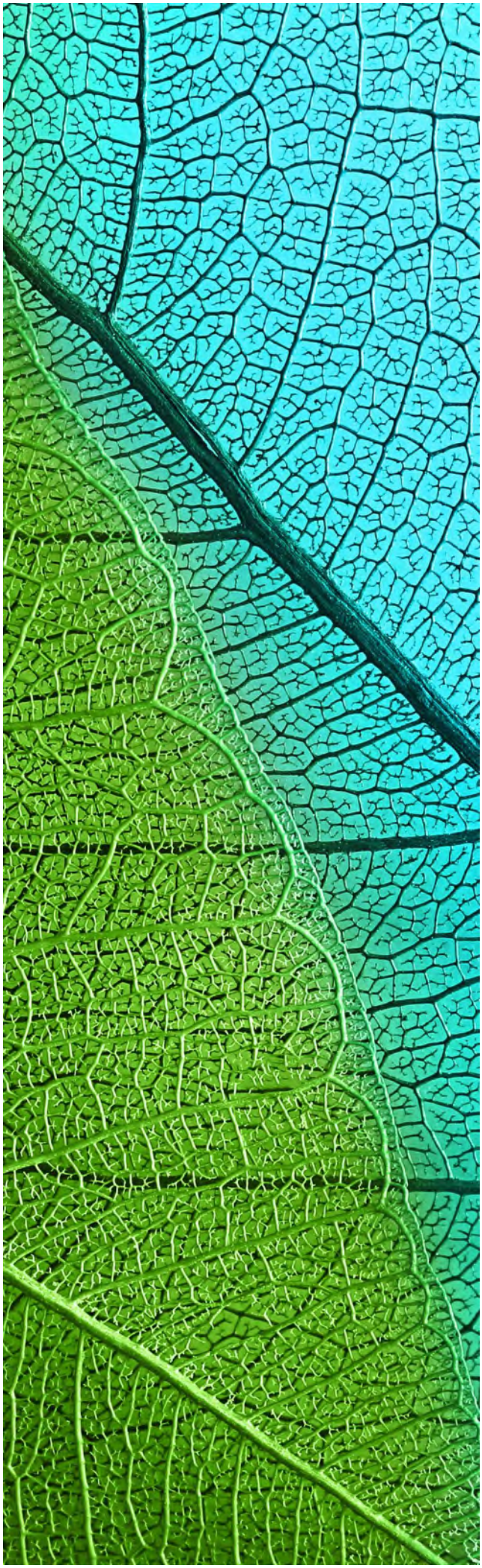


45 Donnybrook Road, Mickleham

EPBC Act Preliminary Documentation (EPBC 2023/09568)

Prepared for Aurecon Australasia Pty Ltd

October 2026

Report No. 19057.06 (1.15)

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1. Introduction

The original referred action (EPBC 2023/09568) was for the development of the Fusion Business Park at 45 Donnybrook Road, Mickleham, comprising either a commercial subdivision or a large purpose-built industrial/commercial use. On 26 October 2023, the action was determined to be a Controlled Action requiring assessment by Preliminary Documentation due to potential impacts on listed threatened species and ecological communities. During the subsequent preparation of assessment documentation, including ecological investigations, offset planning and conservation management measures, the ownership of the site changed to AirTrunk MEL3 Pty Ltd as trustee for AirTrunk MEL3 Land Trust, known as KNBDC MEL3 Pty Ltd (herein referred to as the 'Proponent'). The Proponent is seeking to develop the site as a data centre rather than a business park.

The proposed data centre remains consistent with the broad industrial and commercial development outcome contemplated by the original referral. However, the revised proposal incorporates a different arrangement of buildings, internal roads, utility infrastructure and associated services required to support data centre operations. The proposed layout has been designed to align with the Fusion Business Park as much as practical, maintaining the Conservation Reserve and stormwater treatment infrastructure. The overall environmental impacts associated with the proposed data centre are generally consistent with those provided under the previous proposal.

To reflect the revised development outcome, the Proponent submitted a request under section 156A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) to vary the proposal from the Fusion Business Park to a single-use data centre development. The variation request demonstrated that the revised proposal would result in comparable impacts to Matters of National Environmental Significance, with no new or increased impacts to Matters of National Environmental Significance beyond those already identified through the assessment process. Existing avoidance, mitigation, management and offset measures developed for the original proposal remain applicable and have been adapted where necessary to the revised design.

On 31 August 2026, the National Environmental Protection Agency, as delegate of the Minister for the Environment and Water, accepted the variation request under section 156B of the EPBC Act. The assessment therefore continues on the basis of the varied proposal, being the development and operation of a data centre at 45 Donnybrook Road, Mickleham.

The revised action will involve the development of a data centre, comprising a series of seven data centre buildings and associated infrastructure, including internal road networks, carparks, HV Substations, a switchyard and electrical and water services.

The study area is at 45 Donnybrook Road, Mickleham close to the Hume Freeway, on the northern outskirts of Melbourne (Figure 1). The study area is within the City of Hume, approximately 10km from Craigieburn, 15km from Whittlesea and 31km from central Melbourne.

The Controlled Action decision determined that the action is likely to have a significant impact on:

- Listed Threatened Species and Communities (Section 18 and 18A).

This document is the **Preliminary Documentation** prepared for the proposed action. The listed matters assessed in this include:

- Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) – Critically Endangered;
- Seasonal Herbaceous Wetlands (Freshwater) of The Temperate Lowland Plains (SHWTLP) – Critically Endangered
- Matted Flax-lily (*Dianella amoena*) - Endangered;

- River Swamp Wallaby-grass (*Amphibromus fluitans*) - Vulnerable;
- Striped Legless Lizard (*Delma impar*) - Vulnerable; and
- Growling Grass Frog (*Litoria raniformis*) - Vulnerable.
- Victorian Grassland Earless Dragon (*Tympanocryptis pinguicolla*) – Critically Endangered

The Department of Energy, Environment, Climate Change and Water (DEECCW) issued a Request for Further Information on 15th November 2023 to be included in the Preliminary Documentation, which includes the following:

1. A description of the action;

2. Habitat assessments;

3 Relevant impacts assessment;

4. Details on avoidance, mitigation and management measures;

5. Environmental Offset considerations including an Offset Area Management Plan (OMP);

6. A description of how the development meets the principles of ecologically sustainable development;

7. Analysis of Economic and Social Impacts

8. Details of the Environmental Record of the person proposing to take the action;

9. A Conclusion of the environmental acceptability of the proposed development.

10. A statement on the information sources consulted for the preparation of the document;

This request has been used as a guide to the structure of this Preliminary Documentation and the above numbers refer to section numbers in this document.

1. Description of the Action

This section provides information on the proposed action.

1.1. Proposed action

1.1.1. Planning

It is proposed to develop the study area for a data centre, consistent with its designation for future 'employment' and 'urban' uses under approved regional and local strategic plans. The study area is currently identified for future industrial development, in accordance with the Melbourne Industrial and Commercial Land Use Plan. The study area has been classified as 'State Significant Industrial Land – Future', indicating it is included within one of the state-significant industrial precincts. These precincts have been strategically located close to Principal Freight Networks and other transport gateways. These areas are crucial to facilitate growth in freight, logistics and manufacturing. The study area is zoned INZ1.

The southern extent of the study area has an existing Section 173 on title agreement for the provision of a proposed connection road from Polaris Road to the Hume Freeway. No development is permissible within this extent to facilitate future road planning.

1.1.2. Locational Context

The study area for the data centre is 67.1 ha encompassing the entirety of the 45 Donnybrook Road parcel, plus part of Polaris Road reserve and a section of the AusNet property to the south (Figure 1). The Development Layout (Figure 2) encompasses 57.905 ha of the study area. The development also includes a Conservation Reserve in the south (4.89 ha) and a tree reserve (4.29 ha), both of which aim to retain and protect biodiversity and amenity values (Figure 3).

The study area is bordered by Polaris Road to the west and Donnybrook Road to the north. Access to the site is from Polaris Road, which is a publicly accessible road on Commonwealth Land, with access restricted from the north via Donnybrook Road. In consultation with the Commonwealth, Polaris Road is to be re-aligned within the study area and become a council road. An access road is to be provided by the current project for access from the re-aligned Polaris Road to the Commonwealth facilities that are present on the west side of Polaris Road.

The proposed development is to be constructed over several phases. The first phase involves site establishment, site levelling and construction of all hardstand areas, including roads, car parks, drainage and installation of other services. A temporary bio-detention basin will be constructed and commissioned until the final wetland is constructed at a later phase. Following phases will involve the construction and commissioning of Data Centre buildings on hard surfaces constructed during the first phase.

Electricity supply works will be undertaken by AusNet during the first phase of construction; this includes installation of infrastructure within the Switchyard and Statcom (the Data Centre is to provide hardstand pads for these facilities), plus connection of supply to the proposed substation, proposed on AusNet land to the south of the study area. The substation is being designed by AusNet. The agreed connection between the AusNet substation and the Switchyard will extend approximately 300 m to the south of the 45 Donnybrook Road property boundary.

Hume City Council, who are responsible for administering the Planning Scheme for this area, have authorised the rezone and written to the Minister for Planning to authorise and gazette it. Environmental, engineering and traffic assessments have also been undertaken in relation to the study area to inform the access and servicing strategy.

1.2. Description of all components and indicative layout and timeline

The development will comprise a series of seven data centre buildings and associated infrastructure, including internal road networks, new alignment of Polaris Road, provision of road access to Commonwealth facilities on the west side of Polaris Road, carparks, HV Substations, a switchyard and electrical and water services (Figure 2).

The development area will include the creation of a stormwater treatment wetland incorporating modern, environmentally sensitive design and management measures in accordance with Water Sensitive Urban Design (WSUD) principles, built in accordance with Melbourne Water's Donnybrook Drainage Scheme on the eastern boundary of the study area (Figure 2). The wetland will comprise approximately 8.5 hectares of drainage infrastructure and various vegetated swales for the treatment and conveyance of stormwater from the study area and the wider regional catchment to the west.

Construction activities will be undertaken over several stages. Stage 1 includes the majority of construction activities, including pre-construction and early works, plus bulk earthworks, and establishment of building foundations, roads and services. Stage 2 will involve the construction of the seven data centre buildings and additional stormwater detention wetland works and ongoing management of the Conservation Reserve and Tree Reserve. The construction and commissioning of the seven data centre buildings will occur progressively over a 10-year period.

Stage 1 includes site establishment works and main construction activities (as outlined in Table 1, Appendix 2):

Pre-construction:

- Site establishment, including establishment of site office, amenities, car parking and any service and utility relocation
- Establishing site environmental controls
- Clearing and grubbing of the site including the stripping and stockpiling of topsoil

Main construction activities:

- Establishment of construction access roads
- Stockpiling of materials and establishment of equipment laydown areas
- Switchyard construction adjacent to the conservation area
- Underboring activities to connect utilities underneath the Conservation Reserve. This will involve the use of horizontal directional drilling (HDD).
- Construction of the building foundations.
- Road construction and landscaping works adjacent to the conservation area
- Construction of stormwater wetland, including drainage infrastructure and vegetated swales
- Construction of permanent fencing around the Conservation Reserve.

Stage 2 is primarily the construction of data centre buildings and structures, plus the final works on the proposed wetland along the eastern boundary. The installation of the buildings and structures will not require additional ground disturbance or further impacts to MNES as the works will occur on areas constructed during Stage 1. Stage 2 works will include the following:

- Ongoing management of Conservation and Tree Reserve (responsibility transferred to Council)
- Construction of seven data centre buildings.
  - These will be staged, with buildings constructed and then commissioned, prior to commencing work on the next building. This will occur progressively over a 10-year period.
- Final wetland works, including revegetation and potential physical works within the drainage reserve."

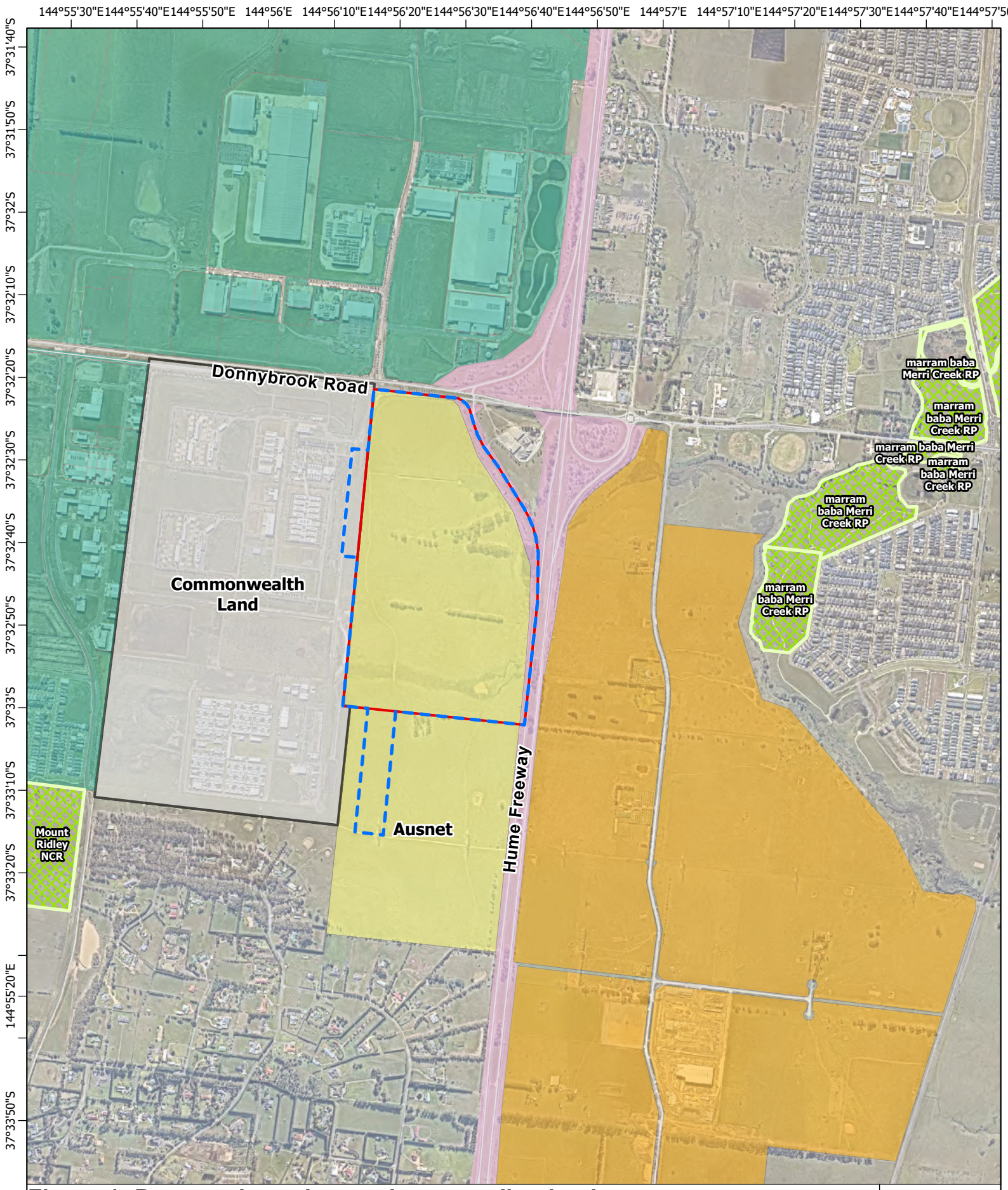


Figure 1: Property boundary and surrounding land

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 09/10/2026

- Fusion Business Park Referral Area (old)
- Study Area (Data Centre)
- Conservation reserve
- Hume Highway
- Merrifield land
- Commonwealth land

State Significant Industrial Precinct

- Existing
- Future

Sources: Vicmap 2026

N

37°34'S

Metres

0 250 500

GDA 1994 MGA Zone 55

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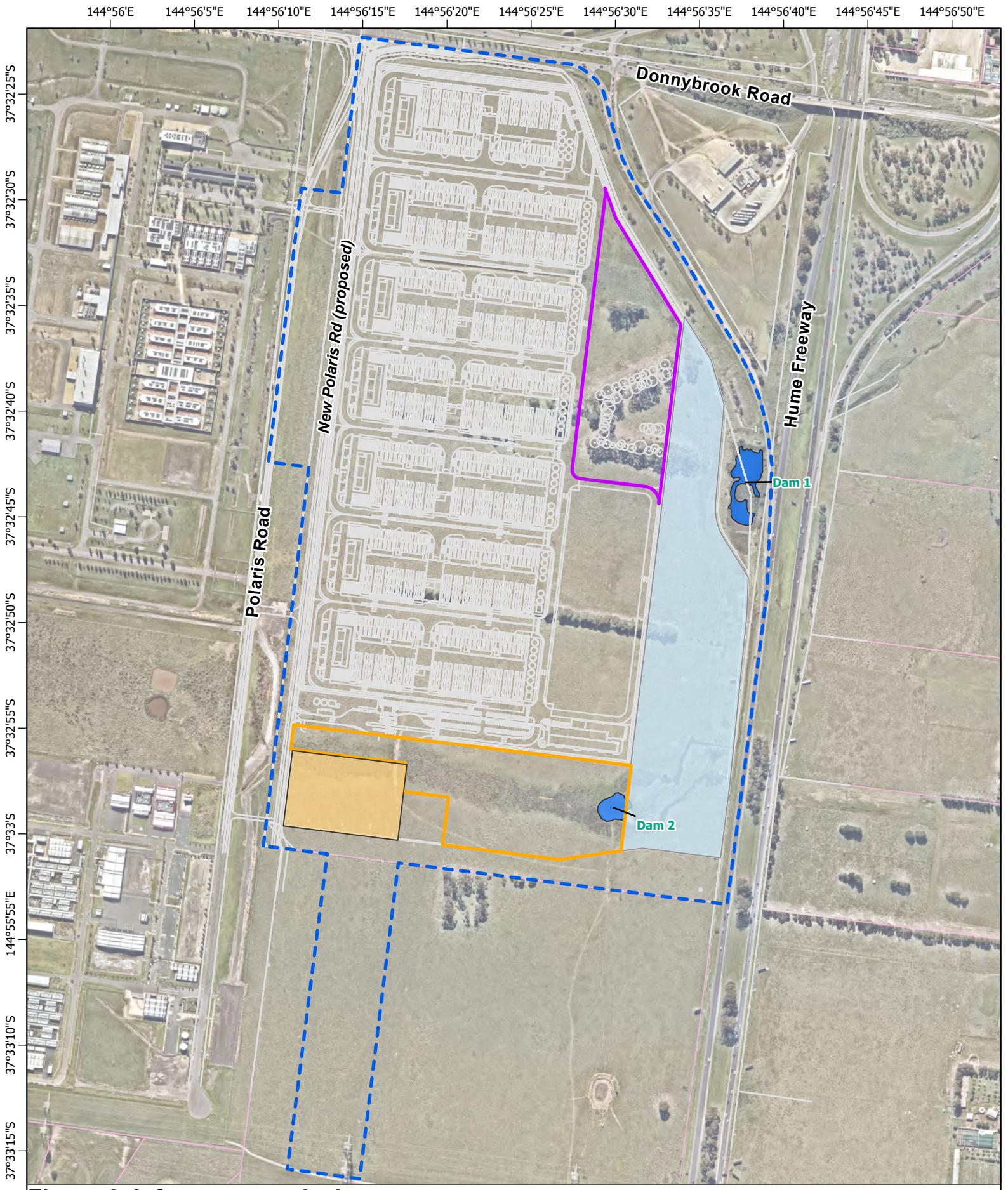


Figure 2. Infrastructure design

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 21/10/2026

- Study Area (Data Centre)
- Property Boundary
- Development Layout
- Drainage reserve
- Switchyard pad

Reserve Areas

- Conservation Reserve
- Tree Reserve
- Dam

Sources: Vicmap 2026

N

Metres

0 200

GDA2020 Vicgrid

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2. Habitat Assessment and ecological assessment

A range of ecological assessments relevant to the MNES recorded on the study area have been undertaken, summarised below:

- Targeted surveys for Growling Grass Frog 2006 - Biosis 2019
- Targeted surveys for Growling Grass Frog - ERM 2010 and 2012
- Ecological Assessment - ERM 2010 and 2012
- Flora and Fauna Assessment 2012- Biosis 2019
- Targeted surveys for Matted Flax-lily 2014 – Biosis 2019
- Targeted surveys for Striped Legless Lizard 2014 - Biosis 2019
- Final ecological assessments 2019– Biosis 2019
- Targeted surveys for Growling Grass Frog - Nature Advisory 2019
- Native Vegetation Assessment and determination of listed ecological communities - Nature Advisory 2019, 2023 and 2024
- Targeted Surveys for Matted Flax-lily - Biosis 2019
- Targeted Survey for River Swamp Wallaby Grass - Biosis 2019
- Native vegetation and threatened flora community assessments – Nature Advisory 2024
- Updated targeted surveys for Matted Flax-lily and River Swamp Wallaby Grass – Nature Advisory 2026
- Targeted surveys for Victorian Grassland Earless Dragon – Aurecon 2026b

Nature Advisory has conducted surveys of the study area since 2019.

Based on these desktop and field assessments, several Matters of National Environmental Significance (MNES) have been identified as having the potential to occur in areas affected by the proposed action. They include flora species Matted Flax-lily (confirmed) and River Swamp Wallaby-grass (not recorded in the 2026 surveys), fauna species Striped Legless Lizard (not detected) and Growling Grass Frog (no recent records – since 2005) and the threatened communities *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP) and *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP) (currently present). All MNES shown in Figure 3.

The 2024 native vegetation assessment by Nature Advisory was completed after the EPBC Act Referral was lodged, following adjacent upstream development in the west of the study area. The survey remapped the extent of native vegetation on the study area (Figure 4). During this survey significant changes were observed in the quality and extent of native vegetation, including the EPBC listed community NTGVVP. Sewer works by the water authority also removed vegetation and potential River Swamp Wallaby Grass habitat from the eastern part of the study area. State offsets were secured for sewer works.

An additional MNES was also identified within the study area during the 2024 survey: Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains SHWTLP. This community overlaps with the mapped extent of NTGVVP in one patch (Figure 3), amounting to a total area of 1.702 hectares. There was also a reduction in the NTGVVP within the study area from 5.026 hectares to 2.568 hectares in 2024. This is a 49% decline in the threatened ecological community. This decline has resulted from a change in the ground cover species composition of the patch of vegetation in the southern part of the study area closest to its western boundary. Since the previous field assessment, the Commonwealth

Government Quarantine Facility and Polaris Rd have been constructed. These developments have altered the drainage into the western side of the study area. This change in drainage likely led to changes in soil moisture that has altered vegetation, leading to the change in the extent of NTGVVP, as well as the emergence of SHWTLP (Figure 5 and Figure 6).

All areas of listed communities provided in this report were calculated using the following projection: GDA94 Zone 55, WKID=28355.

2.1. Species and communities general information

2.1.1. Habitat assessment for listed threatened species and communities

The study area supported fertile basaltic clay-loam soils on a relatively flat landscape, with gentle sloping towards lower lying areas to the south.

This vegetation is subject to significant impacts from current agricultural activity, including stock grazing and invasion by pasture grasses and weeds. The rest of the proposed development site has been altered significantly through cultivation, pasture improvement and stock grazing. Surrounding land has similarly been used for an array of agricultural practices as well as the establishment of new industrial developments.

Vegetation within the study area was heavily modified and contained a mosaic of non-native and low-quality native vegetation dominated by Rush *Juncus spp.* and Wallaby Grasses *Rytidosperma spp.* Patches of higher quality native vegetation were generally found to meet listing criteria and condition thresholds for the EPBC Act-listed community *Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP)* and *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP). These areas generally supported herbaceous species such as Chocolate Lily *Arthropodium strictum*, Sheep's Burr *Acaena echinata*, and Poison Lobelia *Lobelia pratioides* as well as a suite of native graminoids, specifically FFG and EPBC Act-listed species Matted Flax-lily.

Remnant River Red-gum *Eucalyptus camaldulensis* were present within the west of the study area as well as rows of planted non-indigenous and non-native species. Weed invasion was particularly high throughout and was dominated by exotic pasture grasses such as Cocksfoot *Dactylis glomerata*, Toowoomba Canary-grass *Phalaris aquatica*, Serrated Tussock *Nasella trichotoma* and Chilean Needle-grass *Nassella neesiana*. Artichoke Thistle *Cynara cardunculus subsp. flavescens* was also observed as having particularly high cover throughout much of the study area.

Fauna habitat within the study area comprised aquatic, grassland, and wooded habitat. Habitat is relatively isolated and fragmented, particularly the patch of Plains Grassy Woodland and aquatic habitat. Historical records of listed threatened species and ecological communities

Searches on the Victorian Biodiversity Atlas (VBA) (DEECA 2023) public database were conducted for threatened species and ecological community records within a 10-km radius of 45 Donnybrook Road, Mickleham.

Known historical records for the threatened species considered by DCCEEW to be at risk of significant impacts from the proposed action (Matted Flax-lily, River Swamp Wallaby Grass, Striped Legless Lizard and Growling Grass Frog) are provided in Appendix 1. Historical records for Victorian Grassland Earless Dragon are not included, as records are few and their locations are well known. Historical records of threatened ecological communities are not available.

2.1.2. Targeted surveys and MNES Community mapping

Surveys for MNES conducted within the study area are provided in Table 1.



Figure 3. Study area and existing MNES

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 21/10/2026

- Study Area (Data Centre)
- Property Boundary
- Dam

EPBC community (2024)

- NTGVVP
- NTGVVP and SHWTLP

Threatened Flora Species

- Matted Flax-lily (Nature Advisory 2019)
- Matted Flax-lily (Nature Advisory 2024)
- Matted Flax-lily (Nature Advisory 2025)

- Matted Flax-lily potential Habitat 5.84 ha

Sources: Vicmap 2026

N

Metres

0 200

GDA2020 Vicgrid

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Table 1: Summary of surveys for relevant MNES.

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
MFL	ERM, Biosis targeted surveys (2010 and 2014) Nature Advisory (incidental 2019 and 2024, targeted survey in 2025).	ERM (2010) Biosis (2019) Nature Advisory (2026)	Nine individuals recorded in the study area (Biosis 2019). Five additional individuals incidentally recorded by Nature Advisory in 2019, with a further two additional incidental records in 2024. Recent targeted survey (2025) identified 3 individuals. This survey reflects the number of individuals currently known to be present.	<u>ERM (2010) targeted flora surveys (multiple species including MFL)</u> Undertaken by two ecologists from 3 November to 5 November 2010 for a total of 15 person hours. The study area was surveyed as straight line transects by two surveyors walking approximately 20 m apart. <u>Biosis (2014) surveys:</u> Biosis surveys stated to be consistent with guidelines (DCCEEW 2023a, Biosis 2019); however, survey methodology has not been provided. <u>Nature Advisory 2025 targeted survey:</u> • Surveys were conducted by a team of botanists on 23 October 2025. This coincides with flowering period for the species. • Areas of native vegetation were mapped in the previous F&F assessment in 2025 and were analysed to assess areas where survey effort should be focused. • Parallel transects spaced 5 m apart were traversed while visually inspecting the surrounding area. This was considered an adequate way to detect the target species based on species detectability during their flowering period and biomass levels observed onsite (which were particularly low for grassland areas).	Survey effort considered adequate for ERM 2010 and Nature Advisory 2025 surveys.
RSWG	ERM, Biosis targeted		~100 individuals estimated within the study area, with roughly 75 estimated	<u>ERM (2010) targeted flora surveys (multiple species including RSWG)</u>	

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
	surveys (2010 and 2014) Nature Advisory (Incidental 2023 and 2024, targeted survey in 2026)	ERM (2010) Biosis (2019) Nature Advisory (2026)	around the northern dam and 25 in the southern portion of the study area. The estimate was based on the small numbers found – one on the northern dam and 11 elsewhere (Biosis 2019). It is noteworthy that the Biosis assessment of habitat for this species around the dam was based on evidence of one identified plant seed head in this area, with the identity of other material around the dam not able to be confirmed. However, the estimation method was otherwise not described by Biosis. Works by the water authority in the east of the study area may have impacted habitat around Dam 1. In 2023 and 2024, Nature Advisory revisited sites where RSWG were recorded by Biosis and no River Swamp Wallaby Grass were detected. Recent targeted survey (2026) failed to detect any individuals, concluding that the species is now unlikely to occur.	Undertaken by two ecologists from 3 November to 5 November 2010 for a total of 15 person hours. The study area was surveyed as straight line transects by two surveyors walking approximately 20 m apart. <u>Biosis 2014 targeted survey:</u> Not conducted in accordance with the guidelines, as Biosis surveyed during April-August outside recommended timings (November to March) (DCCEEW 2023b). <u>Nature Advisory 2026 targeted survey:</u> • Surveys were conducted by a team of botanists on 3 March 2026 (RSWG). This coincides with the flowering period for the species. • Areas of native vegetation were mapped in the previous F&F assessment in 2025 and were analysed to assess areas where survey effort should be focused. • Parallel transects spaced 5 m apart were traversed while visually inspecting the surrounding area. This was considered an adequate way to detect the target species based on species detectability during their flowering period and biomass levels observed onsite (which were particularly low for grassland areas).	Survey effort considered adequate for ERM 2010 and Nature Advisory 2025 surveys. Advisory surveys.
SLL and VGED	ERM (SLL & VGED) 2012 (Not targeted, active searching	ERM (2012) Biosis (2019) Aurecon (2026)	No individuals detected	<u>ERM SLL & VGED 2012 survey:</u> ERM surveys did not meet survey guidelines for either species, as they only undertook incidental rock rolling. <u>Biosis SLL 2014 targeted survey:</u>	Survey effort considered adequate for Biosis and

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
	through rock rolling) Biosis (SLL) November – December 2014 (targeted survey - pitfall trapping) Aurecon (VGED) 2026 (targeted survey, tiles and spider tubes)			Pitfall trapping only, which is consistent with the survey guidelines (DSEWPcC 2011): • 10 lines of pitfall traps (5x20L buckets connected by a centrally placed drift fence were placed within suitable habitat across the site • Traps were open for 4x5 day trapping sessions on 10-14, 17-21, 24-28 November and 1-5 December 2014 resulting in 200 trap days • Lids were placed on all buckets between trapping sessions • Traps were checked twice per day. Potentially insufficient pitfall effort. The site is >50 ha in size. The survey guidelines specify at least 50 pitfall configurations for such sites. Biosis had 10 – 50 x pitfall traps, but not 50 x pitfall configurations. Possible that survey guidelines could have been met by having 1 x pitfall per configuration and having 50 configurations, whilst not increasing the number of pitfalls and drift fencing compared to what Biosis used. Therefore, survey effort was adequate, but spatial distribution of survey effort may have been too clustered. Survey effort considered reasonable approximation of the guidelines but did not technically fulfil them. Habitat distribution on site considered a reasonable justification for a modified configuration, though no justification was given in the report. No comment as to whether site was rocky but survey area is implied to be rocky based on rock-rolling survey efforts from ERM in 2012. Pitfall trapping is a suboptimal method in rocky environments, where tile surveys are favored. Additionally, pitfall survey	Aurecon surveys

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
				effectiveness is 50% that of tile surveys in spring – an appropriately timed tile survey would have been preferable. Potentially did not fulfil survey guidelines if survey area was rocky, as the survey guidelines mandate the use of tile surveys as the primary technique in this scenario. <u>Aurecon VGED 2026:</u> As noted by DEECA, there are no prescriptive survey methods for VGED (based on the DEECA information update in February 2026). Consequently, the method presented by Aurecon considered the survey techniques provided in current policy documentation for the species, plus consideration of methods for similar species, such as SLL. DEECA is currently developing formal standards to guide the assessment of VGED within Victoria. DEECA was engaged for input on the following survey method, which was supported on the 27 March 2026. Surveys methodology and targeted surveys were conducted in accordance with the survey guidelines (DCCEEW 2024b), with consideration of survey methods for other earless dragon species (Madani et al 2023). This included: • Grids with artificial burrows (spider tubes, set at least 7 days before surveys (26 March 2026) and roof tiles (laid on vegetation at least 2 weeks prior to the start of surveys (4 March 2026). • The number of spider tubes and tiles identified in Madani et al (2023) was increased and established in a grid pattern that is similar with methods for SLL (DSEWPC 2011). • Due to the size of the habitat patches, each Habitat Zone had a minimum of two grids. Habitat Zone 1 was slightly larger than Habitat Zone 2, so an additional grid was included.	

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
				Habitat Zone 1 (2.2 ha) had 3 grids of 20 x tiles and 20x spider tubes, while Habitat Zone 2 (0.7 ha) had 2 grids of 20x tiles and 20x spider tubes. • Grids were arranged in north-south direction, organised into 2 lines of 10 tiles 5m apart with each tile or spider tube spaced 5m. • Checks occurred 3x per week (26 total) • Endoscope inspections of invertebrate burrows and soil cracks were undertaken concurrently with grid checks for 1 hour in the vicinity of each spider tube and tile transect per visit. This methodology aligns with the current survey guidelines for grassland earless dragons (DCCEEW 2024b) where three detection methods should always be applied – artificial arthropod burrows, tiles and endoscopic inspections. The guidelines note that in areas where cracks are abundant, mini pitfall traps should also be installed. However, the two habitat zones contained minimal soil cracks. Therefore, mini pitfall traps weren't considered appropriate. As noted above, DEECA was engaged for input into the survey methodology, which was supported on 27 March 2026.	
GGF	Biosis targeted surveys (2005, 2006) ERM targeted surveys (2002, 2005	ERM (2010; 2012) Biosis (2019) Nature Advisory (2020)	GGF were recorded at Dam 1 only in 2006. No individuals have been detected since the 2006 surveys, Culvert works in 2007 & 2008 on the Hume Fwy may have impacted the GGF on site, as the species was not recorded in subsequent 2010-2015 surveys.	<u>ERM (2002, 2005, 2006, 2010, 2012) surveys:</u> Conducted targeted surveys at Dam 1 in 2010. Insufficient survey effort, as each survey point received 0.5 person-hours of survey effort. The species survey guidelines (DEWHA 2009) specify a requirement of 1 (person-) hour of survey effort per survey point.	Survey effort considered adequate for Nature Advisory surveys

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
	& 2006, 2010 & 2012) Biosis reporting (no targeted surveys – presence assumed) (2012 & 2015) Nature Advisory Habitat assessment (5 December 2019), targeted surveys (9, 16 December 2019)		No GGF were recorded during a Nature Advisory targeted survey in December 2019. Based on the results of this survey, suitable habitat for the species no longer occurs on site, and the species is now considered unlikely to occur.	<u>Biosis (2005, 2006, 2012, 2015) surveys:</u> Biosis does not detail survey effort in available reporting from 2012 and 2015, continually refers to surveys conducted by ERM in 2012, Biosis in 2005 and 2006, and Robertson et al. in 2002. No targeted surveys were completed by Biosis after 2006, with the species assumed present. <u>Nature Advisory (2019):</u> • A habitat assessment was conducted on 5 December 2019 to determine suitable habitat for GGF within the development site where one farm dam was deemed as potentially suitable (Dam 1). • Call playback and visual active search surveys were undertaken by two zoologists at one site over three nights on 5, 9 and 16 December 2019. • 45-minute surveys were conducted during warm evenings with air temperatures of 15◦C or more and moderate to no wind between 21:00 and 22:00. • At the beginning of each survey, 5 minutes was spent at the waters edge listening, while also recording frog species and number of frogs calling. This was immediately followed by 5 minutes of playback of a recorded male GGF advertisement call to encourage any frogs that were present to respond. A further 5 minutes was then spent listening for a response before active searching for 30 minutes (15minutes per person). Call recognition and limited active searching (turning surface debris) was also conducted. Any species heard calling or observed were then recorded.	

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
				The survey guidelines stipulate that wetlands >50 m in length (as present in the study area) need to be searched by "sampling subsets of the whole waterbody in a systematic manner". It is assumed suitable habitat was confined to a single 50-m stretch of the dam, but this has not been stipulated in the report.	
NTGVVP and SHWTLP	Biosis (2019) & Nature Advisory (2024)	Biosis (2019) Nature Advisory (2024)	2019 - One community mapped 2024 - Two communities mapped but in reduced extent	<u>Biosis 2019 survey:</u> VQA mapping of native vegetation by VQA accredited Botanists occurred during the appropriate survey period for grasslands: • Flora assessment was undertaken on 18 and 28 November 2014 and a list of flora species was collected. • A VQA was undertaken for all remnant patch native vegetation identified in the study area using the Habitat Hectare method (DSE 2004) and the Guidelines (DEPI 2013) • Areas of Plains Grassland and Plains Grassy Wetland identified within the study area occur as a patch of native vegetation greater than 0.05 ha, which vegetation satisfies the definition of the MNES NTGVVP (Commonwealth of Australia 2011). <u>Nature Advisory 2024 survey:</u> Native vegetation & threatened flora community assessments were undertaken on 31 January 2024, 28 February 2024 and 12 March 2024. SHWTLP met the following key diagnostic characteristics/condition thresholds for this listed community: • Trees and shrubs were absent and patch size was greater than 0.5 hectares.	Survey effort considered adequate for both Biosis and Nature Advisory surveys

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
				• Vegetation was dominated (more than 50% cover) by native species typical of the SHWLTP community such as Common Tussock-grass, Brown-back Wallaby-grass, Wetland Blown-grass, Milky Beauty-heads and Blue Devil. NTGVVP met the following key diagnostic characteristics/condition thresholds for this listed community: • Trees and shrubs were absent and patch size was greater than 0.5 hectares. • Vegetation was dominated (more than 50% cover) by native species typical of the NTGVVP community such as Wallaby Grass, Spear Grass and Tussock Grass and located on basalt soils. All surveys were conducted in accordance with Nationally Threatened Ecological Communities of the Victorian Volcanic Plain: Natural Temperate Grassland & Grassy Eucalypt Woodland (DCCEEW 2011).	
GSM	ERM targeted survey (2011-12) Biosis targeted survey (2014-15)	ERM (2012) Biosis (2019)	No individuals detected	<u>ERM 2011-12 targeted survey:</u> Survey effort insufficient. This is because they were conducted over the course of three days. The species' survey guidelines require at least four suitable survey-days, and it is recommended they are staggered at least a week apart to maximise the probability of surveys during an adult emergence event (DEWHA 2009). There was also no reference site used to confirm the survey-days were suitable for survey, which is another requirement of the survey guidelines (DEWHA 2009). <u>Biosis 2014-15 targeted survey:</u>	Survey effort considered adequate for Biosis surveys

Target species	Conducted by	Reference	Result	In accordance with guidelines	Adequacy of survey
				• Pre-season checks for male GSM at reference sites around Melbourne from mid-November 2014 to determine flight season for 2014-15. • GSM surveys were undertaken on 16 and 20 December 2014 and 2 and 6 January 2015 spaced 1 week apart to allow for variations in emergence patterns. • Surveys took place during suitable survey conditions for male flight (>20◦C, bright clear days with full sun, absence of rain and wind other than a light breeze) between 1000-1500hrs and weather conditions (temperature, humidity and wind speed) were recorded using a Kestrel Weather Meter. • Four zoologists walked transects 50m apart while recording tracks and waypoints for each location where GSM were observed, taking around 2hrs to complete. • General habitat characteristics of the study area were recorded. Surveys were undertaken in accordance with Significant Impact Guidelines for the Critically Endangered Golden Sun Moth (DEWHA 2009).	

2.1.3. Survey limitations

The targeted surveys referenced in this document have been conducted in accordance with the relevant survey guidelines for each species and cognisant of the extent, cover and condition thresholds in threatened community EPBC Act conservation and listing advice.

2.2. Species and community specific information

Natural Temperate Grassland of the Victorian Plain (NTGVVP) and Seasonal Herbaceous Wetlands of the Temperate Lowland Plains (SHWTLP)

Presence and extent of NTGVVP was determined based on the published descriptions and qualifying criteria of the community (TSSC 2008). A total of 5.026 hectares of NTGVVP which met the qualifying criteria were mapped within the study area during the 2019 Nature Advisory surveys. A reassessment in 2024 by Nature Advisory found a total of 2.568 hectares of NTGVVP (Figure 3). This survey also found that 1.702 hectares of the NTGVVP also qualified as SHWTLP based on the published descriptions and qualifying criteria of the community (TSSC 2012).

Several developments surrounding the project site have been completed or are under construction, which have led to changes in the catchment characteristics. Upstream of the project site, overland flows are intercepted and managed by existing stormwater basins and local depressions associated with the surrounding developments. These features provide local flood storage and attenuate upstream runoff prior to conveyance towards the project site. It is thought that changes to drainage patterns from projects outside of the property boundary in the southwest beyond the control of the landowner have led to an increase in the soil moisture within the lower-lying southern parts of the study area (Figure 5 and Figure 6). These changes have promoted the growth of seasonal wetland plants in part of the study area, resulting in the NTGVVP in this location also qualifying as SHWLTP (Figure 3). These changes may have also led to increased weed cover so that the native vegetation has declined in quality and extent since it was surveyed in 2019. Some areas no longer meet the condition thresholds for the EPBC Act -listed threatened communities.



Figure 4. Native vegetation

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 21/10/2026

- Study Area (Data Centre)
- Property Boundary
- Dam

Native vegetation

- Large Scattered Tree
- Large Tree in Patch
- Small Tree in Patch
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland

N

Metres

0 200

GDA2020 Vicgrid

Sources: Vicmap 2026

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P.O. Box 5076, Alphington, VIC 3078, Australia
www.natureadvisory.com.au
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Figure 5. 2019 Imagery

Project No: 25238_06
Project location: 45 Donnybrook Road, Mickleham, VIC
Date: 21/10/2026

Study Area (Data Centre)
Waterflow
2019 NTGVVP area

Sources: VicMap 2025



N
Meters
0
100
GDA 1994 MGA Zone 55

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Figure 6. 2024 Imagery

Project No: 25238_06
Project location: 45 Donnybrook Road, Mickleham, VIC
Date: 21/10/2026

Study Area (Data Centre)
Waterflow
Culvert

2024 EPBC Act Community

NTGVVP
NTGVVP and SHWTLP

Sources: VicMap 2025



N
Meters
0
100
GDA 1994 MGA Zone 55

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Matted Flax-lily

There were originally nine individuals recorded in the study area in 2014 (Biosis 2019). Subsequently, five additional individuals were incidentally recorded by Nature Advisory in 2019, with a further two additional incidental records in 2024.

Given the complexity in historical survey methodology for Matted Flax-lily (MFL) and uncertainty in the current number and location of MFL individuals on site due to changes in conditions on the study area and time since original surveys, an updated targeted survey was undertaken in December 2025 (Nature Advisory 2026). During this survey, three individuals of MFL were recorded.

Historical records were likely not able to be located due to the individuals being lost over time due to existing and persistent threats on the property such as weed invasion and grazing. Additionally, changes to drainage patterns and additional runoff from outside of the property boundary in the southwest, have led to an increase in the soil moisture within the lower-lying southern parts of the study area, altering the vegetation and making it unsuitable habitat for MFL.

As part of the recent targeted survey, the extent of suitable habitat was mapped (Figure 3). *Species Profile and Threats Database. Dianella amoena – Matted Flax-lily* (DCCEEW 2023a) *was* used to determine the criteria for suitable habitat. A total of 5.84 ha of potential habitat was identified. The northern portion of the study area has been altered significantly through cultivation, pasture improvement and stock grazing that has been progressively recolonised by Rush and common pasture grasses and associated weeds, rendering it unsuitable habitat for MFL.

Although only three individuals were recorded in the recent targeted survey (2025), Nature Advisory has recorded MFL during surveys in 2019 and 2024, which included verifying locations of previous recorded individuals by Biosis from 2015 surveys. As such, a precautionary approach has been applied based off historical records and an assumption that individuals may re-appear prior to salvage occurring. Regardless, it should be recognised that the final number of individuals may vary depending on the survivorship of plants recorded or potentially the emergence of additional individuals within the area of suitable habitat, depending on the prevailing conditions.

River Swamp Wallaby-Grass

During the 2014 Biosis survey for River Swamp Wallaby Grass, roughly 100 individuals were estimated within the study area, with roughly 75 estimated around the northern dam edge and 25 in the southern portion of the study area. However, only eight points in the former area and a polygon (on the dam edge) were recorded by Biosis and no explanation was provided of how the estimate was made.

It is noteworthy that the Biosis assessment of habitat for this species around the dam was based on evidence of one identified plant seed head in this area with the identity of other material around the dam not able to be confirmed. Furthermore, no method for the estimate of numbers was provided.

Given the level of uncertainty of RSWG presence, the time that has passed since this original survey, the inability to record the species in subsequent surveys (2023 & 2024) as well as the recent sewer works by the water authority (Yarra Valley Water), an updated targeted survey was undertaken (Nature Advisory 2026). The targeted surveys were conducted in Habitat Zones G, H and N, which comprised the only occurrences of Plains Grassland (EVC 132) and Plains Grassy Wetland (EVC 125) that were deemed suitable to support the target species (Figure 3). Only the western periphery of Habitat Zone N was deemed suitable to support River Swamp Wallaby-grass, given the remainder occurred within the dam and was dominated by monocultures of native rush species.

This assessment failed to detect the species, as such, the species is now considered unlikely to be present within the study area. Whilst suitable habitat for the species occurs on site (4.189 ha to be impacted), given that there are no confirmed records on site, it is considered unlikely that the species

ever occurred within this habitat. The project is not considered to be having an impact on River Swamp Wallaby Grass habitat.

Growling Grass Frog

Targeted surveys for Growling Grass Frog were conducted at Dam 1 by ERM between 2010 and 2012, which failed to detect the presence of the species. These assessments were considered insufficient based on relevant survey guidelines. Growling Grass Frog targeted surveys were not conducted by Biosis (2019) as they had previously recorded the species in the dam on the north-eastern boundary of the study area in 2005 and 2006 and they assumed presence of the species. More recently, Nature Advisory (2019) undertook Growling Grass Frog surveys, in accordance with the published EPBC Act survey guidelines (Australian Government 2008) and failed to locate any in Dam 1 or the small dams adjacent to the study area, including the dam that occurs across the road reserve boundary in the north-east of the area, where it was recorded 18 years ago by Biosis.

In conclusion, Growling Grass Frog has not been recorded on the project site since Biosis's observations within the farm dam in the north-east of the study area in 2005 and 2006 (Dam 1; Figure 2), which has since seen further decline in quality. All available evidence from more recent targeted survey and habitat assessment by Nature Advisory strongly suggest that the species is no longer present at the study area due to a lack of suitable habitat. Whilst the Donnybrook Road interchange may prevent individuals from recolonising the site, Dam 1 will be retained as a No Go Zone.

Striped Legless Lizard

Targeted surveys for Striped Legless Lizard were conducted by ERM in 2012 by active searching and rock rolling (ERM 2012). Targeted surveys consistent with the guidelines for Striped Legless Lizard were also conducted by Biosis in late 2014 (Biosis 2019). During these surveys, no Striped Legless Lizard were recorded.

Due to few records of Striped Legless Lizard within Melbourne's northern growth area and the lack of recent records within the surrounding area, it has been concluded that it was unlikely that the species was present within the study area (Biosis 2019).

Spiny Rice-flower

The likelihood of occurrence assessment concluded that SRF is unlikely to occur on site due to a lack of nearby records and being beyond the known distribution of the species which is known to occur on the Victorian Volcanic Plain. The nearest records are over 20 kilometres to the south-west near Sunbury, with numerous other records further to the south west.

Additionally, the vast majority of the study area supports exotic and dense vegetation that is considered to be unsuitable for this species. The areas of native vegetation that occur on the site are grassy wetlands subject to seasonal and at times extended inundation, which is not considered suitable habitat for SRF, which require open grassland or grassy woodlands on well drained soils.

The combination of suboptimal habitat, lack of nearby records and the site being beyond the known distribution of the species suggests that they are unlikely to occur. Consequently, no targeted surveys were undertaken, and therefore, no survey details have been provided in Table 1.

Victorian Grassland Earless Dragon

Until recently, the Grassland Earless Dragon was considered to be extinct in Victoria, until its rediscovery at an unknown location in Bacchas Marsh, approximately 50km from the subject site. Prior to that, the last confirmed sightings of the species in Victoria were all from Melbourne's west (Laverton, 1960; Little River, 1967; Rockbank, 1968 and Geelong, 1969).

The vast majority of the study area supports exotic and dense vegetation that is considered likely to be unsuitable for this species. The areas of native vegetation that occur on the site are grassy wetlands to seasonal and at times extended inundation, which is not considered suitable habitat for VGED, which require open grassland on well drained soils.

Some limited habitat occurs within the mapped patch of NTGVVP that contains the following combination of features within a constrained area, including native grass cover, surface and embedded rock, bare ground and invertebrate burrows. Surveys for the species has been undertaken using various methods within the limited habitat areas. The species was not recorded during pitfall trapping in 2014 (Biosis 2019), nor were they identified during active searching and rock rolling in 2012 by ERM. Aurecon (2026) recently conducted targeted surveys in the NTGVVP patches, using roof tiles and spider tubes, with no individuals recorded. Based on limited habitat present and the lack of records from multiple surveys, the species is unlikely to be present.

Golden Sun Moth

Targeted surveys consistent with the guidelines for Golden Sun Moth were conducted by ERM in 2011-12 and again by Biosis in 2014-15. During both of these surveys, no GSM were recorded (Biosis 2019).

Due to the extensive survey effort across multiple seasons, the unsuitability of the site (degraded habitat and a long history of grazing) and the limited opportunity for a low dispersal rate species to recolonise the study area since these surveys, it is considered highly unlikely that GSM persist on the study area.

3. Impact Assessment

This section provides information on the potential impacts of the proposed action, including direct, indirect and consequential impacts resulting from the proposed action. Development activities will require the removal of 2.147 hectares of EPBC Act-listed community, Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP). One patch of this NTGVVP (1.702 hectares) also qualifies as Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (SHWTLP). Due to the variation in records across surveys, it is assumed that the development footprint will also remove all nine individuals of EPBC Act-listed threatened flora species Matted Flax-lily. recorded over the last three surveys (2019, 2024 and 2025). Two other MNES have previously been recorded within the study area (River Swamp Wallaby Grass (unconfirmed) and Growling Grass Frog), but follow-up surveys failed to detect them. As such, they are no longer considered present and therefore unlikely to be susceptible to impacts from this proposal.

As noted in Section 2, the study area is situated in a landscape that has been subjected to development. The site is surrounded on the north and east by two major arterial roads and to the west by a local road and the Commonwealth Quarantine Facility. The potential for indirect impacts outside of the study area is assessed as low due to the lack of ecological values. The Hume Freeway is downstream of the study area and contains mostly degraded road reserve. The freeway also provides a significant barrier in the landscape with existing noise, light and air pollution.

Within the study area, retained ecological values within the Conservation and Tree Reserve have potential risks from indirect impacts, mainly changes in hydrology and sedimentation impacts. Impacts from clearing, such as weed invasion and degradation of habitat will be managed through a dedicated Conservation Management Plan.

The purpose of the Conservation Reserve is to avoid and mitigate some impacts on these MNES. Table 2 below summarises the extent and impacts to MNES.

3.1. Direct MNES impacts

The project is predicted to impact upon three MNES including:

- 2.147 hectares of the listed ecological community NTGVVP,
- 1.702 hectares of the listed ecological community SHWTLP (that fully overlaps with one patch of NTGVVP),
- Nine individual Matted Flax-lily and 4.47 hectares of potential habitat;

Table 2: Summary of MNES extent and impacts

MNES	Extent (hectares)/Individuals	Hectares/Individuals retained in Conservation Reserve	Impacted (ha)	% Impacted
NTGVVP community	2.568 hectares	0.420 hectares	2.147 hectares	84%
SHWTLP community	1.702 hectares	0.116 hectares (7%) retained within the reserve, however, full extent considered impacted due to uncertainty of viability.	1.702 hectares	93% (100% assumed to be impacted)
Matted Flax-lily	10 individuals and 5.840 ha of potential habitat.	One previously recorded individual and 1.37 ha of potential habitat. The species has been recorded in the reserve area	9 individuals and 4.470 ha	90% of individuals 77% of habitat

MNES	Extent (hectares)/Individuals	Hectares/Individuals retained in Conservation Reserve	Impacted (ha)	% Impacted
		during earlier surveys (Biosis 2015; Nature Advisory 2019) and may persist.	of potential habitat.	

Natural Temperate Grassland of the Victorian Volcanic Plains

A total of 2.568 hectares of NTGVVP was recorded in the study area in the 2024 survey (Nature Advisory 2024). The proposed development also includes the creation of a Conservation Reserve retaining 16% (0.420 ha) of the NTGVVP community (Figure 7 and Figure 8). The proposal will therefore remove approximately 84%, or 2.147 hectares of NTGVVP.

This action will result in a significant impact to NTGVVP as it meets the following significant impact criteria (DoE 2013):

- Reduce the extent of an ecological community.

An associated Conservation Management Plan (Nature Advisory 2025a; Appendix 5) has been prepared for the Conservation Reserve, based on information provided in the relevant conservation advice for NTGVVP. This plan aims to protect and enhance retained NTGVVP, as well as restoring native grassland in non-native areas within the Conservation Reserve to a condition that qualifies as NTGVVP. This plan will be implemented within a ten-year timeframe.

This mitigation measure will not be used as an offset for unavoidable residual impacts on this community; rather, a third party (off-site) offset for impacts to this MNES will be secured (Appendix 4).

Seasonal Herbaceous Wetlands of the Temperate Lowland Plains

A total of 1.702 ha of SHWTLP is proposed to be removed in the study area. The study area contains 1.818 ha of SHWTLP in total. Of which, 0.116 ha (two patches –0.066 ha and 0.050 ha) is located within the Conservation Reserve and will be retained. However, the proposed removal of 1.702 ha would leave only these two isolated patches remaining, both of which fall below the minimum size threshold for the community listing (0.1 ha). Although these patches are not directly impacted by the proposed works, they would be functionally lost through indirect impacts, and so are deemed lost. The two remaining extents of the community within the Conservation Reserve are mapped as 'deemed lost' in Figure 8. Consequently, 100% of the community within the study area will be impacted.

This action will result in a significant impact to SHWTLP as it meets the following significant impact criteria (DoE 2013):

- Reduce the extent of an ecological community.

A third party (off-site) offset for impacts to this MNES will be secured to mitigate these impacts (Appendix 4).

Matted Flax-lily

The current targeted survey (Nature Advisory 2026) determined that nine of the ten individuals recorded will be impacted, as well as 4.47 ha of potential habitat (Figure 7 and Figure 9).

There is a historical record of one MFL recorded within the Conservation Reserve, and 1.37 ha of habitat will be retained and protected.

This action had the potential to lead to a significant impact to Matted Flax-lily as it meets the following significant impact criteria (DoE 2013):

- Reduce the area of occupancy of the species.

However, these impacts are considered mitigated by undertaking a pre-clearance survey within all areas of suitable habitat in the impact area prior to construction and through the implementation of a salvage and translocation plan. Any individuals recorded within the impact area will be salvaged, propagated and then translocated into a suitable offsite offset site (Nature Advisory 2025c; Appendix 6). The proposed recipient site (4.127 ha) is of a suitable vegetation type to support a MFL population given that it is Plains Grassland (EVC 132_61). It is of moderate to high quality as it meets the condition thresholds of NTGVVP. Therefore, its existing condition is suitable, provided active management occurs to control biomass and weed invasion. The recipient site will be actively managed as part of the commitments under the NTGVVP OMP and can therefore incorporate commitments for the translocated plants to be monitored, threats to them to be identified, and regular weed control to be undertaken. The objective is to have 85% of clones survive following translocation and that the plants are able to flower and fruit, in order to reproduce. If, at the end of 10 years, this is the case, then MFL will be considered established at its recipient site (Commander *et al.* 2018). The establishment of a viable population at the offset site will mitigate the impacts of the project on this small local population.

3.2. Indirect MNES impacts

There is an assumption that changes to the flow of water, caused by the construction of hardstand adjacent to the Conservation Reserve, will not negatively impact the retained MNES. Flood modelling indicates that the flow path will align with patches of Plains Grassy Wetland (EVC 125). The ecological effects of this change have not been assessed, rather, assumptions have been made based on the topography and an understanding of the physical structure of vegetation within the Conservation Reserve (see Section 3.3).

There is a level of uncertainty around the viability of the retention of SHWTLP within the Conservation Reserve as the reduced size may lead to loss of viable functionality. The long-term uncertainty of the viability of this TEC has been mitigated via the assumed loss of the entire extent and an offset strategy which compensates for 100% loss,

It is also acknowledged that unknown impacts may also influence the viability of MNES in the Conservation Reserve e.g. climate change, persistent drought leading to a change in vegetation composition and transition of SHTLWP to NTGVVP.

The CMP contains measures to monitor and manage retained MNES post-construction to eliminate the risk of ongoing damage to the retained MNES. The required monitoring will detect changes to the MNES and adaptive management is expected to address implications from any indirect impacts.

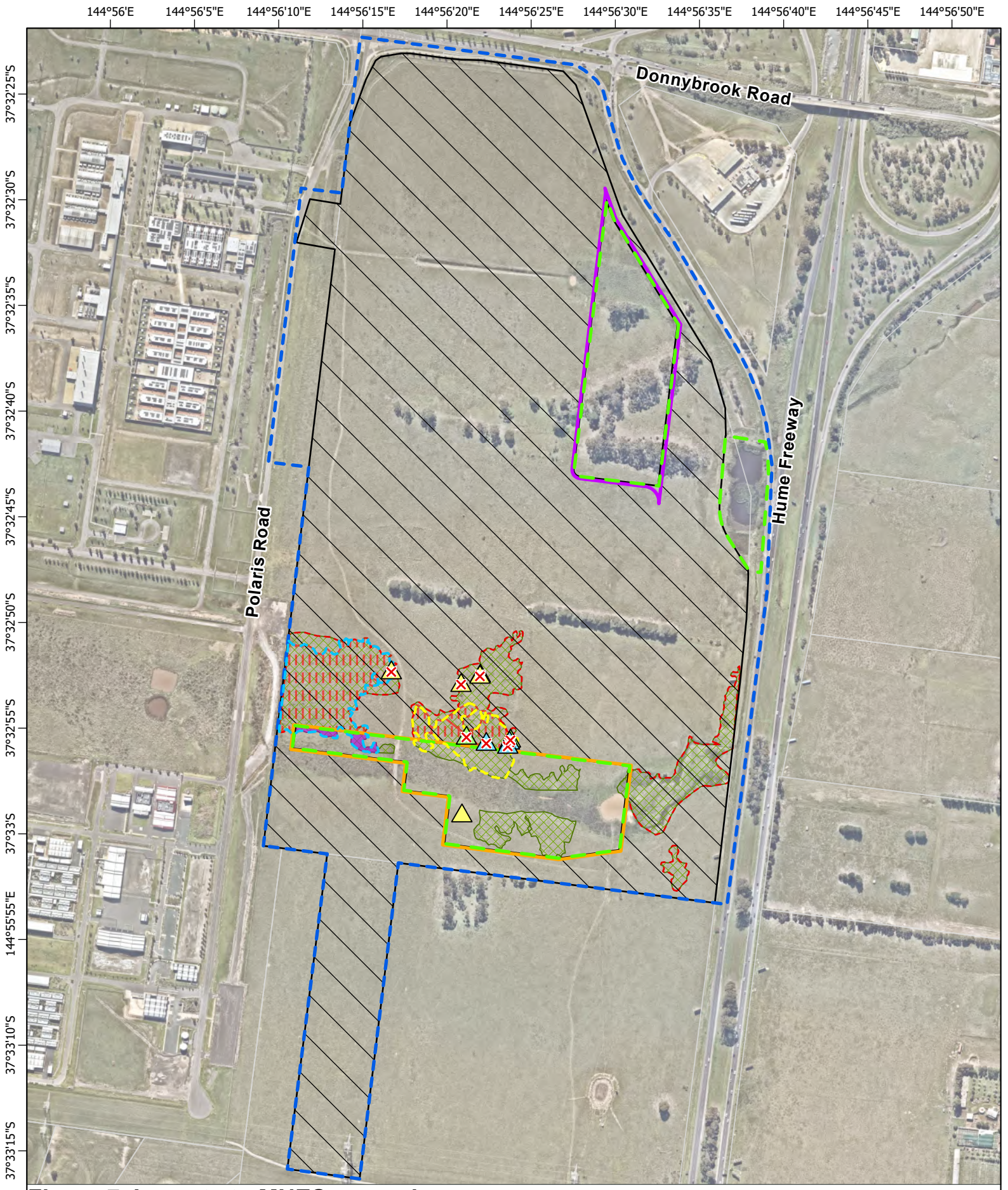


Figure 7. Impacts to MNES - overview map

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 21/10/2026

- Study Area (Data Centre)
- Property Boundary
- Impacted Footprint
- No Go Zone

Reserve Areas

- Conservation Reserve
- Tree Reserve

EPBC Act community

- NTGVVP
- NTGVVP and SHWTLP
- NTGVVP and SHWTLP to be impacted
- NTGVVP and SHWTLP deemed lost

Threatened Flora Species

- Matted Flax-lily (Nature Advisory 2019)
- Matted Flax-lily (Nature Advisory 2024)
- Matted Flax-lily (Nature Advisory 2025)
- Matted Flax-lily to be removed
- Matted Flax-lily potential Habitat 5.84 ha
- Matted Flax-lily impacted Habitat 4.47 ha

Sources: Vicmap 2026

N

Metres

0 200

GDA2020 Vicgrid

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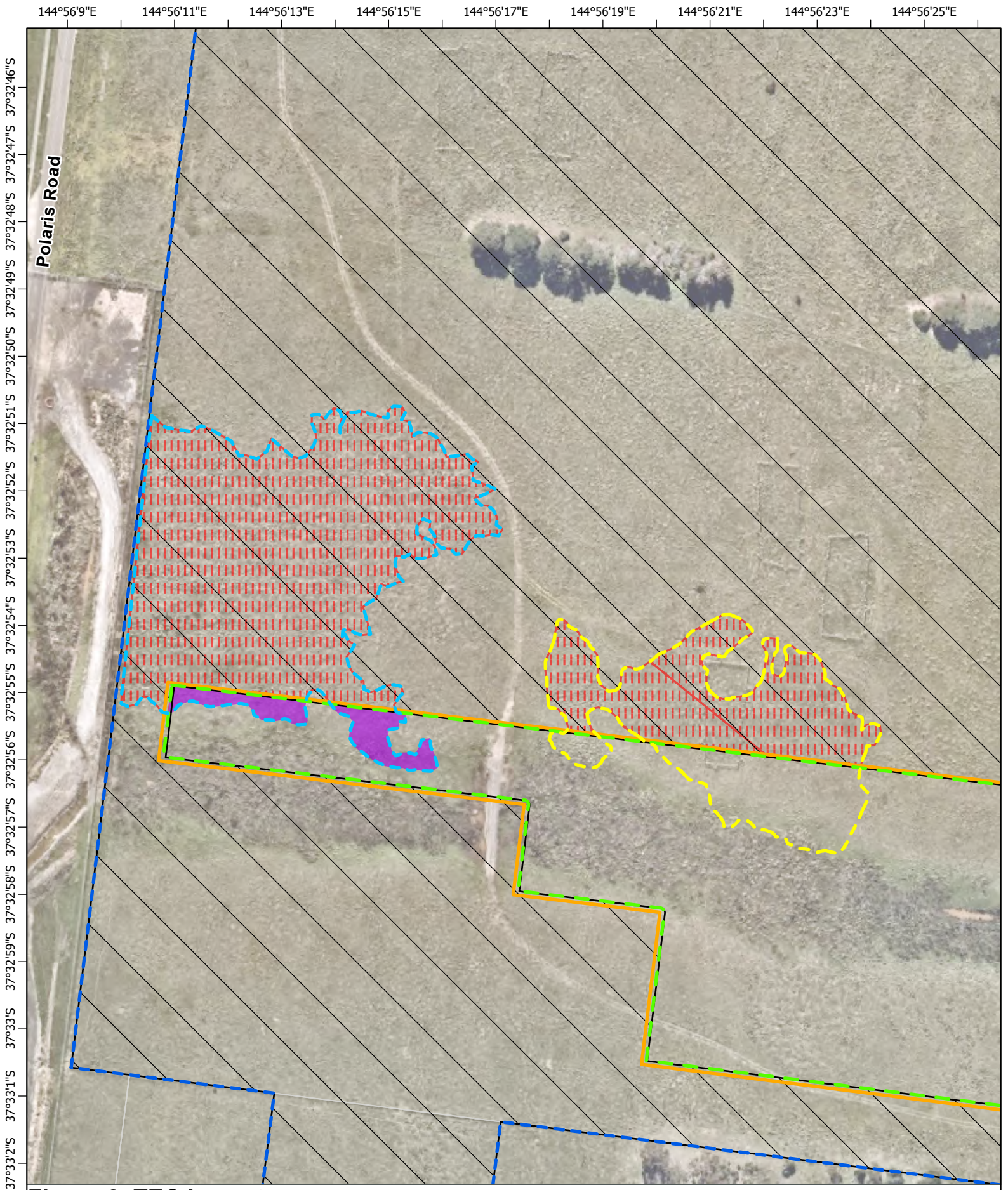


Figure 8. TEC Impacts

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 21/10/2026

- Study Area (Data Centre)
- Property Boundary
- Impacted Footprint
- No Go Zone

Reserve Areas

- Conservation Reserve

EPBC Act community

- NTGVVP
- NTGVVP and SHWTLP
- NTGVVP and SHWTLP to be impacted
- SHWTLP deemed lost



N

Metres

0 60

GDA2020 Vicgrid

Sources: Vicmap 2026

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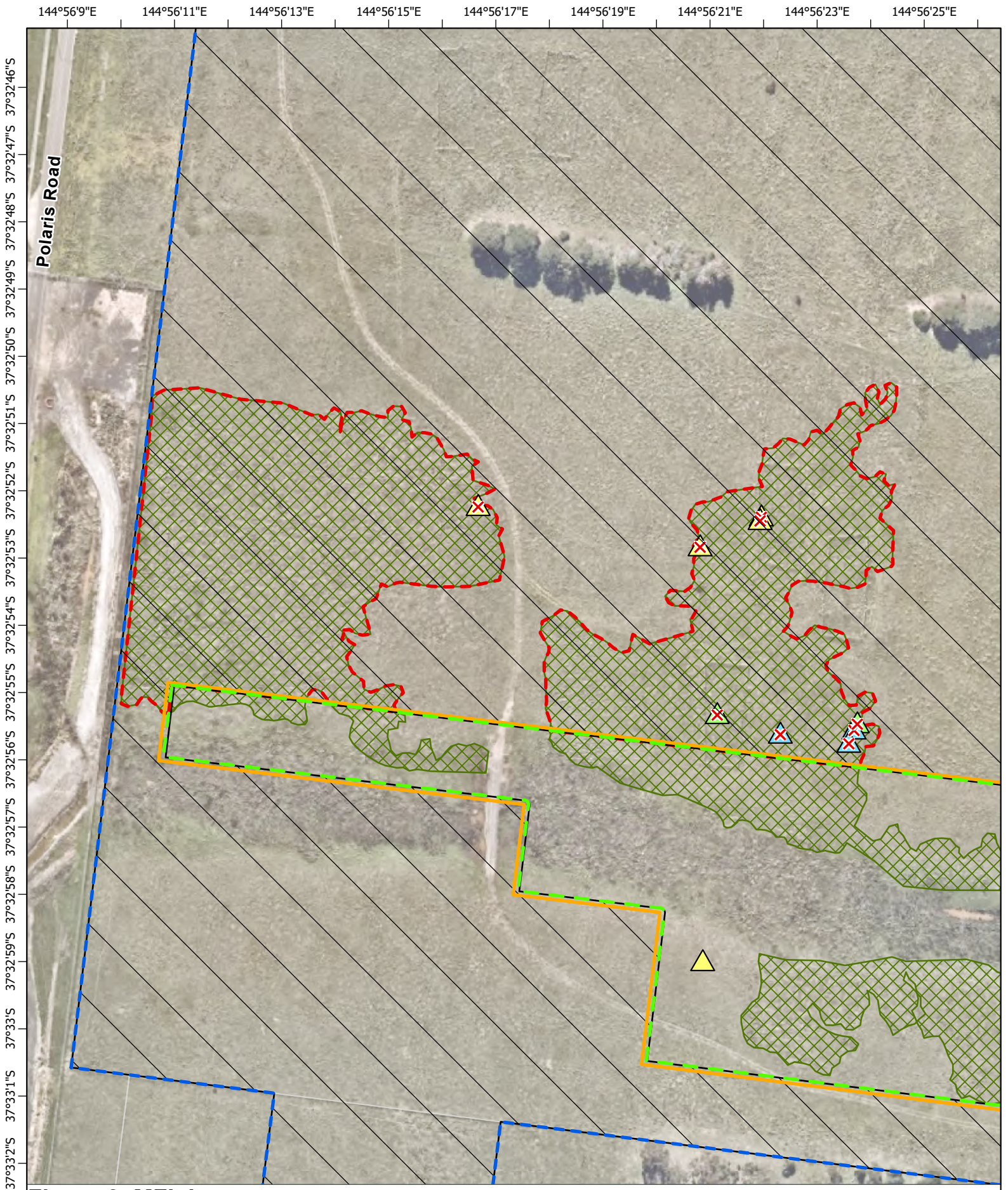


Figure 9. MFL Impacts

Project No: 25238_06 **Project:** 45 Donnybrook Road, Mickleham, VIC **Date:** 21/10/2026

- Study Area (Data Centre)
- Property Boundary
- Impacted Footprint
- No Go Zone

Reserve Areas

- Conservation Reserve

Threatened Flora Species

- Matted Flax-lily (Nature Advisory 2019)
- Matted Flax-lily (Nature Advisory 2024)
- Matted Flax-lily (Nature Advisory 2025)
- Matted Flax-lily to be removed
- Matted Flax-lily potential Habitat 5.84 ha
- Matted Flax-lily impacted Habitat 4.47 ha

Sources: Vicmap 2026

N

Metres

0 60

GDA2020 Vicgrid

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3.3. Impacts to water quality and drainage

The study area is subject to the Melbourne Water Drainage Scheme for Donnybrook (6551 – Donnybrook DSS) which manages cumulative stormwater impacts from development in the catchment. Within this scheme, three existing sets of culverts downstream convey flows from the upstream catchment to the Merri Creek downstream. These are located at the Donnybrook Road offramp, Hume Freeway northbound carriageway and the Hume Freeway southbound carriageway between the study area and the Creeks to the East. A combination of natural and artificial swales, and overland flow convey the upstream water from the western portion of the study area to these culverts. Stormwater treatment and quality is to be addressed through the construction of wetland treatment cells within the proposed retarding basin. These will be constructed in accordance with best-practice guidelines for stormwater treatment wetlands, such as those detailed in the Melbourne Water *Wetland Design Manual* (Melbourne Water 2020). Water will be treated prior to being discharged into the downstream catchment.

The Conservation Reserve is located in the existing flow path of the catchment that drains into Kalkallo Creek, east of the Hume Freeway. The creation of the Conservation Reserve will maintain the existing conditions along the flow path and flows will be maintained to the wetland vegetation communities in the reserve. However, hardstands will be constructed adjacent to the Conservation Reserve, which will reduce the width of the flow path. While volume of flows will be maintained, this velocity is modelled to increase during a flood event due to the proposed narrowing of the flow path (Aurecon 2026a). Flood modelling indicates that the flow path will align with patches of Plains Grassy Wetland (EVC 125). The ecological effects of this change have not been assessed, rather, assumptions have been made based on the topography and an understanding of the physical structure of vegetation within the Conservation Reserve. Considering the generally flat nature of the landscape and the densely vegetated nature of the flow path, consisting of dense covers of rushes, grasses and sedges, which have relatively deep fibrous root systems, it is our understanding that during a flood event, the vegetation within the Conservation Reserve would not be impacted, i.e., scouring of vegetation and soils. The dense cover of vegetation is likely to hold the soils within the reserve and create flow resistance during a flood event. Additionally, the proposed revegetation within the reserve is expected to further assist in increasing flow resistance in a flood event. Revegetation should use strongly fibrous rooted sedges and rushes through the centre of the flow path that is likely to see higher velocities and ensure there are no or minimal areas of bare ground. The CMP contains measures to monitor and manage retained MNES post-construction to eliminate the risk of ongoing damage to the retained MNES. The CEMP must include monitoring and adaptive management strategies that address any damage to or loss of MNES as a result of flood events.

3.4. Impacts of habitat fragmentation

The study area is largely isolated from other areas of native vegetation and surrounded by land that is being developed as part of the North Growth Corridor Plan. The existing freeway, Donnybrook Road and other roads already isolate the area.

Two farm dams were present within the study are. These systems have potential to provide habitat for a range of locally occurring fauna. Targeted Growling Grass frog surveys at Dam 1, including habitat assessments, have detected a deterioration in the quality of habitat, and the Donnybrook Road interchange is now considered a barrier for movement between wetlands. The ecological function of the wetlands will remain unchanged and is likely to be enhanced through the creation of the stormwater treatment wetland. The stormwater treatment wetland will comprise approximately 8.5 hectares of drainage infrastructure and various vegetated swales for the treatment and conveyance of stormwater from the site and the wider regional catchment to the west. Where possible, and not in conflict with flood mitigation, it will include suitable habitat for the Growling Grass Frog.

Grassland habitat across most of the study area was degraded and dominated by exotic grasses, however, there were some large patches of intact native grassland habitat which would provide near-optimal habitat for all faunal groups reliant on such grasslands. This habitat type is subject to grazing from both livestock and kangaroos. These patches of intact native grassland are already isolated, with no connectivity to external patches of native grassland. Whilst the area of habitat on site may reduce, the ecological function of retained habitat on site will remain unchanged, it will continue to support small populations of species on the site.

Wooded habitat within the study area comprised planted windbreaks of predominantly Sugar Gum and some Monterey Cypress. Remnant indigenous wooded vegetation was limited across the study area and comprised six River Red-gums. Although not indigenous, the mature Sugar Gum windbreaks provide ample nectar resources and protected roosting and nesting sites for many native bird species. This habitat is unlikely to support important populations; rather, it provides a stopping point for avian movement across the landscape, as such habitat is generally lacking on a broad landscape scale. There is no connectivity with treed habitat beyond the study area boundaries. The ecological function of treed habitat on site will remain unchanged; the Tree Reserve in the north allows the site to continue to provide resources for avian fauna moving through the landscape.

Given the study area is located within an already highly fragmented landscape, the isolation of the area and the lack of suitable habitat in the study area, the proposed development is not likely to significantly impact connectivity.

3.5. Duration of MNES impacts

The impacts on part of the NTGVVP, all the SHWLTP and Matted Flax-lily population as described above are permanent. The CMP contains measures to monitor and manage retained MNES post-construction to eliminate the risk of ongoing damage to the retained MNES. Experienced contractors will be engaged, and all construction contractors must be inducted into the content of this CMP before accessing the site for the first time.

A level of uncertainty exists on the long-term retention and viability of MNES within the dedicated Conservation Reserve. Uncertainty regarding the viability of the retained NTGVVP within this reserve will be addressed through ongoing management in perpetuity to ensure active weed management, habitat enhancement, and the maintenance of the TEC condition thresholds, thereby proactively addressing potential uncertainties regarding their future viability. Uncertainty around the viability of the retention of SHWTLP within the Conservation Reserve, for instance, the reduced size of the retained areas, has resulted in the project deeming these areas lost due to loss of viable functionality. The community will still be managed to maintain SHWTLP condition thresholds. The long-term uncertainty of the viability of this TEC has been mitigated via the assumed loss of the entire extent and an offset strategy which compensates for 100% loss, even though 0.116 ha will be retained. There is an assumption that changes to the flow of water, caused by the construction of hardstand adjacent to the Conservation Reserve, will not negatively impact the retained MNES.

Given the conclusion that the River Swamp Wallaby-grass, Growling Grass Frog and Striped Legless Lizard are unlikely to currently occur in the area, no significant impacts from development are anticipated to these species.

4. Avoidance, mitigation and management measures

Measures and management strategies to avoid and mitigate impacts on MNES have been carefully considered. The proponent is responsible for implementing all measures and management strategies. These are described below:

- The creation of a 4.89 ha Conservation Reserve within the study area (Figure 3) that has been secured under a Section 173 Agreement with Hume City Council (Harwood Andrews 2024; Appendix 3).
    - The Conservation Reserve retains two areas of native vegetation qualifying as NTGVVP (0.420 ha). This also includes retention of 1.37 ha of Matted Flax Lily habitat.
        - Access to the Conservation Reserve will be limited to management staff undertaking land care activities, to mitigate threats such as trampling and weed introduction.
    - The Conservation Reserve is subject to the Conservation Management Plan (CMP; Nature Advisory 2025a; Appendix 5). This plan aims to protect and enhance retained remnant ecosystems and grassland vegetation and wetland vegetation in non-native areas within its boundaries. The aim is to protect and enhance native grassland, aiming to increase the area that meets the condition thresholds for NTGVVP.
        - Section 8 of the CMP outlines responsibility and timing for each of the management actions during the pre-construction period, the construction period (Stage 1) and 2 years post-construction. The proponent is responsible for implementing management for this period. Following the required 2-year management period by the proponent and the completion of management actions and targets outlined in this report, management of the Conservation Reserve will be handed over to Council (subject to discussions with Hume City Council). After this, the reserve is to be managed by Council under a Section 173 agreement to retain the environmental values in these areas (i.e. weed management and maintenance of fencing).
    - Implementation of a Construction Environmental Management Plan (CEMP; Appendix 2) to protect retained vegetation and mitigate any adverse environmental impacts to MNES values prior to and during construction. The CMP plan outlines the required measures to be incorporated into the CEMP.
        - The proponent is responsible for overseeing the development of this plan and ensuring it is compliant with the CMP. The CEMP must provide compliance indicators to enable monitoring of the success or failure of these actions. Management actions are to be reviewed and adapted if the associated compliance indicators are not being achieved. The CEMP must include monitoring and adaptive management strategies that address any damage to or loss of MNES as a result of indirect flood damage from the hardstand adjacent to the Conservation Reserve. All construction contractors must be inducted onto the content of the CEMP prior to accessing the site for the first time. Implementation of the CEMP is considered an essential compliment to this CMP.
- A Matted Flax-lily Salvage and Translocation Plan (Nature Advisory 2025c; Appendix 6) has been prepared to effectively mitigate impacts to any individuals currently in the impact area. The proponent is responsible for implementation of the Translocation Plan. The translocation site has been selected and is intended to be secured in accordance with the proposed Section 173 agreement for the NTGVVP offset site (further details provided in Section 5.1.1).
    - A pre-clearance survey will be required prior to construction and individuals recorded within the impact area will be salvaged, propagated and then translocated into a suitable offsite offset site.

- The development area will include the creation of a stormwater treatment wetland incorporating modern, environmentally sensitive design and management measures in accordance with Water Sensitive Urban Design (WSUD) principles, built in accordance with Melbourne Water's Donnybrook Drainage Scheme on the eastern boundary of the site. The wetland will comprise approximately 8.5 hectares of drainage infrastructure and various vegetated swales for the treatment and conveyance of stormwater from the site and the wider regional catchment to the west. Where possible, and not in conflict with flood mitigation, this will provide habitat for the Growling Grass Frog.

Where these measures aren't effectively mitigating impacts to TECs, offsets will be secured as detailed in Section 5.

5. Offsets and Offset Management Strategy

5.1. Offset Requirements

5.1.1. NTGVVP & SHWTLP

The following threatened ecological communities are proposed to be impacted by the current proposal:

- 2.147 ha of *Natural Temperate Grassland of the Victorian Volcanic Plain*
- 1.702 ha of *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains*

The SHWTLP TEC overlaps entirely with one of the two NTGVVP patches. Specifically, this is a 1.702 ha patch of vegetation qualifying as both NTGVVP and SHWTLP. Consequently, offsets only need to be secured once for this overlapping portion of the TEC's. This overlapping portion is proposed to be offset within a SHWTLP offset site. The non-overlapping portion of NTGVVP, equates to 0.445 ha (or 21% of the NTGVVP extent) and is proposed to be secured through a separate NTGVVP offset site.

The combination of the above offset sites will not only meet, but exceed the offset requirements as detailed below.

An Offset Management Strategy has been prepared as part of the Preliminary Documentation (Appendix 4). This strategy proposes to offset part of the offset requirements within a third party offset site containing NTGVVP under a third-party agreement (Table 3). This offset site is in Shelford, Victoria and contains 4.127 ha of NTGVVP. In accordance with the gain calculator, based on the minimum requirement of 0.445ha of NTGVVP, this will secure 256.19% of what is required to offset the total quantum of impacts. An MOU is being finalised to secure the site, it is yet to be secured (Appendix 4).

The remaining offset requirements will be secured as SHWTLP on private property in Mininera, Victoria. 15.429 ha of the community was identified within the property (Table 3). An MOU is being finalised to secure the site, it is yet to be secured. In accordance with the gain calculator, this site can secure 187.81% of the offset requirements, achieving an overall gain of 243% when combining this with the gain available at the Shelford offset site. As such, a surplus to the requirements is achieved. This buffer ensures that the offset requirements can be covered between the two proposed offset sites (Appendix 4).

Table 3: Offsets to be secured

MNES	Location	Landholder	Total impact (ha)	Area proposed to be offset (ha)	% of offset target achieved
NTGVVP	Shelford	Critchton	0.445*	4.127	256.19%
SHWTLP	Mininera	Menenia	1.702	15.429	187.81%

* Total impact not overlapping with SHWTLP

EPBC Act Environmental Offset Policy

The proposed offset for NTGVVP and SHWTLP has been assessed against the overarching principles of the Commonwealth Offset Policy in the Offset Management Strategy (Appendix 4). Further to this, preliminary calculations were undertaken using the Offsets Assessment Guide (calculator) (DCCEEW 2024a) to assist in the determination of whether the offsets proposed for the development would satisfy the Commonwealth offset requirements. Calculations and justification for the calculator input values are provided in the Offset Management Strategy (Appendix 4). Based on the outputs of the Assessment Guide

calculator, it is considered that all Commonwealth offset requirements for the proposed development can be achieved within the proposed offset sites.

Refer to Appendix 4 for a detailed discussion of compliance with the EPBC Act Environmental Offset Policy.

5.1.2. Matted Flax-lily

The impacts to Matted Flax-lily are considered mitigated by undertaking a pre-clearance survey within the impact area prior to construction and through the implementation of a salvage and translocation plan. As such, no direct offset is proposed for these species. Any individuals recorded within the impact area will be salvaged, propagated and then intended to be translocated into the above-mentioned NTGVVP offset site (Nature Advisory 2025c; Appendix 6). This will be incorporated into the respective management plan. Translocation to the offset site is proposed but not confirmed.

Matted Flax-lily are known to grow in a range of habitat types and persist in degraded environments. As such, they are a relatively hardy species that can readily be translocated. Although literature on the success of MFL translocations is limited, it is known to be a highly successful species to translocate, a survival rate of 80-90%, due to its rhizomatous nature and ability to remain dormant until conditions are suitable (Ecology Australia 2011 and Carter 2010).

To establish a viable population and to provide assurance of success, six clones from each salvaged plant will be propagated. Four clones from each salvaged individual will be translocated, while two will remain in the nursery as an assurance population to be used as replacement plants should any of the translocated plants fail. The assurance population must be held at the nursery for the duration of the OMP (10 years). This strategy will provide a net gain in the resulting number of impacted individuals. This measure will mitigate the impacts of the project on this small local population.

5.2. Offset strategy

Strategy for offset site

Two offset sites (one for the SHWLTP offset requirements and one for the NTGVVP requirements) have been sourced and will be secured to meet the offset requirements of the proposed development. The Offset Management Strategy (OMS; Nature Advisory 2025d; Appendix 4) outlines the offset requirements and details the proposed offset sites. The offset site is to be secured and managed for the purposes of conservation in perpetuity (Table 4).

Table 4: Offset site details

Offset Security and Management Responsibility	Offset Site
Who is liable/responsible for meeting offset requirements?	The proponent
Type of security	On-title security under Victorian law (s. 69 *CF&L Act 1987* or Trust for Nature Covenant)
Offset site management responsibility	The offset site owner, on behalf of the proponent
Offset Monitoring Responsibility (i.e., Responsible Authority, DEECA)	The offset site owner, on behalf of the proponent

Ongoing land-use commitments & management actions

The landowner commits to the following in perpetuity:

- Retain all native vegetation including the Matted Flax-lily propagated offsite and translocated into the offset site
- Exclude stock
- Ensure that weed cover does not increase beyond current levels
- Eliminate high threat woody environmental weeds (to <1% cover)
- Achieve a reduction in cover of high-threat herbaceous weeds to <5% combined cover by Year 10 of management
- Maintain other weed cover at, or below, the levels proposed after Year 10 of management
- Ensure that pest animals are controlled to the level proposed after Year 10 of management
- Implement a biomass management strategy (periodic biomass reduction at agreed timing/frequency through grazing, burning or both).

Baseline surveys

A baseline weed cover survey will be undertaken by an ecologist at the offset site to determine:

- The cover of woody weeds
- The cover of high-threat weeds
- The combined cover of other weeds.

Management actions to be undertaken

Specific management actions will be documented in the offset plan prepared by the offset site owner, on behalf of the proponent, reflecting the commitments above. An Offset Management Plan will be created for both offset sites in consultation with the landowners, Trust for Nature, Nature Advisory and Vegetation Link.

Monitoring and reporting

The offset plan will include monitoring of native vegetation and associated MNES, along with pest plants and animals on a regular basis to ensure the successful implementation of this Plan and to inform adaptive management responses. Monitoring by an ecologist will be undertaken in the first year of the plan and then again in years 4, 7 and 10 and the results from this monitoring provided as a report to the offset owner. This report will be sent to the proponent as evidence of the execution of the offset plan and maintained on file by the proponent for audit purposes.

Adaptive management

This Plan will document management objective and methods for a period of 10 years. The timing of actions and whether they occur is based on adaptive management over this period, in response to the periodic monitoring described above. Management methods and timing may need to be adjusted to take account of new techniques for controlling high threat weeds that may become available, or further information on the ecology and management of the MNES concerned.

6. Ecologically Sustainable Development (ESD)

The principles of Ecologically Sustainable Development (ESD), as defined in Section 3A of the EPBC Act, guide the project's approach. The following outlines how the proposal actively meets these foundational principles.

ESD principle "*Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social, and equitable considerations*"

The project's core commitment to ESD is embedded from its inception, ensuring that decision-making processes effectively integrate long-term and short-term economic, environmental, social, and equitable considerations. This commitment is evident in the early integration of environmental protection and enhancement into the project's design. Specifically, the protection of conservation values and the environmental and amenity values within the Conservation Reserve and the Tree Reserve were incorporated into the initial phases of project decision-making and design. The Conservation Reserve retains a portion of the NTGVVP and SHWTLP communities. This reserve was strategically sited to protect these two MNES, as they are unique to this part of the study area, thereby providing both short-term and long-term protection of environmental values.

The broader economic, social, and equitable measures associated with this project are comprehensively addressed in Section 8 of this document.

ESD Principle "*If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.*"

The project has been informed by an extensive program of detailed scientific surveys conducted across the study area, across multiple years. These comprehensive surveys have provided the project with a thorough understanding of the presence and condition of the vegetation and habitat within the site, including how these conditions have changed and altered over time. This multi-year surveying effort significantly reduces uncertainty regarding the environmental values present and their dynamics and the projects understanding of direct and indirect impacts.

Notwithstanding the above, a level of uncertainty exists on the long-term retention of viability of MNES within the dedicated Conservation Reserve. Uncertainty regarding some viability of the retained NTGVVP within this reserve will be addressed through ongoing management in perpetuity to ensure active weed management, habitat enhancement, and the maintenance of the TEC condition thresholds, thereby proactively addressing potential uncertainties regarding their future viability. Uncertainty around the viability of the retention of SHWTLP within the Conservation Reserve, for instance the reduced size of the retained areas, has resulted in the project deeming these areas lost, and therefore offsets have been sought to mitigate this damage to the community.

To mitigate potential threats and impacts effectively, comprehensive conservation and construction environmental management plans (Appendix 2 and Appendix 5) will be prepared and rigorously followed. Critically, measures to prevent environmental degradation and protect ecological values will not be delayed; they will be implemented during the early stages of construction, reflecting a commitment to precautionary action even in the absence of absolute scientific certainty.

ESD Principle "*The principle of inter-generational equity – that the present generation should ensure that the health, diversity, and productivity of the environment is maintained or enhanced for the benefit of future generations.*"

Through these comprehensive measures, the project upholds the principle of inter-generational equity. By creating and committing to the ongoing management of these key environmental assets, and adhering

to detailed management plans, the project ensures that these ecologically valuable areas are not just maintained but actively enhanced for the benefit of future generations.

Regarding long-term management and responsibility, the Conservation Reserve will be managed by the Proponent for an initial period of two years, after which, management responsibility will transfer to the local Council in perpetuity. This approach manages and protects the environmental values retained within the Conservation Reserve for the long-term. Furthermore, offset sites will be subject to ongoing management for a period of 10 years, demonstrating a commitment to maintaining their ecological function of the values being offset.

While acknowledging the study area's identification by the state government as crucial for industrial growth due to transport accessibility, the project demonstrates how development can proceed alongside environmental care. It balances growth with environmental protection, aiming to create benefits for both current and future generations while supporting local prosperity and protecting nature.

ESD Principle "*The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making.*"

The conservation of biological diversity and ecological integrity has been a fundamental consideration throughout the project's decision-making process, particularly evident during the design phase. Two significant reserves were established with the objective of maintaining and incorporating ecological and environmental values into the project. This includes a protected Conservation Reserve measuring 4.89 ha within the study area, which retains 0.420 ha of NTGVVP.

Irreversible loss of habitat for NTGVVP and SHWTLP is managed through the provision of offsets, which compensate for impacts in accordance with relevant environmental policies. For MFL, impacts are managed through a comprehensive salvage and translocation program (Ecology Australia 2011 and Carter 2010). This species is considered highly suitable for translocation due to its rhizomatous nature and ability to remain dormant until conditions are favourable. The population in the translocation site will be designed to be viable in the long-term, as the program involves creating six clones for each plant, with four being translocated to the recipient site and holding material as insurance in a nursery. The project also protects 1.37 ha of MFL habitat within the Conservation Reserve. Additionally, a 4.29 ha tree reserve has been established, with plans for revegetation using EVC-appropriate species. This initiative is designed to improve the ecological value and integrity of the site, ensuring that biodiversity conservation remains at the forefront of project outcomes.

ESD Principle "*Improved valuation, pricing, and incentive mechanisms should be promoted.*"

The current proposal focuses on direct project-level environmental protection. While the proposed development and associated Conservation Reserve are situated within a single landholding and implemented by the developer with proceeds from land sales contributing to these efforts, the promotion and implementation of broader economic mechanisms are typically the responsibility of government via regulatory frameworks, rather than individual project proponents. The project, therefore, contributes to sustainable outcomes within its defined scope, complementing the broader policy landscape concerning economic incentives for environmental stewardship.

7. Economic and social matters

The proponent has provided the information below.

7.1. Economic and social impacts

The Proponent recognises that the development and operation of digital infrastructure brings both economic and social benefits and matters requiring careful consideration and management. The Proponent's approach is to consider these matters as part of project planning and delivery, engage with relevant stakeholders and communities, and measure and report on its broader sustainability and community performance.

The Proponent's broader commitment is that its presence within communities should deliver positive and enduring outcomes. This includes investment in digital infrastructure and local economies, employment and workforce development, together with initiatives intended to generate positive social and environmental outcomes. The Proponent recognises that the project will generate local and regional benefits, while also giving rise to matters that need to be assessed and managed through project design, statutory approvals, technical assessment and stakeholder engagement. Potential local benefits include investment, employment, local procurement, skills development, apprenticeships and opportunities to support community infrastructure and participation.

The planning and environmental assessment processes are also considering matters relevant to the surrounding area and community, including construction traffic and activity, noise, dust, vibration, lighting, visual amenity, local access, operational noise, energy and water requirements, local infrastructure and standby generation. These matters are being assessed through the relevant technical investigations and statutory approval processes. Subject to approval, appropriate measures would be implemented to manage identified impacts, including construction traffic management, environmental management plans, controls for noise and dust, safe access arrangements, construction communications and a process for receiving and responding to community feedback and complaints.

The Proponent is committed to considering the economic, social and environmental matters associated with the project and to using technical assessments, stakeholder feedback and ongoing engagement to inform project planning and delivery.

7.2. Public consultation activities and outcomes

Consultation undertaken for the project has reflected the project's current planning and assessment stage and has focused on the relevant planning authorities, statutory referral agencies and infrastructure providers responsible for assessing the proposal. Engagement commenced in April 2025 with early discussions regarding the appropriate planning pathway and approval process. A formal pre-application request was lodged in October 2025, following which the project team engaged with key government agencies and referral authorities to refine the proposal prior to formal lodgement. Following confirmation of project eligibility in June 2026 and formal lodgement of the planning application in July 2026, consultation has continued through the statutory referral process.

Consultation has included the Department of Transport and Planning, Hume City Council, AusNet, Melbourne Water and the Commonwealth Government, together with statutory referral authorities including EPA Victoria, Country Fire Authority, Fire Rescue Victoria, Transport for Victoria, WorkSafe Victoria, Yarra Valley Water and the Department of Energy, Environment and Climate Action (DEECA). Through this process, the project has been progressively refined in response to stakeholder feedback, including updates to the planning pathway, road and access arrangements, urban design, landscape outcomes, traffic, stormwater management, ecology, environmental management, servicing and technical assessments. The planning application documentation was updated to respond to feedback

received from relevant referral authorities and key stakeholders during the pre-application stage. Specific matters addressed through this process included EPA Victoria comments relating to air emissions, greenhouse gas emissions, water management, stormwater containment, contamination and best available techniques and technology; Transport for Victoria comments relating to traffic modelling; WorkSafe comments relating to diesel storage and managing dangerous goods; and DEECA's comments relating to native vegetation, ecology, threatened species and conservation management.

Broader community consultation has not yet been undertaken. The Proponent is currently preparing a project-specific Community Engagement Strategy, which will identify relevant stakeholders, provide opportunities for community participation and establish a process for recording, considering and responding to feedback during the next stages of the project.

7.3. Indigenous consultation

The subject land is covered by an approved Cultural Heritage Management Plan, CHMP 11474, prepared for the former business park proposal. The approved CHMP remains applicable to the proposed development as the nature and extent of the proposed works are consistent with those previously assessed. During the planning process, Hume City Council consulted with the Registered Aboriginal Party, the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation, which confirmed that the existing CHMP could continue to be relied upon for the proposed development and did not require updating. The Proponent intends to continue engagement with the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation as the project progresses and key statutory approvals are finalised.

7.4. Economic costs and benefits

An Economic Benefits Assessment prepared by Urbis in December 2025 considered the anticipated economic contribution of the development during both construction and operation. The total investment value of the development is **$4.3 billion**. Over the anticipated 10-year construction period, the development is estimated to generate annual Gross Value Added to the Victorian economy of approximately **$292 million in direct benefits** and **$255 million in indirect benefits**, representing a total annual contribution of approximately **$547 million**. These benefits reflect the direct activity associated with development and operation of the project, together with indirect economic activity generated through the broader supply chain and economy.

7.5. Employment opportunities

The Economic Benefits Assessment also considered the employment contribution of the project. The development is estimated to support an average of approximately **1,605 full-time equivalent jobs per annum during construction** and approximately **1,680 ongoing full-time equivalent positions** at full occupation, comprising direct and indirect jobs. Potential local benefits include employment, local procurement, skills development and apprenticeship opportunities, with these opportunities to be further developed through project delivery and stakeholder engagement.

8. Environmental record

The proponent has provided the following information.

8.1. Proponent environmental record

AirTrunk MEL3 Pty Ltd (ACN 691 778 104) as trustee for AirTrunk MEL3 Land Trust (ABN 92 254 743 721) is the Proponent for the proposed action. The Proponent is not subject to, and has not faced, enforcement action for non-compliance with Commonwealth, State or Territory environmental/conservation laws or regulations in Australia, and is not aware of any pending enforcement action. This position is consistent with the Proponent's existing public environmental reporting. In its FY24 Climate and Nature-related Risks Report, the Proponent reported that it had not incurred any fines or penalties in relation to its reported nature-related metrics and described its approach to compliance with applicable environmental requirements, including compliance with local noise limits during construction and operation.

Environmental governance and accountability: The Proponent's environmental record is supported by established environmental management, governance, monitoring and reporting frameworks. The Proponent identifies environmental risks, establishes measurable targets, monitors performance and publicly reports progress. Its sustainability strategy includes defined commitments covering energy transition, Net Zero carbon, water resilience, nature and biodiversity stewardship and waste management. Environmental and sustainability performance is overseen through formal governance arrangements, with Board oversight supported by executive management, specialist sustainability functions and dedicated working groups.

Measurement, reporting and assurance: The Proponent voluntarily publishes annual sustainability reporting and reports its objectives, targets and performance against recognised sustainability frameworks. Its 2025 financial year Sustainability Report was prepared in accordance with the Global Reporting Initiative Universal Standards 2021, with reference to other recognised sustainability and climate and nature reporting frameworks. Selected environmental performance indicators are subject to independent assurance, including Scope 1, Scope 2 and Scope 3 greenhouse gas emissions, Power Usage Effectiveness, Water Usage Effectiveness, total energy consumption, renewable energy percentage and water withdrawal. The Proponent also publicly reports performance against defined environmental targets. In the 2025 financial year, this included a portfolio operating Power Usage Effectiveness of 1.32, 72% renewable energy matching, a portfolio Water Usage Effectiveness of 0.89 litres per kilowatt-hour, biodiversity assessments for 100% of new sites and seven nature conservation or restoration projects across four markets.

Environmental management systems: The Proponent's operational data centres maintain certification under ISO 14001 Environmental Management Systems. During the 2025 financial year, all new operational sites achieved certification and existing operational sites maintained certification through recertification audits. The Proponent also reported zero non-conformities across completed ISO 14001 environmental management, ISO 9001 quality management and ISO 45001 occupational health and safety management system audits in the 2025 financial year.

Environmental compliance in practice: The Proponent's MEL1 campus in Melbourne provides an example of implementation of project-specific environmental approval requirements. Approved works at MEL1 affected 2.444 hectares of critically endangered Natural Temperate Grassland of the Victorian Volcanic Plain and the same area of Striped Legless Lizard habitat. In accordance with applicable

environmental requirements, a 10.5-hectare offset area was secured and is subject to ongoing ecological management. Management requirements include measures addressing matters such as weeds, biomass and rabbit activity. Where management issues were identified, corrective land-management measures were implemented. The applicable clearance, offset and management requirements were recorded as compliant for the 2024–25 reporting period, with ongoing management continuing through to 2030. This demonstrates the Proponent's implementation and ongoing management of environmental obligations beyond the initial approval and construction phase.

Nature and biodiversity stewardship: The Proponent's environmental approach also extends beyond project-specific statutory compliance. They have adopted the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD) to assess nature-related dependencies, impacts, risks and opportunities across its portfolio and value chain. Its nature-related targets include conducting biodiversity assessments for 100% of new sites and undertaking nature conservation or restoration projects to contribute to local biodiversity, ecosystem health and community wellbeing. They also work with environmental organisations to support ecological restoration and biodiversity conservation. Its longstanding partnership with the Foundation for National Parks & Wildlife has supported biodiversity and restoration initiatives in Australia, including habitat restoration and threatened-species outcomes. Victorian initiatives include restoration of Western Melbourne grasslands and woodlands to strengthen habitat corridors for threatened species, as well as work to establish a regional seedbank with the Wadawurrung Traditional Owners. They also support Greening Australia's ReWilding Sydney program, which seeks to restore bushland and strengthen biodiverse habitat corridors; Landcare's WildSeek initiative, which uses drone technology, data analysis and local knowledge to improve identification and monitoring of native species and weeds, including work in Gippsland, Victoria; and the Murray Darling Wetland Working Group, supporting restoration of wetland complexes in Victoria and New South Wales to improve habitat and ecological resilience. Citizens of the Reef is also supported, which uses technology and citizen-science data to improve monitoring and conservation of coral reef ecosystems. These initiatives are separate from the Proponent's statutory environmental obligations and demonstrate a broader commitment to environmental stewardship and continuous improvement.

The Proponent will apply this environmental management approach to the proposed development. Environmental risks and obligations will be incorporated into project design, construction management, statutory compliance, monitoring and reporting. The works will be managed and overseen by suitably qualified engineers, environmental professionals and project managers. Specialist environmental consultants will be retained as required to provide technical advice, environmental supervision, monitoring and statutory reporting. Contractors will be required to implement applicable project-specific environmental management plans and approval requirements as part of the construction contract documentation. Compliance will be monitored throughout construction and operation, as applicable, to ensure environmental impacts and statutory obligations are appropriately managed.

8.2. Permit application proceedings

Addressed in Section 8.1 above.

8.3. Executive officers

N/A

8.4. Parent body/ subsidiary environmental record

AirTrunk Australia Holding Pty Ltd (ABN 50 616 379 232) is the relevant parent entity for AirTrunk MEL3 Pty Ltd (ACN 691 778 104) as trustee for AirTrunk MEL3 Land Trust (ABN 92 254 743 721). AirTrunk Australia Holding Pty Ltd is not subject to, and has not faced, enforcement action for non-compliance with Commonwealth, State or Territory environmental/conservation laws or regulations in Australia, and is not aware of any pending enforcement action.

9. Conclusion

The assessment determined that it is likely that the project will result in a significant impact on two MNES — NTGVVP (listed ecological community) and SHWTLP (listed ecological community) that will be offset through a third-party agreement. Impacts to Matted Flax-lily (listed flora species) are mitigated through the implementation of a salvage and translocation plan. No impacts are anticipated on River Swamp Wallaby Grass (listed flora species), Striped Legless Lizard (listed fauna species) or Growling Grass Frog (listed fauna species) as surveys in recent years have not detected a population on the study area.

The study area is part of a larger area designated for industrial use and zoned for urban development. As such, the development is consistent with Victorian policy being located within a state-identified area for industrial use, and development is further supported by Hume City Council.

Though zoned industrial, consideration has been given to the significant ecological values which occur within the study area. These values have been incorporated into the project decision making and has resulted in the establishment of two reserves to enhance and protect these values. These reserves were sited for retention early in the design process. If this project does not proceed, another will take its place. The layout has been carefully designed with consideration to MNES, as described below.

Avoidance, mitigation and management measures will be followed including:

- Establishment of a permanently protected Conservation Reserve within the study area, retaining a portion of the NTGVVP and SHWTLP
- Salvage of all Matted Flax-lily detected on the study area outside of the Conservation Reserve during a comprehensive pre-clearance survey before construction. Transfer salvaged individuals to a nursery for propagation then translocate to the NTGVVP (Matted Flax-lily) offset site.
- Appropriate offsetting of all listed matters and native vegetation likely to be impacted by the project
- Detailed construction and conservation management plans created and adhered to, to avoid impacts other than those described and to protect and enhance retained areas of MNES.

The proponent acknowledges that the proposed action will lead to significant impacts to MNES values. The proposal has been carefully developed to avoid impacts on MNES, where possible, to mitigate such impacts and to offset residual significant impacts. Taking account of these steps, the scale of the residual impacts given the context of the site, as well as the requirement for offsetting and for salvage and translocation, these impacts are appropriately mitigated. The proponent has shown the proposal actively meets the principles of Ecologically Sustainable Development and has a broader commitment that its presence within the community should deliver positive and enduring outcomes. With the implementation of the mitigation strategies proposed, and adherence to the commitments in the Conservation Management Plan, Translocation Plan, and Offset Management Strategy, it is considered the proposed action responds to and aligns with relevant policies and guidelines and should be approved.

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Appendix 1: Historical records of threatened flora and fauna within 10 km of the study area

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Matted Flax-lily *(Dianella amoena)*				
Dianella amoena	Endangered	John Laffan Reserve East end of site on escarpment, below metal pile.	2020	Charlotte Wood
Dianella amoena	Endangered	Aitken Creek - Hothlyn Remnant middle of site in front of dead tree and next to large p	2020	Cameron Walls
Dianella amoena	Endangered	Wollert Compressor Station 700m S of Summerhill Rd, Wollert	2020	Michael Longmore
Dianella amoena	Endangered	Amaroo Business Park Amaroo	2020	Sarah Hilliar
Dianella amoena	Endangered	Amaroo Business park Between Hume FWY and Amaroo Road, Craigieburn	2020	Renee Woodward
Dianella amoena	Endangered	Amaroo Business park Between Hume FWY and Amaroo Road, Craigieburn	2020	Renee Woodward
Dianella amoena	Endangered	GSM Conservation Reserve, Craigieburn and Greenvale GSM Conservation Reserve, C	2020	Sandra Mijatovic
Dianella amoena	Endangered	APA Wollert Gas Compressor Station Back paddock APA	2020	Christopher Geary
Dianella amoena	Endangered	Amaroo Business Park Amaroo	2020	Management Committee Merri Creek
Dianella amoena	Endangered	Aitken Creek - Hothlyn Remnant middle of site in close to wahelenbergia leutiola patc	2020	Catherine Costello
Dianella amoena	Endangered	WORM Ecology WORM	2020	Management Committee Merri Creek
Dianella amoena	Endangered	Aitken Creek - Hothlyn Remnant middle of site south of a none indig angophra. staked	2020	Staff SMEC
Dianella amoena	Endangered	Wollert Compressor Station 1.2km south of Summerhill Rd. North of drystone wall, ea	2019	Phillipa Jones
Dianella amoena	Endangered	Wollert Compressor Station 1.2km south of Summerhill Rd. North of drystone wall, ea	2019	Sophie Lavence
Dianella amoena	Endangered	Growling Grass Frog Nature Reserve, Craigieburn Growling Grass Frog Nature Reserve	2019	National Herbarium Victoria
Dianella amoena	Endangered	565 Old Sydney Road, Beveridge 8km SW of Wallan	2018	Justin Sullivan
Dianella amoena	Endangered	29w Amarath Circuit, Epping Victoria 3076, Australia 29w Amarath Circuit, Epping Vic	2018	Geordie Scott-Walker
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Malcolm Creek Nature Reserve, Craigieburn Malcolm Creek Nature Reserve, Malcolm	2017	Matt Hatton
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Mt Ridley Nature Reserve, Mickleham Mt Ridley Nature Reserve, Heritage Way, Mickle	2017	Bradley Jenner
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Burt-Kir-Min Nature Reserve, Craigieburn Burt-Kir-Min Nature Reserve, Champion Par	2017	Sandra Mijatovic
Dianella amoena	Endangered	Eucalyptus Court Nature Reserve, Mickleham Eucalyptus Court Nature Reserve, Euca	2017	Sandra Mijatovic
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Aurora WOLLERT	2017	John Loschiavo
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Forest Red Gum Nature Reserve, Mickleham Forest Red Gum Nature Reserve, Arcadia	2017	Charlotte Wood
Dianella amoena	Endangered	Kalkallo Common North, Kalkallo (Site 43) Kalkallo Common North, Kalkallo (Site 43),	2017	John Loschiavo
Dianella amoena	Endangered	Dianella amoena Aurora	2017	BIOSIS Research Pty Ltd

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Matted Flax-lily *(Dianella amoena)*				
Dianella amoena	Endangered	Aitken Creek Remnant Nature Reserve (Site 319) Aitken Creek Remnant Nature Reser	2016	Sandra Mijatovic
Dianella amoena	Endangered	Amberfield Grassland, Craigieburn (Site 10) Amberfield Grassland, Craigieburn (Site 1	2016	Sandra Mijatovic
Dianella amoena	Endangered	Parkway Offset Reserve, Mickleham (Site 119) Parkway Offset Reserve, Mickleham (Si	2016	Matt Hatton
Dianella amoena	Endangered	Bardwell Triangle, Oaklands Junction (Site 41) Bardwell Triangle, Oaklands Junction (S	2016	Sandra Mijatovic
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Woodland Grove Grassland Reserve Woodland Grove Grassland Reserve, Craigieburn	2015	Brett Macdonald
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	Steve Sinclair
Dianella amoena	Endangered	Conservation Area 24 Kalkallo Common Grassland Reserve, Kalkallo	2015	BIOSIS Research Pty Ltd
Dianella amoena	Endangered	Withheld	2015	Withheld
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2014	Brian Bainbridge
Dianella amoena	Endangered	Forest Red Gum Accessible from Forest Red Gum Drive or Arcadia Avenue, Mickleham	2014	Geordie Scott-Walker
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2014	Brian Bainbridge
Dianella amoena	Endangered	Eucalyptus Court Accessible from Eucalyptus Court, Mickleham	2014	Geordie Scott-Walker
Dianella amoena	Endangered	Mount Ridley Accessible via Eucalyptus Court and Mt Ridley Road and via east-west al	2014	Geordie Scott-Walker
Dianella amoena	Endangered	Kalkallo Commons North Accessible from Pearson, Dwyer, Mitchell and Yaldwin stree	2014	Geordie Scott-Walker
Dianella amoena	Endangered	Kalkallo Commons South Accessible from Hunter and Dwyer streets, Kalkallo	2014	Geordie Scott-Walker
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2014	Brian Bainbridge
Dianella amoena	Endangered	Craigieburn Grassland Grassland	2014	Tamara Karner
Dianella amoena	Endangered	Reserve 12 Epping	2013	Belinda Stevens
Dianella amoena	Endangered	T2537100 T2537100	2013	Steve Mueck
Dianella amoena	Endangered	615 Old Hume Highway, Beveridge 615 Old Hume Highway, Beveridge	2013	Andrew Hill
Dianella amoena	Endangered	Reserve 13 Epping	2013	Belinda Stevens
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2013	Michael Longmore
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2013	Michael Longmore
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2013	Michael Longmore
Dianella amoena	Endangered	Kalkallo Common grassland Kalkallo Common	2013	Michael Longmore
Dianella amoena	Endangered	Kalkallo Common grassland Kalkallo Common	2013	Michael Longmore
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2013	Michael Longmore
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2013	Steve Mueck
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2013	Michael Longmore
Dianella amoena	Endangered	T2531900 T2531900	2011	Steve Mueck
Dianella amoena	Endangered	1285 Donnybrook Road, Donnybrook 1285 Donnybrook Road, Donnybrook	2011	Andrew Hill
Dianella amoena	Endangered	T2532000 T2532000	2011	Steve Mueck
Dianella amoena	Endangered	9172.4 Beveridge	2011	Rachel Omodei

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Matted Flax-lily *(Dianella amoena)*				
Dianella amoena	Endangered	9172.4 Beveridge	2011	Rachel Omodei
Dianella amoena	Endangered	9172.4 Beveridge	2011	Steve Mueck
Dianella amoena	Endangered	Lockerbie PSP Kalkallo 40 km north of Melbourne. The study area is bounded to the ea	2011	Brian Bainbridge
Dianella amoena	Endangered	9172.4 Beveridge	2011	Staff SMEC
Dianella amoena	Endangered	9172.4 Beveridge	2011	Steve Sinclair
Dianella amoena	Endangered	T2533600 T2533600	2011	Management Committee Merri Creek
Dianella amoena	Endangered	1300 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1482 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1301 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1303 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	I2827800 Centre about 272 m ESE of WOLLERT	2010	Staff SMEC
Dianella amoena	Endangered	1297 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1302 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1307 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	I2826300 Centre about 3 km NE of MICKLEHAM	2010	Staff SMEC
Dianella amoena	Endangered	1304 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1483 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1309 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1310 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1308 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1295 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1296 Somerton	2010	Catherine Costello
Dianella amoena	Endangered	1481 Somerton	2010	Management Committee Merri Creek
Dianella amoena	Endangered	1305 Somerton	2010	John Loschiavo
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2010	Catherine Costello
Dianella amoena	Endangered	1299 Somerton	2010	Bianca Aquilina
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2010	John Loschiavo
Dianella amoena	Endangered	I2826200 Centre about 3 km NE of MICKLEHAM	2010	Matt Hatton
Dianella amoena	Endangered	I2826100 Centre about 3 km NE of MICKLEHAM	2010	Cameron Walls
Dianella amoena	Endangered	1484 Somerton	2010	John Loschiavo
Dianella amoena	Endangered	1298 Somerton	2010	Katherine Nelson
Dianella amoena	Endangered	1306 Somerton	2010	John Loschiavo
Dianella amoena	Endangered	Balyang Wy Grassland between Balyang Wy and the C'burn Public Golfcourse, Craigel	2009	Bianca Aquilina
Dianella amoena	Endangered	Kalkallo Common Kalkallo Common grassland, Malcolm St, Kalkallo	2009	Brian Bainbridge
Dianella amoena	Endangered	I2817300 Centre about 1 km ESE of KALKALLO	2009	Staff SMEC
Dianella amoena	Endangered	I2813600 Centre about 3 km NE of MICKLEHAM	2009	Staff SMEC
Dianella amoena	Endangered	I2816900 Centre about 1 km SSE of KALKALLO	2009	Staff SMEC
Dianella amoena	Endangered	I2816100 Centre about 1 km SSE of KALKALLO	2009	Staff SMEC
Dianella amoena	Endangered	I2814500 Centre about 3 km NE of MICKLEHAM	2009	Staff SMEC
Dianella amoena	Endangered	I2815800 Centre about 1 km SSE of KALKALLO	2009	Staff SMEC

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Matted Flax-lily *(Dianella amoena)*				
Dianella amoena	Endangered	I2818300 Centre about 1 km SSE of KALKALLO	2009	Staff SMEC
Dianella amoena	Endangered	I2816000 Centre about 1 km SSE of KALKALLO	2009	Brian Bainbridge
Dianella amoena	Endangered	T2491900 Centre about 4 km SSW of MERRIANG	2009	Staff SMEC
Dianella amoena	Endangered	I2816800 Centre about 1 km SSE of KALKALLO	2009	Andrew Hill
Dianella amoena	Endangered	I2816500 Centre about 1 km SSE of KALKALLO	2009	Brett Macdonald
Dianella amoena	Endangered	I2778300 Centre about 2 km NE of CRAIGIEBURN	2008	Staff SMEC
Dianella amoena	Endangered	T2489900 Centre about 454 m NW of KALKALLO	2008	Brian Bainbridge
Dianella amoena	Endangered	T2478000 Centre about 4 km ENE of SOMERTON	2007	Katherine Nelson
Dianella amoena	Endangered	E1167000 Centre about 4 km NNE of DONNYBROOK	2005	Lisa Crowfoot
Dianella amoena	Endangered	E1167200 Centre about 4 km NNE of DONNYBROOK	2005	Management Committee Merri Creek
Dianella amoena	Endangered	E1177100 Centre about 2 km NE of CRAIGIEBURN	2005	Geordie Scott-Walker
Dianella amoena	Endangered	T0609800 Centre about 1 km E of CRAIGIEBURN	2004	Management Committee Merri Creek
Dianella amoena	Endangered	T2441800 Centre about 1 km SE of CRAIGIEBURN	2003	Catherine Costello
Dianella amoena	Endangered	T2441900 Centre about 1 km SE of CRAIGIEBURN	2003	Catherine Costello
Dianella amoena	Endangered	2211238A Centre about 1 km NW of CRAIGIEBURN	2003	National Herbarium Victoria
Dianella amoena	Endangered	T2425300 Centre about 4 km WSW of WOLLERT	2001	Catherine Costello
Dianella amoena	Endangered	E2253500 Centre about 4 km ENE of SOMERTON	2001	Catherine Costello
Dianella amoena	Endangered	T2426000 Centre about 4 km E of SOMERTON	2001	Catherine Costello
Dianella amoena	Endangered	T2425600 Centre about 3 km SW of WOLLERT	2001	Catherine Costello
Dianella amoena	Endangered	T2425400 Centre about 4 km WSW of WOLLERT	2001	Belinda Stevens
Dianella amoena	Endangered	T2425500 Centre about 3 km SW of WOLLERT	2001	Staff SMEC
Dianella amoena	Endangered	T2425900 Centre about 4 km E of SOMERTON	2001	Andrew Hill
Dianella amoena	Endangered	T2413600 Centre about 3 km NW of EPPING	2000	Catherine Costello
Dianella amoena	Endangered	Dianella amoena Population 2 Broad rise, approximately 60m from eastern boundary	2000	James Ross
Dianella amoena	Endangered	T2413900 Centre about 4 km ENE of SOMERTON	2000	Catherine Costello
Dianella amoena	Endangered	E0481600 Centre about 3 km NE of SOMERTON	2000	Doug Frood
Dianella amoena	Endangered	T0083100 Centre about 3 km NW of MICKLEHAM	1998	John Stewart
Dianella amoena	Endangered	2016760A Centre about 4 km NNW of CRAIGIEBURN	1992	Geordie Scott-Walker
River Swamp Wallaby-grass *(Amphibromus fluitans)*				
Amphibromus fluitans	Vulnerable	Mt Ridley Nature Reserve, Mickleham Mt Ridley Nature Reserve, Heritage Way, Mickle	2017	Bradley Jenner
Amphibromus fluitans	Vulnerable	E1504500 Centre about 1 km E of SOMERTON	1989	Jane Marks
Amphibromus fluitans	Vulnerable	T0934200 Centre about 3 km ESE of MICKLEHAM	2008	Lisa Crowfoot
Amphibromus fluitans	Vulnerable	GSM Conservation Reserve, Craigieburn and Greenvale GSM Conservation Reserve, C	2020	Sandra Mijatovic
Amphibromus fluitans	Vulnerable	Forest Red Gum Nature Reserve, Mickleham Forest Red Gum Nature Reserve, Arcadia	2017	Sandra Mijatovic
Striped Legless Lizard *(Delma impar)*				
Delma impar	Vulnerable	WOODY HILL	1991	Cam Beardsell
Delma impar	Vulnerable	Withheld	1990	Withheld
Delma impar	Vulnerable	WITHIN 2 KM OF HUME HIGHWAY	1988	Staff Staff of DNRE Region Orbost

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog *(Litoria raniformis)*				
Litoria raniformis	Vulnerable	MRPV Craigieburn Rd East Private property, waterbody on Findon Creek	2022	Kelly Dalton
Litoria raniformis	Vulnerable	Withheld	2022	Withheld
Litoria raniformis	Vulnerable	Withheld	2021	Withheld
Litoria raniformis	Vulnerable	Withheld	2021	Withheld
Litoria raniformis	Vulnerable	Withheld	2021	Withheld
Litoria raniformis	Vulnerable	Withheld	2021	Withheld
Litoria raniformis	Vulnerable	Withheld	2021	Withheld
Litoria raniformis	Vulnerable	Withheld	2020	Withheld
Litoria raniformis	Vulnerable	Withheld	2020	Withheld
Litoria raniformis	Vulnerable	Withheld	2020	Withheld
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, approx. 900 m E of Stanley Dr intersection with Sy	2019	David De Angelis
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, approx. 800 m E of Sydney Rd, Somerton	2019	David De Angelis
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, approx. 800 m E of Sydney Rd, Somerton	2019	David De Angelis
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, approx. 800 m E of Sydney Rd, Somerton	2019	David De Angelis
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, approx. 900 m E of Stanley Dr intersection with Sy	2019	David De Angelis
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, approx. 800 m E of Sydney Rd, Somerton	2019	David De Angelis
Litoria raniformis	Vulnerable	Withheld	2019	Withheld
Litoria raniformis	Vulnerable	Withheld	2019	Withheld
Litoria raniformis	Vulnerable	Withheld	2019	Withheld
Litoria raniformis	Vulnerable	100 Kinnear Road, Mickleham Deep Creek, private property	2018	Hannah Nicholas
Litoria raniformis	Vulnerable	Withheld	2018	Withheld
Litoria raniformis	Vulnerable	Withheld	2018	Withheld
Litoria raniformis	Vulnerable	SWP Frog Court Craigieburn	2017	Brendan Casey
Litoria raniformis	Vulnerable	16122.5 495 Old Sydney Road, Beveridge	2017	Teisha Sloane
Litoria raniformis	Vulnerable	Merri Creek above O'Herns Rd Merri Creek	2017	Brendan Casey
Litoria raniformis	Vulnerable	16122.5 495 Old Sydney Road, Beveridge	2017	Teisha Sloane
Litoria raniformis	Vulnerable	16122.5 495 Old Sydney Road, Beveridge	2017	Teisha Sloane
Litoria raniformis	Vulnerable	100 Kinnear Road, Mickleham Deep Creek, private property	2017	Hannah Nicholas
Litoria raniformis	Vulnerable	16122.5 495 Old Sydney Road, Beveridge	2017	Teisha Sloane
Litoria raniformis	Vulnerable	Oherns Road, Epping, Victoria 3076, Australia Oherns Road, Epping, Victoria 3076, Au	2017	Teisha Sloane
Litoria raniformis	Vulnerable	old quarry hole Epping	2017	Brendan Casey
Litoria raniformis	Vulnerable	Withheld	2017	Withheld
Litoria raniformis	Vulnerable	Withheld	2017	Withheld
Litoria raniformis	Vulnerable	Withheld	2017	Withheld
Litoria raniformis	Vulnerable	Growling Grass Frog Habitat Pond Eaststone Avenue Wollert	2016	Daniel Gilmore
Litoria raniformis	Vulnerable	Withheld	2016	Withheld
Litoria raniformis	Vulnerable	Withheld	2016	Withheld
Litoria raniformis	Vulnerable	Withheld	2016	Withheld
Litoria raniformis	Vulnerable	Withheld	2016	Withheld
Litoria raniformis	Vulnerable	Withheld	2016	Withheld
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2015	Sally Koehler
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, Somerton	2015	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, Somerton	2015	Geoffrey Heard

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog	***(Litoria raniformis)***			
Litoria raniformis	Vulnerable	Merri Creek, Somerton Merri Creek, Somerton	2015	Geoffrey Heard
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2015	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2015	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2015	Sally Koehler
Litoria raniformis	Vulnerable	Withheld	2015	Withheld
Litoria raniformis	Vulnerable	Withheld	2015	Withheld
Litoria raniformis	Vulnerable	Withheld	2015	Withheld
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2014	Sally Koehler
Litoria raniformis	Vulnerable	Withheld	2014	Withheld
Litoria raniformis	Vulnerable	Withheld	2014	Withheld
Litoria raniformis	Vulnerable	O'Herns Swamp, Epping Ephemeral swamp 1.5 km E of O'Herns Road intersection wit	2013	David De Angelis
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2013	Sally Koehler
Litoria raniformis	Vulnerable	Dam adjacent to Tesselar Road Wollert	2013	Daniel Gilmore
Litoria raniformis	Vulnerable	Craigieburn Frog Court	2013	Daniel Gilmore
Litoria raniformis	Vulnerable	Konagaderra Reserve, Mickleham Large reserve along Deep Creek bisected by Konaga	2013	Clare McCutcheon
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2013	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2013	Anthony Byrne
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2013	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2013	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2013	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2013	Sally Koehler
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Epping North	2013	Sally Koehler
Litoria raniformis	Vulnerable	Withheld	2013	Withheld
Litoria raniformis	Vulnerable	Withheld	2013	Withheld
Litoria raniformis	Vulnerable	Withheld	2013	Withheld
Litoria raniformis	Vulnerable	Withheld	2013	Withheld
Litoria raniformis	Vulnerable	Withheld	2013	Withheld
Litoria raniformis	Vulnerable	Edgars Creek Edgars Creek approximately 500m upstream of Eaststone Avenue, Eppi	2012	Anthony Byrne
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2012	Anthony Byrne
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2012	Mark Venosta
Litoria raniformis	Vulnerable	Aurora Eaststone Avenue, Wollert	2012	Sally Koehler
Litoria raniformis	Vulnerable	Growling Grass Frog Dam Wollert	2011	Daniel Gilmore
Litoria raniformis	Vulnerable	Edgars Creek off harvest Home Road at Aurora Housing Development at Epping	2011	Anthony Byrne
Litoria raniformis	Vulnerable	Edgars Creek off harvest Home Road at Aurora Housing Development at Epping	2011	Anthony Byrne
Litoria raniformis	Vulnerable	Growling Grass Frog Dam Wollert	2011	Daniel Gilmore
Litoria raniformis	Vulnerable	Edgars Creek off harvest Home Road at Aurora Housing Development at Epping	2011	Anthony Byrne
Litoria raniformis	Vulnerable	Edgars Creek off harvest Home Road at Aurora Housing Development at Epping	2011	Anthony Byrne

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog	***(Litoria raniformis)***			
Litoria raniformis	Vulnerable	Edgars Creek off harvest Home Road at Aurora Housing Development at Epping	2011	Anthony Byrne
Litoria raniformis	Vulnerable	Growling Grass Frog Dam Wollert	2011	Daniel Gilmore
Litoria raniformis	Vulnerable	Edgars Creek off harvest Home Road at Aurora Housing Development at Epping	2011	Anthony Byrne
Litoria raniformis	Vulnerable	Withheld	2011	Withheld
Litoria raniformis	Vulnerable	Cooper St; Epping	2010	Peter Homan
Litoria raniformis	Vulnerable	City of Whittlesea quarry, Epping City of Whittlesea quarry, 1 km north of Cooper Stree	2010	David De Angelis
Litoria raniformis	Vulnerable	Cooper St; Epping	2010	Peter Homan
Litoria raniformis	Vulnerable	Growling Grass Frog Dam Wollert	2010	Daniel Gilmore
Litoria raniformis	Vulnerable	Craigieburn stormwater pond adjacent to Merri Crk	2010	Danielle Klomp
Litoria raniformis	Vulnerable	Growling Grass Frog Dam Wollert	2010	Daniel Gilmore
Litoria raniformis	Vulnerable	GAA Project Area	2010	Staff SMEC
Litoria raniformis	Vulnerable	Growling Grass Frog Dam Wollert	2010	Daniel Gilmore
Litoria raniformis	Vulnerable	Cooper St; Epping	2010	Peter Homan
Litoria raniformis	Vulnerable	GAA Project Area	2010	Staff SMEC
Litoria raniformis	Vulnerable	GAA Project Area	2010	Staff SMEC
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2010	Daniel Gilmore
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2010	Daniel Gilmore
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2010	Daniel Gilmore
Litoria raniformis	Vulnerable	GAA Project Area	2010	Staff SMEC
Litoria raniformis	Vulnerable	GAA Project Area	2010	Staff SMEC
Litoria raniformis	Vulnerable	Frog Court, Craigieburn Stormwater pond at the east end of Frog Court, Craigieburn	2010	David De Angelis
Litoria raniformis	Vulnerable	Frog Court, Craigieburn Stormwater pond at the east end of Frog Court, Craigieburn	2010	David De Angelis
Litoria raniformis	Vulnerable	Storm water pond, Craigieburn	2010	Brendan Casey
Litoria raniformis	Vulnerable	Storm water pond, Craigieburn	2010	Brendan Casey
Litoria raniformis	Vulnerable	COW Quarry About 18kms north of Melbourne CBD	2010	Peter Homan
Litoria raniformis	Vulnerable	COW Quarry About 18kms north of Melbourne CBD	2010	Peter Homan
Litoria raniformis	Vulnerable	COW Quarry About 18kms north of Melbourne CBD	2010	Peter Homan
Litoria raniformis	Vulnerable	Storm water ponds 100 E of Gasoline way Craigieburn	2009	Brendan Casey
Litoria raniformis	Vulnerable	GAA Project Area	2009	Staff SMEC
Litoria raniformis	Vulnerable	GAA Project Area	2009	Staff SMEC
Litoria raniformis	Vulnerable	GAA Project Area	2009	Staff SMEC
Litoria raniformis	Vulnerable	GAA Project Area	2009	Staff SMEC
Litoria raniformis	Vulnerable	Old quarry hole, adjacent O'Henry Rd Wetlands	2009	Brendan Casey
Litoria raniformis	Vulnerable	Aurora GGF farm dam	2009	Nathan Garvey
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2009	Daniel Gilmore
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2009	Daniel Gilmore
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2009	Daniel Gilmore
Litoria raniformis	Vulnerable	City of Whittlesea Quarry City of Whittlesea Quarry	2009	Daniel Gilmore
Litoria raniformis	Vulnerable	GAA Project Area	2009	Staff SMEC
Litoria raniformis	Vulnerable	Merri Creek: end of O'Herns Rd., Epping	2009	David De Angelis
Litoria raniformis	Vulnerable	COW Quarry About 18 kms north of Melbourne CBD	2009	Peter Homan
Litoria raniformis	Vulnerable	COW Quarry About 18 kms north of Melbourne CBD	2009	Peter Homan
Litoria raniformis	Vulnerable	COW Quarry About 18 kms north of Melbourne CBD	2009	Peter Homan
Litoria raniformis	Vulnerable	Merri Creek: end of O'Herns Rd., Epping	2009	David De Angelis

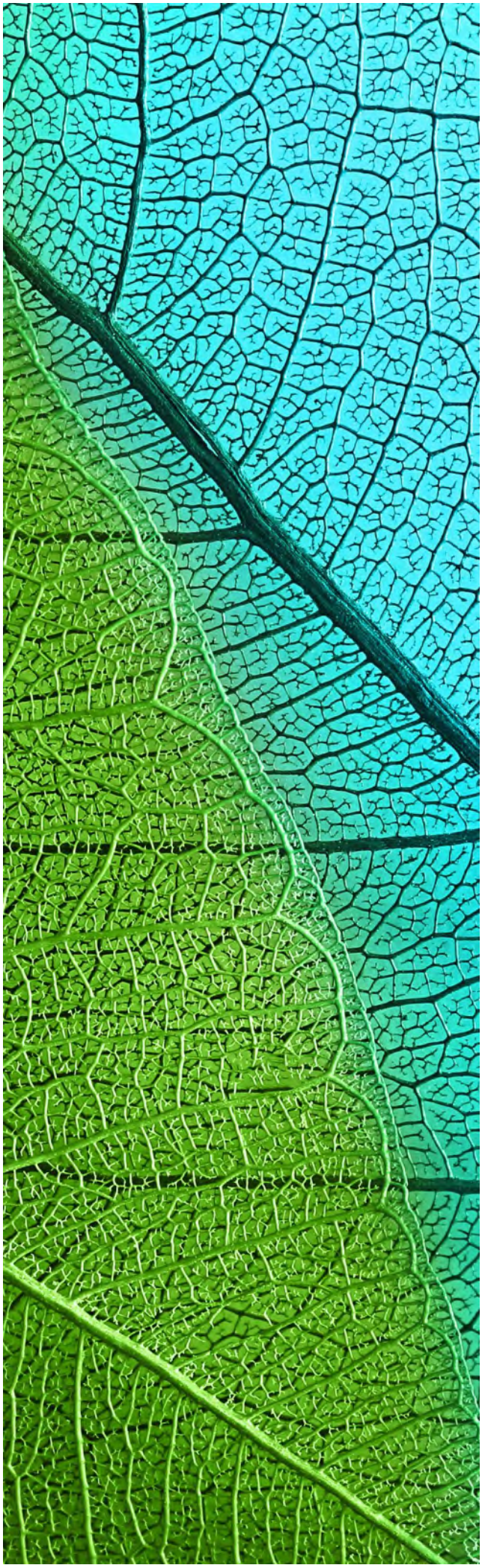
Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog	***(Litoria raniformis)***			
Litoria raniformis	Vulnerable	Aurora GGF farm dam	2009	Nathan Garvey
Litoria raniformis	Vulnerable	Beveridge passing lane 2, Sydney Melbourne rail line, Beveridge	2009	Peter Myroniuk
Litoria raniformis	Vulnerable	GAA Project Area	2009	Staff SMEC
Litoria raniformis	Vulnerable	Merri Creek; about 20m downstream of O'Hearn;'s Rd; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri creek; 50m upstream of junction with Curly Sedge Creek	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri creek; 500m downstream of junction with Curly Sedge Creek	2008	Brendan Casey
Litoria raniformis	Vulnerable	Aurora GGF farm dam	2008	Naomi O'Brien
Litoria raniformis	Vulnerable	Storm water Ponds; about 100m E of Gasoline Way; Craigieburn	2008	Brendan Casey
Litoria raniformis	Vulnerable	Aurora GGF farm dam	2008	Sally Koehler
Litoria raniformis	Vulnerable	Merri Creek; E of Gasoline Way; Craigieburn	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri Creek; about 20m downstream of O'Hearn;'s Rd; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Storm water Ponds; about 100m E of Gasoline Way; Craigieburn	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri Creek; about 20m downstream of the O'Hearns Rd causewayu; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Aurora GGF farm dam	2008	Nathan Garvey
Litoria raniformis	Vulnerable	Merri Creek; E of Patullos Rd; Craigieburn	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri Creek; about 250m below O'Herns Rd; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Aurora GGF farm dam	2008	Katrina Sofo
Litoria raniformis	Vulnerable	Merri Creek; about 20m downstream of O'Herns road; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri Creek; about 120m upstream of the O'Hearn's Road causeway; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Merri Creek; about 120m upstream of O'Hearns Rd; Somerton	2008	Brendan Casey
Litoria raniformis	Vulnerable	Waterbody north of Harvest Home Lane, Epping	2007	Ecology Australia
Litoria raniformis	Vulnerable	Merri Crk, below Patullos Lane	2007	Ecology Australia
Litoria raniformis	Vulnerable	Merri Crk, below the O'Hearn's Rd. causeway	2007	Ecology Australia
Litoria raniformis	Vulnerable	Merri Crk, pool upstream of O'Hearn's Rd.	2007	Ecology Australia
Litoria raniformis	Vulnerable	Merri Creek, Somerton North of causeway over the Merri Creek, approx. 800 m ENE of	2007	David De Angelis
Litoria raniformis	Vulnerable	Merri Crk, upstream below Freight Drive.	2006	Ecology Australia
Litoria raniformis	Vulnerable	Roadside	2006	Daniel Gilmore
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Merri Crk, below Patullos Lane	2006	Ecology Australia
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Donnybrook Rd & Hume Hwy: Kalkallo	2006	Katrina Sofo
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Merri Crk, pool upstream of O'Herns Rd.	2006	Ecology Australia
Litoria raniformis	Vulnerable	Water body north of Harvest Home Lane, Epping	2006	Ecology Australia
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Merri Crk, below the O'Herns Rd causeway	2006	Ecology Australia
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Donnybrook	2006	Mark Venosta
Litoria raniformis	Vulnerable	Merri Crk, upstream site below Freight Drive.	2005	Ecology Australia
Litoria raniformis	Vulnerable	O'Herns Swamp, Somerton	2005	Ecology Australia
Litoria raniformis	Vulnerable	Merri Crk, pool downstream of O'Herns Rd.	2005	Ecology Australia

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog	***(Litoria raniformis)***			
Litoria raniformis	Vulnerable	Merri Crk below the O'Herns Rd Causeway	2005	Ecology Australia
Litoria raniformis	Vulnerable	Waterbody north of Harvest Home Lane, Epping	2005	Ecology Australia
Litoria raniformis	Vulnerable	300 Hume Highway Craigieburn	2005	Katrina Roberg
Litoria raniformis	Vulnerable	Curly sedge Crk, 300 m upstream of O'Herns Rd.	2005	Ecology Australia
Litoria raniformis	Vulnerable	300 Hume Highway Craigieburn	2005	Luisa Macmillan
Litoria raniformis	Vulnerable	300 Hume Hwy: Craigieburn	2005	Daniel Gilmore
Litoria raniformis	Vulnerable	Merri Creek within 'Merriang Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek: downstream of Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Large waterbody within the Wollert Quarry	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Somerton	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Waterbody north of Harvest Home Lane: Epping	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Farm dam: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merriang Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Merriang	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merriang Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek below the trainline crossing: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Craigieburn	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Farm dam: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merriang Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Merriang	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek SE of Bald Hill	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Merriang	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Private Land North of Harvest Home Rd	2002	Sally Koehler
Litoria raniformis	Vulnerable	Merri Creek: upstream of Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: below Freight Dr	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek: downstream of Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Bald Hill, Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Merriang	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merri Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merri Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Somerton	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek below Patullos Lane	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merriang Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Quarry Hole: Bald Hill, Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Donnybrook	2002	Geoffrey Heard

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog	***(Litoria raniformis)***			
Litoria raniformis	Vulnerable	Merri Ck: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek: between O'Herns Rd and Patullos Lane	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek SE of Bald Hill	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek: Mineral Springs property, Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek below the trainline crossing: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Dam on Spring St: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: below Freight Dr	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek within 'Merri Park'	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Quarry hole: Wollert Landfill	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Kalkallo Creek at Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Pond at Craigieburn Nubrik	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek above the trainline crossing: Donnybrook	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek: downstream of Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Creek: upstream of Donnybrook Rd crossing	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Small pond: Wollert Landfill	2002	Geoffrey Heard
Litoria raniformis	Vulnerable	Withheld	2002	Withheld
Litoria raniformis	Vulnerable	Merri Ck: Somerton	2001	Geoffrey Heard
Litoria raniformis	Vulnerable	ROUGHLY 2 KM S OF HUME HIGHWAY	2001	Peter Robertson
Litoria raniformis	Vulnerable	Merri Creek Just Below O'Herns Road Crossing	2001	Brendan Casey
Litoria raniformis	Vulnerable	Merri Ck: Somerton	2001	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Somerton	2001	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Somerton	2001	Geoffrey Heard
Litoria raniformis	Vulnerable	SUMMER HILL	2001	Peter Robertson
Litoria raniformis	Vulnerable	SUMMER HILL	2001	Peter Robertson
Litoria raniformis	Vulnerable	SUMMER HILL	2001	Peter Robertson
Litoria raniformis	Vulnerable	Curley Sedge Ck: Somerton	2001	Geoffrey Heard
Litoria raniformis	Vulnerable	Merri Ck: Craigieburn	2001	Geoffrey Heard
Litoria raniformis	Vulnerable	ROUGHLY 2 KM S OF HUME HIGHWAY	2001	Peter Robertson
Litoria raniformis	Vulnerable	Merri Creek N Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek N Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek N Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek: beside Craigieburn Grasslands	2000	Nick Clemann
Litoria raniformis	Vulnerable	O'Hearns Rd	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Confluence Of Curly Sedge And Merri Creeks	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Curly Sedge Creek	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek N Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	O'Hearns Rd Between Curly Sedge and Merri Creeks	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Nubrick Property	2000	Brendan Casey
Litoria raniformis	Vulnerable	S end beside powerline	2000	Nick Clemann

Species or Community	EBPC listing	Location of record	Year recorded	Accuracy/notes/additional info/Collector Name
Growling Grass Frog	***(Litoria raniformis)***			
Litoria raniformis	Vulnerable	Merri Ck: O'Herns rd	2000	Nick Clemann
Litoria raniformis	Vulnerable	Merri Ck North Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Ck North Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek: beside Craigieburn Grasslands	2000	Nick Clemann
Litoria raniformis	Vulnerable	100M N Of O'Herns Road On Merri Creek	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek N Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	100M N Of O'Herns Road On Merri Creek	2000	Michael Scroggie
Litoria raniformis	Vulnerable	100M N Of O'Herns Road On Merri Creek	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Swamp Adjacent To O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Swamp 100m S of O'Hearns Rd	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek S Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	100m S of O'Hearns Rd	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Curly Sedge Creek	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Curly Sedge Creek 150m N of O'Hearns Rd	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Curly Sedge Creek 200m N of O'Hearns Rd	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Merri Creek About 20m Downstream of Summer Hill Rd	2000	Brendan Casey
Litoria raniformis	Vulnerable	Merri Creek North Of O'Herns Road	2000	Michael Scroggie
Litoria raniformis	Vulnerable	Boral Quarry: Donnybrook	1995	Sid Larwill
Litoria raniformis	Vulnerable	Boral Quarry: Donnybrook	1995	Sid Larwill
Litoria raniformis	Vulnerable	Braelands Wetlands: 2.4 km E of Donnybrook	1993	Sid Larwill
Litoria raniformis	Vulnerable	Braelands: Merri Creek, 3.5 km NE of Donnybrook	1993	Sid Larwill
Litoria raniformis	Vulnerable	ROUGHLY 2 KM SW OF WOODY HILL	1991	Cam Beardsell
Litoria raniformis	Vulnerable	WITHIN 2 KM OF BEVERIDGE	1991	Cam Beardsell
Litoria raniformis	Vulnerable	ROUGHLY 4 KM SSE OF HUME HIGHWAY	1991	Cam Beardsell
Litoria raniformis	Vulnerable	WITHIN 2 KM OF BEVERIDGE	1991	Cam Beardsell
Litoria raniformis	Vulnerable	ROUGHLY 2 KM SW OF GREENVALE RESERVOIR	1991	Staff Staff of DNRE Region Orbost
Litoria raniformis	Vulnerable	WOODY HILL	1991	Cam Beardsell
Litoria raniformis	Vulnerable	ROUGHLY 2 KM NE OF WOLLERT	1989	Cam Beardsell
Litoria raniformis	Vulnerable	MICKLEHAM	1989	Cam Beardsell
Litoria raniformis	Vulnerable	BALD HILL	1988	Cam Beardsell
Litoria raniformis	Vulnerable	ROUGHLY 2 KM NE OF WOODSTOCK	1988	Cam Beardsell
Litoria raniformis	Vulnerable	WITHIN 2 KM OF DONNYBROOK	1988	Cam Beardsell
Litoria raniformis	Vulnerable	ROUGHLY 2 KM NE OF WOLLERT	1988	Staff Staff of DNRE Region Orbost
Litoria raniformis	Vulnerable	ROUGHLY 2 KM NE OF WOODSTOCK	1988	Cam Beardsell
Litoria raniformis	Vulnerable	ROUGHLY 2 KM S OF HUME HIGHWAY	1988	Staff Staff of DNRE Region Orbost
Litoria raniformis	Vulnerable	ROUGHLY 2 KM SW OF WOODY HILL	1988	Staff Staff of DCNR Region Mildura
Litoria raniformis	Vulnerable	ROUGHLY 2 KM E OF SUMMER HILL	1986	NA See original data sheet
Litoria raniformis	Vulnerable	Craigieburn	1966	Not Supplied
Litoria raniformis	Vulnerable	MICKLEHAM	1788	Arthur J. Brook
Litoria raniformis	Vulnerable	5' BLOCK CONTAINING CAMPBELLFIELD	1788	Arthur J. Brook

Appendix 2: Overview Construction Environmental Management Plan



45 Donnybrook Rd, Mickleham

Overview Construction Environmental Management Plan for Matters of National Environmental Significance

Prepared for Aurecon Australasia Pty Ltd

October 2026

Report No. 25238 (5.7)

Nature Advisory
(Formerly Brett Lane & Associates Pty Ltd)
5/61-63 Camberwell Road
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1. Introduction

This report outlines measures to be incorporated into a Construction Environmental Management Plan (CEMP) that is to be prepared for works. The CEMP will be specifically designed to protect Matters of National Environmental Significance. This overview CEMP forms Appendix 2 to the Preliminary Documentation prepared for assessment under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) of a proposed data centre development at 45 Donnybrook Road, Mickleham.

Once the proposed action is approved, the proponent will conduct a tender to select a Construction Contractor to develop the land in accordance with the proposed action. This Contractor will be expected to prepare a full Construction Environmental Management Plan (CEMP) that meets the requirements of the Planning approval for the development, which includes the requirements of this plan.

The aim of this plan is to summarise the commitments that the Contractor's full CEMP will be required to meet in relation to minimising direct and indirect impacts on matters of national environmental significance (MNES) protected under the EPBC Act. It is designed to be referenced in any EPBC Act approval conditions to ensure the proposed development does not adversely affect retained and offsite MNES.

The proposed action will result in the development of the majority of the site for a data centre, with the exception of two vegetation reserves:

- A 4.87 ha reserve in the southern part of the proposed development, to be vested in Hume City Council that retains MNES, specifically *Natural Temperate Grassland of the Victorian Volcanic* Plain (NTGVVP) and *Seasonal Herbaceous Wetland (Freshwater) of the Temperate Lowland Plains* (SHWTLP) as well as suitable habitat for Matted Flax Lily.
- A 4.29 ha tree reserve in the north-east of the proposed development, which retains native vegetation and planted trees. This reserve does not support MNES.

This Overview CEMP addresses the following key aspects:

- Construction actions within proximity to the conservation reserve (and subsequent MNES values) and their potential environmental impacts;
- Management measures (pre, during and post development) to mitigate construction risks to conserved values and MNES; and
- Auditing requirements to be undertaken to monitor the ongoing effectiveness of this CEMP.

As a contractor has not been selected, the measures included in this CEMP provide a minimum requirement to be implemented to protect and manage MNES. Unless stated here, exact locations of management measures will need to be determined and documented in the contractor CEMP.

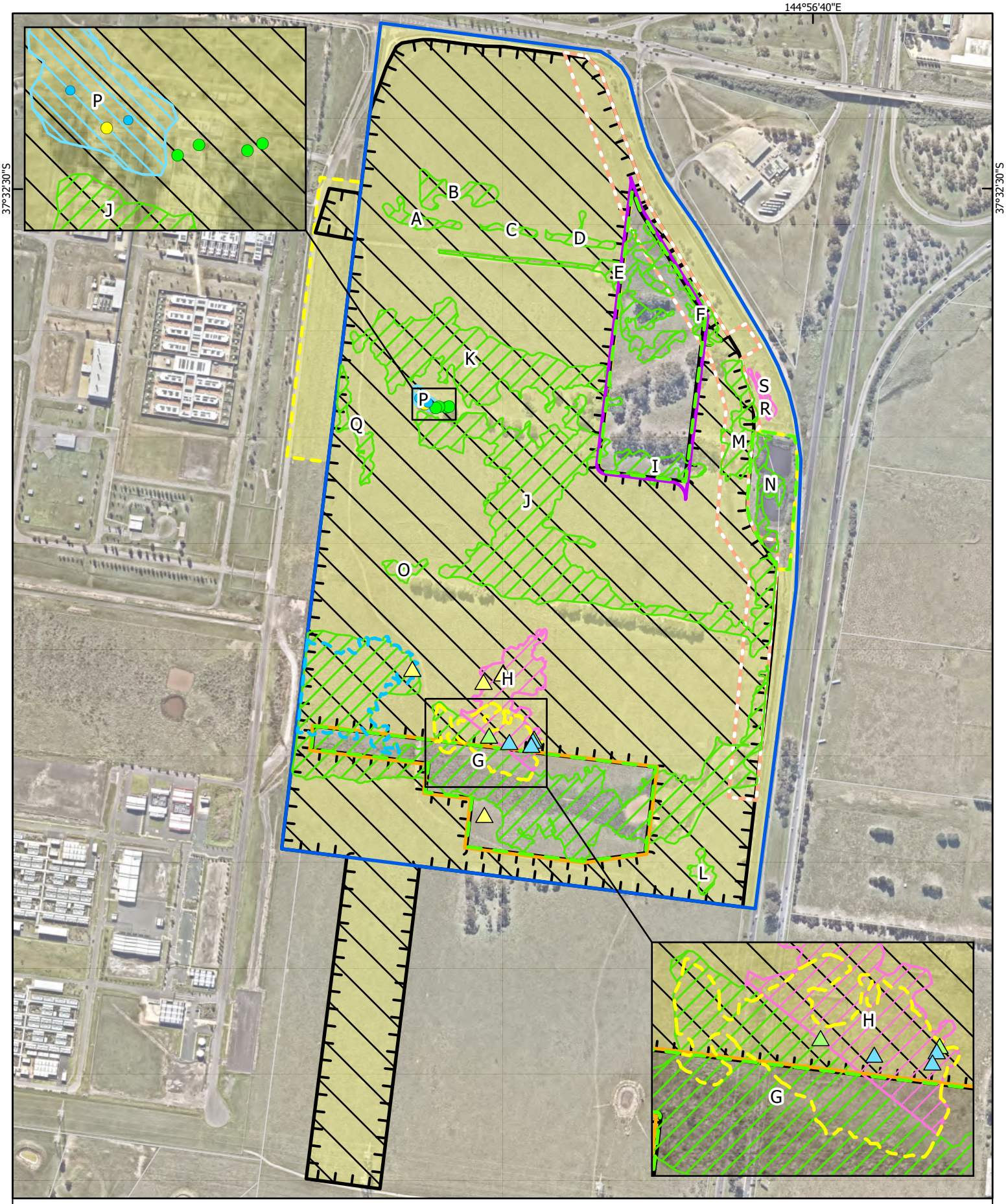


Figure 1. Development plan showing the two reserves

Project No: 25238.06 **Project**: 45 Donnybrook Road, Mickleham **Date**: 08/09/2026

- Study area
- Impacted Footprint
- Referral area
- No Go Zone
- Revegetation Exempt Area

Reserve Areas
- Conservation Reserve
- Tree Reserve

EPBC Act community
- NTGVVP
- NTGVVP and SHWTLP

Native vegetation
- Large Scattered Tree
- Large Tree in Patch
- Small Tree in Patch
- Plains Grassland (EVC 132)
- Plains Grassy Wetland (EVC 125)
- Plains Grassy Woodland (EVC 55_61)

Threatened Flora Species
- Matted Flax-lily (Nature Advisory 2019)
- Matted Flax-lily (Nature Advisory 2024)
- Matted Flax-lily (Nature Advisory 2025)

N

Metres 0 180

GDA2020 Vicgrid

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2. Construction activities

Construction activities will be undertaken over several stages. Stage 1 includes the majority of construction activities, including pre-construction and early works, plus bulk earthworks, and establishment of building foundations, roads and services. Stage 2 will involve the construction of the seven data centre buildings and additional stormwater detention wetland works and ongoing management of the Conservation Reserve and Tree Reserve.

This section of the plan outlines the pre, during and post construction activities (and associated risks) required during Stage 1, which will be undertaken within proximity of the Conservation Reserve. Post-construction actions refer to activities associated with the Conservation Reserve following completion of Stage 1 works. The sequence of Stage 1 activities is proposed to be as per following:

Pre-construction:

- Site establishment, including establishment of site office, amenities, car parking and any service and utility relocation
- Establishing site environmental controls

Main construction activities:

- Establishment of construction access roads, stockpiling of materials and establishment of equipment laydown areas
- Switchyard construction adjacent to the Conservation Reserve
- Underboring activities to connect utilities underneath the Conservation Reserve. This will involve the use of horizontal directional drilling (HDD).
- Construction of the building foundations.
- Road construction and landscaping works adjacent to the Conservation Reserve
- Construction of stormwater wetland, including drainage infrastructure and vegetated swales
- Construction of permanent fencing around the Conservation Reserve.

Stage 2 works will include activities within existing footprint and ongoing risks to the reserves, including incidental damage, weed invasion and biomass, will be managed through the establishment of permanent fencing and ongoing management of the Conservation Reserve and Tree Reserve (refer to CMP).

Table 1: Construction activities, potential impacts to environment and relevant management measures

Phase	Action	Potential environmental impacts	Relevant management measures
Pre-construction	Clearing and grubbing of the site including the stripping and stockpiling of topsoil	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.8 & 3.8
		Destruction of Matted Flax-lily plants	Section 3.3
		Sedimentation and contaminated watercourses	Sections 3.4
		Dust generation	Section 3.5

		Import of invasive weeds from contaminated equipment	Sections 3.6, 3.7.2 & 3.9.1
	Site establishment, including establishment of site office, amenities, car parking and any service and utility relocation.	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.8 & 3.8
		Destruction of Matted Flax-lily plants	Section 3.3
		Sedimentation and contaminated watercourses	Sections 3.4
		Dust generation	Section 3.5
		Import of invasive weeds from contaminated equipment	Sections 3.6, 3.7.2 & 3.9.1
During construction	Stockpiling of materials and establishment of equipment laydown areas	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.7 & 3.8
		Sedimentation and contaminated watercourses	Sections 3.4 & 3.6.1
		Dust generation	Section 3.5
		Import of invasive weeds from contaminated equipment	Section 3.6
	Switchyard construction adjacent to the conservation area	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.8 & 3.8
		Sedimentation and contaminated watercourses	Sections 3.4 & 3.6.1
	Underboring activities to connect utilities underneath the conservation reserve. This will involve the use of horizontal directional drilling (HDD).	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.8 & 3.8
		Sedimentation and contaminated watercourses	Sections 3.4 & 3.6.1
		Import of invasive weeds from contaminated equipment	Section 3.6
	Road construction and landscaping works adjacent to the conservation area	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.8 & 3.8
		Sedimentation and contaminated watercourses	Sections 3.4 & 3.6.1
		Dust generation	Section 3.5
		Import of invasive weeds from contaminated equipment	Section 3.6
	Construction of stormwater wetland, including drainage infrastructure and vegetated swales	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.1, 3.7.1, 3.7 & 3.8
		Sedimentation and contaminated watercourses	Sections 3.4 & 3.6.1
		Dust generation	Section 3.5
		Import of invasive weeds from contaminated equipment	Section 3.6
Post-construction	Construction of permanent fencing around the conservation reserve	Destruction of vegetation and/or habitat beyond construction footprint	Sections 3.2.2, 3.8 & 3.8
		Import of invasive weeds from contaminated equipment	Section 3.6
		Import of invasive weeds from contaminated equipment	Refer to CMP

3. Management measures

This section outlines the management measures to mitigate potential impacts from the construction actions outlined in Section 2. These measures are to be implemented prior to, during, and post construction to protect MNES and other values to be retained within the reserves and across the study area.

3.1. Site induction

All site personnel must be inducted into the management measures of this plan and given instructions on the following items:

- Location of and how to use the clean-down area/s
- Native vegetation and threatened ecological communities to be retained and their significance
- Location of no-go zones
- Location of stockpiling of top soil and materials
- Location of equipment and plant laydown area
- Location of spill kits

3.2. Fencing

3.2.1. Pre-construction

Before any works commence, the areas of native vegetation to be retained (the conservation reserve and tree reserve; Figure 1) will be fenced. Temporary construction fencing is to be used for these areas as detailed in the Conservation Management Plan (CMP, Nature Advisory 2025c).

Fenced areas of native vegetation to be retained will be clearly marked onsite with 'No-Go' signage affixed at regular intervals.

All activities associated with construction are prohibited in these areas. Only access for the purpose of undertaking conservation activities will be permitted, as detailed in the CMP.

3.2.2. Post construction

Once construction work has been completed, temporary construction fencing must be removed, and permanent perimeter fencing is to be established. Fencing requirements are detailed in the CMP (Nature Advisory, 2025c).

3.3. Salvage of Matted Flax-lily

A translocation plan has been prepared for Matted Flax-lily (MFL) (Nature Advisory 2025b).

Prior to any construction activities commencing, the entire study area (except for the two reserves) will be surveyed for MFL in accordance with targeted survey methods. In accordance with the salvage measures in the above plan, all Matted Flax-lily individuals found will be flagged, after which they will be salvaged between late autumn and early spring. Any salvaged individuals will then be moved to a nursery for propagation and maintenance prior to planting into the recipient site.

3.4. Sediment and erosion control

Sediment and erosion control measures must be implemented to ensure that no polluted water and/or sediment laden runoff is discharged directly or indirectly into the reserves, stormwater drains or watercourses during the construction period, as per the *Urban Stormwater Best Practice Environmental Management Guidelines* (CSIRO 1999).

High risk activities that could result in the above include general earthworks in the vicinity of the tree and conservation reserves, underboring of services and the construction of access roads and associated infrastructure along the site boundary.

Sediment controls will be implemented around No Go Zones and should be installed at the edge of the No Go Zone, in conjunction with No Go Zone fencing (CMP, Nature Advisory 2025c). All earthworks must be undertaken in a manner that will minimise soil erosion and adhere to *Construction Techniques for Sediment Pollution Control* (EPA 1991) and *Environmental Guidelines for Major Construction Sites* (EPA 1995). Provided these standards are implemented, the aforementioned high-risk activities are expected to be appropriately mitigated.

3.5. Dust suppression

Dust suppression control measures must be implemented to minimise the amount of airborne dust spreading and settling into the reserves, stormwater drains or watercourses during the construction period in accordance with EPA Guideline for assessing and minimising air pollution in Victoria (EPA 2025).

The following control measures must be incorporated into the CEMP:

- Active suppression of dust through water application in high traffic areas
- Capping of stockpiles that are going to remain mounded for a prolonged period of time to reduce wind erosion
- Speed restrictions within the construction site to reduce dust generation
- Responsible personnel for visual surveillance and air testing to trigger appropriate mitigation measures

3.6. Clean-down procedures

A logbook must be kept on site and all personnel who use this facility must sign in, declaring the machinery/vehicle to be free from weed propagules.

The clean-down area must provide facilities for adequate washdown of machinery and vehicle exteriors. These facilities should include a high-pressure water hose and manual implements such as brooms and brushes, which can also be used to clean contaminated footwear.

All vehicles, machinery and plant entering or exiting the construction site must be examined and cleaned of mud, vegetation and seeds before entering the site and upon leaving. Particular attention must be made to critical areas of contamination commonly associated with earthmoving and other construction vehicles.

3.6.1. Clean-down location

Establishment of a clean-down area must be incorporated prior to the commencement of works. This area must be selected based on the following criteria:

- Close to site access/egress;
- At least 30 metres away from waterways, drainage lines or wetlands;
- At least 30 metres away from the conservation reserve and tree reserve;
- Be entirely bunded to prevent sediment run-off; and
- Fitted with appropriate sediment control to prevent discharge off site.

A layer of gravel is to be used to minimise mud and improve drainage.

Signage indicating the clean-down area must be clearly visible and include suitable instructions to works staff, particularly those leaving the site.

Waste collected from clean-down bays must be managed on site by burying the waste below the topsoil. Care must be taken to prevent discharge off site to waterways and drainage.

3.7. Stockpiling

3.7.1. Topsoil and spoil

All stockpiles of topsoil and spoil are to be located at least 30 metres away from the conservation and tree reserves. Stockpiles are to be suppressed in accordance with sediment control and dust suppression methods, as detailed in Sections 3.4 and 3.5 respectively.

Stockpiles of topsoil and spoil are to be otherwise legally disposed of using appropriate permits for disposal and transportation.

3.7.2. Disposal of weed material

Any fertile weed material, especially that of any CaLP Act-listed weeds **must** be burned on site or otherwise legally disposed of using appropriate permits for disposal and transportation.

If weeds are to be stockpiled and burned, all fertile or woody weed material must remain on site and be piled in the designated stockpile area (to be determined at the discretion of the contractor but at least 30 metres from the conservation reserve), and a permit to do so must be obtained under the relevant legislation. Prior to any burning off, appropriate warning will be given to local residents through a letterbox drop and fire authorities will be notified. Firebreaks will be slashed around the perimeter of the designated stockpile area in the lead up to burns.

Burns will be undertaken on days with only light wind, with sufficient numbers of suitably experienced bushland contractor personnel on hand within firebreaks with portable water supplies to halt the fire if required. Bushland contractors would remain at the site of the burn until an appointed team leader confirms that all fire has been extinguished.

3.8. Equipment laydown and works areas

All equipment and plant laydown areas are to be located at least 30m from the conservation and tree reserve.

This includes fuel and chemical storage areas, which must be appropriately bunded to prevent run-off. Spill kits and relevant Material Safety Data Sheets (MSDS) must be readily available in storage areas.

3.9. Weed management

3.9.1. Pre-construction

Initial weed control works will be undertaken at the commencement of this CEMP with the aim to reduce the production and spread of propagules from existing high threat invasive weeds on the site. This will be undertaken until stripping of topsoil occurs as part of construction. See the Conservation Management Plan (CMP) prepared by Nature Advisory (2025c) for details on the weed management targets to be achieved.

3.9.2. During construction

During construction, weed control within the reserves, other non-cleared areas of land and designated topsoil and spoil stockpiles must be undertaken at least quarterly in accordance with the CMP (Nature Advisory, 2025c).

At the completion of construction, weed management of the conservation reserve will be handed over to Council, as detailed within the CMP.

4. Monitoring and reporting

Implementation of the management measures will be monitored on a weekly basis in line with the construction contactor's environmental management system. Non-conformances that have the potential to impact native vegetation or MNES values will be required to be reported to the relevant responsible authority and rectified as soon as practical. The outcome of the monitoring is to be documented.

The following measures are to be, at a minimum, monitored weekly:

- Ensure compliance with site induction procedures
- Ensure no disturbance has occurred within the boundary of the conservation reserve
- Inspect condition and maintain functionality of fencing and sedimentation control measures;
- Visual inspection downstream of sediment controls
- Inspection of clean-down facilities and logbook compliance
- Assessment of effectiveness of stockpile management including appropriateness of dust suppression measures.

4.1. Adaptive management

By monitoring the outcomes of actions, management may be adapted to ensure the stated commitments in the Plan to manage direct and indirect risks to MNES are upheld. For example, new techniques for dust suppression may become available or an unanticipated adverse event may necessitate adjustment to management actions.

5. References

CSIRO 1999, Urban Stormwater: Best-Practice Environmental Management Guidelines, CSIRO Publishing.

DCCEEW 2024, *Environmental Management Plan Guidelines*, Department of Climate Change, Energy, the Environment and Water, Canberra.

EPA 1991, *Construction Techniques for Sediment Pollution Control*, Environment Protection Authority Victoria, Docklands.

EPA 1995, *Environmental Guidelines for Major Construction Sites*, Environment Protection Authority Victoria, Docklands.

Nature Advisory 2025b, *45 Donnybrook Road, Mickleham: Salvage & Translocation Plan for Matted Flax-lily* Dianella amoena - Report No. 25238.01 (3.1), Nature Advisory Pty Ltd, Hawthorn East, consultant report prepared for Aurecon Australasia Pty Ltd.

Nature Advisory 2025c, *45 Donnybrook Road, Mickleham: Conservation Management Plan*, Report No. 25238.01 (2.2), Nature Advisory Pty Ltd, Hawthorn East, consultant report prepared for Aurecon Australasia Pty Ltd.

Appendix 3: Section 173 Agreement

HARWOOD ANDREWS

SECTION 173 AGREEMENT
PLANNING AND ENVIRONMENT ACT 1987

HUME CITY COUNCIL
Council

- and -

BUNKERHILL PTY LTD
ACN 632 978 128
Registered Proprietor

in relation to land at:
45 DONNYBROOK ROAD, MICKLEHAM

4AMC:22205098

Harwood Andrews
ABN 98 076 868 034
70 Gheringhap Street, Geelong 3220, Victoria, Australia
DX 22019 Geelong
PO Box 101 Geelong Vic 3220

Telephone: 03 5225 5225 Facsimile: 03 5225 5222

PARTIES:

1. **Hume City Council** of 1079 Pascoe Vale Road, Broadmeadows 3047

(**Council**)

2. **Bunkerhill Pty Ltd ACN 632 978 128** of McMullin Group, Level 3, 2-6 Railway Parade, Camberwell 3124

(**Owner**)

RECITALS:

R.1. Council is responsible for the administration and enforcement of the Planning Scheme pursuant to the provisions of the Act. Council is also the planning authority under the Act for proposed Amendment C267 to the Planning Scheme.

R.2. Council enters into this Agreement in its capacity as responsible authority and planning authority for Amendment C267 to the Planning Scheme.

R.3. The Owner is or is entitled to be the registered proprietor of the Land.

R.4. Council has prepared Amendment C267 at the request of the Owner.

R.5. Amendment C267 proposes to:

a. rezone the Land from Urban Growth Zone (UGZ) to Industrial 1 Zone (IN1Z) and apply the Development Plan Overlay – Schedule 34 (DPO34) to facilitate the development of an industrial business park; and

b. apply the Specific Control Overlay – Schedule 15 (SCO15) and insert an accompanying incorporated document in the Schedule to Clause 45.12 and the Schedule to Clause 72.04 of the Planning Scheme to ensure the future use and development of the Land considers and manages any potential amenity impacts to accommodation uses within the former Victorian Quarantine Hub on the adjoining Commonwealth land.

R.6. The Owner has agreed to enter into this Agreement with Council prior to Council submitting Amendment C267 to the Minister for approval.

R.7. The Owner has voluntarily agreed to deliver the Land Projects and Construction Projects on the terms set out in this Agreement, being localised infrastructure, works and services which are required to facilitate and meet the future use and development of the Land in accordance with the controls proposed by Amendment C267. This Agreement secures those voluntary contributions for the delivery of the Land Projects and Construction Projects required to facilitate and meet the future use and development of the Land in accordance with the controls proposed by Amendment C267.

R.8. This Agreement is entered into between the parties pursuant to section 173 of the Act in order to facilitate Amendment C267 and to achieve the objectives of planning in Victoria.

R.9. All Mortgagees and/or Caveators have consented to this Agreement.

IT IS AGREED AS FOLLOWS:

1. DEFINITIONS

In this Agreement unless inconsistent with the context or subject matter:

1.1. **Act** means the *Planning and Environment Act 1987* (Vic).

1.2. **Administration Fee** means a payment made to Council by the Owner for the administration of the maintenance of the L3 Conservation Reserve in the sum of 10% of the amount of the Management Fee.

1.3. **Agreement** means this Agreement and any agreement executed by the parties varying or expressed to be supplemental to this Agreement.

1.4. **Annexure** means an annexure to this Agreement.

1.5. **Balance Land** means that part of the Land shown as "Business and industry" on Figure 1: Concept Plan in the DPO34.

1.6. **Business Days** means a day that is not a Saturday, Sunday or a public holiday in Melbourne.

1.7. **Caveator** means the caveator identified in item 3 of Schedule 1.

1.8. **Certificate of Practical Completion** means a written certificate prepared by Council stating that the Construction Project has been completed to the satisfaction of Council.

1.9. **Commercial Lot** means a lot created as a result of the subdivision of the Land which in the opinion of Council is of a size and dimension that it is intended to be developed as a commercial lot without further subdivision, and for the avoidance of doubt, excludes a super lot or reserve.

1.10. **Conservation Maintenance Period** means the period specified in Item 6 of Schedule 1.

1.11. **Conservation Management Plan** means the conservation management plan prepared in respect of the L3 Conservation Reserve pursuant to the DPO34 and forming part of the Development Plan.

1.12. **Construction Project** means a project for the construction of works identified in the Construction Projects Table at Schedule 2 of this Agreement.

1.13. **Council** means (as the context may require):

1.13.1. in its capacity as responsible authority, Hume City Council or its successor as the authority responsible for administering and enforcing the Planning Scheme; and/or

1.13.2. in its capacity as planning authority, Hume City Council or its successor as the authority responsible for preparing Amendment C267 to the Planning Scheme,

and includes its agents, officers, employees, servants, workers and contractors.

1.14. **Civil Maintenance Bond** means an irrevocable unconditional bank guarantee from a financial institution approved by Council or other form of security to the satisfaction

of Council, in favour of Council, for the amount specified in Item 5 of Schedule 1 to secure maintenance of a Construction Project.

1.15. **Civil Maintenance Period** means the period specified in Item 4 of Schedule 1 from the issue of a Certificate of Practical Completion for a Construction Project.

1.16. **Current Address for Service**

1.16.1. for Council means the address shown under the heading "Parties" in this Agreement, or any other principal office address listed on the Council website;

1.16.2. for the Owner, means the relevant address shown under the heading "Parties" in this Agreement or any other address provided by the Owner to Council for any purpose or purposes relating to the Land.

1.17. **Current Email Address for Service**

1.17.1. for Council means contactus@hume.vic.gov.au, or any other email address listed on the website of Council; and

1.17.2. for the Owner, means any email address provided by the Owner to Council for the express purpose of electronic communication regarding this Agreement.

1.18. **Development Area** means Development Area A and/or Development Area B as relevant.

1.19. **Development Area A** means that part of the Land marked 'Development Area A' on the plan at Annexure B, as amended from time to time with the prior written consent of Council.

1.20. **Development Area B** means that part of the Land marked 'Development Area B' on the plan at Annexure B, as amended from time to time with the prior written consent of Council.

1.21. **Development Plan** means the development plan approved by Council pursuant to Clause 43.04 of the Planning Scheme for the Land.

1.22. **DPO34** means the Development Plan Overlay – Schedule 34 proposed to be introduced by way of Amendment C267.

1.23. **Early Maintenance Responsibility** means Council's responsibility to maintain the L3 Conservation Reserve in accordance with the Conservation Management Plan prior to the conclusion of the Conservation Maintenance Period.

1.24. **Endorsed Plan** means a plan endorsed under the relevant Permit, as amended from time to time.

1.25. **GAIC** means the Growth Areas Infrastructure Charge under the Act.

1.26. **GST** means the *New Tax System (Goods and Services Tax) Act 1999* (Cth) as amended from time to time.

1.27. **GST Regulations** means the *New Tax System (Goods and Services Tax) Regulations 1999* (Cth) as amended from time to time.

1.28. **Handover Date** means the date that Council nominates as the date from which it will accept Early Maintenance Responsibility under clause 4.7.3.1.

1.29. **L3 Conservation Reserve** means the Land Project of the same number and name as specified in Schedule 3.

1.30. **Land** means the land identified in Item 1 of Schedule 1 and includes any lots created by the subdivision of the Land or any part of it.

1.31. **Land Projects** means a project comprised of the transfer to or vesting of land in Council as described in the Land Projects Table at Schedule 3 of this Agreement.

1.32. **Localised Infrastructure** means works, services or facilities necessitated by the subdivision or development of the Land including but not limited to provision of utility services such as water supply, stormwater drainage, sewerage, gas and electricity services, telecommunications infrastructure and local road, bridges, culverts and other water crossings, any required associated traffic control measures and devices. For the purposes of this Agreement, localised infrastructure does not include infrastructure that is in the nature of regional or state infrastructure.

1.33. **Management Fee** means a payment made to Council by the Owner in exchange for Council's acceptance of Early Maintenance Responsibility, to be determined by Council in its absolute discretion prior to confirmation of the Handover Date, by reference to:

1.33.1. Any costings set out in the Conservation Management Plan;

1.33.2. Any outstanding works, actions, maintenance or management activities described in the Conservation Management Plan; and

1.33.3. Any cost estimate provided by an independent ecological contractor engaged by the Owner.

1.34. **Mortgagee** means the mortgagee identified in Item 2 of Schedule 1 and any subsequent person or persons registered or entitled from time to time to be registered by the Registrar of Titles as mortgagee of the Land or any part of it.

1.35. **Owner** means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as the proprietor or proprietors of an estate in fee simple of the Land or any part of it, and includes a Mortgagee in possession.

1.36. **party** or **parties** means the Owner and Council under this Agreement as appropriate.

1.37. **Permit** means a planning permit issued by Council in its capacity as responsible authority for the development of the Land, as amended from time to time.

1.38. **Planning Scheme** means the Hume Planning Scheme and any successor instrument or other planning scheme which applies to the Land.

1.39. **Schedule** means a schedule to this Agreement.

1.40. **Stage** is a reference to a stage of subdivision of a Permit as shown on an approved plan of subdivision or Endorsed Plan.

1.41. **Statement of Compliance** means a statement of compliance issued by Council under the *Subdivision Act 1988* (Vic).

1.42. **Tax Act** means the *Taxation Administration Act 1953* (Cth) as amended from time to time.

1.43. **Tribunal** means the Victorian Civil and Administrative Tribunal.

2. INTERPRETATION

In the interpretation of this Agreement unless inconsistent with the context or subject matter:

2.1. The singular includes the plural and the plural includes the singular.

2.2. A reference to a gender includes a reference to all other genders.

2.3. Words (including defined expressions) denoting persons will be deemed to include all trusts, bodies and associations, corporate or unincorporated, and vice versa.

2.4. A reference to a person includes a reference to a firm, corporation, association or other entity and their successors in law.

2.5. A reference to a statute includes any statute amending, consolidating or replacing that statute and includes any subordinate instruments made under that statute.

2.6. The Recitals to this Agreement are and will be deemed to form part of this Agreement including any terms defined within the Recitals.

2.7. References to the parties will include their transferees, heirs, assigns, and liquidators, executors and legal personal representatives as the case may be.

2.8. Reference to a document or agreement includes reference to that document or agreement as changed, novated or replaced from time to time.

2.9. Where a word or phrase is given a definite meaning in this Agreement, a part of speech or other grammatical form for that word or phrase has a corresponding meaning.

2.10. Where a word or phrase is not defined in this Agreement, it has the meaning as defined in the Act, or, if it is not defined in the Act, it has its ordinary meaning.

3. CONSTRUCTION PROJECTS

3.1. Construction

The Owner agrees that it must construct the Construction Projects:

3.1.1. at its own cost;

3.1.2. in accordance with plans and specifications approved by Council in writing pursuant to clause 3.2 and varied pursuant to clause 3.8 of this Agreement;

3.1.3. in compliance with all applicable laws and permits, consents and approvals;

3.1.4. within the timeframe specified in Schedule 2 of this Agreement; and

3.1.5. to the satisfaction of Council.

3.2. Designs and approval

The Owner agrees that prior to commencing any works for a Construction Project, it must, at its own cost:

3.2.1. prepare plans and specifications for the Construction Project and submit those plans and specifications to Council for its approval; and

3.2.2. obtain all necessary permits, consents and approvals for the Construction Project.

3.3. **Maintenance of Construction Projects**

The Owner agrees that, upon the issue of a Certificate of Practical Completion for a Construction Project, it must:

3.3.1. provide the following to Council:

3.3.1.1. a copy of as-built plans and any maintenance information, operational manual or other material which is reasonably required for the ongoing operation and maintenance of the Construction Project;

3.3.1.2. a copy of any permit, consent or approval obtained for the Construction Project; and

3.3.1.3. the Civil Maintenance Bond for the Construction Project; and

3.3.2. maintain the Construction Project in good order, condition and repair for the Civil Maintenance Period to the reasonable satisfaction of Council.

3.4. **Issue of a Certificate of Practical Completion**

Upon the completion of a Construction Project to Council's satisfaction and in accordance with this Agreement, Council will issue a Certificate of Practical Completion for the Construction Project in accordance with this Agreement.

3.5. **Application of the Civil Maintenance Bond**

Council may use the Civil Maintenance Bond to undertake works to ensure the good order, condition and repair of the associated Construction Project in the event that:

3.5.1. any part the Construction Project is not maintained to Council's reasonable satisfaction during the Civil Maintenance Period; and

3.5.2. the Owner fails to comply with a written direction from Council to undertake any maintenance works required by Council, including within the timeframe specified within a written direction or otherwise within a reasonable time frame.

3.6. **Return of Civil Maintenance Bond**

Council will return the Civil Maintenance Bond at the written request of the Owner following completion of the Civil Maintenance Period, less any monies used by Council in accordance with clause 3.5.

3.7. **Other Maintenance Obligations**

For the avoidance of doubt, nothing in this Agreement is intended to excuse the Owner from complying with any other maintenance obligation with respect to the Construction Projects required by other relevant authorities under any required consents, approvals or permit.

3.8. **Variation of approved plans**

The plans and specifications approved by Council pursuant to clause 3.2 of this Agreement may be varied by the Owner subject to the prior written consent of Council, which consent must not be unreasonably withheld.

4. LAND PROJECTS

4.1. Provision of Land Projects

The Owner agrees that it must transfer to or vest in Council the Land Projects:

4.1.1. within the timeframe specified in Schedule 3 of this Agreement;

4.1.2. in accordance with Schedule 3; and

4.1.3. to the satisfaction of Council.

4.2. If the Owner does not transfer or vest a Land Project within the timeframe required by clause 4.1.1, Council may at its absolute discretion:

4.2.1. further extend the relevant timeframe in writing; or

4.2.2. refuse to issue any further Statement of Compliance for the subdivision of the relevant Development Area until such time as the Owner has transferred or vested the Land Project.

4.3. Condition of the land

The Owner agrees that any land transferred to or vested in Council in accordance with clause 4.1 must:

4.3.1. be free of all encumbrances save for any easements as shown in the certificate of title to the Land;

4.3.2. be free from contamination;

4.3.3. unless liability for GAIC is exempt or excluded as confirmed by the certificate referred to under clause 4.3.4, have any liability for GAIC discharged prior to it being transferred to or vested in Council, and to the extent that it is not, the Owner shall remain liable to Council for any GAIC liability incurred by Council; and

4.3.4. be accompanied by a certificate from the State Revenue Office certifying that:

4.3.4.1. all GAIC or any tax liabilities in respect of the land to be transferred to or vested in Council in accordance with clause 4.1 have been discharged; or

4.3.4.2. that there is, or there will be, no GAIC nor tax liabilities in respect of the land to be transferred to or vested in Council in accordance with clause 4.1,

unless otherwise agreed to in writing by Council.

4.4. Survival of liability clause

The Owner agrees that clause 4.3.3 survives the termination or ending of this Agreement.

4.5. **No further compensation payable**

The Owner acknowledges and agrees that:

4.5.1. no compensation of any kind whatsoever is payable to the Owner in relation to the land transferred to or vested in Council under this Agreement.

4.6. **Maintenance of L3 Conservation Reserve**

The Owner agrees that, prior to transferring to or vesting in Council the L3 Conservation Reserve, the Owner must at its cost maintain the L3 Conservation Reserve for the Conservation Maintenance Period in accordance with the Conservation Management Plan, subject to clause 4.7.

4.7. **Early Maintenance Responsibility for L3 Conservation Reserve**

The parties agree that:

4.7.1. The Owner may request that Council accept Early Maintenance Responsibility for the L3 Conservation Reserve from the Handover Date in return for the payment of the Maintenance Fee and the Administration Fee;

4.7.2. Council may at its absolute discretion accept Early Maintenance Responsibility for the L3 Conservation Reserve but it is not required to do so;

4.7.3. If Council accepts Early Maintenance Responsibility for the L3 Conservation Reserve:

4.7.3.1. Council will notify the Owner in writing of the Handover Date;

4.7.3.2. Prior to the Handover Date:

4.7.3.2.1. the Owner must transfer to or vest in Council the L3 Conservation Reserve in accordance with Clause 4; and

4.7.3.2.2. the Owner must pay the Maintenance Fee and the Administration Fee to Council; and

4.7.3.3. Provided that the Owner has satisfied its obligations under Clause 4.7.3.2, Council will, from the Handover Date, accept full responsibility for the implementation, including all associated costs, of the Conservation Management Plan.

5. OWNER'S FURTHER COVENANTS

The Owner warrants and covenants that:

5.1. It is the registered proprietor (or entitled to be so) of the Land;

5.2. Save as shown in the certificate of title to the Land, there are no mortgages, liens, charges, easements or other encumbrances or any rights inherent in any person affecting the Land or any part of it and not disclosed by the usual searches;

5.3. Neither the Land nor any part of it is subject to any right obtained by adverse possession or subject to any easements, rights or encumbrances mentioned in section 42 of the *Transfer of Land Act 1958* (Vic);

5.4. It will not sell, transfer, dispose of, assign, mortgage or otherwise part with possession of the Land or any part of it without first providing to its successors a copy of this Agreement;

5.5. It will within 28 days of written demand pay to Council, Council's reasonable costs (including legal or other professional costs) and expenses of and incidental to the:

5.5.1. negotiation, preparation, execution and recording of this Agreement;

5.5.2. assessment, negotiation, preparation, execution and recording of any proposed amendment to this Agreement;

5.5.3. the cancellation or alteration of this Agreement in the Register; and

5.5.4. determination of whether any of the Owner's obligations have been undertaken to the reasonable satisfaction of Council or to give consent to anything under this Agreement.

5.6. To the extent that the costs and expenses to be paid for by the Owner in accordance with clause 5.5 constitute legal professional costs, Council may at its absolute discretion have these costs assessed by the Law Institute of Victoria and in that event the Parties will be bound by the amount of that assessment, with any fee for obtaining such an assessment being borne equally by Council and the Owner;

5.7. It will do all that is necessary to enable Council to make application to the Registrar of Titles to record this Agreement in the Register in accordance with the Act, including the signing of any further agreement, acknowledgment or other document; and

5.8. Until such time as this Agreement is recorded in the Register, the Owner must ensure that successors in title will give effect to this Agreement, and do all acts and sign all documents which will require those successors to give effect to this Agreement, including executing a deed agreeing to be bound by the terms of this Agreement.

6. ACKNOWLEDGEMENT BY THE PARTIES

The Parties acknowledge and agree that:

6.1. This Agreement relates only to infrastructure that is set out in Schedule 2 to this Agreement and not Localised Infrastructure; and

6.2. Compliance with the obligations of this Agreement does not relieve the Owner of any obligation imposed by Council or the Tribunal to provide Localised Infrastructure which obligation may be imposed as a requirement in a planning permit for the subdivision or development of the Land.

7. FURTHER ASSURANCE

The parties to this Agreement will do all things necessary (including signing any further agreement, acknowledgement or document) to give full effect to the terms of this Agreement and to enable this Agreement to be recorded in the Register in accordance with the Act.

8. AMENDMENT

8.1. This Agreement may be amended only in accordance with the requirements of the Act.

8.2. If notice of a proposal to amend this Agreement is required pursuant to section 178C of the Act, the parties agree that only Council and the Owner of the Land or that part of the Land that is the subject of the proposal to amend this Agreement are required to be notified of the proposal.

9. NO WAIVER

The Parties agree that:

9.1. No waiver by any party of any default in the strict and literal performance of or compliance with any provision, condition or requirement in this Agreement will be deemed to be:

9.1.1. a waiver of strict and literal performance of and compliance with any other provision, condition or requirement of this Agreement; or

9.1.2. a waiver or release any party from compliance with any provision, condition or requirement in the future; and

9.2. Any delay or omission of any party to exercise any right under this Agreement in any manner will not impair the exercise of such right accruing to it thereafter.

10. NO FETTERING OF POWERS OF COUNCIL

The parties acknowledge and agree that this Agreement does not fetter or restrict the power or discretion of the Council to make any decision or impose any requirements or conditions in connection with the granting of any planning approval or certification of any plans of subdivision applicable to the Land or relating to any use or development of the Land.

11. INTEREST ON OVERDUE MONEYS

Any amount due under this Agreement but unpaid by the due date incurs interest at the rate prescribed under section 120 of the *Local Government Act 2020* (Vic) and any payment made shall be first directed to payment of interest and then the principal amount owing.

12. NOTICES

All notices and other communications under this Agreement will be sent by prepaid mail, by hand delivery or by email to the Current Addresses for Service or Current Email Address for Service of the parties, and may be sent by an agent of the party sending the notice. Each notice or communication will be deemed to have been duly received:

12.1. not later than two Business Days after being deposited in the mail with postage prepaid;

12.2. when delivered by hand; or

12.3. if sent by email, at the time of receipt in accordance with the *Electronic Transactions (Victoria) Act 2000* (Vic).

13. COSTS ON DEFAULT

If the Owner defaults in the performance of any obligations under this Agreement, the Owner will pay to Council its reasonable costs of action taken to achieve compliance with this Agreement.

14. INVALIDITY OF ANY CLAUSE

Notwithstanding anything to the contrary in this Agreement, if any provision of this Agreement will be invalid and not enforceable in accordance with its terms, all other provisions which are self-sustaining and capable of separate enforcement without regard to the invalid provisions will be and continue to be valid and enforceable in accordance with those terms.

15. AGREEMENT BINDING ON SUCCESSORS OF OWNERS

This Agreement will extend to and bind the Owner's successors, assigns, administrators, transferees and legal personal representatives and the obligations imposed upon them will also be binding on their successors, transferees, purchasers, mortgagees and assigns as if each of them had separately executed this Agreement.

16. JOINT OBLIGATIONS

In the case of each party that consists of more than one person (including in that expression any corporation) each of those persons covenants, agrees and declares that all of the covenants, agreements, declarations and consents contained in this Agreement and made and given by that party have been entered into, made and given and are binding upon that person both severally and also jointly with the other person or persons constituting that party.

17. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties in connection with its subject matter and supersedes all previous agreements or understandings between the parties in connection with its subject matter.

18. GST

The Parties agree that:

18.1. expressions used in this clause and in the GST Act have the same meanings as when used in the GST Act;

18.2. a supply under this Agreement of:

18.2.1. in-kind contributions of any kind provided by the Owner to the Council for the supply by the Council to the Owner of a right to develop land where the right/s granted comply with requirements imposed by or under an Australian law (as that term is understood in the GST Act) will be exempt from GST;

18.2.2. payments, fees, charges levies or other amounts payable (the amount payable) by the Owner to the Council for the supply of a right to develop land, to the extent:

18.2.2.1. the amount payable is a payment of an Australian tax under subsection 81-5(1) of the GST Act; or

18.2.2.2. is an amount that is subject to subsection 81-10(1) of the GST Act and is not an amount listed in regulation 81-10.01 of the GST Regulations; or

18.2.2.3. is an amount that is not subject to subsection 81-10(1) of the GST Act but is listed in regulation 81-15.01 of the GST Regulations; or

18.2.2.4. is an amount that is subject to subsection 81-10(1) of the GST Act and is listed in regulations 81-10.01 and 81-15.01 of the GST Regulations but is listed in subregulation 81-10.01(1)(g);

will be exempt from GST.

18.3. the recipient of a taxable supply made under or in respect of this Agreement must pay to the supplier, at the time the consideration for the supply is due, the GST payable in respect of the supply. This obligation extends to supply consisting of a Party's entry into this document; and

18.4. a Party is not obliged, under clause 18.3, to pay the GST on a taxable supply to it until given a valid tax invoice for the supply.

19. FOREIGN RESIDENT CAPITAL GAINS WITHHOLDING TAX

19.1. The Parties agree that the words defined or used in subdivision 14-D of schedule 1 of the Tax Act have the same meaning in this clause unless the context requires otherwise.

19.2. The Owner acknowledges and agrees that if Council is required to pay the Commissioner an amount in accordance with subdivision 14-D of schedule 1 of the Tax Act for any transfer to or vesting of land by the Owner in Council under this Agreement (**the Amount**):

19.2.1. at least 60 days prior to the transfer to or vesting of such land in Council, the Owner must provide Council with a clearance certificate issued by the Commissioner under section 14-220 (1) of schedule 1 to the Tax Act, which must be valid for the period within which the relevant land is to be vested in or transferred to Council and must be issued in the exact name of the Owner; or

19.2.2. where a clearance certificate is not provided in accordance with clause 19.2.1:

19.2.2.1. if the land is to be transferred or vested in Council in exchange for a cash payment to the Owner, then the Amount is to be deducted from the total cash payment;

19.2.2.2. if the land is to be transferred or vested in Council in exchange for non-cash consideration, the Owner must pay the Amount to Council at least 30 days prior to the transfer to or vesting of the land in Council; and

19.2.2.3. if the land is to be transferred or vested in Council in exchange for part cash payment and part non-cash consideration, then the Amount is to be deducted from the total cash payment and to the extent that the total cash payment is less than the Amount, the Owner must pay the

difference to Council at least 30 days prior to the transfer to or vesting of the land in Council.

19.3. The Owner acknowledges and agrees that it must provide Council with all information and assistance necessary to enable Council to comply with its obligation to make a payment under subdivision 14-D of schedule 1 of the Tax Act in respect to the transfer to or vesting of land in Council under this Agreement.

19.4. The Owner indemnifies Council against any interest, penalty, fine or other charge or expense incurred by Council arising from a failure by Council to pay the Amount in accordance with subdivision 14-D of schedule 1 of the Tax Act as a result of the Owner's failure to comply with its obligations under this clause of the Agreement.

20. COUNTERPARTS

20.1. This Agreement may consist of a number of counterparts and, if so, the counterparts taken together constitute an agreement.

20.2. Execution by either or both parties of an email copy of this Agreement, or transmission or email of a copy of this Agreement, executed by that party, will constitute valid and binding execution of this Agreement by such party or parties.

21. COMMENCEMENT AND ENDING OF AGREEMENT

21.1. This Agreement will commence on the date on which the notice of approval of Amendment C267 is published in the Government Gazette.

21.2. This Agreement will end:

21.2.1. if Council determines to abandon Amendment C267;

21.2.2. if Amendment C267 lapses;

21.2.3. if the Minister refuses to approve Amendment C267; or

21.2.4. otherwise in accordance with the provisions of the Act.

21.3. If notice of a proposal to end this Agreement is required pursuant to section 178C of the Act, the parties agree that only Council and the Owner of the Land or that part of the Land that is the subject of the proposal to end this Agreement are required to be notified of the proposal.

21.4. As soon as reasonably practicable after the Agreement has ended with respect to all or part of the Land, Council will, following a request from the Owner and at the cost of the Owner, apply to the Registrar of Titles under section 183(1) of the Act to cancel the recording of the Agreement in relation to the relevant land.

EXECUTED BY THE PARTIES

Signed sealed and delivered as a deed by the Parties

Date: 26 February 2024

SIGNED for and on behalf of **HUME CITY COUNCIL** by Megan Taylor, Manager City Strategy, in the presence of:

Witness

Andrea Taylor

Name of witness (please print)

EXECUTED by **BUNKERHILL PTY LTD** ACN 632 978 128 in accordance with Section 127 of the Corporations Act 2001:

Director

Spiro Vallos

Full Name

Director ~~/ Secretary~~

Ian McMullin

Full Name

MORTGAGEE CONSENT

The Mortgagee identified in Item 2 of Schedule 1 under the Instrument/s of Mortgage identified in Item 2 of Schedule 1 consents to the Owner entering into this Agreement and agrees to be bound by the terms and conditions of this Agreement.

DATED: 19/2/2024

EXECUTED by **NATIONAL AUSTRALIA BANK LIMITED**
by being signed sealed and delivered in Victoria by its Attorney:

Adam Cusick
NAME SIGNATURE

who holds the position of Level 3 Attorney under Power of Attorney dated 1/3/2007 (a certified copy of which is filed in Permanent Order Book No 277 Page No 025 Item 35) in the presence of

Witness: CLAIRE BAMFORD
NAME SIGNATURE

Executed for and on behalf of **National Australia Bank Ltd**

Schedule 1

Item 1 – Land	Certificate of Title Volume 11860 Folio 776 Lot A on Plan of Subdivision 805138H 45 Donnybrook Road, Mickleham
Item 2 – Mortgagee & Instrument/s of Mortgagee	National Australia Bank Ltd under Instrument of Mortgage No. AT866840K
Item 3 – Caveator & Instrument of Caveat	N/A
Item 4 – Civil Maintenance Period	12 months
Item 5 – Civil Maintenance Bond Amount	5% of the cost of the Construction Project
Item 6 – Conservation Maintenance Period	At least 2 years immediately prior to the transfer to or vesting of the L3 Conservation Reserve in Council

Schedule 2

CONSTRUCTION PROJECTS TABLE

A – Project Number and Description	B – Extent of Project	C – Timing for Completion
RD1 **East West Road** Construction of the East West Road (interim), including a single carriageway (2 lanes) landscaping and shared path, as generally shown on the plan at Annexure A.	From the western boundary of the Land to the extent of all lots with frontage to the East West Road (approximately 240 lineal meters) as generally shown on the plan at Annexure A.	Prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.
RD2 **Polaris Road** Construction of Polaris Road (interim), including single carriageway (2 lanes) landscaping and shared path, and demolition and removal of existing redundant roadway between Donnybrook Road and the PEQ Facility northern entry driveway, as generally shown on the plan at Annexure A. [1]	From the existing intersection at Donnybrook Road to the southern boundary of the Land, as generally shown on the plan at Annexure A.	To be delivered in two stages, comprising: • Stage 1 prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area A; and • Stage 2 prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.
INT1 **Intersection of Polaris Road and Estate Road North** Construction of a roundabout (to provide access to the Estate and PEQ Facility), including a footpath on western leg to connect to the PEQ Facility, as generally shown on the plan at Annexure A.	Construction of full intersection (roundabout), at the location where Polaris Road meets Estate Road North, opposite the main PEQ entry, as generally shown on the plan at Annexure A.	Prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area A.

[1] The alignment of Polaris Road and the demolition and removal of the existing redundant roadway are subject to change pursuant to the detailed plans and specifications submitted to and approved by Council and all necessary permits, consents and approvals obtained for the Construction Project in accordance with this Agreement.

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INT2 **Intersection of Polaris Road and Estate Road South** Construction of a T intersection (un-signalised)	Construction of full intersection (un-signalised), at the location where Polaris Road meets Estate Road South, adjacent to the Conservation Reserve (L3) as generally shown on the plan at Annexure A	Prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.
INT3 **Intersection of Polaris Road and East West Road** Construction of an intersection (90-degree road bend)	Construction of full intersection (90-degree road bend), at the location where Polaris Road meets East West Road, as generally shown on the plan at Annexure A	Prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.

SCHEDULE 3

LAND PROJECTS TABLE

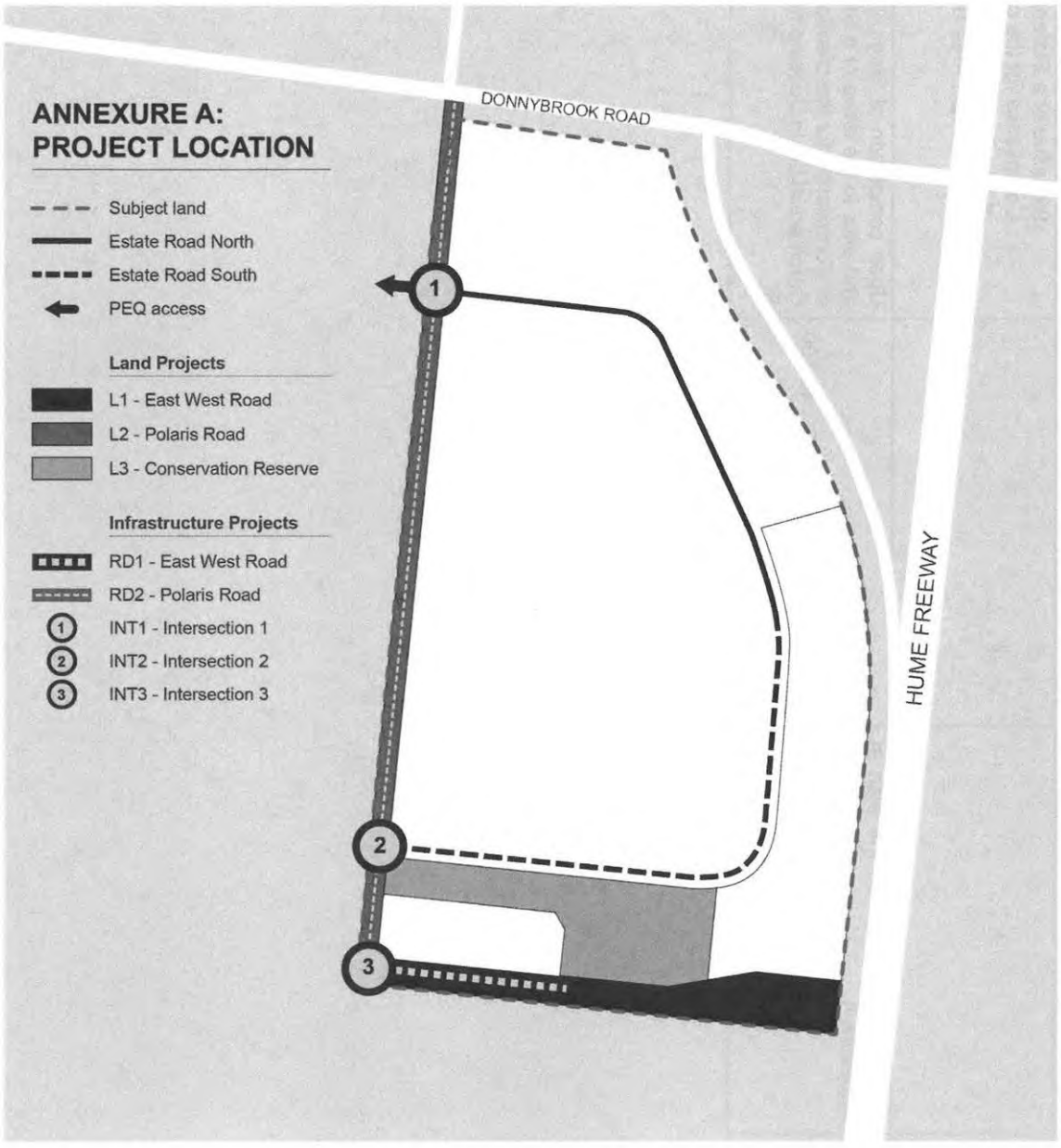
A – Land Project Number and Name	B – Location	C – Area	D – Timing for transfer / vesting
L1 **East West Road**	Between the western boundary of the Land and the Hume Freeway as generally shown on the plan at Annexure A.	Width of road reserve: varies between 34m and 66m (road to bridge). Total area: approximately 28,000 sqm. As generally shown on the plan at Annexure A.	Upon completion of RD1 and prior to to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.
L2 **Polaris Road**	Between the southern boundary of the Land and Donnybrook Road, adjoining the western boundary of the Land, and inclusive of land required from the Land for intersections INT1, INT2 and INT3, as generally shown on the plan at Annexure A.[2]	Width of road reserve: 24m. Total area: approximately 26,500 sqm[3]	To be transferred or vested in 2 stages, comprising: • Stage 1 upon completion of Stage 1 of RD2 and prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area A; and • Stage 2 upon completion of Stage 2 of RD2 and prior to

[2] The alignment of Polaris Road, and therefore the exact location of the Land Project, is subject to change pursuant to the detailed plans and specifications submitted to and approved by Council and all necessary permits, consents and approvals obtained for the associated Construction Project in accordance with this Agreement. Nonetheless, the location of the Land Project is generally as shown on the plan at Annexure A.

[3] The alignment of Polaris Road, and therefore the exact area of the Land Project, is subject to change pursuant to the detailed plans and specifications submitted to and approved by Council and all necessary permits, consents and approvals obtained for the associated Construction Project in accordance with this Agreement. Nonetheless, the area of the Land Project is generally as described in Column C.

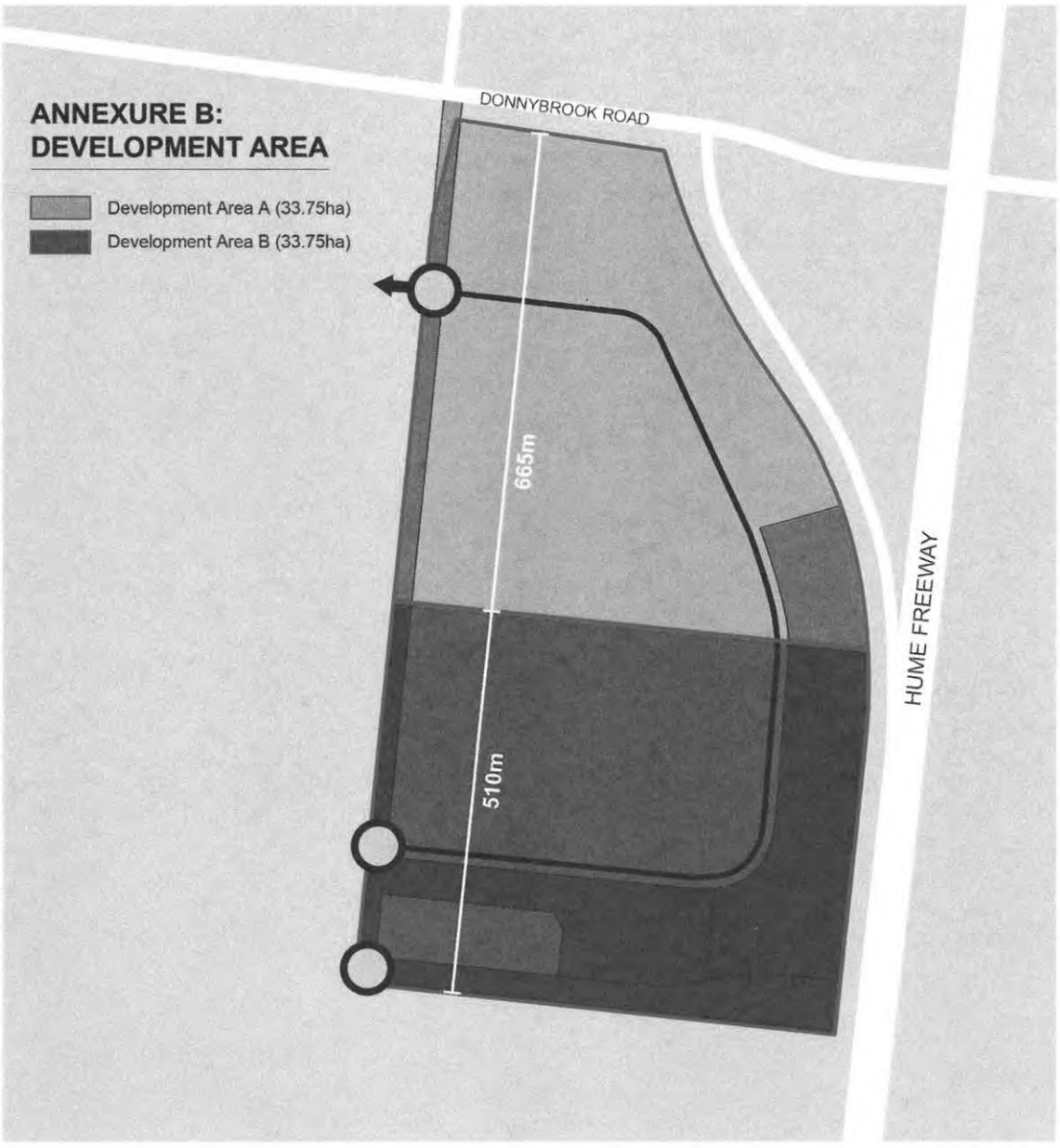
			the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.
L3 **Conservation Reserve**	As generally shown on the plan at Annexure A.	Width varies Total area: approximately 48,700 sqm	Upon completion of Stage 2 of RD2 and prior to the issue of a Statement of Compliance for the creation of any Commercial Lot in Development Area B.

ANNEXURE A

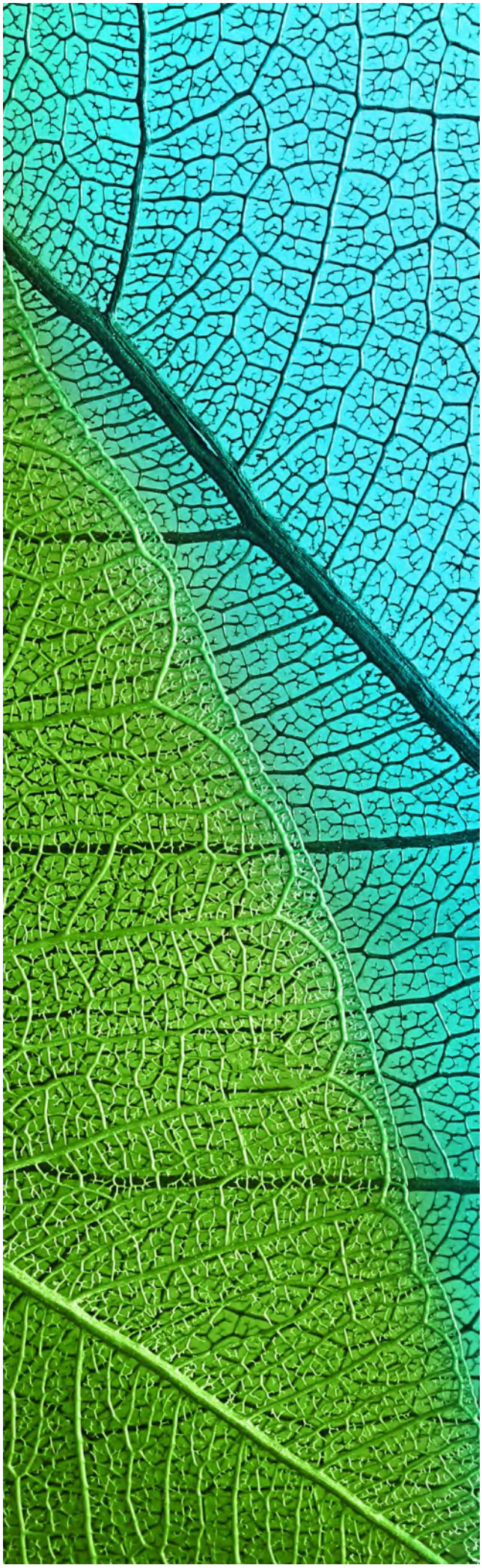


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ANNEXURE B


ANNEXURE B:
DEVELOPMENT AREA
Development Area A (33.75ha)
Development Area B (33.75ha)
DONNYBROOK ROAD
665m
510m
HUME FREEWAY

Appendix 4: Offset Management Strategy



45 Donnybrook Road, Mickleham

Offset Management Strategy

Prepared for Aurecon Australasia Pty Ltd

September 2026

Report No. 25238.01 (4.1)

Nature Advisory

5/61-63 Camberwell Road
Hawthorn East, VIC 3123
PO Box 337, Camberwell VIC 3124
(03) 9815 2111
www.natureadvisory.com.au

Nature Advisory acknowledges the traditional owners and sovereign custodians of the land on which we work from – the Wurundjeri people of the Woi Wurrung language group. We extend our respect to their Ancestors and all First Peoples and Elders, past and present.

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1. Introduction

Aurecon Australasia Pty Ltd engaged Nature Advisory Pty Ltd to prepare an Offset Management Strategy (OMS) for a portion of the property located on private land in Shelford (NTGVVP offset site), Victoria as well as a property located in Mininera (SHWTLP offset site). An Offset Management Plan (OMP) is required to compensate for impacts associated with the proposed development of a data centre at 45 Donnybrook Road, Mickleham (EPBC 2023/09568) under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth; EPBC Act).

This OMS has been prepared to accompany the Preliminary Documentation and provide information on the proposed offset sites that will be secured for the project. An OMP will be prepared once all offsets are secured and management actions specific to each offset site have been agreed upon.

The NTGVVP and SHWTLP offsets will be held under a Memorandum of Understanding (MOU) agreement with the client and landholder until such time as they will be secured as offsets. Until the offsets for both sites have been secured, the exact property locations have been kept out of this strategy.

The exact extent of the offsets will be finalised and detailed in the respective Offset Management Plans and will ensure than a minimum of 100% of the offset target is achieved. This strategy is intended to demonstrate that there is a surplus to the offset requirements for this project available at the respective offset sites.

Matters of National Environmental Significance (MNES) listed under the EPBC Act to be impacted by the current proposal include:

- 2.147 ha of *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP; EPBC Act: Critically Endangered)
- 1.702 ha of *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP; EPBC Act: Critically Endangered)

As the extent of the SHWTLP ecological community overlaps in its entirety with one of the two NTGVVP patches, offsets only need to be secured once (a minimum of 0.445 ha of NTGVVP).

1.1. Proposed NTGVVP offset site

The proposed NTGVVP offset site occurs on private land at in Shelford Victoria, approximately 6.4 km north-west of Shelford and 38 km north-west of Geelong. The proposed NTGVVP offset site is shown in Figure 1.

The offset site was bordered by private property within the same parcel in all directions. Surrounding land predominantly supported farming, including associated buildings and dwellings. Native vegetation occurs along the length of Warrambine Creek to the north and south, with existing areas of NTGVVP abutting the site to the north.

Specifically, the purpose of this OMS is to:

- Confirm the extent and quality of NTGVVP present
- Confirm the suitability as an offset site for any NTGVVP recorded
- inform management requirements of threats including weeds, pests, habitat decline, fencing and fauna management.

- Inform management actions of threats to be implemented at the offset site to improve the quality of the vegetation whilst an Offset Management Plan (OMP) is prepared.
- Furthermore, it aims to inform management of the area to protect and support EPBC Act-listed threatened ecological communities.

1.2. Proposed SHWTLP Offset site

The proposed SHWTLP offset site occurs on private land at in Mininera Victoria, approximately 12 km north-east of Lake Bolac and 39 km south of Ararat. The proposed SHWTLP offset site is shown in Figure 2.

The offset site was bordered by private property within the same parcel in all directions. Surrounding land predominantly supported cropping practices, associated farming infrastructure and rural residences. The proposed offsets occur in association with approximately 90 ha of SHWTLP in the relevant land parcel.

Specifically, the purpose of this OMS is to:

- Confirm the extent and quality of SHWTLP present
- Confirm the suitability as an offset site for any SHWTLP recorded
- Inform management requirements of threats including weeds, pests, habitat decline, fencing and fauna management.
- Inform management actions of threats to be implemented at the offset site to improve the quality of the vegetation whilst an Offset Management Plan (OMP) is prepared.
- Furthermore, it aims to inform management of the area to protect and support EPBC Act-listed threatened ecological communities.

2. Offset Strategy – NTGVVP

2.1. Description of offset site

The offset site totals 8.017 hectares and is comprised of two conservation management zones (CMZs), containing four patches of NTGVVP (Figure 1). The amount of NTGVVP within the offset patches is 4.127 ha with the surrounding buffer area making up the remainder of the offset site area. The NTGVVP and buffer areas will both be managed to protect the NTGVVP. The buffer areas are not being managed to restore NTGVVP to those areas or to increase the extent of NTGVVP but instead are managed to protect the existing NTGVVP patches and prevent any further reduction in extent.

All management zones contain areas that qualify as the EPBC Act-listed community *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP), listed as Critically Endangered under the EPBC act (refer to Table 1 for detailed assessment). All management zones occurred on private property and were highly fragmented due to the presence of exotic grasses, such as Toowoomba Canary-grass *Phalaris aquatica,* Chilean Needle-grass *Nassella neesiana,* and Squirrel-tail Fescue *Vulpia bromoides.*

The Vegetation Quality Field Assessment Sheets (DSE 2004b) are provided in Appendix 1. Descriptions of the environmental values of the proposed offset management zones are provided below.

2.2. Conservation Management Zones

Management Zone 2A (0.343 hectares)

Management Zone 2A (EVC 132_61) was assessed as having a habitat score of 28 out of 100. This management zone occurs in the north-west of the site.

The dominant native species were spear grasses and wallaby grasses. Other indigenous species present within this management zone included Rush, Wiry Dock, Common Blown-grass, Kangaroo Grass and Grassland Wood-sorrel.

Weed cover was moderate and was dominated by Toowoomba Canary-grass and Squirrel-tail Fescue, along with occurrences of Wild Oat, Wild Sage, Spear Thistle *Cirsium vulgare*, Common Sow-thistle and Flatweed.

Management Zone 2B (0.781 hectares)

Management Zone 2B (EVC 132_61) was assessed as having a habitat score of 24 out of 100. This management zone occurs in the west of the site.

The dominant native species were spear grasses and wallaby grasses. Other indigenous species present within this management zone included Wiry Dock, Berry Saltbush *Atriplex semibaccata* and Nodding Saltbush *Einadia nutans*. Planted eucalypts were recorded along the western boundary of the management zone.

Weed cover was moderate and was dominated by Toowoomba Canary-grass and Squirrel-tail Fescue, along with occurrences of Wild Sage, Wild Oat, Serrated Tussock, Flatweed, Horehound *Marrubium vulgare*, Fat Hen *Chenopodium album*, Chilean Needle-grass and Prostrate Knotweed *Polygonum aviculare*.

Management Zone 2C (1.828 hectares)

Management Zone 2C (EVC 132_61) was assessed as having a habitat score of 32 out of 100. This management zone occurs in the south-west of the site.

The dominant native species were spear grasses and wallaby grasses. Other indigenous species present within this management zone included Kangaroo Grass, Bluebell *Wahlenbergia* spp., Windmill Grass *Chloris truncata*, Grassland Wood-sorrel, Tree Violet, Rush and Weeping Grass.

Weed cover was moderate and was dominated by Toowoomba Canary-grass and Squirrel-tail Fescue, along with occurrences of Serrated Tussock *Nassella trichotoma*, Common Sow-thistle *Sonchus oleraceus*, Wild Sage, Wild Oat, Chilean Needle-grass and Flatweed.

Management Zone 2D (1.175 hectares)

Management Zone 2D (EVC 132_61) was assessed as having a habitat score of 31 out of 100. This management zone occurs in the north of the site.

The dominant native species were spear grasses and wallaby grasses. Other indigenous species present within this management zone included Common Blown-grass *Lachnagrostis filiformis*, Kangaroo Grass, Wiry Dock *Rumex dumosus*, Grassland Wood-sorrel, Rush and Weeping Grass.

Weed cover was moderate and was dominated by Toowoomba Canary-grass and Squirrel-tail Fescue, along with occurrences of Wild Oat, Onion Grass *Romulea rosea*, Wild Sage, Rough Sow-thistle *Sonchus asper* and Ox-tongue.

2.3. Site Surveys

The initial site assessment was undertaken by Nature Advisory on 10 January 2025. During the site survey, *Heavier-soils* Plains Grassland (EVC 132_61, DSE 2004a) vegetation was assessed against the key diagnostic criteria and condition thresholds ('qualifying criteria') from the EPBC Act Policy Statement (TSSC 2008) for the EPBC Act-listed community *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP).

Areas that qualified as this community were mapped using ArcGIS Field Maps® (Esri) on a hand-held device. This site assessment was undertaken in summer. It should be noted that vegetation mapped during this survey is vegetation that qualifies as NTGVPP, not native vegetation as defined under Victoria's *Guidelines for the removal, destruction or lopping of native vegetation* ('the Guidelines', DELWP 2017). The extent of native vegetation under the Guidelines extends slightly beyond the mapped NTGVVP however these areas were not mapped or shown as part of this assessment as state offsets are not required. Some of these areas will be within the proposed buffer areas that surround and connect the NTG patches.

All four patches were determined to qualify as NTGVVP, as they occur within the distribution, meet the description, key diagnostic characteristics and condition thresholds of the community (Table 1).

Table 1: Assessment against NTGVVP listing advice (TSSC 2008)

Key diagnostic criteria / Condition thresholds	Assessment
Distribution is mainly limited to Quaternary basalt soils within the Victorian Volcanic Plain IBRA bioregion, sometimes extending into the adjacent Victorian Midlands and South-east Coastal Plain bioregions.	The study area occurs on basalt soils in the Victorian Volcanic Plain IBRA bioregion.
At least one of the following grass genera is the dominant native species in the ground layer: ▪ *Themeda* (Kangaroo-grass); ▪ *Austrodanthonia [Rytidosperma]* (Wallaby-grass); ▪ *Austrostipa* (Spear-grass); and/or ▪ *Poa* (Tussock-grass).	In all patches, the dominant native species in the ground layer was Spear Grass *Austrostipa* spp., with Wallaby Grass *Rytidosperma* spp. co-dominant in some areas.
The minimum size of the grassland patch and the maximum cover of woody vegetation depends on the native vegetation remnant within which the grassland patch occurs. ▪ For a native vegetation remnant ≤1 hectare in size, the minimum contiguous size of the grassland patch is 0.05 hectare and the crown cover of shrubs and trees over one metre tall within the grassland patch should not exceed 5%; ▪ For a native vegetation remnant >1 hectare in size, the minimum contiguous size of a grassland patch is 0.5 hectare and the density of mature trees within the grassland patch should not exceed 2 trees per hectare	All patches of NTGVVP within remnant vegetation ≤1 ha were larger than 0.05 hectares, with shrub and tree cover less than 5%. All patches of NTGVVP within remnant vegetation >1 ha were larger than 0.5 hectares, with less than 2 trees per hectare.
Either: ▪ The total perennial tussock cover represented by the native grass *genera Themeda*, *Austrodanthonia* [*Rytidosperma*], *Austrostipa* or *Poa* is at least 50%; and/or ▪ If the total perennial tussock cover represented by the above 4 native grass genera is less than 50%, then the ground cover of native forbs (wildflowers) is at least 50% of total vegetation cover during spring-summer (September to February); and/or ▪ The cover of non-grass weeds is less than 30% of total vegetation cover at any time of the year	The total perennial tussock cover represented by the native grass genera *Austrostipa* is at least 50% and the cover of non-grass weeds is less than 30% of total vegetation cover at any time of the year.

Therefore, all four zones qualify as NTGVVP as they meet the key diagnostic criteria, by being larger than 0.05 or 0.5 ha, having at least 50% of the total perennial tussock cover represented by the native grass genera *Austrostipa*, and having less than 30% of the total vegetative cover represented by non-grass weeds.

2.3.1. Site survey limitations

The site assessment was conducted during summer. The short duration and seasonal timing of site assessments can result in certain species remaining undetected despite their occasional presence at other times of year. Additionally, some flora species and lifeforms may be undetectable at the time of survey or unidentifiable due to a lack of flowers or fruit. Due to the variable nature of grassland communities across the year and seasons, assessments at a different time of year may result in a slightly different extent of NTGVVP. Summer is a good survey time for the assessment as the native grasses on the site had seed heads present, allowing for easy identification and mapping of the extent.

Sheep grazing and slow growth of grasses resulted in very few grass species with readily identifiable seed material. However, the dominant native species (spear grasses) and the dominant perennial weedy species Toowoomba Canary-grass were readily identifiable due to their habit, distinctive colour and the occasional presence of seed heads. As such, these factors are not considered to be limitations to the extent of NTGVVP recorded within the site.

2.4. Site quality, characteristics and threats

The site occurs along Warrambine Creek, which appears to support patches of grassland to the north and south and is surrounded by agricultural land either side. The quality of all offset management zones was low to moderate. Native species diversity across the site was poor, although the survey was not conducted at an optimal time for observing annual herb species. Weed cover and litter occupied a lot of space between native tussocks.

The site and surrounds have been subjected to sheep grazing historically, with areas still supporting grazing. Stock grazing pressure and weed invasion have resulted in degradation of remnant grassland within the site. Warrambine Creek runs through the site, which supports and facilitates the spread of high-threat weeds such as Cane Needle-grass *Nassella hyalina* and Spear Thistle. Further information on the characteristics and quantified quality of the offset management zones is provided above in Section 2.1.

All four management zones are vulnerable to ongoing weed invasion (particularly from Toowoomba Canary Grass and Chilean Needle-grass) from all sides, which presents one of the biggest threats to NTGVVP within the site. These perennial weed species currently occupy space through their tussocks and litter and reduce native species recruitment All four management zones were subject to high levels of herbivory at the time of survey, which is likely to have been exacerbated by the dry weather and limited vegetative growth. Inappropriate stock grazing poses a risk to the NTGVVP on site, as native herbs may be selectively grazed and native grasses supressed when they are producing seed. European Rabbit or European Brown Hare are expected to occur in all management zones, with diggings observed near CMZ 2. Both of these species have a high potential to suppress recruitment of both herbaceous and woody native species, as well as eliminate more palatable herbaceous native species. While evidence of Red Fox was not observed, it is likely to inhabit the area. Red Fox are known to prey on a range of indigenous fauna species.

2.5. Proposed management actions

The goal of management within each CMZ is to protect and enhance NTGVVP primarily by increasing recruitment area available for native species. Additionally, the area of NTGVVP will aim to be increased over time through management of a buffer area beyond the current mapped extent of NTGVVP.

Management actions will be specified in detail when an OMP is finalised, following discussions with the landowner. The following management actions are suggested to reduce threats within the proposed offset site to maintain the quality of NTGVVP.

Fencing

The establishment of simple fencing is recommended where CMZs abut access tracks, to discourage vehicle access into CMZs. Stock-proof fencing will also be required around each CMZ so stock can be excluded in line with the requirements in the finalised OMP. Details will be provided in the OMP following discussions with the landowner.

Weed control

The aim of weed control is to prevent perennial and annual weed cover from increasing beyond its current levels and provide habitat improvement within buffer zones. Any new weed species recorded must be eradicated.

Note that a baseline survey by a qualified botanist at a different time of year will be undertaken prior to the commencement of the OMP to establish a more extensive weed species list and determine baseline covers. This baseline survey will be used to inform management targets. Weed control must be undertaken by a grassland specialist contractor to avoid off-target spraying.

Pasture improvement and fertiliser must not be allowed to enter the CMZs to avoid excess nutrients and subsequently the establishment of new weed infestations.

Stock grazing

The aim of stock grazing is to assist with control of annual weeds and encourage increased native species diversity. Initially, heavy grazing should occur in mid to late spring to control annual weeds before they set seed and encourage increased cover of native grasses. Following this, the 'crash grazing' method should be utilised to avoid overgrazing. Grazing is recommended only in Winter, to maximise annual weed growth control while allowing native herb species to establish in Spring. Stock may need to be excluded from the site at all other times of year. Stock feed (hay or grain) from outside the offset site must not be placed within the CMZs. Following discussions with the landowner and the baseline weed survey, targets will be established to determine when grazing can commence (when annual weed cover exceeds a certain amount) and when it must end (when annual weed cover reaches a lower target). Prior to stock entering the offset site, they will need to be held for a period to 'empty out' of weed seeds before entering the offset site. It should be noted that simple, temporary fencing may be required to create smaller paddocks for grazing (only if this will have negligible impacts on native vegetation).

It is important not to drastically change the grazing regime from its current one, and discussions with the landowner will ensure grazing is gradually shifted to avoid drastic changes or declines in the vegetation.

Pest control

The goal of pest control will to be reduce rabbit activity within the CMZs through annual monitoring. A detailed pest control plan will form part of the OMP following discussions with the landowner.

Ecological burning

In discussion with the landowner there is potential to recommend ecological burning as a method of increasing native species diversity, however this will need to be carefully implemented as weed cover can increase drastically after a burn if not controlled early.

2.6. Comparison of offset site and impact site

The conservation gains to be achieved is the protection and enhancement of existing NTGVVP in the proposed offset areas. The proposed offset site includes more than the required minimum 90% of the impact offset as it is a larger area than is required (See Appendix 3). While revegetation is not proposed as a management action, weed and pest control as well as controlled stock grazing regimes will be used to increase recruitment for native plant species. Additionally, buffer areas will be managed to encourage recruitment beyond the existing extent and ideally connectivity between fragmented patches.

All management zones which have been chosen for this offset strategy are of a similar quality to the impact site, notably in terms of the understorey structure, species richness, weed cover and patch size. The impact site occurs in an urban agricultural context and is subject to cattle grazing, whilst the offset site comprises several patches in a regional context with sheep grazing. The impact site comprises part of a larger area of native vegetation, whereas the offset site comprises smaller, fragmented patches in close proximity to larger areas of grassland to the north.

As the extent of the SHWTLP ecological community overlaps in its entirety with one of the two NTGVVP patches, offsets only need to be secured once. As such, a minimum of 0.445 ha of NTGVVP is required to be offset.

In accordance with the gain calculator, based on the minimum requirement (0.445 ha), the proposed offset site of 4.127 hectares of NTGVVP will secure 256% of what is required to offset the total quantum of impacts to NTGVVP. As such, the proposed offset site, which comprises similar quality patches of native vegetation that will be actively managed for conservation purposes, will ensure that there is no net loss to the functional ecological community (Appendix 3).

The proposed offset site occurs adjacent to a larger expanse of native vegetation. This adjacent vegetation contains a suite of native plants, animal species, and ecological functions and is currently actively managed as an existing offset site. Furthermore, the proposed offset adequately minimises the reduction in extent of the ecological community as the offset site will see the protection, enhancement, and net gain of at least 4.127 ha of the Critically Endangered community, in perpetuity.

A quantitative comparison of the quality of the offset sites and impact site is provided in Table 2 below. Site quality is based on scores attributed for site condition, site context and species stocking rates (SSR), as required under the EPBC Act Environmental Offset Policy (DSEWPC 2012). Site condition and site context have been derived directly from the habitat scores of the sites, undertaken during the site surveys and in accordance with DEECA's Habitat Hectares methodology (DSE 2004b). Species Stocking Rate could not be determined on site as there were no threatened species identified. Therefore, Species Stocking Rate has been given a weighting of zero, in accordance with DCCEEW's *How to Use The Offsets Assessment Guide* document (DCCEEW 2024).

The Habitat Hectare Vegetation Quality Field Assessment Sheets (VQA Sheets) for the offset site are provided as Appendix 1 and the VQA Sheets for NTGVVP within the impact site are provided in Appendix 2.

Table 2: Quality comparison between the impact site and offset site

	Impact Site	Offset Site			
Attribute	HZ H	HZ 2A	HZ 2B	HZ 2C	HZ 2D
***Site condition**	19	27	23	30	30
^Site context	7	1	1	2	1
#SSR	0	0	0	0	0
Total	**26**	**28**	**24**	**32**	**31**

Table notes: * = Site condition subtotal score, of a possible maximum of 75; ^ = Site landscape context score, of a possible maximum of 25; # = An SSR could not be identified, therefore this component has not been used (i.e. weighting of zero).

2.7. Proposed legal protection of offset site

All management zones comprising the offset site will be secured in perpetuity for the sole purpose of habitat conservation, on title, via a formal agreement under the Victorian Conservation Trust Act 1972, between the owner of the property in which the offset management zones are situated and Trust for Nature.

2.8. How the offset proposal meets the EPBC Act Environmental Offsets Policy

The Commonwealth Offset Policy (DSEWPC 2012) was reviewed to determine whether the proposed offset is consistent with the Commonwealth requirements. The proposed offset has been assessed against the overarching principles of the Commonwealth Offset Policy in Table 3.

Further to this, preliminary calculations were undertaken using the Offsets Assessment Guide (calculator) (DCCEEW 2024) to assist in the determination of whether the offsets proposed for the development would satisfy the Commonwealth offset requirements. Calculations are provided in Appendix 3 and justification for the calculator input values is provided in Appendix 4.

Based on the outputs of the Assessment Guide calculator (Appendix 3), it is considered that all Commonwealth offset requirements for the proposed development can be achieved within the proposed offset site.

Table 3: Assessment against Commonwealth offset principles

Commonwealth Requirement	Proposed Offset Site
Deliver an overall conservation outcome that improves or maintains the viability of the aspect of the environment that is protected by national environment law and affected by the proposed action.	The proposed offset site will secure the ongoing protection of 4.127 ha of NTGVVP. Additionally, with the inclusion of buffer areas, approximately 8.017 ha of land will be secured and managed as an offset site. Furthermore, compared to the removal of 0.445 ha of NTGVVP, protected NTGVVP will exceed removal by an area of 3.682 ha. Therefore, this can be considered to not only compensate for removal but also allow for an overall net benefit to the conservation of this listed matter.
Be built around direct offsets but may include other compensatory measures.	The proposed offset strategy will comprise a direct offset, through the protection of 4.127 ha of NTGVVP.
Be in proportion to the level of statutory protection that applies to the protected matter.	The extent of protected NTGVVP (4.127 ha) relative to the proposed impacts to NTGVVP (0.445 ha), equates to protection of more than eight-times the extent of this listed community. According to the EPBC offset calculator, this equates to more than three times the required area of offsets (Appendix 3). This is deemed to be sufficiently proportionate, given the statutory protection of this critically endangered community.
Be of a size and scale proportionate to the residual impacts on the protected matter.	Refer to above response.
Effectively account for and manage the risks of the offset not succeeding.	An offset management plan (OMP) will be produced to ensure the preservation and enhancement of NTGVVP. This plan will provide a clear framework for managing key threats to NTGVVP, including weeds, pest animals and excess biomass.
Be additional to what is already required, determined by law or planning regulations or agreed to under other schemes or programs.	The proposed offset site is not currently subject to any prior environmental management agreements. While it is covered by an Environmental Significance Overlay (ESO), this doesn't present any obligations beyond the retention of native vegetation (unless a permit for its removal is secured). Management activities covered under an OMP, such as weed control, pest animal control and biomass management, are therefore additional to what is required for this land.
Be efficient, effective, timely, transparent, scientifically robust and reasonable.	As outlined above, the NTGVVP secured will constitute a net gain. The preservation and enhancement of this value will be informed by the expert advice of suitably qualified professionals, through the development and implementation of an OMP. This OMP is to be endorsed by the responsible authority. The proposed offset site has been assessed by a suitably qualified, VQA-accredited botanist. This has been conducted in accordance with the VQA method, as outlined in the Assessor's Handbook (DELWP 2018). The eligibility of assessed vegetation as an occurrence of NTGVVP has also been considered against published guidelines, administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

Commonwealth Requirement	Proposed Offset Site
Have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced.	The offset site will be secured in perpetuity for the sole purpose of habitat conservation, on title, via a formal agreement under the Victorian Conservation Trust Act 1972, between the perspective owner of the property in which the offset management zones are situated and Trust for Nature. Monitoring will be conducted annually for the first 10 years, with the results of monitoring also provided to the responsible authority on this basis.
Be informed by scientifically robust information and incorporate the precautionary principle in the absence of scientific certainty.	An appropriate OMP will be developed by suitably qualified experts and ultimately approved by the responsible authority, prior to the establishment of this offset site. The OMP and ongoing management of this offset site will also be informed by the published recovery plan and approved conservation advice for NTGVVP, as administered by DCCEEW.
Be conducted in a consistent and transparent manner.	The proposed offset site will be managed in accordance with an approved OMP, which will outline a consistent approach to management protocols. This information will be provided to the responsible authority to ensure transparency on any changes to extent and quality of NTGVVP and compliance with approved management requirements.



Figure 1: Proposed NTGVVP Offset Site

Project No: 19057_11 **Project**: Fusion Business Park **Date**: 5/03/2025

Conservation Management Zones

NTGVVP Management Zone

EPBC community (NTGVVP)

CMZ ID

Patch ID

N

Metres

0 90

GDA2020 Vicgrid

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3. Offset Strategy – SHWTLP

3.1. Description of offset site

The proposed offset site occurs on a private property near Mininera, Victoria. It totals 15.429 hectares and is comprised of two conservation management zones (CMZs), containing two patches of SHWTLP (Figure 2). The offset site is bordered by the same land parcel in all directions, which primarily supports cropping practices and existing SHWTLP offsets.

All management zones are occupied by native wetland vegetation that qualifies as the EPBC Act-listed community *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP), listed as Critically Endangered under the EPBC act (refer to Table 4 for detailed assessment). All management zones occurred on private property and were contiguous with over 90 hectares of SHWTLP.

The Vegetation Quality Field Assessment Sheets (DSE 2004b) are provided in Appendix 2. Descriptions of the environmental values of the proposed offset management zones are provided below.

3.2. Conservation Management Zones

Management Zone 4A (6.544 hectares)

Management Zone 4A (EVC 125) was assessed as having a habitat score of 45 out of 100. This management zone occurs in the northern third of the site.

The dominant native species comprised Australian Sweet-grass *Glyceria australis*, Common Spike-rush *Eleocharis acuta* and Common Tussock-grass *Poa labillardierei*. Other prominent indigenous species present within this management zone included Brown-back Wallaby-grass *Rytidosperma duttonianum*, Common Blown-grass *Lachnagrostis filiformis*, Prickfoot *Eryngium vesiculosum*, Common Woodruff *Asperula conferta* and Variable Willow-herb *Epilobium billardierianum*.

Weed cover was low and was dominated by Spear Thistle *Cirsium vulgare*, Prickly Lettuce *Lactuca serriola* and Flatweed *Hypochaeris radicata*. The most significant weed infestations were present in the southern portion of the Management Zone and primarily consisted of Spear Thistle. Weed species were otherwise evenly distributed throughout the Management Zone.

Management Zone 7A (8.886 hectares)

Management Zone 7A (EVC 125) was assessed as having a habitat score of 52 out of 100. This management zone occurred in the southern two-thirds of the site.

The dominant native species were largely consistent with those of 4A, though there was a significantly higher cover of Common Tussock-grass in the east of this Management Zone. Other prominent indigenous species present within this management zone included Tangled Lignum *Duma florulenta,* Brown-back Wallaby-grass, Common Spike-rush, Rough Spear-grass *Austrostipa scabra* and Varied Raspwort *Haloragis heterophylla*. Planted eucalypts were recorded along the western boundary of the management zone.

Weed cover was low and was dominated by Spear Thistle, Prickly Lettuce, Flatweed and Rough Sowthistle *Sonchus asper*. The most significant weed infestations were present in the northern portion of the Management Zone and primarily consisted of Spear Thistle. Weed species were otherwise evenly distributed throughout the Management Zone, except where swathes of Common Tussock-grass excluded most weed species in the east.

3.3. Site Surveys

The initial site assessment was undertaken by Nature Advisory from the 22nd to 23rd January 2025. During the site survey, Plains Grassy Wetland (EVC 125, DSE 2004a) vegetation was assessed against the key diagnostic criteria and condition thresholds ('qualifying criteria') from the EPBC Act Policy Statement (TSSC 2012) for the EPBC Act-listed community *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP).

Areas that qualified as this community were subsequently mapped using ArcGIS Field Maps® (Esri) on a hand-held device. This site assessment was undertaken in early summer, following a period of sufficient rainfall. This timing is considered suitable for detecting wetland flora, which may otherwise have occurred in a dormant state during drier periods.

Both assessed patches were determined to qualify as SHWTLP, as they occur within the distribution, meet the description, key diagnostic characteristics and condition thresholds of the community (Table 4).

Table 4: Assessment against SHWTLP listing advice (TSSC 2012)

Key diagnostic criteria / Condition thresholds	Assessment
Landscape: ▪ Limited to the temperate zone of mainland south-eastern Australia. The ecological community occurs in south-east SA, Victoria and southern NSW. ▪ On flat plains grading into slopes, below 500 m asl. ▪ Associated soils are generally fertile but poorly draining clays derived from a range of geologies. ▪ Typically in rainfall zones with a Winter seasonal rainfall pattern, extending into a Uniform seasonal rainfall pattern at the edge of its range. The mean annual rainfall is usually 400 to 800 mm/year but can be lower at the northern edge of its range.	The proposed offset site occurs within the Victorian Volcanic Plain bioregion and is therefore present in the temperate zone of mainland south-eastern Australia. The topography of the broader landscape is characterised by plains and gentle slopes, with fertile basaltic soils being dominant. The soils of the offset site consisted of poorly drained cracking clays, which has resulted in the dominance of wetland vegetation. The region is subject to a Winter seasonal rainfall pattern. According to Bureau of Meteorology (BOM) data, the region receives at least 400-600mm of rainfall annually.
Hydrology: ▪ On isolated drainage lines or depressions which are seasonally inundated (typically during winter-spring) and subsequently dry (typically by late summer). ▪ Rainfall is the main water source. These wetlands are not dependent on overbank flooding from riverine systems. ▪ Salinity of the water is fresh to slightly brackish. Salinity mostly lies within the range, 0 to 1000 mg/L but can be up to 3000 mg/L, typically exhibiting a progressive increase in salinity as wetlands dry.	The offset site occurred within a substantial depression (approximately 90 ha). The results of this field assessment and past assessments indicate that this site is subject to seasonal inundation, given the dominance of wetland vegetation across its extent.

Key diagnostic criteria / Condition thresholds	Assessment
	Given it is not connected to any major waterways, the primarily source of water is seasonal rainfall. Additionally, wetland flora were typical of freshwater conditions.
Biota: ▪ Trees and shrubs are sparse to absent. When present, they mostly occur as fringing or scattered individuals. The cover of woody species accounts for no more than 10% projective foliage cover across the wetland. ▪ The vegetative cover of the ecological community is dominated by a ground layer of native wetland graminoids and/or native wetland forbs. ▪ A range of graminoids is often present and typically includes one or more of the following taxa: *Amphibromus spp., Carex tereticaulis, Deyeuxia spp., Glyceria spp., Lachnagrostis spp., Poa labillardieri,* and *Rytidosperma duttonianum.* Note that other graminoid taxa may also occur, though are not necessarily common – refer to Appendix A for a plant species list. ▪ At least one native wetland forb species must be present (preferably more) after the ecological community is inundated. The suite of forbs that may occur within the ecological community's range is variable and potentially large. Refer to Appendix A for a plant species list. ▪ Freshwater algae often are present when the wetland is, or recently has been, wet. The most evident representatives are green algae from the groups Charales (stoneworts) and Zygnematales (pond scums). ▪ Characteristic fauna that may be associated with the ecological community include invertebrate groups that are temporary water specialists. The types of fauna present can be highly variable, depending on the inundation history, current conditions and other factors.	Trees and shrubs were very sparse, with the greatest cover (1%) being present in Zone 7A. The site was dominated by a groundcover of wetland graminoids, primarily comprising Australian Sweet-grass, Common Spike-rush and Common Tussock-grass. A range of wetland forbs were present, notably including Common Woodruff, Prickfoot and Variable Raspwort. The wetland was largely dry at the time of assessment, despite preceding rainfall. However, it is anticipated that algae are present during periods of greater inundation. Given the high-quality of wetland vegetation, the significant extent of contiguous habitat and evidence of seasonal inundation, it is anticipated that a range of wetland fauna will utilise the site.
Modified wetlands: ▪ Modifications to other types of wetland may result in the ecological community being present where it was formerly absent. These modified wetland sites are included as part of the national ecological community, if they remain a functional natural wetland and conform to the description of the ecological community.	Not applicable.
Part A) Condition during 'typical' wet cycles: ▪ 50% or more of the total cover of plants in the ground layer of the wetland is dominated by native species characteristic of the Seasonal Herbaceous Wetlands ecological community	During the site assessment, it was found that >50% of the ground layer was associated with characteristic species such as Australian Sweet-grass, Common Spike-rush and Common Tussock-grass.

Key diagnostic criteria / Condition thresholds	Assessment
Part B) For dry conditions (e.g. drought): ▪ Determine landscape position, including any modifications of the surrounds. Observations of the wetland and its surrounding landscape should show that it is clearly consistent with the Seasonal Herbaceous Wetlands. ▪ Is the wetland known to be a natural wetland from existing information? For instance, its floristic composition, when wet, is known from past vegetation surveys or maps, detailed flora lists, wetland directories, reliable modelling of pre-European vegetation, or on-ground evidence that native wetland vegetation is present. ▪ Is the wetland surrounded by or adjoining a native vegetation remnant?	Not applicable.
Part C) Minimum wetland size: ▪ If the wetland occurs as a single isolated wetland, then it must be 0.5 ha or larger in size: or ▪ If the wetland occurs as a cluster of many small wetlands in reasonably close proximity, then the cluster effectively functions as a single unit. The wetlands within the cluster must total at least 0.5 ha and this area of wetland must lie across a polygon (i.e. total area of wetland plus non-wetland in the cluster site) of at least 5ha. This means the area of wetland proper accounts for 10% or more of the total cluster area; or ▪ If an individual wetland or wetland cluster is smaller than 0.5 ha, it may be included as part of the national ecological community if: ▫ the actual wetland or wetland cluster is 0.1 ha or more in size; and ▫ the wetland is contiguous with a native vegetation remnant; and ▫ the total area of the wetland plus other native vegetation remnant or type of natural wetland is 1 ha or more	The wetland zones were contiguous with a single isolated wetland, equating to approximately 90ha.
Part D. Very high quality wetlands: ▪ If three or more native plant taxa listed as indicative of very high quality wetlands in the SHWTLP approved listing advice (TSSR 2012) are present wetland is considered to be of very high quality.	Relevant plant taxa identified during the site assessment included Common Wood-ruff, Prickfoot and Poison Lobelia. However, only Management Zone 7A supported all three of these taxa.

3.3.1. Site survey limitations

The site assessment was conducted during early summer. The short duration and seasonal timing of site assessments can result in certain species remaining undetected despite their occasional presence at other times of year. Additionally, some flora species and lifeforms may be undetectable at the time of survey or unidentifiable due to a lack of flowers or fruit. Due to the variable nature of SHWTLP relative to rainfall, assessments at a different time of year are likely to result in variations in cover and diversity of both native and exotic values. However, given significant rainfall preceded the site survey, the survey period was ultimately considered appropriate for identifying the presence and quality of SHWTLP.

3.4. Site quality, characteristics and threats

The site occurs within a private property in Mininera, in association with approximately 90ha of SHWTLP offsets. The quality of all offset management zones was moderate to high. Native species diversity across the site was moderate, although it is expected to be higher in wetter periods (e.g. late winter/early spring). Weed cover was low across the site, while litter cover was moderate relative to the Plains Grassy Wetland benchmark. The site surrounds have been subjected to cropping historically and this practice is ongoing. Further information on the characteristics and quantified quality of the offset management zones is provided above in Section 3.2.

Both management zones are vulnerable to ongoing weed invasion, which presents one of the most significant threats to SHWTLP within the site. The most prevalent high-threat species comprised Spear Thistle, though other notable species included Yorkshire Fog, Toowoomba Canary-grass and Ox-tongue. These weed species currently occupy inter-tussock spaces throughout both zones, with Spear Thistle infestations being especially prominent where the zones adjoin one another. Though no permanent warrens were identified, European Rabbit are also expected to visit the management zones and result in herbivory pressures. This presents a high potential to suppress recruitment of both herbaceous and grassy species, as well as eliminate more palatable herbaceous native species. While evidence of Red Fox was not observed, it is likely to inhabit the broader area. Red Fox are known to prey on a range of indigenous fauna species. Additionally, adjacent land practices such as spraying of herbicides, application of fertiliser and stubble burning may impact SHWTLP offsets, if these practices are not appropriately contained to surrounding cropland.

3.5. Proposed management actions

The goal of management within each CMZ is to protect and enhance SHWTLP, primarily by reducing the cover of exotic weeds and increasing recruitment area available for native species.

Management actions will be specified in detail when an OMP is finalised, following discussions with the landowner. The following management actions are suggested to reduce threats within the proposed offset site to maintain the quality of SHWTLP.

Fencing

Existing fencing is present along the eastern boundary of the offset site, while the remaining boundaries are bordered by remnant wetland vegetation. This fencing must be maintained in perpetuity, to minimise the potential for unauthorised vehicular access to the offset site. Details will be provided in the OMP following discussions with the landowner.

Weed control

The aim of weed control is to prevent perennial and annual weed cover from increasing beyond its current levels and provide habitat improvement within buffer zones. Any new weed species recorded must be eradicated.

It should be noted that a baseline survey by a qualified botanist was undertaken during the most recent assessment and will guide development of the relevant OMP. This baseline survey will be used to inform priority weeds and management targets.

Weed control must be undertaken by a wetland specialist contractor to avoid off-target spraying.

Fertiliser must not be allowed to enter the CMZs, to avoid excess nutrients and subsequently establishment of new weed infestations.

Biomass control

The aim of biomass control is to assist with the control of annual weeds and encourage increased native species diversity. At the time of the most recent assessment, bare ground was very limited within the management zones and therefore recruitment potential was low. However, this was mostly attributed to a dense cover of Australian Sweet-grass, Common Spike-rush and Common Tussock-grass, rather than exotic weeds. Furthermore, the site supported a moderate diversity of native graminoids and herbs, and it is anticipated that assessments during wetter periods may result in detection of additional species. Biomass control is therefore likely to require a more adaptive approach, which may incorporate ecological burns or stock grazing. This will ultimately be subject to discussions with the landowner and the results of future monitoring.

Pest control

The goal of pest control will to be reduce rabbit activity within the CMZs through annual monitoring. This control protocol will also consider Red Fox as necessary. A detailed pest control plan will form part of the OMP following discussions with the landowner.

Buffer zones

To limit the potential for any impacts from spray drift, fertiliser run-off and stubble burns, a buffer zone will be required along the eastern boundary of the offset site. Agricultural activities must be excluded from this zone in perpetuity, to ensure the ongoing protection of SHWTLP. The extent of this buffer zone will be confirmed, following discussions with the landowner.

3.6. Comparison of offset site and impact site

The conservation gains to be achieved is the protection and enhancement of existing SHWTLP in the proposed offset areas. The proposed offset site includes more than the required minimum 90% of the impact offset as it is a larger area than is required (See Appendix 8). While revegetation is not proposed as a management action, weed and pest control will be used to increase recruitment for native plant species.

All management zones which have been chosen for this offset strategy are of a greater quality to the impact site, notably in terms of the understorey structure, species richness, weed cover and patch size. The impact site occurs in an urban agricultural context and is subject to cattle grazing, whilst the offset site comprises portions of a large SHWTLP occurrence, present in a regional setting.

In accordance with the gain calculator, based on the minimum requirement (1.702 ha), the proposed offset site of 15.429 hectares of SHWTLP will secure 187.81% of what is required to offset the total quantum of impacts to SHWTLP. This achieves an overall gain of 243% when combining this with the gain available at the Shelford offset site. As such, a surplus to the requirements is achieved. This buffer ensures that the offset requirements can be covered between the two proposed offset sites. As such the proposed offset site, which comprises higher quality patches of native vegetation that will be actively managed for conservation purposes, will ensure that there is no net loss to the functional ecological community (Appendix 8).

The proposed offset site adjoins a larger area of high-quality SHWTLP that supports native plants, fauna and ecological functions, and is already managed as an offset site. By protecting and enhancing at least 15.429 ha of this Critically Endangered community in perpetuity, the proposed offset would minimise the reduction in the community's extent.

A quantitative comparison of the quality of the offset sites and impact site is provided in Table 5 below. Site quality is based on scores attributed for site condition, site context and species stocking rates (SSR),

as required under the EPBC Act Environmental Offset Policy (DSEWPC 2012). Site condition and site context have been derived directly from the habitat scores of the sites, undertaken during the site surveys and in accordance with DEECA's Habitat Hectares methodology (DSE 2004b). Species Stocking Rate could not be determined on site as there were no threatened species identified. Therefore, Species Stocking Rate has been given a weighting of zero, in accordance with DCCEEW's How to Use The Offsets Assessment Guide document (DCCEEW 2024).

Table 5: Quality comparison between the impact site and offset site

	Impact Site	Offset Site	
Attribute	HZ G	4A	7A
***Site condition**	34	30	37
^Site context	7	15	15
#SSR	NA	NA	NA
Total	**41**	**45**	**52**

Table notes: * = Site condition subtotal score, of a possible maximum of 75; ^ = Site landscape context score, of a possible maximum of 25; # = An SSR could not be identified, therefore this component has not been used (i.e. weighting of zero).

3.7. Proposed legal protection of offset site

The SHW offset site is protected under a s69 Landowner Agreement, made pursuant to Part 8 of the Victorian Conservation, Forests and Lands Act 1987 (CFL Act) between the property owner and DEECA. The agreement provides legal protection in perpetuity and details management and monitoring actions, resulting in native vegetation and habitat improvement.

The s69 Landowner Agreement and associated offset is registered with the Native Vegetation Offsets Register (NVOR). To meet their offset requirements, the approval holder will secure a 12-ha offset (area to be confirmed) by purchasing an area of unsold Native Vegetation Credits within the existing s69 Landowner Agreement.

Although the SHW offset site is protected with a s69 it is not yet allocated to a project/approval, thus it is available for the current proposal.

Two other Commonwealth Offsets have been established for other patches of SHW on the site previously.

3.8. How the offset proposal meets the EPBC Act Environmental Offsets Policy

The Commonwealth Offset Policy (DSEWPC 2012) will be reviewed to determine whether the proposed offset is consistent with the Commonwealth requirements. The proposed offset will be assessed against the overarching principles of the Commonwealth Offset Policy in Table 6. Preliminary calculations were undertaken using the Offsets Assessment Guide (calculator) (DCCEEW 2024) to assist in the determination of whether the offsets proposed for the development would satisfy the Commonwealth offset requirements based on an assumed score of 5 (based on the lowest score from previous assessments). Under this scenario with a score of 4 for the impact site, approximately 12 hectares of SHWTLP would be required (Appendix 7). VegLink has advised that this amount of native wetland vegetation is present on the proposed offset site. Calculations are provided in Appendix 7 and justification for the calculator input values will be provided in Appendix 8 after a site assessment is completed. Based

on the outputs of the Assessment Guide calculator (Appendix 7), it is considered likely that all Commonwealth offset requirements for the proposed development can be achieved within the proposed offset site.

Table 6: Assessment against Commonwealth offset principles

Commonwealth Requirement	Proposed Offset Site
Deliver an overall conservation outcome that improves or maintains the viability of the aspect of the environment that is protected by national environment law and affected by the proposed action.	The proposed offset site will secure the ongoing protection of 15.429 ha of SHWTLP. Compared to the removal of 1.702 ha of SHWTLP, protected SHWTLP will exceed removal by an area of 13.727 ha. Therefore, this can be considered to not only compensate for removal but also allow for an overall net benefit to the conservation of this listed matter.
Be built around direct offsets but may include other compensatory measures.	The proposed offset strategy will comprise a direct offset, through the protection of 15.429 ha of SHWTLP.
Be in proportion to the level of statutory protection that applies to the protected matter.	The extent of protected SHWTLP (15.429 ha) relative to the proposed impacts to SHWTLP (1.702 ha), equates to protection of approximately 11-times the extent of this listed community. According to the EPBC offset calculator, this equates to more than three times the required area of offsets (Appendix 3). This is deemed to be sufficiently proportionate, given the statutory protection of this critically endangered community.
Be of a size and scale proportionate to the residual impacts on the protected matter.	Refer to above response.
Effectively account for and manage the risks of the offset not succeeding.	An offset management plan (OMP) will be produced to ensure the preservation and enhancement of SHWTLP. This plan will provide a clear framework for managing key threats to SHWTLP, including weeds, pest animals, excessive biomass, nutrient run-off, stubble burns and spray drift.
Be additional to what is already required, determined by law or planning regulations or agreed to under other schemes or programs.	The proposed offset site is not currently subject to any prior environmental management agreements.
Be efficient, effective, timely, transparent, scientifically robust and reasonable.	As outlined above, the SHWTLP secured will constitute a net gain. The preservation and enhancement of this value will be informed by the expert advice of suitably qualified professionals, through the development and implementation of an OMP. This OMP is to be endorsed by the responsible authority. The proposed offset site has been assessed by a suitably qualified, VQA-accredited botanist. This has been conducted in accordance with the VQA method, as outlined in the Assessor's Handbook (DELWP 2018). The eligibility of assessed vegetation as an occurrence of SHWTLP has also been considered against published guidelines, administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).

Have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced.	The offset site is secured in perpetuity for the sole purpose of habitat conservation, on title, via a formal agreement under the Victorian Conservation, Forests and Lands Act 1987 (CFL Act), between the perspective owner of the property in which the offset management zones are situated and DEECA. Monitoring will be conducted annually for the first 10 years, with the results of monitoring also provided to the responsible authority on this basis.
Be informed by scientifically robust information and incorporate the precautionary principle in the absence of scientific certainty.	An appropriate OMP will be developed by suitably qualified experts and ultimately approved by the responsible authority, prior to securing this offset site. The OMP and ongoing management of this offset site will also be informed by the published recovery plan and approved conservation advice for SHWTLP, as administered by DCCEEW.
Be conducted in a consistent and transparent manner.	The proposed offset site will be managed in accordance with an approved OMP, which will outline a consistent approach to management protocols. This information will be provided to the responsible authority to ensure transparency on any changes to extent and quality of SHWTLP and compliance with approved management requirements.



Figure 2: Proposed SHWTLP offset site

Project No: 25238_01 **Project**: 45 Donnybrook Rd, Mickleham, VIC **Date**: 7/01/2026

Conservation Management Zone

SHWTLP Management Zone

EPBC community (SHWTLP)

Patch ID

N

Metres

0 50 100 150

GDA2020 Vicgrid

Nature Advisory

PO Box 337, Camberwell, VIC 3124, Australia
www.natureadvisory.com.au
03 9815 2111 - info@natureadvisory.com.au

4. References

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Appendix 1: Offset site Vegetation Quality Field Assessment Sheets (VQA Sheets) for NTGVVP

Assessor: Tessa Doherty	Site / habitat zone: 1A	Date: 10/1/25
EVC: 132_61	Bioregion: VVP	Area:

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody: Herb (non grass-like leaves)			Non-Woody: Graminoid (Grass-like leaves)						Other						
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust	Bare ground
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C	
Benchmark no. species																							
Obs. no. species																							
Benchmark % cover																							
Obs. % cover					+	+			+	+			12	+	6						8	+	10
Oxalis perennans										✓													
Austrostipa													✓		✓								
Austrostipa													✓										
Rytidosperma													✓		✓								
Rytidosperma													✓		✓								
Juncus sp.													✓										
Persicaria prostrata									✓														
Themeda triandra													✓										
Convulvulus sp.									✓														
Microlaena stipoides														✓									
Alternanthera denat									✓														
Melicytus dentatus					✓																		
Rumex brownii									✓														

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							
Organic litter		30 N					
Total weed cover		25					
High threat weed cover		1%					

Weeds

Species	HT (Y/N)	%	Species	HT (Y/N)	%	Species	HT (Y/N)
Hypochaeris radicata	N	+	Serrated Tussock	Y	+		
Bromus hordeaceus	N	1	Polygonum aviculare	N	+		
Vulpia bromoides	N	2	Chilean Needle-grass	Y	+		
Avena sp.	N	2	Cane Needle-grass	Y	+		
Salvia verbenaca	Y	2					
Phalaris aquatica	Y	15					
Sonchus oleraceus	N	+					
Acetosella vulgaris	N	1					
Helminthotheca echioides	N	+					
Spear thistle	Y	+					
Hordeum sp.	N	2					
Rumex cr. sp	N	+					

Large Tree count

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Assessor: TD	Site / habitat zone: 2A	Date: 10/1/25
EVC: 132	Bioregion: VVP	Area: 0.343

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody									Other					
								Herb (non grass-like leaves)			Graminoid (Grass-like leaves)											
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C
Benchmark no. species								2	12	4	1		13	4							-	
Obs. no. species								0	1	1	0		7	0							-	
Benchmark % cover								5	20	5	5		40	5							20	←
Obs. % cover								0	+	+	0		22								9	+
Hydrocotyle												✓	✓									
Hydrocotyle												✓	✓									
Hydrocotyle												✓	✓									
Juncus													✓									
Hydrocotyle													✓									
Rumex dum									✓													
Lachnagrostis													✓									
Themeda													✓									
Oxalis										✓												

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							–
Organic litter							28
Total weed cover							22
High threat weed cover							55

Weeds

Species	%	HT (Y/N)	Species	HT (Y/N)	Species	HT (Y/N)
Plantago	12	Y				
Vulpia	10					
Avena	1					
Salvia verb	+	Y				
Spear thistle	+	Y				
Soncho oleo	+					
Hypochaeris	+					

Large Tree count

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Bare ground: 21

Assessor: TD	Site / habitat zone: 2B	Date: 10/1/25
EVC: 132	Bioregion: VVP	Area: 0.781

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody									Other					
								Herb (non grass-like leaves)			Graminoid (Grass-like leaves)											
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C
Benchmark no. species								2	12	4	1		13	4							-	
Obs. no. species								0	3	0	0		4	0							-	
Benchmark % cover								5	20	5	5		40	5							20	←
Obs. % cover								0	+	0	0		25	0							6	+
Austrostipa													✓									
Rytidosperma													✓									
Austrostipa													✓									
Rumex dum									✓													
Austrostipa elegan													✓									
Atriplex semi									✓													
Enchadra nut									✓													

Planted ECS

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							2
Organic litter							35
Total weed cover							31
High threat weed cover							65

Weeds

Species	%	HT (Y/N)	Species	HT (Y/N)	Species	HT (Y/N)
Salvia verb	3	Y				
Phalaris	15	Y				
Vulpia	12					
Avena	1					
Serrated Tussock	+	Y				
Hypochaeris	+					
Marrybum	+	Y				
Fat hen	+					
Cirsium needle	1	Y				
Polygonum avic	+					

Large Tree count

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Bare ground: 30

Assessor: TD	Site / habitat zone: 2C	Date: 10/1/25
EVC: 132	Bioregion: VVP	Area: 1.828

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody									Other					
								Herb (non grass-like leaves)			Graminoid (Grass-like leaves)											
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C
Benchmark no. species								2	12	4	1		13	4							1	
Obs. no. species					1			0	1	1	0		7	1							1	
Benchmark % cover								5	20	5	5		40	5							20	←
Obs. % cover					+			0	+	+	0		25	+							8	+
Austrostipa													✓									
Austrostipa													✓									
Rytidosperma													✓									
Themeda													✓									
Wallenbergia									✓													
Chloris truncata													✓									
Austrostipa													✓									
Oxalis										✓												
Melicytus dentatus					✓																	
Juncus													✓									
Microlaena														✓								

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							-
Organic litter							35
Total weed cover							30
High threat weed cover							67

Weeds

Species	%	HT (Y/N)	Species	HT (Y/N)	Species	HT (Y/N)
Serrated Tussock	1	Y				
Phalaris	16	Y				
Sonchus ole	+					
Salvia verb	2	Y				
Avena	1					
Chilean needle	2	Y				
Vulpia	8					
Hypochaeris	+					

Large Tree count

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Bare ground - 24

Assessor: TD	Site / habitat zone: 2D	Date: 10/1/25
EVC: 132_	Bioregion: VVP	Area: 1.175

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody									Other					
								Herb (non grass-like leaves)			Graminoid (Grass-like leaves)											
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C
Benchmark no. species								2	12	4	1		13	4							–	
Obs. no. species								0	1	1	0		7	1							–	
Benchmark % cover								5	20	5	5		40	5							20	←
Obs. % cover								0	+	+	0		20	+							[redacted]	+
Austrostipa													✓									
Rytidosperma													✓									
Rytidosperma													✓									
Lachnagrostis													✓									
Trifolium													✓									
Rumex dum grassland									✓													
Oxalis										✓												
Juncus													✓									
Rytidosperma													✓									
Microlaena														✓								

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							—
Organic litter							30
Total weed cover							20
High threat weed cover							60

Weeds

Species	%	HT (Y/N)	Species	HT (Y/N)	Species	HT (Y/N)
Phalaris	15	Y				
Vulpia bromoides	5					
Avena	[illegible]					
Hedychium coronarium	+					
Romulea rosea	+					
Salvia verbenaca	+	Y				
Sonchus asper	+					
Helminthotheca echioides	+					

Large Tree count

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Boggom

Bare ground: 20

Appendix 2: Impact site Vegetation Quality Field Assessment Sheets (VQA Sheets) for NTGVVP

VVP Grassland Habitat Hectare Assessment (GC ≥25)

Size ranges: Canopy Tree (5m-min can); Understory Tree/Shrub (1-5m); Mallee (>3m); Epiphyte; Scrambler/Climber; Herb (5-50cm); TGram (10cm-1m); NGram (>/<1m); Misc: Hummock Grass; Ground Fern; Tree Fern. **Can. & LOTs** (<30/30-70/>70). **Weeds** (0/<50/>50). **UnC**=Uncontrollable.

Job: 19057.6 Surveyor: TD Date: 31/1/24

Bioreg: EVC: 132 Epis recr_____ Y / N Seas LFs: P/A

HZ	H
WP	
Photo	
NH	
Tenure	

Indigenous			% Cover				Exotic			
Rec	Species	LF	L	M	S/T	P/ misc.	Species	HT	%	UnC
	Anthoxanthum scab.	TG		-25			Blackberry	✓		
	Microlaena stip.	NG		- +			Arwada / privet	✓		
(5)	Austrostipa sp.	TG		- ↑			Phalaris	✓	✓	
	Poa labill	TG		- ↑			Flatweed	✓	✓	
	~~Dichopogon~~	TG								
	Themeda	TG		- ↑						
	Austrostipa sp.	TG	- 1							
	Dianella amoena	TG		- ↑						
	Austrostipa sp.	TG		- ↑						
	Bire dum	H		- 1						
	Oxalis	H		- ↑	- 1					
	calocephalus lach.	H			- ↑					
		TH								

NTGVVP? ☑ **Y** / ☐ **N** ~3 in pnts

Must meet **all 4** diagnostic features:

- ☑ Basalt soils
- ☑ Natives comprise ≥ 50 % total veg cover
- ☐ Themeda, Rytid, Stipa or Poa is dom native sp
- ☑ Patch ≥ 0.05 ha (may vary if multiple patches)

Must meet **one** condition threshold:

- ☐ Native grass genera ≥ 50%
- ☐ Native wildflowers ≥ 50 %
- ☐ Non-grass weeds < 30%

WBPGC? ☐ **Y** / ☐ **N**

Bryophytes 2 *Woody weeds*____% Total Weeds 55 %(~50%HT) Description:

Soil Crusts 1 *NonW. weeds*____%

Litter (N/E) 5 *GS targ.weeds*____%

Bare Ground 1 *Annual weeds*____%

Management notes & onsite threats (OPs only): *</>25% per. grass weed* *NOTE SOILS*

Appendix 3: EPBC Act Offset Calculator for NTGVVP

Offsets Assessment Guide

For use in determining offsets under the *Environment Protection and Biodiversity Conservation Act 1*
2 October 2012

This guide relies on Macros being enabled in your browser.

Matter of National Environmental Significance	
Name	Natural Temperate
EPBC Act status	Critically Endangere
Annual probability of extinction Based on IUCN category definitions	6.8%

Key to Cell Colours
User input required
Drop-down list
Calculated output
Not applicable to attribute

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community Clear row	Yes		Area	0.45	Hectares	Preliminary Documentation (Nature Advisory).
			Quality	3	Scale 0-10	
			Total quantum of impact	0.13	Adjusted hectares	

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)	% of impact offset	Minimum (90%) direct offset requirement met?
Ecological Communities																		
Area of community	Yes	0.13	Adjusted hectares		Risk-related time horizon (max. 20 years)	20	Start area (hectares)	4.127	Risk of loss (%) without offset	0%	Risk of loss (%) with offset	0%	0.00	80%	0.00	0.00	0.34	256.19%	Yes
									Future area without offset (adjusted hectares)	4.1	Future area with offset (adjusted hectares)	4.1						
					Time until ecological benefit	10	Start quality (scale of 0-10)	2	Future quality without offset	1	Future quality with offset	3	2.00	80%	1.60	0.83		

Appendix 4: EPBC Act Offset Calculators values table NTGVVP

Guide component	Assessed value	Discussion and justification
Impact calculator values		
Area (ha)	0.445 ha	The total area value represents the calculated area of loss of the NTGVVP at the site of the proposed action. The total area of removal of NTGVVP within the limit of works area is 0.445 ha[2] (Nature Advisory 2024).
Quality (scale 0-10)	3/10	The quality rating of 3/10 was calculated as per the directions in the DCCEEW 'How to use the offsets assessment guide', where the site quality score was derived from the following three components: *site condition* and *site context.* The value for these components was entirely derived from *habitat score* obtained for the site, using the DEECA's Habitat Hectares methodology (DSE 2004). An explanation on how the habitat score was applied to each quality rating component was as follows: • *Site condition*: The site condition score was based directly on the average of the site condition component of the habitat score comprising the area of NTGVVP, which is 19 out of a maximum possible score of 75. Hence a site condition rating of 1.9 out of a possible 7.5. • *Site context*: The site context score was based directly on the site context component of the habitat score comprising the area of NTGVVP, which is 7 out of a maximum possible score of 25. Hence a site context rating of 0.7 out of a possible 2.5. • *Species stocking rate (SSR)*: Important habitat for threatened species at the site could not be identified, as no threatened species were identified there. However, the habitat hectare analysis considers not only native vegetation components, but also important fauna habitat features such as Large Tree density, log abundance and diversity of lifeforms. As such the habitat hectare score can be used as a surrogate for determining the SSR at the site, thus the SSR score is incorporated in the site condition component of the quality rating score. Therefore, the overall site quality rating of the NTGVVP at the site of the proposed action was calculated to be 1.9 + 0.7 = 2.6/10, which has precautionary been rounded up to 3/10.
Total quantum of impact (adjusted hectares)	0.13 ha	This value was derived directly from the Offset Guide, provided in Appendix 3 of this OMS.
Offset calculator values		
Start area (hectares)	4.127 ha	The offset site (comprising two conservation management zones) is represented below for the purposes of DCCEEW's consideration for the

[2] A total of 2.147 ha of NTGVVP was recorded at the impact site. However, a patch of NTGVVP (1.702 hectares) at the impact site also qualified as SHWTLP. Therefore, it is proposed that only 0.445 hectares of NTGVVP is to be offset, and the remaining impacts will be secured using SHWTLP offsets.

Guide component	Assessed value	Discussion and justification
		suitability of this offset site. A more detailed plan will be prepared for the preliminary documentation: 
Risk-related time horizon	20 years to be secured	As the mechanism for securing this offset is on-title and secured in perpetuity, the maximum value has been applied. We propose to secure this agreement on title through a Trust for Nature (TFN) Covenant.
Risk of loss without offset: **(0 – 100%)**	0%	The DCCEEW have advised that this value should always be zero, in accordance with their current policy.
Risk of loss with offset **(0 – 100%)**	0%	The DCCEEW have advised that this value should always be zero, in accordance with their current policy.
Confidence in result (%) (risk related)	80%	While a value of 80% was entered in the Offset Guide, it has no relevance when risk of loss with and without an offset is at 0%.
Time until ecological benefit	10 years	This value reflects the duration it will take to achieve the management objectives of the OMP once it has been finalised. The OMP targets will be realised by the end of 10 years. The exact specifications on the OMP will require collaboration with the landowner, TFN and DCCEEW. The most significant target will be to control perennial grassy weeds and prevent further spread. A reduction in perennial weed cover would be expected to result in increases in bare ground, decreased weed cover and decreased exotic litter cover. All of these outcomes are expected to occur feasibility within the first 2-3 years of the OMP, but a precautionary duration of 10 years was used to ensure that once these targets are reached that they can be maintained at this level and that the ecological benefit is lasting.

Guide component	Assessed value	Discussion and justification
Start quality (1 – 10)	2/10	The start quality rating of 2/10 was calculated as per the directions in the DCCEEW 'How to use the offsets assessment guide', where the site quality score was derived from the following three components: *site condition, site context and species stocking rate.* The value for these components was entirely derived from *habitat score* obtained for the offset sites, using the DEECA's Habitat Hectares methodology (DSE 2004b). An explanation on how the habitat score was applied to each quality rating component was as follows: • *Site condition*: The site condition score was based directly on the average site condition component of the habitat score of the areas of NTGVVP proposed for this offset site, which is 27.5 out of a maximum possible score of 75. Hence a site condition rating of 2.75 was applied. • *Site context*: The site context score was based directly on the average site context component of the habitat score of the area of NTGVVP proposed for this offset site, which is 1.25 out of a maximum possible score of 25. Hence a site context rating of 0.125 was applied. • Important habitat for threatened species at the site has not been investigated. However, the habitat hectare analysis considers not only native vegetation components, but also important fauna habitat features such as Large Tree density, log abundance and diversity of lifeforms. As such the habitat hectare score can be used as a surrogate for determining the SSR at the site, thus the SSR score is incorporated in the site condition component of the quality rating score. Therefore, the overall start site quality rating of the NTGVVP proposed for this offset site was calculated to be 2.75 + 0.125 = 2.88/10. Although this value is very similar to the impact quality, it includes some areas of slightly lower quality largely due to lower species diversity and low landscape context scores. To account for this decreased diversity and lower context scores, the start quality has precautionarily been given a score of 2/10 despite the average being closer to 3/10.
Future quality without offset (1 – 10)	1/10	A one-point decrease in the quality of the offset site could be expected without implementation of the offset, particularly through increased weed cover and declining diversity resulting in decreased quality. Therefore, the start quality of 2/10 minus 1/10 equals a future quality score without the offset of 1/10.
Future quality with offset (1 – 10)	3/10	A one-point increase in the quality of the offset site could be expected without implementation of the offset, through weed control and biomass control to improve diversity. Therefore, the start quality of 2/10 plus 1/10 equals a future quality score with the offset of 3/10.
Confidence (%) (quality related)	80%	This value in confidence was applied to allow for limitations in predictions on vegetation quality, with and without the offset. However, the modest assumptions, i.e. ±1 quality value are considered precautionary and realistic outcomes especially given the relatively low starting quality. It is considered highly likely that the vegetation quality will degrade without the offset and management due to high threat weed invasion (primarily Toowoomba Canary Grass and Chilean Needle Grass) as well as the

Guide component	Assessed value	Discussion and justification
		vulnerability of these values with a lack of security (may be proposed for development by future landowners). Conversely, if the site becomes an offset, the OMP and the associated weed control obligations will eliminate and prevent the spread of high threat weeds, facilitate native species colonisation and result in an improvement in the quality of the offset. Additionally, securing this offset on title will protect these values from any future development of the site leading to its degradation/removal.

Appendix 5: Offset site Vegetation Quality Field Assessment Sheets (VQA Sheets) for SHWTLP

Assessor: AK	Site / habitat zone: LIA	Date: 22/12/25
EVC: 125	Bioregion: VVP	Area: 6.544 ha

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody										Other					
								Herb (non grass-like leaves)			Graminoid (Grass-like leaves)												
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C
Benchmark no. species					1			5	6	3	3	1	8	2							na	
Obs. no. species					1			1	8	3	1	1	7	1							na	
Benchmark % cover					1			5	10	10	15	5	30	10							10	
Obs. % cover					+			+	5	1	5	-	30	10							+	
Poa labi.											✓		✓									
Lachnagrostis fil.													✓									
Rytidosperma caes.													✓									
Rytidosperma dut.													✓									
Austrostipa scabra													✓									
Glyceria aus.													✓									
Eleocharis acuta														✓								
Juncus sp.													✓									
Senecio glom.								✓	✓													
Asperula con.									✓	✓												
Wahlenbergia									✓													
Eryngium vesi.									✓	✓												
Lophogyne lut.									✓													
Epilobium hir.									✓													
Geranium pot.									✓	✓												
Brachyscome div.									✓													
Dumortiera flo.					✓																	

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							-
Organic litter							30
Total weed cover							7
High threat weed cover							6

Weeds

Species	HT (Y/N)	Species	HT (Y/N)	Species	HT (Y/N)
Cirsium vulgare	Y				
Lactuca serriola	N				
Holcus lanatus	Y				
Taraxacum	N				
Sonchus asper	N				
Briza minor	N				
Avena barbata	N				
Hypochaeris rad.	Y				
Hetheranthera ech.	Y				
Vulpia bromoides	N				
Bromus hord.	N				
Lysimachia arv.	N				

Large Tree count X

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs X

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Bare ground : <1%

Assessor: AK	Site / habitat zone: 7A	Date: 22/12/25
EVC: 125	Bioregion: VVP	Area: 8.886 ha

Habitat Hectare life form checklist

Species name	Adeq. Recruitment* Y/N	Woody						Non-Woody									Other					
								Herb (non grass-like leaves)			Graminoid (Grass-like leaves)											
		Immature Canopy Tree >5m	Understorey Tree >5m	Mallee Tree	Medium Shrub 1 - 5m	Small Shrub 0.2 - 1m	Prostrate Shrub <20cm	Large >50cm	Medium 5 - 50cm	Small <5cm	Large Tufted >1m	Large Non-tufted >1m	Medium Tufted 0.1 - 1m	Medium Non-tufted <1m	Tiny Tufted <10cm	Hummock Grass	Ground fern	Tree fern / Palm	Scrambler / Climber	Epiphyte	Bryophytes / Lichens	Soil Crust
		IT	T	MT	MS	SS	PS	LH	MH	SH	LTG	LNG	MTG	MNG	TTG	HG	GF	TF	SC	EP	BL	S/C
Benchmark no. species					1			5	6	3	3	1	8	2							na	
Obs. no. species					1			1	11	5	1	-	7	1							-	
Benchmark % cover					-			5	10	10	15	5	30	10							10	
Obs. % cover					1			+	10	3	15	-	36	10							-	
Poa labi.											✓		✓									
Lachnagrostis fili.													✓									
Austrostipe scabra													✓									
Rytidosperma ges.													✓									
Rytidosperma duv.													✓									
Juncus sp.													✓									
Goodenia ova.													✓									
Eleocharis acuta														✓								
Senecio glom.								✓	✓	✓												
Asperula conf.									✓													
Wahlenbergia									✓													
Lophangium lut.									✓													
Acaena echinata									✓													
Eryngium vesi									✓	✓												
Epilobium hal									✓													
Geranium pot.									✓	✓												
Brachyscome dav.									✓													
Oxalis perennans										✓												
Lobelia pratt.										✓												
Euchiton inv.									✓													
Haloragis hetero.									✓													
Dumo floculenta					✓																	

Cover estimates

	BM %	Multiple estimates if required					Total cover (%)
Canopy cover							-
Organic litter							25
Total weed cover							6
High threat weed cover							4

Weeds

Species	HT (Y/N)	Species	HT (Y/N)	Species	HT (Y/N)
Cirsium vulgare	Y	Cynosurus ech.	N		
Lactuca serriola	N				
Hypochaeris rad	Y				
Helminthotheca ech.	Y				
Sonchus asper	N				
Taraxacum	N				
Holcus lanatus	Y				
Avena barbata	N				
Centaurium eryth.	N				
Acetosella vulg.	N				
Briza minor	N				
Phalaris aquatica	Y				

Large Tree count X

	BM no./ha	DBHs or running count of LOTs	Total LT/ha
Benchmark DBH _____cm			

Logs X

Benchmark		Running log count		Total logs (m)
Benchmark m/0.1ha _____m	**Logs** (>10 cm & <50% BM LT DBH)			
Benchmark large log _____cm	**Large Logs** (≥50% BM LT DBH)			

Bare ground : <1%

Appendix 6: Impact site Vegetation Quality Field Assessment Sheets (VQA Sheets) for SHWTLP

VVP Grassland Habitat Hectare Assessment (GC ≥25)

Size ranges: Canopy Tree (5m-min can); Understory Tree/Shrub (1-5m); Mallee (>3m); Epiphyte; Scrambler/Climber; Herb (5-50cm); TGram (10cm-1m); NGram (>/<1m); Misc: Hummock Grass; Ground Fern; Tree Fern. **Can. & LOTs** (<30/30-70/>70). **Weeds** (0/<50/>50). **UnC**=Uncontrollable.

Job: 14057.6 Surveyor: TD Date: 31/1/24

Bioreg: VVP EVC: 132 Epis recr_____ Y / N Seas LFs: P/A

HZ	G
WP	
Photo	
NH	
Tenure	

Indigenous			% Cover				Exotic			
Rec	Species	LF	L	M	S/T	P/ misc.	Species	HT	%C	UnC
							Poa	✓		
✓	Poa labillardieri	Th		15			Phalaris	✓	✓	
	Juncus						Lolium			
	Austrostipa						Ehrharta	✓	✓	
	Rytidosperma duttonianum						Sparaxis	✓		
	Arthropodium strictum / Veronica gracilis	H								
	Epilobium	H		3						
	Acaena novae-zelandiae	H								
	Gonocarpus	H								
	Dichondra repens	H				10				
	Calocephalus lacteus	H								
	Pole dense									
	Lobelia pratioides									
	Oxalis									
	Centella									
	Elaeocharis	N		10						
	Isolepis									

NTGVVP? ☑ Y / ☐ N

Must meet **all 4** diagnostic features:

- ☑ Basalt soils
- ☐ Natives comprise ≥ 50 % total veg cover
- ☑ Themeda, Rytid, Stipa or Poa is dom native sp
- ☐ Patch ≥ 0.05 ha (may vary if multiple patches)

Must meet **one** condition threshold:

- ☐ Native grass genera ≥ 50%
- ☐ Native wildflowers ≥ 50 %
- ☐ Non-grass weeds < 30%

WBPGC? ☐ Y / ☐ N

Bryophytes 3 *Woody weeds*____% Total Weeds 40 %(7.50 %HT) Description:

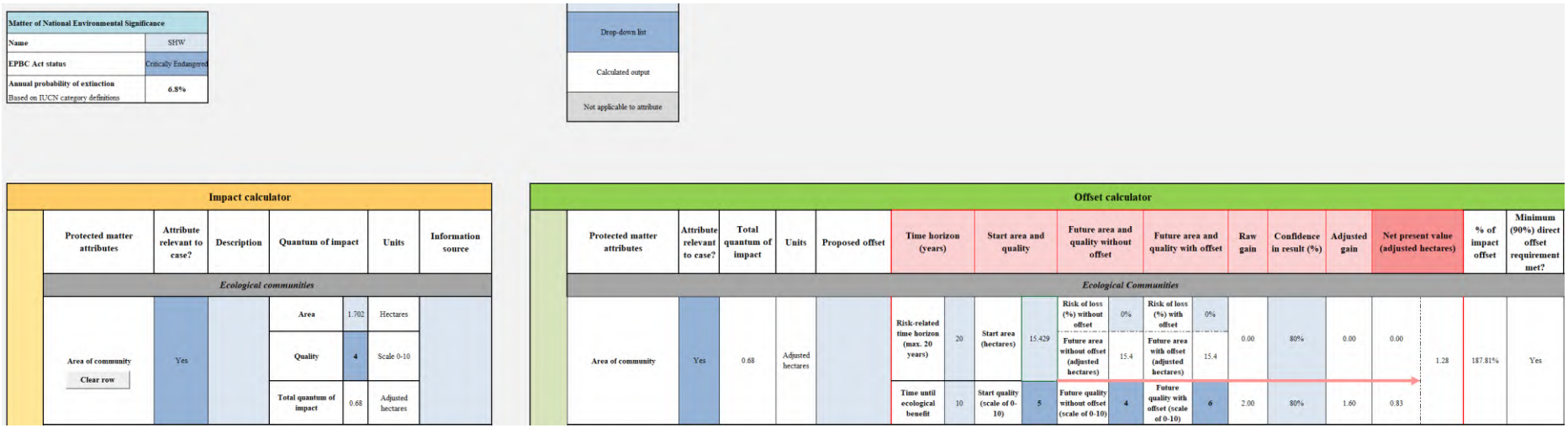
Soil Crusts 1 *NonW. weeds*____%

Litter (N/E) 3 *GS targ.weeds*____%

Bare Ground 2 *Annual weeds*____%

Management notes & onsite threats (OPs only): *</>25% per. grass weed* *NOTE SOILS*

Appendix 7: EPBC Act Offset Calculator for SHWTLP



Matter of National Environmental Significance	
Name	SHW
EPBC Act status	Critically Endangered
Annual probability of extinction Based on IUCN category definitions	6.8%

Drop-down list

Calculated output

Not applicable to attribute

Impact calculator

Protected matter attributes	Attribute relevant to case?	Description	Quantum of impact		Units	Information source
Ecological communities						
Area of community Clear row	Yes		Area	1.702	Hectares	
			Quality	4	Scale 0-10	
			Total quantum of impact	0.68	Adjusted hectares	

Offset calculator

Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon (years)		Start area and quality		Future area and quality without offset		Future area and quality with offset		Raw gain	Confidence in result (%)	Adjusted gain	Net present value (adjusted hectares)		% of impact offset	Minimum (90%) direct offset requirement met?
Ecological Communities																			
Area of community	Yes	0.68	Adjusted hectares		Risk-related time horizon (max. 20 years)	20	Start area (hectares)	15.429	Risk of loss (%) without offset	0%	Risk of loss (%) with offset	0%	0.00	80%	0.00	0.00	1.28	187.81%	Yes
									Future area without offset (adjusted hectares)	15.4	Future area with offset (adjusted hectares)	15.4							
					Time until ecological benefit	10	Start quality (scale of 0-10)	5	Future quality without offset (scale of 0-10)	4	Future quality with offset (scale of 0-10)	6	2.00	80%	1.60	0.83			

Appendix 8: EPBC Act Offset Calculators values table SHWTLP

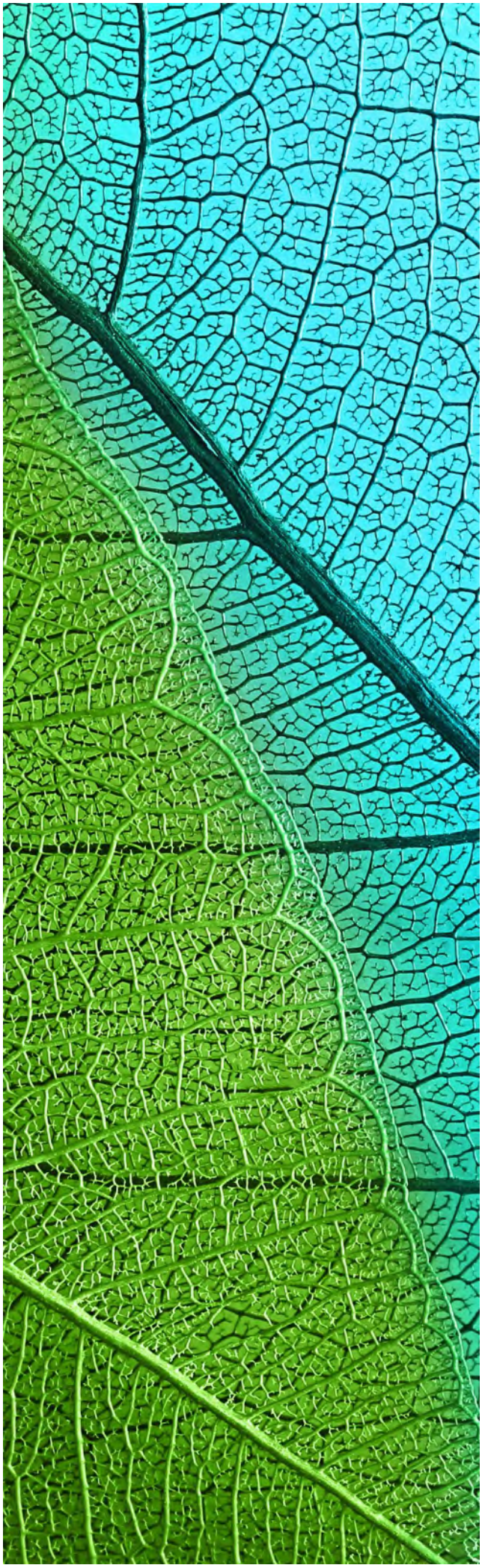
Guide component	Assessed value	Discussion and justification
Impact calculator values		
Area (ha)	1.702 ha	The total area value represents the calculated area of loss of the SHWTLP at the site of the proposed action. (Nature Advisory 2024).
Quality (scale 0-10)	4/10	The quality rating of 4/10 was calculated as per the directions in the DCCEEW 'How to use the offsets assessment guide', where the site quality score was derived from the following three components: *site condition* and *site context.* The value for these components was entirely derived from *habitat score* obtained during the current assessment. An explanation on how the habitat score was applied to each quality rating component was as follows: • *Site condition*: The site condition score was based directly on the average of the site condition component of the habitat score comprising the area of SHW. With 34 out of 75 (i.e. 3.4/7.5). • *Site context*: The site context score was based directly on the site context component of the habitat score comprising the area of SHW, which is 7 out of a maximum possible score of 25 (i.e. 0.7/2.5). • *Species stocking rate (SSR)*: Important habitat for threatened species at the site could not be identified, as no threatened species were identified there. However, the habitat hectare analysis considers not only native vegetation components, but also important fauna habitat features such as organic litter and diversity of lifeforms. As such the habitat hectare score can be used as a surrogate for determining the SSR at the site, thus the SSR score is incorporated in the site condition component of the quality rating score. Therefore, the overall site quality rating of the SHW at the site of the proposed action was assumed until the site assessment to be 3.4+0.7 = 4/10.
Total quantum of impact (adjusted hectares)	0.68 ha	This value was derived directly from the Offset Guide, provided in Appendix 4 of this OMS.
Offset calculator values		
Start area (hectares)	15.429 ha	The offset site and the areas of SHW were determined to equate to 15.429 ha following the field assessment.

Guide component	Assessed value	Discussion and justification
Risk-related time horizon	20 years to be secured	As the mechanism for securing this offset is on-title and secured in perpetuity, the maximum value has been applied. We propose to secure this agreement on title through a Trust for Nature (TFN) Covenant.
Risk of loss without offset: (0 – 100%)	0%	The DCCEEW have advised that this value should always be zero, in accordance with their current policy.
Risk of loss with offset (0 – 100%)	0%	The DCCEEW have advised that this value should always be zero, in accordance with their current policy.
Confidence in result (%) (risk related)	80%	While a value of 90% was entered in the Offset Guide, it has no relevance when risk of loss with and without an offset is at 0%. Also the offsets site has already been successfully used for two other Federal offsets sites giving us increased confidence in the result.
Time until ecological benefit	10 years	This value reflects the duration it will take to achieve the management objectives of the OMP once it has been finalised. The OMP targets will be realised by the end of 10 years. The exact specifications on the OMP will require collaboration with the landowner, TFN and DCCEEW.
Start quality (1 – 10)	5/10	The start quality rating of 5/10 was calculated as per the directions in the DCCEEW 'How to use the offsets assessment guide', where the site quality score was derived from the following three components: *site condition, site context and species stocking rate.* The value for these components was entirely derived from *habitat score* obtained for the offset sites in 2021, using the DEECA's Habitat Hectares methodology (DSE 2004b). This score will be confirmed following the site assessment. An explanation on how the habitat score was applied to each quality rating component was as follows: • *Site condition*: The site condition score was based directly on the average site condition component of the habitat score of the areas of SHWTLP proposed for this offset site, which is 34 out of a maximum possible score of 75 (i.e. 3.4/7.5) • *Site context*: The site context score was based directly on the average site context component of the habitat score of the area of NTGVVP proposed for this offset site, which is 15 out of a maximum possible score of 25 (i.e. 1.5/2.5). • Species stocking rate (SSR): Important habitat for threatened species at the site could not be identified, as no threatened species were identified there. However, the habitat hectare analysis considers not only native vegetation components, but also important fauna habitat features such as organic litter and diversity of lifeforms. As such the habitat hectare score can be

Guide component	Assessed value	Discussion and justification
		used as a surrogate for determining the SSR at the site, thus the SSR score is incorporated in the site condition component of the quality rating score. Therefore, the overall start site quality rating of the SHWTLP proposed for this offset site was calculated to be 3.4 + 1.5 = 5/10. Although this value will be confirmed following the site assessment.
Future quality without offset (1 – 10)	4/10	A one-point decrease in the quality of the offset site could be expected without implementation of the offset, through increased weed cover and declining diversity resulting in decreased quality. Therefore, the start quality of 5/10 minus 1/10 equals a future quality score without the offset of 4/10.
Future quality with offset (1 – 10)	6/10	A one-point increase in the quality of the offset site could be expected without implementation of the offset, through weed control and grazing to improve diversity. Therefore, the start quality of 5/10 plus 1/10 equals a future quality score with the offset of 6/10.
Confidence (%) (quality related)	80%	This value in confidence was applied to allow for limitations in predictions on vegetation quality, with and without the offset. However, given the offset site has already been successfully used for meeting the requirements of two prior federal offsets. The OMP and the associated weed control obligations will eliminate and prevent the spread of high threat weeds, facilitate native species colonisation and result in an improvement in the quality of the offset. Additionally, the exiting s69 Landholder Agreement protects these values from any future development of the site leading to its degradation/removal.

*Will be confirmed and updated if required following a site assessment for SHWTLP.

Appendix 5: Conservation Management Plan



45 Donnybrook Road, Mickleham

Conservation Management Plan

Prepared for Aurecon Australasia Pty Ltd

October 2026

Report No. 25238.01 (2.6)

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1. Introduction

Aurecon Australasia Pty Ltd engaged Nature Advisory Pty Ltd to create a Conservation Management Plan (CMP) for two proposed reserves located within 45 Donnybrook Road, Mickleham (Figure 1). This CMP was developed in response to a requirement under the *Development Plan Overlay – Schedule 34 (DPO34)* in the Hume Planning Scheme which requires a CMP to be produced and approved prior to any development in areas covered by the overlay (DoTP 2024).

The two reserves comprised remnant wetland and grassland in the south ('Conservation Reserve') and an area of remnant wetland and planted trees in the northeast ('Tree Reserve'). A data centre development and associated infrastructure is proposed for the remainder of the study area outside of the reserves. The environmental values outside of the reserves will not be retained and are not considered further in this CMP.

The purpose of the Conservation Reserve is to protect and enhance the condition of Plains Grassland (EVC 132_61) and Plains Grassy Wetland (EVC 125) already present within the reserve, and to increase the cover of indigenous species in the reserve to at least 70%. This will increase the total area of the EPBC Act listed communities Natural Temperate Grasslands of the Victorian Volcanic Plains (NTGVVP) and Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (SHWTLP). Targeted surveys have been conducted within the study area for Matted Flax-lily (MFL), there is one historical record of MFL within the conservation area. Their locations are shown in Figure 1.

The purpose of the Tree Reserve is to maintain remnant ecological values (i.e. Plains Grassy Wetland) and reestablish a robust understory of species that are characteristic of modelled Plains Grassy Woodland (EVC 55). All trees within this reserve are non-indigenous and non-native, though they will be retained given their utility to fauna. Revegetation with species from the appropriate Plains Grassy Woodland EVC will be undertaken in accordance with the Landscaping Plan.

This CMP also aims to inform management requirements of threats including weeds, pests and dumping of rubbish.

This CMP prescribes management actions to commence upon approval of the plan and continue through Stage 1 of construction to two years post-construction (within Stage 2). AirTrunk will manage the reserves for two years following completion of Stage 1 works. Construction of the data centre buildings will continue during Stage 2 within the foundations established during Stage 1. Construction and commissioning of the seven data centre buildings will occur progressively over a ten-year period. For the purposes of this plan, the construction period is from the commencement of works to the completion of Stage 1, as Stage 2 works will occur on developed areas. Stage 1 will include all works in and around the Conservation Reserve and Tree Reserve. The plan includes the following:

- A statement of sources of information consulted for the investigation, including any limitations, where applicable.
- Results of the review of existing information documenting biodiversity, ecological values and management requirements of the site and study area.
- A list of weed species identified during the site survey and identification of key threats in the study area.
- Table of appropriate management actions required.

Following the required 2-year management period by the proponent and the completion of management actions and targets outlined in this report, management of the Conservation Reserve

will be handed over to Council (subject to discussions with Hume City Council). After this, the reserve is to be managed by Council under a Section 173 agreement to retain the environmental values in these areas (i.e. weed management and maintenance of fencing). However, it is understood that the Tree Reserve will remain the responsibility of the proponent. It is likely that continuation of the management actions in this plan will be required before its targets can be met.

This report is divided into the following sections:

Section 2 describes the existing environmental values present and threats within the reserves.

Section 3 describes management actions, such as fencing and pest animal control.

Section 4 details weed control management actions.

Section 5 details revegetation actions, including the planting schedule, protections and planting design.

This investigation was undertaken by a team from Nature Advisory comprising Sarah Dunn (Botanist), Kate Thurkle (Botanist & Project Officer), Sammy Blades (GIS Analyst), Nicola Roysmith (GIS Analyst), Arend Kwak (Senior Botanist) and Amanda Dare (Senior Project Manager & Zoology Field Team Lead).

The implementation of this CMP must commence immediately upon its approval by the Responsible Authority.

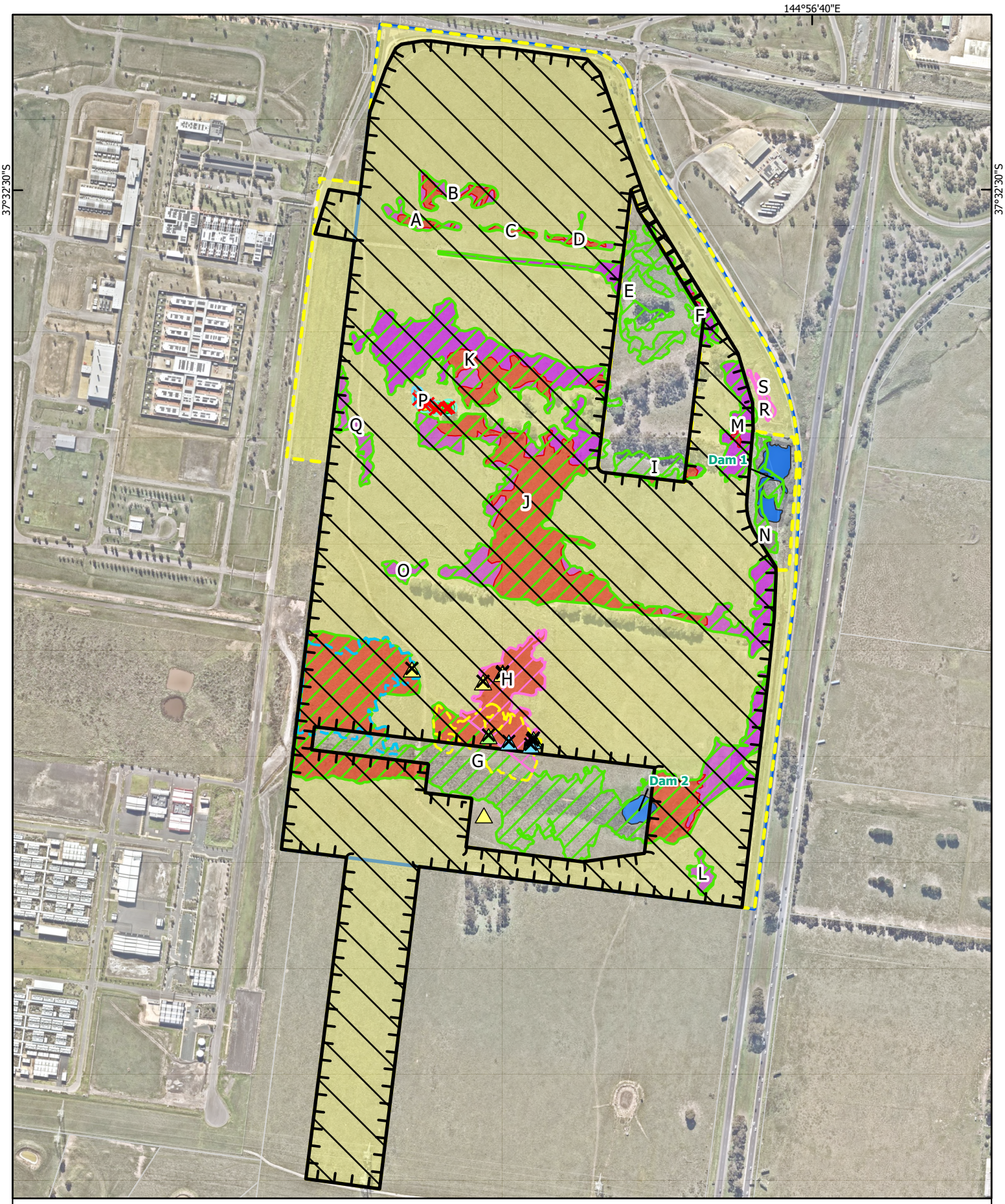


Figure 1. Study area and existing ecological values

Project No: 25238.01 **Project**: 45 Donnybrook Road, Mickleham **Date**: 08/09/2026

- Study area
- Impacted Footprint
- Referral Area
- TPZ
- Dam

EPBC community (2024)

- NTGVVP
- NTGVVP and SHWTLP

Threatened Flora Species

- Matted Flax-lily (Nature Advisory 2019)
- Matted Flax-lily (Nature Advisory 2024)
- Matted Flax-lily (Nature Advisory 2025)
- Matted Flax-lily to be removed

Native vegetation

- Large Scattered Tree
- Large Tree in Patch
- Small Tree in Patch
- Plains Grassland
- Plains Grassy Wetland
- Plains Grassy Woodland

Removal

- Tree to be removed
- Native vegetation to be removed
- Exemption removal

N

Metres

0 180

GDA2020 Vicgrid

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2. Environmental values and threats

2.1. Site description and environmental values

The larger study area supported basalt soils on a gently sloping landscape, with a low point in the south where a drainage line exists running from west to east. A drainage line also runs from north to south along the eastern edge of the study area. Both these watercourses support standing water and farm dams. The land has historically been used for agricultural stock grazing, and cattle were actively grazing during the field assessments.

Two reserve areas are proposed within the development area, a 4.29-hectare Tree Reserve east of the development and a 4.89-hectare Conservation Reserve along the waterway in the south of the study area. The purpose of the Tree Retention Reserve is to create a reserve where existing native vegetation is enhanced with understory plantings and non-native trees are retained. Vegetation in the Tree Reserve was highly modified and comprised a planted canopy of Sugar Gum (non-indigenous) and Cyprus Pine (non-native) and a high weed cover of Toowoomba Canary-grass, Serrated Tussock and Drain Flat-sedge. Native vegetation consisted primarily of Rushes, as well as a lesser occurrence of Wallaby Grass, Common Tussock-grass, and Common Spike-sedge. There were no indigenous trees in the area.

The Conservation Reserve will protect and enhance the condition of Plains Grassland (EVC 132_61) and Plains Grassy Wetland (EVC 125), to increase the total amount of the EPBC Act listed communities *Natural Temperate Grassland of the Victorian Volcanic Plains* (NTGVVP) and *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP). Furthermore, it is anticipated that these listed community occurrences will provide suitable habitat for a range of threatened flora and fauna species. Vegetation within the Conservation Reserve mostly comprised native Rushes, Common Spike-sedge, Common Tussock-grass and Common Blown-grass. Outside remnant patches, the ground layer was dominated by weeds such as Brown-top Bent and Cane Needle-grass.

The reserves lie within the Victorian Volcanic Plain bioregion and fall within the Melbourne Water catchment management area and Hume City Council local government area. The conservation area is currently zoned Industrial Zone (INZ1) in the Hume Planning Scheme.

2.2. Management issues and threats

The following sections describe current threats to environmental values in the conservation areas.

2.2.1. Weeds

The vegetation within the study area has been disturbed and modified by past agricultural land use, which has resulted in the loss of native flora species in some areas and the invasion of weed species. Although not all weeds recorded across the property are present within the proposed reserves, there exists the potential for the emergence of these species from existing seed banks or invasion from adjacent areas. Therefore, weed control must consider all potential priority weeds across the entire property. High-threat weeds pose a significant risk to native vegetation within the reserves. Land managers are also required to meet the obligations under the CaLP Act regarding preventing the growth and spread of regionally controlled weeds.

61 weed species were recorded during the field study, of which 12 species are listed under the CaLP Ac. These notably included African Box-thorn, Blackberry, Gorse, Sweet Briar, Serrated Tussock, Chilean Needle- Grass and various Thistles. These species are currently out-competing indigenous species in some areas and will continue to do so if left untreated. A baseline survey of

the weeds within the two reserves and the establishment of Photo points is recommended prior to construction to establish the weed priorities for the reserves and allow for monitoring of the success of management actions. Weed control methods are discussed in Section 4.

2.2.2. Pest animals

Rabbit activity was observed within the study area. Rabbits pose a risk to the native vegetation throughout the reserves through overgrazing. Furthermore, rabbits can cause soil erosion, establishment of opportunistic weeds and attract foxes. Pest control for rabbits may be required and guarding of revegetation is recommended if rabbit numbers are high.

2.2.3. Rubbish

A small amount of rubbish was observed within the study area. Rubbish can act as a harbour for pest animals such as rabbits. Furthermore, it can spread into the reserves and surrounding landscape and negatively impact associated ecological values.

Removal of rubbish is discussed in Section 3.4.

2.2.4. Unauthorised/inappropriate access

Unauthorised access to the Conservation Reserve poses risks to the environmental values and may lead to the following:

- Habitat and ecological community destruction;
- Soil compaction;
- Introduction of weeds;
- Introduction of pests and diseases;
- Dumping of rubbish.

Section 3.5 discusses fencing requirements to minimise unauthorised/inappropriate access to the Conservation Reserve.

2.2.5. Changes in Soil Moisture

Increasing soil moisture from stormwater entering the proposed Conservation Reserve, from adjoining properties to the west along Polaris Rd, has led to a transition from grassland to wetland habitat. This has led to a decrease in the extent of remnant grassland within the reserve and therefore a decrease in the extent of the NTGVVP community. The vegetation community now, although reduced in size, also meets the condition thresholds for the EPBC Act-listed Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains (SHWTLP). The proposed development will involve the creation of a stormwater management area in the east of the reserve and infrastructure to move/manage the water through the site. The proposal will not change the stormwater entering the site from properties on Polaris Rd significantly. Measures will be put in place to ensure the stormwater is entering the site in a controlled manner and follows the natural flow path.

3. General management

The following sections describe the general management strategy to be undertaken for the duration of the CMP. A summary of management actions is provided in Section 8. The location of the two reserves is shown in Figure 1.

A baseline survey has not been undertaken as part of the preparation of this report. This survey is required to be done in the initiating stages of this management plan. It will provide updated information on the status of the environmental values and management issues including baseline weed covers within the reserve areas.

3.1. Security and management responsibility

The property will be managed in the lead up to, during and post construction, and for the duration of this plan by the landowner or nominated authority/agent.

The following management strategy has been devised to facilitate the appropriate management of the proposed reserves prior to and during the construction process of the development as well as two years after construction (Stage 1) has finished.

Following the required 2-year management period by the proponent and the completion of management actions outlined in this report, management of the Conservation Reserve will be handed over to Council (subject to discussions with Hume City Council). After this, the Conservation Reserve is to be managed by Council under a Section 173 agreement to continue implementing management actions towards the targets in this CMP (i.e. weed management and maintenance of fencing) and to retain the environmental values in these areas.

3.2. Environmental values to retained

The Conservation Reserve retains a large area of Plains Grassy Wetland (EVC 125) as well as an area of Plains Grassland (EVC 132). Additionally, this reserve includes partial protection of the EPBC Act-listed community NTGVVP and SHWTLP. The proposed reserve will be 4.89 ha in size and will retain 0.420 ha of NTGVVP and 0.116 ha of SHWTLP.

The Tree Reserve retains areas of native vegetation comprising Plains Grassy Wetland (EVC 125). Vegetation within this reserve is of moderate quality and contains planted individuals of Sugar Gum. Though planted, due to the trees age and structure they are able to provide ample foraging habitat for nectar feeding species and habitat for avi-fauna species. The proposed reserve will be 4.29 ha in size.

3.3. Construction environmental management measures

Mitigation measures will be put in place to ensure no adverse impacts occur to the environmental values in the reserves from the adjacent construction works.

Detailed construction environmental management actions are provided in Appendix 1. A separate Construction Environmental Management Plan (CEMP) will be prepared. The CEMP must provide compliance indicators to enable monitoring of the success or failure of these actions. Management actions are to be reviewed and adapted if the associated compliance indicators are not being achieved. All construction contractors must be inducted into the content of this CMP prior to accessing the site for the first time. Implementation of the CEMP is considered an essential compliment to this CMP.

3.4. Rubbish management

All rubbish within the reserves must be promptly removed before any management measures are performed. Removal must be undertaken in such a way that the native vegetation in the reserves is not adversely impacted. Rubbish must be disposed of at an approved landfill site and adequate fencing must be installed to prevent continual dumping of rubbish.

3.5. Fencing

The boundaries of the reserve areas are to be clearly identified and temporary construction fencing established before any construction works commence. The boundary of the Reserves must be assessed by a surveyor to enable permanent fencing to be constructed in the appropriate location at the completion of construction works. This will ensure the vegetation and threatened community within the reserve are not encroached upon.

3.5.1. Temporary construction fencing

The planned reserves occur immediately adjacent to the development footprint. Therefore, No Go Zones (NGZs) will be established and the construction buffer on the development footprint will be limited to the following distances around reserves:

- Designated No Go Zones during construction
  - **Conservation Reserve (4.89ha):** 1m buffer inside the northern edge and 2m buffer inside all other edges (4.68ha NGZ).
  - **Tree Reserve (4.29ha):** 3m buffer inside the reserve (3.98ha NGZ).
  - **North-eastern No Go Zone (wetland):** 2m buffer applied to the western edge adjacent to the Drainage Reserve. The assumption is that the existing fence will be retained and no new fencing will be introduced through this area.

The reserve areas must be entirely fenced for the duration of the construction of the surrounding development to exclude inappropriate/unauthorised access.

Temporary construction fencing must meet the following requirements (shown in Figure 2 below):

- Chain link fencing must be at least 1.5 metres tall and mounted on vertical steel pipes at 3 metre intervals.
- Signs stating 'Conservation Area - NO GO ZONE' must be attached to the fencing at 30 metre intervals.



Figure 2: Recommended construction fencing dimensions and 'NO GO ZONE' signage.

Once construction work (Stage 1) has been completed, temporary construction fencing must be removed. The permanent perimeter fencing (described below) must be established and remain in place around the Conservation Reserve to exclude threats, such as vehicular and pedestrian access.

3.5.2. *Permanent perimeter fencing requirements*

Temporary fencing must be replaced with permanent fencing upon completion of construction (Stage 1).

The landowner has an obligation under this current plan to install and maintain fencing to exclude threats from the proposed Reserves.

Fencing of the Reserves will help to mitigate any potential threats to existing native vegetation and revegetated areas, such as overgrazing by native herbivores and pest animals. The fencing will also assist in preventing public access into the Reserves post construction.

Fencing specifications is at the discretion of the responsible authority but must be generally in accordance with the specifications detailed below.

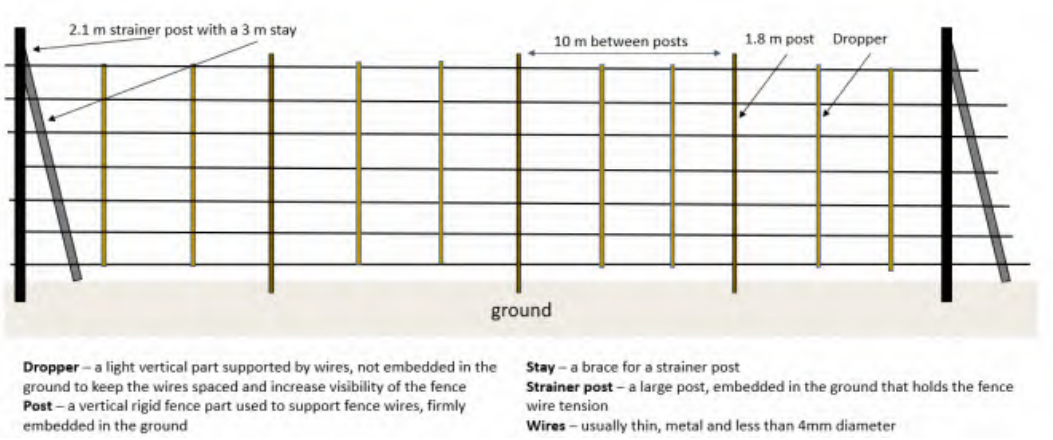


Figure 3: Permanent perimeter fencing Source: *Management standards for native vegetation offset sites* (DELWP 2019).

3.6. Habitat enhancement

In order to enhance habitat for native fauna, the following measures are recommended as a follow up to the weed and pest animal management:

- Logs from the large River Red-gums to be removed within the study area will be moved to the Conservation and Tree Reserves to provide habitat for fauna species. Logs are not to be added to areas within the extent of retained Heavier Soils Plains Grassland (EVC 132_61) or Plains Grassy Wetland (EVC 125), though they may be positioned on their periphery. Though logs are not typical of treeless EVCs, this is anticipated to provide valuable habitat for fauna. The placement of logs will be incidental and low density, to ensure that natural recruitment and revegetation opportunities are not undermined.
- Large rocks on site will be re-instated into both of the reserves to create habitat for insects, lizards and small mammals. A selection of rocks removed from the development area are to be relocated to the reserves in small groups. Total rock cover should not exceed 10% ground cover. Any rocks which are brought into the reserve from an outside source should be matched to the geology of the study area, and range in size from 10 cm to over 1 m in diameter. As above, these must be placed strategically, to avoid disturbing retained native vegetation.

These improvements will provide habitat features for fauna, primarily through the provision of shelter, but will also likely have other benefits including improved sources of food for fauna and perching/vantage points.

3.7. Biomass management

High biomass was not noted as an issue at the time of the assessment, due to ongoing cattle grazing. However, once this grazing ceases, it is anticipated that this will become an ongoing management issue. Therefore, native grassy vegetation may require occasional biomass reduction (management) to maintain the health and diversity of the vegetation.

It is suggested that this is achieved through the implementation of ecological burns in areas of remnant grassland, outside the extent of wetland vegetation. Ecological burning may also be utilised in conjunction with spraying as an integrated weed management tool, particularly in the treatment of Serrated Tussock. However, should ecological burns not be feasible or are not approved by Council, this vegetation will instead be slashed as required (see Section 3.7.1).

3.7.1. Ecological burns

If implementation is feasible, burns will be conducted in autumn (prior to any revegetation), as biomass will be highest in this season and temperatures will generally be cooler, therefore allowing for safer and more effectives burns. These burns must also be conducted in a mosaic pattern, to encourage greater habitat heterogeneity. Importantly, burns must not be undertaken where shrubbery or trees could be ignited, as these values are not anticipated to recover effectively.

As part of meeting safety requirements, a burn plan will need to be prepared. This will need to incorporate fire planning in consultation with the CFA, FRV or DEECA. The burns should be planned to occur in autumn up to early spring each year outside of the normal annual Fire Danger Period (1st December to 30th April).

In preparation for a burn, a boundary needs to be created. This boundary needs careful consideration as it cannot be created by ploughing any rocks and grass to create a mineral earth border. No soil removal or excavation can be carried out. Each burn boundary can be wet down (with water) or slashed with brush cutters and burns executed under optimal (low fire risk) weather conditions. The optimal conditions are low wind days with wind direction blowing away from developed areas.

Burns may be started with drip torches and extinguished using slip on vehicles afterwards. No fires should be left smouldering or burning without supervision due to the proximity of the Hume Highway. A cool burn would be started with a drip torch and burn at low intensity for a short time then be extinguished.

Ecological burning requires bushland management contractors to have appropriate insurance to prepare for and implement such burns. They also need to have experience in undertaking burns and be able to prepare a burn plan that meets the foregoing requirements.

3.7.2. Slashing

As stated above, slashing constitutes an alternative measure to ecological burns. This will be undertaken if burns are not considered feasible by Council or if proper approval cannot be secured. Accordingly, grassy vegetation (outside the extent of the wetlands) will be slashed as required.

It is anticipated that this will be necessary in late-spring/early-summer, prior to the seed set of most weedy grasses. This measure may also be utilised in conjunction with spraying as an integrated weed management tool, particularly in the treatment of Serrated Tussock. This is to be conducted by a suitable qualified land care specialist.

4. Weed Management

Although not all weeds recorded across the property are present within the proposed reserves, there exists the potential for the emergence of these species from existing seed banks or invasion from adjacent areas. Therefore, weed control in the reserves and construction area must consider all potential priority weeds across the entire property (see Section 4.1.3).

The aim of weed control is to prevent the further spread of high-threat weeds from within the construction area into the reserve areas. Potential sources of introduction or spread of weeds are listed in Table 1.

Table 1: Potential sources of introduction or spread of weeds and proposed management measures

Source	Management measures
Importation of contaminated construction materials such as soil and gravel	Inspect all material before entry to and exit from site. Reject all material that contains noxious weed propagules. Dispose of material containing declared noxious weeds in accordance with the CaLP Act. Keep records of disposal of abovementioned materials. Keep records for all importation and exportation of materials to and from site.
Vehicles, machinery and equipment brought onto site	Clean all vehicles, machinery and plant equipment before entering and leaving the site at the designated clean-down area. Keep records and maintain a logbook for use of cleaning and washdown areas.
Existing established weeds	Undertake **satisfactory** weed control before, during and after construction **to achieve <10% cover and <1% dense infestation targets**. Maintain a logbook that records weed cover values periodically and documents weed control activities that has been undertaken.
Neighbouring land with weed infestations	Be aware of these sources and act accordingly at these interfaces when weeds spread on the site. Request that the relevant authority control these weed infestations where they occur on public land.
Inappropriate disposal of weed materials	Control weeds prior to stockpiling of topsoil. Dispose of material at a legal place of disposal.

Weed control works must be conducted until the construction area is fully developed and weed control targets are achieved within the reserves. The site supervisor must monitor the construction site fortnightly for new weed management risks and populate the appropriate logbook (Appendix 3). The reserves will also be monitored on a quarterly (minimum) basis by suitably qualified weed control contractors. Any new threats identified by either the site supervisor or the weed control contractor must be communicated appropriately and acted upon accordingly.

This plan requires the land manager to reduce the total cover of all *woody* weeds within the construction area and reserves to <1%. All other weeds (herbaceous) that are listed under the CaLP Act, as a Weed of National Significance (WoNS), or that are on DELWP's *Advisory List of Environmental Weeds* (2022) and considered to be of 'high-threat' are to be reduced to <10% cover. The remaining grassy weeds in the construction area and reserves are to be slashed regularly to control their spread and prevent seed development.

Any fertile weed material, especially that of any CaLP Act-listed weeds must be burned or otherwise legally disposed of using appropriate permits for disposal and transportation.

It is acknowledged that annual differences in rainfall greatly influence the extent and cover of introduced grasses and weeds. Although this plan aims to achieve the foregoing objectives within two years, longer may be required and, therefore, the obligation for achieving the objectives in the Conservation Reserve will pass to Council's reserve manager.

4.1. Clean-down procedures

Clean-down procedures will be required to prevent the spread of additional weed propagules or other contaminants into the site. All site personnel must be inducted into this section of the plan and given instructions of the location of and how to use the clean-down area.

A logbook must be kept on site and all personnel who use this facility must sign in, declaring the machinery/vehicle to be free from weed propagules (Appendix 5).

The clean-down area must provide facilities for adequate washdown of machinery and vehicle exteriors. These facilities should include a high-pressure water hose and manual implements such as brooms and brushes, which can also be used to clean contaminated footwear.

All vehicles, machinery and plant entering or exiting the construction site must be examined and cleaned of mud, vegetation and seeds before entering the site and upon leaving. Particular attention must be made to critical areas of contamination commonly associated with earthmoving and other construction vehicles.

4.1.1. Clean-down location

Establishment of a clean-down area must be incorporated prior to the commencement of works. This area must be selected based on the following criteria:

- Close to site access/egress
- At least 30 metres away from waterways, drainage lines or wetlands
- Avoid areas of native vegetation and Tree Protection Zones
- Be entirely bunded to prevent sediment run-off
- Fitted with appropriate sediment control to prevent discharge off site

As such, the clean-down area will be located at the entry/exit of the site with the exact location to be determined following the production of a finalised development plan.

A layer of gravel is to be used to minimise mud and improve drainage.

Signage indicating the clean-down area must be clearly visible and include suitable instructions to works staff, particularly those leaving the site.

Care must be taken to prevent discharge off site to waterways and drainage lines.

4.2. Weed control targets

A total of 14 priority weeds to be controlled were identified during the field assessment. These weeds were assessed as being a priority for management based on the following criteria:

- All woody weeds
- Declared noxious weeds under the CaLP *Act 1994*
- Species listed as a serious or priority weed by Hume Council (2024)
- Any other weed deemed to be high-threat due to the potential risk the species poses to the surrounding landscape

Management targets for priority weeds to be controlled are discussed in the following sections. Recommended methods for their control and optimal timing for control are detailed in Table 2. The current infestation status of weeds in the study area should be assessed prior to or at the time of initial weed control and included as a baseline for future monitoring and weed control.

The weed threat (species and cover) must be monitored continually to determine the need for and timing of management actions and managed accordingly.

All weed control is to be carried out by a suitably qualified revegetation and/or weed control contractor, with experience in working in ecologically sensitive areas. A reporting form (Appendix 4) describing the control methods used to manage these species must be completed by the weed control contractor, with the results submitted to council upon request. Any spot-spraying would be undertaken on days with minimal wind to prevent off-target damage by spray-drift.

Construction area

It is anticipated that the initial stripping of topsoils within the extent of the construction area will effectively result in the removal of all weeds. However, the stripping of topsoil alone is not considered adequate weed control. Therefore, weed control must continue on a quarterly basis, until the construction area is fully developed.

The specific percentage cover targets for both the construction area and reserves are detailed in Section 4.1.4 below.

Reserves

Weed control will be undertaken at least quarterly each year for the duration of the CMP. Weed control works in the Conservation Reserve must be conducted until its handover to Council at the completion of this plan. Weed control in the Tree Reserve will be ongoing, until planted values are reproductively mature. At this point, they can be considered sufficiently established to resist competition from weeds. However, the proponent will still have an ongoing legal obligation to control CaLP-listed weeds.

The specific percentage cover targets for both the construction area and reserves are detailed in Section 4.1.4 below.

High-threat weeds

Control methods for all high threat weed species recorded within the construction zone are provided in Table 2. Weed control must be undertaken by an experienced bushland contractor at least twice (and up to four times) each year for the duration of this Plan.

The application of appropriate herbicide is to be undertaken as required to control weed species. Any spot spraying would be undertaken on days with minimal wind to prevent spray drift into residential areas, with appropriate signage erected to notify users of the reserve of the recent use of herbicide.

Care must be taken to ensure that there are no impacts to any rare or threatened flora and/or fauna species when using herbicides.

High threat woody weeds

Woody weeds within the study area are to be eliminated, i.e. **<1% cover, with no mature plants present**. Seven woody weeds (listed below) were recorded within the study area and may therefore pose a threat to the reserves. All woody weeds are to be removed from the reserve area and disposed of appropriately. Control of woody weeds is to be <1% within the first year after commencement of the CMP.

- African Box-thorn
- Blackberry
- Gorse
- Montpellier Broom
- Sweet Briar

High threat herbaceous weeds

High-threat non-woody weeds within the study area are to be controlled to **<1% cover, with no concentrated infestations present.** Five high threat herbaceous weeds (listed below) were recorded within the study area and may therefore pose a threat to the reserves.

- Artichoke Thistle
- Bathurst Burr
- Spear Thistle
- St Peter's Wort
- Variegated Thistle

High threat grassy weeds

High-threat grassy weeds will be highly detrimental to the conservation goals of this CMP and must be **reduced to <10% cover**. Four high threat grassy weeds (listed below) were recorded within the property and are therefore subject to this target.

- Cane Needle-grass
- Chilean Needle-grass
- Serrated Tussock
- Spiny Rush
- Toowoomba Canary-grass

All other weeds

All other weeds will be controlled such that their cover does not exceed the initial cover determined when the baseline survey is conducted.

4.3. Disposal of weed material

Any fertile weed material, especially that of any CaLP Act-listed weeds must be burned or otherwise legally disposed of using appropriate permits for disposal and transportation.

If weeds are to be stockpiled and burned in the adjacent construction area, all fertile or woody weed material must remain on site and be piled in a designated stockpile area, and a permit to do so, must be obtained under the relevant legislation. Prior to any burning off, appropriate warning will be given to local residents through a letterbox drop and fire authorities will be notified. Firebreaks will be slashed around the perimeter of the designated stockpile area in the lead-up to burns.

Burns will be undertaken on days with only light wind, with sufficient numbers of suitably experienced bushland contractor personnel on hand within firebreaks with portable water supplies to halt the fire if required. Bushland contractors would remain at the site of the burn until an appointed team leader confirms that all fire has been extinguished.

Table 2: Weed control management actions for high threat weeds (Example as the Baseline surveys have not yet been conducted)

Weed type	Recommended method of control	Common name	Scientific name	Listing	Optimum timing	Management outcome to be achieved
Woody weeds	Cut-and-paint mature plants using an appropriate herbicide.	Hawthorn	*Crataegus monogyna*	**C, DELWP**	All year round	**<1% cover, with no mature plants present**
		African Box-thorn	*Lycium ferocissimum*	**C, WoNS, DELWP**		
		Gorse	*Ulex europaeus*	**C, WoNS, DELWP**		
		Sweet Briar	*Rosa rubiginosa*	**C, WoNS, DELWP**	When actively growing from late spring to mid-summer	
		Montpellier Broom	*Genista monspessulana*	**C, WoNS, DELWP**	From winter to early spring, before production of mature seed pods	
	Spray with an appropriate herbicide	Blackberry	*Rubus fruticosus*	**C, WoNS, DELWP**	When actively growing from spring to mid-autumn	
Broad-leaf herbaceous weeds	Spray with appropriate herbicide when plants are actively growing	Artichoke Thistle	*Cynara cardunculus*	**C, DELWP**	Prior to flowering in late spring and autumn	**<1% cover, with no concentrated infestations present**
		Spear Thistle	*Cirsium vulgare*	**C, DELWP**		
		St Peter's Wort	*Hypericum tetrapterum*	**C, DELWP**	Spring to early summer, when actively growing but prior to flowering	
		Variegated Thistle	*Silybum marianum*	**C, DELWP**	Early spring, prior to flowering	

Weed type	Recommended method of control	Common name	Scientific name	Listing	Optimum timing	Management outcome to be achieved
		Bathurst Burr	*Xanthium spinosum*	**C, DELWP**	Spring and summer, when actively growing and prior to seed set.	
	Slash to ground level and follow up with spot spraying	Spiny Rush	*Juncus acutus subsp. acutus*	**C, DELWP**	Summer to autumn, when pant is actively growing	
Grassy Weeds	Spray with appropriate herbicide when plants are actively growing/ ecological burn	Toowoomba Canary-grass	*Phalaris aquatica*	**DELWP**	Whilst plants are actively growing. Prior to seed set in late spring and continually every three months or as required.	**reduced to <10% cover**
		Cane Needle-grass	*Nassella hyalina*	**DELWP**		
		Chilean Needle-grass	*Nassella neesiana*	**R, WoNS, DELWP**		
		Serrated Tussock	*Nassella trichotoma*	**C, WoNS, DELWP**		

Note: Optimum timing indicates the ideal time for control. However, year-round control is feasible for most species, provided they are actively growing.

5. Revegetation

Revegetation works are focussed within both the Conservation Reserve and Tree Reserve. Additionally, it is understood that screening plantings of indigenous trees are being considered, though details on these works are limited at this stage.

The biodiversity values of the Reserves will be increased through targeted weed management and supplementary plantings of indigenous species. These plantings can also contribute to ongoing weed suppression, by reducing the amount of bare ground for weeds to recolonise.

The overarching goal of the revegetation is to replace weeds with indigenous species, to the greatest extent practicable. With each new planting area established, there will be a reduction in weed cover and subsequently the newly planted area will act as a buffer to prevent weed colonisation of retained patches. The below subsections outline how this will be achieved within the reserves.

5.1. Revegetation area

All existing native vegetation falling within the Conservation Reserve and Tree Reserve will be retained and supplementary revegetation will be conducted outside the extent of these retained patches (Figure 4& 5). Additionally, it is anticipated that existing native vegetation will be further enhanced through targeted weed control.

A selection of suitable indigenous species for revegetation use has been based on indigenous species known to successfully and rapidly colonise in revegetation efforts and the EVCs present and/or modelled to occur. Species present in the remnant patches of Plains Grassland (EVC 132_61) and Plains Grassy Wetland (EVC 125) have been prioritised (Photo 1) for the conservation reserve, while species associated with Plains Grassy Woodland (EVC 55_61) have been prioritised for the Tree Reserve. A variety of plants have been chosen to enhance the biodiversity values of the area.



Photo 1: Remnant native vegetation onsite, comprising dense swathes of Common Tussock-grass and Wallaby-grass.

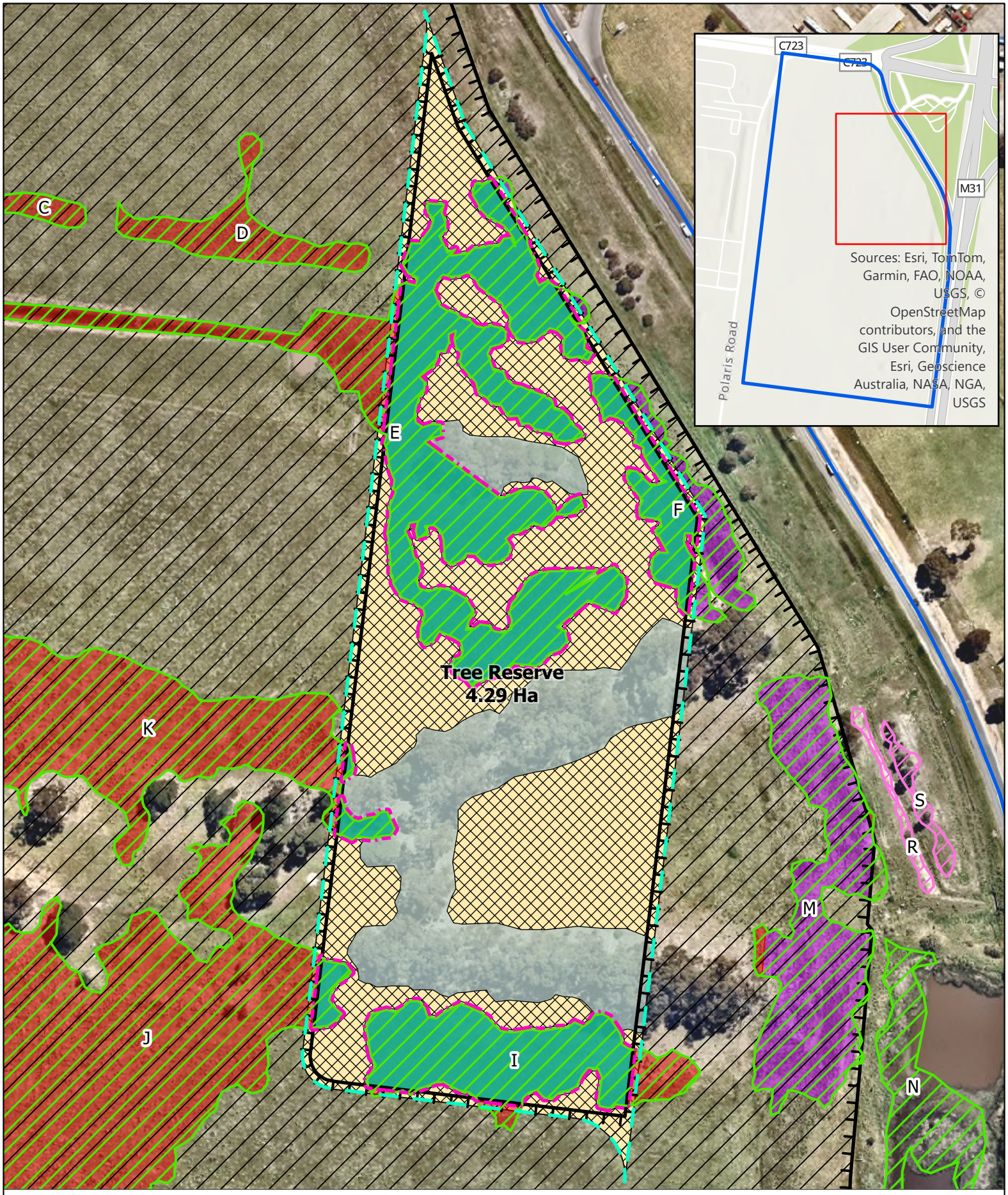


Figure 4. Tree reserve and ecological features

Project No: 25238_04 **Project**: 45 Donnybrook Rd, Mickleham, VIC **Date**: 11/05/2026

Study area
Impact area

Proposed design
Tree Reserve

Fence type
Reserve fence and sediment control
Temporary vegetation protection fencing

Native vegetation
Plains Grassland
Plains Grassy Wetland
Area to be revegetated
Retained native vegetation

Removal
Native vegetation to be removed
Exemption removal

N
Metres
0 20 40 60
GDA2020 Vicgrid

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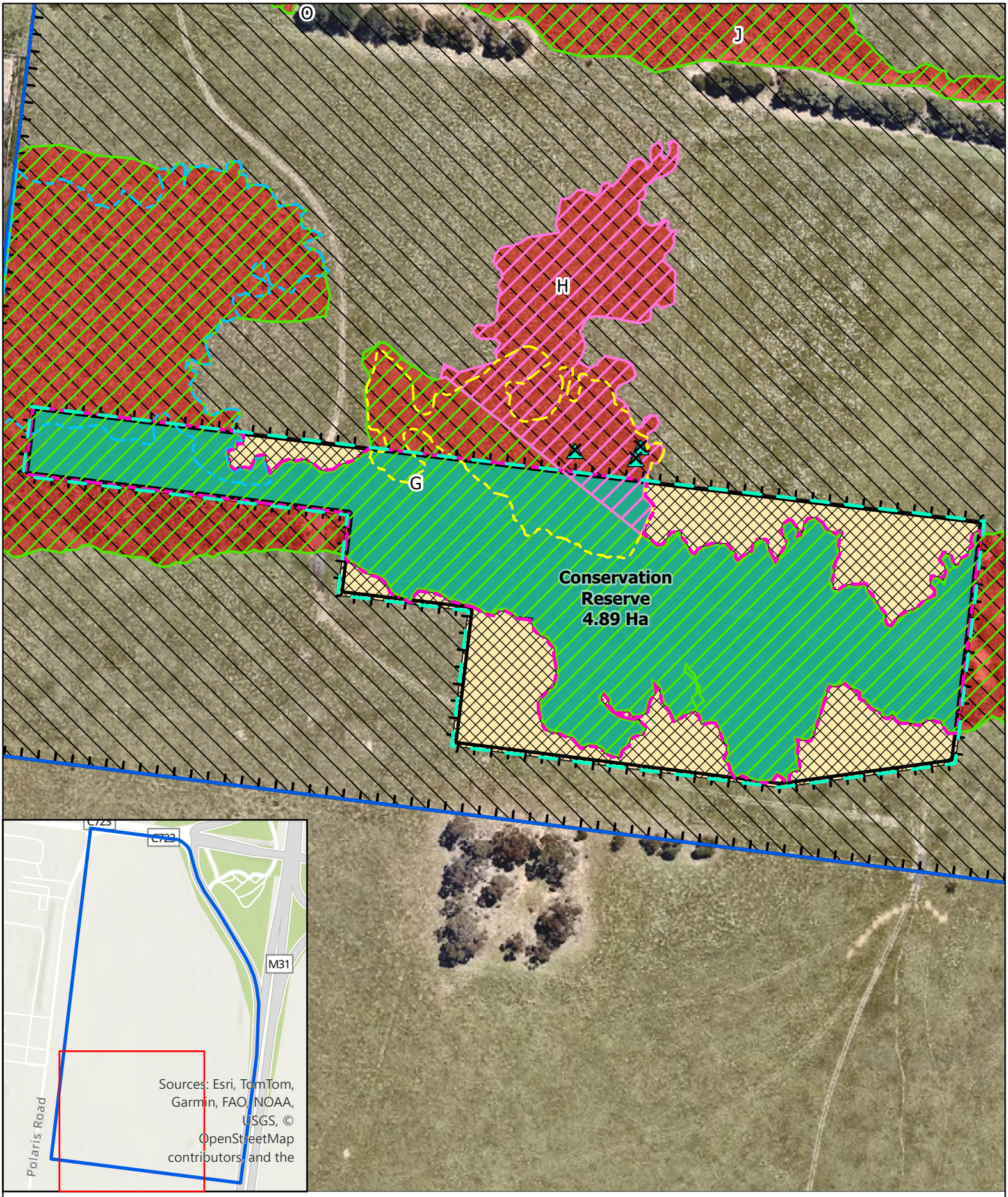


Figure 5. Conservation reserve and ecological features

Project No: 25238_04 **Project**: 45 Donnybrook Rd, Mickleham, VIC **Date**: 11/05/2026

- Study area
- Impact area

Proposed design
- Conservation Reserve

Fence type
- Reserve fence and sediment control
- Temporary protection fencing

Threatened flora (2025)
- Matted Flax-lily
- MFL to be removed

EPBC community (2024)
- NTGVVP
- NTGVVP and SHWTLP

Native vegetation
- Plains Grassland
- Plains Grassy Wetland
- Area to be revegetated
- Retained native vegetation

Removal
- Native vegetation to be removed

N

Metres
0 20 40 60
GDA2020 Vicgrid

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5.2. Revegetation timing

Revegetation will be initiated in late autumn and early spring, after and ideally also preceding a forecast of significant rainfall to encourage successful establishment of new plants. If rainfall is insufficient, supplementary watering will be required.

Revegetation will occur in autumn for the vast majority of selected species. Separate plantings of Kangaroo Grass should occur in early spring, given this species is a C4 grass and therefore favours growth in warmer conditions. This secondary planting will also assist in compensating for any mortality in the initial plantings. Ideally plantings should be conducted following a rainfall event, to minimise stress in newly planted tube stock and, ideally, before one to aid in establishment.

Weed control must be conducted in the reserves at least one month prior to planting to reduce competition from weeds and in turn increase the likelihood of plant establishment and survival. Ideally weed control should occur in the spring and autumn before planting events.

5.3. Planting guide and targets

A planting guide has been designed to rapidly revegetate and stabilise the ground, and a variety of plants have been chosen to enhance the biodiversity values of the area (Section 5.1.2).

The planting schedule outlined in Section 5.1.2 is intended as a guide only and local indigenous plant nurseries should be consulted regarding suitable indigenous species for the area and to substitute like-for-like species if others are not available. The planting schedule provided is intended to inform revegetation decisions with respect to the density of planting, species selection and survivorship targets. Design is left to the landowner.

Tube-stock planting effort success must be monitored to determine the necessity and timing of management actions and adapted accordingly. Supplementary planting in order to achieve the cover target for each lifeform.

Local indigenous plant nurseries will need to be consulted regarding suitable species for the area and to substitute like-for-like species if others are not available or are unsuccessful at establishing.

5.4. Conservation Reserve

A mix of tube stock and direct seeding will be used to revegetate the Conservation Reserve. For this reserve, the aim is to establish a Common Tussock-grass dominant grassland, with lesser quantities of other wetland ground layer species in damp portions (mostly adjacent to existing native vegetation). Following the establishment of the initial direct seeding of graminoids (approx. 50% cover) additional planting of herbaceous tube stock is to be introduced to increase biodiversity and to minimise grazing pressure.

This reserve must achieve an 80% survivorship target for planted values, established at the densities outlined in Table 3. If the 80% survival target is not achieved, supplementary planting will be undertaken.

5.5. Tree Reserve

The Tree Reserve supported a predominantly exotic ground cover and limited native vegetation. Therefore, due to these constraints, direct seeding is not considered feasible. Tube stock plantings will instead be utilised to revegetate the Tree Reserve with a range of robust woody understory values. This will enable the provision of wooded habitat for fauna, which is otherwise very limited in the study area.

This reserve must achieve an 80% survivorship target for tube stock, planted at the densities outlined in Table 3. If the 80% survival target is not achieved, supplementary planting will be undertaken.

5.6. Planting list

A combination of the species listed below (Table 3) should be used if available and on the guidance of a suitably qualified land management contractor. Using a mix of species will create a diverse habitat structure and have a lower risk of failure than using a few select species.

Table 3: Suggested planting schedule with approximate quantities required

Common name	Scientific name	Density	
		Conservation Reserve	Tree Reserve
Canopy trees (tube stock)			
River Red-gum	*Eucalyptus camaldulensis*	N/A	1 plant every 10m
Swamp Gum	*Eucalyptus ovata*		1 plant every 10m
Shrubs (tube stock)			
Gold Wattle	*Acacia pycnantha*	N/A	2 plants/m²
Hedge Wattle	*Acacia paradoxa*		
Sweet Bursaria	*Bursaria spinosa*		1 plant/m²
Blackwood	*Acacia melanoxylon*		
Small/prostrate shrubs (tube stock)			
Creeping Bossiaea	*Bossiaea prostrata*	N/A	4-5 plants/m²
Cranberry Heath	*Styphelia humifusa*		
Common Rice-flower	*Pimelea humilis*		
Berry Saltbush	*Atriplex semibaccata*		
Nodding Saltbush	*Einadia nutans*		
Herbs (tube stock)			
Sheep's Burr	*Acaena echinata*	6 plants/m² (only plant in drier areas)	N/A
Kidney-weed	*Dichondra repens*		
Sprawling Bluebell	*Wahlenbergia gracilis*		
Clustered Everlasting	*Chrysocephalum semipapposum*		
Lemon Beauty-heads	*Calocephalus citreus*		
Blue Devil	*Eryngium ovinum*		
Prickfoot	*Eryngium vesiculosum*	6 plants/m²	
Poison Loeblia	*Lobelia pratioides*		
Graminoids (tube stock)			
Pale Rush	*Juncus pallidus*	4 plants/m² (plant on periphery of HZ G)	N/A
Tall Rush	*Juncus procerus*		
Tall Sedge	*Carex appressa*		
Poong'ort	*Carex tereticaulis*		

Common name	Scientific name	Density	
		Conservation Reserve	Tree Reserve
Joint-leaf rush	*Juncus holoschoenus*	5 plants/m² (plant on periphery of HZ G)	
Common Spike-rush	*Eleocharis acuta*		
Graminoids (direct seeding)			
Common Tussock-grass	*Poa labillardierei*	20kg/ha	N/A
Brown-back Wallaby-grass	*Rytidosperma duttonianum*		
Kneed Spear-grass	*Austrostipa bigeniculata*	20kg/ha (only seed in drier areas)	
Common Wallaby- grass	*Rytidosperma caespitosum*		
Slender Wallaby-grass	*Rytidosperma racemosum var. racemosum*		
Kangaroo Grass	*Themeda triandra*		
Weeping Grass	*Microlaena stipoides var. stipoides*		

5.7. Protection of retained native vegetation

Temporary fencing is required to be established along the boundary of areas of native vegetation proposed for retention within the reserves, prior to the commencement of revegetation activities. The purpose of this fencing is to clearly demarcate vegetation that is to be retained, to limit the potential for impacts by ground disturbance that might occur during planting.

The establishment of bunting-style flagging rope affixed to star pickets (as shown in Photo 2; Figures 2a & 2b) must be established approximately 1-metre from the outer extent of native vegetation patches.

This fencing can only be removed once revegetation has been completed in the relevant area.



Photo 2: An example of bunting-style flagging rope. Source: https://cirtexcivil.co.nz/product/site-safety-tape/

5.8. Plant protection

If revegetated values are subject to significant browsing by rabbits, rabbit-proof fencing will be established around the extent of the affected reserve/s. However, it must be noted that this is an adaptive management measure and may not ultimately be required. If plants continue to be browsed, tree guards are to be installed to protect plants from grazing pressures.

5.8.1. Rabbit-proof fencing

To upgrade the fence to a rabbit-proof standard, the following requirements are to be affixed to the fencing (DEECA 2025):

- The minimum standard for rabbit-proof fence netting is 1050 mm wide, 30-40 mm mesh diameter and 1.4 mm wire diameter; and
- Fix rabbit netting so that it reaches at least 900 mm above the ground and is either buried (to 150 mm depth) or laid down to a width of 300 mm on the ground and secured with pegs, rocks or timber.

An example of this type of fencing is shown in Figure 6.

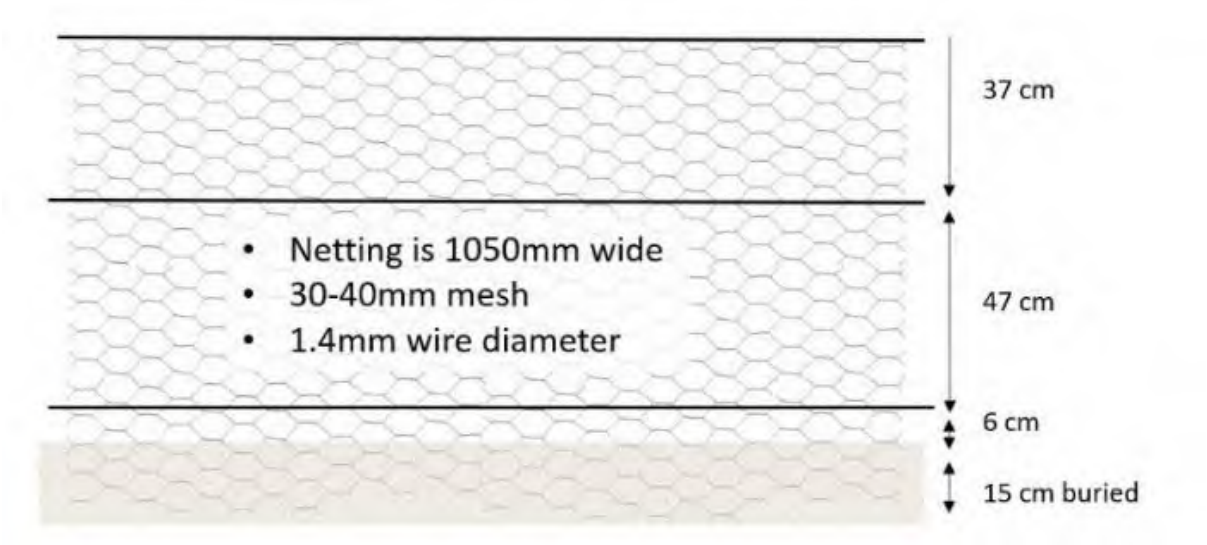


Figure 6: Rabbit proofing specifications

5.9. Watering

Plants will require ongoing watering to aid in establishment and survival, particularly through the dry summer months. The frequency and amount of watering will be guided by monitored conditions on the site. It is likely that plants will require regular watering for 12 months after planting, and more frequently and for longer if conditions are particularly harsh and the plants are displaying signs of stress. Plants will not be required to be watered after a significant rainfall event (> 20 mm).

The table below suggests the frequency of watering for the initial 12 months.

Table 4: Watering requirements

Months after planting	Watering schedule
0–3	Weekly (dry periods)
3–6	Fortnightly
6–12	Monthly

12 onwards	Only if plants display signs of stress

5.10. Maintenance and adaptive management

Tree guards and fencing is to be inspected every three months to determine the ongoing integrity of these protective measures. If damage is identified, tree guards must be replaced and fencing repaired.

Weed control must be conducted post planting to support the establishment of newly-planted tube stock and germinating grasses. This must be in accordance with weed control protocols outlined in Section 4. In order to minimise off-target impacts to germinating native grasses, spot-spraying of grassy weeds in revegetation areas should only occur once grasses are readily identifiable roughly 3 months after planting has occurred.

A monitoring assessment is to be conducted at two months and at six months post-planting to assess the progress/success of rehabilitation and determine the need for supplementary seeding/planting, weed control or watering. This assessment must be conducted by a qualified ecologist (independent of the weed control contractor).

5.11. Screening planting

It is understood that planting to provide tree screening to the perimeter of the site is proposed. Given that the exact scope of these plantings is not understood at this stage, only general advice can be given.

Tree protection

As with the vegetation protection recommendations outlined in Section 5.1.3, temporary flagging should be affixed around the periphery of retained trees. This should correlate with their Notional Root Zone (NRZ) and plantings must not occur within this extent, so as to avoid impacting the health of retained trees.

Suggested species

It is advised that indigenous species are prioritised for planting, given their adaptation to the local climate and utility to native fauna. Species have also been considered, based on their visual amenity, growth rate and ability to screen the site. Accordingly, the following species are advised for planting:

- River Red-gum (*Eucalyptus camaldulensis*)
- Yellow Gum (*Eucalyptus leucoxylon*)
- Drooping Sheoak (*Allocasuarina verticillata*)
- Blackwood (*Acacia melanoxylon*)

6. Monitoring and reporting

From the acceptance of this plan, until the completion of the 2-year management period, monitoring is to be undertaken by a suitably qualified ecologist or environmental officer every year in spring, in accordance with the schedule in Section 8. Monitoring and reporting requirements of this CMP applies to the conservation reserves located at 45 Donnybrook Road, Mickleham. Monitoring and reporting requirements for salvaged Matted Flax-lily are separate from this plan and will be in accordance with the approved salvage and translocation plan (Nature Advisory 2026).

The responsible authority will coordinate this monitoring which will include:

- Extent and quality of retained native vegetation
- Weed cover estimates to be recorded for each weed species that occurs in the reserves
- An overall weed cover estimate for the reserves
- Monitoring of pest animals to determine the need for pest animal control
- Monitoring of revegetation progress
- Monitoring of fencing
- Monitoring of rubbish levels

Findings recorded during this periodic monitoring will be documented in a report, which will include:

- A summary of works completed since the last monitoring event
- Assessment of the integrity of the property fencing for plant protection
- Extent and quality of native vegetation and percentage cover of declared noxious weeds and high-threat weeds within the area
- Assessment of the status of weed control works
- Identification of any new and emerging weeds, including extent of infestation
- Assessment of the status of revegetation works
- Assessment of the effects of pest animal activity
- Photos of the Conservation Reserve and Tree Reserve from fixed photo points, established during the initial monitoring, to measure change in weed infestation and revegetation over the course of the plan
- Discussion and evidence of the progress of the management actions listed in Section 8 and whether targets have been achieved
- Recommendations for future management of the site

The responsible landowner will provide the periodic reporting to Hume City Council within three months of the commencement this Plan (Section 8).

7. Adaptive management

The Conservation Reserve area will be managed for conservation beyond the nominal 2-year period of this plan by Hume City Council. The landowner will carry out ongoing management of the Tree Reserve.

By monitoring the outcomes of actions, management may be adapted to ensure the stated commitments in the Plan are achieved. For example, new techniques for controlling high threat weeds may become available or further information on the ecology and status of vegetation communities may necessitate adjustment to management actions.

Seeding and planting schedules should be aligned with the Melbourne revegetation season (e.g. April - September). It is recommended the Greening Australia (2003) 'Guide to timing of revegetation activities' (Figure 7) is used to guide timing of practice.

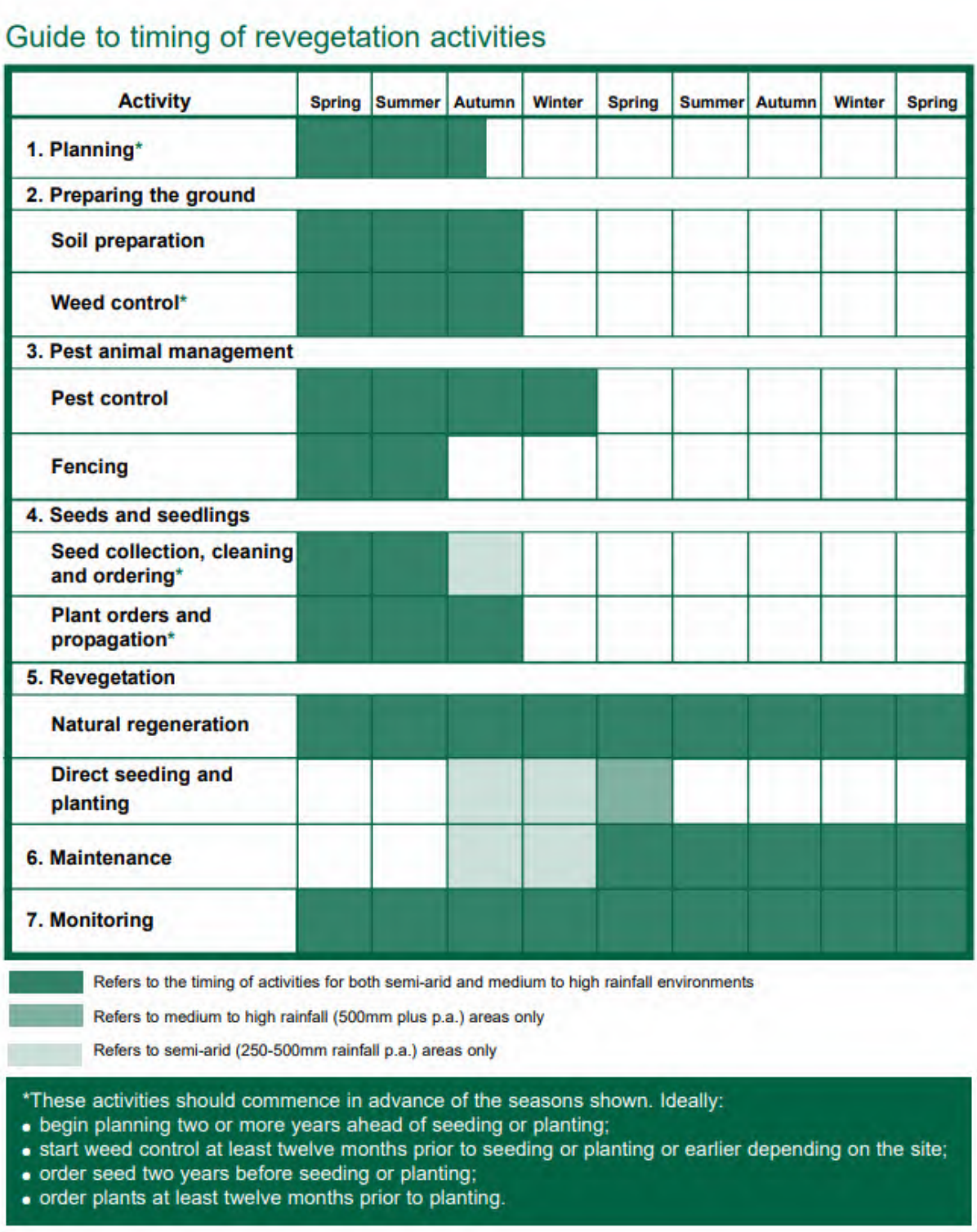
Occasional watering, dependent on rainfall and climate, may be required to aid plant establishment, growth, and survival (particularly in summer). Watering must occur at the time of seeding and two weeks after seeding (if no follow up rains have occurred in this time after seeding).

Where plant establishment is low, supplementary revegetation in the form of infill seeding and replacement of failed tube-stock plantings should be undertaken to ensure around 45-50% cover of native grass foliage cover is achieved and maintained.

Weed control must be conducted post seeding to facilitate the natural growth and recruitment of grassy vegetation. In order to minimise off-target impacts to germinating native grasses, spot-spraying of grassy weeds in revegetation areas should only occur once grasses are readily identifiable roughly 3 months after planting has occurred.

Regular monitoring (at two months and at six months post-seeding) will determine whether additional watering is required and at what frequency. Ongoing weed control is a key factor in maintaining plantings and planting survival.

Figure 7: Guide to timing of revegetation activities (Greening Australia 2003)



Guide to timing of revegetation activities

Activity	Spring	Summer	Autumn	Winter	Spring	Summer	Autumn	Winter	Spring
1. Planning*									
2. Preparing the ground									
Soil preparation									
Weed control*									
3. Pest animal management									
Pest control									
Fencing									
4. Seeds and seedlings									
Seed collection, cleaning and ordering*									
Plant orders and propagation*									
5. Revegetation									
Natural regeneration									
Direct seeding and planting									
6. Maintenance									
7. Monitoring									

Refers to the timing of activities for both semi-arid and medium to high rainfall environments

Refers to medium to high rainfall (500mm plus p.a.) areas only

Refers to semi-arid (250-500mm rainfall p.a.) areas only

*These activities should commence in advance of the seasons shown. Ideally:
- begin planning two or more years ahead of seeding or planting;
- start weed control at least twelve months prior to seeding or planting or earlier depending on the site;
- order seed two years before seeding or planting;
- order plants at least twelve months prior to planting.

8. Management actions and timing

The following tables provide the management actions to be undertaken and proposed timelines.

Table 5: Management actions for the pre-construction period, the construction period (Stage 1) and 2 years post-construction

Pre-construction						
Management Action	**Timing**	**Target to be achieved**	**Responsible person**	**Location in Plan**	**Completed (Yes/No)**	**Month completed**
Establish reserves	Upon approval of the Plan	Defines the start of the prescribed management period under this Plan	Landowner	-		
Delineate the reserves – establish markers to identify boundary of the reserves to assist with their management and monitoring	On commencement of the Plan	Reserves clearly demarcated onsite	Landowner in consultation with land surveyor	-		
Establish perimeter temporary fencing and signage	On commencement of the Plan	Ensure fencing excludes herbivores	Landowner	Section 3.5		
Construction and 2-years post-construction						
Management Action	**Timing**	**Target to be achieved**	**Responsible person**	**Location in Plan**	**Completed (Yes/No)**	**Month completed**
Weed control	As required as per optimal time for each species	See Section 4 and Table 2	Landowner nominated contractor	Section 4 and Table 2		
Pest animal monitoring	On commencement of the Plan	Pest animals monitored; pest animal control measures to be implemented if required	Landowner nominated contractor	Section 6		
Biomass	On commencement of the Plan. Seasonally dependent based on the method employed.	To maintain the health and diversity of the existing vegetation and to allow revegetation targets to be met (Section 5).	Landowner nominated contractor	Section 3.7		
Revegetation	Late autumn and early spring	Initiate revegetation of each area, as detailed in Section 5.	Landowner nominated contractor	Section 5		
Revegetation monitoring and infill plantings (if required)	Two months and six months post-planting	Infill plantings implemented (as required) to achieve targets detailed in Section 5.	Landowner nominated contractor	Section 5.10		
Site quality audit	Late spring to early summer	Results will inform management approaches and techniques.	Landowner nominated ecologist	Section 6		
Monitoring to determine fencing integrity and timeliness of management actions	Boundary fencing formally inspected every 3 months; each management action monitored	Boundary fencing effective and management actions undertaken on time	Landowner/Ecologist	Section 6		

Pre-construction						
Management Action	Timing	Target to be achieved	Responsible person	Location in Plan	Completed (Yes/No)	Month completed
Report to be prepared documenting management actions undertaken and monitoring results.	No later than three months after anniversary of commencement	Report delivered to Hume City Council no later than three months after anniversary of commencement	Landowner/Contractor	Section 6		

Table 6: Year 2 management actions

Year 2						
Management Action (see Year 1 for Plan reference)	Timing	Target to be achieved	Responsible person	Year 2		
				Location in Plan	Completed (Yes/No)	Month completed
Weed control	As per optimal time for each species	See Section 4 and Table 2	Landowner nominated contractor	Section 4 and Table 2		
Weed monitoring	September to November	Results will inform management approaches and techniques	Landowner nominated ecologist	Section 6		
Revegetation	Late autumn and early spring	80% survivorship of planted values	Landowner nominated contractor	Section 5		
Revegetation monitoring and infill plantings (if required)	Two months and six months post-planting	Infill plantings implemented (as required) to achieve targets detailed in Section 5	Landowner nominated contractor	Section 5.10		
Site quality audit	Late spring to early summer	Results will inform management approaches and techniques	Landowner nominated ecologist	Section 6		
Monitoring to determine fencing integrity and timeliness of management actions	Boundary fencing formally inspected every 3 months; each management action monitored	Boundary fencing effective and management actions undertaken on time	Landowner	Section 6		
Report to be prepared documenting management actions undertaken and monitoring results.	Annually, no later than three months after anniversary of commencement. Reports are to include outcomes of monitoring conducted on site and progress made towards delivering the management actions	Report delivered to Hume City Council no later than three months after anniversary of commencement	Landowner	Section 6		

9. References

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Appendix 1: Construction environmental management actions

Management actions	Responsibility	Monitoring frequency
Fence the reserves with post-and-wire fencing, constructed to the fencing requirements detailed in Section 3.5. Affix '**CONSERVATION AREA – NO GO ZONE**' signage at 30 metre intervals during construction. One farm gate entry to each reserve provided to allow entry for management. NO GO ZONES strictly enforced to exclude pedestrian or vehicle access, material storage or equipment laydown. Ensure that fencing and signage is maintained and effective for the duration of this Plan.	Responsible landowner/ Construction Contractor	Ongoing
Control all weed outbreaks in disturbed areas within 20 metres of the reserves to prevent spread into the reserves.	Responsible landowner/ Construction Contractor	Monthly
All vehicle washdown, equipment lay down and personnel rest areas are to be clearly defined (fenced and/or signed) and located to prevent any detrimental impact on the reserve.	Construction Contractor	Daily
Manage surface runoff from stormwater or construction works (e.g. hosing down or clean-up) so that no excess runoff is directed towards the reserve.	Construction Contractor	Weekly and after any rain
Stockpile soil/fill outside at least 20 metres from the reserve. Bund all soil/fill stockpiles.	Construction Contractor	Daily during earthworks

Appendix 2: Photographs of the two reserve areas

All photos were taken between 31 January 2024, 12 March 2024 or the 23 October 2025.



Photo 4: Representative photo of Habitat Zone K that extends into the Tree Reserve



Photo 4: Representative photo of Habitat Zone C-F that make up the Tree Rention Zone



Photo 5: Representative photo of Habitat Zone G that occurs throughout the Vegetation Reserve



Photo 6: NTGVVP area within Habitat Zone G that occurs within the Vegetation Reserve



Photo 7: NTGVVP and SHWTLP area within Habitat Zone G that occurs within the Vegetation Reserve

Appendix 3: Logbook for weed survey and weed control

Date													
Initials													
Monitoring checklist													
Site entrance													
Clean-down bay and discharge areas													
Materials transported to the site													
Stockpiles													
Areas of soil disturbance													
Disposal of sediment at clean-down bay as required													
Monitor remainder of site not included above													

Appendix 4: Reporting form for weed control

Weed type	Recommended method of control	Common name	Scientific name	Date implemented	No. of infestations treated (%)	Management outcome to be achieved and maintained per species	Name of company/contractor undertaking works	Name of herbicide and rate applied
Woody weeds	Cut-and-paint mature plants using an appropriate herbicide.	Hawthorn	*Crataegus monogyna*			**Elimination**		
		Montpellier Broom	*Genista monspessulana*					
		African Box-thorn	*Lycium ferocissimum*					
		Gorse	*Ulex europaeus*					
		Blackberry	*Rubus fruticosus spp. agg.*					
		Sweet Briar	*Rosa rubiginosa*					
Broad-leaf herbaceous weeds	Spray with appropriate herbicide when plants are actively growing	Artichoke Thistle	*Cynara cardunculus*					
		Spear Thistle	*Cirsium vulgare*					
		St Peter's Wort	*Hypericum tetrapterum*					
		Variegated Thistle	*Silybum marianum*					
		Bathurst Burr	*Xanthium spinosum*					
	Slash to ground level and follow up with spot spray	Spiny Rush	*Juncus acutus subsp. acutus*					
Grassy Weeds	Spray with appropriate herbicide when plants are actively growing	Toowoomba Canary-grass	*Phalaris aquatica*			**<10% total cover of all grassy weed species**		
		Cane Needle-grass	*Nassella hyalina*					
		Chilean Needle-grass	*Nassella neesiana*					
		Serrated Tussock	*Nassella trichotoma*					

Appendix 5: Logbook for recording clean-down facility

All personnel who utilise the clean-down area must populate the logbook below. Ensure no material remains on or within the vehicle before entering the site.

Date	Time	Name/company	Machine type	Rego/ identification	Last location of machine	Destination within site	Adequately cleaned	Declaration (Signature)

Appendix 6: Logbook for recording importation of materials

Record all importation of organic material that has the potential to contain weed seeds, plant parts and/or pathogens: gravel, soil, bark, etc.

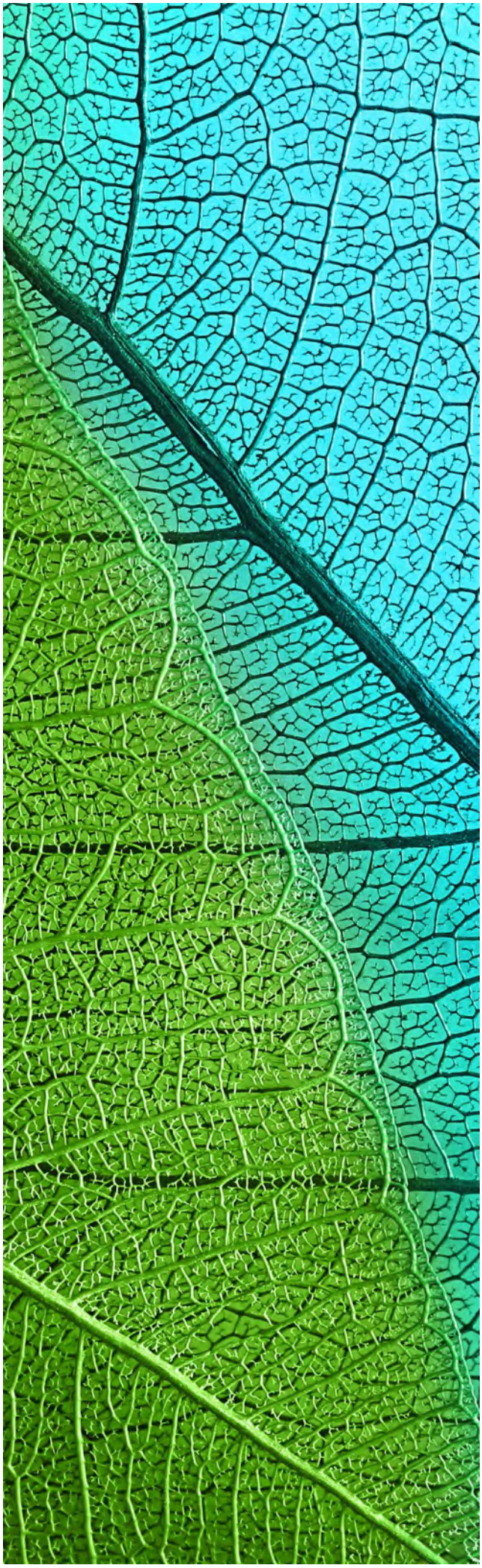
Date	Time	Name/company	Supplier	Composition	Source location (if known)	Destination of material within site	Declaration that material is propagule-free (Signature)

Appendix 7: Critical contamination areas in earthmoving vehicles



Source: DJPR (2017)

Appendix 6: Salvage and Translocation Plan for Matted Flax-lily



45 Donnybrook Road, Mickleham

Salvage & Translocation Plan for Matted Flax-lily *Dianella amoena*

Prepared for
Aurecon Australasia Pty Ltd

September 2026

Report No. 25238.01 (3.3)

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Nature Advisory acknowledges the traditional owners and sovereign custodians of the land on which we work from – the Wurundjeri people of the Woi Wurrung language group. We extend our respect to their Ancestors and all First Peoples and Elders past, present, and future.

Executive summary

Aurecon Australasia Pty Ltd engaged Nature Advisory Pty Ltd to design a salvage and translocation plan for Matted Flax-lily *Dianella amoena*. This plan is required by the Commonwealth Department of Climate Change, Energy, the Environment, and Water (DCCEEW) for the Preliminary Documentation assessment process under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Table 1: Matted Flax-lily salvage and translocation executive summary table

Requirements		Response
1.	Taxon to be translocated	Matted Flax-lily *Dianella amoena*
2.	Number of plants to be translocated	A target of nine (9) individuals/patches of Matted Flax-lily (MFL) will be salvaged. Although only three (3) individuals were recorded in the recent targeted survey (2025), Nature Advisory has recorded MFL during surveys in 2019 and 2024, which included verifying locations of previous recorded individuals by Biosis from 2015 surveys. As such, a precautionary approach has been applied based off historical records and an assumption that individuals may re-appear prior to salvage occurring. Regardless, it should be recognised that the final number of individuals may vary depending on the survivorship of plants recorded or potentially the emergence of additional individuals within the area of suitable habitat, depending on the prevailing conditions. To establish a viable population and to provide assurance of success, six (6) clones from each salvaged plant will be propagated. Four (4) clones from each salvaged individual will be translocated, while two (2) will remain in the nursery as an assurance population to be used as replacement plants should any of the translocated plants perish.
3.	Proposed dates of translocation	The proposed timing of translocation depends on when project planning and environmental approvals are received and the planned commencement of the project. Timing of salvage and translocation is to be determined, although the intent is to translocate plants via a holding nursery with proven expertise then into the offsite offset site within a year of salvage (and no later than two years after salvage). The preferred seasonal timing for both salvage and translocation is from late autumn to mid-spring, when soil moisture is high and rainfall is regular.
4.	Source location or propagation facility	Within the study area (see Figure 1) at 45 Donnybrook Road, Mickleham, MFL was recorded in three (3) locations in the most recent targeted survey (2025). Propagation facility at Victorian Indigenous Nurseries Co-Operative (VINC), Yarra Bend Rd, Fairfield VIC 3078 or an alternative suitable nursery with experience in propagating MFL.
5.	Recipient site(s)	The plan outlines that the MFL within the development footprint will be salvaged and transported to a nursery for propagation and will then be translocated into an offsite offset site. No offset site has been secured as yet, however a suitable site has been identified.
6.	Summary of the translocation	This plan documents: ▪ A protocol for salvage and translocation; ▪ Selection criteria to determine a recipient site(s); ▪ Pre-clearance surveys;

Requirements		Response
		▪ Post translocation management; ▪ Monitoring and reporting; and ▪ Adaptive management.

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1. Introduction

Aurecon Australasia Pty Ltd engaged Nature Advisory Pty Ltd to design a salvage and translocation plan for Matted Flax-lily *Dianella amoena*. This plan is required by the Commonwealth Department of Climate Change, Energy, the Environment, and Water (DCCEEW) for the Preliminary Documentation assessment process under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The proponent is responsible for implementing this plan. The aim of the plan is to provide a comprehensive guide for the salvage and translocation of Matted Flax-lily (MFL) that occur within the property at 45 Donnybrook Road, Mickleham (herein referred to as the 'salvage site'). Details are also provided on the translocation of the MFL to the proposed recipient site.

This report includes the following sections:

- **Section 2** provides background biological information on MFL.
- **Section 3** provides the legislative context for this salvage and relocation plan.
- **Section 4** provides procedural guidelines for salvage of the MFL.
- **Section 5** details the selection process for choosing a recipient site.
- **Section 6** provides guidelines for management of the recipient site.
- **Section 7** provides guidelines for ongoing monitoring.

This report was compiled by a team from Nature Advisory, comprising Kate Thurkle (Botanist) and Amanda Dare (Senior Project Manager & Zoology Field Team Lead) and Chris Armstrong (Team Lead - Property development and conservation).

1.1. Translocation definition

In the *Guidelines for the Translocation of Threatened Plants in Australia* (Commander *et al.* 2018), translocation is defined as the deliberate transfer of plant material from a natural population to a new location. In this case it will involve the salvage of MFL and introduction into a recipient site. The methods of translocation are diverse and may include seed collection and propagation, propagation via cuttings or tissue culture, planting of containerised plants, direct seeding, transplantation of whole plants from one site to another, and the transfer of soil, leaf litter, brush, or pollen (Commander *et al.* 2018).

1.2. Purpose of translocation

1.2.1. Matted Flax-lily individuals to be translocated

A target of nine (9) individuals/patches of MFL will be salvaged.

Nature Advisory has recorded MFL during surveys in 2019 and 2024, which included verifying locations of previous recorded individuals by Biosis from 2015 surveys. Most recently, targeted surveys were completed in 2025 by Nature Advisory.

The results of the surveys have continually recorded the species within and surrounding the mapped patches of NTGVVP north of the drainage line in the southern extent of the Project area. The surveys have demonstrated the species ability to respond to environmental conditions and pressures (such as grazing, competition by pasture grasses and water-stress (Carter, 2010)), with several new records being recorded during each of the aforementioned surveys. Based on the Nature Advisory assessments to date, nine separate records of the species have been identified from 2019 to 2025, although as of the most recent survey in 2025, only three were identified.

Due to the variation in records over the surveys, it is assumed that all nine individuals recorded over the last three surveys (2019, 2024 and 2025) are present. This assumption is made as the species can be deciduous if stressed and respond once conditions are more favourable (Carter, 2010), so may not have been visible at the time of surveys if grazed or being outcompeted by pasture. Two of these records are in a similar location to Biosis records from 2015 survey (Biosis 2019) and are still considered present, however, seven records from this survey are no longer considered present, as these records have not been verified for over 10 years.

1.2.2. Vegetation condition at the current location of Matted Flax-lily

Suitable habitat for MFL, which is the subject of this investigation, occurred within a site located approximately 4 km northeast of Craigieburn and 2.5 km west of Donnybrook. The broader project area constituted approximately 67 ha of private property, bordered by Donnybrook Road. The extent of suitable habitat for MFL was assessed and mapped by Nature Advisory on 23 October 2025. The total extent of suitable habitat was determined to be 5.839 hectares, of which 4.470 hectares is to be impacted by the development (salvage site).

The project area has fertile basaltic clay-loam soils on a relatively flat landscape, with gentle sloping towards lower lying areas of the south. This vegetation is currently subject to agricultural activity, including stock grazing and invasion by pasture grasses and weeds.

The extent of suitable MFL habitat was generally defined by patches of higher quality native vegetation that meet listing criteria and condition thresholds for the EPBC Act-listed community *Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP)* and *Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains* (SHWTLP). These areas supported herbaceous species such as Chocolate Lily *Arthropodium strictum*, Sheep's Burr *Acaena echinata*, and Poison Lobelia *Lobelia pratioides* as well as a suite of native graminoids, indicators of high-quality suitable habitat. Lower quality but still suitable habitat was also identified in areas containing a mosaic of non-native and low-quality native vegetation dominated by Rush *Juncus spp.* and Wallaby Grasses *Rytidosperma spp.* as well as the persistence of surface rocks. These features indicate that these areas had not been subject to historical cultivation and therefore MFL could still persist (Figure 1) within these more modified habitats.

The remainder of the development site has been altered significantly through cultivation, pasture improvement and stock grazing that has been progressively recolonised by Rush and common pasture grasses and associated weeds, rendering it unsuitable habitat for MFL. Surrounding land has similarly been used for an array of agricultural practices as well as the establishment of new industrial developments.

The site lies within the Victorian Volcanic Plain Victorian bioregion, the Southern Volcanic Plain Interim Biogeographical Regionalisation for Australia (IBRA) bioregion, and the Melbourne Water catchment management area. The study area is located on Wurundjeri Country.

1.2.3. Project summary

The salvage site is proposed to be developed to construct a data centre. The data centre will comprise the majority of the study area, with the exception of a 4.89 ha conservation reserve in the south and a 4.29 ha tree reserve in the northeast. The three MFL recorded in the south of the salvage site are in the footprint of the proposed development. Under a precautionary approach, based off historical records and an assumption that individuals may re-appear prior to salvage occurring, nine (9) individuals/patches of MFL may be impacted.

This is a major development and the client has advised that the layout cannot be modified to retain the MFL. Therefore, impacts to MFL cannot be avoided by the development. The new location for the MFL will be referred to as the 'recipient site'.

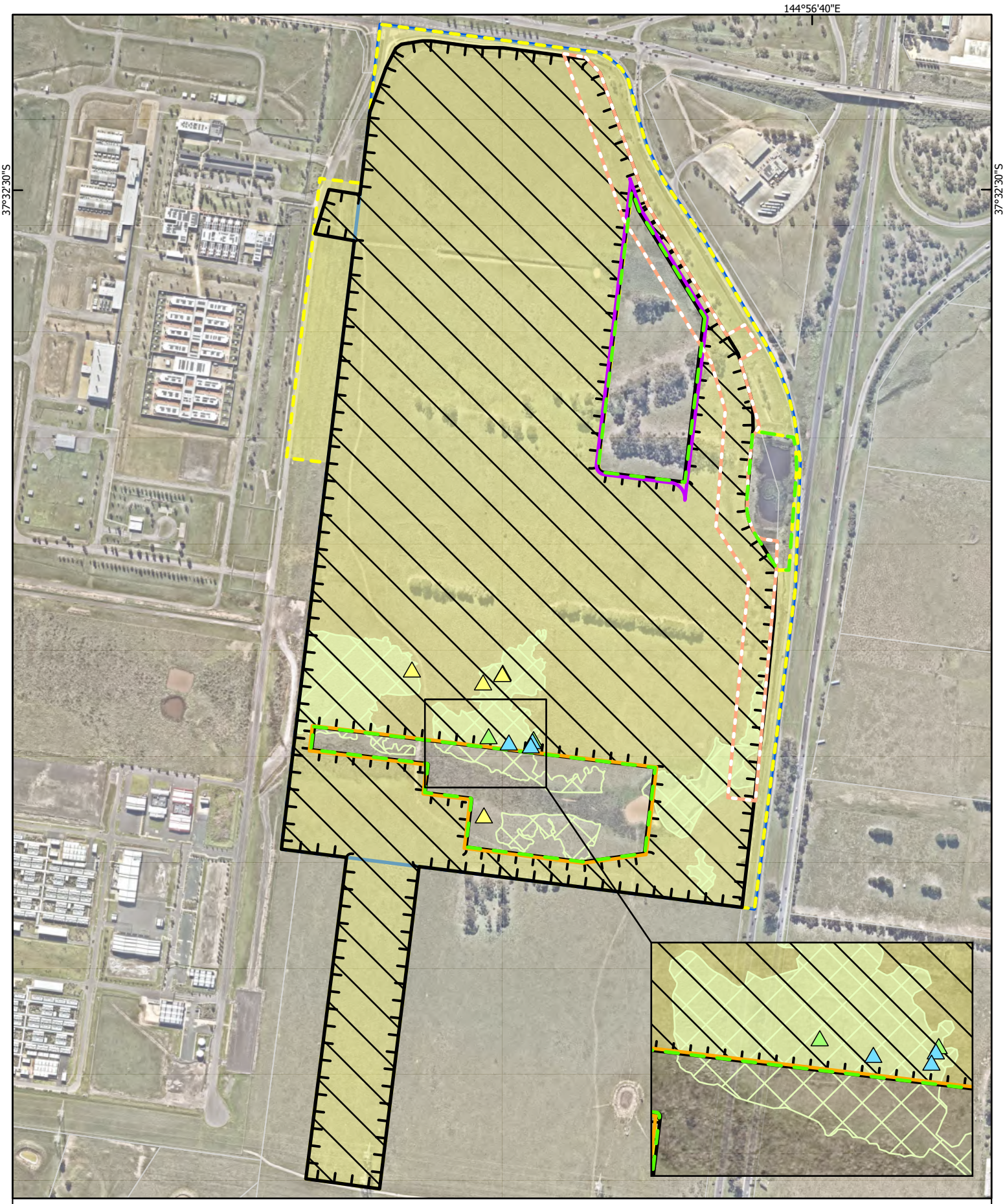


Figure 1. Location of Matted Flax-lillies within the salvage site

Project No: 25238.06 **Project**: 45 Donnybrook Road, Mickleham **Date**: 08/09/2026

- Study area
- Impacted Footprint
- Referral Area
- No Go Zone
- Revegetation Exempt Area

Reserve Areas

- Conservation Reserve
- Tree Reserve

Threatened Flora Species

- Matted Flax-lily (Nature Advisory 2019)
- Matted Flax-lily (Nature Advisory 2024)
- Matted Flax-lily (Nature Advisory 2025)

N

Metres

0 180

GDA2020 Vicgrid

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2. Matted Flax-lily biology

2.1. Description

MFL is a tufted perennial that typically grows in distinctive rhizomatous mats. Its grey-green leaves are softer, shorter, narrower and generally paler than those of most other species of *Dianella*. Additionally, the leaves are V-shaped in cross-section, with small serrations irregularly spaced along the margins and midrib, usually for the full length of the leaf including the sheath. Leaves grow to 45 cm long and 12 mm wide, and may die back during periods of significant water stress (summer dormancy; Carter 2010; RBGV 2023).

The inflorescence of MFL is upright and reaches 20–90 cm tall. Its nodding, star-shaped flowers are pale blue to blue-violet with yellow stamens (Photo 1), and produce a sweet, nutmeg-like fragrance. Flowering occurs from late spring to mid-summer (October–April), followed by fleshy, bluish-purple, globular fruits (Carter 2010; RBGV 2023).

Due to the matting habit, individual plants can occupy an area of up to 25 m^2, making population numbers difficult to estimate (Carter 2010).



Photo 1: Photograph of MFL flowers (Neville Walsh, CC BY-NC-SA 4.0 © Royal Botanic Gardens Board).

2.1.1. Habitat

MFL typically grows within lowland grassland, herb-rich woodland, valley grassy forest and grassy woodland habitats. The soil is fertile, well-drained and seasonally wet. Soil types range from sandy loams to heavy cracking clays. The understory component of its habitat is typically dominated by native grass cover, with companion species including Kangaroo Grass *Themeda triandra*, Weeping Grass *Microlaena stipoides var. stipoides*, Common Tussock-grass *Poa labillardierei*, Common Wheat Grass *Anthosacne scabra*, Slender Wallaby-grass *Rytidosperma racemosum var. racemosum* and Grey Tussock-grass *Poa sieberiana*. While not present across all MFL habitat, common companion trees comprise Blackwood *Acacia melanoxylon* and a range of eucalypt species, including River Red-gum *Eucalyptus camaldulensis*, Swamp Gum *Eucalyptus ovata*, Yellow Box *Eucalyptus melliodora*, Red Box *Eucalyptus polyanthemos*, Snow Gum Eucalyptus pauciflora, Bundy *Eucalyptus goniocalyx* and Red Stringybark *Eucalyptus macrorhyncha*. Introduced pasture species are also commonplace in much of the remaining MFL habitat (Carter 2010; RBGV 2023).

2.1.2. Translocation suitability of MFL

Although literature on the success of MFL translocations is limited, it is known to be a highly successful species to translocate due to its rhizomatous nature and ability to remain dormant until conditions are suitable. An example of a publicly available project is the Sugarloaf Pipeline Alliance easement in Yarra Glen, where 1172 propagules were planted. The monitoring report has indicated that only 5% mortality was evident one year after translocating (Ecology Australia 2011). Additionally, the National Recovery Plan for MFL (Carter 2010) recognises that translocated plants have a survival rate of 80-90%.

2.1.3. Distribution

MFL occurs within Victoria, Tasmania and New South Wales. Within Victoria, it exhibits a patchy distribution ranging from the state's east to its south-west (Figure 2). The species most often occurs in patches of remnant vegetation on roadsides and beside railways, as well as within nature reserves. The surrounds are typically highly disturbed by agriculture and urban development (Carter 2010; RBGV 2023).

2.1.4. Threats

The habitat and distribution of MFL were drastically reduced following European settlement. Urbanisation and agriculture have led to the clearing and disturbance of vast tracts of habitat, resulting in populations becoming fragmented and introduced species further displacing remnants. At present, much of the remaining habitat of MFL is restricted to roadsides, railway lines and reserves surrounded by urban development. Populations in these locations are particularly susceptible to herbicide use, slashing, weed invasion and damage via machinery and grazing (Carter 2010; RBGV 2023).

Major threats to MFL include:

- Weed invasion
- Habitat destruction
- Population fragmentation
- Loss of pollinators

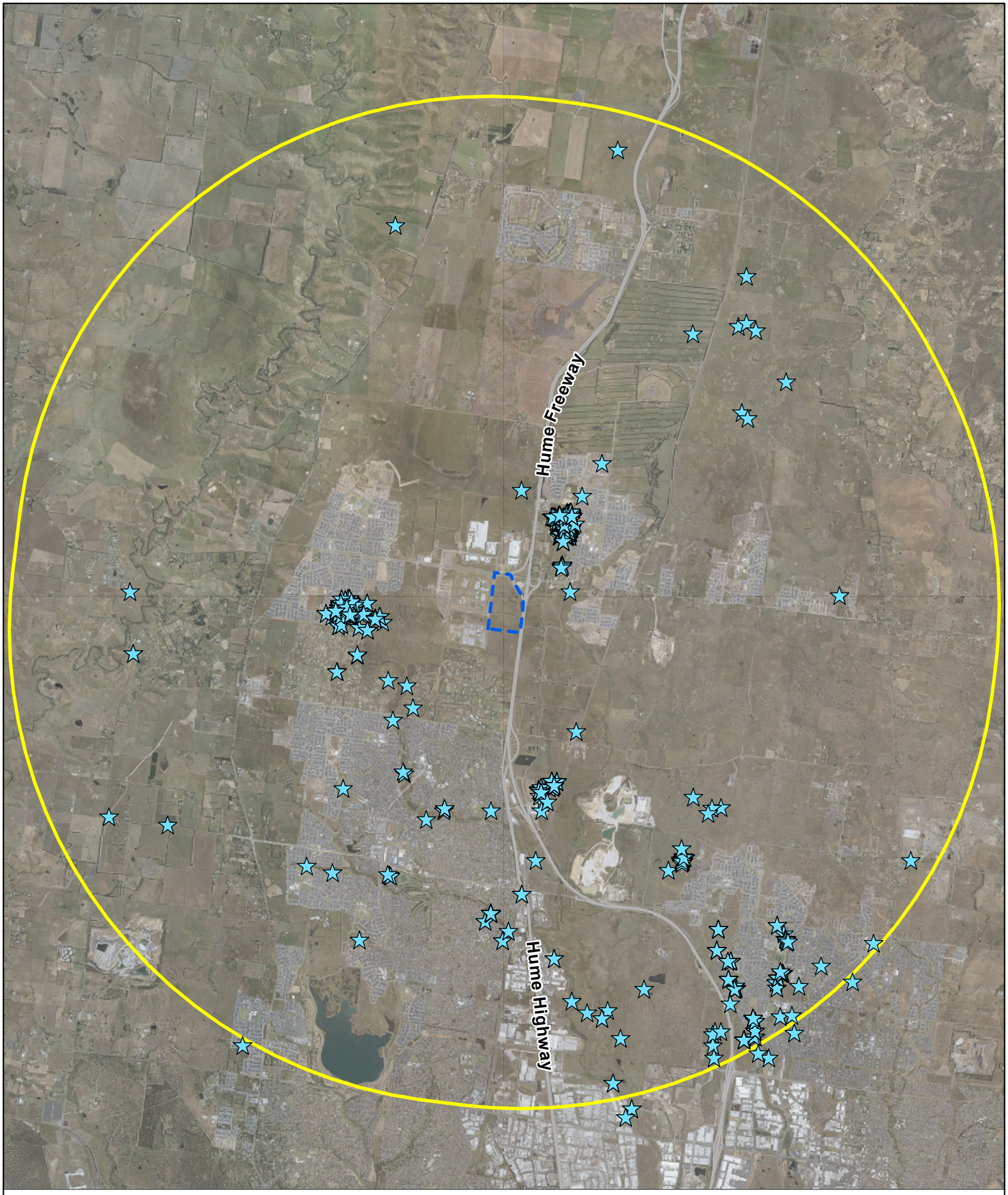


Figure 2. Records of MFL in Victoria

Project No: 25238_06 **Project**: 45 Donnybrook Rd, Mickleham **Date**: 02/09/2026

Study area

Study area (10km buffer)

Matted Flax-lily VBA Records

N

Kilometers

0 1 2

GDA2020 Vicgrid

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3. Legislative context

3.1. Relevant Legislation

MFL is currently listed as:

- Endangered under the EPBC Act
- Critically Endangered under the Flora and Fauna Guarantee Act 1988 (FFG Act).

A national recovery plan for the species has been developed based solely on the Victorian population (Carter 2010).

3.2. EPBC Act Legislation

The EPBC Act is legislation designed to protect threatened species, habitats, listed migratory species and ecological communities of national conservation significance. Any significant impacts to these species require the approval of the Australian Minister for the Environment.

If there is a possibility of a significant impact on nationally threatened species, communities or listed migratory species, a Referral under the EPBC Act should be considered. The Minister will decide whether the project will be a 'controlled action' under the EPBC Act, in which case the project can only be undertaken with the approval of the Minister. This approval depends on a further assessment and approval process.

4. Salvage

The translocation program will follow the timetable outlined in Table 2 below.

Table 2: Salvage and translocation schedule for MFL

Action	Timeframe	Relevant section
Pre-clearance surveys of salvage site, including flagging plants to be salvaged to locate them in the future	No more than 6 months before salvage	4.1
Identification of a suitable nursery (such as VINC or Abzeco)	No later than 3 months before salvage	4.3.1
Salvage of plants to be translocated	Prior to start of construction	4.2
Labelling of plants	During salvage and propagation at nursery	4.2 and 4.3.2
Propagation of clones (six per plant)	After transport to the nursery of salvaged material and then as required	4.4
Nursery management	For up to 10 years following salvage, until performance objectives are met (see Section 7.2)	4.3.2
Preparation of the recipient site (weed control)	Minimum of 6 months before planting of salvaged material	6.2
Initial translocation to recipient sites to include four clones of each plant (where possible) and two retained in the nursery as replacements (if required)	Preference is within the 1st year of the nursery management period (subject to site conditions) but no longer than 2 years and following the autumn breaking rains.	6.1
Recipient site management	For the duration of the Offset Management Plan (OMP) (10 years).	6.3
Monitoring period	For the duration of the OMP (10 years).	7.3
Replacement plantings	As required, for the duration of the OMP (10 years).	6.3.1
Reporting	Report immediately after salvage and translocation then annually for the first two years, then at five and ten years or until performance objectives have been met.	7.4
Adaptive management measures	As needed in response to monitoring schedule during 10-year monitoring period, or until long-term performance criteria are met	7.2
Evaluation of performance objectives	At year five following translocation, with further evaluation annually until year ten.	7.2

4.1. Pre-clearance surveys

Pre-clearance surveys for MFL within the salvage site will be required prior to works commencing. All plants recorded will be salvaged, propagated and then translocated into the offsite offset site. Plants will be propagated to achieve the target number of individuals. If an insufficient amount of material is salvaged, additional clones will be propagated once the individual has grown and developed under nursery conditions. Alternatively, if there is excess material (propagules) from other salvaged individuals, this will be used to supplement.

The pre-clearance surveys will utilise the following methodology:

1. Stock must be removed from the project area a minimum of 2 months prior to the targeted survey occurring. Alternatively, stock exclusion fencing around the salvage site must be installed.
2. Targeted survey (pre-clearance survey) throughout the entire area of identified suitable habitat to be impacted (salvage site).
3. All previous detected individuals/patches will be searched for with a GPS (accurate to 2m), and any differences in locations and/or additional plants identified will be recorded.
4. Each individual/patch will be marked with a red flag by a qualified botanist.
5. A tally of plants will be recorded and mapped.

4.2. Salvage process

The salvage process must be undertaken before the commencement of construction works, which can be undertaken upon the approval of this Translocation Plan by the Commonwealth.

Flowering of MFL occurs predominantly from November to January but the species can flower as early as October and as late as April (Carter 2010). As such, it is recommended that salvage takes place between late autumn to early spring (May- September) during stages of vegetative growth, as the species is more resilient to disturbance at this time (RGBV 2024; Bull 2014). Furthermore, undertaking salvage at this time ensures a greater rate of success as it allows for an extended period of favourable growing conditions before the drier months of summer arrive (GHD 2022).

All MFL recorded within the salvage site during the pre-construction survey must be salvaged from their current location at 45 Donnybrook Road, Mickleham. The entire plants are to be salvaged, including roots and associated soil. A qualified botanist or ecologist is required to supervise salvage activities with the salvage being undertaken by a suitably qualified and experienced bushland contractor. The salvage must be undertaken appropriately to ensure that:

- The plants are handled, transferred into pots, and appropriately labelled.
- Where required, the trimming of leaf mass, flowers and fruit is undertaken to reduce transpiration and reduce stress of translocation to nursery.
- That the risk of pests, pathogens, and diseases being transferred with the plants or associated soil is minimised i.e. tools and machinery hygiene protocols are implemented and weed material is removed as far as practicable.

The procedure will be as follows:

- All MFL individuals identified in the pre-clearance survey must be located prior to salvage and physically marked with readily visible stakes.

- If there is an absence of natural rainfall (>10 mm) in the 1-2 days leading up to the salvage event, the MFL must be watered 1-2 days prior to salvage to allow time for the water to soak in. As such, the plant must be saturated to root depth.
- During salvage, plants must be dug from the ground using clean and sanitised manual equipment. The whole plant and associated soil must be salvaged to ensure as much propagation material is salvaged as possible.
- Each plant or group of plants (mat) must be labelled, for future reference.
- The root system of all salvaged plants must be kept moist during the salvage process, using either a wet hessian cloth or similar method.
- Upon completion of salvage, the MFL must be potted in transportable containers and immediately transported to a suitably qualified indigenous plant nursery.
- Upon completion of salvage, the Department of Climate Change, Energy, the Environment and Water (DCCEEW) must be notified that it has occurred.

4.3. Salvaged plants

The MFL, post salvage, will need to be divided, propagated, and managed to reproduce vegetatively (cloned) to establish a security population of a sufficient/ viable number of individuals. To establish a viable population and to provide assurance of success, six (6) clones from each salvaged plant will be propagated. Four (4) clones from each salvaged individual will be translocated, while two (2) will remain in the nursery as an assurance population to be used as replacement plants should any of the translocated plants fail. The assurance population must be held at the nursery for the duration of the OMP (10 years).

The propagated individuals will be held at the nursery until the recipient site is adequately prepared before receiving the salvaged individuals (refer to Section 6.2). Additionally, the plants will be held at the nursery until suitable planting conditions occur, ensuring they are planted at an appropriate time to maximise establishment success (i.e. following the autumn breaking rains).

4.3.1. Nursery selection and capability

Upon the salvage of the MFL, they must be transferred to a suitably qualified indigenous plant nursery for propagation, cloning and labelling. The plant nursery to undertake the work must be capable and experienced in propagating MFL and should have experience working with threatened flora species, preferably MFL. The nursery must also have knowledge and experience in propagation techniques to clone MFL, and space to maintain a healthy security population in the nursery throughout the 10-year duration of this plan.

4.3.2. Nursery obligations

A suitably experienced indigenous nursery, such as Victorian Indigenous Nurseries Co-operative (VINC) *or* ABZECO Pty Ltd, must be used to undertake the following responsibilities:

- For each individual of MFL:
    - Six (6) clones from each salvaged plant will be propagated.
        - If an insufficient amount of material is salvaged, additional clones will be propagated once the individual has grown and developed under nursery conditions. Alternatively, if there is excess material (propagules) from other salvaged individuals, this will be used to supplement.

- Four (4) clones from each salvaged individual will be translocated into the recipient site.
- Two (2) will remain in the nursery as an assurance population to be used as replacement plants should any of the translocated plants fail.
    - The assurance population must be held at the nursery for the duration of the OMP (10 years).
- Each plant must be labelled to ensure the clone of each is traceable back to its parent plant.
- The propagated clones must be grown to a stage when they have recovered from salvage and are ready for translocation (determined by the amount of new growth they have produced).

4.4. Propagation at the nursery

Upon arrival at the nursery, MFL plants must be potted in soil medium that is designed for propagation of native plants. When the nursery deems it appropriate, each of the MFL must be propagated and cloned (this may be immediately).

Once each clone is potted, the nursery must undertake a care regime. This will involve watering, weeding, fertilisation where necessary, repotting, and monitoring of pathogens and diseases. This will continue perpetually over the 10-year duration of this plan for the assurance population.

To prepare plants for planting into the recipient site, they will need to be acclimatised to outdoor conditions. This will involve the slow introduction and exposure to ambient conditions, commonly referred to as 'hardening off'. This will ensure that extra stress is not imposed on the plants when they are translocated to the recipient site. This process must only occur once an appropriate recipient site has been determined and a translocation date has been confirmed.

4.4 Indicative timeframe for salvage, propagation and translocation

Pre-clearance surveys will be required prior to construction. All MFL located within the impact area will be salvaged before any site works commence. The ideal timing for salvage is late autumn to early spring (May- September) where rainfall is generally most consistent, as salvage and translocation of MFL is best implemented when plants are not flowering or fruiting, the daily maximum temperatures are low, and soil moisture is high. Undertaking salvage between winter and early spring will maximise the chance of success as MFL are more resilient to disturbance at this time and have a longer period for recovery post salvage. Salvage and translocation may occur outside of this time period *if* supplementary watering occurs before salvaging (i.e. if rainfall is low), or if the conditions are deemed to be suitable (i.e. there has been sufficient rainfall).

Preparation of the proposed recipient sites within the offset site will also begin as soon as plants have been salvaged (i.e. selecting locations within the offset site as suitable recipient sites and undertaking initial weed control and fence construction).

The propagated MFL plants will be held at the approved nursery until required for planting. Once the translocation plan reaches the defined success rate (85% survival rate at the end of the 10 year management period), then the remaining nursery plants will be offered to Hume City Council or Parks Victoria for use at their discretion.

5. Recipient site selection

5.1. Selection criteria

The following criteria were referred to in order to guide selection of potential sites:

- The recipient site must be in the same or similar Ecological Vegetation Class (EVC) to the salvage site. In this case Plains Grassy Woodland (EVC 55_61) or Plains Grassland (132_61).
- The recipient site must be actively managed, meaning that the translocated plants can be monitored, threats to them can be identified, and regular weed control is conducted.

5.2. Recipient site

Although the recipient site is yet to be secured, the proposal is to translocate the MFL into the same offset site as to what is to be secured for the NTGVVP. The proposed offset site occurs on private land at in Shelford Victoria, approximately 6.4 km north-west of Shelford and 38 km north-west of Geelong and contains 4.127 ha of NTGVVP.

A site assessment was undertaken on 10 January 2025 to ascertain the quality and extent of native vegetation present, as well as other characteristics, to determine the suitability of the site for MFL translocation (Figure 3).

5.2.1. Condition

The recipient site was bordered by private property within the same parcel in all directions. Surrounding land predominantly supported farming, including associated buildings and dwellings. Native vegetation occurs along the length of Warrambine Creek to the north and south, with existing areas of NTGVVP abutting the site to the north. The proposed offset site (recipient site) contains separate management areas, referred to as Conservation Management Zones, as shown in Figure 3.

The recipient site supported basaltic soils. The dominant native species were spear grasses and wallaby grasses. Other indigenous species present within the Conservation Management Zone included Wiry Dock, Berry Saltbush *Atriplex semibaccata* and Nodding Saltbush *Einadia nutans*. Planted eucalypts were recorded along the western boundary of the Conservation Management Zone.

Weed cover was moderate and was dominated by Toowoomba Canary-grass and Squirrel-tail Fescue, along with occurrences of Wild Sage, Wild Oat, Serrated Tussock, Flatweed, Horehound *Marrubium vulgare*, Fat Hen *Chenopodium album*, Chilean Needle-grass and Prostrate Knotweed *Polygonum aviculare*.

5.2.2. Suitability

The proposed recipient site is of a suitable vegetation type to support a MFL population given that it is Plains Grassland (EVC 132_61). It is of moderate to high quality as it meets the condition thresholds of NTGVVP. Therefore, its existing condition is suitable, provided active management occurs to control biomass and weed invasion. The recipient site will be actively managed as part of the commitments under the NTGVVP OMP and can therefore incorporate commitments for the translocated plants to be monitored, threats to them to be identified and regular weed control to be undertaken.

MFL are known to grow in a range of habitat types and persist in degraded environments. As such, they are a relatively hardy species that can readily be translocated. Although literature on the success of MFL translocations is limited, it is known to be a highly successful species to translocate due to its rhizomatous nature and ability to remain dormant until conditions are suitable (Ecology Australia 2011 and Carter 2010).



Figure 3: Proposed MFL recipient **Site**

Project No: 19057_11 **Project**: Fusion Business Park **Date**: 5/03/2025

Conservation Management Zones

NTGVVP Management Zone

EPBC community (NTGVVP)

CMZ ID

Patch ID

N

Metres

0 90

GDA2020 Vicgrid

Nature Advisory

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6. Translocation and recipient site management

6.1. Translocation

Translocation can take place once the MFL in the nursery have reached a stage when they are ready for translocation. This is subject to the judgment of the nursery, based on health of the plants and the amount of new growth that they have produced following propagation.

A total of 4 MFL from each salvaged plant will be translocated into the new recipient site (up to 32 if 8 plants are salvaged). An additional 2 from each plant will be propagated but will remain in the nursery as an assurance population to be used as replacement plants should any of the translocated plants perish.

Translocation must occur in accordance with the Guidelines for the translocation of threatened plants in Australia (Commander et al. 2018). Translocation also includes salvage which is detailed in the Guidelines. Translocation and ongoing maintenance must be undertaken by experienced bushland contractors.

Prior to planting, the holes must be dug for the MFL and filled with water. The clones are to be mixed throughout the recipient holes to ensure mixed genetics (that is, clones from the same parent plant should not be planted next to each other). Each plant should be planted approximately 1m apart to encourage germination.

All translocated plant must be identified with a unique metal ID tag. This tag will be securely pegged into the ground, adjacent to the relevant plant. Due to the dense matting habit of MFL and the potential for groundcovers to establish and obscure tags over time, the locations of each plant must also be recorded using a differential GPS.

6.2. Recipient site preparation

To ensure the best survival chance for translocated plants, any threats that are present at the translocation site must be managed before translocation can occur.

6.2.1. Weed control

Before translocation of MFL, weed control must occur at and adjacent to the location where they will be planted. Any high threat weeds must be controlled with appropriate methods by the land manager. Given that the proposed recipient site is intended to be the NTGVVP offset site, it will already be managed for such threats.

Before translocation, competition for MFL must be reduced by reducing cover of competitive grasses. This should primarily involve weeds but may also include native grasses. Competition to MFL will be reduced by cutting down biomass and cover of grasses at the planting location. Control methods are to be determined by the responsible land manager, and may include small burns, slashing, hand weeding, or spraying of weeds.

6.2.2. Pest animal control

If rabbits are considered a threat at the site, then they must be managed prior to translocation. This may include warren fumigation and destruction. It may also include baiting, should the land manager determine that this is a necessary measure.

Additionally, contractors are required to incidentally monitor kangaroo activity throughout the life of this plan, to assess any herbivory pressures associated with this threat.

Fencing

To best protect MFL from herbivory pressures associated with rabbits and kangaroos, fencing must be established around the translocated plants and maintained for the first five years following their translocation. This will allow the plants to sufficiently establish and mature to a point in which they can better resist herbivory pressures.

Fencing must be constructed to the following standards to exclude these herbivory threats:

- Use chain-link (cyclone) fencing, ringlock fencing or deer mesh (also known as K wire).
- Be high-tensile, heavy galvanised wire.
- Be at least 1.8 m high.

To prevent rabbit entry via gaps at the base of the fencing, the following design must also be implemented:

- Fencing must have a secured mesh apron.
- Fencing (including the mesh apron) must be embedded into the ground.

6.3. Ongoing management

Management of the translocated MFL must continue for the duration of the NTGVVP OMP (10 years), to ensure successful establishment and ongoing plant health. Management will be most intense during the first six months after translocation. One year following translocation, management will occur monthly, unless more frequent management is deemed necessary by the land manager.

6.3.1. Matted Flax-lily management

A watering regime for the MFL must be adhered to throughout the 10-year monitoring period. Watering will be most intense in the months following translocation, as the plants establish their root systems. By the end of the monitoring period, watering should only be necessary if plants appear stressed or if drought occurs. Below is an indicative schedule. However, this may be modified as necessary by the responsible land manager.

- For the first six months after translocation, watering should occur on a weekly basis. However, this will only be necessary if less than 10mm of rainfall occurs within the week.
- For 6 – 12 months after translocation, watering should occur fortnightly if less than 10mm of rainfall occurs within the fortnight. This only applies between December and March.
- For 1 – 2 years after translocation, watering should occur monthly if less than 10mm of rainfall occurs within the month. This only applies between December and March.
- For 2 – 10 years after translocation, watering should only occur when plants show signs of stress, or in drought events.

If MFL mortality occurs at the recipient site, it must be replaced from the security population from the same parent plant. Whenever this occurs, the same watering regime as above will be implemented for that one individual.

Each time the MFL are monitored, the fencing is to be inspected. They must be checked for structural integrity and for any signs of breaches by herbivores.

6.3.2. Site management

Throughout the 10-year management period, all threats to the MFL must be managed. This includes weed invasion, herbivory threats, disease and any other threats that occur.

The MFL should be monitored for any signs of herbivory. If it appears that herbivory has occurred, preventative measures must be put in place to ensure it does not continue. This may include upgrades to fencing or installation of other forms of physical protection. If herbivory is occurring due to a pest animal such as rabbits, population control should also be considered.

Weed management must occur throughout the 10-year period. Within a 5m radius of any MFL, the following high threat weeds must be kept to less than 1% cover:

- Spear Thistle
- Toowoomba Canary-grass
- Squirrel-tail Fescue
- Wild Sage
- Serrated Tussock
- Flatweed
- Horehound
- Fat Hen
- Chilean Needle-grass
- Prostrate Knotweed

Weeding nearby the MFL must be completed manually, to ensure they are not damaged by any chemical or mechanical weed control. In the broader recipient site, weed infestations should be monitored to ascertain any threats they pose to MFL, and controlled accordingly. It is understood that the recipient site will be managed for such threats as part of the broader ongoing management of the conservation management zones as per the obligations under the NTGVVP OMP.

7. Monitoring and reporting obligations

A table or responsibilities is provided in Appendix 1.

7.1. Schedule

Throughout the 10-year management period, monitoring must be completed by a suitably qualified person who is familiar with the biology and ecology of MFL. The proponent must contract a suitably qualified person to complete this work. Health, size, offspring and reproduction, and survival must be monitored. Monitoring will be most intense following translocation and gradually become less intensive. Planted material is considered established if it has survived for a period of five years (GHD 2022).

A recommended timeline for monitoring is outlined below:

- During the first month after translocation, monitoring should occur weekly.
- For months 2 – 6 after translocation, monitoring should occur monthly.
- For 6 – 24 months after translocation, monitoring should occur quarterly.
- For 2 – 10 years after translocation, monitoring should occur every 6 months.

7.2. Performance objectives

The objective is to have 85% of clones survive following translocation. If, at the end of 10 years, this is the case, then MFL will be considered established at its recipient site (Commander *et al.* 2018). Another aim is that the plants are able to flower and fruit, in order to reproduce. Monitoring should also establish plant growth and levels of reproduction, as well as condition of the recipient site.

Proposed indicators for assessing the successful establishment of translocated individuals are as follows;

- Plant growth and survival
- Recruitment availability
- Competition from weeds
- Pest management
- Population growth
- Genetic diversity

7.3. Monitoring obligations

Each time monitoring is completed, the following must be recorded:

- The condition and health of each MFL, based on the following criteria:
  - Plant health (ranging from poor, moderate and good)
  - Number of inflorescences (<5, 5-10, 10-15, etc.)
  - Number of leaf tufts (<5, 5-10, 10-15, etc.)
  - Width of plant (cm) at its widest point
  - Other management notes (e.g. signs of herbivory, need for weeding, water stress, presence of fruit, etc.)
- Survival rate of the translocated MFL. If any of the translocated MFL have experienced mortality, a replacement must be made available by the nursery.

- A photo should be taken at a set photo point.
- Record any MFL recruits in the area and take their location.
- Monitor the site for any threats to the MFL such as pest animals/ plants; and,
- If there is evidence of reproduction and natural recruitment

Monitoring must occur in November or December from the first year that individuals are translocated until the conclusion of the OMP. Monitoring is to occur during this period as it is when MFL is known to flower so that species identification can be confirmed.

7.4. Reporting

The proponent will be responsible for annual reporting to DCCEEW on the population of MFL. The reporting is to be provided within 3 months after the 12-month anniversary of salvage occurring. Monitoring must be undertaken by a suitably qualified, independent botanist.

Reports must contain information on the health, reproduction, survival rates, size and growth rates of the population of MFL. It must also report on the condition of the recipient site and detail any threats present. Annual reports must include the locations of any translocated plants or clones, which should be uploaded to the Victorian Biodiversity Atlas (VBA).

8. References

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Appendix 1: Table of responsibilities

Task	Responsibility
Pre-salvage identification of MFL locations at the salvage site.	Nature Advisory on behalf of the proponent.
Salvage procedure.	Nature Advisory on behalf of the proponent.
Propagation and cloning of salvaged MFL.	An indigenous nursery such as VINC on behalf of the proponent.
Establishment of a security population of MFL in the nursery.	An indigenous nursery such as VINC on behalf of the proponent.
Translocation of MFL.	Experienced bushland contractors
Management of recipient site.	Experienced bushland contractors
Management of MFL in recipient site.	Experienced bushland contractors
Monitoring of MFL in recipient site.	Experienced bushland contractors
Incidental monitoring of kangaroo activity.	Experienced bushland contractors
Reporting on condition of MFL in recipient site.	DEECA accredited botanist on behalf of the proponent.