au/_data/assets/pdf_file/0006/807666/Climate-Reveg-Guide-v2-2018.pdf	Plantings will be managed under a landscape plan and will select species that are climate ready in accordance with the <i>Climate Revegetation Guide</i> (Hancock <i>et al.</i> 2018) wherever possible.
BG4 Development applications are to demonstrate: reuse of native plants (including but not limited to seed collection) and top soil from development sites that contain known or potential native seed bank. Appropriate uses may include, but are not limited to, application in re-vegetation or restoration works and landscaping in the precincts, the relocation of native animals from development sites, prior to development commencing.	Collection of topsoil and associated native seedbank for reuse in landscaping across the subject site is recommended in accordance with the Biodiversity Management Plan (BMP) prepared for the broader Burrah Park proposal. Prior to construction, preclearance surveys will be undertaken to ensure any native fauna using habitat features across the site identified and relocated. Similarly, dams to be removed will be subject to a Dam Dewatering Plan (DDP) and any native fauna present in the dams will be relocated appropriately.

4.3. Western Sydney Aerotropolis Development Control Plan 2022 – Phase 2

The Western Sydney Aerotropolis DCP 2022 Phase 2 was finalised in November 2022 and applies to the study area. Chapter 2.4.2 and 2.4.3 of the DCP provide general controls relevant to the protection of biodiversity, trees and vegetation, in relation to specific performance outcomes. Table 8 below addresses the performance outcomes relating to biodiversity, noting that controls specific to landscaping and arboriculture are not address in this report.

Table 8: Phase 2 DCP Performance Outcomes

Performance Outcome		Benchmark Solution	Response
Chapter 2.4.4 – Protection of Biodiversity			
PO2	Populations of threatened species are retained, and the condition of suitable habitat improves within areas of the Cumberland subregion most likely to support long-term viability.	<ul style="list-style-type: none"> ● Mitigation to be undertaken in accordance with the following best practice guidelines for threatened ecological communities (TEC): ● <i>Best Practice Guidelines: Cooks River/Castlereagh Ironbark Forest</i> (NSW Department of Environment and Climate Change, 2008) within and adjacent to the TEC; and ● <i>Recovering Bushland on the Cumberland Plain: Best Practice Guidelines for the Management and Restoration of Bushland</i> (NSW Department of Environment and Climate Change, 2005). ● Fencing is to be constructed where required to protect threatened species habitat. Site design allows access to fencing for ongoing maintenance. ● Temporary protective fencing to be erected around areas identified for conservation on or immediately adjoining the site prior to construction commencing. ● Allow public access to temporary fencing to ensure ongoing maintenance throughout construction. ● Protect integrity of temporary fencing during construction. ● Implement open structure design for roads adjacent to known populations of Cumberland Plain Land Snail in accordance with actions under the <i>Save our Species Program</i> (EES, 2020). ● Locate Asset Protection Zones (APZs) for bushfire protection wholly within certified land. The appropriate APZ distance is determined by <i>Planning for Bush Fire Protection 2019</i> and <i>Rural Fire Service Standards for Asset Protection</i> based on vegetation type, slope and development type. ● Contain domestic cats and dogs within certified-urban capable land, consistent with relevant council guidelines as permitted and appropriate. ● Provide for the reuse of native plants (including but not limited to seed collection) and topsoil from development sites that contain known or potential native seed bank. 	<p>The proposed development is located within biodiversity certified land under the CPCP, which has not been identified as having high biodiversity value. No HBV Areas are mapped within the site. The impact area is predominantly exotic grassland (Figure 6) and contains limited extents of native vegetation (including threatened ecological communities under the BC Act) that require no further assessment.</p> <p>The study area is unlikely to support long-term viability of threatened species. The Project has been sited with this in mind, being located largely on exotic grassland in certified urban-capable land. Some low-quality habitat is available for Southern Myotis available in the form of a farm dam. There are no nearby hollows identified within the site. Vegetation to be removed within the impact area has been offset in designated areas of the CPCP will ensure more viable patches of habitat are restored and/or protected in perpetuity, including to the west of the broader Burrah Park site in Cosgroves Creek.</p> <p>No-go areas will be delineated with protective fencing prior to works, to protect habitat that is not within the impact area and specifically within the adjacent riparian corridor. APZs have been addressed through the Bushfire Assessment report (ELA 2024c). APZs are wholly located with certified land.</p> <p>Seed collection of native vegetation is recommended prior to any clearing in accordance with the BMP prepared for the broader Burrah Park site under SSD-70316465.</p>
PO3	Development facilitates the connected movement of native animals	<ul style="list-style-type: none"> ● Avoid impacts to habitat features which provide essential habitat for native fauna including ground cover and shrub layers, emerging trees, mature trees, dead trees capable of providing habitat, natural drainage lines and rock outcrops and avoid impacts to soil within the Tree Protection Zone (TPZ) of the retained trees and the subject and neighbouring sites. 	<p>Hollow bearing trees have not been identified within the site.</p> <p>Wildlife corridors along the western boundary of the subject site are associated with HBV and Avoided Land</p>

Performance Outcome	Benchmark Solution	Response
	<p>through the landscape.</p> <ul style="list-style-type: none"> ● Movement of fauna is facilitated within and through wildlife corridors by: ● Ensuring that development, services and landscaping associated activities do not create barriers to the movement of fauna along and within wildlife corridors. ● Protect fauna from potential construction hazards during pre-construction and construction. ● Prepare a pre-clearance native fauna survey immediately prior to clearing of native vegetation to ensure that arboreal mammals, roosting and hollow-using birds, bats and reptiles are stopped from accessing any vegetation to be cleared and are translocated prior to clearing. Translocation may require a licence from NSW Environment, Energy and Science under the Translocation Operational Policy. ● Adopt and implement open structure design for roads adjacent to known populations of the Cumberland Plain Land Snail in accordance with actions under the NSW Government’s Saving Our Species program. 	<p>protections, and will not be affected by the DHL masterplan.</p> <p>Barriers to movement of fauna are not expected to occur as a result of vegetation removal. Native vegetation within the impact area is limited to isolated patches and scattered trees that do not provide substantial habitat connectivity.</p> <p>The proposed development will therefore not significantly encumber the movement of native animals through the landscape, or fragment significant native fauna habitats.</p>
PO4	<p>Within land subject to the Cumberland Plain Conservation Plan only, development adjoining conservation areas provides ecological setbacks to threatened species.</p> <p>The following threatened species require setbacks:</p> <p>Grey-headed flying fox:</p> <ul style="list-style-type: none"> ● Grey-headed flying fox camp requires 100m setback to any buildings and development; ● The setback area should be maintained free of flying fox roosting habitat; and ● A flying fox management plan should be provided to demonstrate management and mitigation measures. <p>Raptors:</p> <ul style="list-style-type: none"> ● Raptor nests require a 500m circular setback from where nests are in extensive undisturbed bushland; and ● Where nests are located closer to existing developments, a minimum circular setback distance of 250m should be maintained along with an undisturbed corridor at least 100m wide extending from the nest to the nearest foraging grounds. 	<p>Grey-headed Flying-fox setbacks do not apply to the proposed development as they will not impact a known flying-fox camp.</p> <p>Raptor setbacks are not applicable as no known raptors (i.e. birds of prey) or suitable habitat (large hollows) were identified within the site.</p>
PO5	<p>Noise and light adjacent, and near, conservation areas does not result in any disturbance to wildlife.</p> <ul style="list-style-type: none"> ● High intensity lighting including industrial or commercial lighting, sports field lighting, lighting within carparking areas and associated with any industrial or commercial-scale retail development shall be designed to avoid light spill into adjoining parks and biodiversity areas (AS 4282 Control of the Obtrusive Effects of Outdoor Lighting, or updates to that standard, are to be considered as a minimum). ● Install warm coloured LED street lighting where a development footprint contains or is within 100m of known microbat colonies or habitat likely to support microbat colonies to deter insects. ● Manage light spill and noise producing activities where wildlife impacts are likely to arise from the proposed development and where development is adjacent to avoided land. 	<p>Mitigation measures are provided to ensure lighting is in accordance with <i>ASNZS 4282:2019 Control of the obtrusive effects of outdoor lighting</i>.</p> <p>Measures such as shielding and use of warm-toned lights in proximity to the riparian corridor (e.g. in public open space and on pathways) will be utilised to ensure light impacts are minimised.</p> <p>Appropriate timing of construction activities is recommended in accordance with the standard</p>

Performance Outcome	Benchmark Solution	Response	
	<p>Measures shall include appropriate noise treatment barriers along major roads and other light and noise attenuation mitigation measures.</p> <ul style="list-style-type: none"> ● Ensure that any residual noise impacts on wildlife arising from development are appropriately mitigated. 	<p>daytime hours to avoid noise impacts to wildlife during the evening and night.</p> <p>Work hours would be carried out in accordance with the conditions of consent, and noise/light impacts minimised where adjacent to important habitat areas.</p>	
PO6	Bushfire risk is minimised	Ensure appropriate fire management regimes and hazard reduction techniques for native vegetation areas, waterways, and riparian zones.	Appropriately managed APZs will be in place to minimise the risk of bushfire (ELA 2024c).
PO7	Retain and protect koala populations and their habitats through mitigating indirect and ongoing impacts from development.	<p>For all certified-urban capable land adjacent to koala habitat, the following controls apply:</p> <ul style="list-style-type: none"> ● Design subdivision layout, including perimeter roads and asset protection zones to reduce impacts to, and protect areas of, adjacent koala habitat. ● Signpost areas adjoining koala habitat to identify koalas in the area and associated penalties for non-compliance. ● Exclude planting tree species in open space, recreation areas and urban streets that are koala feed tree species set out below by Schedule 2 – Central and Southern Tablelands and Central Coast Koala Use Tree Species of the <i>State Environmental Planning Policy (Koala Habitat Protection) 2021</i>. ● An ecologist shall be present through the duration of any pre-clearance koala surveys and vegetation clearing works to maintain oversight and responsibility of the activities and koala translocation. ● Where a koala exclusion fence is not installed between koala habitat and certified-urban capable land, the following development controls apply: ● Prepare a pre-clearance koala survey immediately prior to the removal of native vegetation to ensure minimal disturbance to koala habitat. Implement a translocation plan if koalas are found. Translocation may require a licence from NSW Environment, Energy and Science (EES) under the Translocation Operational Policy. ● Implement a tree-felling protocol to avoid impacts to koalas in trees to be cleared. ● Enforce vehicle wash-down points for machinery, equipment and tyres prior to entering and leaving the construction site to control the spread of vegetation pathogens known to affect koala feed trees. <p>Pre-construction Temporary Fencing</p> <ul style="list-style-type: none"> ● Erect temporary protective fencing designed for koala protection to protect adjacent koala habitat on or immediately adjoining the site prior to construction to ensure koala protection. <p>Dog Containment Fencing</p> <ul style="list-style-type: none"> ● Design and construct public dog recreation areas with secure containment fencing. 	<p>Koala have not been recorded on the site or within proximity to it. The study area is not within a koala management area under Chapter 3 or 4 of the Biodiversity and Conservation SEPP. Therefore, the study area is not adjacent to koala habitat.</p> <p>Regardless, considering the ENZ zoning and native vegetation within the study area, mitigation measures to avoid indirect and ongoing impacts to habitat outside the impact area have been provided in Section 5. A pre-clearance survey will be undertaken to identify and relocate any fauna, including unlikely koala individuals.</p> <p>Traffic calming measures are not thought to be required given the proposed distance of roads from areas of fauna habitat.</p>

Performance Outcome	Benchmark Solution	Response	
	<ul style="list-style-type: none"> Design residential lots with dog containment fencing in accordance with Council requirements. <p>Development Operation</p> <ul style="list-style-type: none"> Manage roadside vegetation to increase the visibility of koalas. <p>Vehicle Strike</p> <ul style="list-style-type: none"> Implement traffic calming measures for all development Implement 40km/hr speed limit restrictions on local roads adjacent to koala habitat. Install koala information signposts on perimeter roads and roads adjacent to wildlife habitat areas in accordance with Austroads, Roads and Maritime Services (RMS) technical guidelines, Council Guidelines and relevant Australian Standards. Install traffic calming devices such as speed humps and audible surfacing along perimeter roads adjacent to koala habitat. Install koala-friendly road design structures, such as underpasses, fauna bridges and overpasses as required. Reference to the RMS Biodiversity Guidelines is to be made. 		
Chapter 2.4.3 – Protection of Trees and Vegetation			
PO1	Existing trees and vegetation are retained, protected, enhanced, and incorporated into the development, wherever possible.	<p>Development is designed to minimise impacts on trees, except for invasive species and/or noxious weeds.</p> <p>Development is designed to minimise removal of trees (includes vehicular access, utility installations and ancillary development).</p>	<p>The development has been located in an area of limited canopy cover.</p> <p>The development is proposed in an area of largely exotic grassland. No hollow-bearing trees are within the site.</p> <p>The majority of native vegetation to be removed is considered planted (1.362 ha). A further 1.025 ha of vegetation conforms to derived native grassland and does not contain a canopy. A total of 0.408 ha of remnant native vegetation with a canopy will be removed as a result of the proposed development.</p> <p>Canopy cover will be reinstated through landscaping and street tree plantings as part of the proposed development. In addition, the site is entirely certified-urban capable under the CPCP and biodiversity certified. Due to the large format of buildings and the need for bulk earthworks to create suitable levels, retention of trees within the development footprint was not practical and clearing is consistent with the certification of the land for urban development.</p>

Performance Outcome		Benchmark Solution	Response
PO2	Minimise threats to the long-term survival of existing trees through tree preservation zones and pruning techniques.	<p>Works and construction activities are excluded within the Tree Protection Zone (TPZ) of trees unless a qualified arborist has assessed the tree and provided guidelines as to how the work can be carried out with minimal risk to the long-term survival of the tree and this has been included in an approved Tree Protection Plan (Drawing and Specification)</p> <p>Any pruning or tree removal works that may impact threatened ecological communities are to adhere to the following best practice guidelines:</p> <ul style="list-style-type: none"> • <i>Best Practice Guidelines: Cooks River/Castlereagh Ironbark Forest</i> (Department of Environment and Climate Change NSW, 2008) within and adjacent to the threatened ecological community; and • <i>Recovering Bushland on the Cumberland Plain: Best Practice Guidelines for the Management and Restoration of Bushland</i> (Department of Environment and Climate Change NSW, 2005). <p>Development is designed to avoid impacts on trees, except for priority weeds in accordance with the Council's weed policy.</p> <p>Existing trees have appropriate soil volumes and setbacks from buildings, footpath, road/kerb and gutter and services to provide sufficient space for root and canopy development to ensure the tree reaches its identified mature height and spread.</p>	All vegetation clearing for the proposed development will occur on biodiversity certified-urban capable land in accordance with the recommended mitigation measures. Where possible, trees will be pruned instead of removed.
PO3	Where hollow-bearing tree cannot be retained and are removed, they shall be replaced with nesting boxes, as close as possible to where the removed tree was located.	<p>The removal of the hollow bearing trees shall be offset by the installation of nesting boxes. The size of the nest box is to reflect the size and dimensions of the hollow removed. Alternatively, the tree hollow could be appropriately mounted on one of the retained trees in a manner where it will not pose a risk to life or property.</p> <p>All nesting boxes and hollows shall be mounted at least 5m above the ground.</p> <p>Requirement for 60% of nest boxes (replacement habitat) to be in place prior to clearing of hollow-bearing trees.</p>	No hollow-bearing trees have previously been identified within the impact area during field survey. Suitable pre-clearing procedures will be undertaken to identify any other habitat features and ensure fauna are not harmed in the removal of vegetation on site.

5. Mitigating and Managing Impacts

Measures proposed to mitigate and manage impacts to the environment and MNES within the impact area before, during and after construction are provided below in Table 9.

Table 9: Recommended mitigation measures

Impact	Mitigation Measure	Timing	Responsibility
Direct Impacts			
Removal of native vegetation, loss of habitat (including hollows)	<ul style="list-style-type: none"> Pre-clearance survey of trees to be removed and identification/location of active nests by a suitably qualified ecologist. Native animals are to be relocated from development sites in accordance with the former Office of Environment and Heritage's <i>Policy on the Translocation of Threatened Fauna in NSW</i>. 	B	PM ECO
Breeding disruptions to native fauna	<ul style="list-style-type: none"> Programming of works to avoid critical life cycle events such as breeding or nursing Impacts to vegetation during the Spring/Summer breeding period should be minimised to avoid disrupting the breeding cycles of threatened species (i.e., microbat species threatened under the BC Act). 	B, D	PM, in consultation with ECO
Habitat connectivity	<ul style="list-style-type: none"> Road design is to be in accordance with the Cumberland Plain Land Snail <i>Saving Our Species</i> strategy, which includes: Road design with open structures to facilitate movement of the Snail across the landscape. Use of bridges rather than culverts and minimising channelisation of waterways allows migration to occur. 	B	PM, in consultation with ECO
Dam dewatering	<ul style="list-style-type: none"> The dewatering schedule should allow time for fish rescue, especially during the final 0.3 - 1 m water depth (to be advised by an Aquatic Ecologist). Fauna should be captured in one day, so pumps need to be of an adequate size and placed in an area free from mud and debris (e.g., inside excavator bucket or screened sump pit). If wetland birds are observed nesting, or young birds (chicks) are using the dam, advise the Aquatic Ecologist immediately for advice. Depending on species and age, birds may be able to relocate themselves. Chicks will need temporary refuge during dewatering, or works may need to be postponed. Fish are to be collected by hand nets during the final day of dewatering. Native fish healthy enough for relocation are to be contained and transported in an aerated tub/bucket/tank to an appropriate dam/lake/waterhole/creek, such as Cosgroves Creek. Exotic fish (e.g., Carp, Gambusia, Goldfish, Redfin Perch, Spotted Livebearer) are to be intercepted, euthanised and disposed of in accordance with the ecologist's Animal Research Authority (issued by the Secretary's Animal Care & Ethic Committee). Exotic <i>Trachemys scripta elegans</i> (<i>Red-eared Slider Turtle</i>) are to be contained humanely and DPI immediately notified 	B	PM, in consultation with ECO

Impact	Mitigation Measure	Timing	Responsibility
	<p>(Biosecurity Line - 1800 680 244). They will collect the live turtle from the ecologist.</p> <ul style="list-style-type: none"> The Aquatic Ecologist should prepare a summary report suitable for submission to NSW Fisheries within 7 days of completing the aquatic fauna relocation works. 		
Indirect impacts to adjacent vegetation, edge effects, inadvertent damage, soil disturbance	<ul style="list-style-type: none"> Boundaries of the impact area to be clearly delineated with heavy duty fencing, retained areas marked with "No Go" signage, in particular surrounding the riparian corridor located along the western boundary of the development site. Temporary fencing and signage to be installed at the edge of the development site to prevent entry into the adjacent retained vegetation (i.e. riparian corridor). 	B, D	PM, in consultation with ECO
Sedimentation, erosion	<ul style="list-style-type: none"> Install permanent sediment barriers and erosion controls during and post construction to prevent runoff into vegetation outside of the impact area, including the second order watercourse. Maintain controls throughout construction and undertake regular inspections (weekly). Inspect controls following heavy rainfall. Removal of native vegetation by chain-saw, rather than heavy machinery, is preferable where partial clearing is proposed to avoid impacts outside of the defined impact area. 	L	PM, C
Noise impacts to fauna	<ul style="list-style-type: none"> Daily timing of construction activities is recommended in accordance with the standard daytime hours. 		PM, C
Light and dust disturbance to native fauna	<ul style="list-style-type: none"> Conduct works during standard daylight hours Dust management controls to be implemented during construction and operations. If water is being used to manage dust, ensure contaminated water is managed appropriately on and off site in accordance with a water management plan or similar. 	D	PM
Spread of priority weeds or WoNS	<ul style="list-style-type: none"> <i>Phytophthora</i> control measures must be undertaken from the commencement of the project to minimise the risk of spread and to the site. The following guidelines should be followed: <ul style="list-style-type: none"> https://www.rbg Syd.nsw.gov.au/science/plants/pets-diseases/phytophthora-dieback/disinfection-procedures http://www.environment.gov.au/biodiversity/invasive-species/publications/management-phytophthora-cinnamomi-biodiversity-conservation Vehicles, machinery and building refuse should remain only within the development site and disposed of at an appropriate waste management facility in accordance with the EPA (2014) <i>Waste Classification Guidelines</i>. Vehicles to be washed down before entering and exiting the site to prevent the spread of weeds to or from the development site and adjacent vegetation. In particular, machinery work on or nearby dams are required to be washed down in order to prevent the spread of chytrid fungus into or from the development site. 	B, D	PM, C

Impact	Mitigation Measure	Timing	Responsibility
	<ul style="list-style-type: none"> If water trucks are being used for dust control, implement procedures to manage <i>Phytophthora</i> such as daily cleaning of the water truck and equipment. 		
Understanding of environmental features and values	<ul style="list-style-type: none"> All staff working on the project will undertake an environmental induction as part of their site familiarisation. Site briefings should be updated based on phase of the work. This induction will include items such as: <ul style="list-style-type: none"> Site environmental procedures (vegetation management, sediment and erosion control, exclusion fencing) Threatened species habitat, TECs, riparian corridor What to do in case of environmental emergency (chemical spills, fire, injured fauna) Key contacts in case of environmental emergency What to do in the case of finding a threatened species What to do in the case of finding fauna on the site 	B, D	PM, ALL
Indirect Impacts			
Reduced viability of adjacent habitat due to edge effects	<ul style="list-style-type: none"> Boundaries of the impact area to be clearly delineated with heavy duty fencing, retained areas marked with “No Go” signage, in particular surrounding the riparian corridor located along the western boundary of the development site. Temporary fencing and signage to be installed at the edge of the development site to prevent entry into the adjacent retained vegetation 	L	PM
Reduced viability of adjacent habitat due to noise, dust or light spill	<ul style="list-style-type: none"> No impacts expected during construction if works are carried out during daytime hours. Lighting installed during construction, to be used for the operation phase of the project, is to conform to <i>Australian Standard AS 4282</i> to minimise light spill. Lighting should be of suitable kind that does not attract insects, to deter microbats from the site. 	D, P	PM, C
Transport of weeds and pathogens from the site to adjacent vegetation	<ul style="list-style-type: none"> As above (‘Spread of priority weeds or WoNS’) 	L	PM, ALL
Fauna - Increased risk of starvation or exposure, and loss of shade or shelter	<ul style="list-style-type: none"> Boundaries of the impact area to be clearly delineated with heavy duty fencing, retained areas marked with “No Go” signage Vegetation is to be reinstated post-works including landscaping and street trees. 	D, P	PM, C
Trampling of threatened flora species	<ul style="list-style-type: none"> No threatened flora species were identified within the impact or study area. 	N/A	N/A
Rubbish dumping	<ul style="list-style-type: none"> All general contractor waste is to be disposed of using provided waste bins. 	L	ALL

TIMING KEY: B = BEFORE CONSTRUCTION, D = DURING CONSTRUCTION, P = POST-CONSTRUCTION, L = THROUGHOUT LIFE OF PROJECT
RESPONSIBILITY KEY: PM = PROJECT MANAGER, C = CONTRACTOR, ALL = ALL STAFF, ECO = PROJECT ECOLOGIST

6. Conclusion

This report has been prepared by ELA for DHL Supply Chain (Australia) Pty Ltd for the proposed development of the DHL Logistics Facility, at Burrah Park - 1953-2109 Elizabeth Drive, Badgerys Creek. The proposed development is to be assessed as two separate State Significant Developments (SSDs) per Figure 2:

- SSD-7081878 (Stage 1, southern half of DHL masterplan site)
- SSD-70817958 (Stage 2, northern half of DHL masterplan site)

The site is located within the Northern Gateway Precinct of the Western Sydney Aerotropolis. The proposed development is wholly located on certified-urban capable land under the Cumberland Plain Conservation Plan (CPCP), as such no further assessment under the BC Act or EPBC Act is required. This report describes the biodiversity certification of the proposed development, and consistency with the Western Sydney Aerotropolis Precinct Plan, Phase 2 DCP and the Biodiversity and Conservation SEPP.

Mitigation measures relating to direct, indirect and prescribed impacts are provided within this report to reduce and address any residual impacts from the development.

7. References

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