MELBOURNE AIRPORT

August 2026

Melbourne Airport Hotel Apron South Project Major Development Plan



Executive Summary

This Major Development Plan (MDP) has been prepared by Australia Pacific Airports (Melbourne) Pty Ltd (APAM) to support the delivery of the Hotel Apron South Project (the Project) at Melbourne Airport, in accordance with the *Airports Act 1996* ('the Airports Act'). The project is classified as a major airport development due to its environmental impacts and location within an environmentally significant area. It must therefore be carried out in accordance with an MDP approved by the Commonwealth Minister[1] for Infrastructure, Transport, Regional Development and Local Government.

The Project comprises apron construction for aircraft parking, reconstruction of Taxiway Sierra (to be renamed Taxiway Papa), and construction of ground support equipment (GSE) and bussing facility areas.

Together, these works will increase aircraft parking capacity, improve apron efficiency, and support ongoing airfield operations within Melbourne Airport's terminal precinct.

Strategic Need and Justification

Melbourne Airport is Australia's second busiest airport and largest domestic freight hub, with aircraft movements forecast to grow significantly over the long term.

The existing apron system is approaching capacity, particularly during peak periods and overnight operations. Without additional infrastructure, operational constraints would increase, potentially leading to congestion, delays and inefficient use of taxiways for aircraft parking.

The Project directly responds to these challenges by providing additional remote stand capacity and supporting infrastructure, enabling Melbourne Airport to accommodate future growth. It is also a key enabling project supporting broader airfield and terminal expansion initiatives, including the third runway and associated apron developments.

The need for the Project is closely linked to the growth in aircraft movements enabled by the approved Melbourne Airport Third Runway (M3R) project. While M3R will significantly increase runway capacity and support future passenger and aircraft growth, corresponding apron infrastructure is required to ensure sufficient aircraft parking capacity is available to accommodate that additional traffic.

The Project is therefore a complementary enabling project that supports the broader airport development program. The project does not create demand; rather, it provides the aircraft parking infrastructure necessary to support the increased aircraft movements expected as a result of M3R and Melbourne Airport's long-term growth forecasts. By providing additional remote aircraft parking capacity, the Project ensures apron infrastructure grows in line with airfield capacity, enabling the airport to realise the full operational benefits of the third runway.

Legislative and Planning Context

This MDP demonstrates that the Project is consistent with the Airports Act, relevant Commonwealth regulations, and Melbourne Airport's lease obligations. It aligns with the approved Melbourne Airport Master Plan 2022 and emerging Master Plan 2027, including the Airside Development Plan and Aviation Precinct land use framework, which identify the South-East precinct of the airfield for future apron expansion.

While located on Commonwealth land, the Project has been assessed against relevant State and local planning policies and is broadly consistent with the Victorian Planning Policy Framework, supporting Melbourne Airport's role as a key economic, transport and employment asset.

[1] Unless otherwise stated, a reference to the Minister is a reference to the Minister responsible for administering the *Airports Act 1996* (Cth)

Environmental Assessment

Environmental impacts associated with the Project have been assessed through detailed technical studies prepared for this MDP, noting that part of the Project was previously assessed and approved as “Project D” under EPBC 2024/09907. The Project has evolved since it was assessed as “Project D” and requires additional land to the ‘action area’ approved under EPBC 2024/09907. However, the impacts of the Project are consistent with those previously assessed for “Project D” under EPBC 2024/09907, with no additional or materially different impacts to matters of national environmental significance (MNES). As with “Project D” assessed and approved under EPBC 2024/09907, the impacts of the Project are localised and are primarily associated with vegetation removal within managed airside grasslands and construction activities.

A robust environmental management framework will be implemented, including:

- A Construction Environmental Management Plan (CEMP)
- Targeted mitigation measures for biodiversity, contamination and construction impacts
- An offset strategy for the removal of native grassland

EPBC 2024/09907 previously assessed substantially similar works and environmental values; however, APAM does not rely on that approval to authorise the Project described in this MDP. This reflects that the current development footprint extends beyond the EPBC Act action area approved for Project D.

The Project is assessed and approved solely under the Airports Act through this MDP, with *Environment Protection and Biodiversity Conservation Act 1999* (‘EPBC Act’) matters to be considered through referral under section 160 of the EPBC Act. However, APAM acknowledges that it will implement the mitigation and offset measures required by EPBC 2024/09907 for Project D.

Operational and Safeguarding Considerations

The Project has been assessed against the National Airports Safeguarding Framework and relevant aviation requirements. It will not impact aircraft noise exposure levels, flight paths or prescribed airspace.

Construction will be staged within a live operational environment, with measures in place to maintain safe and efficient airport operations throughout delivery.

Socio-Economic Benefits

Melbourne Airport is a critical economic and social asset for Victoria, supporting significant employment, tourism, trade and freight activity.

The Project will:

- Generate direct employment during construction
- Support long-term airport capacity and operational efficiency
- Enable continued growth in passenger, freight and aviation activity

By strengthening airfield capacity, the Project contributes to Melbourne Airport’s ongoing role as a major national and international gateway for Victoria and Australia.

Conclusion

The Hotel Apron South Project is a necessary, well-planned and strategically aligned development that addresses capacity constraints, supports future growth, and enhances the efficiency and resilience of Melbourne Airport’s airside operations.

The Project is consistent with statutory requirements, supported by comprehensive technical assessment, and delivers clear operational and economic benefits. It is therefore appropriate for approval under the Airports Act.

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1. Introduction

1.1 Overview

Melbourne Airport is operated by Australia Pacific Airports (Melbourne) (APAM) Pty Ltd under a Head Lease from the Commonwealth Government as the owner of the Airport.

APAM presents this Major Development Plan (MDP) in support of developing the 'Hotel Apron South Project' (the Project) at Melbourne Airport in accordance with Section 89 of the Airports Act as a major airport development.

Section 90 of the Airports Act requires major airport development to be carried out in accordance with an MDP approved by the Minister.

Melbourne Airport is Australia's largest 24-hour curfew-free airport, the nation's largest domestic freight hub and the second busiest airport in the country by passenger numbers. Since its construction in the 1960s, Victoria's population has grown to more than seven million and the aviation sector has changed dramatically. Melbourne Airport has continually adapted and expanded to keep pace with technological progress and rising demand for passenger and freight movement. Continued investment and development are essential to ensure the airport can support Victoria's future social and economic needs.

Melbourne Airport is committed to upgrades across its airfield operations in response to rising travel demand. The Project will deliver additional capacity in the south-east precinct of Melbourne Airport's airfield, supporting growing international operations, including wide body aircraft layover and freight activities. It is also a key enabling project for future apron, airfield and terminal developments, which together represent more than $4.5 billion in investment.

1.2 Project Summary

This MDP has been prepared by APAM for the Project which is being developed to support Melbourne Airport's capacity to meet increased demand across airfield operations in line with the Melbourne Airport Master Plan 2022 (Master Plan 2022) and emerging Melbourne Airport Master Plan 2027 (Master Plan 2027).

The Project involves apron construction for aircraft parking, taxiway reconstruction works and construction of ground support equipment (GSE) and bussing facility areas. Together, these works are intended to lift operational efficiency, safely accommodate forecast airline growth, and future-proof the precinct while meeting regulatory and industry requirements.

Construction of the Project is expected to commence in early 2027 and will be staged to maintain the safe, secure and efficient operation of the airport. The Project construction is expected to be completed by mid-2028.

Further detail on the Project is included in **Section 3.**

1.3 Major Airport Development Approvals

1.3.1 Major Airport Development

In accordance with Section 90 of the Airports Act, major airport development must not be carried out except in accordance with an approved MDP. Under Section 89(1) of the Airports Act, a major airport development is defined as '*a development that is carried out at an airport site and that consists of…*' (as applicable to the Project):

> *m. a development of a kind that is likely to have significant environmental or ecological impact.*
>
> *n. a development which affects an area identified as environmentally significant in the environment strategy.*

The Project will impact on native grassland listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and an area identified as environmentally significant in the

airport environment strategy, and is therefore considered to be major airport development that triggers the requirement for an approved MDP under the Airports Act.

The project is 'not extending a taxiway where the extension significantly increases the capacity of the airport to handle movements of aircraft' and therefore does not trigger the following section of 89(1)

g. extending a taxiway, where:

(i) the extension significantly increases the capacity of the airport to handle movements of passengers, freight or aircraft; and

(ii) the cost of construction exceeds the threshold amount

The project only reconstructs a section of Taxiway Sierra that has reached the end of its serviceable life, to align with new apron levels.

1.3.2 Major Development Plan Approval Process

Approval of an MDP is obtained from the Minister. The key steps in the approval process for an MDP under the Airports Act are shown in Figure 1. It is of note that the preparation and distribution of an Exposure Draft to external stakeholders is not a process mandated under the Airports Act.

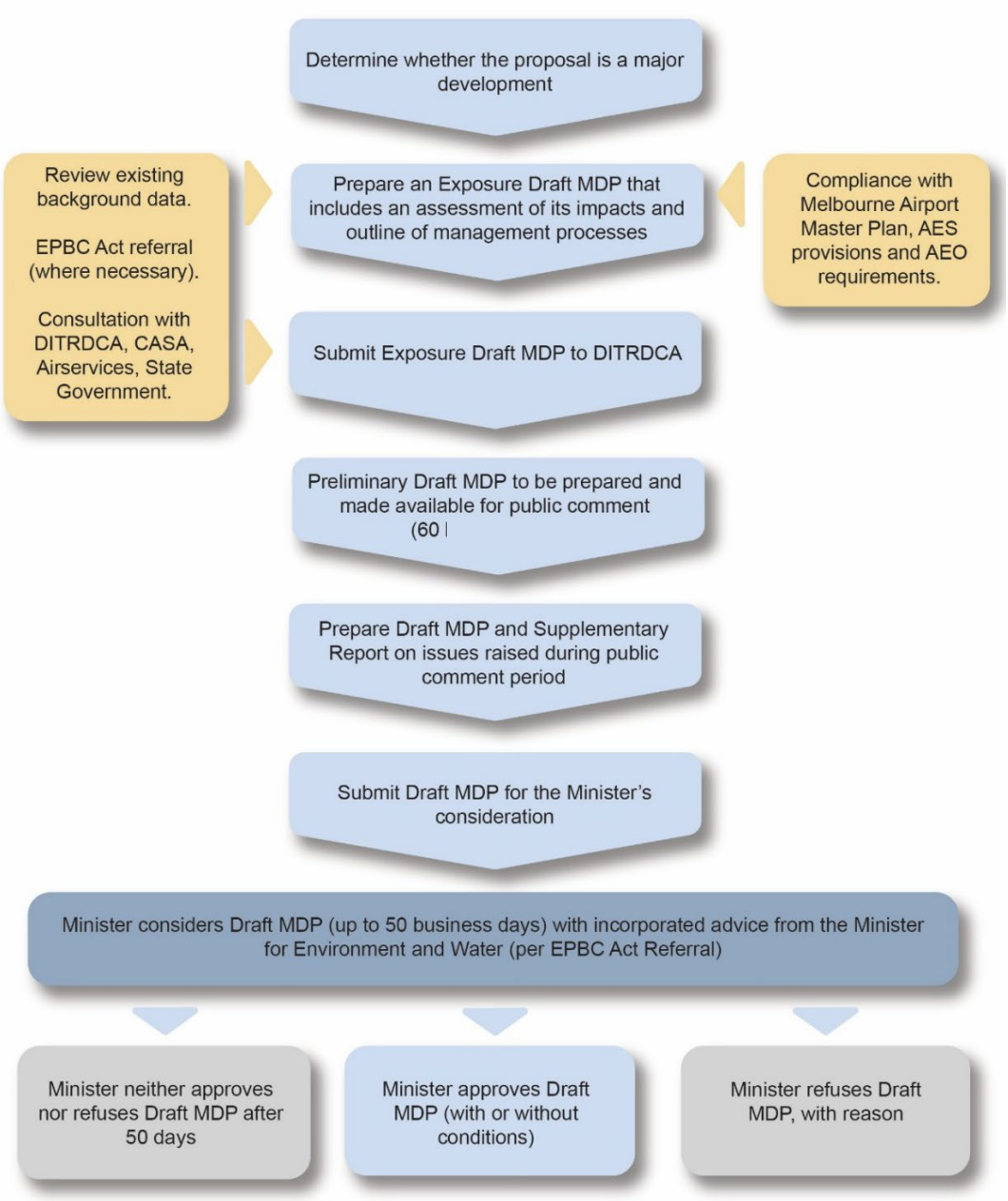


Figure 1: MDP Approvals Process

The Airports Act requires that the MDP be exhibited to the public, and, as a matter of practice, airport-lessee companies (including APAM) undertake public and stakeholder consultation regarding the content and proposed development in an MDP. A Preliminary Draft MDP must be made available for public comment for at least 60 business days, except a shorter period can be approved by the Minister. In this case a 15-business day consultation period has been approved by the Minister.

Following the public exhibition period a Draft MDP will then be prepared, incorporating appropriate amendments arising from the public consultation period together with a 'Supplementary Report' detailing amendments incorporated. The Draft MDP and Supplementary Report are submitted to the Minister for consideration and decision.

The specific matters that must be addressed by this MDP are set out in Section 91 of the Airports Act. **Appendix A** shows where each requirement has been addressed in this MDP.

1.4 Report Aim and Structure

This MDP is structured as follows to address the requirements of the Airports Act:

- **Sections 3 and 4** provide details of the Project that is the subject of this MDP and the justification for it
- **Sections 5 and 6** describe the legislative context and consistency with relevant federal, state and local legislation and policy
- **Section 7** provides a summary of economic and social effects of the Project
- **Section 8** provides a summary the traffic and transport effects of the Project
- **Section 9** provides a summary of the environmental effects of the Project
- **Section 10** describes the impacts on Airport Operations and consistency with the NASF guidelines
- **Section 11** describes the process that will be followed for implementation of the Project
- **Section 12** defines the consultation and approval process undertaken as part of this MDP.

1.5 Project Proponent

As the Airport Lessee Company under the Airports Act, APAM is the Project proponent.

Contact details for APAM are:

Australia Pacific Airports (Melbourne) Pty Ltd

International Terminal,

Locked Bag 16,

Tullamarine, VIC, 3043

The APAM contact in connection with this proposal is:

Rosie Offord

Head of Planning

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2. EPBC Act Context

2.1 Overview

This section outlines the statutory approvals context for the Project, including the environmental and planning approvals pathway undertaken to date. In particular, it describes the assessment and approval process completed under the EPBC Act, the history of advice relied upon by APAM regarding the need for an MDP, and the relationship between the EPBC Act approval footprint and the footprint now proposed under this MDP.

For clarity, the following terminology is used consistently throughout this MDP:

- "Project D" refers to the part of the action assessed under EPBC 2024/09907 that relates to part of the Project (noting that EPBC 2024/09907 also assessed and approved four other airfield developments as described in **Section 2.2** below).
- "EPBC Act action area" refers to the area within which the action was assessed and approved for Project D under EPBC 2024/09907.
- "MDP development footprint" refers to the full extent of works proposed under this MDP, including land outside the EPBC Act action area.

The EPBC Act action area and MDP development footprint are identified in Figure 2.

The Project assessed in this MDP (the Hotel Apron South Project) differs from Project D in its footprint and extent and therefore constitutes a separate action for the purposes of the EPBC Act.

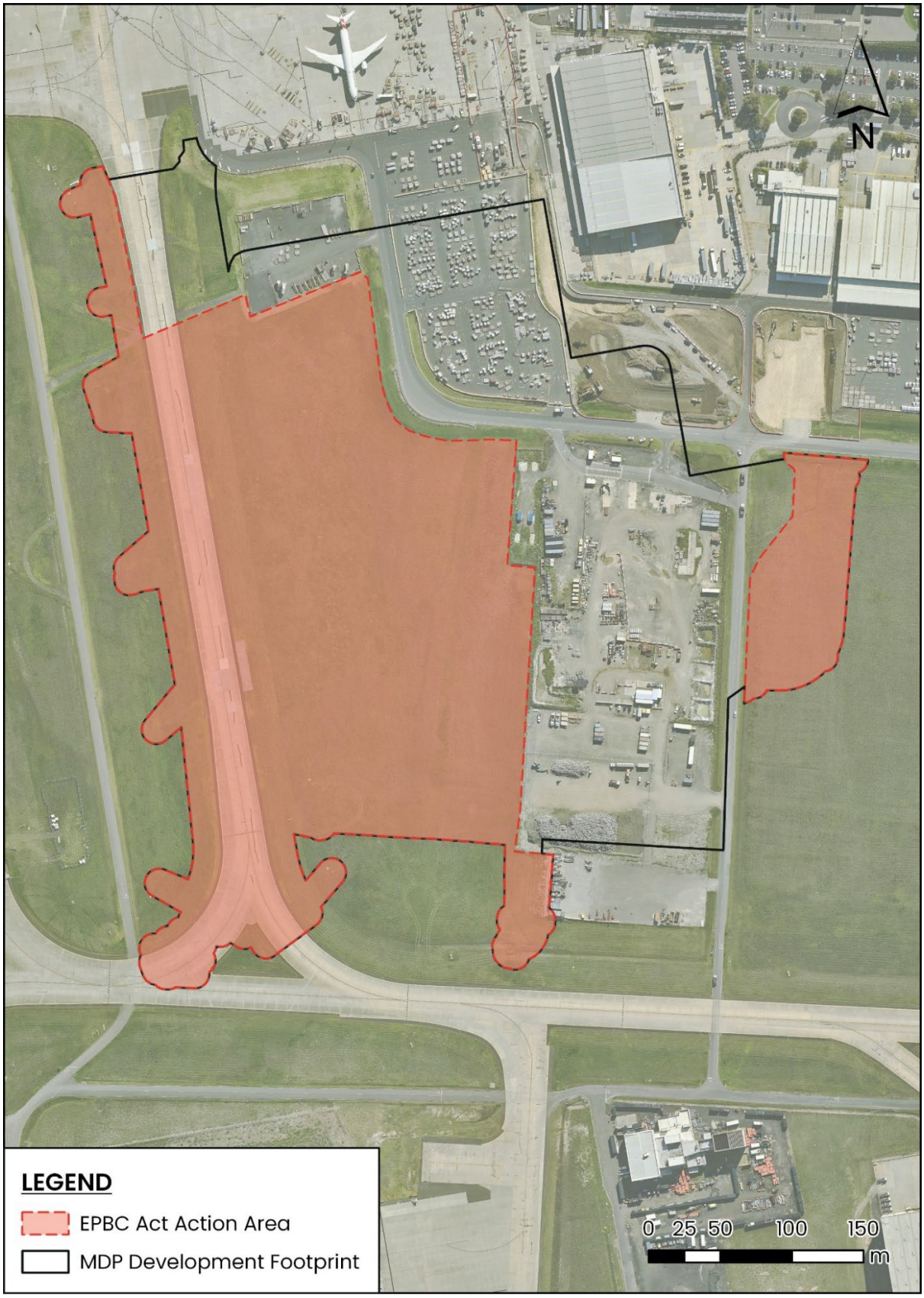


Figure 2: Development Footprint vs EPBC Act action area

2.2 EPBC Act Assessment and Approval

Over recent years, APAM has planned and coordinated a program of airfield maintenance and upgrade works at Melbourne Airport, including the Hotel Apron South Project works, to support ongoing operational capacity, safety and efficiency.

Following early engagement with the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCSA) the agency responsible for major airport development, APAM commenced the Commonwealth environmental approvals process under the EPBC Act for APAM's planned airfield developments. During engagement with the Department of Climate Change, Energy, the Environment and Water (DCCEEW), APAM was encouraged to adopt a strategic rather than a project-by-project approach to EPBC Act matters associated with airfield development across the airport.

As a result, APAM submitted the Future Airfield Projects EPBC Act Referral (EPBC 2024/09907) in 2024. The referral consolidated a suite of airfield projects, including:

- Project A – Airfield renaming
- Project B – Melbourne Airport Pavement Maintenance Program 3
- Project C – Runway 09/27 overlay
- Project D – Hotel Apron South and associated works (part of the Project assessed in this MDP)
- Project E – Staff Car Park Extension.

The referral was publicly exhibited between 18 July 2024 and 1 August 2024. On 29 August 2024, DCCEEW determined that the proposed action was a *controlled action* and required assessment and approval under the EPBC Act. The EPBC Act assessment approach determined by DCCEEW was via 'preliminary documentation'.

APAM subsequently prepared preliminary documentation addressing impacts to listed threatened species and communities (relevantly, the Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP)) and the environment as a whole, consistent with EPBC Act requirements for actions on Commonwealth land. Draft preliminary documentation was publicly exhibited in December 2025, followed by final exhibition between 6 February 2026 and 27 March 2026. Following consideration of submissions, EPBC 2024/09907 was approved by the Minister for the Environment and Water on 17 April 2026.

Importantly, the EPBC Act assessment and approval for EPBC 2024/09907 expressly included a whole-of-environment assessment, addressing impacts not only to the NTGVVP, but also to the broader environment on Commonwealth land, in accordance with the EPBC Act Significant Impact Guidelines. This assessment considered flora, fauna, habitat loss, indirect effects, cumulative impacts, mitigation measures and offsets across the full scope of Project D (together with Projects A – C and E).

The EPBC Act assessment for EPBC 2024/09907 provides a robust and relevant assessment of environmental impacts associated with works equivalent to those proposed under this MDP, particularly in relation to NTGVVP and the environment of Commonwealth land. The findings of that assessment are therefore used to inform this MDP.

2.3 History of MDP Advice and Reliance

In parallel with early environmental and planning investigations for the Project, APAM undertook a self-assessment in 2023 to determine whether the proposed Hotel Apron South Project works constituted a "major airport development" requiring approval under Part 5 of the Airports Act.

At that time, APAM formed the view that an MDP was not required. This position was communicated to DITRDCSA and was acknowledged by them on 29 August 2023. APAM subsequently progressed the Project in reliance on this position, including advancing design development and pursuing approval under the EPBC Act as the primary Commonwealth approvals pathway.

As the Project progressed into more detailed design and construction planning in late 2025, APAM commenced engagement with the Airport Building Controller (ABC) in relation to building approval

requirements. In parallel, APAM continued consultation with DITRDCSA regarding the applicable planning and approval framework.

On 1 April 2026, DITRDCSA advised APAM of a revised position, indicating that the Project is likely to constitute a “major airport development” for the purposes of the Airports Act, and therefore requires approval through the preparation and assessment of an MDP.

In providing this advice, DITRDCSA noted that the term “development” is not expressly defined in the Airports Act and clarified its interpretation that a development will generally involve works that physically alter land with a degree of permanence and bring out a latent capability of that land.

In light of this updated advice, APAM has commenced preparation of this MDP to ensure compliance with the statutory requirements of the Airports Act. The preparation of this MDP reflects a regulatory response to DITRDCSA’s clarified interpretation and revised position and is intended to provide a comprehensive and transparent assessment of the Project in accordance with the Airports Act.

2.4 Project Footprint – EPBC Approval and MDP

2.4.1 Overview

EPBC 2024/09907 assessed and approved a defined ‘action area’ associated with Project D (Hotel Apron South and associated works) as part of a broader suite of future airfield projects.

Importantly, the EPBC Act action area assessed does not represent the full construction footprint of the Project but rather reflects the area within which impacts to the NTGVVP and the environment of Commonwealth land were identified and assessed as part of Project D.

A comparison of the EPBC Act action area and the MDP development footprint (refer to Figure 3) demonstrates that the NTGVVP impacts remain confined to the area previously assessed under EPBC 2024/09907, and that the inclusion of the additional land does not result in new or materially different impacts to the NTGVVP or the environment of Commonwealth land.

Accordingly, while the MDP development footprint is larger than the EPBC Act action area, the impacts to the NTGVVP and the environment of commonwealth land remain consistent with those previously assessed.

Figure 3 illustrates the relationship between:

- The EPBC Act action area
- The currently proposed MDP development footprint
- The location of MNES, (i.e. Natural Temperate Grassland of the Victorian Volcanic Plains (NTGVVP) within the development footprint

2.4.2 No Additional Impacts to Matters of National Environmental Significance

Given the difference between the EPBC Act action area and the broader development footprint proposed under this MDP, targeted assessments were undertaken in 2023 (Biosis[2]) and 2024 (WSP[3]) to confirm whether the Project gives rise to any additional impacts to the NTGVVP and the environment of Commonwealth land.

These assessments were completed in March 2023 (Biosis) and June 2024 (WSP), using methodologies consistent with EPBC Act survey and assessment guidance and confirm that:

- The only listed threatened species or community present within the MDP development footprint is NTGVVP
- All areas of NTGVVP impacted by the Project are located within the EPBC Act action area and were assessed under EPBC 2024/09907
- The additional land does not contain:

[2] *Melbourne Airport’s Third Runway Project Ecology Technical Report,* Biosis, March 2023

[3] *Assessment of native grasslands within airfields of Melbourne Airport, Tullamarine, WSP, June 2024*

  - NTGVVP
  - Listed threatened species habitat
  - Any other MNES
- No new indirect impact pathways (such as edge effects, hydrological changes or fragmentation) are introduced as a result of the expanded footprint.
- There are no changes to the impacts to the environment of Commonwealth land.

On this basis, the Project does not result in any additional or unassessed impacts to listed threatened species and communities, or the environment of Commonwealth land. All MNES impacts associated with the Project are consistent with those previously assessed and approved under EPBC 2024/09907 and are manageable with the implementation of mitigation and offset measures required by EPBC 2024/09907 for Project D.



Figure 3: NTGVVP within the Development Footprint

2.5 Relationship Between EPBC Act Approval and this MDP

Since completion of the EPBC Act assessment under EPBC 2024/09907, the design and footprint of the works previously assessed as Project D have evolved, including expansion beyond the EPBC Act action area to incorporate additional land required for construction and supporting works.

As the current development footprint extends beyond the EPBC Act action area approved under EPBC 2024/09907, the Project does not rely on that approval.

As a result, the Project as described in this MDP differs in footprint and extent from Project D as assessed under EPBC 2024/09907 and therefore constitutes a different ‘action’ for the purposes of the EPBC Act.

Accordingly, APAM does not rely on the EPBC Act approval for EPBC 2024/09907 to authorise the Project. The Project will instead be assessed and approved solely under the MDP framework established by the Airports Act, with EPBC Act matters considered through referral under section 160 of the EPBC Act.

The EPBC Act assessment for EPBC 2024/09907 remains relevant as supporting information, as it assessed substantially similar works, considered the same environmental values, and identified appropriate mitigation and offset measures. This MDP draws on that assessment to demonstrate that impacts are consistent with, and not materially different from, those previously assessed. APAM will implement the mitigation and offset measures required by EPBC 2024/09907 for Project D.

3. Description of Proposal

3.1 Proposed Development under this MDP

Melbourne Airport's terminal apron precinct currently comprises approximately 68 terminal-connected stands and 12 remote stands that support freight operations, aircraft layovers, bussing, and overnight parking.

To support forecast growth in aircraft operations and improve airfield efficiency, Melbourne Airport proposes the Hotel Apron South Project (the Project). The Project will deliver additional aircraft parking capacity and associated operational infrastructure within the southern precinct.

The Project involves apron construction for aircraft parking, taxiway reconstruction works and construction of ground support equipment (GSE) storage and bussing facility areas. It will increase aircraft parking and improve apron operations in line with contemporary standards. The Project delivers new aircraft stands, replaces displaced ground support equipment storage and bus parking, reconstructs a life expired section of Taxiway Sierra (to be renamed Taxiway Papa) to suit new apron levels, and adds the Papa Apron to support Regional Express (REX)/Link operations. Together, these works are intended to lift operational efficiency, safely accommodate forecast airline growth, and future proof the precinct while meeting regulatory and industry requirements.

Hotel Apron South will mirror the use of the existing Hotel Apron and provide additional remote aircraft stand capacity to support a range of aviation operations, including international passenger bussing operations, aircraft layover activities, air freight operations, and domestic aircraft movements. In addition, the apron will provide operational resilience by offsetting temporary reductions in aircraft stand availability associated with planned future airfield construction and maintenance works.

Papa Apron will not support international operations.

Together, these works will improve aircraft parking capacity, improve operational flexibility, and support Melbourne Airport's long-term airfield development strategy. The additional apron capacity will also assist in offsetting temporary stand closures associated with apron redevelopments, pavement renewals and maintenance activities across the airfield.

It is noted that the Project is located in an area that may eventually be required for the future east-west runway (09R/27L) shown in the 2022 Master Plan. As stated in the Master Plan, this runway is currently foreseen to be implemented beyond 2050. If, at that time, the Project interferes with the construction or operation of the future east-west runway, it will be modified or removed to ensure that the runway can operate in accordance with the Master Plan.

The project details are discussed further in **Section 3.4** below.

3.2 Proposed Development timeframes

Construction of the Project is expected to commence in early 2027 and will be staged to maintain the safe, secure and efficient operation of the airport. The Project construction is expected to be completed by mid-2028. An overview of timeframes is included below in Figure 4.



Figure 4: Project Development Timeframes

3.3 Project Objectives

Section 91(1)(a) of the Airports Act requires an MDP to set out the airport-lessee company's objectives for the development. Melbourne Airport's objectives for this project are:

- **Increase Aircraft Parking and Operational Capacity:** Deliver additional remote aircraft stands and associated apron infrastructure to meet forecast demand, ensuring Melbourne Airport can accommodate increased airline activity and maintain efficient operations.
- **Upgrade and Optimise Supporting Infrastructure:** Develop new GSE storage and bus parking facilities to replace those displaced by the apron expansion and rehabilitate Taxiway Sierra ensuring safe and effective aircraft movement and operational flexibility.
- **Support Future Growth and Compliance:** Deliver apron and taxiway infrastructure that align with future airfield planning, operational standards and regulatory requirements, including the relocation of REX/Link operations to Papa Apron.

3.4 Project Details

3.4.1 Site and Land Description

The Project site is located to the south of the airport's existing Hotel Apron, east of Taxiway Sierra and north of Taxiway Whiskey as shown in Figure 5.



Figure 5: Site Location Plan

The site comprises a combination of operational airfield infrastructure and undeveloped land, including Taxiway Sierra, rigid and flexible pavements, airside service roads, existing GSE and bussing areas, grassed land, drainage swales and underground services infrastructure. Ground levels generally fall towards the south.

The environmental characteristics of the site, including the extent of native grassland, are discussed in **Section 9.**

3.4.2 Project Layout

The Project layout plan is shown in Figure 6.

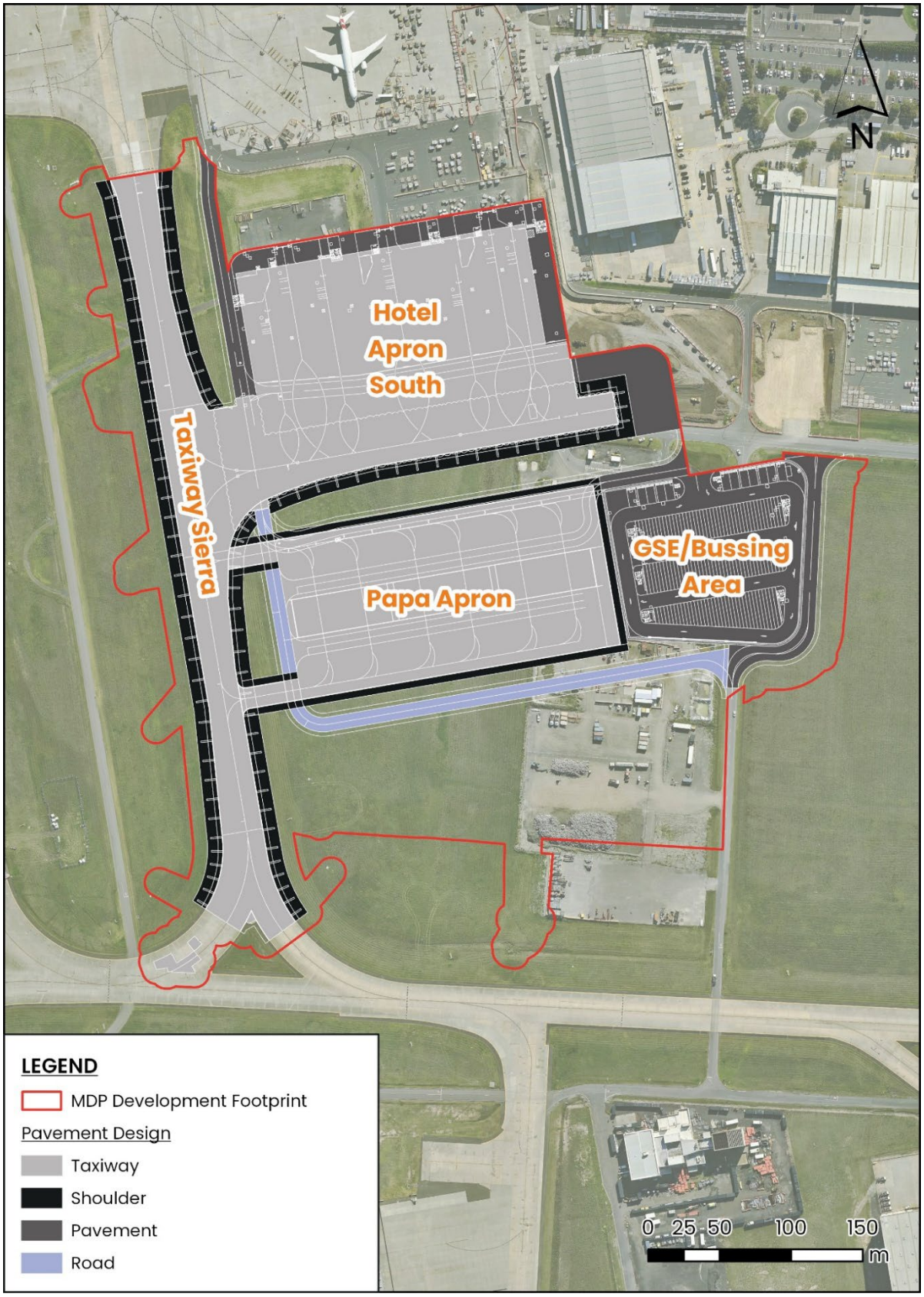


Figure 6: Project Layout Plan

3.4.3 Key Design Considerations

Hotel Apron South has been identified as a priority apron development to provide additional remote stand capacity for domestic and international layover and bussing operations in the short to medium term. Hotel Apron South will deliver three Code E widebody stands, or five Code C narrowbody stands. The apron layout and operational configuration were refined through consultation with airlines, with formal airline endorsement received in November 2024 (refer **Section 4.2**).

The Project also includes reconstruction of Taxiway Sierra (to be renamed Taxiway Papa), which requires pavement replacement due to its end-of-life condition and regrading to integrate with the proposed apron levels. Replacement GSE and bussing facilities are also required to maintain operational capability following displacement of the existing facilities.

Papa Apron will provide a dedicated remote area for REX/Link turboprop operations currently located within the Sierra Infill area. Relocating these operations will support future precinct development, including the longer-term Pier G expansion and associated widebody growth.

Key design considerations focus on delivering durable, operationally efficient and compliant airfield assets while minimising operational disruption during construction. Pavement solutions, grading, drainage, lighting, utilities and supporting infrastructure will be coordinated to satisfy operational, safety and future planning requirements. This will include consideration of supporting tug operations to reduce repositing clearances.

Rigid pavements will be adopted in aircraft load-critical areas to achieve long-term durability and reduced maintenance requirements, while flexible pavements will be adopted in lower-stress operational areas. Stormwater infrastructure, lighting systems, fuel services and utility connections will be integrated with existing airport infrastructure and designed in accordance with the Civil Aviation Safety Authority (CASA) requirements and Melbourne Airport operational standards.

3.4.4 Design Elements

The Project includes construction of new apron pavements, taxiway works, operational support areas, drainage infrastructure, lighting systems and utility services required to support ongoing aircraft operations.

3.4.4.1 Pavements

Hotel Apron South, Taxiway Sierra and the replacement GSE and bussing areas will comprise a combination of rigid and flexible pavements. Rigid pavements will be used in aircraft load-critical areas subject to stationary or repeated heavy wheel loading, while flexible pavements will be used in shoulders, blast pavements, airside roads and lower-stress operational areas.

Alternative pavement solutions, including high-modulus asphalt and hybrid pavement configurations, were assessed during the design development process to optimise operational performance, constructability and lifecycle outcomes.

Papa Apron is expected to comprise of high-strength flexible pavements appropriate to the operational requirements of turboprop aircraft.

3.4.4.2 Drainage and Grading

The Project includes new stormwater infrastructure comprising grated trench drains, flame trap pits and detention systems designed to integrate with the existing airport drainage network.

Changes to vertical geometry are required to support the proposed apron levels, drainage outcomes and future airfield development interfaces.

3.4.4.3 Supporting Services

The Project includes new aeronautical ground lighting, apron floodlighting and associated control systems to support safe aircraft operations. Lighting infrastructure and Visual Docking Guidance Systems (VDGS) will integrate with Melbourne Airport's existing operational systems.

Security, surveillance and operational control requirements, including CCTV infrastructure, have been incorporated into the design and continue to be developed in consultation with the Australian Border Force (ABF). To support ABF participation in the design process, a Design and Expenditure Recovery Deed has been executed between the Department of Home Affairs and APAM. A subsequent agreement will be implemented to support ABF involvement during the construction phase.

Additional supporting infrastructure will include:

- electrical and communications services;
- fuel hydrant infrastructure for Hotel Apron South; and
- utility relocations and connections.

The new GSE and bussing area will also incorporate revised airside road arrangements designed to accommodate both light and heavy operational vehicles.

3.4.5 Construction Activities

Construction will be undertaken within an active operational airfield environment and will be staged to maintain the safe, secure and efficient operation of Melbourne Airport at all times.

The construction program has been developed to align with Melbourne Airport's broader capital works program and will be staged to minimise disruption to airfield operations while maintaining operational resilience during concurrent airside projects.

A key dependency for the Project is current Taxiway Alpha Reconstruction. Taxiway Sierra and Taxiway Alpha are the only access routes to the maintenance hangars, therefore staging of the works during construction, aircraft movements and parking allocations will continue to be managed by Melbourne Airport.

Works will be sequenced to progressively deliver apron, taxiway, drainage, utility and support infrastructure while maintaining aircraft operations, ground handling activities and access to critical airside areas. Temporary pavements, lighting, services and traffic management arrangements will be implemented where required during construction staging.

The works are expected to include:

- demolition of existing pavements and operational infrastructure;
- bulk earthworks and grading;
- pavement construction;
- drainage installation;
- trenching and relocation of services; and
- installation of lighting and utility infrastructure.

Construction access will be via the internal airport road network.

Critical operational infrastructure, including aeronautical ground lighting, communications, electrical systems and fuel infrastructure, will either remain operational or be progressively reinstated during construction in accordance with Melbourne Airport operational requirements.

Construction activities will be undertaken in accordance with approved environmental, safety and operational management measures.

3.4.5.1 Earthworks and Ground Conditions

Based on the current design, excavations of up to approximately 3.5 metres may be required for localised drainage and service works, with the majority of bulk earthworks generally limited to shallower depths. Filling of up to approximately 2 metres may be required across parts of the site.

Groundwater is not expected to be encountered during excavation works, with groundwater levels across the airfield understood to be approximately 23 metres below ground level.

Contaminated soil, including PFAS-affected material, may be encountered during excavation works and will be managed in accordance with the Melbourne Airport PFAS Management Framework, the *Melbourne Airport Environment Management Plan* (APAM 2021) and relevant EPA guidance.

The suitability of material for reuse onsite and the requirement for imported fill will be confirmed during construction.

3.4.5.2 Construction Plant and Equipment

Construction plant and equipment is expected to include:

- 12 to 35 tonne excavators;
- mobile cranes;
- truck and trailer combinations;
- Compaction equipment;
- trenching equipment;
- skid steer loaders;
- graders;
- concrete and asphalt paving equipment; and
- water carts.

The timing and duration of construction will be confirmed following finalisation of construction staging, with works to be undertaken in a manner that maintains the safe, secure and efficient operation of Melbourne Airport at all times.

4. Project Justification

4.1 Accommodating Growth

Aircraft movements at Melbourne Airport are forecast to grow from 237,136 in 2024-25 to more than 435,000 in 2046–47, largely facilitated by the approved M3R project.

International passenger aircraft movements are expected to grow by a Compound Annual Growth Rate of 3.9 per cent a year over the forecast period. Domestic aircraft movements are expected to grow by a Compound Annual Growth Rate of 2.5 per cent a year over the forecast period, driven primarily by Regular Public Transport (RPT) aircraft movements.

Runways supported by a capable taxiway network and sufficient aircraft parking capacity are the backbone of airport infrastructure. Future airside developments planned for Melbourne Airport, such as Hotel Apron South and Papa Apron, will ensure that its capacity is able to accommodate forecast growth. Specifically, this project will:

- maximise existing apron capacity in the current terminal precinct
- improve safety for airside operations
- reduce constraints associated with apron space for improved operational efficiency.

Following the recovery of aviation activity after COVID-19, demand for aircraft parking has increased significantly. This includes growing demand for daytime operational stands and overnight aircraft parking, as well as longer aircraft layover periods. These trends have increased pressure on existing apron infrastructure.

Provision of additional aircraft stand capacity, including both contact and remote positions, is critical to supporting forecast demand and maintaining operational flexibility, particularly during periods of ongoing terminal and apron development. Aircraft parking infrastructure also supports a range of functions, including bussing operations, freight activities, and provision of relief capacity to optimise the use of contact gates for both international and domestic operations.

Available capacity within the existing aircraft parking system is limited, particularly during peak and overnight periods. The Project has therefore been identified as a priority airside development to support M3R and Melbourne Airport's ongoing operational requirements.

Hotel Apron South has been identified as a key apron development project, endorsed by airline stakeholders, to deliver additional remote stand capacity for domestic and international layover and bussing operations in the short to medium term.

Papa Apron, located south of Hotel Apron South, will provide a dedicated remote apron for REX and Link turboprop operations. This apron is also a key enabling component of future airfield development, including the planned Pier G expansion, which will accommodate long-term growth in widebody aircraft operations. The relocation of turboprop operations from the Sierra Infill area will further support the efficient use and future development of the terminal precinct.

4.2 Civil Aviation User Need and Operational Demand

Section 91(1)(b) of the Airports Act requires an assessment of the extent to which the future needs of civil aviation users will be met by the development.

The Project has been developed in response to demonstrated operational demand, informed by ongoing apron utilisation monitoring, operational planning and targeted consultation with key civil aviation user groups.

Consultation was undertaken with a range of stakeholders, including:

- Domestic and international airlines operating at Melbourne Airport
- Regional airline operators, including Regional Express (REX) and Link Airways
- Ground handling operators and bussing service providers
- Melbourne Airport operational and apron management teams.

Consultation focused on stand demand, operational constraints, layout functionality and future fleet and scheduling requirements within the terminal precinct. The proposed apron layout and operational configuration were refined through this process and formally endorsed by airline stakeholders in November 2024.

This endorsement reflects airline acceptance that the layout supports efficient aircraft parking, safe manoeuvring and ground handling operations, and is aligned with current and forecast operational requirements.

Current operational analysis indicates that demand for aircraft parking regularly exceeds optimal apron capacity during peak and overnight periods. Constraints within the existing system reduce flexibility in stand allocation and limit the ability to accommodate variations in airline scheduling, disruptions and longer aircraft dwell times.

In the absence of additional apron capacity, aircraft parking demand is increasingly managed through contingency measures, including the use of operational areas or taxiways for temporary aircraft holding. These measures reduce overall airfield efficiency and introduce additional operational complexity within a highly constrained environment.

The Project has been developed to respond directly to these identified operational constraints and user requirements. By providing additional aircraft parking capacity and supporting infrastructure, the Project will meet the current and future operational needs of civil aviation users at Melbourne Airport and will support construction of M3R.

4.3 Melbourne Airport Development Objectives

Melbourne Airport's development objectives are set out in Master Plan 2022 (refer **Section 2.2**). They are shown in Figure 7.

The Project will assist in implementing the 'Growth', 'Safe and secure' and 'Efficiency' development objectives.

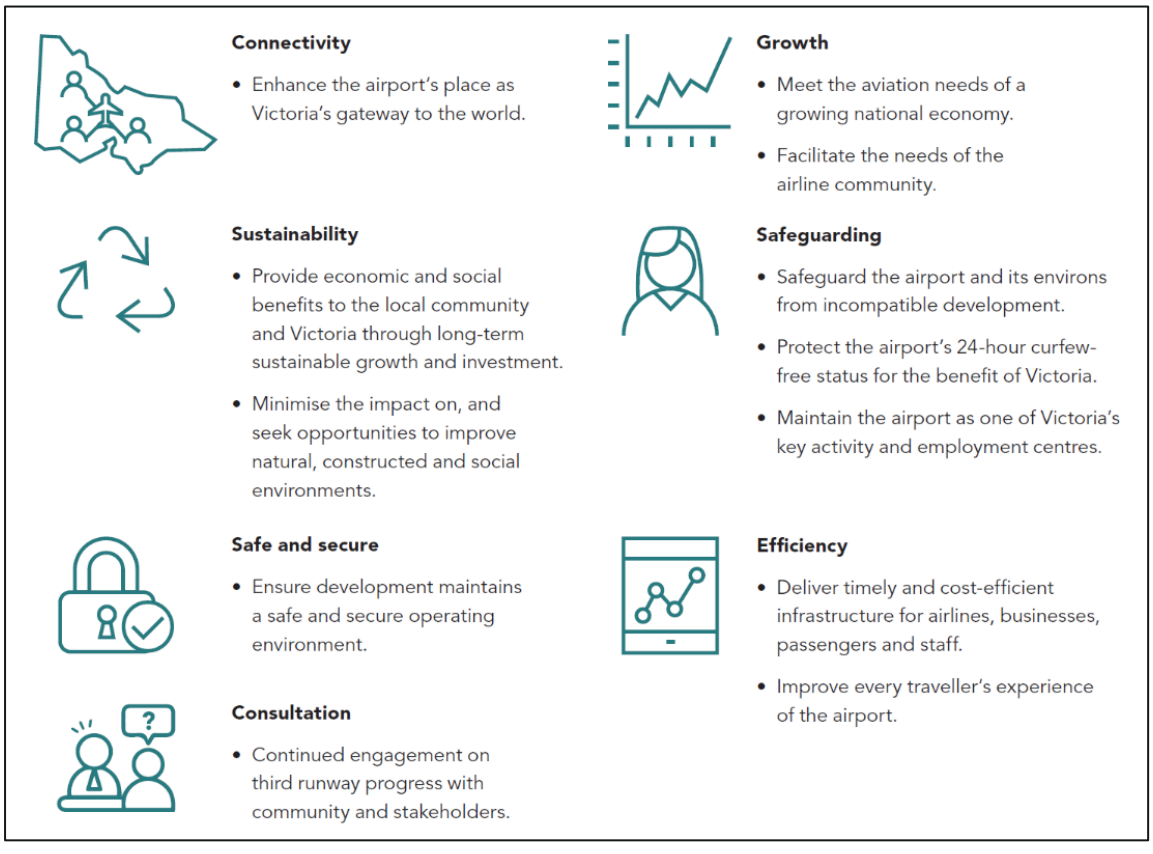


Figure 7: Melbourne Airport Development Objectives

4.4 Related MDPs and Future Development

4.4.1 Melbourne Airport's Third Runway MDP

On 10 September 2024, the Minister approved the Draft MDP for Melbourne Airport's Third Runway (M3R), pursuant to section 94 of the Airports Act. The Minister's approval came with conditions in accordance with 94(7) of the Airports Act.

Consistent with previous Master Plans, the third runway (Runway 16R/34L) will be located 1,311 metres to the west of the existing north-south runway (Runway 16L/34R) and will be 3,000 metres long. The runway includes a 180-metre starter extension for departures on Runway 34L. The natural slope of the land (downwards from north to south) results in a slight loss of effective take-off run in the 34-direction, meaning this additional 180 metres for departures is required to support larger aircraft needing the runway length to take off to the north. This will help balance operations when both parallel runways are operating with flights taking off to the north.

Construction of the third runway is now underway.

4.4.2 Eastern Extension Project MDP

Condition 1.1 of the M3R MDP approval required Melbourne Airport to provide the Minister with a legally enforceable commitment to restore the length of the east-west runway (09/27) in terms satisfactory to the Minister. This took the form of a Deed, executed by the APAM CEO on 1 May 2025.

The purpose of the Eastern Extension Project (EEP) is to restore the length of the east-west runway (09/27) to ensure it retains the equivalent operational capability as the existing runway. The EEP reinstates the length of the east-west runway (09/27) by increasing the pavement extent by approximately 345m at its eastern end. This is to maximise opportunities for noise sharing. In accordance with the Deed, the EEP will be operational before the Third Runway opens.

The new location of the Runway 27 threshold (at the eastern end of Runway 09/27) is driven by the runway's proximity to Sunbury Road and the requirement for a compliant runway end safety area (RESA) of 240-metres in length. This results in the threshold moving east of its current location by approximately 210m. A starter extension of approximately 135-metres for departures on Runway 27 will also be delivered as part of the EEP.

To deliver the EEP, Melbourne Airport will be required to update its Master Plan and submit a MDP to the Minister for approval. Submission of the drafts of these documents to the Minister is expected to occur in early and mid-2027, respectively.

4.4.3 Passenger Terminal Expansion Projects

4.4.3.1 International terminal

Melbourne Airport is a major international gateway into Australia. Historic international traffic growth has been outpacing domestic growth, and in 2024-25 the airport processed nearly 12 million international passengers.

- Over the next five to ten years the following initiatives are expected to be implemented to expand the capacity of the international terminal:
- Expansion of the landside departures area into the forecourt (in coordination with the arrivals level expansion noted below)
- Continuing the conversion of traditional staffed check-in counters to next-generation automated self-service kiosk and bag-drop check-in facilities
- Extension of the existing Pier D to provide additional Code E/F aircraft contact stands
- Expansion of retail facilities
- Expansion of passenger lounge facilities

- Redevelopment of the Terminal 2 arrivals level and walkways between arrival gates and passport control
- Continuing to work with Australian Border Force to improve passport and customs processing throughput
- Expansion of the Terminal 2 arrivals level into the forecourt, providing increased baggage reclaim, Australian Border Force secondary examination facilities and arrivals hall space.

4.4.3.2 Domestic terminals

Melbourne Airport is a major domestic gateway into Australia, handling 24.2 million domestic passengers in 2024-25. All Qantas domestic flights, including regional services operated by QantasLink arrive and depart Terminal 1. Virgin Australia's domestic flights operate from Terminal 3 and domestic Jetstar, Regional Express and Link Airways flights operate from Terminal 4.

Currently planned projects expected to be required to meet demand in the next five to ten years include:

- Pier F redevelopment to facilitate all-weather aerobridge operations at each gate
- Pier G expansion to increase the number of stands available for walk-out operations
- Expansion of T4 to the south to increase the capacity of the common user departure lounge and provide a direct connection to the T4 transport hub
- The northern bridge link connecting the new pick-up drop-off area to T1.

4.4.4 Taxiway Infrastructure Supporting Runway Developments

Taxiway infrastructure is planned as part of the Third Runway and the EEP to support runway operations. This supporting infrastructure includes:

- Dual cross-field taxiways connecting the new runway with existing north-south runway
- New runway-crossing taxiways over the existing north-south runway
- New intersection departure taxiways on the existing runway
- New rapid-exit taxiways on existing runway
- A single parallel taxiway for the new north-south runway
- Supporting rapid-exit taxiways and entry/exit taxiways for the new north-south runway
- Dual parallel taxiways for the EEP
- New taxiway infrastructure accessing the new runway 09 threshold.

4.4.5 Apron Infrastructure Enhancements

Apron infrastructure enhancements include both the introduction of new aircraft types onto existing aprons and the building of new apron infrastructure.

4.4.5.1 Project Wominjeka

Over the last few years Melbourne Airport has been undertaking works to support the introduction of new aircraft types across the apron precinct. This includes the introduction of the following aircraft:

- Airbus A321xlr and A220 aircraft types in Pier B and C for Qantas
- Boeing 737 MAX8 and MAX10 aircraft on Pier E and F for Virgin Australia
- Airbus A321 LR capability on Pier G for Jetstar
- Airbus A350-1000 aircraft at Terminal 1 for Qantas, and Terminal 2 for international operators.

Project Wominjeka also aims to increase the flexibility of the existing fleet across the aprons. Melbourne Airport will continue to monitor the needs of our airline partners and enhance the capability of existing stands to support fleet renewal programs.

4.4.5.2 Apron projects within the existing terminal precinct

Melbourne Airport has a range of opportunities to expand its apron area within the existing terminal precinct based on demand and airline requirements as shown in Figure 8. They include:

1. A new wide-body aircraft apron to the east of Pier B
2. Expansion of Pier B apron to the north
3. Expansion of the existing apron to the north of Pier D
4. Apron works associated with the rebuild of Pier E
5. Expansion of Pier G apron across Taxiway Sierra
6. Apron expansion in the south-east precinct
7. A new Southern Apron supporting wide-body aircraft

Additional GSE storage areas will also be provided to complement the apron expansion opportunities within the existing terminal precinct.

The Project that is the subject of this MDP is part of this apron expansion program, specifically the apron expansion in the south-east precinct (6).

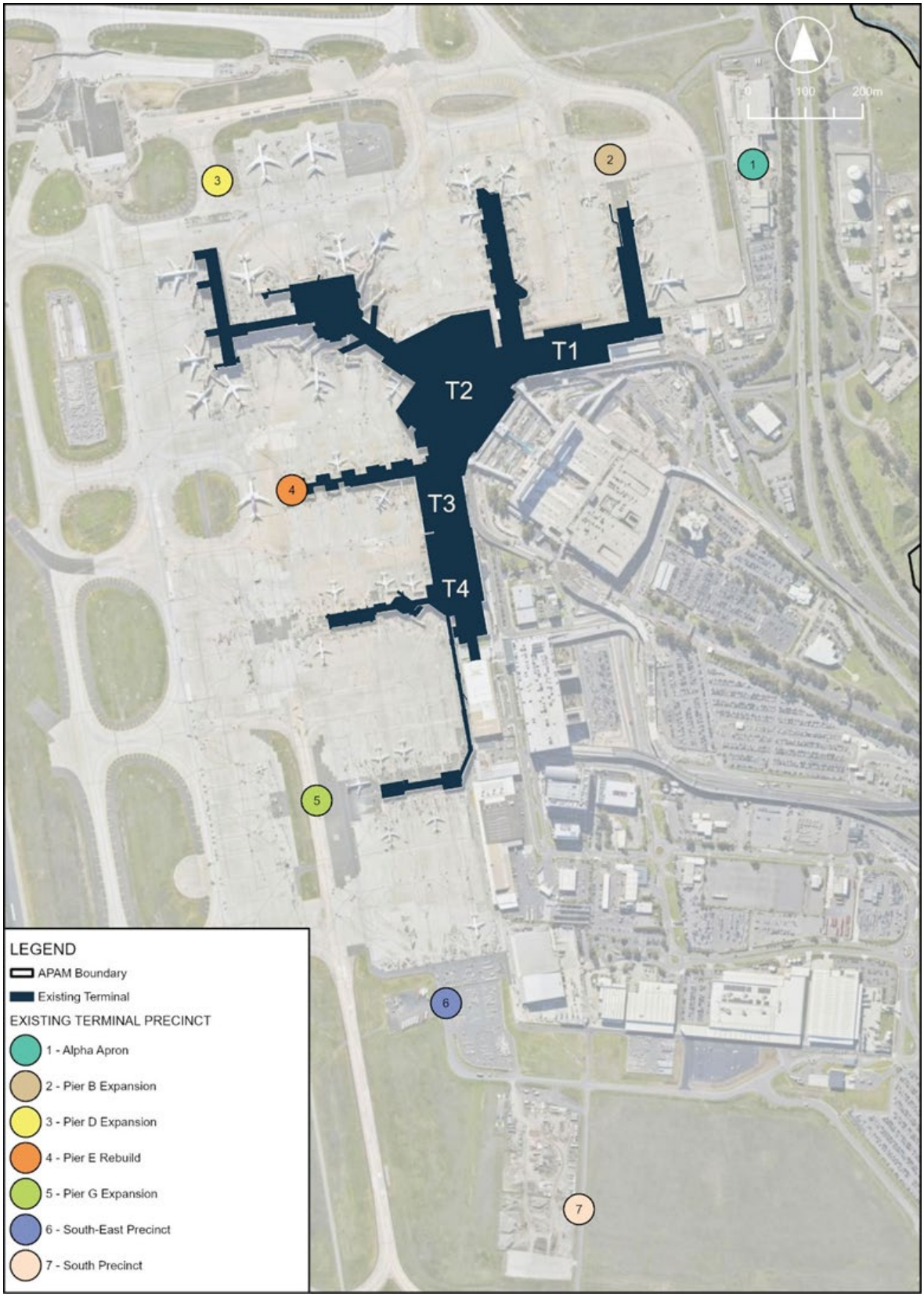


Figure 8: Apron Projects in the Existing Terminal Precinct

5. Legislative Framework

Melbourne Airport land is owned by the Commonwealth Government. As the airport is a Commonwealth-leased airport and is governed by Commonwealth legislation, this MDP is principally regulated under Commonwealth legislation. The proposal demonstrates alignment with applicable statutory frameworks, the approved Master Plan, land use planning provisions, and lease obligations.

5.1 Legislation Overview

The key Commonwealth legislation applicable to planning, land use, and development at Melbourne Airport are:

- *Airports Act 1996*
- *Airports Regulations 1997*
- *Airports (Building Control) Regulations 2025*
- *Airports (Environment Protection) Regulations 2026*
- *Airports (Protection of Airspace) Regulations 2026*
- *Airports (Control of On-Airport Activities) Regulations 2026*
- *Civil Aviation Act 1988*
- *Civil Aviation Regulations 1988*
- *Civil Aviation Safety Regulations 1998*
- *Airspace Act 2007*
- *Aviation Transport Security Act 2004*
- *Aviation Transport Security Regulations 2005*
- *Environment Protection and Biodiversity Conservation Act 1999*
- *Environment Protection and Biodiversity Conservation Regulations 2025*
- *Aboriginal and Torres Strait Islander Heritage Protection Act 1984*

The above legislation has been considered in the design and development of this project and MDP.

5.2 Airports Act 1996

The Airports Act establishes the regulatory framework for Commonwealth-leased airports.

The specific matters subject to the Airports Act and associated Regulations include:

- leasing and management of airports
- land-use planning and building controls
- environmental management
- protection of airspace around airports
- building construction approvals
- pricing and quality of service monitoring.

The DITRDCSA is responsible for administering the Airports Act and its Regulations.

In accordance with section 70 of the Act, there must be a final Master Plan for the airport approved by the Minister. The current approved Master Plan for the airport is the Master Plan 2022. A new Master Plan 2027 is currently in preparation.

5.3 Airports (Protection of Airspace) Regulations 2026

Under the provisions of the Airports Act and the *Airports (Protection of Airspace) Regulations 2026*, Melbourne Airport's airspace has been declared as prescribed airspace. The objective of the regulations is to establish a system for the protection of airspace at and around the vicinity of airports. This includes the airspace surrounding the ultimate four-runway layout.

Prescribed airspace is defined as the airspace above either an Obstacle Limitation Surface or Terminal Instrument Flight Procedures Obstacle Protection surface, which are defined as follows:

- Obstacle Limitation Surface: these surfaces are usually the lowest of the two sets of surfaces that make up prescribed airspace and is designed to provide protection when the pilot is flying by sight.
- Terminal Instrument Flight Procedure Obstacle Protection (TIFPOP) surfaces (formerly known as Procedures for Air Navigation Services – Aircraft Operations (PANS-OPS) surfaces): these surfaces are usually higher than the OLS and are designed to provide protection for when the pilot is flying by instruments.

Prescribed airspace may also include protection for important communications, navigation and surveillance facilities such as radar. National Airports Safeguarding Framework Guideline G describes these surfaces.

Under section 182 of the Airports Act, activities that result in intrusions into an airport's prescribed airspace are called 'controlled activities' and cannot be carried out without approval.

The airport operator or DITRDCSA must assess applications to carry out controlled activities, taking into consideration the opinions of CASA and Airservices, and may impose conditions on approval.

Under the Act and regulations, a 'building authority' (including local councils with boundaries that fall within Melbourne Airport's prescribed airspace) are required to review all building and development applications they receive for any infringements to prescribed airspace. If the proposal constitutes a controlled activity they are required to give notice to the airport. It is an offence to carry out a controlled activity without approval, or to breach a condition of a controlled activity approval.

These matters are explained and addressed in **Section 10.**

5.4 Airports (Environment Protection) Regulation 2026

While approval is not required for the Project under the *Airports (Environment Protection) Regulation 2026*, they impose obligations relating to the management of the environment across the airport site and require assessment, monitoring and reporting in relation to biodiversity, heritage, air, water and soil pollution, and noise levels. As such, Melbourne Airport has a duty to take all reasonable and practicable measures to:

- Prevent the generation of air, water and soil pollution, as well as to assess and report on existing pollution (e.g. soil contamination)
- Ensure that works do not result in adverse consequences for local biota and their associated ecosystems and habitats
- Ensure that works do not result in adverse consequences for existing aesthetic, cultural, historical, social and scientific (including archaeological and anthropological) values of the local area
- Prevent the generation of offensive noise (excluding noise generated by an aircraft in flight or when landing, taking off or taxiing at the airport).

5.5 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act is the primary Commonwealth legislation for environment and heritage protection, and biodiversity conservation. The objectives of the EPBC Act are to:

- Provide for the protection of the environment, especially matters of national environmental significance
- Conserve Australian biodiversity
- Provide a streamlined national environmental assessment and approvals process
- Enhance the protection and management of important natural and cultural places

- Control the international movement of plants and animals (wildlife), wildlife specimens, and products made or derived from wildlife
- Promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources
- Recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity
- Promote the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.

The *Environment Protection and Biodiversity Conservation Regulations 2025* set out the criteria for the environmental impact assessment processes.

The *Significant impact guidelines 1.2 Environment Protection and Biodiversity Conservation Act 1999* (Significant Impact Guidelines 1.2) provide guidance on determining whether an action is likely to have a significant impact on a matter protected under national environmental law; and whether assessment and approval is required under the EPBC Act (DSEWPC, 2013). The matters of national environmental significance (MNES) protected under the EPBC Act include:

- World heritage properties
- National heritage places
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed)
- Nationally threatened species and ecological communities
- Migratory species
- Commonwealth marine areas
- The Great Barrier Reef Marine Park
- Nuclear actions
- A water resource, in relation to coal seam gas development and large coal mining development.

The Significant Impact Guidelines 1.2 also provide guidance for, relevantly, any person who proposes to take an action which is situated on, or may have an impact on, Commonwealth land.

The guidelines assist in deciding whether a referral is required.

If an action will or is likely to have a significant environmental impact on Commonwealth land, a 'whole-of-environment' assessment is required.

Section 160 of the EPBC Act requires that before a Commonwealth agency or employee gives an authorisation of certain 'actions', that agency or employee will obtain and consider advice from the Minister for the Environment and Water. The adoption or implementation of a MDP is a relevant action for the purposes of section 160 of the EPBC Act.

Matters regarding environment and heritage are further explained and addressed in **Section 9.** Particular attention was given to the potential for significant impacts to listed threatened species and communities and to the environment of Commonwealth land, as defined in relevant EPBC Act Significant Impact Guidelines.

5.6 Melbourne Airport Master Plan 2022 (Approved)

Under Section 70 (1) of the Airports Act, each airport is required to produce a Final Master Plan. The Final Master Plan is one that has been submitted to the Minister as a Draft Master Plan and approved. Prior to submitting a Draft Master Plan, the airport is required to take into account public comments, and subsequent developments at the airport must be consistent with the Final Master Plan.

Section 70 of the Airports Act states that the purposes of a Final Master Plan for an airport are to:

- Establish the strategic direction for efficient and economic development at the airport over the planning period of the plan,

- Provide for the development of additional uses of the airport site,
- Indicate to the public the intended uses of the airport site,
- Reduce potential conflicts between uses of the airport site, and to ensure that the uses of the airport site are compatible with the areas surrounding the airport,
- Ensure that all operations at the airport are undertaken in accordance with relevant environmental legislation and standards,
- Establish a framework for assessing compliance at the airport with relevant environmental legislation and standards, and
- Promote the continual improvement of environmental management at the airport.

Master Plan 2022 (MP22) was approved on 14 November 2022 and is the current, approved Master Plan for Melbourne Airport. As outlined below, the Project is consistent with the 2022 Master Plan's long-term development scenarios, land use precincts and zoning plan.

5.6.1 MP22 Development Concept Plans

The Project is consistent with the MP22 Development Concept Plans, as the subject site (red star) is located within an area designated for 'Future Aviation Development' in the 2027, 2042 and Long-Term Development Concept Plans shown in Figure 9. The project comprises airfield infrastructure works that support aircraft parking, taxiway functionality and ground operations within the existing airport precinct. The proposal therefore aligns with the aviation development intent of the concept plans and does not prejudice the long-term development framework identified in MP22.

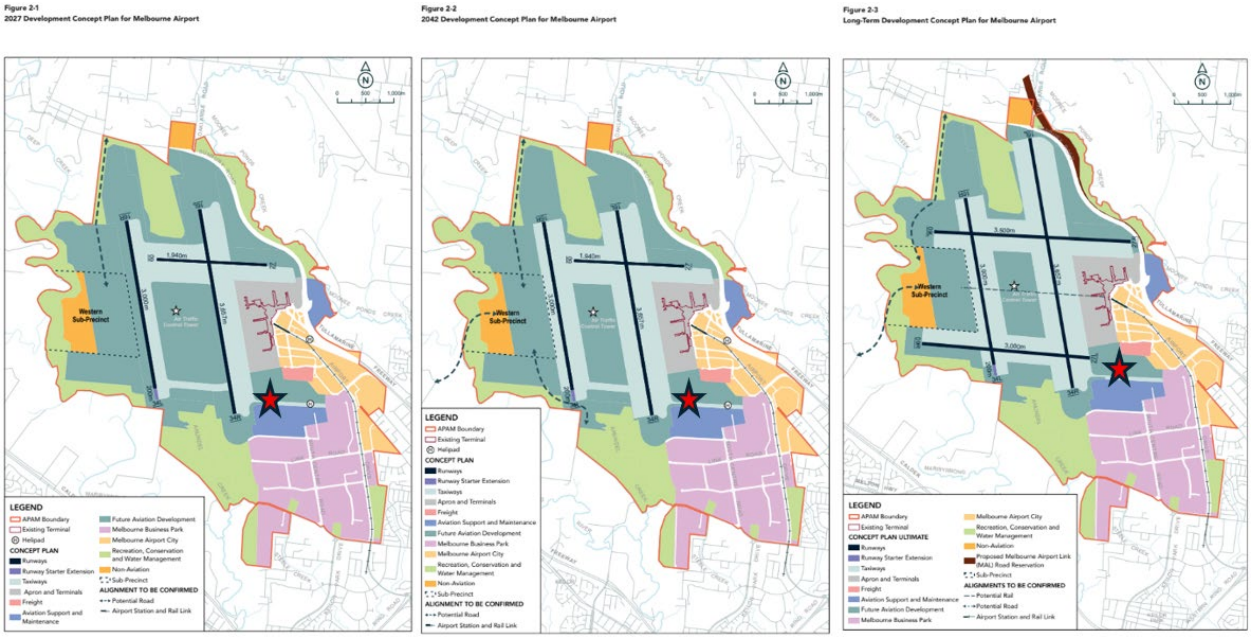


Figure 9: Master Plan 2022 Development Concept Plans

5.6.2 MP22 Land Use Plan

MP22 contains an Airport Land Use Plan under **Section 8.3.** In accordance with the zoning provisions outlined in the Airport Land Use Plan, any activity listed in sections 89 and 89A of the Airports Act that is classified as a major airport development or a sensitive development requires an MDP to be prepared and approved by the Minister.

The Airport Land Use Plan establishes three land use precincts and one sub-precinct across Melbourne Airport shown in Figure 10, each with a defined role and function. The Project is located entirely within the Aviation Precinct. The role of the Aviation Precinct is to provide for:

- safe, secure and efficient airfield activities including aircraft take-off, landing, taxiing, handling and parking
- aircraft navigation aids, Aviation Rescue Fire Fighting Services and other facilities essential to aircraft operations
- the operation, use and development of land for passenger and baggage processing, thereby enabling the terminal facilities to operate safely, securely, efficiently and cost-effectively
- best-practice facilities for airlines and passengers, including efficient terminal facilities with sufficient commercial areas and utilities infrastructure
- integrated terminals with commercial, office and retail uses
- the flexible expansion of passenger terminal facilities to meet forecast demand
- 24-hours-a-day, seven-days-a-week aircraft operations.

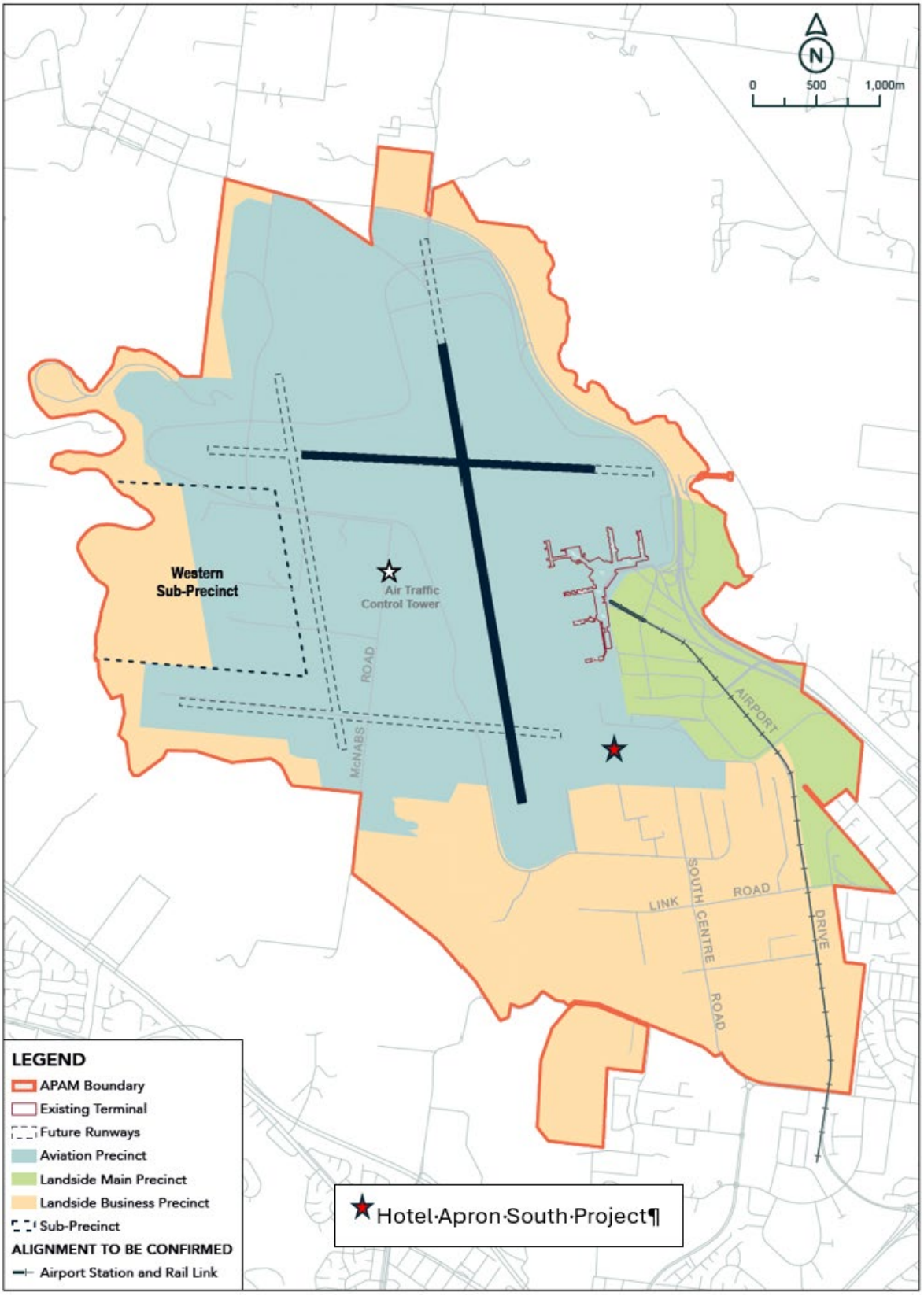


Figure 10: Master Plan 2022 Land Use Precincts

Planning zones are also applied to the land use precincts, shown in Figure 11. Melbourne Airport has adopted the Victorian Planning Provisions where applicable, and these are considered in airport development. The Special Use Zone Schedule 1: Aviation Precinct, applies to the Aviation Precinct and reflects the distinctive nature of this area and its critical role in Melbourne Airport's operation. The zone supports aviation related uses and development that facilitate the safe, secure and efficient operation of the airport.

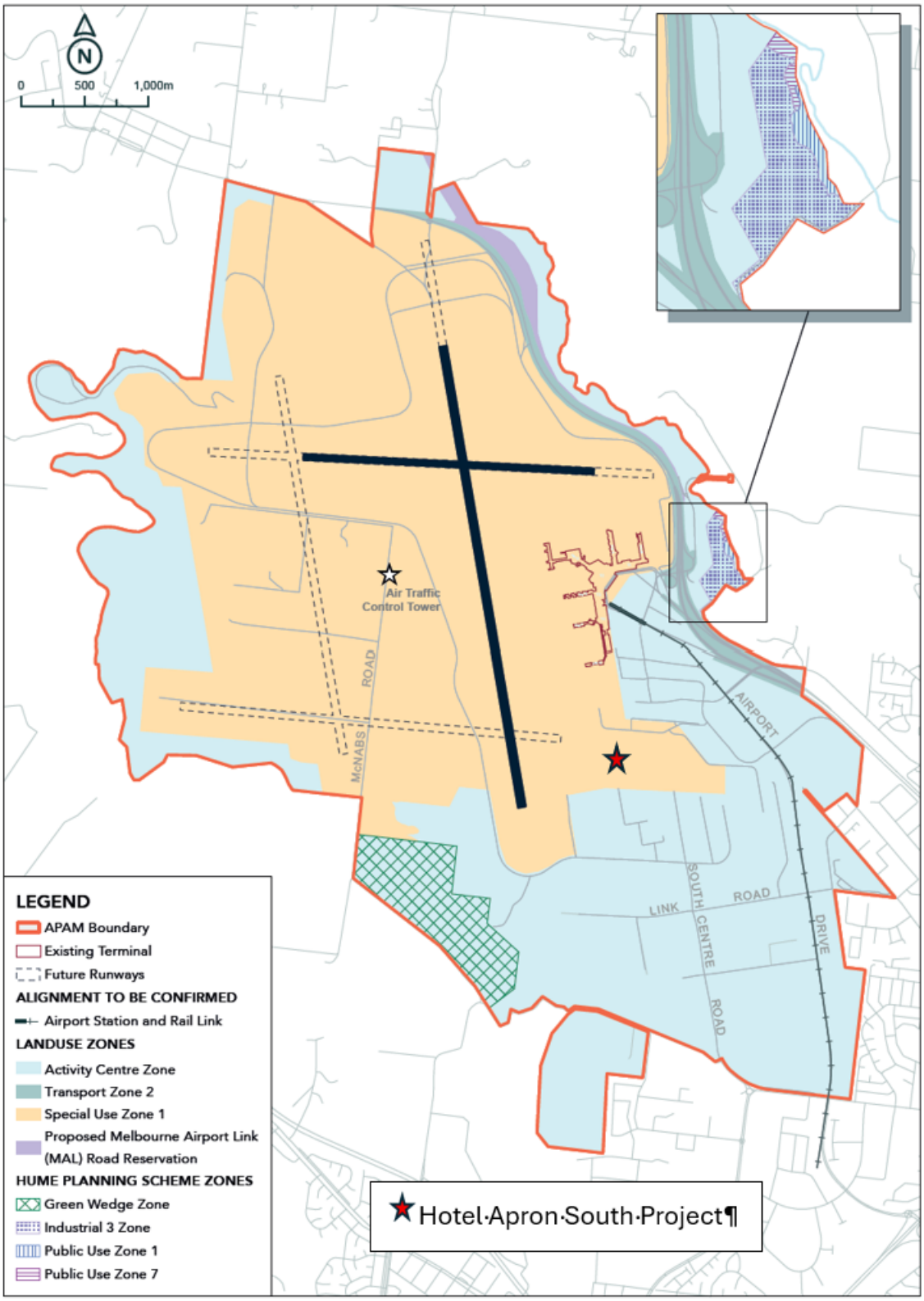


Figure 11: Master Plan 2022 Zoning Plan

The Project is consistent with the MP22 Land Use Plan. The proposed works are located entirely within the Aviation Precinct and Special Use Zone Schedule 1: Aviation Precinct, which provide for safe, secure and efficient airfield activities, including aircraft landing, take off, taxiing, handling and parking, and for aircraft operations on a 24 hours a day, seven days a week basis.

The Project comprises airfield infrastructure works, including new aircraft parking stands, reconstruction of Taxiway Sierra, replacement GSE and bussing facilities, and construction of Papa Apron for REX and Link operations. These works support the intended aviation function of the precinct by improving aircraft parking capacity, taxiway functionality and supporting ground operations infrastructure. The Project does not introduce any land use that would conflict with airport operations and is therefore consistent with the purposes of the Aviation Precinct and Special Use Zone Schedule 1.

5.6.3 MP22 Airside Development Plan

MP22 includes an Airside Development Plan which identifies planned airside infrastructure required to support forecast aircraft movements and associated terminal development. **Section 9.4** identifies apron infrastructure enhancements within the existing terminal precinct and recognises the 'South-East Precinct' as safeguarded for medium term uses, including potential apron expansion to support future freight operations. It also identifies the need for additional GSE storage areas to complement apron expansion opportunities within the existing terminal precinct.

Figure 12 identifies apron infrastructure opportunities within the existing terminal precinct, including No. 6: South-East Precinct, where the Project is located. The Project comprises new remote aircraft parking stands, reconstruction of Taxiway Sierra, replacement GSE and bussing facilities, and construction of Papa Apron for REX and Link operations. These works are consistent with the Airside Development Plan as they provide additional apron capacity, support aircraft parking and ground handling operations, and deliver supporting airside infrastructure within an area identified for medium term apron development. The Project therefore supports the safe, efficient and flexible operation of Melbourne Airport's existing terminal precinct and is consistent with the intent of the Airside Development Plan.

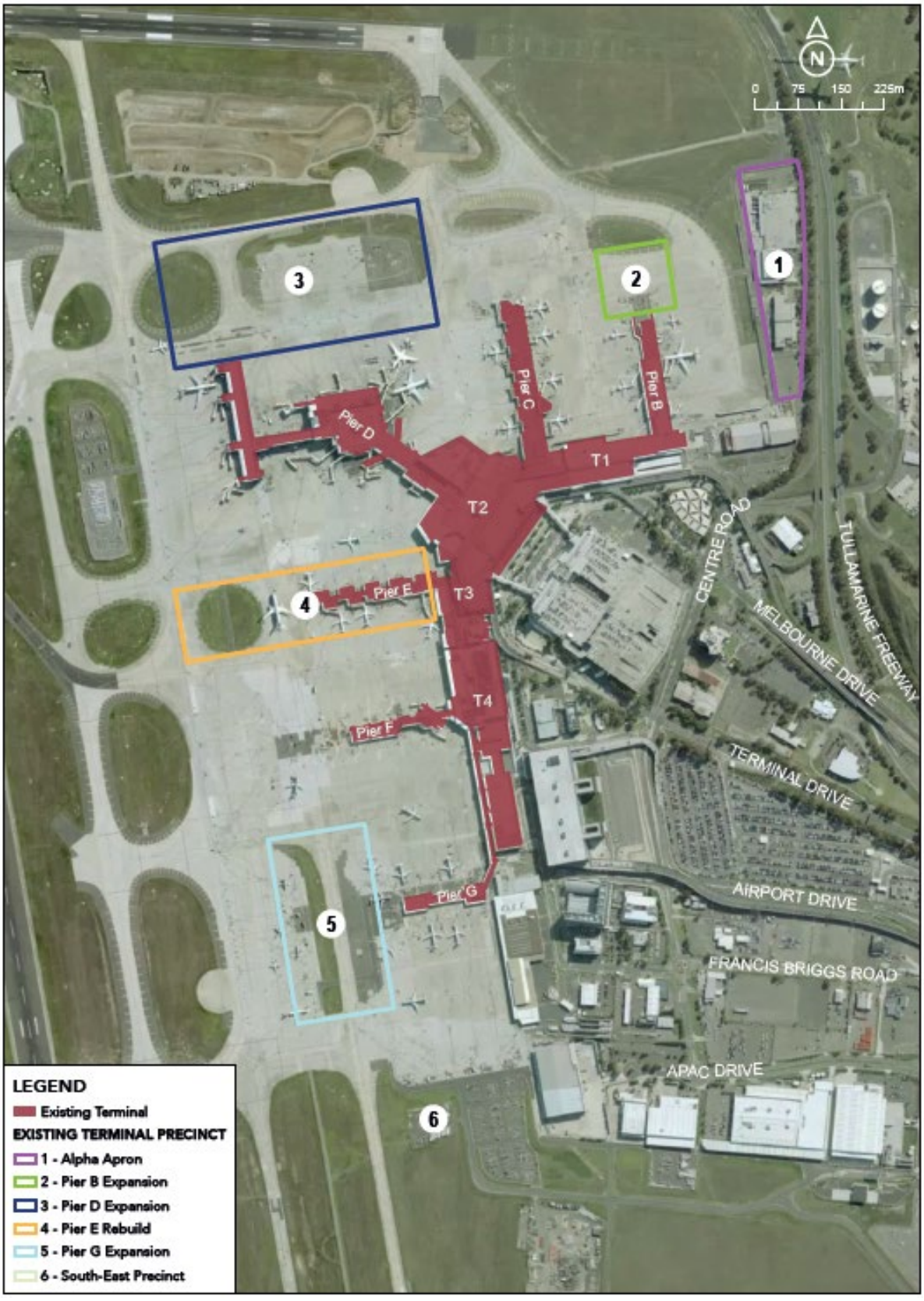


Figure 12: Master Plan 2022 Apron Infrastructure – Existing Precinct

5.6.4 MP22 Environment Strategy

MP22 includes an Environment Strategy which sets out Melbourne Airport's approach to environmental management, cultural heritage protection and sustainability across the airport estate. The Strategy identifies environmentally significant areas (Figure 13) for the purposes of Section 71(2)(h)(ii) of the Airports Act, including natural temperate grassland, grey box woodland, seasonal herbaceous wetlands, growling grass frog habitat, golden sun moth habitat and cultural and historical heritage sites.

The Project is located within an area containing NTGVVP, and is within an environmentally significant area identified under the Environment Strategy. The proposal is consistent with the Environment Strategy because it recognises the environmental values present within the development footprint and is being assessed through the appropriate statutory process. The MDP provides the framework for assessing potential environmental and heritage impacts, identifying mitigation and management measures, and demonstrating how the Project will be delivered in accordance with Melbourne Airport's environmental management obligations. Detailed assessment of the Project's environmental impacts is provided in **Section 9.**

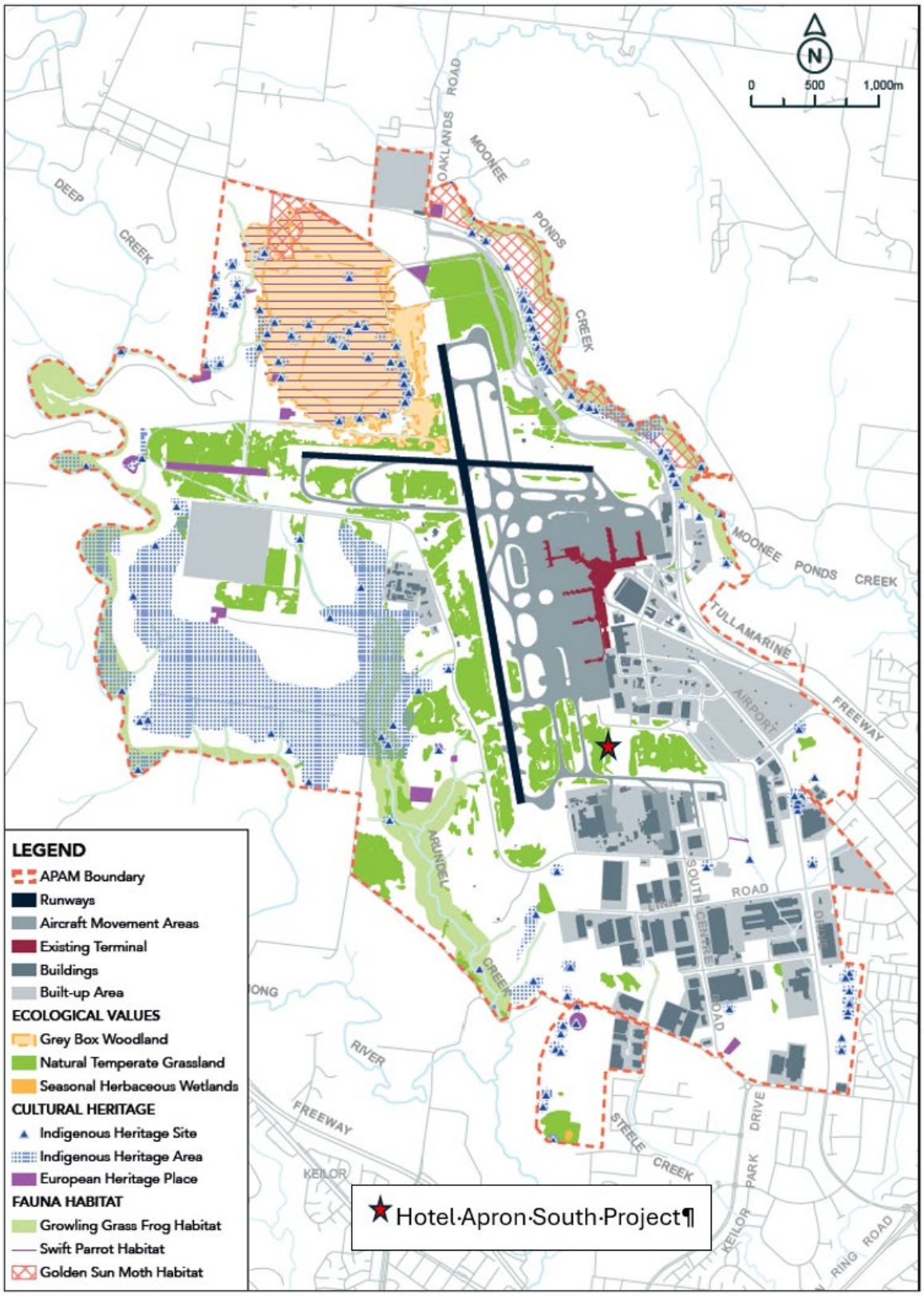


Figure 13: Master Plan 2022 Environmentally Significant Areas

5.7 Melbourne Airport Master Plan 2027 (Proposed)

The Airports Act requires that Melbourne Airport develop a new Master Plan every five years. Master Plan 2027 (MP27) is currently being prepared in accordance with the five-year planning cycle under Section 76 of the Airports Act.

MP27 will outline the vision and strategic intent for Melbourne Airport's future development over the next 20 years.

The key concepts from MP22 will continue in MP27 particularly in relation to apron infrastructure enhancements. This MDP will be consistent with MP27.

5.8 Melbourne Airport Lease

In accordance with Section 91 (1) (ca) of the Airports Act, the MDP needs to determine *'whether or not the development is consistent with the airport lease for the airport'.*

Under the provisions of the Airports Act, APAM (which is a subsidiary of Australia Pacific Airports Corporation Limited, known as APAC) is the 'airport-lessee company' for Melbourne Airport. Under the lease APAM is responsible for managing the airport for 50 years (from 1997 to 2047) with an option to extend this lease by a further 49 years to 2096. APAM manages the entire airport site including the airside, terminal and landside precincts, on-airport road network and associated service infrastructure.

Under clause 12 of the lease, APAM is required to develop Melbourne Airport, taking into account anticipated demand, to the quality standards reasonably expected of a major international airport in Australia and consistent with good business practices. The Project is being developed in accordance with this requirement of the lease.

5.9 Aviation White Paper

The Aviation White Paper sets out the Australian Government's vision for Australia's aviation sector towards 2050. This Master Plan is structured to align with the strategic goals of the Aviation White Paper, focusing on innovation, passenger experience, connectivity, and workforce and skills.

Released on 26 August 2024, the White Paper includes 56 new policy initiatives in total, addressing matters including consumer protection; disability access; competition; skills and workforce; decarbonisation; regional connectivity; general aviation; airport planning and noise; safety, security and airspace regulation; new aviation technology; and international aviation.

Initiative 39 of the Aviation White Paper sets out the extra information now required in airport Master Plans and Major Development Plans (MDPs) in addition to the requirements of the Airports Act. The Minister will have regard to this additional information when making decisions about Master Plans and MDPs.

This MDP has considered the Aviation White Paper and has addressed those matters of relevance to the Project.

5.10 State Legislation

Melbourne Airport is located on Commonwealth land. The Airports Act is the key piece of legislation setting out the land use regulatory framework for this MDP. Commonwealth land within the Melbourne Airport boundary is exempt from the State legislation and the Victoria Planning Provisions; however, a MDP must address consistency with planning schemes under Victorian state law. This is addressed in **Section 6.**

6. Consistency with State and Local Planning

Planning requirements for the Melbourne Airport site (Commonwealth land) are administered under the Airports Act, and therefore the State and local planning provisions under the Victorian *Planning and Environment Act 1987* ('P&E Act') are not directly applicable to land use and development of the Melbourne Airport site.

The Airports Act requires Master Plans to, where possible, be consistent with the State and local planning policies relevant to the State or Territory in which the airport is located. Similarly, the preparation of a MDP is required to give consideration to the level of consistency or otherwise with prevailing State and local planning policies and controls. This MDP has considered the Planning Policy Framework (PPF) and the Victoria Planning Provisions (VPP).

6.1 State Planning Policy Overview

In preparing this MDP, Melbourne Airport has had regard to the PPF, the Local Planning Policy Framework (LPPF), and the zones, overlays and other planning provisions derived from the Victoria Planning Provisions (VPP). The Master Plan and development approval processes for Melbourne Airport land are aligned with Victorian processes insofar as ensuring that any such development is compatible with broader strategic planning directions for the airport and adjoining areas as a whole. The state and local planning provisions considered as part of this MDP process are summarised below.

6.1.1 Plan for Victoria

Released by the Victorian Government in February 2025, Plan for Victoria replaces Plan Melbourne 2027-2050 (Plan Melbourne) and sets out Victoria's long-term plan for the state's growth to 2050.

Plan for Victoria's vision is centred around 'building a state that provides choices and opportunities for current and future generations of Victorians in quality housing, transport, employment, environment and connectivity will require input from the community, government, local businesses and industry alike' and within Melbourne aims to foster growth while 'protecting economic and environmental values'.

Under the former Plan Melbourne, Melbourne Airport was explicitly identified as a State-Significant Transport Gateway. While Plan for Victoria no longer contains the detailed airport-specific policies seen in Plan Melbourne, it acknowledges:

- The aircraft noise footprint of Melbourne Airport as a constraint on urban growth, supporting ongoing airport safeguarding
- The airport's role in access and employment infrastructure, consistent with its function as a national and state-level transport and freight gateway
- A direct rail connection to Melbourne Airport via the Suburban Rail Loop (SRL) and, reinforcing integrated land use and transport planning.

6.1.2 Melbourne Airport Environs Strategy Plan 2003

Part 3C of the P&E Act identifies the Melbourne Airport Environs Strategy Plan 2003 (MAESP) as an approved strategy plan and a prescribed document applicable to every municipal council whose municipal district is wholly or partly within the Melbourne Airport Environs Area. It also requires works by a government department, public authority or council to be in conformity with the MAESP unless otherwise approved by the Premier of Victoria.

The Victorian Government prepared MAESP to address a number of issues and concerns with the Airport Environs Overlay in place at the time. The overall aim was to ensure that Victoria could retain a 24-hour, curfew-free airport and manage associated aircraft noise impacts on residential areas. The MAESP's recommendations took the form of a new overlay control (PSA VC30), the MAEO. The introduction of the MAEO reflected the State Government's response to the MAESP Steering Committee's report recommendations and is applied to areas of high and moderate aircraft noise

exposure (in excess of the 20 ANEF noise contour). The boundaries of the MAEO are based on the 2018 ANEF contours.

The Ministerial Direction on the Form and Content of Planning Schemes requires relevant planning schemes to incorporate Australian Standard AS 2021-2015: Acoustics – Aircraft noise intrusion – Building siting and construction. The MAEO in the relevant planning schemes references AS2021-2015. Land that is or will be subject to high levels of aircraft noise based on the 25 ANEF contour is classified under MAEO Schedule 1 and generally applies to land close to the runway ends. Land that is or will be subject to moderate levels of aircraft noise based on the 20 to 25 ANEF contour is classified under MAEO Schedule 2.

The purpose of the MAEO control is to:

- Implement the Municipal Planning Strategy and the PPF
- Ensure that land use and development are compatible with Melbourne Airport's operation under the relevant airport strategy or Master Plan, and with safe air navigation for aircraft approaching and departing the airfield
- Assist in shielding people from the impact of aircraft noise by requiring appropriate noise attenuation measures in dwellings and other noise-sensitive buildings
- Provide for appropriate levels of noise attenuation depending on the level of forecast noise exposure.

6.1.3 Planning Policy Framework

All planning schemes contain the PPF which establishes the context for spatial planning and decision-making in Victoria. Planning and responsible authorities are to have regard to, and be consistent with, the PPF when formulating and implementing local planning schemes for their municipal area. At an overarching level, the PPF seeks to ensure that the needs of existing and future communities are properly planned having regard to factors ranging from the provision of appropriately zoned and located land, to understanding and minimising environmental impacts.

The relevant sections of the PPF in relation to the Project are summarised below:

- **Clause 11.01-1R Green Wedges – Metropolitan Melbourne** endeavours to plan and protect major infrastructure and resource assets that serve the wider Victorian community, such as airports and ports with their associated access corridors
- **Clause 12 Environmental and landscape values** seeks to ensure that planning protects ecological systems and biodiversity, and conserves areas with identified environmental and landscape values. In particular, the clause identifies that planning must implement environmental principles for ecologically sustainable development that have been established by international and national agreements
- **Clause 12.01-1S Protection of biodiversity** seeks to assist in the protection and conservation of Victoria's biodiversity and encourages the use of strategic planning as the primary tool for the protection and conservation of Victoria's biodiversity
- **Clause 12.01-2S Native vegetation management** seeks to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation
- **Clause 13 Environmental risks and amenity** identifies that 'planning should aim to avoid or minimise natural and human-made environmental hazards, environmental degradation and amenity conflicts'
- **Clause 17 Economic development** acknowledges that planning must provide for a strong and innovative economy and seeks to support and foster economic growth and development by providing land, facilitating decisions and resolving land use conflicts, so that districts may build on strengths and economic potential

- **Clause 17.04-1S Facilitating tourism and Clause 17.04-1R Tourism in Metropolitan Melbourne** seek to ensure that tourism facilities have access to suitable transport and to maintain Metropolitan Melbourne as a desirable tourist destination by improving transport infrastructure
- **Clause 18.02-7S Airport and airfields** seeks to strengthen the role of Victoria's airports and airfields within the state's economic and transport infrastructure, facilitate their siting and expansion and protect their ongoing operation. This clause notes that the NASF must be considered as a relevant policy document. Key strategies include to:
    - Protect airports from incompatible land-uses
    - Prevent land use or development that poses risks to the safety or efficiency of an airport or airfield − Minimise the detrimental effects of aircraft noise when planning for areas around airports and airfields
    - Ensure land use and development at airports and airfields contributes to the aviation needs of the state and the efficient and functional operation of the airport or airfield
    - Ensure land use and development at airports complements the role of the airport
    - Plan for areas around airports and airfields so that land use or development does not prejudice future airport or airfield operations or expansions in accordance with an approved strategy or master plan for that airport or airfield.
- **Clause 18.02-7R Melbourne Airport** seeks to protect the curfew-free status of Melbourne Airport and ensure any new use or development does not prejudice its operation. The clause notes that planning must consider as relevant the MP22 (to be superseded by the MP27) and the Melbourne Airport Strategy 1990 (MAS) for planning decisions affecting land in the vicinity of the Melbourne Airport

6.2 Local Planning Overview

Section 91(1)(ga)(iii) of the Airports Act requires a MDP to provide an assessment of the local and regional economy and community, including analysis of how the Project fits within the planning schemes for commercial and retail development in the adjacent area.

The local planning authority administers municipal planning scheme provisions and development approval requirements as per the processes provided for in the state's legislation. The local content of planning schemes must be consistent with the PPF and the Ministerial Direction on the Form and Content of Planning Schemes set out under section 7(5) of the P&E Act. As Commonwealth land, planning scheme provisions do not directly apply to Melbourne Airport land, although they must be considered when preparing a MDP.

Melbourne Airport is wholly located within the City of Hume and therefore the Hume Planning Scheme must be considered. The following sub-section identifies the relevant clauses of the Hume Planning Scheme. It is noted that as the Project is not a commercial or retail development, those aspects of the Hume Planning Scheme are not relevant in this case.

6.2.1 Hume Planning Scheme

The City of Hume's LPPF contained within the Hume Planning Scheme includes the Municipal Planning Statement (MPS) and local planning policies. The following clauses of the MPS are particularly relevant to Melbourne Airport and the Hotel Apron South Project:

- Clause 02.01 Context provides local and regional context for the municipality, noting that it is located approximately 20 kilometres north-west of the Melbourne city centre, is one of Melbourne's seven growth area municipalities and recognises Melbourne Airport and surrounds is a key strategic employment hub
- Clause 02.02 Vision outlines Hume's vision 'to be a sustainable and thriving community with great health, education, employment, infrastructure and a strong sense of belonging'

- Clause 02.03-1 Settlement states that there is a need to 'protect Melbourne Airport's curfew free status from encroachment by development'
- Clause 02.03-7 Economic development recognises Melbourne Airport as one of Victoria's key strategic assets, economic drivers and employment generators, and this role should continue to be reinforced.
- Clause 18.02-7L Melbourne Airport – Hume encourages the use and development around the Melbourne Airport related to transport and logistics, wholesale trade and other sectors that require immediate access to the airport.

6.3 Conclusion

Having regard to the policy context outlined above, the proposal is consistent with the Victorian state planning framework. The Project will deliver additional apron capacity and supporting airside infrastructure within Melbourne Airport's existing terminal precinct, including new remote aircraft parking stands, reconstruction of Taxiway Sierra, ground support equipment, and construction of Papa Apron for REX and Link operations. These works support the safe, secure and efficient operation of Melbourne Airport as a major economic and transport asset and will contribute to the airport's role in the State's access and employment infrastructure, consistent with its function as a national and state level transport and freight gateway.

The Project is therefore consistent with the strategic intent of the airport related provisions of the Planning Policy Framework, which seek to protect airports from encroachment, support their expansion in accordance with approved planning frameworks, and ensure that development contributes to their ongoing functional operation. The Master Plan's Airside Plan also identifies the South-East precinct as an area safeguarded for medium term apron expansion and supporting operational uses, which reinforces the strategic basis for the proposal.

The Project is also consistent with the local planning context. The Project supports the strategic role of Melbourne Airport recognised in the Hume Planning Scheme local policy context as a key employment, transport and economic asset. By providing additional aircraft parking and associated operational infrastructure within the existing airport precinct, the Project supports the continued operation and capacity of the airport without introducing incompatible land use outcomes. The Project forms part of Melbourne Airport's broader apron expansion program and relevant environmental and aviation safeguarding matters are addressed in this MDP.

7. Socio-Economic Assessment

7.1 Overview

Melbourne Airport is a critical piece of economic and social infrastructure for Victoria and Australia. As Australia's second-busiest passenger airport and largest domestic freight airport, it plays a central role in facilitating travel, trade and economic activity at the State, regional and national levels. In addition to its direct operations, the Airport generates substantial indirect benefits by enabling key industries such as tourism, international education, freight and logistics, and advanced manufacturing.

Victoria has one of the largest and fastest-growing travel markets in Australia, driven by strong population growth, an internationally connected economy, and the State's attractiveness as a destination for business, tourism, education and major events. Melbourne Airport serves as Victoria's primary aviation gateway, providing the connectivity required to meet this demand and linking Victorian communities, businesses and industries with domestic and global markets. The Airport accommodates millions of passenger journeys each year and acts as the principal entry point for the majority of interstate and international visitors to Victoria, supporting economic growth, social connectivity and long-term prosperity across the State.

7.2 Overarching Benefits of the Airport

The economic and social contribution of Melbourne Airport is described in Melbourne Airport's *Economic and Social Impact Report 2025*, prepared by ConnellGriffin. This report provides the most recent assessment of the Airport's contribution to the Victorian and national economy and is referenced throughout this section to reflect current economic conditions and activity levels.

7.2.1 Economic Activity

Melbourne Airport is a significant contributor to the Victorian and national economy. In FY25, the Airport contributed approximately $22 billion in direct and indirect gross value added (GVA), representing around 1 per cent of Australia's GDP.

This contribution reflects the Airport's role as a key enabler of economic activity across a range of sectors, including tourism, international education, freight, logistics and business services. Economic activity facilitated by the Airport extends well beyond its physical boundaries, generating flow-on benefits across metropolitan Melbourne and regional Victoria.

7.2.2 Visitor Economy

Melbourne Airport is the primary gateway for Victoria's visitor economy, facilitating both international and domestic travel. In FY25, the Airport handled approximately 36 million passengers, including nearly 12 million international passengers, reflecting strong growth in aviation demand.

This connectivity supports tourism, international education and business travel, which are key contributors to the Victorian economy. The Airport plays a critical role in maintaining Melbourne's global accessibility and competitiveness as a destination for investment, events and international engagement.

7.2.3 Trade and Freight

Melbourne Airport plays a vital role in supporting trade and freight movement across Victoria and Australia. As a major airfreight hub, the Airport enables the efficient movement of high-value, time-sensitive goods and supports domestic and international supply chains.

This capability is critical for industries such as advanced manufacturing, agriculture, pharmaceuticals and e-commerce, which rely on rapid and reliable logistics. The Airport's freight function supports economic productivity and contributes to the resilience of supply networks.

7.2.4 Employment

Melbourne Airport is a major employment hub for Victoria and a key source of jobs for surrounding communities. In FY25, the Airport directly supported more than 23,200 jobs on-site, while approximately 239,000 direct and indirect jobs were supported across the broader economy.

Employment associated with the Airport spans a wide range of sectors including aviation, construction, logistics, retail, hospitality and professional services. The Airport precinct is one of the largest employment centres outside the Melbourne CBD and plays an important role in supporting employment opportunities in Melbourne's north and west.

7.2.5 Social Benefits

Beyond its economic contribution, Melbourne Airport provides important social benefits by facilitating connectivity for individuals, families, businesses and communities. The Airport enables access to employment, education, tourism and essential services, supporting broader social and economic participation.

Melbourne Airport also delivers measurable social value through its community investment and partnership programs. In FY25, these initiatives contributed approximately $4 million in social value, supporting local communities and social inclusion outcomes across Victoria.

These programs complement the Airport's broader role as a key piece of community infrastructure and reinforce its contribution to social wellbeing.

7.2.6 Environmental and Social Responsibility

Melbourne Airport has demonstrated an ongoing commitment to environmental and social responsibility through its operations, planning and investment activities. This includes initiatives focused on sustainability, emissions reduction, biodiversity management and responsible resource use.

The Airport's Environmental, Social and Governance (ESG) framework supports continuous improvement in environmental performance and ensures that infrastructure development is undertaken in a manner that balances operational, environmental and community considerations.

7.2.7 Supporting Regional Economies

Melbourne Airport plays an important role in supporting regional economies by connecting regional communities and industries to national and global markets. Its curfew-free operations and international connectivity are particularly important for regional exporters, including producers of perishable and high-value goods.

Efficient access to the Airport enhances the competitiveness of regional industries and enables broader economic participation across Victoria.

7.2.8 Summary

Overall, Melbourne Airport delivers substantial economic and social benefits that extend well beyond its physical footprint. It is a major driver of economic activity, a key employment hub, and a critical enabler of tourism, trade and connectivity.

The Project will support these ongoing benefits by contributing to the efficient operation and future capacity of Melbourne Airport's airside infrastructure.

7.3 Specific project benefits

7.3.1 Employment

During the initial construction phase of Hotel Apron South, the Project is estimated to require labour equivalent to 148 annualised employee equivalent roles across the life of the works. The Local Employment Target Plan also requires that at least 5 per cent of deemed project labour hours, equal to 14,635 hours, be delivered through Victorian employment. Based on an adjusted project value of $136,593,861, the total deemed labour task for the Project is estimated at 292,701 hours. Together, these figures indicate that the Project will generate a substantial construction workforce requirement and will make a measurable contribution to local employment participation during delivery. Table 1 summarises the key construction employment metrics identified for the Project.

Table 1: Construction Employment Summary

Measure	Value
Adjusted project value	$136,593,861
Deemed labour ratio	15%
Total deemed project labour hours	292,701.13
Minimum Victorian employment requirement	14,635.06 hours
Estimated total annualised employee equivalent roles across the project	148 AEE

The construction employment requirement is also expected to extend across a broad range of occupations reflecting the scale and complexity of the proposed works. Demand is expected across engineering, support and administration, supervision, general labour, specialist trades, plant operations, asphalt works, masonry and truck driving. This demonstrates that the employment effects of the Project are not limited to a narrow construction task but will be distributed across multiple skill levels and disciplines associated with airside civil and infrastructure delivery. Table 2 sets out the indicative construction workforce profile identified in the Local Employment Target Plan.

Construction of the Project is expected to commence in early 2027 and will be staged to maintain the safe, secure and efficient operation of the airport. The Project construction is expected to be completed by mid-2028.

Table 2: Indicative Construction Workforce Profile

Occupational type	Estimated total number	Existing	New
Engineers	18	14	4
Support staff, environment, safety, administration	13	11	2
Supervisors	3	3	0
Labourers	40	0	40
Plumbers	3	0	3
Electricians	6	0	6
Carpenter	4	0	4
Steel fixer	6	0	6

Occupational type	Estimated total number	Existing	New
Plant operators	10	0	10
Asphalters	10	0	10
Masonry	15	0	15
Truck drivers	20	0	20

In summary, the Project will support employment in two related ways. First, it will generate direct construction employment during delivery, including opportunities across a wide range of technical, trade and labour roles. Second, by increasing aircraft stand availability, improving apron functionality, reconstructing Taxiway Sierra, and providing relocated ground support equipment storage and associated infrastructure, the Project will support the continued operation and future growth of Melbourne Airport as a major and expanding employment centre for Melbourne's north and west.

7.3.2 Economic Contribution During Construction

In addition to the employment benefits identified above, the Project will generate broader economic activity during construction through expenditure on materials, equipment, professional services, subcontractors and supporting services. Given the nature of the works, this expenditure is expected to involve civil construction, pavement works, drainage, electrical services, plant operation, logistics, environmental management and airport operational coordination.

These activities will contribute to the construction sector and associated supply chains during the delivery period. The economic contribution will be temporary and construction related, but it is nevertheless relevant in assessing the Project's socio-economic effects. The Project will also support specialist airfield construction capability by requiring works to be delivered within a live airport environment, where staging, safety, access and operational continuity are critical delivery considerations.

7.3.3 ESG

The Project includes a range of environmental and social responsibility measures relevant to procurement, construction, and project delivery. Environmental measures include waste and resource recovery initiatives, the use of recycled and alternative materials, carbon reduction measures, measures that support resilience to climate impacts relevant to the development and project level monitoring and reporting of sustainability performance. These measures are supported through waste diversion targets, monitoring of energy and emissions, embodied carbon tracking for key materials, consideration of climate-related risks and adaptation measures where relevant and reporting processes established for the Project. Environmental management measures also respond to the specific conditions of the development footprint, including requirements for construction environmental management, ongoing inspections, protection of native grass areas, and management of contaminated materials. This includes controls relating to PFAS affected spoil, water, and slurry, together with procedures for handling, approval, transport, and disposal within the airport environment.

Social responsibility measures include Indigenous employment and procurement initiatives, engagement with Aboriginal and Torres Strait Islander businesses, social procurement measures, and broader workforce inclusion practices. Project documentation also identifies opportunities to support social benefit suppliers and inclusive employment outcomes through procurement and workforce related initiatives. In addition, the Project is to be delivered in a manner that minimises disruption to airport users, tenants, airlines, and other stakeholders. This is supported by requirements for coordination with airport operations, management of operational interfaces, and control of construction activities within the live airport environment. Overall, the Project incorporates

environmental management, social procurement, and operational control measures intended to support delivery within the airport context.

The Project demonstrates an appropriate approach to environmental and social responsibility, having regard to the operational context of the airport and the nature of the proposed works. Environmental impacts are to be managed through established construction and site management measures, while social considerations are addressed through attention to stakeholder interfaces, responsible procurement and workforce practices, and the minimisation of disruption during delivery. Overall, the proposal reflects a balanced and practical response to environmental and social responsibility considerations relevant to the development.

7.3.4 Civil Aviation User Benefits

The Project will provide direct benefits to civil aviation users by addressing the operational constraints and demand pressures identified in **Section 4.2.**

The Project will deliver additional remote aircraft parking stands, reconstruct Taxiway Sierra, provide replacement GSE and bussing facilities, and construct Papa Apron for REX and Link operations. Together, these works support aircraft parking, circulation, ground handling and airside support activities within the terminal precinct.

The Project will improve the flexibility and efficiency of aircraft stand allocation, reducing pressure on existing apron areas and supporting more reliable airfield operations, particularly during periods of peak demand, overnight layover and disruption.

While the Project does not itself generate new aviation demand, it directly enables Melbourne Airport to accommodate existing and forecast activity more efficiently and with greater operational resilience.

The Project delivers targeted benefits for a range of civil aviation user groups, including:

International operations

- Increased remote stand capacity for widebody aircraft layover;
- improved operational resilience during peak periods.

Domestic operations

- Additional narrowbody aircraft parking capacity
- Reduced congestion within existing terminal aprons.

Regional (REX and Link)

- Provision of a dedicated Papa Apron for turboprop operations
- Relocation from constrained operational areas.

Ground handling and bussing operations

- Provision of purpose-built bussing and GSE areas
- Improved efficiency of passenger transfer and support functions.

Freight and overnight layover operations

- Increased availability of remote parking for freight and overnight aircraft
- Improved ability to accommodate extended dwell times.

Overall, the Project improves the efficiency, flexibility and resilience of apron operations and ensures that the future needs of civil aviation users at Melbourne Airport are appropriately accommodated.

7.3.5 Support for Tourism, Trade and Freight

The Project will support the broader tourism, trade and freight functions of Melbourne Airport by improving the capacity and reliability of airside infrastructure. Melbourne Airport's role in tourism, trade and freight depends not only on runway and terminal capacity, but also on the availability of

apron, taxiway and ground support infrastructure that enables aircraft to be parked, serviced, turned around and repositioned efficiently.

The Project will not directly create new tourism, trade or freight demand. However, by providing additional aircraft parking capacity, renewing taxiway infrastructure and maintaining supporting ground operations facilities, it will help preserve the operational conditions needed for Melbourne Airport to support passenger airlines, freight movements and associated economic activity. The Project therefore contributes indirectly to the airport's broader role as a transport, tourism and freight gateway.

7.3.6 Long term infrastructure benefits and capital expenditure

The Project represents an investment in long term aviation infrastructure within Melbourne Airport's existing terminal precinct. By delivering additional apron capacity, renewing ageing taxiway infrastructure and replacing displaced operational support facilities, the Project supports the ongoing functionality of the airport's airside system.

This long-term infrastructure benefit is relevant because airport capacity is dependent on the performance of multiple interconnected systems, including runways, taxiways, aprons, terminals, ground support areas and access infrastructure. The Project strengthens one part of this broader system by improving aircraft parking and supporting ground operations. This will assist Melbourne Airport in managing future aviation activity while making better use of the existing terminal precinct.

8. Traffic Assessment & Ground Transport Infrastructure

8.1 Overview

Section 91 of the Airports Act outlines the contents of an MDP. In relation to traffic, sub-section (1) specifies that the MDP must set out:

> *(ga) the likely effect of the proposed developments that are set out in the major development plan, or the draft of the major development plan, on:*
>
> *(i) traffic flows at the airport and surrounding the airport;*

This assessment has been prepared for an airfield and apron infrastructure project delivered within a live operational airport environment.

The key traffic and access considerations relate to construction staging and sequencing, construction and non-construction vehicle routing, temporary access arrangements, traffic controls, delivery scheduling, and the management of interfaces with the airside road network and airport stakeholders to maintain operational continuity.

8.2 Operational traffic generation after completion

The Project comprises airfield and apron infrastructure that supports airport operations. It does not introduce a new public land use such as a terminal facility, public car parking, retail or other development that would independently generate new landside vehicle trips.

On this basis, the completed Project is not expected to generate standalone landside vehicle trips. Any ongoing vehicle activity associated with the completed works is expected to occur within the context of existing airport operational movements rather than as a new trip generating land use.

No permanent changes to public road networks, public transport services, pedestrian routes or cycling routes are identified as a consequence of the Project.

8.3 Construction traffic and access arrangement

Construction traffic generated by the Project will be temporary and will occur during the construction phase only. Construction of the Project is expected to commence in early 2027 and will be staged to maintain the safe, secure and efficient operation of the airport. The Project construction is expected to be completed by mid-2028.

Construction movements will include workforce access, truck and trailer movements, plant mobilisation and demobilisation, material deliveries, drainage and services deliveries, pavement material deliveries, and movements associated with lighting and utility installation.

The primary construction access point for the Project will be Gate 22 (shown in Figure 14). Construction vehicles will access Gate 22 via Operations Road and Haul Road to the south of the project site. This access arrangement will be managed to minimise disruption to airport operations and to avoid vehicle queuing or truck backing on Operations Road.

The construction compound will be located at Gate 22 and will use the established construction compound currently shared across other ongoing construction works at Melbourne Airport. The compound will provide construction car parking, site offices and lunchroom facilities. Additional amenities will also be provided within the work site, including toilets, an emergency first aid room and a lunchroom.

Workforce access will also be provided through Gate 22 using light utility vehicles. The construction workforce is expected to average approximately 60 staff and peak at approximately 130 staff. Workforce movements are expected to occur mainly during the start and end of construction shifts and will be managed through the compound access arrangements.

Heavy vehicle activity is expected to be highest during periods involving earthworks, pavement construction, drainage installation and material delivery. During peak construction periods, up to approximately 30 truck and trailer combinations may enter the site during the morning start period,

generally around 6:30 am. These movements will be managed through staged access arrangements to avoid truck queuing or backing onto Operations Road.

The final daily profile of heavy vehicle movements, delivery movements and workforce movements will be confirmed through contractor construction planning and documented in a Construction Traffic Management Plan (CTMP). The CTMP will confirm access routes, delivery windows, traffic control requirements, queuing management, stakeholder notification procedures and monitoring measures.

8.4 Construction staging, road interfaces and traffic management

Construction traffic, including heavy vehicles and plant, will be managed through staged sequencing that reflects operational requirements and constraints within the live airport environment. Construction and non-construction traffic routes will be defined by stage through construction staging and traffic management planning.

Construction traffic and temporary works may interact with Freight Services Road, Airside Road and Maintenance Road during delivery. These roads support important airport operational, freight, maintenance and stakeholder access functions. The staging approach will seek to maintain access along these routes wherever practicable, supported by coordinated planning and engagement with affected road users. The key stakeholder locations and relevant internal airport road interfaces are shown in Figure 14.

It is noted that the nearest residential area to the Project site is located approximately 1.8 kilometres to the east.

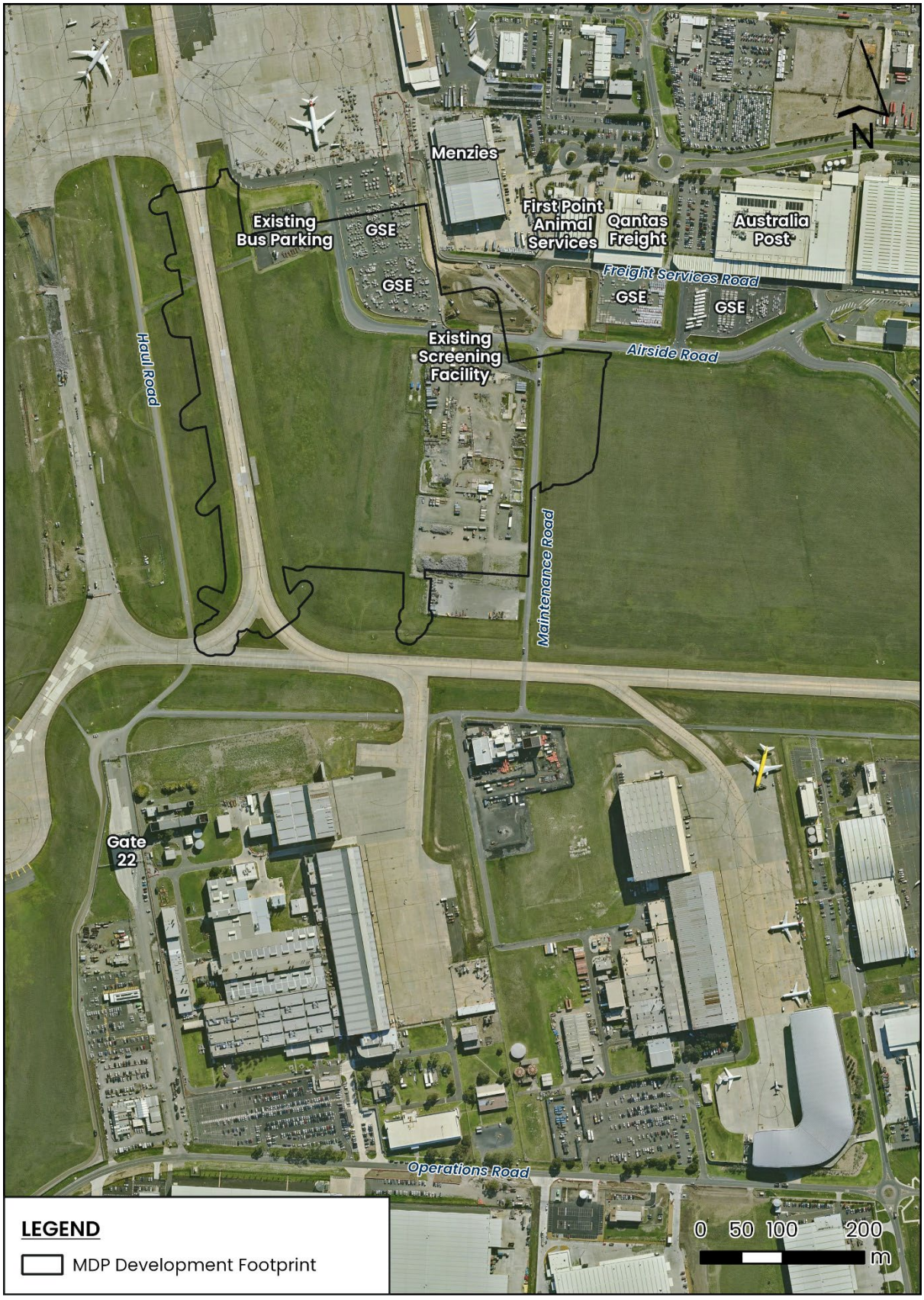


Figure 14: Key stakeholder locations and internal airport road interfaces

Interactions with Freight Services Road, Airside Road and Maintenance Road are expected to be limited and primarily associated with minor temporary traffic closures, controlled access arrangements or works requiring temporary traffic control. Any such works will be subject to a pre-approved CTMP. Affected road users will be notified before works commence.

Where works require crossing an existing airfield road, or where temporary road constraints are required, contraflow arrangements may be implemented to maintain access and minimise disruption to operational activities. Where temporary closures, lane restrictions, contraflow arrangements or other traffic controls are required, these will be planned in coordination with Melbourne Airport operations and affected stakeholders.

Traffic management measures will be designed to maintain safe access for airport users, freight operators, ground handlers, maintenance vehicles, emergency services and other authorised users. Measures may include staged work areas, temporary signage, barriers, traffic control devices, temporary traffic signals, staggered vehicle movements and delivery coordination for time sensitive materials.

The construction approach places strong emphasis on maintaining operational continuity and stakeholder access during staged works. Disruption risks associated with congestion and construction related movements will be managed through defined access routes, staged construction sequencing, coordinated delivery windows, a pre-approved CTMP and ongoing communication with affected road users.

8.5 Cumulative construction traffic with other airport projects

The Project will be delivered in the context of other major airport works. Major concurrent projects expected during the construction period include Taxiway Delta, M3R and Pier D Expansion. These projects are shown in Figure 15.

Cumulative construction traffic will be managed through the strategic use of separate airport access gates and construction routes. The Hotel Apron South Project will use Gate 22. Pier D and Taxiway Zulu are expected to use Gate 3 to the north of the airfield, while M3R will use a dedicated access gate to the west.

This separation of access points will distribute construction traffic across different parts of the airport and reduce the likelihood of concentrated construction vehicle demand at a single gate, road or access route. It will also assist in separating project related construction movements from other airside construction activities where practicable.

Coordination across projects will be undertaken through Melbourne Airport’s construction planning and operational coordination processes. This will include coordination of access routes, delivery windows, temporary traffic controls, construction staging and stakeholder communication where works overlap or where shared road interfaces may occur.

Where cumulative impacts are identified, mitigation measures may include staged delivery windows, separation of haulage routes, coordination of peak workforce arrival periods, restrictions on peak vehicle movements, temporary traffic controls and targeted stakeholder communication.



Figure 15: Major concurrent projects

8.6 Construction Traffic Management Plan and safety controls

A project specific CTMP will be prepared before construction commences. The plan will define the detailed traffic management measures required to maintain safe and efficient movement across affected airport roads and operational areas during construction.

The CTMP will be prepared with specialist input and will address, as relevant, construction access routes, Gate 22 access arrangements, delivery windows, workforce access, heavy vehicle movements, queuing management, temporary road closures, lane restrictions, contraflow arrangements, stakeholder notification, emergency access and monitoring requirements.

The plan will also identify work areas and control measures, including barrier locations, signage, temporary traffic control devices and traffic control aids such as portable traffic signals. Traffic control measures will prioritise the safe management of live traffic environments, including the use of temporary traffic signals in constrained areas to manage vehicle movements and reduce the need for stop and go control in active traffic lanes.

Swept path assessments will be undertaken where required to confirm that construction vehicles and affected stakeholder vehicles can manoeuvre safely around work areas. These assessments will be used to minimise disruption to operational activities and confirm that safe access can be maintained for airport users, freight operators, ground handlers, maintenance vehicles, emergency services and other authorised users.

Signage and physical separation measures will be implemented to guide road users and protect the workforce adjacent to live roads. Temporary ramps between stages of new and existing pavements will be provided where required to manage level changes, with designs assessed to confirm vehicle loading capacity and stakeholder requirements.

8.7 Conclusion

The completed Project is not expected to generate standalone landside traffic, as it comprises airfield and apron infrastructure supporting airport operations rather than a new public facing development.

The principal traffic and ground transport impacts are expected to occur during construction. These impacts will relate to workforce access, truck and trailer movements, construction material deliveries, plant movements, temporary road closures, staging arrangements and interfaces with Freight Services Road, Airside Road, Maintenance Road, Operations Road and Haul Road.

Preliminary construction planning indicates that the workforce may average approximately 60 staff and peak at approximately 130 staff, with workforce access provided through Gate 22 using light utility vehicles. During peak construction periods, up to approximately 30 truck and trailer combinations may enter the site during the morning start period, generally around 6:30 am. These movements will be managed through staged access arrangements to avoid truck queuing or backing onto Operations Road.

Construction access will be consolidated through Gate 22, supported by an established construction compound providing parking, offices and lunchroom facilities. Additional site amenities will be provided within the work site. Interactions with key internal airport roads will be managed through pre-approved Traffic Management Plans and stakeholder notification.

Cumulative construction traffic with other airport projects will be managed through the strategic use of separate access gates and routes. Pier D and Taxiway Zulu are expected to use Gate 3 to the north of the airfield, M3R will use a dedicated western access gate, and Hotel Apron South will use Gate 22. This will assist in distributing construction access demand and reducing cumulative pressure on any single airport access point.

Subject to implementation of the CTMP, construction staging, defined access routes, delivery scheduling, queuing controls, temporary traffic management measures and stakeholder coordination, the Project is expected to have temporary and manageable traffic effects. There will be no traffic impacts to local residents or the travelling public from the Project.

9. Environmental Assessment

9.1 Overview

The environmental assessment in this section has been prepared having regard to the requirements of the Airports Act and the EPBC Act.

In particular, the assessment considers impacts of the Project to:

- NTGVVP, which is located within the MDP development footprint; and
- The environment of Commonwealth land.

The assessment draws on the detailed studies undertaken for this MDP and the relevant assessment findings and mitigation measures contained in the Preliminary Documentation for EPBC 2024/09907, provided at **Appendix B.**

EPBC 2024/09907 assessed five separate Future Airfield Projects, including Project D – Hotel Apron South. Accordingly, the findings and mitigation measures from that assessment have been reviewed to identify those applicable to the Hotel Apron South Project and are reflected in the relevant parts of this section. Findings and impacts attributable solely to the other four Future Airfield Projects have not been attributed to this Project. This section also separately assesses the additional land within the MDP development footprint that was outside the Project D action area.

This section:

- Describes the environmental values present within the MDP development footprint
- Assesses the nature and extent of environmental impacts
- Demonstrates that impacts are localised, low and manageable
- Identifies mitigation and offset measures.

For clarity, APAM does not intend to rely on the EPBC Act approval for EPBC 2024/09907 to authorise the Project. It is proposed that the Project be assessed and approved solely under the Airports Act through this MDP, with the EPBC Act assessment and approval of Project D under EPBC 2024/09907 referenced as supporting information only.

9.2 Summary of key environmental outcomes

The key environmental outcomes of the Project are summarised as follows:

- The Project is located within a highly modified and actively managed airfield environment
- The only MNES present is NTGVVP
- Impacts to NTGVVP are:
    - Localised
    - Limited in extent
    - Consistent with EPBC 2024/09907
- The expanded Project footprint:
    - Does not contain additional MNES or any additional areas of the NTGVVP (which was assessed as part of EPBC 2024/09907)
    - Does not introduce additional or materially different impact pathways (based on current assessments)
- The ‘whole of environment’ assessment shows that the balance of the impacts are:
    - Short-term
    - Construction-related
    - Readily managed

These outcomes are consistent with the findings of EPBC 2024/09907 and confirm that environmental impacts are localised, limited and manageable.

9.3 Environmental legislative context

9.3.1 Airports Act

Of specific relevance to the environment, Section 91 of the Airports Act requires an MDP to:

- Be consistent with the airport lease and Master Plan for the airport, which includes the Airport Environment Strategy
- Include an assessment of the environmental impacts that might reasonably be expected to be associated with the development
- Outline details of how environmental impacts will be ameliorated and prevented.

9.3.2 Airports (Environment Protection) Regulation 2026

As explained in **Section 5.4**, while the Project does not require approval under the *Airports (Environment Protection) Regulation 2026*, the regulations impose obligations relating to the management of the environment across the airport site and require assessment, monitoring and reporting in relation to biodiversity, heritage, air, water and soil pollution, and noise levels. As such, Melbourne Airport has a duty to take all reasonable and practicable measures to:

- Prevent the generation of air, water and soil pollution, as well as to assess and report on existing pollution (e.g. soil contamination)
- Ensure that works do not result in adverse consequences for local biota and their associated ecosystems and habitats
- Ensure that works do not result in adverse consequences for existing aesthetic, cultural, historical, social and scientific (including archaeological and anthropological) values of the local area
- Prevent the generation of offensive noise (excluding noise generated by an aircraft in flight or when landing, taking off or taxiing at the airport).

9.3.3 EPBC Act

EPBC 2024/09907 was approved on 17 April 2026 and included a comprehensive assessment of environmental impacts associated with Project D (Hotel Apron South and associated works), including impacts to NTGVVP and the environment of Commonwealth land.

EPBC 2024/09907 defined a specific EPBC Act action area within which Project D was approved, subject to conditions.

As outlined in **Section 2.5**, the Project as described in this MDP differs in footprint and extent from Project D and therefore constitutes a separate action for the purposes of the EPBC Act. APAM does not rely on the EPBC Act approval for EPBC 2024/09907 to authorise the Project.

In accordance with section 160 of the EPBC Act, this MDP will be referred by the DITRDCSA to the Minister for the Environment and Water for advice in relation to the potential environmental impacts of the Project. This process ensures that impacts to NTGVVP and impacts to the environment of Commonwealth land are appropriately considered as part of decision-making under the Airports Act.

While the MDP development footprint is larger than the EPBC Act action area, this reflects the inclusion of additional land required for construction and staging. The additional land beyond the EPBC Act action area does not contain any NTGVVP and, based on current assessments, does not result in additional or materially different impacts to the environment of Commonwealth land.

The EPBC Act assessment for EPBC 2024/09907 remains relevant as supporting information, as it assessed substantially similar works, considered the same environmental values, and identified appropriate mitigation and offset measures. This MDP draws on that assessment to inform the evaluation of environmental impacts, and implements the mitigation and offset measures required by EPBC 2024/09907 for Project D.

9.4 Biodiversity

9.4.1 Overview of ecological values

The MDP development footprint comprises:

- Managed airfield grasslands
- Existing infrastructure
- Previously disturbed land

The ecological context is characterised by:

- Extensive historic disturbance
- Ongoing vegetation management
- Fragmented habitat

9.4.2 Vegetation

The Project is located within managed airside grassland, dominated by Plains Grassland - Ecological Vegetation Class 132 (EVC 132), with some areas meeting the criteria for the EPBC Act listed NTGVVP.

The MDP development footprint supports a total of 7.7 hectares of native vegetation, with 5.9 hectares meeting the criteria for the EPBC Act listed NTGVVP. Of the 5.9 hectares of NTGVVP within the MDP development footprint, 1.23 hectares is subject to existing approvals for M3R associated with taxiways and roads required as part of M3R, as shown in Figure 16.

Given the Project's location within managed airside grassland, impacts to vegetation cannot be completely avoided, however, the Project location and extent of associated works have been selected to avoid or minimise impact to ecological communities and bio-connectivity so far as reasonably practicable.

As assessed and approved under EPBC 2024/09907, Project D will result in the direct and permanent removal of 6.12 hectares of Plains Grassland – EVC 132, of which 4.57 hectares is NTGVVP (Refer to Figure 16).

Further to the direct impacts, the proposed works will physically isolate a small area of identified NTGVVP near the Project's south-eastern extent (refer to Figure 16), resulting in this area falling below the threshold size for NTGVVP of 0.05 hectares.

The Project presented in this MDP will not result in any additional impacts to MNES, including NTGVVP beyond what has already been assessed and approved under EPBC 2024/09907, and no impacts to MNES occur outside this area.

While there are no additional impacts to MNES, there will be a small additional area of EVC 132 (0.16 hectares) that does not meet the criteria for the EPBC Act listed NTGVVP outside the EPBC Act action area that will require removal to facilitate the Project. The Bioregional Conservation Status of EVC 132 within the Victorian Volcanic Plain bioregion is endangered, and the Western (Basalt) Plains Grasslands Community is listed as a threatened community of flora and fauna under the Victorian *Flora and Fauna Guarantee Act 1988.* The additional area of EVC 132 requiring removal consists of small areas of airside vegetation, that is already physically isolated from larger patches.

Consistent with the mitigation measures identified in EPBC 2024/09907, retained native vegetation adjacent to the MDP development footprint will be protected through exclusion fencing, environmental protection signage, designated access routes, environmental inductions and hygiene controls to reduce the risk of weed or disease spread.

The Project will implement a Construction Environmental Management Plan (CEMP) to minimise impacts to vegetation during the construction phase. As described in EPBC 2024/09907 and **Section 9.12.2**, the CEMP will include specific mitigation measures relative to vegetation.

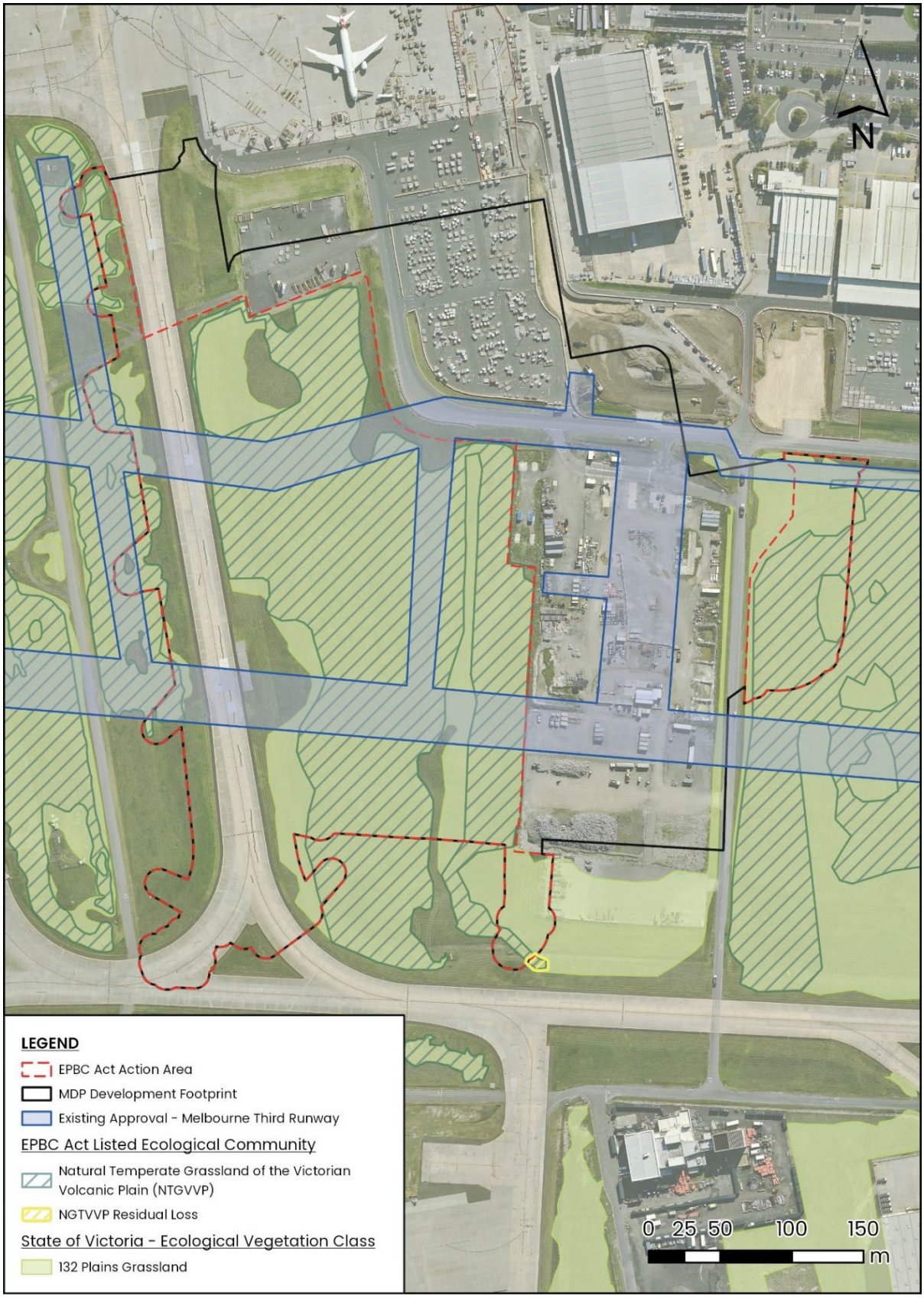


Figure 16: Vegetation impacts

9.4.3 Fauna

Habitat within the MDP development footprint is limited and highly modified, reflecting its location within an operational airfield environment.

Based on the review of DCCEEW's Protected Matters Search Tool and the Victorian Biodiversity Atlas undertaken as part of the EPBC 2024/09907, as well as previous surveys within the airport estate, the likelihood of fauna species of State or National significance occurring within the MDP development footprint is negligible to low.

While there is a medium to high likelihood of EPBC Act listed and other threatened fauna including Gang-gang Cockatoo, White-throated Needletail, Grey-headed Flying-fox and Golden Sun Moth, occurring within the broader airport estate, there is no suitable habitat within the MDP development footprint for these species, and therefore there are no direct impacts expected to these species.

While there are no direct impacts to these species, as they likely utilise areas within the north of the airport, they may fly over the MDP development footprint at times, and therefore, there may be indirect noise and dust impacts to these species during construction phase of the Project. These impacts are discussed further in **Section 9.9.**

Impacts to fauna are therefore expected to be negligible to low.

9.5 Heritage

9.5.1 Aboriginal cultural heritage

As the MDP development footprint is located entirely within Commonwealth land, Victorian state legislation does not apply. However, consideration has been given to the requirements of the Victorian *Aboriginal Heritage Act 2006* through review of previous assessments and existing Cultural Heritage Management Plans (CHMPs) relevant to the MDP development footprint.

Previous assessments undertaken at the airport concluded that there are no known Aboriginal cultural heritage values within the MDP development footprint. The MDP development footprint overlaps with existing approved CHMPs) obtained for other projects, including CHMPs 12774 and 16792 (refer to Figure 17).

APAM has an established approach of relying on existing approved CHMPs where proposed works are consistent with the activity descriptions and scope of works previously assessed under those CHMPs. This approach has been accepted by Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation (WWCHAC) for previous Melbourne Airport projects, including the approved Runway 16-34 Overlay Project. Consultation undertaken with the WWCHAC during that project confirmed that the relevant CHMPs could be applied to the overlapping project areas.

Given the works associated with the Project are consistent with the types of activities previously assessed under CHMP 12774 and CHMP 16792, and the entire MDP development footprint is located within the approved activity areas of those CHMPs. Accordingly, CHMP 12774 and CHMP 16792 provide an appropriate framework for the management of Aboriginal cultural heritage within the MDP development footprint, including requirements relating to the discovery, removal, custody, curation and management of any Aboriginal cultural heritage encountered during construction.

On this basis, impacts to Aboriginal cultural heritage are therefore expected to be negligible to low.

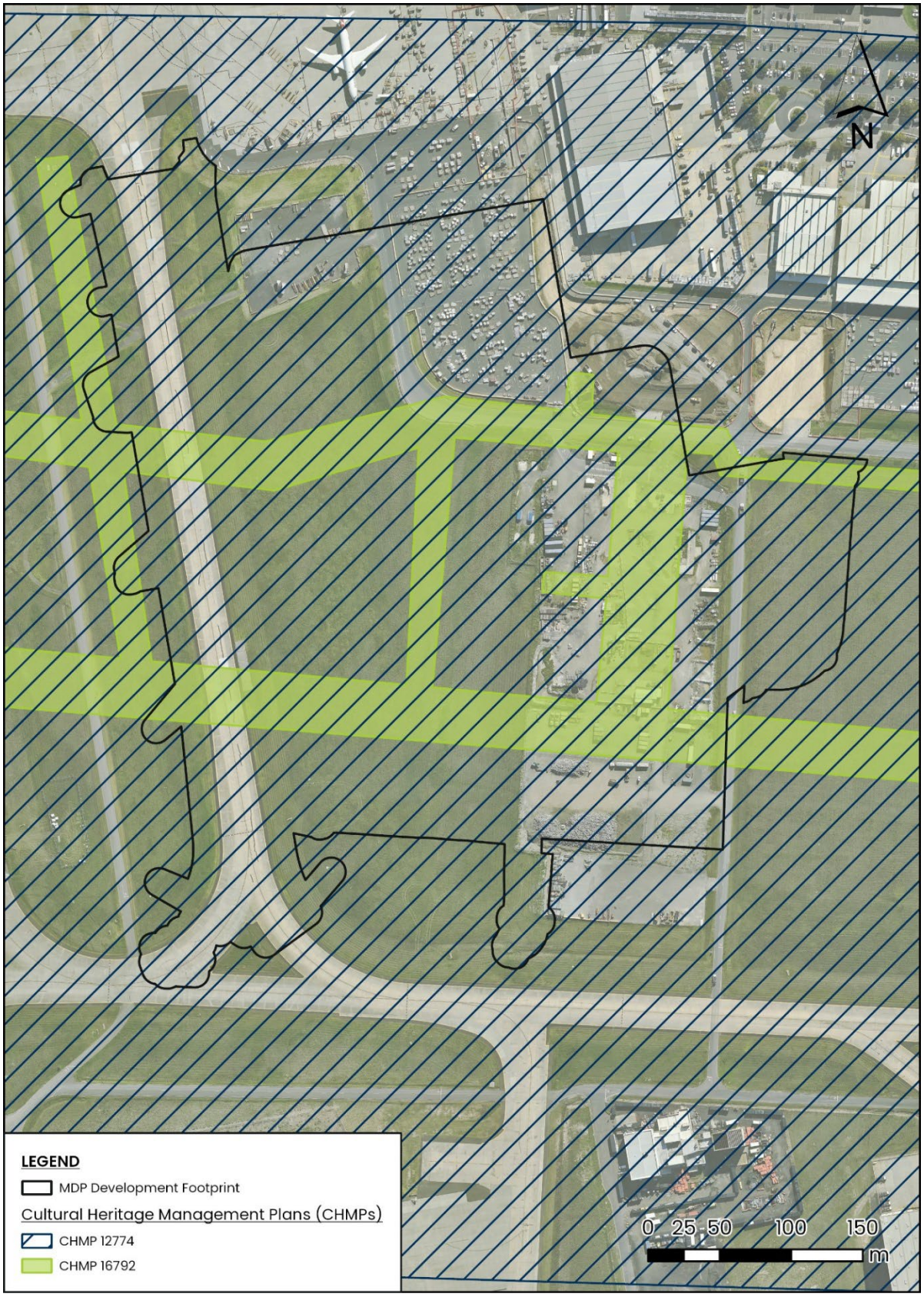


Figure 17: CHMPs 12774 and 16792

9.5.2 European heritage

As the MDP development footprint is located entirely within Commonwealth land, Victorian state legislation does not apply, however consideration has been given to the requirements of the Victorian *Heritage Act 2017* through review of previous assessments relevant to the MDP development footprint.

Previous assessments undertaken at the airport concluded that there are no known European heritage values within the MDP development footprint.

Impacts to European heritage are therefore expected to be negligible to low.

9.6 Contamination

Extensive contamination assessments have been undertaken across the airport estate, which provide an understanding of historical land use and operational practices, existing soil contamination conditions and the likely contamination status within the MDP development footprint. Previous assessments relevant to this MDP include:

- **Preliminary Soil Assessment (Aecom 2023)**
    - In 2023 Aecom undertook a targeted soil investigation as part of assessments near Taxiway Alpha North, which is adjacent to the MDP development footprint. The investigation included six test pits, seven boreholes to 2 metres depth and installation of a groundwater monitoring bore. Although the sampling locations are limited to the western portion of the MDP development footprint, they are considered representative of the conditions within the surrounding area.
    - The assessment found that soils generally comprised shallow fill or reworked natural material overlying natural clay. No foreign materials such as fragments of concrete, metal or brick were observed, and there was no visual evidence of contamination, such as staining or odours.
    - PFAS compounds were detected at low concentrations and were below the PFAS National Environmental Management Plan (NEMP) ecological criteria and Melbourne Airport PFAS Management Level 1 thresholds. However, detectable PFOS and PFHxS concentrations resulted in the material being classified as PFAS-impacted fill for off-site disposal purposes. The groundwater monitoring bore remained dry, and no groundwater impacts were identified.
- **Organochlorine Pesticides Assessment (Elgin Associates 2017)**
    - An assessment of organochlorine pesticides (OCPs) was undertaken by Elgin Associates in 2017 across airside areas of the airport estate. The investigation involved collection and analysis of 121 surface samples between the surface and 0.05 metres below ground level, including locations in close proximity to the MDP development footprint.
    - The assessment confirmed historical use of organochlorine pesticides at Melbourne Airport, consistent with past industry practices before these chemicals were deregistered in Australia.
    - While OCPs, primarily dieldrin, were detected at a limited number of locations elsewhere within the airport, none of the locations where OCP concentrations exceeded regulatory trigger levels were located within the MDP development footprint.

The principal potential sources of contamination relevant to the MDP development footprint are historical airport operational activities, including the potential use of aqueous film-forming foam, fuel and chemical handling and historic pesticide application. Potential exposure and migration pathways include direct contact with excavated soil, dust generation, mobilisation of affected soil in sediment-laden runoff, tracking by vehicles and personnel, and transport or disposal of excavated material. Potential receptors include construction personnel, retained vegetation, the airport stormwater drainage system and facilities receiving excavated material.

Based on the previous contamination assessments completed within proximity to the MDP development footprint, it is considered likely that contaminated soil will be encountered during groundbreaking such as excavation required as part of project construction activities.

While soils are likely to contain contaminants in varying concentrations, including per-and poly-fluoroalkyl substances (PFAS) at levels up to PFAS Management Level 2 as per *Melbourne Airport PFAS Management Framework* (APAM 2025), the scale, intensity and duration of excavation works is not considered to be significant.

Any PFAS-contaminated soil will be managed in accordance with the *Melbourne Airport PFAS Management Framework (*APAM 2025).

Prior to construction, soils will be assessed for suitability for reuse or the need for imported fill, with detailed procedures for sampling, handling, reuse, and disposal set out in the contractor's CEMP, consistent with the Melbourne Airport Environmental Management Plan (EMP) and the Melbourne Airport PFAS Management Framework. Whilst groundwater is not expected to be encountered during construction (see **Section 9.7**), any contaminated water resulting from construction would also be managed in accordance with the contractor's CEMP (and the airport's EMP) and the Melbourne Airport PFAS Management Framework

Further mitigation measures relative to contamination and identified in EPBC 2024/09907 are outlined in **Section 9.12.2.**

These impacts are temporary, localised, and can be effectively managed through standard construction controls.

9.7 Water Resources

The Project is not located near any rivers or creeks. Groundwater is understood to be approximately 23 metres below ground level and is not expected to be encountered, noting that most excavation will be relatively shallow and deeper excavation will be limited to localised drainage and service works. The Project is therefore unlikely to affect groundwater levels or groundwater flow.

Construction nevertheless has the potential to affect the airport stormwater drainage system through sediment-laden runoff, concrete wash water, spills or mobilisation of contaminated soil from exposed work areas and stockpiles. These pathways will be managed through staged disturbance, erosion and sediment controls, stabilisation of temporary stockpiles, diversion of stormwater away from exposed surfaces, refuelling and spill response procedures and other measures to be documented in the project-specific CEMP.

The completed Project will increase the area of hardstand within the MDP development footprint. Runoff will be collected through the new drainage infrastructure described in **Section 3.4.4.2**, including grated trench drains, flame-trap pits and detention infrastructure connected to the existing airport drainage network. Detailed design will confirm drainage capacity, water-quality and spill-containment requirements. Subject to these measures, the Project is not expected to materially affect receiving waters, drainage patterns, groundwater levels or water quality.

9.8 Waste and Resource Management

Construction will generate excavated soil, demolished pavement, concrete, asphalt, packaging and general construction waste. Materials will be reused or recycled where practicable, subject to contamination classification, engineering suitability and airport operational requirements. The project-specific CEMP will include measures to manage potential waste impacts during construction, including waste handling, storage and disposal requirements.

Subject to implementation of these controls, waste-related impacts are expected to be temporary, localised and manageable.

9.9 Construction Noise, Vibration and Air Quality

Noise, vibration and air quality impacts during construction are anticipated to be minimal. While there are some sensitive receivers within proximity to the MDP development footprint including the hotels (approximately 320 metres to the north-east), a childcare centre (approximately 820 metres to the north-east) and residential properties (approximately 1.8 kilometres to the east), construction noise, vibration and air quality impacts will be limited to potential indirect impacts as described below:

- **Noise and vibration:** While construction is expected to generate noise and vibration associated with excavation, earthworks and operating plant, these impacts will be temporary in nature and generally occur within standard construction hours, with out-of-hours works implemented where required to maintain safe and efficient airport operations. Given the Project's location within an active airport environment, construction noise and vibration levels are anticipated to be significantly lower than existing aircraft operations and temporary in nature.
- **Air quality:** During construction there is potential for fumes to be emitted from construction machinery and vehicles, and dust to be generated from earthworks and soil handling activities. Appropriate measures will be implemented to mitigate impacts to air quality via the Project's CEMP. With these measures in place, impacts to local air quality are expected to be minor, short-term, and within acceptable limits, with no residual impact to the surrounding environment.

Construction noise and vibrations will be managed through the project-specific CEMP, which will detail best-practice construction noise and vibration mitigation measures. Construction-related dust generated by earthworks and soil-handling activities will also be managed through the CEMP, including measures to minimise exposed soil and implement dust suppression where required.

Subject to implementation of these measures, construction noise, vibration and air-quality impacts are expected to be temporary, localised and manageable.

9.10 Cumulative Environmental Impacts

The Project will be delivered while other major airport projects may also be under construction, including Melbourne Airport's Third Runway, Taxiway Delta and Pier D Expansion. Potential cumulative environmental effects include concurrent dust and noise, soil disturbance, waste generation, construction traffic and increased demand on internal airport access routes.

These effects will be managed through coordinated construction staging, separate or coordinated access arrangements, project-specific CEMPs, delivery scheduling and Melbourne Airport's construction and environmental coordination processes. Where work areas or activities overlap, mitigation measures and monitoring requirements will be reviewed and coordinated across the relevant projects. Subject to these measures, cumulative environmental effects are expected to be temporary and manageable.

9.11 Whole of Environment Assessment

Impacts to the whole of environment must be considered for actions on or adjacent to Commonwealth land, regardless of whether MNES are present. A whole of environment assessment was undertaken as part of EPBC 2024/09907 to assess the likelihood of the action (including Project D) having a significant impact to the environment on Commonwealth land in accordance with the *Significant impact guidelines 1.2 - Actions on, or impacting upon, Commonwealth land, and actions by commonwealth agencies* (Commonwealth of Australia 2013).

Overall, it was concluded during that assessment that the action (including Project D) is likely to result in a significant impact on Commonwealth land, due to the following factors:

- Medium scale native vegetation clearance is likely to occur
- Substantial disturbance of contaminated soils has the possibility to occur
- The introduction of potentially invasive species is possible.

The relevant Project D findings from EPBC 2024/09907 have been reflected in this section of the MDP through the assessment of biodiversity, contamination, water resources, waste, construction noise and air quality, cumulative environmental impacts, environmental management measures and offsets.

A copy of the whole-of environment assessment undertaken as part of EPBC 2024/09907 is provided in **Section 6** of **Appendix B.** These findings are consistent with the assessment presented in this MDP, which confirms that environmental impacts are localised, limited and manageable.

9.12 Environmental Management

9.12.1 Construction Environmental Management Plan

A project-specific CEMP will be prepared to address the potential environmental impacts associated with construction of the Project and implement the mitigation measures identified in this section. The CEMP will be consistent with the *Environmental Management Plan Guidelines* (DCCEEW 2024), the *Melbourne Airport Environment Management Plan* (APAM 2021) and the *Melbourne Airport PFAS Management Framework* (APAM 2025), and will at a minimum outline the following:

- Purpose and objectives of the CEMP
- Roles and responsibilities
- Reference to relevant environmental legislation and management plans developed by APAM
- Summary of project details
- Detailed outline on environmental management controls for all relevant receptors (land, water, flora, fauna) both inside the MDP development footprint and in the adjacent areas, as well as measures to be taken to manage potential noise, waste and air quality issues
- Unexpected finds protocols
- Emergency response procedures
- CEMP implementation, monitoring and reporting/record keeping requirements
- Audits and inspections.

9.12.2 Specific mitigation measures

Although APAM does not intend to rely on EPBC 2024/09907 to authorise the Project, the CEMP will incorporate the mitigation measures required to comply with the conditions of EPBC 2024/09907 insofar as they relate to Project D. The CEMP will also address the additional land and activities within the current MDP development footprint and include the standard industry best-practice controls identified in Table 3.

Table 3: Indicative environmental mitigation measures to be included in the project-specific CEMP

Environmental aspect	Mitigation measure

Biodiversity (vegetation and fauna)	• Protect EPBC Act listed communities (i.e. NTGVVP) and other areas of native vegetation that are to be retained adjacent to the MDP development footprint, through:
	  ○ Installation of exclusion fencing identified with appropriate signage such as ’Environmental Protection Area’ or ‘No-go zone’ at regular intervals along the fence line.
	  ○ Restricting access to and from the MDP development footprint to designated access roads, and prohibiting vehicles traversing native and introduced grasslands outside of the MDP development footprint.
	• Ensure all employees and contractors involved in the project complete environmental inductions prior to undertaking works within the MDP development footprint.
	• Implement strict hygiene protocols that reduce the risk of establishment of novel and/or high threat weeds or disease including vehicle washdown procedures, weed control measures, erosion control and surface water management.
	• Designate areas outside areas of retained vegetation for all material stockpiles, vehicle parking and machinery storage within the MDP development footprint.

Environmental aspect	Mitigation measure
Heritage	• Comply with conditions under CHMP 12774 and CHMP 16792. • Prepare and implement an unexpected finds protocol.
Contamination	• Implement sampling, handling and disposal methodologies as per Melbourne Airport EMP and the Melbourne Airport PFAS management framework. • Stage works to limit the area of exposed surfaces at any one time. • Implement measures to prevent and manage potential mobilisation of contaminants, such as appropriate sediment fencing downslope of stockpiles, stabilisation of temporary stockpiles and diverting of stormwater away from exposed surfaces. • Implement measures to manage the offsite disposal (if unexpected contamination is unearthed) of soil/hardstand material excavated during excavation and construction works for the project, including sampling requirements, delineation of likely areas of contaminated soil/hardstand and disposal requirements. • Reduce the double handling of any excavated material wherever possible, by minimising stockpiling of material and maximising direct transportation of fill to the placement site. • Implement measures to verify that any fill material imported to the site is free from contamination. • Include requirements for vehicle and onsite personal hygiene to minimise the potential for transportation of PFAS and other potential contaminants offsite. • Install appropriate sediment and erosion controls. • Prepare and implement refuelling and spill response procedures, noting refuelling of vehicles and equipment will occur off-site where possible.
Construction noise, vibration and air quality	• Undertake activities generally within standard construction hours, with out-of-hours works implemented where required to maintain safe and efficient airport operations. • Minimise exposed soils where practicable. • Implement dust suppression, where required.
Waste	• Implement measures to manage potential waste impacts.
Monitoring, reporting audits and inspection	• Implement monitoring, reporting, record-keeping, audit and inspection requirements.
Post-construction rehabilitation	• Establish an erosion-resistant ground condition through a project-specific program of revegetation, erosion control and targeted weed management following completion of works.

9.13 Offset Strategy

An Offset Strategy was prepared as part of the EPBC 2024/09907, which covered all projects approved under EPBC 2024/09907. A summary relative to the Project is provided below:

- Residual impacts have been identified associated with the Project and are limited to the permanent removal of NTGVVP within the Project footprint
- APAM has secured a direct offset to compensate for the permanent removal of 4.57 hectares of NTGVVP within the MDP development footprint, in accordance with the *EPBC Act Environmental Offsets Policy* (DSEWPaC 2012)

- The proposed offset site is an advanced offset site location in Rokewood, Victoria, which sits within a broader site for which there is an existing agreement made under Section 69 of the *Conservation Forests & Lands Act 1987* between the landowner and the Department of Environment, Land, Water and Planning (DELWP, now the Department of Energy, Environment and Climate Action)
- Further details of the offset strategy and site are provided in **Section 9** of **Appendix B.**

9.14 Summary

Overall, the environmental impacts associated with the Project are localised and limited in extent. Impacts to the environment of Commonwealth land are temporary and manageable, and the Project results in acceptable environmental outcomes.

The Project will result in the permanent removal of native vegetation identified in **Section 9.4** and temporary construction effects associated with soil disturbance, contamination, stormwater, dust, noise, waste and construction activity. The Project-specific mitigation and management measures in **Section 9.12** will avoid or reduce these effects, while the residual impact to NTGVVP will be addressed through the offset strategy outlined in **Section 9.13**.

Through implementation of the proposed controls, residual impacts associated with the Project other than native vegetation removal are expected to be minor, localised and temporary. The assessment has considered the additional land within the MDP development footprint and the potential cumulative effects of concurrent airport construction.

10. Airport Safeguarding

10.1 Overview

A review of the impacts on aviation activity associated with the construction and operation of the Project has been undertaken with the following key areas identified as requiring assessment:

- Aircraft noise exposure levels
- Effect on flight paths
- Airspace requirements
- Lighting in the vicinity of the aerodrome
- Windshear
- Protection of communication, navigation and surveillance infrastructure
- Bird and animal hazard management
- Public safety areas.

These considerations are guided by, but not limited to, the National Airports Safeguarding Framework (NASF) guidelines. The NASF provides guidance on planning requirements for development that may affect aviation operations.

The key safeguarding considerations for the Project are expected to relate primarily to construction-phase management, including works near operational airfield infrastructure, temporary construction lighting, construction plant and equipment, airside access, traffic control, operational staging and stakeholder coordination.

10.2 National Airports Safeguarding Framework

The National Airports Safeguarding Framework is a national land-use planning framework that aims to:

- Improve community amenity by minimising aircraft noise-sensitive developments near airports, including the use of additional noise metrics and improved noise-disclosure mechanisms
- Improve safety outcomes by ensuring aviation safety requirements are recognised in land-use planning decisions by jurisdictions adopting guidelines on various safety-related issues.

The National Airports Safeguarding Framework applies to all Australian airports. The purpose of the framework is to enhance the current and future safety, viability and growth of aviation operations, by supporting and enabling the implementation of best practice in relation to land use assessment and decision making in the vicinity of airports.

The National Airports Safeguarding Framework was developed by the National Airport Safeguarding Advisory Group comprising Commonwealth, state and territory government planning and transport officials; the Department of Defence, CASA, Airservices Australia, and the Australian Local Government Association.

The most recent review of the National Airports Safeguarding Framework guidelines by National Airport Safeguarding Advisory Group was completed in 2023. It concluded the review of Guideline B (windshear) with no changes to the existing guideline and endorsed the updated Guideline C (Wildlife).

Pursuant to the Standing Council on Transport and Infrastructure agreement, it is the responsibility of each state jurisdiction to implement the National Airports Safeguarding Framework into their respective planning systems. Whilst the National Airports Safeguarding Framework Guidelines are referenced within the Victorian Planning Policy Framework, they are only as a "policy guideline". To ensure consistent application and compliance as a planning control, Melbourne Airport would welcome further progress on National Airports Safeguarding Framework implementation and education.

The National Airports Safeguarding Framework principles are set out in Figure 18 and the accompanying nine guidelines are shown in Figure 19.



Figure 18: National Airports Safeguarding Framework Principles

Source: DITRDCSA: https://www.infrastructure.gov.au/infrastructure-transport-vehicles/aviation/aviation-safety/aviation-environmental-issues/national-airports-safeguarding-framework/national-airports-safeguarding-framework-principles-and-guidelines#principles

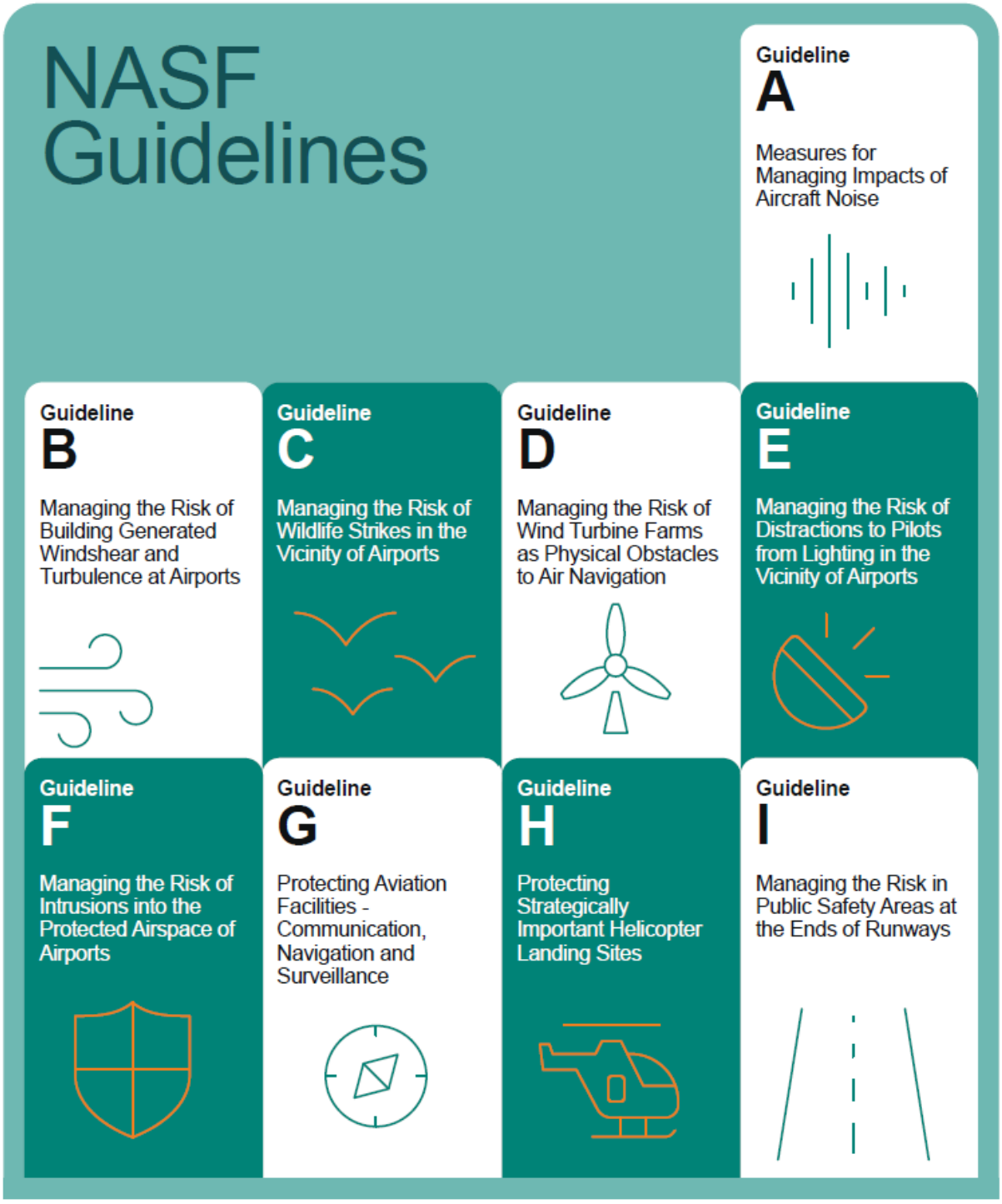


Figure 19: National Airports Safeguarding Framework Guidelines

The Project is consistent with the NASF Guidelines.

The following sections provide an assessment of the consistency of the Project against the matters addressed in the relevant NASF guidelines, as follows:

Table 4: ***NASF Guidelines Assessment***

NASF Guideline	MDP Section
Guideline A: Measures for Managing the Impacts of Aircraft Noise	Section 10.3
Guideline B: Managing the Risk of Building Generated Windshear and Turbulence	Section 10.4
Guideline C: Managing the Risk of Wildlife Strikes in the Vicinity of Airports	Section 10.5
Guideline D: Managing the Risk of Wind Turbine Farms as Physical Obstacles to Air Navigation	Not addressed in this MDP. No windfarms are planned as part of this Project.
Guideline E: Managing the Risk of Distraction to Pilots from Lighting in the Vicinity of Airports	Section 10.6
Guideline F: Managing the Risk of Intrusions into Protected Airspace of Airports	Section 10.7
Guideline G: Protecting Aviation Facilities – Communications, Navigation and Surveillance (CNS)	Section 10.9
Guideline H: Protecting Strategically Important Helicopter Sites	Not addressed in this MDP. No helicopter sites are proposed as part of this Project.
Guideline I: Public Safety Areas	Section 10.10

In addition to the NASF guideline matters, the following sections also address the effect of this Project on flight paths, control tower visibility and the consideration of operational risks and mitigation measures.

10.3 Aircraft Noise Exposure Levels

In accordance with Section 91(1)(e) of the Airports Act, a MDP is required to identify whether the Project will affect noise exposure levels at the airport. Further, in accordance with Section 91 (1) (f) of the Airports Act, consideration must be given to management of forecast high-noise areas.

The Project is not anticipated to have any impact on the noise exposure levels at Melbourne Airport. Noise exposure within and outside the airport will not change as a result of the Project as works are entirely consistent with current airport operations. The Project seeks to enhance the existing aircraft infrastructure and subsequently, will not directly impact noise levels (with the exception of noise generated during the construction period).

The Project will not affect flight paths at the airport and will not affect the Australian Noise Exposure Forecast in the 2022 Master Plan. The Project is located between the 25 and 35 ANEF contours and as an ‘Other industrial activity’ it is considered acceptable in this ANEF zone pursuant to Australian Standard AS2021-2015: Acoustics – Aircraft noise intrusion – Building siting and construction.

In addition, the nearest residential area is located approximately 1.8 kilometres to the east of the MDP development footprint and consequently, the substantial separation distance will further reduce any potential for detrimental noise impacts. The impact of noise is likely to be negligible compared to the operational noise associated with aircraft and local traffic movements.

In summary, noise exposure outside the airport will not change as a result of the Project. Further, relevant mitigation measures for the Project will be detailed in the CEMP for the Project prior to construction.

10.4 Building-Generated Windshear and Turbulence

The proposed development is located within two assessment trigger areas identified, in MP22, for potential building induced windshear as specified in the NASF Guideline B. The Guideline states that buildings in the assessment trigger area that are more than 35 times their height from the relevant runway centreline (i.e., they do not penetrate the 1:35 surface) will not pose a risk and do not require aerodynamic modelling (see Figure 10-4 of the guideline). As all the development within the scope of this MDP will be constructed either at or below ground level, infringement of the 1:35 surface is not anticipated. Proposed earthworks will be compared to the elevation of the relevant runways to ensure the 1:35 surface is not infringed.

The Project is not expected to create a material building generated windshear or turbulence risk. The permanent works primarily comprise apron pavement, taxiway works, lighting and supporting ground operations infrastructure, and do not include substantial vertical built form.

10.5 Bird and Animal Hazard Management

NASF Guideline C seeks to manage wildlife strike risk by providing guidance on land uses and activities that may attract wildlife near airports.

The Project will be delivered within an operational airfield environment. Wildlife hazard risk will need to be considered in the design and construction of any drainage, grassed areas, landscaping, temporary water pooling, stockpiles, waste management areas or construction compounds.

Construction activities will be managed to minimise wildlife attraction, including through appropriate waste control, drainage management and site housekeeping.

The Project is not expected to materially increase wildlife strike risk, provided drainage, landscaping and construction management measures are designed to avoid wildlife-attracting outcomes.

10.6 Lighting in the Vicinity of the Aerodrome

NASF Guideline E provides guidance on managing lighting that may distract or confuse pilots, particularly where lighting is located near runways, taxiways or approach and departure paths.

Lighting systems include new floodlighting, taxiway centreline lighting, and apron edge lighting to support the new aprons, integrated with Visual Docking Guidance Systems (VDGS) and coordinated with APAM's existing infrastructure.

These permanent lighting systems will be designed in accordance with relevant CASA Manual of Standards Part 139 requirements and airport technical standards. Temporary construction lighting, including light towers, will be managed through operational controls and consultation with Melbourne Airport Operations where required.

10.7 Effect on Flight Paths

In accordance with Section 91(1)(ea) of the Airports Act, a MDP is required to address the potential effects that the development may have on the airport flight paths.

A key consideration in the planning of the Project was the impact on aircraft operations at Melbourne Airport. In particular, the location of the MDP development footprint versus the orientation of Melbourne Airport's runways and the associated aircraft approach and departure paths must be considered.

The Project works will not impact on the operation of the established flight paths at Melbourne Airport. The program of works will provide critical apron infrastructure in the south-east airfield precinct to facilitate and support the overall expansion and growth of terminal apron capacity and the parallel runway system. The airside infrastructure works will have direct operational and safety benefits for civil aviation users with safer and more efficient ground aircraft movement.

Given the nature of the proposed development, comprising taxiway and apron construction to facilitate additional parking and ground movement, the proposed development will not affect any flight paths.

10.8 Airspace Requirements

NASF Guideline F provides advice for planners and decision makers about working within and around protected airspace, including OLS and TIFPOP intrusions, and how these can be better integrated into local planning processes to protect aircraft from obstacles or activities that could be a threat to safety.

The Project will be assessed for potential impacts on protected airspace during detailed design and construction planning. Permanent infrastructure associated with apron and airfield works is not expected to materially affect protected airspace, subject to final design confirmation.

10.8.1 Obstacle Limitation Surfaces (OLS)

The proposed infrastructure including airfield lighting system will be designed to comply with the applicable OLS height restrictions across the Project site. The permanent works are not expected to penetrate the OLS.

Temporary construction activities will be managed to protect the OLS during delivery of the Project. This will include identifying applicable work areas and height limits in the Construction Management Plans, clearly marking work areas on site, using visual aids to identify changes in height restrictions and verifying equipment heights before works commence each shift.

10.8.2 Terminal Instrument Flight Procedure Obstacle Protection (TIFPOP)

The critical surface for the subject area is the OLS. At this stage, it is not envisaged that the construction of the proposed development, or the development itself will have an impact on any Terminal Instrument Flight Procedure Obstacle Protection (TIFPOP) surface. If a temporary TIFPOP infringement is required for construction, Melbourne Airport will liaise with the necessary authorities to minimise impacts and seek the necessary controlled activity approvals if required.

More specifically, Airservices will be notified if any works, including the use of construction equipment, may pose a hazard to aircraft operations to ensure that all instrument flight procedures maintained by Airservices are safe for aircraft operations. Furthermore, Airservices will be notified, in advance, of any changes that may affect published procedures, such as changes to the new aeronautical ground lighting, apron floodlighting and associated control systems.

10.8.3 Crane Activity During Construction

Construction activities will require management of temporary plant and equipment within Melbourne Airport’s prescribed airspace environment. Working height controls will be applied to manage the risk of unauthorised intrusion into protected airspace. These controls may include delineation of work areas, visual aids identifying height restrictions, verification of equipment heights and reference to OLS diagrams within relevant management plans.

Crane use may be required for selected construction activities, including installation of floodlight towers and associated infrastructure. Any crane activity with the potential to affect protected airspace would be reviewed during detailed construction planning and managed through Melbourne Airport’s relevant approval, notification and coordination processes before use.

Any crane use would be subject to Melbourne Airport’s established airspace assessment and approval processes, including consultation with relevant aviation authorities where required. This process would confirm appropriate controls such as maximum operating height, location, duration, lighting, marking and operational restrictions.

Crane activities would be temporary, construction related and undertaken in accordance with relevant approvals. Subject to these controls, crane use is not expected to adversely affect prescribed airspace, aviation safety or airport operations.

10.9 Protection of Communication, Navigational and Surveillance Equipment

NASF Guideline G provides land use planning guidance to better protect CNS facilities that support the systems and processes in place by Airservices Australia, the Department of Defence or other agencies under contract with the Commonwealth Government to safely manage the flow of aircraft into, out of and across Australian airspace.

Airservices Australia will be consulted with regard to any impact on the performance of Precision/Non-Precision Navigational Aids, High Frequency/Very High Frequency (HF/VHF) Communications, Advanced-Surface Movement Guidance and Control Systems (A-SMGCS), Radar, Precision Runway Monitor (PRM), Automatic Dependent Surveillance Broadcast (ADS-B), WAM or Satellite/Links to ensure that works will not affect any sector or circling altitude, nor any instrument approach or departure procedure at Melbourne Airport.

Airservices has advised that based on the information currently available, the proposed apron area is not expected to result in any significant impact on the ML16 Localizer. However, Airservices notes that any structure, aircraft, equipment, plant, or temporary works within the proposed development that exceeds a height of 10m AGL, either during construction phase or following the completion of works, will require assessment to determine any potential impact on the facility.

Airservices also advised that a review of their drawing records has not identified any Airservices owned communications cabling infrastructure within the area of the proposed development. However, drawing records are reference only and may not cover all the Airservices cables. As a result, Airservices requested the following cabling controls to be applied:

- *A Service Audit must be undertaken to confirm cable routes/depth using non-destructive method (Hydro excavation and/or Ground Penetrating Radar - GPR).*
- *If Airservices cables are identified, cabling controls needs to be reassessed.*
- *Mechanical excavation is not permitted within 1 metre of Airservices conduits.*
- *The use of radio frequency (RF) transmitting equipment such as scanners (e.g. GPR) have the potential to interfere with the aviation RF environment, most commonly within the aviation very high frequency (VHF) band (communication). An analysis must be performed based on the specifications of the scanner, and if it is discovered that an adverse impact is possible, Airservices recommends that different equipment is used and that suitable contact details are provided to ATC. Should interference be detected, ATC has the authority to terminate the works immediately.*
- *A Worksplan will be required if any works is undertaken within 1m of Airservices cabling assets or where the works have the potential to impact services.*

Melbourne Airport will comply with these requirements.

10.10 Public Safety Areas

NASF Guideline I provides guidance on managing risk to public safety in areas near the ends of runways. Assessment envelopes are determined based on the proximity of the site to the runway centreline.

Public Safety Areas (PSAs) are mapped in the current Master Plan 2022. A PSA associated with the future east-west runway shown in the Master Plan traverses part of the subject site. However, the proposed development does not constitute an incompatible use or activity pursuant to NASF Guideline I. Whilst the Project will include fuel hydrant infrastructure, this will not constitute the “manufacture or bulk storage of flammable, explosive or noxious materials” which is an incompatible activity listed in Guideline I.

As stated in **Section 3.1**, in the long term, upon construction of the future east-west runway, some changes to the Project apron may be required to ensure that the runway can operate in accordance with the Master Plan. However, the parallel east-west runway is currently foreseen to be implemented beyond 2050.

10.11 Air Traffic Control Tower Visibility

As the development within the scope of this MDP will be constructed either at or below ground level, visibility from the ATC tower to existing aircraft movement areas will not be impacted. The existing built form of the airport allows clear sight lines to all of the proposed aircraft movement areas.

10.12 Consultation on Operational Risks and Mitigation Measures

Melbourne Airport is committed to effective engagement and consultation with stakeholders that are impacted by the development. Melbourne Airport will continue to work with Airservices Australia to ensure its assets and infrastructure are not detrimentally impacted. The design of the elements included within this MDP will meet CASA and Airservices Australia requirements.

11. Implementation

11.1 Other Project Approvals

Section 91(g) of the Airports Act requires an MDP to identify the approvals that the airport-lessee company has sought, is seeking, or proposes to seek under Division 5 or Part 12 associated with a Major Development.

Following the approval of this MDP by the Minister, further statutory and internal approvals are required under the Airports Act prior to the commencement of any construction works.

New developments and building works at Melbourne Airport are subject to an internal approval process managed by APAM, alongside independent approvals to ensure consistency with the approved MDP, the prevailing Melbourne Airport Master Plan, and the Airport Environment Strategy.

Independent statutory approvals for the construction of the proposed facilities will be sought through two key regulatory delegates:

- The Airport Building Controller (ABC): The ABC exercises the powers and functions prescribed by the *Airports (Building Control) Regulations 2025*, made under Division 5 of the Airports Act.
- The Airport Environment Officer (AEO): The AEO assesses the proposal against the environmental requirements of the Airports Act, the *Airports (Environment Protection) Regulations 2026*, and the environmental commitments established in the Master Plan and Environment Strategy. The AEO is also responsible for examining Construction and Operational Environmental Management Plans.

11.2 Building and Environmental Approval Process

The overall building activity approval process comprises the following sequential components:

1. Airport Operator's Consent (or Airport Lessee Consent): Granted by Melbourne Airport (APAM) after evaluating the proposed development to ensure it complies with the approved MDP, the Master Plan, the Environment Strategy, and Melbourne Airport's published design and building guidelines.
2. Building Permit: Issued by the ABC. It is important to note that the ABC cannot issue a building approval without the prior written consent of APAM.
3. Environmental Assessment: Assessment of the proposal by the AEO and Melbourne Airport Environment officers, which includes a thorough review and approval of the CEMP prepared by the construction contractor.
4. Permit to Commence Work (PERCOW): Issued by Melbourne Airport once all prerequisite conditions and management plans are satisfied.
5. Certificate of Compliance: Issued by the ABC upon the successful completion of the construction works, allowing for the occupancy and operation of the new development.

11.3 Construction Environmental Management Plan

The purpose of a CEMP is to either eliminate or significantly reduce the impacts of construction on the environment to the satisfaction of Melbourne and the AEO. A CEMP for the Hotel Apron South Project will be prepared at a later date.

Before construction commences, the development contractor(s) will be required to prepare and submit for endorsement by the Melbourne Airport Environment Team, a CEMP covering all aspects of the construction of the Project. This plan must include a monitoring, auditing and reporting system to be used throughout the duration of the Project.

Regular site audits will be carried out by the Melbourne Airport Environment Team to ensure compliance with the approved CEMP. The Airport Environment Officer will also be involved in the site audits.

11.4 Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) will be prepared by the contractor prior to the commencement of construction works to define the measures and procedures required to safely and efficiently manage traffic within and surrounding the project area. The CTMP will detail proposed road closures, temporary traffic arrangements, diversion routes, access and egress provisions, and traffic control measures necessary to maintain safe operations during construction. It will ensure that continuous and unobstructed access is provided to critical airport facilities and users, and that disruptions to existing operations are minimised to the extent practicable. The CTMP will also outline coordination requirements with relevant stakeholders, communication and notification processes, and will be subject to approval by the Melbourne Airport prior to implementation.

11.5 Part 13 Permit under the EPBC Act

Under Section 201 of the EPBC Act, a Part 13 permit to clear threatened species and ecological communities must be obtained from DCCEEW prior to clearing of any listed threatened species or community.

12. Consultation and Approval Process

12.1 Consultation Objectives

Melbourne Airport is committed to comprehensive consultation and engagement with the community. This section sets out Melbourne Airport's stakeholder consultation objectives, principles and proposed activities for the Hotel Apron South Project MDP.

Melbourne Airport's well-established communications and engagement framework is built on global best practice, as recognised by the Engagement Institute (formerly International Association of Public Participation (IAP2)). The framework also considers the *Airservices Australia Engagement Standard* (2023) and is underpinned by the airport's set of core engagement principles – purposeful, respectful, transparent, responsive, inclusive and committed to continuous improvement.

These principles have been implemented through a comprehensive engagement methodology that includes:

- Clear and accessible information sharing through newsletters, fact sheets, videos, webinars, and translated materials
- Authentic and inclusive engagement activities such as community pop-ups, school incursions, stakeholder briefings, and interpretive presentations via the community mobile trailer
- Strategic partnerships with community organisations to build trust and reach underrepresented groups, including Culturally and Linguistically Diverse (CALD) communities through interpreter services, multicultural media outreach, and local partnerships
- Embedding engagement culture across Melbourne Airport, including employee volunteering and internal training programs
- Monitoring and evaluation mechanisms, including regular community surveys, to capture feedback, measure awareness and sentiment, and inform strategy adjustments
- Tailored engagement with neighbouring communities on major projects
- Initiatives to enhance accessibility and engagement, such as bringing airport information directly to communities, schools, and events via the mobile trailer with interpretive materials.

The Hotel Apron South Project will adopt this proven framework, tailoring it to the specific context and needs of the Project while maintaining the same commitment to best practice, transparency, and community-led engagement.

12.2 Preliminary Consultation

In accordance with Melbourne Airport's Consultation Strategy for the Project, the following actions have been undertaken in the preparation of the MDP.

As noted in **Section 2** of this report, prior to the preparation of the Preliminary Draft MDP, consultation was undertaken as part of the EPBC Act approval process, including public exhibition of the EPBC Act referral and preliminary documentation.

A range of key stakeholders were briefed on the Project during preparation of the Preliminary Draft MDP, prior to public exhibition. These included:

- DCCEEW
- DITRDCSA
- Department of Transport and Planning (DTP)

12.3 Advice to Government

In accordance with Section 92(1A) of the Airports Act, the following persons and authorities will be advised of the Preliminary Draft MDP:

(a) the Minister, of the State in which the airport is situated, with responsibility for town planning or use of land

(b) the authority of that State with responsibility for town planning or use of land

(c) each local government body with responsibility for an area surrounding the airport.

In addition, consistent with Sections 91 and 92 of the Airports Act, consultation will also be undertaken with the Civil Aviation Safety Authority (CASA) and Airservices Australia in relation to operational and safety matters.

Written advice of the Preliminary Draft MDP will be provided to the above State and local government authorities prior to, or at the commencement of, the public consultation period, in accordance with Section 92(1A).

This advice will include:

- A copy of the Preliminary Draft MDP
- Description of the proposed development
- Details of how submissions may be made.

Targeted briefings will also be provided to key advisory forums, including the Planning Coordination Forum (PCF) and Community Aviation Consultation Group (CACG), to support dissemination of information and stakeholder awareness.

Advice provided by government agencies will be formally recorded and considered separately to public submissions (refer **Section 12.4**).

12.4 Public Comment

Pursuant to Section 92(1) of the Airports Act, the Preliminary Draft MDP will be subject to a formal period of public comment.

Public notice of the Preliminary Draft MDP will be given in accordance with Section 92(2) of the Airports Act, including:

- Publication of a notice in a newspaper circulating generally within Victoria
- Publication of the notice on the Melbourne Airport website.

The notice will specify:

- That the Preliminary Draft MDP has been prepared
- The location(s) and website where the document may be accessed
- The submission period
- The process for making written submissions.

The Preliminary Draft MDP will be made publicly available for inspection:

- On the Melbourne Airport website
- Within Melbourne Airport's head offices at Terminal 4.

In accordance with Section 92(3) of the Airports Act, the standard public consultation period is 60 business days. A reduced consultation period of 15 business days was approved by the Minister on 11 May 2026.

The public consultation period is expected to run from 5 August 2026 to 25 August 2026 (15 business days).

All submissions received during the public consultation period will be:

- Recorded in a submissions register
- Acknowledged where contact details are provided
- Assessed having regard to the matters raised and their relevance to the MDP.

A Consultation Report (Supplementary Report) will be prepared to:

- Summarise the issues raised in submissions
- Distinguish between submissions received from government agencies and the general public
- Document Melbourne Airport's response to each issue raised, including any resulting amendments to the MDP.

Government agency advice provided under Section 92(1A) will be considered as part of a formal intergovernmental consultation process and will be documented separately from public submissions to ensure transparency in how statutory advice has informed the final MDP.

12.5 Submission to Minister

Upon completion of the above consultation the Draft MDP will be submitted to the Minister for approval.

In accordance with Section 92(4) of the Airports Act, the following will be submitted to the Minister:

- The Draft MDP;
- Copies of all submissions received during the consultation period;
- A Supplementary Report detailing:
    - A summary of issues raised
    - Responses to submissions
    - Any amendments made to the MDP
    - Evidence that the consultation requirements under Section 92 have been satisfied, including copies of published notices.

13. Conclusion

The Hotel Apron South Project represents a critical component of Melbourne Airport's ongoing airfield expansion and infrastructure program, supporting the safe, efficient and sustainable operation of the airport in response to forecast growth in aviation demand. The Project delivers additional aircraft parking capacity, renews essential taxiway infrastructure, and provides supporting ground operations facilities required to maintain and enhance airside functionality.

The Project is strongly justified on the basis of operational need and long-term planning outcomes. It directly addresses current and forecast constraints in aircraft stand availability and apron efficiency and supports Melbourne Airport's role as a nationally significant passenger, freight and economic gateway. It is also a key enabling project for broader airfield and terminal development identified in the approved Melbourne Airport Master Plan 2022 and emerging Master Plan 2027.

This MDP demonstrates that the Project is consistent with the requirements of the Airports Act, the Melbourne Airport lease, and the approved Master Plan framework. It aligns with the Aviation Precinct land use intent and supports the strategic development objectives of growth, safety, efficiency and safeguarding. The Project is also consistent with relevant State and local planning policy settings, to the extent applicable to Commonwealth land.

Environmental impacts associated with the Project have been comprehensively assessed. These impacts are largely confined to managed airside areas and include vegetation removal and construction-related disturbance. No additional impacts to MNES beyond those previously assessed and approved under EPBC 2024/09907 are expected. A robust framework of mitigation, management and offset measures will be implemented through a project-specific Construction Environmental Management Plan and associated environmental controls, ensuring impacts are appropriately managed and minimised.

The Project will not adversely affect aircraft noise exposure levels, flight paths, or protected airspace, and is consistent with the National Airports Safeguarding Framework. Construction and operational risks will be appropriately managed through established airport planning, design and operational controls.

From a socio-economic perspective, the Project will generate employment during construction and support the continued growth and operational efficiency of Melbourne Airport. By enhancing airside capacity and resilience, the Project contributes to the broader economic, tourism and freight functions of the airport and reinforces its role as a key driver of economic activity for Victoria.

In summary, the Project represents a logical, necessary and well-planned expansion of Melbourne Airport's airside infrastructure. It is consistent with statutory requirements, supported by robust technical assessment, and delivers clear operational, economic and strategic benefits. The Project is therefore appropriate for approval under the Airports Act.

14. Appendix A: Consistency with Airports Act 1996

Table A.1 Airports Act Major Development Plan requirements checklist

Airports Act Requirement	Where it is addressed in the MDP
Section 91: Contents of major development plan (1) A major development plan, or a draft of such a plan, must set out: (a) the airport-lessee company's objectives for the development; and	• Section 3: Description of proposal, Subsection 3.2 Project Objectives
(b) the airport-lessee company's assessment of the extent to which the future needs of civil aviation users of the airport, and other users of the airport, will be met by the development; and	• Section 3: Description of Proposal • Section 4: Project Justification • Section 7: Socio – Economic Assessment, Subsection 7.3.4: Civil Aviation User Benefits
(c) a detailed outline of the development; and	• Section 3: Description of Proposal
(ca) whether or not the development is consistent with the airport lease for the airport; and	• Section 5: Legislative Framework, Subsection 5.8: Melbourne Airport Lease
(d) if a final master plan for the airport is in force, whether or not the development is consistent with the final master plan; and	• Section 5: Legislative Framework, Subsection 5.5: Melbourne Airport Master Plan 2022 (Approved)
(e) if the development could affect noise exposure levels at the airport – the effect that the development would be likely to have on those levels; and	• Section 10: Airport Safeguarding, Subsection 10.3: Aircraft Noise Exposure Levels
(ea) if the development could affect flight paths at the airport – the effect that the development would be likely to have on those flight paths; and	• Section 10: Airport Safeguarding, Subsection 10.7: Effect on Flight Paths
(f) the airport-lessee company's plans, developed following consultations with the airlines that use the airport, local government bodies in the vicinity of the airport and – if the airport is a joint user airport – the Department of Defence, for managing aircraft noise intrusion in areas forecast to be subject to exposure above the significant ANEF levels; and	• Section 10: Airport Safeguarding, Subsection 10.3: Aircraft Noise Exposure Levels •
(g) an outline of the approvals that the airport-lessee company, or any other person, has sought, is seeking or proposes to seek under Division 5 or Part 12 in respect of elements of the development; and	• Section 11: Implementation, Subsection 11.1: Other Project Approvals and Subsection 11.2: Building and Environmental Approval Process
(ga) the likely effect of the proposed developments that are set out in the major development plan, or the draft of the major development plan, on: (i) traffic flows at the airport and surrounding the airport; and (ii) employment levels at the airport; and (iii) the local and regional economy and community, including an analysis of how the proposed developments fit within the local planning schemes for commercial and retail development in the adjacent area; and	• Section 8: Traffic Assessment & Ground Transport Infrastructure • Section 7: Socio – Economic Assessment, Subsection 7.2.4: Employment and Subsection 7.3.1 Employment • Section 6: Consistency with State and Local Planning and Section 7: Socio-Economic Assessment

(h) the airport-lessee company's assessment of the environmental impacts that might reasonably be expected to be associated with the development; and	• Section 2: EPBC Act Context • Section 9: Environmental Assessment
(j) the airport-lessee company's plans for dealing with the environmental impacts mentioned in paragraph (h) (including plans for ameliorating or preventing environmental impacts); and	• Section 9: Environmental Assessment
(k) if the plan relates to a sensitive development – the exceptional circumstances that the airport-lessee company claims will justify the development of the sensitive development at the airport; and	Section 71A(2) of the Airports Act defines a sensitive development as *the development of, or a redevelopment that increases the capacity of, any of the following:* *(a) a residential dwelling* *(b) a community care facility* *(c) a pre-school* *(d) a primary, secondary, tertiary or other educational institution* *(e) a hospital.* Not applicable. The proposal is not a sensitive development.
(l) such other matters (if any) as are specified in the regulations	Not applicable
(3) The regulations may provide that, in specifying a particular objective, assessment, outline or other matter covered by subsection (1), a major development plan, or a draft of such a plan, must address such things as are specified in the regulations.	Not applicable
(4) In specifying a particular objective or proposal covered by paragraph (1)(a), (c) or (ga), a major development plan, or a draft of a major development plan, must address: (a) the extent (if any) of consistency with planning schemes in force under a law of the state in which the airport is located; and (b) if the major development plan is not consistent with those planning schemes – the justification for the inconsistencies.	• Section 6: Consistency with State and Local Planning
(6) In developing plans referred to in paragraph (l)(f), an airport-lessee company must have regard to Australian Standard AS2021 – 2000 ("Acoustics – Aircraft noise intrusion – Building siting and construction") as in force or existing at that time.	• Section 10: Airport Safeguarding, Subsection10.3: Aircraft Noise Exposure Levels

15. Appendix B: EPBC 2024/09907 Preliminary Documentation

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Melbourne Airport Future Airfield Projects: Preliminary Documentation for assessment under the EPBC Act

EPBC 2024/09907

3 MARCH 2026

Australia Pacific Airports (Melbourne) Pty Ltd

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Glossary

ABC	Airport Building Controller
AEO	Airport Environment Officer
AGL	Airfield ground lighting
Airports Act	Airports Act 1996 (Cth)
APAM	Australia Pacific Airports (Melbourne) Pty Ltd
BEC	Bajwa EnviroConsult Pty Ltd
CASA	Civil Aviation Safety Authority
DAWE	Department of Agriculture, Water and the Environment
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DITRDCSA	Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999 (Cth)
EVC	Ecological Vegetation Class
FFG Act	Flora and Fauna Guarantee Act 1988 (Vic)
ICT	Information and communication technologies
M3R	Melbourne Airport's Third Runway
MAPMP 3.0	Melbourne Airport Pavement Maintenance Program 3.0
MDP	Major Development Plan
MOS	Manual of Standards
NTGVVP	Natural Temperate Grassland of the Victorian Volcanic Plain
OMP	Offset Management Plan
PAPI	Precision approach path indicator
PFAS	Per- and polyfluoroalkyl substances
PFAS NEMP	PFAS National Environmental Management Plan
TEC	Threatened ecological community
TSSC	Threatened Species Scientific Committee
VPP	Victoria Planning Provisions
VQA	Vegetation Quality Assessment

1. Introduction

Bajwa EnviroConsult Pty Ltd (BEC) has been engaged by Australia Pacific Airports (Melbourne) Pty Ltd (APAM) to prepare this Preliminary Documentation in support of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral application for future airfield developments over the next 5-10 years which are expected to impact on matters of national environmental significance (MNES). These projects include:

- Project A – Airfield Renaming
- Project B – Melbourne Airport Pavement Maintenance Program 3 (MAPMP 3)
- Project C – Runway 09/27 overlay
- Project D – Hotel Apron South
- Project E – Staff Car Park Extension

BEC understands that the Department of Climate Change, Energy, the Environment and Water (DCCEEW) is supportive of a more strategic approach to EPBC Act referrals for developments at Melbourne Airport. With consideration to this, the above projects combined represent the proposed action which is subject of EPBC reference 2024-09907. There may be other airfield projects which arise in the next 5-10 years which also impact on MNES. In these instances APAM will liaise with DCCEEW with regard to the proposed approval approach.

This Preliminary Documentation has been prepared with consideration to further information requested by DCCEEW in their letter dated 24 October 2024, and additional comments provided by DCCEEW on 23 October 2025 and 16 September 2025. Appendix H includes tables outlining how each item in the DCCEEW RFI's have been addressed within this document. This documentation also provides further information relating to specific sections of the application form in the EPBC Act Business Portal, as outlined in Table 1 below.

Table 1 Summary of supporting information provided in this document

Portal section	Information required	Location in this document
1.2.1	Provide an overview of the proposed action, including all proposed activities.	Section 3 – Description of the action
1.2.6	What Commonwealth or state legislation, planning frameworks or policy documents are relevant to the proposed action, and how are they relevant?	Section 2 – Regulatory framework
3.2.1	Describe the flora and fauna within the affected area and attach any investigations of surveys if applicable.	Section 4 – Habitat assessments
3.2.2	Describe the vegetation (including the status of native vegetation and soil) within the project area.	Section 4.5 – Summary of targeted surveys for threatened ecological communities

Portal section	Information required	Location in this document
4.1.4.2	Briefly describe why your action has a direct and/or indirect impact on these protected matters.	Section 5.1 – Nature of impacts
4.1.4.5	Describe why you consider this to be a Significant Impact.	Section 5.3 – Severity of impacts Section 6 – Impacts to the environment of Commonwealth land
4.1.4.10	Please describe any avoidance or mitigation measures proposed for this action and attach any supporting documentation for these avoidance and mitigation measures.	Section 8 – Avoidance, mitigation and management measures
4.1.4.11	Please describe any proposed offsets and attach any supporting documentation relevant to these measures.	Section 9 – Offsets

2. Regulatory framework

Melbourne Airport is located on Commonwealth land and as such is subject to Commonwealth legislation, primarily the *Airports Act 1996* (Airports Act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

The relevant regulatory requirements, planning frameworks and policy documents for the proposed action are outlined below.

2.1. Airports Act

The Airports Act is administered by the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCSA) and is the primary Commonwealth legislation applicable to Melbourne Airport.

Section 89(1) of the Airports Act classifies certain types of airport development as 'major airport developments' for which an airport lessee company is required to seek approval through a Major Development Plan (MDP). These developments include:

(m) a development of a kind that is likely to have significant environmental or ecological impact; or

(n) a development which affects an area identified as environmentally significant in the environment strategy;

Given that the projects involve maintenance of existing infrastructure, and do not constitute a development, an MDP is not required.

Section 98(1) of the Airports Act sets out certain building activities which must not be carried out unless an approval has been obtained under the *Airports (Building Control) Regulations 1996*. These activities include:

(c) undertaking, constructing or altering earthworks (whether or not in relation to buildings or other structures);

(d) undertaking, constructing or altering engineering works, electrical works or hydraulic works (whether or not in relation to buildings or other structures);

(e) demolishing, destroying, dismantling or removing:

(i) buildings or other structures; or

(ii) earthworks; or

(iii) engineering works; or

(iv) electrical works; or …

The relevant requirements of the *Airports (Building Control) Regulations 1996* are further discussed in Section 2.1.1.

2.1.1. Airports (Building Control) Regulations 1996

The proposed action is subject to airport lessee consent from APAM and a building approval from the appointed Airport Building Controller (ABC) as required under the *Airports (Building Control) Regulations 1996*.

The building approval cannot be issued by the ABC without written consent from APAM, confirming that the projects are consistent with:

- The Melbourne Airport Master Plan
- Airport Environment Strategy
- Planning objectives for the airport

Once approval from the Minister for the Environment and Water under the EPBC Act is gained for the proposed action, each project will need to seek building approval from the ABC in the form of a Permit to Commence Works (PERCOW). The ABC consults with the Airport Environment Officer (AEO), who is an independent officer employed by the Commonwealth Government, for environmental matters relevant to the building approval application.

An overview of the PERCOW process is provided in Figure 1. Detailed guidance about the process can also be found at the Melbourne Airport Building Approvals website.

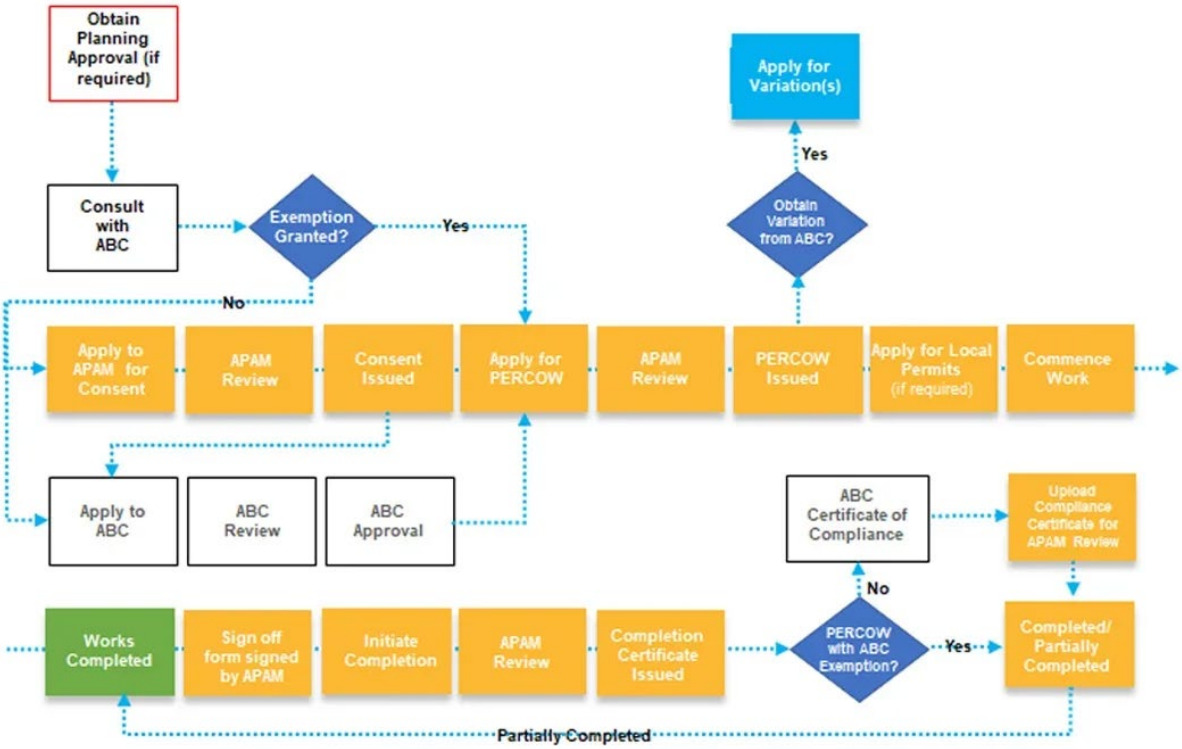


Figure 1 Overview of Melbourne Airport building approval process

2.1.2. Airports (Environment Protection) Regulations 1997

The *Airports (Environment Protection) Regulations 1997* cover the full range of airport environmental management matters. While an approval is not required for the proposed action under these regulations, they impose obligations relating to the management of the environment across the airport site and require assessment, monitoring and reporting in relation to biodiversity, heritage, air, water and soil pollution, and noise levels.

The *Airports (Environment Protection) Regulations 1997* outlines the role of the AEO, who has oversight of the operation of the regulations.

2.1.3. Melbourne Airport Master Plan

In line with the Airports Act, APAM must submit a draft master plan for approval by the infrastructure minister every 5 years. The purpose of the master plan is to provide detailed plans for the continued development of the airport over the next five years. These plans must align with the Master Plan's 20-year strategic direction for the airport that considers the changes needed to aviation facilities, ground transport, utilities infrastructure, non-aviation development and environmental measures.

The current Melbourne Airport Master Plan 2022 sets out land use requirements for the different precincts across the airport. In particular, for the Airside Operations Precinct (where the proposed action will take place), the following objectives are of relevance:

- To provide for safe, secure and efficient airfield activities including the landing, take-off, taxiing and parking of aircraft
- To accommodate the provision of aircraft navigation aids … and other facilities essential for safe and efficient aircraft operations.
- To provide for the safe and secure operation of the airport

The Melbourne Airport Master Plan 2022 also includes the current Airport Environment Strategy, which identifies environmental objectives and targets to be achieved alongside implementation of the airport development plan. These objectives and targets have been taken into account when conducting relevant environmental assessments for the proposed action and identifying suitable mitigation measures.

2.2. EPBC Act

The EPBC Act applies to actions (e.g. developments and associated activities) with the potential to significantly impact Matters of National Environmental Significance (MNES) or the environment on Commonwealth land. MNES are typically listed under the EPBC Act following listing advice provided for each MNES (this listing advice is the authoritative description of an MNES). Further policy documents may help with clarifying listing advice, and identifying the presence or absence of specific MNES.

Section 26 of the EPBC Act requires that APAM seek approval for any action on Commonwealth land that has, will have or is likely to have a significant impact on the environment or any action outside Commonwealth land that has, will have or is likely to have a significant impact on the environment on Commonwealth land.

The EPBC Act *Significant Impact Guidelines 1.1* (DoE 2013) provide a framework against which potential significant impacts on MNES are assessed. Species-specific significant impact guidelines may further help define significant impacts to certain listed threatened species.

The EPBC Act *Significant Impact Guidelines 1.2* (DSEWPaC 2013) provide guidance for identifying environmental values and assessing potential significant impacts on the environment as a whole. In accordance with the *Significant Impact Guidelines 1.2*, State environmental legislation and policy may assist in identifying special environmental values. The *Significant Impact Guidelines 1.2* indicate that 'State government protected species lists and heritage lists may assist in identifying components of the environment with special value' and that 'local government may also have information about rare or otherwise important elements of the environment'.

3. Description of the action

The projects which comprise the proposed action are planned to be undertaken over the next 5-10 years. A description of each project, including the reason and proposed activities associated with each project is provided below.

3.1. Reason for the proposed action

Project A - Airfield renaming

The current taxiway/taxi lane nomenclature will result in the airport exhausting single letter digits. Renaming of the taxiways/taxi lanes is required prior to the opening of the third runway to allow for clear identification of each taxiway/taxi lane as development progresses.

Project B - MAPMP 3

Ongoing long term major maintenance for end-of-life airfield pavement, including but not limited to replacement of existing drainage, pavement and apron areas.

To enable the delivery of this and other projects, new construction hardstands are required. The hardstands will be located north of the airfield to reduce travel distance for construction vehicles. The hardstands will accommodate site amenities, offices, staff parking, materials, and plant storage.

Project C - Runway 09/27 overlay

Based on the 2022 Annual Technical Inspection (ATI), the asphalt condition of Runway 09/27 is understood to be in a 'fair' to 'fair to good' condition, with the eastern portion of the runway displaying most of the defects whereas the western portion is in a better condition. The asphalt portion of the runway received an asphalt overlay in 2011 with an overlay design life of 10 to 12 years. As such, treatment of the flexible portion of Runway 09/27 is now warranted to extend the life of the existing asphalt pavement for the next 10 to 12 years.

In addition to the upgrades required for the asphalt, the Airfield Ground Lighting (AGL) along the runway will be upgraded from obsolete halogen fittings to LED lighting, to ensure continuity of supply of spares, installation of additional fittings to improve the lighting systems available for night-time arrivals, and the installation of new lights to meet updated standards.

The majority of these works will be completed on-pavement within the existing runway footprint, however AGL works will be required off-pavement.

Project D - Hotel Apron South

Recovery has occurred rapidly following COVID-19 with increasing demand for daytime operational stands and overnight parking of aircraft. Aircraft are also having longer layover periods resulting in increased demand for parking stands. The additional aircraft parking provided by this project will support the increased demand.

Project E – Staff Car Park Extension

The current at-grade staff car park is nearing capacity and needs to be expanded to accommodate for the future growth projections for the airport. This location has been earmarked as one of the

preferred sites due to proximity to the existing staff car park and ease of access from the landside road precinct.

3.2. Project location

The location of the proposed action is shown in Figure 2, which also shows existing ecological values within and adjacent to the project area.

The expected disturbance footprint (including for earthworks, site access and laydown) is estimated to be 44.4 hectares.

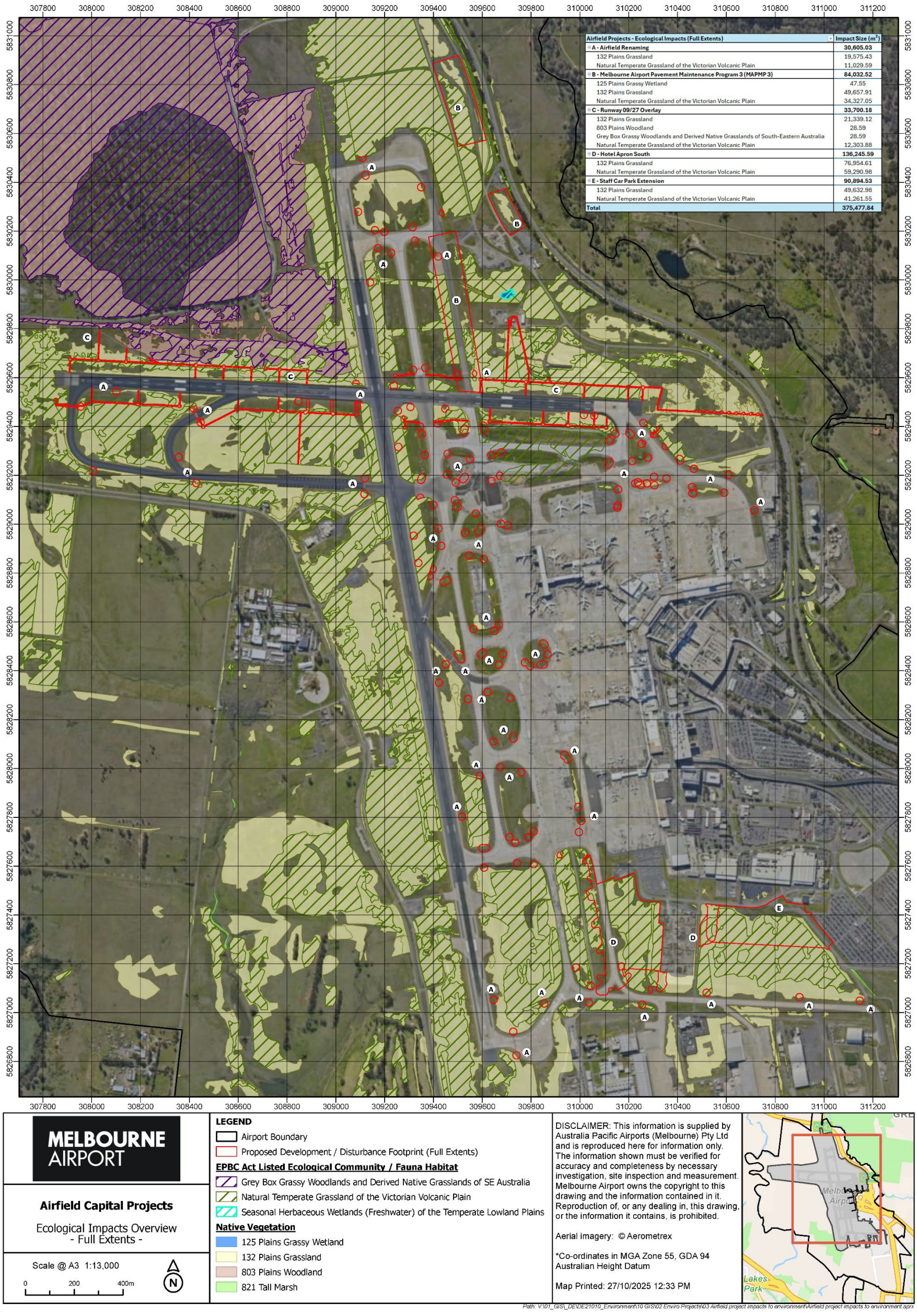


Figure 2 Location of proposed action

3.3. Project description

3.3.1. Pre-construction

Prior to each project, the selected contractors will look to establish their site compound and work laydown areas as part of their pre-construction activities.

3.3.2. Construction

Project A - Airfield renaming

The works will involve demolition of existing infrastructure (footings for taxiway and runway signs), localised earthworks grading and installation of new services/connection with existing services at multiple locations across the airfield, where MAG signs are installed. Access to and from the works area will be via the internal airport road network.

Based on the proposed project details, the following is expected.

- Earthworks to a maximum of 0.5 m depth in localised areas of the airport, which will remain exposed for <1 week.
- Excess spoil is not expected to be generated at this stage of the design.
- Groundwater is not expected to be intersected during earthwork given the maximum depths of excavations in this project area (0.5 m depth), and groundwater depths across the airfield are known to be approximately 23 meters below ground level.
- The suitability of soil for reuse or need for imported fill material will be assessed prior to construction.

The following plant and equipment will be used during construction:

- 12 tonne to 30 tonne excavators to demolish existing pavement to subgrade level.
- Truck and trailers to remove waste material, deliver new material to site, and float heavy plant to site.
- Skid steers to maneuver in smaller areas between new and existing services.
- Trenchers for digging out new service conduits.
- Front end loaders, to be used if all excavators are in use.
- Concrete trucks to pour foundations.

Project B - MAPMP 3

The main works will involve demolition of existing infrastructure (pavements), earthworks grading to allow for sufficient drainage and construction of new high-strength pavement and trenching of services for stormwater drainage, airfield ground lighting infrastructure, and communications network. The project area comprises the Taxiway Alpha North and the Northern Access Route (NAR). Ancillary works for new construction hardstands will involve demolition of existing infrastructure (fences and pavements), earthworks grading and construction of new high-strength

pavement and trenching of services. Access to and from the work areas will be via the internal airport road network.

Based on the proposed project details, the following is expected.

- While upgrade works for the NAR will only require a surface scrape to remove topsoil, earthworks will extend to a maximum of 1.2 m depth for upgrades to the Taxiway Alpha North. Approximately 8,000 m^3 of soil will be excavated for the NAR and 48,000 m^3 for the Taxiway Alpha North. The amount of hardstand to be excavated has not been estimated at this stage.
- Excavations will need to remain open for up to 2 months for the Taxiway Alpha North upgrades, while the NAR works will only require 2 weeks.
- Groundwater is not expected to be intersected during earthwork given the maximum depths of excavations in this project area (1.2 m depth), and groundwater depths across the airfield are known to be approximately 23 meters below ground level. However, there may be potential for perched groundwater to be encountered as pavement is excavated for the Taxiway Alpha North upgrades.
- The suitability of soil for reuse or need for imported fill material will be assessed prior to construction.

The following plant and equipment will be used during construction:

- 12 tonne to 30 tonne excavators to demolish existing pavement to subgrade level.
- Truck and trailers to remove waste material or deliver new material to site.
- Trenchers for digging out new service conduits.
- Skid steers to maneuver in smaller areas between new and existing services.
- Large plant including graders, concrete trucks, asphalt pavers, watercarts, bulldozers.

Project C - Runway 09/27 overlay

The works will involve a combination of asphalt resurfacing, surface treatment and installation of additional airfield ground lighting (AGL) infrastructure for the existing Runway 09/27. The majority of these works will be completed on-pavement within the existing runway footprint, however AGL works will be required off-pavement.

Off-pavement work will primarily consist of accessing existing pit and conduit infrastructure to install new cabling as part of the lighting replacement. Excavation work will be required for the installation of earthing pits to bring the system up to the same safety standard as the rest of the airfield; grading works around each of the precision approach path indicators (PAPIs) to make them compliant with the updated regulations; new conduits for the new Rapid Exit Taxiway indicator lights to match the system installed on Runway 16/34; and, installation of elevated stop bar lights to meet the updated regulations and match the systems installed around the rest of the runway/taxiway network. Access to and from the work areas will be via the internal airport road network.

Based on the proposed project details, the following is expected.

- The majority of earthworks required for this project will only comprise surface scrapes to remove topsoil, which will leave bare earth outside of the graded portion of the runway exposed for up to four months. One shaft will need to be excavated for installation of AGL pits and conduits, no deeper than 1.5 m depth.
- Groundwater is not expected to be intersected during earthworks given the maximum depths of excavations in this project area (1.5 m) and groundwater depths across the airfield are known to be approximately 23 meters below ground level.
- The suitability of soil for reuse or need for imported fill material will be assessed prior to construction.

The following plant and equipment will be used for off pavement works:

- Excavator
- Light truck
- Ute and trailer
- Portable light tower

Project D - Hotel Apron South

The works will involve demolition of existing infrastructure (buildings and pavements), earthworks grading and construction of new high-strength pavement and trenching of services. Access to and from the work areas will be via the internal airport road network.

Based on the proposed project details, the following is expected.

- The project will require excavations up to 1.5 m depth where swale drains are provided, however the majority of the project area will require filling of up to 2 m. Any excavations required for the project are not expected to remain open longer than 4 months at a time.
- It is estimated that approximately 7,200 m^3 of concrete will be excavated during the demolition of Taxiway Sierra.
- Groundwater is not expected to be intersected during earthworks given the maximum depths of excavations in this project area (1.5 m) and groundwater depths across the airfield are known to be approximately 23 meters below ground level.
- The suitability of soil for reuse or need for imported fill material will be assessed prior to construction.

The following plant and equipment will be used during construction:

- 12 tonne to 30 tonne excavators to demolish existing pavement to subgrade level.
- Truck and trailers to remove waste material or deliver new material to site.
- Trenchers for digging out new service conduits.
- Skid steers to maneuver in smaller areas between new and existing services.
- Large plant including graders, concrete trucks, asphalt pavers, watercarts, bulldozers.

Project E – Staff Car Park Extension

The works will involve construction of a new at grade car park, including civil and drainage works, car park lighting, electrical, security and information and communication technologies (ICT) related works. Access to and from the work areas will be via the internal airport road network.

Based on the proposed project details, the following is expected.

- The project will require excavations between 1.5-2 m depth for drainage trenches and outfalls and 0.3-1 m depth for stripping, the pavement box cut out and utility trenches. Any excavations required for the project are not expected to remain open longer than 3-4 months at a time depending on contractor methodology and staging. The amount of soil and hardstand to be excavated has not been estimated at this stage.
- Groundwater is not expected to be intersected during earthworks given the maximum depths of excavations in this project area (1.5-2 m) and groundwater depths across the airfield are known to be approximately 23 meters below ground level.
- The suitability of soil for reuse or need for imported fill material will be assessed prior to construction. However, it is considered unlikely that additional fill material will be required for this project.
- Access to and from the works area will be via a new access road network from Francis Briggs Road.

The following plant and equipment will be used during construction:

- 12 tonne to 30 tonne excavators to demolish existing pavement to subgrade level.
- Truck and trailers to remove waste material or deliver new material to site.
- Trenchers for digging out new service conduits.
- Skid steers to maneuver in smaller areas between new and existing services.
- Large plant including graders, concrete trucks, asphalt pavers, watercarts, bulldozers.

3.3.3. Construction program

An indicative construction program is outlined in Table 2. The construction program for individual projects will be developed in more detail, however works are expected to commence from late 2025 onwards.

Table 2 Indicative construction program

Project	Construction Start	Construction Complete
Project A – Airfield Renaming	January 2026	June 2027
Project B – MAPMP 3	February 2026	December 2027

Project	Construction Start	Construction Complete
Project C – Runway 09/27 overlay	January 2026	September 2026
Project D – Hotel Apron South	November 2025	September 2027
Project E – Staff Car Park Extension	February 2026	October 2026

4. Habitat assessments

4.1. Records of listed flora and fauna species

A review of the potential for listed threatened flora and fauna species to be within 10 km of the project area was completed to evaluate the likelihood and potential impacts associated with the proposed action. The review utilised the Protected Matters Search Tool (DCCEEW; accessed on 20 November 2023) and the Victorian Biodiversity Atlas (accessed on 20 November 2023).

Following the database searches, threatened species, TECs and listed migratory species were categorised as having a negligible, low, medium or high likelihood of occurring within the project area or, if the species was observed during field surveys, as having been recorded within the project area. These categorisations were determined with reference to surrounding records of the species, expert knowledge of the species ecology and knowledge of the habitat types present in the project area.

The review found a total of 62 flora species (21 flora species of National significance and 41 flora species of State significance), 80 fauna species (43 fauna species of National significance and 37 fauna species of State significance) and 26 migratory species potentially located within 10 km of the project footprint. The likelihood of occurrence within the project area for the majority of the species is rated as negligible to low.

A summary of the threatened flora and fauna species with a medium or high potential to occur within the project footprint, including rationale and the need for additional surveys is provided in Table 3 below. It is noted that extensive surveys for listed threatened species and ecological communities were conducted between 2019 and 2021 to inform the MDP for Melbourne Airport's Third Runway (M3R); these have been referred to when considering the need for targeted surveys.

The full list of threatened flora and fauna species, including details on the most recent records, habitat descriptions and likelihood rankings is provided in Appendix A.

Table 3 Summary of listed threatened flora and fauna species

Common name	Scientific name	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking	Targeted survey needed
Potential threatened Flora Species – State Significance (FFG Act)					
Austral Crane's-bill	*Geranium solanderi* var. *solanderi s.s.*	Medium	Grasslands or grassy woodlands where hydrology is not a limiting factor.	Recent records nearby <20 yrs. Suitable habitat within the Melbourne Airport and can be present in disturbed grasslands and grassy woodlands.	No. Targeted surveys for FFG listed flora species was not considered necessary. The vegetation surveys undertaken for the project area were sufficient to detect these species if present. There is no further regulatory requirement to undertake targeted surveys for these species.
Large Flower Crane's Bill	*Geranium* sp. *1*	Medium	The habitat requirements of this species are poorly known.		
Pale-flower Crane's-bill	*Geranium* sp. *3*	Medium	Grasslands and dry woodlands.		
Potential threatened Fauna Species – National Significance (EPBC Act)					
Gang-gang Cockatoo	*Callocephalon fimbriatum*	Medium	Southern Vic to Eastern NSW. Forests and woodlands from coast to alpine areas. Autumn-winter dispersal from highlands to lower elevations. Forages in eucalypts, acacias and some exotic garden trees and shrubs.	Species likely to utilise the woodland patches north of the project area, which may result in flights over the project area at times.	No. The species was listed after field assessments were conducted and is assumed to be present within the Melbourne Airport estate. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species' use of the project area.
White-throated Needle Tail	*Hirundapus caudacutus*	High	An almost exclusively aerial species within Australia, occurring over most types of habitat, particularly wooded areas.	It is likely that the species utilises the airspace at Melbourne Airport with the woodland providing preferable habitat for the species. There is an incidental record of the species from 2010 (Birdlife Australia) over Sky Road in Melbourne Airport and other records surrounding the Airport.	No. The species is assumed present. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species' use of the Melbourne Airport estate.
Grey-headed flying fox	*Pteropus poliocephalus*	Recorded	Rainforest, wet and dry sclerophyll forest, woodland and urban areas.	Species likely to utilise flowing trees adjacent to the Melbourne Airport, which may result in flights over the project area at times.	No. The species is known to use habitat in the Melbourne Airport estate. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species' use of the project area.
Golden Sun Moth (GSM)	*Synemon plana*	Medium	Grassy habitats supporting suitable larval food plants including Spear Grasses, Wallaby Grasses and the introduced Chilean Needle-grass *Nassella neesiana* and potentially Serrated Tussock *Nassella trichotoma*.	The species has been recorded in two areas in the northern-most portion of Melbourne Airport only. Previous surveys have not detected the species within the project area, however there is an area of potential GSM habitat between Sunbury Road and Moonee Ponds Creek, to the northwest of project area B.	No. Targeted surveys have been undertaken in suitable habitat within the Melbourne Airport estate (refer Section 4.4.1).
Potential threatened Fauna Species – State Significance (FFG Act)					
Little Eagle	*Hieraaetus morphnoides*	Medium	Woodland and open areas. Rabbits are a key component of their diet. Nesting occurs in mature trees in open woodland or riparian vegetation.	Suitable habitat present in the broader local area and the species may forage over the project area.	No. Targeted surveys for FFG Act listed fauna species was not considered necessary. The extensive targeted fauna and vegetation surveys undertaken for the M3R project were considered likely to identify many of these species if present. For example, 17 Tussock Skink individuals were recorded from tile grids within the M3R disturbance

Common name	Scientific name	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking	Targeted survey needed
Black Falcon	*Falco subniger*	Medium	Woodlands, open country and around terrestrial wetlands areas, including rivers and creeks. Primarily occurs in arid and semi-arid zones in the north, north-west and west of Victoria.	Area adjacent to runways is highly managed to prevent prey (rabbits, rodents etc) and scare cannon guns are used to prevent bird activity in the area. However, suitable habitat present in the broader local area and the species may forage over the project area occasionally.	footprint. Other FFG Act listed fauna may utilise habitat present within the project area on occasions but are unlikely to be resident within the project footprint. There is no further regulatory requirement to undertake targeted surveys for these species.
Tussock Skink	*Pseudemoia pagenstecheri*	Recorded	On the ground in a range of grasslands or sparse grassy woodlands from alps to coast.	Tussock Skink have been recorded in the broader Melbourne Airport area as part of surveys undertaken for the M3R project. Suitable habitat for the Tussock Skink is present within grassland habitat throughout project areas A, B, C, D, E and F .	
Potential threatened Migratory Fauna Species					
Fork-Tailed Swift	*Fork-tailed Swift*	High	NA – Migratory Species	Project area is within core range for the species (DoE 2015). No records from within Melbourne Airport, however there are several from surrounding areas such as Sunbury, Greenvale and Yuroke from the past 10 years.	No. The species is assumed present. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species use of the project area and the project's impacts.
Latham's Snipe	*Gallinago hardwickii*	High	NA – Migratory Species	Species recorded along Maribyrnong River flats Ascot Vale 2007, and the nearby Jacana Wetlands regularly (Birdata, Birdlife Australia).	No. The species is assumed present. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species use of the project area and the project's impacts.
Rufous Fantail	*Rhipidura Rufifrons*	High	NA – Migratory Species	Project area is within core range for the species (DoE 2015). Species was recorded in the Grey Box Woodland in 2009.	No. The species is assumed present. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species use of the project area and the project's impacts.
Satin Flycatcher	*Myiaara cyanoleuca*	High	NA – Migratory Species	Project area is within core range for the species (DoE 2015). Species recorded in Woodlands Historic Park in 2007, 2013 and 2015 (Birddata, Birdlife Australia).	No. The species is assumed present. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species use of the project area or the project's impacts.
White-throated Needle Tail	See above under 'Potential threatened Fauna Species – National Significance (EPBC Act)'				

4.2. Landscape context

The Melbourne Airport estate is located in Melbourne's northern suburbs. Native vegetation has been cleared or become degraded on most land within 5 kilometres of the Airport estate, either due to agricultural activities (mostly livestock grazing) or industrial and residential development. Nearby waterways (Deep Creek, Jacksons Creek, Arundel Creek, Maribyrnong River and Moonee Ponds Creek) provide the most intact dispersal corridors for fauna. The largest and most intact areas of native vegetation outside the Airport estate but within the local area, are Woodlands Historic Park to the north-east and Organ Pipes National Park to the west.

4.3. Past and current land management practices

Prior to development of land for the airport in the late 1960s, the Melbourne Airport site was predominantly used for grazing and crops. Significant ground disturbance and soil filling occurred during construction of the current east-west runaway commencing circa 1966. Most native vegetation within the project area is highly modified and species-poor, having recolonised land that has been subject to earthworks and/or rock removal during initial construction of the airport and ongoing development of the airport since then.

The Airside Operations Precinct (where the proposed action will take place) is a highly-managed environment containing runways, taxiways, and other infrastructure directly associated with operating the airfield. It is a large flat expanse characterised by hard surfaces, outbuildings and technical equipment, and is surrounded by a large expanse of grassed areas.

Several management activities take place within the airfield, to ensure safe aircraft operations in line with CASA requirements. These include:

- Regular slashing of grasses, with some areas (e.g. near critical infrastructure) mowed up to once per week
- Use of bird deterrents such as motion-activated noise generators and shooting (as a last resort) to reduce the risk of aircraft wildlife strike
- Insecticides applied alongside some lengths of runway to reduce foraging by birds in these high-risk wildlife strike zones.

The Airside Operations Precinct is undergoing or has recently undergone significant disturbance, subject to relevant approvals (refer Table 7), with major earthworks being undertaken for a number of construction projects.

4.4. Summary of habitat assessments and targeted surveys for threatened species

Several EPBC Act listed species were considered to have a medium to high likelihood of occurring within one or more of the project areas or have been previously recorded in the local area. EPBC Act listed species for which targeted surveys have been undertaken during previous assessments include:

- **Golden Sun Moth (GSM)**

  The targeted surveys completed for the GSM have been undertaken across the airport over a number of years, and most recently undertaken as part of the proposed M3R project. While these surveys were not completed specifically for the purpose of the proposed action, the

scope of the targeted surveys and investigations included the footprint of projects A, B, C, D and E and are considered sufficient to determine whether these species were present within these project areas and, if so, the extent to which they use any habitat within the project areas.

Investigations completed for the proposed M3R project extend beyond the project area thereby including the local area, which provides a broader understanding of landscape context and captures areas adjacent to the project area that may have represented more suitable habitat for the species (thereby increasing the likelihood of detection).

Targeted surveys for other threatened species of national significance were not considered necessary, based on the following:

- **Gang-Gang Cockatoo:** The species was listed after field assessments were conducted and is assumed to be present within the project area. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species' use of the project area.
- **White-throated Needle Tail:** The species is assumed present. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species' use of the project area.
- **Grey-headed Flying Fox:** The species is known to use habitat in the project area. Targeted surveys for the species are unlikely to produce additional information to assist with current understanding of the species' use of the project area.

Targeted surveys for FFG Act listed fauna species were not considered necessary. The extensive targeted fauna and vegetation surveys undertaken as part of the proposed M3R project for EPBC Act listed threatened species and ecological communities were considered likely to identify many of these species if present. For example, 17 Tussock Skink individuals were recorded from tile grids during targeted surveys for SLL. The likelihood of occurrence for Tussock Skink was subsequently changed from 'medium' or 'high' to 'recorded'. Other FFG Act listed fauna may utilise habitat present within the project area on occasions but are unlikely to be resident within the project area. There is no further regulatory requirement to undertake targeted surveys for these species.

The Victorian Grassland Earless Dragon (VGED) was initially assigned a "negligible" likelihood of occurring in the project area as it was considered to be locally extinct (as outlined in Appendix A).

It is noted that the rediscovery of the VGED near Bacchus Marsh means the project area falls within the VGED projected distribution in DCCEEW's species profile and threats database. As such the likelihood of this species occurring in the project area may be considered "low".

There are a number of known threats to the VGED that have historically occurred, or currently occur, at Melbourne Airport. This includes the following:

- Prior to airport development the project area and surrounds were subject to agricultural practices including ploughing and intense grazing. During the development of Melbourne Airport in the late 1960s the entire project area was significantly disturbed. This included bulk earthworks and complete disturbance of all pre-existing grassed areas and removal of rocks and boulders, particularly within the operational airfield and terminal development.
- Native vegetation at Melbourne Airport has been cleared or become degraded on most land within 5 km of the airport estate, either due to agricultural activities (mostly livestock grazing) or industrial and residential development.

- The Melbourne Airport Precinct (within which the project area is located) is surrounded by various roadways, car parks and other industrial developments to the north and south, as well as waterways to the west and east, which are considered to be significant physical barriers, inhibiting the VGED recolonizing within Melbourne Airport.
- The project area is within the operational areas of Melbourne Airport which is now a highly modified and managed environment with regular and ongoing maintenance activities occurring in the project area including weed management, mowing and slashing and herbicide treatment.

These threats are all consistent with the known threats to VGED outlined in the *Conservation Advice for Tympanocryptis pinguicolla (Victorian grassland earless dragon)* (DCCEEW 2023). Based on the number of threats to the VGED present at Melbourne Airport, and particularly within the project area, the likelihood of the VGED recolonising within the project area is considered negligible. As a result, the need for any further targeted surveys or management measures was not considered necessary.

Targeted surveys for FFG Act listed flora species were not considered necessary. The vegetation surveys undertaken for the project were sufficient to detect these species if present. There is no further regulatory requirement to undertake targeted surveys for these species.

A summary of the habitat survey for the GSM is provided in Section 4.4.1 below. Detailed habitat survey assessment methods are provided in Appendix B.

4.4.1. Golden Sun Moth (GSM)

During ecological site assessments of Melbourne Airport between 2010 and 2019 it was determined that suitable habitat for GSM was present only within the northern portion of the airport estate.

Previous surveys completed at Melbourne Airport include the following:

- GAGIN 2010: A selected area in the southern portion of Melbourne Airport was surveyed at least once during the GSM flight season. No GSM were recorded.
- Biosis 2013/14: Selected areas in the eastern, northern and western portions of Melbourne Airport were surveyed on four occasions during the GSM flight season. No GSM were recorded.
- Biosis 2018: Selected areas in the northern and southern portions of Melbourne Airport were surveyed at least once during the GSM flight season. While no GSM were recorded in the southern portion of the airport, GSM were recorded in the northern portion of the airport, between Sunbury Road and Moonee Ponds Creek.

An overview of the location of previous GSM surveys is provided in Appendix C.

Previous surveys on Melbourne Airport land west of Sunbury Road failed to detect GSM, but due to the presence of suitable habitat and in response to feedback from the Commonwealth, targeted surveys for this species were completed most recently for the proposed M3R project. Four surveys were conducted in December 2019 on days of appropriate weather conditions and were undertaken in accordance with the Commonwealth survey guidelines (DEWHA 2009a).

Targeted surveys for GSM in 2019 confirmed the presence of this species in the northern-most area of the M3R project footprint only, where the GSM habitat is bounded by Sunbury Road to the north, the Grey Box Woodland to the south and east and an existing access track to the west. The area west of the GSM habitat is bounded by a pasture improved paddock (Phalaris dominated).

Despite previous surveys not detecting the species within the project area, there are areas of potential suitable habitat located along Moonee Ponds Creek, to the northwest of project area B.

Based on survey results from the broader Melbourne Airport estate, and the history of disturbance and insecticide use, this species is considered unlikely to occur within the majority of the proposed project areas. However, given the proximity of project area B to potential GSM habitat located on the other side of Sunbury Road, along Moonee Ponds Creek, there is considered to be a medium likelihood of the species occurring in this project area.

4.5. Summary of targeted surveys for threatened ecological communities

Each project area was previously assessed by qualified ecologists to determine the presence and extent of native vegetation and threatened ecological communities within these areas. Due to the wide range of projects located in different areas across the Melbourne Airport estate, field surveys for each area were completed across multiple assessments conducted between 2016 and 2024, as follows:

- Assessment of Native Grasslands within Airfields of Melbourne Airport (WSP, 2024):
  - Project A - Airfield renaming
  - Project B - MAPMP 3
  - Project D - Hotel Apron South & Whiskey/Sierra Apron Projects
- Melbourne Airport's Third Runway (M3R) ecology technical report (Biosis, 2023):
  - Project A - Airfield renaming
  - Project B - MAPMP 3
  - Project C - Runway 09/27 Overlay
  - Project D - Hotel Apron South
  - Project E - Staff Car Park Extension
- Taxiway Zulu Biodiversity Assessment (Biosis, 2016):
  - Project A – Airfield renaming
  - Project B - MAPMP 3

4.5.1. Field assessment - NTGVVP

All field data for NTGVVP within the project area was collected during the following assessments:

- Biosis (2016): Surveys undertaken during May and August 2014 by qualified ecologists of Biosis as part of the Taxiway Zulu and Northern Compound Biodiversity assessment.
- Biosis (2023): Surveys undertaken during November and December 2019, January and February 2020 and October 2021 by qualified ecologists of Biosis as part of the M3R project.
- WSP (2024): Surveys undertaken during February and March 2024 by DEECA-accredited vegetation quality assessors of WSP as part of the future airfields development.

A field checklist (refer Appendix B) was used to identify the presence or absence of NTGVVP in areas mapped as suitable Ecological Vegetation Classes (EVCs), i.e. Heavier-soils Plains Grassland.

The checklist was based on the key diagnostic characteristics and condition thresholds outlined in the listing advice for the TEC (TSSC 2008). Where the listing advice was unclear, further clarity was sought from the NTGVVP Information Sheet (DSEWPaC 2011) and, if required, guidance provided by DCCEEW (and its predecessors).

The approach to completing the field checklist is outlined in Table 4. The percentage cover of native flora within each grassland patch was estimated by reference to predefined cover charts. Where cover estimates were close to the condition threshold, gridded one-by-one metre quadrats (square frames) were used to objectively sample plant cover within the grassland patch and confirm the veracity of cover estimates. For the purposes of assessing minimum contiguous size thresholds, the 'grassland patch' was taken to be the area of contiguous grassland that otherwise met all other key diagnostic characteristics and condition thresholds for the TEC – rather than the (generally larger) Heavier-soils Plains Grassland patch.

In addition, the 'native vegetation remnant' was taken to be the contiguous area of native vegetation, whether or not belonging to more than one EVC. DCCEEW (formally DAWE) has confirmed that this interpretation is correct and upholds the intention of the listing advice (J. Vranjic, DAWE, pers. comm., March 2020).

Table 4 Approach for identifying the NTGVVP community

Criteria	Condition Thresholds	Method used to test patch against threshold
Location	With limited exceptions, the grassland patch must be associated with Quaternary basalt soils within the Victorian Volcanic Plain bioregion.	The position of the grassland patch relative to modelled geological and bioregional boundaries was reviewed. Surface soil texture observations were made during vegetation mapping on site.
Perennial native flora cover	Native flora must make up ≥50% of total vegetation cover, excluding introduced annuals, within the grassland patch.	The percentage cover of native flora within each grassland patch was estimated with reference to cover charts and, if required, 1x1 m quadrats.
Dominant grass genera	Grasses in the genera *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* make up ≥50% of total native species cover.	The percentage cover of the four key native grass genera within each grassland patch was estimated with reference to cover charts and, if required, 1x1 m quadrats.
Weediness	For grassland patches where *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* are the dominant native genera, one of the following thresholds must be met: *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* must also make up ≥50% of total perennial tussock cover or Perennial non-grass weeds must be <30% of total vegetation cover.	The percentage cover of the four key native grass genera and perennial non-grass weeds within each grassland patch was estimated with reference to cover charts and, if required, 1x1 m quadrats.
Native forb cover	For grassland patches where *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* are not the dominant native species,	The percentage cover of native forbs within each grassland patch was estimated

Criteria	Condition Thresholds	Method used to test patch against threshold
	native forbs must make up ≥50% of total vegetation cover during spring-summer (September to February).	with reference to cover charts and, if required, 1x1 m quadrats.
Patch size	For a native vegetation remnant ≤1 ha, the grassland patch must be ≥0.05 ha and the crown cover of shrubs/ trees >1 m tall must be ≤5%. For a native vegetation remnant >1 ha, the grassland patch must be ≥0.5 ha and there must be <2 mature trees per ha.	Contiguous native vegetation remnants and grassland patches were mapped to determine size and areas. Minor physical barriers were aggregated based on ecological function (e.g. fauna movement prospects, seed/genetic dispersal, water and nutrient cycling, recruitment and regeneration). Mature trees were counted and the crown cover of shrubs/trees >1 m estimated with the assistance of recent aerial imagery (i.e. from the past 6 months), where required.

To determine and properly assess the impact on NTGVVP, the quality of native vegetation was assessed using the Vegetation Quality Assessment (VQA habitat hectare) method (DSE, 2004c).

DCCEEW has previously endorsed the 'habitat hectare' method as appropriate for assessing the condition of TECs such as NTGVVP. This method is further explained in Appendix B.

4.5.2. Desktop assessment

A desktop assessment was conducted which identified the following threatened ecological community (TEC) within the Melbourne Airport estate and the project area:

- Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP).

Several field assessments of the extent and quality of the NTGVVP have previously been undertaken, as detailed in Section 4.5.1.

4.5.3. Outcomes

One EPBC Act listed TEC was recorded in the project area and will be impacted by the project. A summary of the survey findings is presented below.

General observations

The projects cover a total area of approximately 44.44 hectares which contains approximately 21.72 hectares of EVC 132 Plains Grassland and small amounts of 125 Plains Grassy Wetland (0.0048 hectares) and 803 Plains Woodland (0.0029 hectares). The remaining vegetated areas support predominantly introduced vegetation, with the main species being Chilean Needle Grass *Nassella neesiana* and Serrated Tussock *Nassella trichotoma*.

Plains Grassland is synonymous with the Western (Basalt) Plains Grasslands Community, which is listed as threatened under the FFG Act. The Western (Basalt) Plains Grasslands Community is therefore present in all areas mapped as Plains Grassland.

Some areas of Plains Grassland within the project area meet the diagnostic criteria and condition thresholds for NTGVVP, an ecological community listed as critically endangered under the EPBC Act. These areas tend to have lower perennial weed covers and a higher proportion of native grasses that are characteristic of NTGVVP, including the following species:

- Bristly Wallaby-grass *Rytidosperma setaceum*
- Common Wallaby-grass Rytidosperma caespitosum
- Brown-back Wallaby-grass *Rytidosperma duttonianum*
- Leafy Wallaby-grass *Rytidosperma bipartitum* s.s.

In total, the project area supports 15.82 hectares of NTGVVP (a portion of which is assumed to be NTGVVP based upon adjacent patches, as certain parts of the airfield could not be accessed to conduct detailed condition surveys). Of the total 15.82 hectares of NTGVVP within the project area, 4.68 ha is subject to existing approvals as discussed in Section 5.1.

Other native grasses that are present (but not necessarily characteristic of NTGVVP) include Windmill Grass *Chlorruncateata* and Silky Blue-grass *Dichanthium sericeum* subsp. *sericeum*. Scattered herbs and shrubs also persist, including Common Woodruff *Asperula conferta*, Berry Saltbush *Atriplex semibaccata* and Small Loosestrife *Lythrum hyssopifolia*. Weed covers within NTGVVP range from 30% to 40% and are dominated by high threat weeds such Chilean Needle Grass, Serrated Tussock, Toowoomba Canary-grass Phalaris aquatica and Cocksfoot Dactylis glomerata. Herbaceous weed species include Hairy Hawkbit *Leontodon saxatilis* subsp. *saxatilis*, Buck's-horn Plantain *Plantago coronopus*, Artichoke Thistle *Cynara cardunculus* subsp. *flavescens* and Clovers *Trifolium* spp.

Habitat zones

A summary of the habitat zones that were surveyed and identified as NTGVVP within the impact area is provided in Table 5 below.

Condition of TECs

The VQA data captured for the habitat zones that qualify as NTGVVP within the impact area is presented in Table 6.

Table 5 Summary of habitat zones identified as NTGVVP within the impact area

Project ID	Habitat Zone	Survey Date	Ecological Vegetation Class	Threatened Ecological Community (State)	EPBC listed community present
A	18b	October 2021	132 Plains Grassland	Western (Basalt) Plains Grasslands Community	NTGVVP
	41a		132 Plains Grassland		
	194a		132 Plains Grassland		

Project ID	Habitat Zone	Survey Date	Ecological Vegetation Class	Threatened Ecological Community (State)	EPBC listed community present
	202a		132 Plains Grassland		
B	18b	October 2021	132 Plains Grassland	Western (Basalt) Plains Grasslands Community	NTGVVP
C	18b	October 2021	132 Plains Grassland	Western (Basalt) Plains Grasslands Community	NTGVVP
	41a		132 Plains Grassland		
D	206a	February 2022	132 Plains Grassland	Western (Basalt) Plains Grasslands Community	NTGVVP
	212a		132 Plains Grassland		
	214a		132 Plains Grassland		
	216a		132 Plains Grassland		
E	216a	February 2022	132 Plains Grassland	Western (Basalt) Plains Grasslands Community	NTGVVP

Table 6 VQA scores for NTGVVP habitat zones within the impact areas

Site and Habitat Zone ID			18b	41a	194a	202a	206a	212a	214a	216a
EVC #: Name			EVC 132 - Plains Grassland							
	Max Score		Score							
Site Condition	Large Old Trees	10	NA	NA	NA	NA	NA	NA	NA	NA
	Canopy Cover	5	NA	NA	NA	NA	NA	NA	NA	NA
	Lack of Weeds	15	4	7	0	4	0	4	4	4
	Understorey	25	20	15	15	10	10	5	10	15
	Recruitment	10	10	10	3	6	3	3	3	6
	Organic Matter	5	5	5	4	4	4	4	4	4
	Logs	5	NA	NA	NA	NA	NA	NA	NA	NA
	Total Site Score		39	37	22	24	17	16	21	29
	EVC standardiser (x 75/55)		2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36
	Habitat points (=#/100)		0.68	0.66	0.46	0.39	0.28	0.26	0.38	0.51
Landscape value	**Adjusted Site Score**		**53.18**	**50.45**	**32.73**	**32.73**	**23.18**	**21.82**	**28.64**	**39.55**
	Patch size		8	8	8	2	1	1	4	6
	Neighbourhood		4	5	5	3	3	2	4	4
	Distance to Core		3	3	3	1	1	1	1	1
	Total landscape score		**15**	**16**	**16**	**6**	**5**	**4**	**9**	**11**
HABITAT SCORE			**68.18**	**66.45**	**46.00**	**38.73**	**28.18**	**25.82**	**37.64**	**50.55**

4.6. Review of adequacy of surveys

In general, the survey methods adopted for the flora and fauna assessments which were used to identify and quantify threatened species and ecological communities within the project area were considered sufficient to ensure all species with a medium to high potential to occur within the project area were surveyed and registered.

For vegetation surveys, native vegetation was identified and mapped utilising the EVC classification system. These areas were then reviewed to confirm whether they satisfy the criteria for a TEC under the EPBC Act. In order to assess the presence and quality of the NTGVVP TEC checklists were developed that relied on the diagnostic characteristics and condition thresholds outlined in the relevant listing advice. Where the listing advice was unclear, further clarity was sought from the Natural Temperate Grassland Information Sheet (DSEWPaC 2011) and, if required, from guidance provided by DCCEEW (and its predecessors).

The vegetation survey checklist and survey methods were developed and undertaken with consideration to the following guidelines:

- DELWP 2016. The Victorian wetland classification framework 2014, Victorian Government Department of Environment, Land, Water and Planning, East Melbourne.
- DELWP 2020. NatureKit. Victorian Government Department of Environment, Land, Water and Planning, Melbourne.
- DoE 2013. Matter of National Environmental Significance: Significant Impact Guidelines 1.1. Environment Protection and Biodiversity Conservation Act 1999. Australian Government Department of the Environment, Canberra
- DSE 2004a. EVC/Bioregion Benchmark for Vegetation Quality Assessment: Central Victorian Uplands Bioregion. Victorian Government Department of Sustainability and Environment, Melbourne.
- DSE 2004b. EVC/Bioregion Benchmark for Vegetation Quality Assessment: Victorian Volcanic Plain Bioregion. Victorian Government Department of Sustainability and Environment, Melbourne.
- DSE 2004c. Native Vegetation: Sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the Habitat hectares scoring method. Version 1.3, Victorian Government Department of Sustainability and Environment. Melbourne, Victoria.
- DSEWPaC 2011a. Nationally Threatened Ecological Communities of the Victorian Volcanic Plain: Natural Temperate Grassland & Grassy Eucalypt Woodland A guide to the identification, assessment and management of nationally threatened ecological communities. Australian Government Department of Sustainability, Environment, Water, Population & Communities, Canberra.
- DSEWPaC 2012b. Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy. October 2012. Australian Government Department of Sustainability, Environment, Water, Population and Communities. Canberra.
- Victorian Government 2004. Native Vegetation: Sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the Habitat hectares scoring method.

Version 1.3, Victorian Government Department of Sustainability and Environment. Melbourne, Victoria.

- TSSC 2008. Commonwealth Listing Advice on Natural Temperate Grassland of the Victorian Volcanic Plain. Threatened Species Scientific Committee, Australian Government Department of the Environment, Water, Heritage and the Arts. Canberra. Available from: http://www.environment.gov.au/biodiversity/threatened/communities/pubs/42-listing-advice.pdf. In effect under the EPBC Act from 21-Jun-2008.
- Victorian Government 2017. Guidelines for the removal, destruction or lopping of native vegetation. Department of Environment, Land, Water, and Planning. East Melbourne, Victoria. https://www.environment.vic.gov.au/__data/assets/pdf_file/0021/91146/Guidelines-for-the-removal,-destruction-or-lopping-of-native-vegetation,-2017.pdf.

Targeted fauna surveys completed were developed taking into account previous assessments completed at the airport and in the local area. The aim was to determine the adequacy of the previous surveys completed and whether additional data was required. Where additional surveys were determined to be warranted to inform the M3R MDP, consideration was then given to the species in question, to ensure surveys were completed in the correct potential habitat areas at the correct time of year and during times of the day where the species was considered to be most active. The targeted fauna surveys were developed and undertaken with consideration to the following guidelines:

- DEWHA 2009a. Significant impact guidelines for the critically endangered golden sun moth (Synemon plana). Australian Government Department of the Environment, Water, Heritage and the Arts. Canberra.

5. Impacts to listed threatened species and communities

The impacts posed to listed threatened species and communities via the project developments were assessed via residual impact assessments on the nature of the impacts, the likelihood and the severity of the impacts. Further information is provided in Sections 5.1 to 5.3 below.

5.1. Nature of impacts

Impacts associated with the proposed action have been determined based on the project scope and construction details provided in Section 3.3 and shown in Appendix D.

Impacts to listed threatened species and communities within areas which overlap with other EPBC Act approval applications have not been considered as part of this application, where approval has already been granted. A summary of other approval applications and the timing of those projects is provided in Table 7.

Table 7 Summary of other EPBC approvals relevant to the project area

Project	Approval Reference	Status	Project timing
Taxiway Zulu and Northern Access Route	EPBC 2016/7837	Approved	2018 to 2027
Melbourne Airport Pavement Maintenance Program 2 (MAPMP 2)	EPBC 2023/09257	Approved	Oct 2025 to Nov 2026
Runway 16-34 Overlay Project	EPBC 2022/01371	Approved	Completed March 2024
Melbourne Airport's Third Runway (M3R)	EPBC 2021/8886	Approved	2025 to July 2031

The nature, likelihood and severity of direct and indirect impacts to listed threatened species and ecological communities are discussed below. There are no unknown or unpredictable impacts associated with the proposed action.

5.1.1. Direct impacts

Threatened species

No direct impacts to threatened species are expected to the Gang-Gang Cockatoo, White-throated Needletail and the Grey-headed Flying Fox as there has been no suitable habitat identified for these species within the project areas. In relation to the GSM, previous surveys have not detected the species within the project area. However, there is an area of potential suitable habitat located along Moonee Ponds Creek, to the northwest of project area B (outside of the project area). During previous survey efforts in 2018, GSM were recorded in areas dominated by Ribwort and Turnip. This is not generally typical habitat for the species. It is likely that the Parks Victoria managed Woodlands Historic Park on the eastern side of Moonee Ponds Creek supports a large population of the GSM, which may be the source of the males detected during the survey.

Due to the highly modified nature of any potential habitat within the project areas as well as the historic and current land management practices (mowing, slashing, airport operations) it is considered highly unlikely that the GSM would be present in or around the project areas. As a result, there were not expected to be any direct impacts to the GSM.

Ecological communities

The proposed action will result in the direct, permanent removal of 11.14 hectares of NTGVVP with a weighted average habitat score of 39.02 out of 100. Weighted average habitat score is based on the habitat scores, impact areas and total impact area of all projects included in this referral (refer to Section 4.5.1 for further details of NTGVVP quality assessment). For areas which were inaccessible and assumed to be NTGVVP (based upon adjacent patches), the weighted average habitat score across the remainder of the project area was applied. The areas of NTGVVP which will be impacted are shown for each project area in Appendix D. As a conservative measure, it is assumed that all NTGVVP present within the project footprints will be permanently impacted.

With consideration to habitat and bio-connectivity, it is acknowledged that the proposed locations of the projects does result in the potential for impacts to NTGVVP across multiple areas of the Airport. While efforts have been made to reduce project footprints as far as practical, the positioning of the majority of projects are subject to current safety and Airport requirements and are unable to be relocated. While projects B, D and E are not necessarily restricted based on current Airport needs or constraints, the locations and extents of these projects have been selected to ensure that impacts to ecological communities and bio-connectivity are minimised as much as possible. It is noted that due to existing infrastructure and airport operations the Melbourne Airport estate is already considered to be a highly fractured area with limited connectivity between existing habitats.

While permanent impacts associated with the removal of native vegetation for the purpose of construction have the potential to result in a reduction in bio-connectivity, ecological communities and NTGVVP habitat located in the immediate vicinity of and surrounding each project will be carefully managed. In addition, established areas of NTGVVP located in other areas of the airport estate will remain in place. Given the relatively small-scale level of vegetation removal and the management measures in place aimed at further reducing ecological impacts where possible, localised connectivity between these communities is not expected to be lost.

All projects outlined in this Preliminary Documentation will undergo design and development in accordance with the approved Melbourne Airport Master Plan 2022 to ensure adequate management measures are implemented throughout the construction phase, minimising ecological impacts wherever possible.

5.1.2. Indirect impacts

Threatened species

The Gang-gang Cockatoo *Callocephalon fimbriatum*, White-throated Needletail *Hirundapus caudacutus*, and Grey-headed Flying-fox *Pteropus poliocephalus* are likely to utilise woodland patches north of the project areas, which may result in flights over the project areas at times. Indirect impacts to these species associated with the project are likely to comprise dust and noise

from excavation activities during construction only, although it is noted that construction noise will be less than aircraft noise from existing operations.

Indirect impacts to these species associated with the project may include:

- **Noise** - Noise from excavation activities will occur during construction hours only. All construction noise will be managed in accordance with a project-specific construction environmental management plan (CEMP). Although it is noted that construction noise will be significantly less than current aircraft noise associated with the existing airport operations, the project-specific CEMPs will detail best-practice construction noise mitigation measures to be implemented in order to mitigate any potential indirect impacts from noise. The minimum required noise mitigation measures are outlined in Section 8.2.
- **Dust** - Construction activities, in particular earthworks and soil management, have the potential to generate dust emissions. Dust emissions will be managed in accordance with the project-specific CEMP. The minimum required dust mitigation measures are outlined in Section 8.2.

GSM have been recorded in two areas in the northern-most portion of Melbourne Airport only (refer Section 4.4.1). While potential GSM habitat is present throughout the airport and within the project areas as noted in section 5.1.1 above, previous surveys have not detected the species at any locations within the project areas. In addition, due to the highly modified nature of any potential habitat within the project areas, the physical barrier of Sunbury Road, as well as the historic and current land management practices (mowing, slashing, airport operations) it is considered highly unlikely that the GSM would be present in or around the project areas as discussed in Section 5.1.1. Based on these factors, it's considered highly unlikely that a GSM population exists within the project area or adjacent areas, therefore no indirect impacts to identified GSM are expected.

Ecological communities

The proposed works will physically isolate several small areas of identified NTGVVP from adjoining broader patches (shown in yellow in Figure 3), resulting in those areas falling below the threshold size for NTGVVP of 0.05 hectares. As such the total of these areas (being 0.01 hectares) is considered an indirect loss. Other remaining patches of NTGVVP are all greater than 0.05 hectares in size.

No facilitated impacts to NTGVVP are expected.

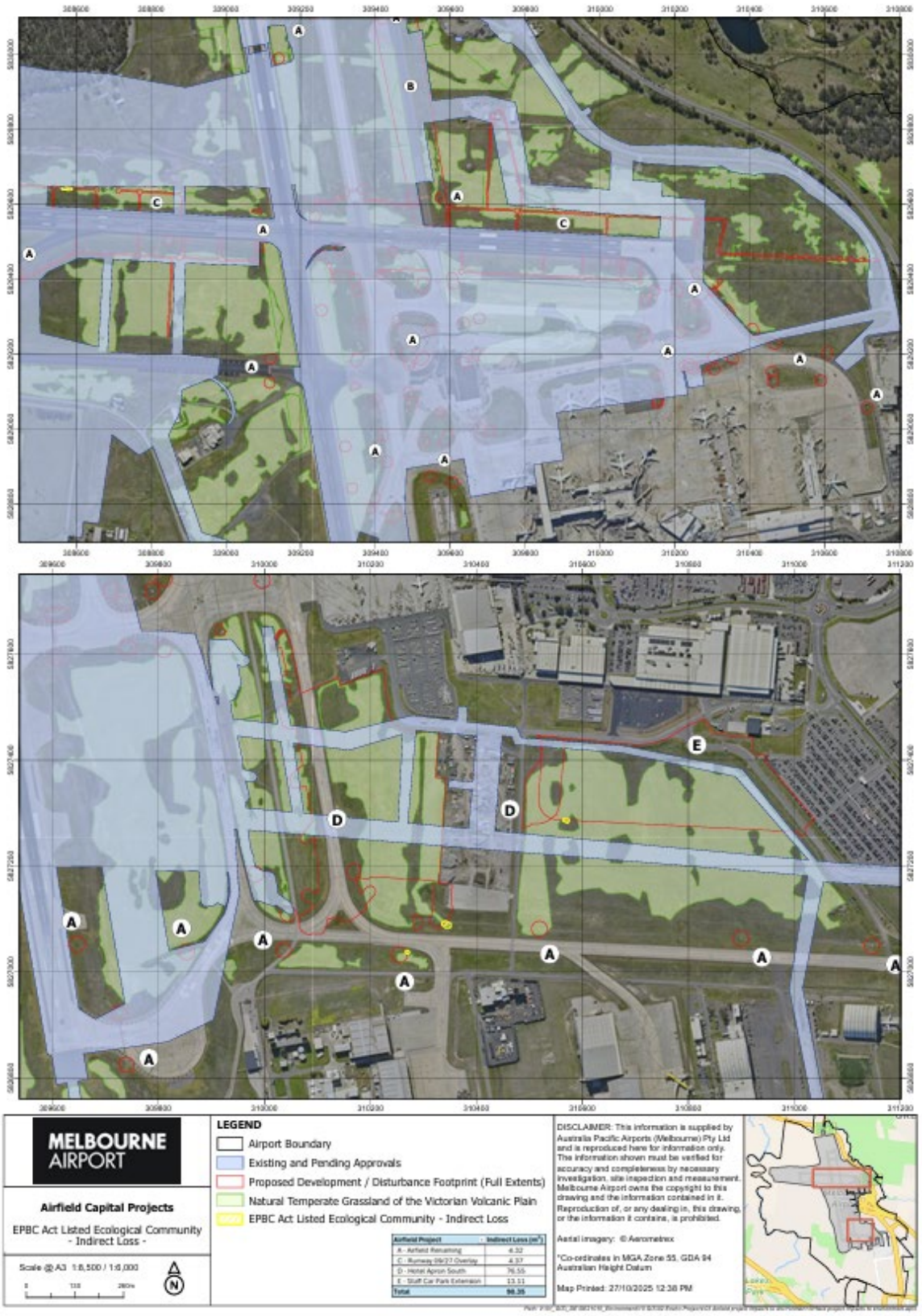


Figure 3 Indirect impacts to NTGVVP associated with the project

5.2. Likelihood of impacts

5.2.1. Direct impacts

Threatened species

No direct impacts to threatened species are expected (refer Section 5.1.1).

Ecological communities

Permanent impacts associated with the removal of native vegetation for the purpose of construction, in particular bulk earthworks, access routes, stockpiling and laydown areas and excavation of trenches for services are considered unavoidable. Given the presence of up to 11.14 hectares of NTGVVP located within the project areas, the likelihood of direct impact to NTGVVP is certain.

Measures that will be implemented throughout the project to minimise impacts to surrounding NTGVVP where possible are discussed in section 8 below.

5.2.2. Indirect impacts

Threatened species

Threatened fauna species (the Gang-gang Cockatoo *Callocephalon fimbriatum*, White-throated Needletail *Hirundapus caudacutus*, and Grey-headed Flying-fox *Pteropus poliocephalus)* may utilise nearby woodland patches, occasionally utilise habitat within the project area, or fly over the project area but are unlikely to be resident or make significant use of the project area. Therefore, indirect impacts to these species are possible, but not expected for this project.

Whilst there is the potential for the GSM to occur in project area B due to the detection of the species in the Moonee Ponds Creek Corridor, adjacent to project area B this is not generally typical habitat for the species. The area is considered unlikely to be re-populated by GSM due to airside operational requirements (slashing, herbicide and insecticide spraying) impacting the vegetation surrounding the project area, the species limited dispersal ability and the fact that no previous surveys had identified GSM within the project area. As such, the likelihood of indirect impacts to the GSM is considered low.

Ecological communities

The proposed works will physically isolate several small areas of identified NTGVVP from adjoining broader patches (shown in yellow in Figure 3), resulting in those areas falling below the threshold size for NTGVVP of 0.05 hectares. These impacts are considered unavoidable and therefore the likelihood of indirect impacts to these areas is considered certain.

No facilitated impacts to NTGVVP are expected.

5.3. Severity of impacts

The likelihood of the proposed action having a significant impact on listed threatened species and ecological communities has been assessed in accordance with:

- Matters of National Environmental Significance: *Significant impact guidelines 1.1*, EPBC Act 1999 (Commonwealth of Australia 2013a).

MNES relevant to the project are summarised in Table 8. A detailed assessment against the significant impact guidelines for NTGVVP is provided in Table 9 below.

Overall, it is considered likely that the proposed action will result in a significant impact on NTGVVP. There are no likely significant impacts to any other EPBC Act listed species.

Table 8 Assessment of relevant MNES

MNES	Project specifics	Assessment against significant impact guidelines
EPBC Act listed species	21 flora species and 43 fauna species listed under the EPBC Act have been recorded or have the potential to occur within 10 km of the project areas. The likelihood of these species occurring in the project area is assessed in Appendix A and summarised in Section 4.1.	Threatened flora species predicted to occur within the project areas are considered to have a negligible to low likelihood of occurrence. The proposed action is therefore considered unlikely to constitute a significant impact on these species. For fauna species with a medium or higher likelihood of occurrence, an assessment of potential for significant impact is outlined below: • Despite previous surveys not detecting the species within the project area, survey efforts in 2018 detected GSM in the Moonee Ponds Creek Corridor, adjacent to Project B area. The individuals were recorded in areas dominated by Ribwort and Turnip. This is not generally typical habitat for the species. It is likely that the Parks Victoria managed Woodlands Historic Park on the eastern side of Moonee Ponds Creek supports a large population of the Golden Sun Moth, which may be the source of the males detected during the survey. Whilst it was considered that there may be a medium likelihood of GSM occurring in project area B (refer Section 4.3.1), this area is unlikely to be re-populated by GSM due to airside operational requirements (slashing,

MNES	Project specifics	Assessment against significant impact guidelines
		herbicide and insecticide spraying) and the species limited dispersal ability. Therefore, the project is considered unlikely to constitute a significant impact on this species. • The Gang-gang Cockatoo *Callocephalon fimbriatum*, White-throated Needletail *Hirundapus caudacutus* and the Grey-headed Flying-fox *Pteropus poliocephalus* are likely to utilise woodland patches north of the project areas, which may result in flights over the project area at times. However, as no suitable habitat occurs within any of the project areas, the project is considered unlikely to constitute a significant impact on these species.
EPBC Act listed ecological communities	The following EPBC Act listed ecological communities are present within the project areas: • Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP).	The project will result in the direct, permanent removal of 11.14 hectares of NTGVVP and indirect loss of 0.01 hectares of NTGVVP. No additional facilitated impacts to NTGVVP are expected. Detailed assessment against the *Significant impact guidelines 1.1* for NTGVVP is presented in Table 9.

Table 9 Significant impact assessment for NTGVVP

Significant impact criteria (critically endangered / endangered community)	Likelihood of significant impact	Justification
Reduce the extent of an ecological community	Likely	It is inherently difficult to estimate the extent of treeless threatened ecological communities (TECs) at landscape scales. Nevertheless, it is generally accepted that NTGVVP has declined in extent by more than 98% since European arrival in Victoria (TSSC, 2008). In the early 2000s, it was estimated that 5,000 hectares of NTGVVP

Significant impact criteria (critically endangered / endangered community)	Likelihood of significant impact	Justification
		remained (Barlow and Ross, 2002). If anything, the extent of this TEC is likely to be less now. Removal of an approximate total of 11.15 hectares of NTGVVP from the project area (including direct removal of 11.14 hectares of and indirect loss of 0.01 hectares) amounts to removal of approximately 0.22% of the estimated remaining extent of this TEC, near the eastern limit of the TEC's distribution. In the context of the historical decline in NTGVVP, this impact could be considered significant.
Fragment or increase fragmentation of an ecological community	Likely	It is estimated that more than 95% of known patches of NTGVVP are less than 10 ha in size, as a result of fragmentation by clearing and modification of the TEC over time (TSSC 2008). The proposed action would impact the margins of a number of patches of NTGVVP generally associated with broader areas of grassland greater than 10 ha in size. It is considered likely that the proposed action could cause fragmentation or increase fragmentation of the NTGVVP TEC.
Adversely affect habitat critical to the survival of an ecological community	Unlikely	Melbourne Airport supports a broader area of grassland covering approximately 270 hectares. The projects would result in permanent removal of a combined 11.15 hectares of this grassland and therefore adversely affect about 4.13% of NTGVVP within the airport estate. Given the broader context, this is considered unlikely to have a significant impact on the ability of this TEC to persist in the airport or in the broader context. However, given that less than 2% of the TEC is estimated to still exist, most areas that continue to support the TEC are likely to be considered critical habitat, particularly if those areas support moderate to high quality examples of the TEC. While no formal Recovery Plan has been prepared or adopted for this TEC and no critical habitats have been formerly identified by the Australian Government, where possible APAM is enacting a number of priority recovery and threat abatement actions outlined in the Approved

Significant impact criteria (critically endangered / endangered community)	Likelihood of significant impact	Justification
		Conservation Advice for the NTGVVP dated 29 May 2008. APAM is committed to undertaking the following actions for NTGVVP offset sites which it secures, both on and off airport: • Monitoring for key threats and minimising adverse impacts from changed land uses. • Protecting remnants of NTGVVP communities via the establishment and management of offset sites • Establishment and implementation of weed management plans to remove key weed species and ensuring chemicals are applied in a manner that does not adversely impact the ecological community. • Preventing trampling and excessive grazing on offset sites and development of appropriate fire management regimes.
Modify or destroy abiotic factors necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns	Unlikely	Project construction activities are unlikely to result in long term disturbance to soil, topography and hydrology necessary for persistence of the TEC across most of the project areas.
Cause a substantial change in the species composition of an occurrence of an ecological community, including a decline or loss of functionally important species, for example through regular burning or flora and fauna harvesting	Unlikely	Decline of NTGVVP typically involves the sequential loss of the following functionally important species or floristic groups: loss of warm-season grasses (e.g. Kangaroo Grass), followed by decline in native forb diversity, followed by loss of cool-season grasses (e.g. Tussock Grass, Wallaby Grass and Spear Grass). Permanent removal of 11.15 hectares of NTGVVP within the project area would be unlikely to result in loss of functionally important species from the broader occurrence of the TEC. Any NTGVVP that persists or regenerates within the project areas has a reduced species richness and is subject to the same intensive management regimes (e.g. mowing) post-construction, thereby resulting in a similar reduced flora and fauna assemblages as to

Significant impact criteria (critically endangered / endangered community)	Likelihood of significant impact	Justification
		any other existing areas of NTGVVP within the airport grounds.
Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including but not limited to: • Assisting invasive species establishment • Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community.	**Possible**	Construction of each project will result in opportunities for the invasion of highly invasive weeds. However, the disturbed topsoil is proposed to be reinstated as topsoil and this is expected to mitigate the potential for weed invasion by maximising the opportunity for native grasses to re-establish. Proposed mitigation measures are expected to reduce the likelihood of these impacts, these are detailed in Section 8.
Interfere with the recovery of an ecological community	**Unlikely**	The action of clearing 4.17% of the estimated remaining area of this TEC within the airport ground and 0.22% more broadly, even at the eastern edge of the TEC's distribution, is not considered likely to interfere with priority recovery and threat abatement actions. Note that current and ongoing management of NTGVVP within airport grounds is unlikely to contribute to the recovery of this TEC in general. No formal Recovery Plan has been prepared or adopted for this TEC however as noted above, APAM is committed to undertaking actions in line with the Approved Conservation Advice (29 May 2008) for NTGVVP offset sites which it secures, both on and off airport.

6. Impacts to the environment of Commonwealth land

For actions on or adjacent to Commonwealth land, impacts to the whole of environment must be considered, regardless of whether any MNES are present. This section assessed the likelihood of the proposed action having a significant impact on the environment on Commonwealth land and has been assessed in accordance with:

- Actions on, or impacting upon, Commonwealth land, and actions by commonwealth agencies: *Significant impact guidelines 1.2*, EPBC Act 1999 (Commonwealth of Australia 2013b)

Overall, it is considered that the proposed action is likely to result in a significant impact on Commonwealth land, due to the following factors:

- Substantial disturbance of contaminated soils have the possibility to occur
- Medium scale native vegetation clearance is likely to occur
- The introduction of potentially invasive species is possible

6.1. Impacts on landscapes and soils

Table 10 provides an assessment against the relevant criteria for impacts on landscape and soils.

Table 10 Assessment of impacts on landscapes and soils

Criteria	Assessment
Is there a real chance or possibility that the actions will:	
Substantially alter natural landscape features	No. The proposed action is located fully within the operational airside boundary of Melbourne Airport, being a highly modified environment which has undergone extensive landscape alteration in the past. The proposed action will not substantially alter natural landscape features.
Cause subsidence, instability or substantial erosion, or	No. The proposed action is located on flat ground surrounded by existing infrastructure, it is unlikely to cause subsidence, instability or substantial erosion.
Involve medium or large-scale excavation of soil or mineral?	No. Although some excavation will be required for the works (to a maximum depth of 1.5 m), no excavation considered as medium or large-scale would be required.

6.2. Impact on coastal landscapes and soils

Table 11 provides an assessment against the relevant criteria for impacts on coastal landscapes and process.

Table 11 Assessment of impacts on coastal landscapes and process

Criteria	Assessment
Is there a real chance or possibility that the actions will:	
Alter coastal processes, including wave action, sediment movement or accretion, or water circulation patterns	No. The proposed action is not located within the vicinity of coastal environments and no works within aquatic environments are proposed.
Permanently alter tidal patterns, water flows or water quality in estuaries	
Reduce biological diversity or change species composition in estuaries, or	
Extract large volumes of sand or substantially destabilise sand dunes?	

6.3. Impacts on ocean forms, ocean processes and ocean life

Table 12 provides an assessment against the relevant criteria for impacts on ocean forms, ocean processes and ocean life.

Table 12 Assessment of impacts on ocean forms, ocean processes and ocean life

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Reduce biological diversity or change species composition on reefs, seamounts or in other sensitive marine environments	No. The proposed action is not located within the vicinity of coastal (i.e. marine) environments and no works within aquatic environments are proposed.
Alter water circulation patterns by modification of existing landforms or the addition of artificial reefs or the other large structures	
Substantially damage or modify large areas of the seafloor or ocean habitat, such as sea grass	
Release oil, fuel or other toxic substances into the marine environment in sufficient quantity to kill larger marine animals or alter ecosystem processes, or	
Release large quantities of sewage or other waste into the marine environment?	

6.4. Impacts on water resources

Table 13 provides an assessment against the relevant criteria for impacts on water resources.

Table 13 Assessment of impacts on water resources

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Measurably reduce the quantity, quality or availability of surface or ground water	No. It is highly unlikely that any change to surface or ground water would occur as a result of the proposed action.
Channelise, divert or impound rivers or creeks or substantially alter drainage patterns, or measurably alter water table levels?	No. The proposed action is highly unlikely to have any impact to rivers, creeks, drainage patterns or water table levels.

6.5. Pollutants, chemicals, and toxic substances

Table 14 provides an assessment against the relevant criteria for impacts from pollutants, chemicals and toxic substances.

Table 14 Assessment of impacts from pollutants, chemicals and toxic substances

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Generate smoke, fumes, chemicals, nutrients, or other pollutants which will substantially reduce local air quality or water quality	No. Fumes from vehicles and machinery will not exceed normal background levels and will therefore not substantially reduce local air, soil or water quality.
Result in the release, leakage, spillage or explosion of flammable, explosive, toxic, radioactive, carcinogenic, or mutagenic substances, through use, storage, transport, or disposal	No. No pollutants or chemicals will be used during construction. Refuelling of vehicles and equipment will occur off-site where possible. The project-specific CEMPs will outline protocols for refuelling and include contingencies in the event of an accidental release of fuel from construction vehicles and equipment while operating (i.e. spill response procedures). Each CEMP will meet minimum requirements of the Melbourne Airport EMP.
Increase atmospheric concentrations of gases which will contribute to the greenhouse effect or ozone damage, or substantially disturb contaminated or acid-sulphate soils?	Possible. Concentrations of contaminants including PFAS were reported at levels ranging from PFAS Management Level 1 to PFAS Management Level 3. The scale, intensity and duration of excavation works is not considered to be significant. Proposed mitigation measures are expected to reduce the likelihood of these impacts, these are detailed in Section 8.

6.6. Impacts on plants

Table 15 provides an assessment against the relevant criteria for impacts on plants.

Table 15 Assessment of impacts on plants

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Involve medium or large-scale native vegetation clearance	Likely. Commonwealth land at Melbourne Airport is approximately 2,665 hectares in size of which 650 hectares contains native vegetation of varying qualities, patch sizes and EVCs. Approximately 410 hectares of this native vegetation is Plains Grassland EVC of which approximately 270 hectares is comprised of the NTGVVP ecological community. The proposed action will result in permanent removal of: • 0.0048 hectares of Plains Grassy Wetland (EVC 125), 15.37 hectares of Plains Grassland (EVC 132) of which 11.14 hectares is NTGVVP. In addition there is an indirect loss of 0.01 hectares of Plains Grassland which is also NTGVVP. This amounts to approximately 4.08% of the total native vegetation within Melbourne Airport. This is considered to be medium-scale vegetation clearance across all eight projects. It is important to consider the location and quality of the vegetation to be impacted. The native vegetation is located adjacent to taxiways and existing buildings and onsite infrastructure. It is subject to regular mowing and impacts from the existing infrastructure and associated land uses. The vegetation proposed for removal and disturbance has previously been removed or impacted from the original installation of the taxiways and the construction of other airfield infrastructure and has since recolonised the project area. It is likely that the clearing of native vegetation as described above would result in medium scale clearing of native vegetation that would result in a significant impact to the environment.
Involve any clearance of any vegetation containing a listed threatened species which is likely to result in a long-term decline in a population or which threatens the viability of the species	No. The vegetation clearance required will not result in the long-term decline in a population of a threatened species or threaten the viability of the species. There are no known listed threatened species within the study area.
Introduce potentially invasive species	Possible. Proposed mitigation measures are expected to reduce the likelihood of these impacts, these are detailed in Section 8.
Involve the use of chemicals which substantially stunt the growth of native vegetation or	No. There will be no use of chemicals which will impact plants.

Criteria	Assessment
Involve large-scale controlled burning or any controlled burning in sensitive areas, including areas which contain listed threatened species?	No. The proposed action does not include burning.

6.7. Impacts on animals

Table 16 provides an assessment against the relevant criteria for impacts on animals.

Table 16 Assessment of impacts on animals

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Cause a long-term decrease in, or threaten the viability of, a native animal population or populations, through death, injury or other harm to individuals	No. The proposed action will only have a low-negligible impact on native species through disturbance during construction. The proposed action will not fragment or substantially reduce habitat for native species within the Melbourne Airport. EPBC Act listed fauna species with a medium or higher likelihood of occurrence within the project area, including the Gang-gang Cockatoo *Callocephalon fimbriatum*, White-throated Needletail *Hirundapus caudacutus,* Golden Sun Moth *Synemon plana* and Grey-headed Flying-fox *Pteropus poliocephalus* are unlikely to utilise the habitat within the proposed project areas.
Displace or substantially limit the movement or dispersal of native animal populations	
Substantially reduce or fragment available habitat for native species	
Reduce or fragment available habitat for listed threatened species, which is likely to displace a population, result in a long-term decline in a population, or threaten the viability of the species	
Introduce exotic species which will substantially reduce habitat or resources for native species, or	No. The proposed works will not result in the introduction of exotic fauna species.
Undertake large-scale controlled burning or any controlled burning in areas containing listed threatened species?	No. The proposed impact does not include burning.

6.8. Impacts on people and communities

Table 17 provides an assessment against the relevant criteria for impacts on people and communities.

Table 17 Assessment of impacts on people and communities

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Substantially increase demand for, or reduce the availability of, community services or infrastructure which have direct or indirect impacts on the environment, including water supply, power supply, roads, waste disposal, and housing	No. There are no people or communities that will be adversely affected by the proposed projects.
Affect the health, safety, welfare, or quality of life of the members of a community, through factors such as noise, odours, fumes, smoke, or other pollutants	
Cause physical dislocation of individuals or communities, or	
Substantially change or diminish cultural identity, social organisation, or community resources?	

6.9. Impacts on heritage

Table 18 provides an assessment against the relevant criteria for impacts on heritage.

Table 18 Assessment of impacts on heritage

Criteria	Assessment
Is there a real chance or possibility that the action will:	
Permanently destroy, remove or alter the fabric of a heritage place?	No. There are no known cultural heritage values located within the project areas. Mitigation measures under relevant approved Cultural Heritage Management Plans (CHMPs) will be followed including: • CHMP 12774 • CHMP 16792 Figure 4 shows the project areas which overlap with the relevant CHMPs. Where project areas are not covered by existing CHMPs, these areas have been identified during previous cultural heritage assessments as being previously disturbed with a low likelihood of heritage values and therefore no CHMP or specific management measures are required.
Involve extension, renovation, or substantial alteration of a heritage place in a manner which is inconsistent with the heritage values of the place?	No. The works do not involve extensions or renovations. No heritage structures will be impacted by the proposed works for each project.

Criteria	Assessment
Involve the erection of buildings or other structures adjacent to, or within important site lines of a heritage place which are inconsistent with the heritage values of the place?	No. The proposed works are not expected to further alter the already modified landscape surrounding each project.
Substantially diminish the heritage value of a heritage place for a community or group for which it is significant?	No. The works will not substantially diminish the heritage values of places in the project areas.
Substantially alter the setting of a heritage place in a manner which is inconsistent with the heritage values of the place?	No. The proposed works will not substantially alter the setting of any heritage places.
Substantially restrict or inhibit the existing use of a heritage place as a cultural or ceremonial site?	No. The works will not restrict or inhibit access to any Aboriginal or historical cultural heritage values used as a cultural or ceremonial site.



Figure 4 Overlap of proposed action with existing approved CHMPs

6.10. Site contamination

Extensive contamination assessments have been completed across Melbourne Airport to date and these provide a comprehensive understanding of the historical practices within the airport estate, the contamination status of soil across the airport precinct and the likely contamination status within each of the project areas. A summary of the previous investigations is provided in Sections 6.10.1 to 6.10.3 following. Figure 5 shows the sampling locations associated with the previous contamination assessments, and how they relate to the project area. This information is shown in more detail for each project area in Appendix M.

Due to the location of the project area within an operational airfield, access is constrained and the ability for gathering additional soil contamination data is limited. Soil classification testing within each project area will be completed as part of the construction phase of works to inform soil management options as required by the CEMPs and PFAS Management Plan. Soil classification testing will be conducted by a suitably qualified site contamination consultant, and a report will be prepared for each project area which details the classification of material to be excavated.

6.10.1. Preliminary soil assessment (AECOM, 2023)

A targeted preliminary soil sampling program was undertaken to assist in the characterisation of soil and pavement materials in the vicinity of Taxiway Alpha North, adjacent to projects A, D and E. In addition to this soil assessment, one groundwater monitoring bore was installed in order to assess the potential for perched water to interact with the pavements at shallow depths (<2m below ground surface). Further detail on the outcomes of the assessment is provided below.

Scope of work

Soil investigation works were completed between 23 and 31 January 2023. It is noted that while the investigation locations do not fall directly within the project boundaries, the outcomes of the assessment provide an indication of the conditions expected to be encountered within the nearby project areas.

- Desktop review of historical site information for the Melbourne Airport and surrounding land uses.
- Six (6) test pit locations (TP4 - TP09) excavated to depths of 2.0 m.
- Seven (7) borehole locations (BH02 - BH08) progressed to a depth of 2.0 m.
- Soil samples were typically collected near surface, at 0.2 m, 0.5 m, 1.0 m and 2.0 m depth.
- Two soil samples collected from each soil bore and test pit location were analysed for a range of potential contaminants of concern in accordance with EPA Publication 1828.2 and EPA Publication IWRG702.
- Extension of one soil bore (BH2) to a depth of 3.2 m to allow for installation and construction of a groundwater monitoring well.
- While it was proposed that the groundwater monitoring well would be sampled as part of the investigation, following installation the well was found to be dry. As a result, the well was not sampled during the fieldworks completed.

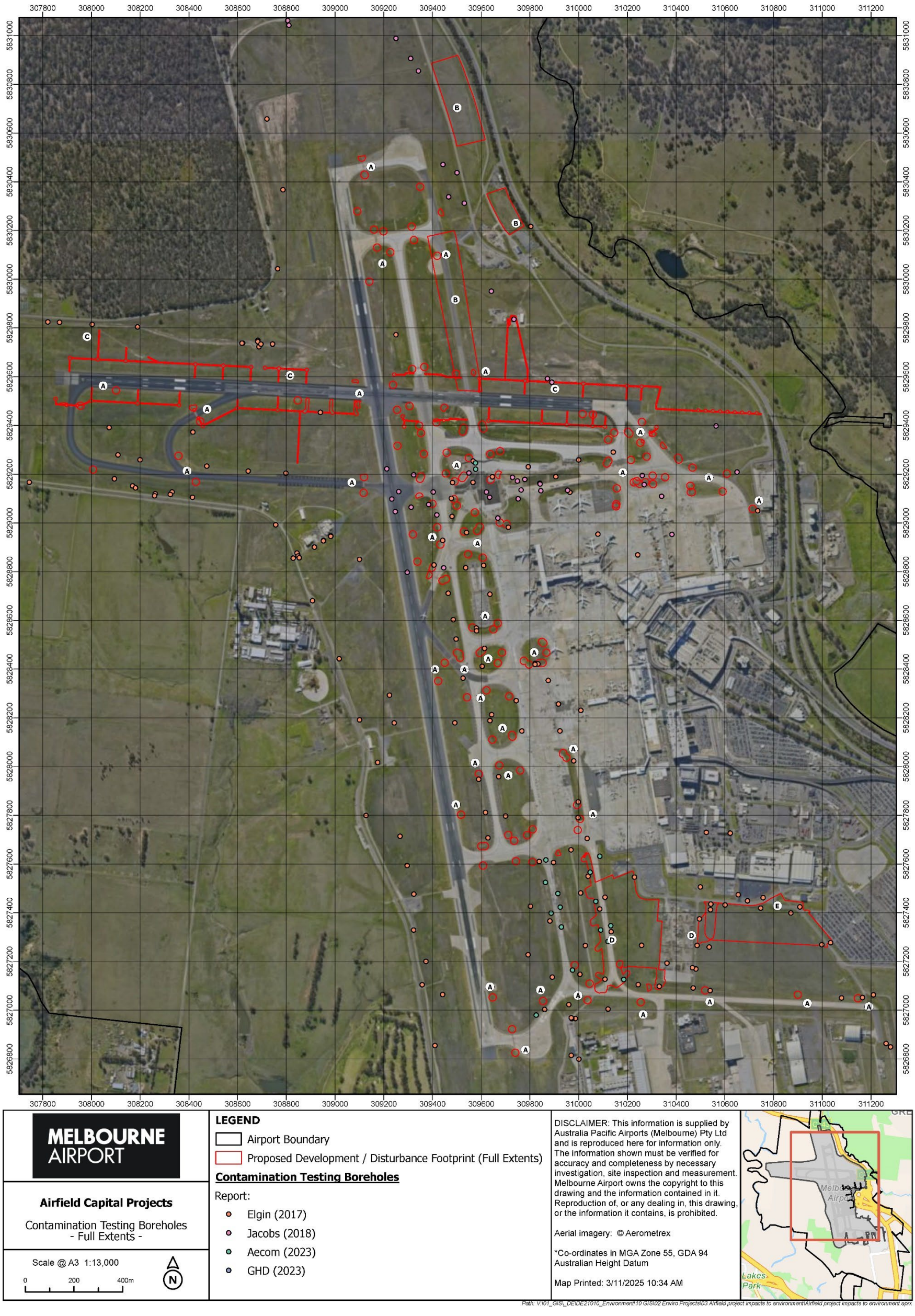


Figure 5 Overview of previous contamination assessments

Site History

Melbourne Airport has been operating as an airport since the 1960s. Historical operations at Melbourne Airport have generally included:

- Passenger and cargo aviation which includes fuel storage and handling.
- Fire training and the storage and use of firefighting foam.
- Tenant-operated maintenance facilities for vehicles and aircraft.
- Water run-off from vehicle-related activities including aircraft maintenance and car park facilities.
- General airport operation, construction, maintenance, and landscaping, including the use and disposal of pesticides and herbicides, solvents and paints, batteries, and asbestos-containing materials within existing buildings, fuels and cleaning chemicals.

No evidence of fuel spills, foam use or storage of chemicals was observed in the project areas from a review of historical aerial photographs and NearMap imagery.

Results of soil and groundwater investigation

Beneath the taxiway pavements the general soil profile consisted of:

- A shallow geological layer comprising fill / reworked natural soil to a depth of approximately 0.2 - 0.5 metres below ground level (mbgl). The fill / reworked natural soil consisted of primarily of sand, sandy clay, and clay.
- The underlying natural soil consisted primarily of clay with some traces of silt and sand observed (0.5 - 2.0 mbgl).
- There were no observations of foreign material, such as fragments of concrete, metal or bricks or visual signs of contamination (staining or odours).

The laboratory analysis results for soil showed:

- The pH of soil samples ranged between 6.1 and 8.5 consistent with the classification of 'non-aggressive' (AS2159 2009 Piling – Design and Installation, Table 6.4.2 pH >5.5).
- Results for all contaminants of concern were below the adopted assessment criteria for human health and land dependent ecosystems.
- No asbestos was observed during the collection of the samples.
- While concentrations of barium exceeded the site specific *Airports (Environment Protection) Regulations 1997* criteria in multiple samples, barium is considered to be a product of basalt weathering and is naturally common in volcanic derived soils. As a result, concentrations of barium exceeding the *Airports (Environment Protection) Regulations 1997* criteria were considered to be an indicator of regional geological conditions and not a source of contamination.
- Concentrations of PFAS compounds were reported below the upper limits outlined in the PFAS National Environmental Management Plan (PFAS NEMP) (HEPA 2025) for Ecological indirect exposure criteria (0.01mg/kg) and the upper limits for Management Level 1 in accordance with the Melbourne Airport PFAS Management Framework.

- Due to detectable concentrations of PFOS and PFHxS above EPA Victoria's waste designation guidelines (Victoria Government Gazette, 2023) this soil is classified as "fill material – PFAS impacted soil" for offsite disposal purposes.
- The groundwater monitoring bore installed was dry and as a result no samples or laboratory analytical results were required as part of the assessment

6.10.2. Organochlorine Pesticides Assessment (Elgin Associates, 2017)

An assessment of organochlorine pesticides (OCP) in surface soils in Airside areas of the Melbourne Airport was undertaken across the four stormwater sub-catchments of Arundel Creek, (Arundel Creek outfalls 1, 2 and 3) and the golf course. The surface soil sampling locations are located in close proximity to project areas A, B, C D and E in the northern portion of the Airport.

Scope of work

Surface soil investigation works were completed in December 2016. It is noted that while the investigation locations do not fall directly within the project boundaries, the outcomes of the assessment provide an indication of the conditions expected to be encountered within the nearby project areas.

- Desktop review of historical information and sampling results of OCP at the Airport.
- Targeted surface soil sampling at 121 total locations across the four sub-catchments at depth intervals between the surface and 0.05 m below ground level.
- Laboratory analysis of soil samples for a suite of OCP compounds.
- Data analysis, interpretation of results and mapping to understand the extent of soil impacts from OCP across all four sub-catchments.

Summary of historical OCP use at the airport

Historical use of OCP at the Melbourne airport comprised the following:

- From the interviews completed with long term APAM assets and maintenance staff and sampling results in 2015 that reported OC pesticides in soils at Airside, it was concluded that organochlorine pesticides have historically been used at the Airport, which was not unexpected given their widespread use in Australia prior to being deregistered in 1988.
- Anecdotes on the historical use of pesticides at the Airport was provided in interviews with long term Airside maintenance staff, which included historical accounts of spraying 'sheep dip' pesticide products to control cricket plagues in the 1980's. The product was sprayed by boom method across the Terminal Apron area, with spraying also on nearby taxiway areas.
- The Wildlife Hazard Management Plan prepared to support Melbourne Airport's management program includes an action for the use of pesticides to reduce invertebrates immediately alongside runways and taxiways, and noted that pesticides had been applied along a length of runway since 2006 as a trial and that this had been successful in reducing magpie numbers in the treated area.
- Historical OCP sampling and analysis undertaken at the airport identified the following:

- Concentrations of dieldrin (0.48 mg/kg) at depths of 0.1 m in fill beneath a former concrete slab adjacent to Terminal 2 in 2013.
- Concentrations of dieldrin (0.7 - 1.3 mg/kg) at depths of 0.1 m depth below ground level in fill material, adjacent to the southern end of the north-south runway in the AC03 drainage catchment in 2014.
- Concentrations of dieldrin (0.08 - 1.95 mg/kg) and 4, 4-DDE (0.64 - 0.95 mg/kg) were detected in sweeper residues collected from the Southern Apron Extension in 2014.
- Concentrations of dieldrin (0.006 - 0.52mg/kg) at two locations in subgrade material (crushed rock) beneath concrete pavement in the AC02 drainage catchment and in subsurface soils in the AC03 drainage catchment.

It is noted that none of the above historical sample locations that showed detectable concentrations of OCP were located within the project areas of projects A, B, C, D or E.

Results of surface soil investigation

Based on the outcomes of the surface soil sampling program the following conclusions were made:

- Concentrations of OCP were detected in surface soils at eight sampling locations in total. Five of these locations occurred in the AC03 catchment and three occur in the AC02 catchment. Detected OC pesticides included dieldrin, which was reported at all eight sample locations. Endrin was also reported at one location.
- The eight locations where OCPs were detected were all from soils adjacent to a hardstand or roadway, such as an Apron, Taxiway or service road. Five locations were all from soils sampled from the grassed verge, whilst the other three locations were sampled from a grassed swale or spoon drain also adjacent to hardstand or roadway.
- The detection of OCPs in surface soils at several locations between the Terminal Apron and Gate 22 is consistent with historical results, which also reported OCPs in surface soils and street sweeper residues in this part of Airport**.** The likely source of these OC pesticides is the historical spraying of ‘sheep dip’ pesticide products in the 1980’s across the Terminal Apron and nearby taxiway areas, based on anecdotal accounts from long term Airside maintenance staff.
- Assessment of the current and historical soil results against the adopted OCP criteria found six results exceeded the accepted limit/trigger value (area of environmental significance) of the Federal Airport Regulations (1997), with one result below this accepted limit/trigger value. These locations were located in the AC02 and AC03 catchments. The results did not exceed other adopted criteria, which included NEPM Health Investigation Levels for commercial/industrial land use.

A review of the sample locations and OCP detections confirmed that none of the samples exceeding the trigger value (area of environmental significance) of the Federal Airport Regulations (1997) were located within the projects areas.

6.10.3. PFAS investigation (Jacobs, 2018)

A PFAS investigation was undertaken to consolidate historical and current concentrations of PFAS compounds and compare them against updated assessment criteria for the Melbourne Airport. The

report detailed the findings of previous investigations undertaken along the Northern Access Route (NAR) and Taxiway Zulu in the vicinity of project areas A and B in the northern portion of the airport.

Scope of work

Soil investigation works were completed in July 2017. It is noted that while the investigation locations do not fall directly within the project boundaries, the outcomes of the assessment provide an indication of the conditions expected to be encountered within the nearby project areas.

- Desktop review of historical soil investigations undertaken across the northern portion of the airport, in the vicinity of the NAR and Taxiway Zulu.
- Installation of 45 soil bores via push tube to an average of 1.0 m depth.
- Collection of 53 soil samples from the 45 bore locations. Samples were typically collected from the top 0.8 m of soil. At eight locations in bores within the Taxiway Zulu area, an additional sample was collected between 0.8 and 1.15 m depth.
- Analysis of soil samples collected from each soil bore for a range of potential contaminants of concern in accordance with EPA Publication 1828.2 and EPA Publication IWRG702.
- Development of a Conceptual Site Model (CSM) and provision of recommendations based on the outcomes of the sampling programs.

Review of historical soil investigations

Previous investigations undertaken in the vicinity of the NAR and Taxiway Zulu in 2014 and 2015 included the following:

- Installation of a total of 24 test pits and 20 boreholes.
- Laboratory results showed concentrations of PFAS (specifically PFOS) above the laboratory Limit of Reporting (LOR) in 3 of 53 samples analysed in 2014 and leachable PFAS in 6 out of 17 samples analysed in 2015.
- No obvious patterns were observed with regard to PFAS detections. As a result additional sampling was recommended, which was undertaken as part of this investigation.

Results of additional soil investigation

The review of historical soil sampling and the additional soil investigation showed the following:

- The encountered fill material comprised silty and gravelly clay comprising coarse gravels to a maximum of 0.4 m depth.
- The underlying natural soil comprised a mixture of silty and sandy clay from 0.1-0.4 m to 1.0 m depth, underlain by weathered basalt rock.
- No obvious signs of contamination observed in the soil profile encountered, with the exception of brick fragments identified at one sampling location in the fill material.

The historical and current laboratory analysis results for soil showed:

- Results for all contaminants of concern were below the adopted assessment criteria for human health and land dependent ecosystems with the exception of total PAHs which exceeded both human and ecological health guidelines at one test pit location TP05 installed in 2014.
- Concentrations of PFAS were below the adopted commercial/industrial ecological criteria at all sample locations. However, leachable concentrations of PFOS were reported above the 99% species protection limits outlined in the PFAS National Environmental Management Plan (HEPA, 2018) at 47 sample locations.
- Based on the laboratory soil results fill and natural soil in the vicinity of the NAR and Taxiway Zulu projects were considered to be classified as EPA Fill Material containing PFAS, for offsite disposal purposes.
- Spatial analysis of the total and leachable PFAS concentrations show there is a broad trend of higher concentrations being present along the NAR and at depth (>0.5 m depth).
- The risk to human health as a result of exposure to NAR and Zulu soils is considered to be low. With implementation of a construction environmental management plan (including items such as use of PPE, dust control etc.), this risk is likely to be reduced.

6.10.4. Limited Soil Assessment (GHD, 2023)

A limited soil assessment was conducted in 2023 to understand the contamination of status of the soil within the proposed Taxiway Alpha North package areas, adjacent to project areas A, D and E in the eastern and southern portions of the airport. The scope of works included the collection and analysis of shallow soil samples (up to 1 m) from 12 geotechnical sampling locations.

Results of soil investigation

Results from the soil investigation showed the following:

- The encountered fill material comprised gravelly clay with sand with coarse gravels to a maximum of 0.6 m depth.
- The underlying natural soil comprised sandy clay from 0.05-0.6 m to 1.5-1.8 m depth, underlain by weathered basalt rock.
- Results for all contaminants of concern were below the adopted assessment criteria for human health and land dependent ecosystems with the exception of nickel and chromium which exceeded health guidelines.
- Groundwater was found to range from 20 to 23 mbgl and was considered unlikely to be encountered during construction activities
- Detectable concentrations of PFAS were reported in the majority of soil samples, however only one sample (BH06) exceeded the Level 1 Melbourne Airport PFAS Management Framework upper limits (0.01 mg/kg) and the leachable PFAS NEMP Unlined Landfill criteria (0.07 µg/L).
- Based on the laboratory results fill and natural soils were considered to be classified as Category D soils for offsite disposal purposes.

6.10.5. Status of contaminants of concern across project areas

The assessments summarised in sections 6.10.1 to 6.10.4 included analysis for a wide range of Contaminants of Potential Concern (COPC) in order to assess the contamination status of the investigation areas adequately. The assessments reported the following:

- **Preliminary soil assessment (AECOM, 2023):** Concentrations of all COPC were below the adopted assessment criteria for human health and land dependent ecosystems. While concentrations of barium exceeded the site-specific *Airports (Environment Protection) Regulations 1997* criteria in multiple samples, barium is considered to be a product of basalt weathering and is naturally common in volcanic derived soils. As a result, concentrations of barium exceeding the *Airports (Environment Protection) Regulations 1997* criteria were considered to be an indicator of regional geological conditions and not a source of contamination.
- **PFAS investigation (Jacobs, 2018):** Concentrations of all COPC were below the adopted assessment criteria, with the exception of concentrations of total PAH ranging from 44-47 mg/kg at one location (TP05), which exceeded the assessment criteria adopted for the Site at the time of the assessment *(RAIS - Dutch Intervention Soils Screening Benchmark (RAIS, 2018))*. However, its noted that the reported concentrations of 44-47 mg/kg were well below the more applicable Australian Standards derived from the *NEPM 2013 Table 1A Human Investigation Levels (HILs)* of 4,000 mg/kg for commercial industrial land use.
- **Organochlorine Pesticides Assessment (Elgin Associates, 2017):** Concentrations of COPC were below the adopted assessment criteria for the Site, with the exception of the following:
  - Concentrations of Dieldrin at two locations in assessment area AC03, in samples SS25 and SS30 (2.3 mg/kg and 0.84 mg/kg respectively) and at one location in assessment area AC02 in sample SS64 (1.0 mg/kg) which exceeded the *Federal Airport Environment Regs 1997 - Accepted Limit/Trigger Level (Area of Environmental Significance).*
  - These locations were located in the AC02 and AC03 catchments in soils adjacent to a hardstand or roadway, such as an Apron, Taxiway or service road.
- **Limited Soil Assessment (GHD, 2023):** Results for all contaminants of concern were below the adopted assessment criteria for human health and land dependent ecosystems with the exception of the following:
  - Concentrations of nickel (70-110 mg/kg) and chromium (81-82 mg/kg) which exceeded the adopted *NEPM 2013 Ecological Investigation Levels (EILs)* for commercial/industrial land use and the *Federal Airport Environment Regs 1997 - Accepted Limit/Trigger Level (Area of Environmental Significance)* at five locations (BH02 to BH06).
  - All sample locations were located either underlying or immediately adjacent to current hardstand bitumen storage areas in the southern portion of the airport.

Based on the locations of these sampling points (adjacent to or underlying hardstand storage areas, runways or roadways) and the ongoing land use as an airport, the potential risks posed to onsite receptors was considered to be low. In addition, exceedances of the adopted assessment criteria for Federal *Airport Environment Regs 1997 - Accepted Limit/Trigger Level (Area of Environmental Significance)* were not considered to be relevant, where sample locations were located in and

around the airport infrastructure that is subject to regular airside operational requirements for maintenance (slashing, herbicide and insecticide spraying).

In addition, all potentially contaminated soil will be appropriately managed under project specific CEMPs to ensure all possible risks to human health and the environment are minimsed where possible.

6.10.6. Status of PFAS impacts across the project areas

Per- and polyfluoroalkyl substances (PFAS) are the key contaminants of concern which will drive the management options for any soil which is excavated as part of the project construction work. A plan showing the inferred levels of PFAS contamination in soil across the airport and within each of the project areas is provided in Figure 6 below.

As shown in Figure 6**Error! Reference source not found.** and evidenced in the previous investigations, PFAS concentrations in soil across the project areas are expected to range from <0.01 mg/kg to 1 mg/kg. All soils excavated during project construction works will be managed in accordance with requirements outlined in the Melbourne Airport PFAS Management Framework as follows:

- **PFAS Management Level 1**: Requires leachable concentrations <0.4 µg/L. Reuse within same concentration areas with surface stabilisation improvements (e.g. hydromulch). If this soil is removed from the project area it will be stored at the Gate 11 facility and treated for stabilisation to minimise dust generation and surface water runoff using hydromulch or similar stabilisation product.
- **PFAS Management Level 2:** Requires leachable concentrations >0.4 to 0.7. Reuse within same concentration areas beneath a separation layer to further mitigate potential leaching and mobilisation of PFAS into surface water run-off (i.e., hardstand, clean soil or Level 1 PFAS impacted soil with surface stabilisation). If this soil is removed from the project area it will be stored at the Gate 11 facility and treated for stabilisation to minimise dust generation and surface water runoff using hydromulch or similar stabilisation product.
- **PFAS Management Level 3:** Leachable concentrations >0.7 mg/L. Reuse subject to specific risk assessment in accordance with the PFAS NEMP, and subject to approval by the APAM Environment and Sustainability Team. If this soil is removed from the project area it will be stored at the Gate 11 facility with temporary and final stockpiles covered with an impermeable barrier to prevent infiltration to, and leaching from, stockpile (e.g. LDPE with maintenance; or impermeable geocomposite; or similar material).

All management of PFAS impacted soils will be conducted in accordance with the Melbourne Airport PFAS Management Framework, which was developed to deliver consistent environmental management practices for potential environmental risks posed by PFAS impacted material on construction and maintenance projects at Melbourne Airport. The framework has been reviewed by DITRDCSA and is being applied to current construction and maintenance projects across the Melbourne Airport estate.

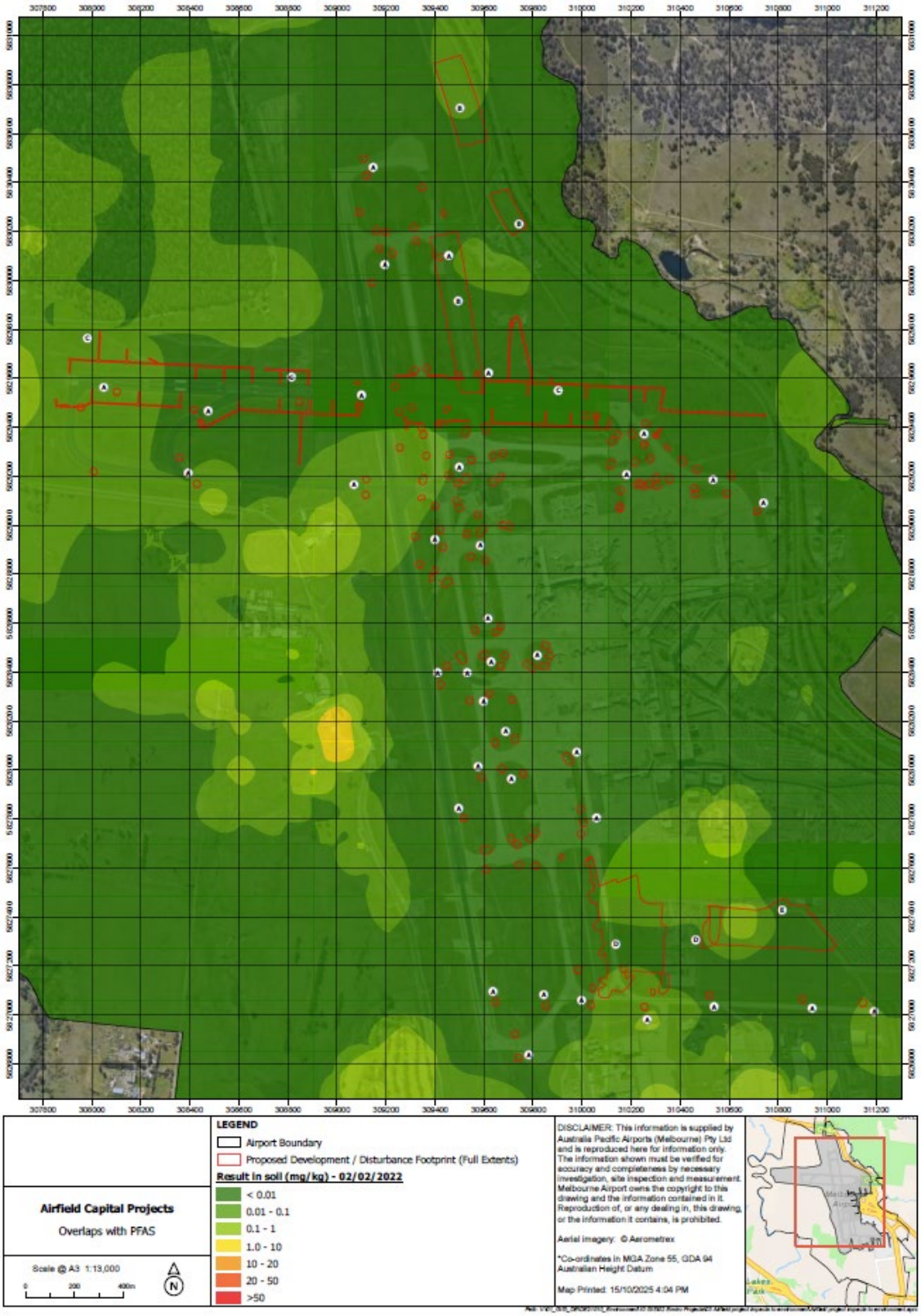


Figure 6 PFAS concentrations in soil – Project footprint overlay

7. Cumulative impacts

7.1. Residual impacts of the proposed action

As outlined in Section 3, the proposed action comprises a range of upgrade and maintenance works required to ensure operations at the Melbourne Airport are able to continue under safe and effective conditions and to allow for increased demand in parking and flights. As such, the proposed action cannot be avoided.

Residual significant impacts on MNES associated with the proposed action are discussed in Section 9.1. Residual impacts will be offset in accordance with the EPBC Act Environmental Offsets Policy (DSEWPaC, 2012b), as per the proposed offset strategy outlined in Section 9.2.

As discussed in Section 5.1, there is some overlap with the proposed action and other EPBC Act approval applications, the most notable being M3R. The M3R MDP has been approved.

7.2. Potential for cumulative impacts

The *Significant impact guidelines 1.2* (Commonwealth of Australia 2013b) state:

An action which will take place in an area that is already developed, or which is consistent with existing land-use, may nevertheless have a significant impact on the environment if cumulative impacts are increased to unacceptable levels.

Melbourne Airport is Australia's second-busiest airport and the main aviation hub for the southern part of the country. The ongoing use and development of Melbourne Airport is outlined in the Melbourne Airport Master Plan 2022. The Master Plan provides detailed plans for the continued development of the airport over the next five years. These plans align with the Master Plan's 20-year strategic direction for the airport that considers the changes needed to aviation facilities, ground transport, utilities infrastructure, non-aviation development and environmental measures.

The Master Plan outlines specific objectives for the Airside Operations Precinct, as discussed in Section 2.1.3 of this Preliminary Documentation. It is acknowledged that other projects are already taking place within the Airside Operations Precinct which have/will impact on MNES. Projects which were assessed as having a significant impact on the environment, and which have already gained approval under the EPBC Act include:

- Taxiway Zulu and Northern Access Route (EPBC 2016/7837)
- Melbourne Airport Pavement Maintenance Program 2 (MAPMP 2) (EPBC 2023/09257)
- Runway 16-34 Overlay Project (EPBC 2022/01371)
- Melbourne Airport's Third Runway (M3R) (EPBC 2021/8886)

The above projects have been considered when evaluating the nature of impacts for the proposed action (Section 5.1).

The Eastern Extension Project (EEP), the delivery of which is a requirement of the M3R approval, is planned to occur and is also likely to have a significant impact on the environment. The EEP MDP is being developed, and is expected to be submitted to the Minister for Infrastructure, Transport and Regional Development in August 2027.

With reference to the impact assessment presented in Section 5.3 and Section 6, it is considered likely that the proposed action with have a significant impact on the NTGVVP TEC, and a significant impact on Commonwealth land due to the following factors:

- Substantial disturbance of contaminated soils has the possibility to occur
- Medium scale native vegetation clearance is likely to occur
- The introduction of potentially invasive species is possible.

The above factors are common to all current and future projects within the Airside Operations Precinct, with the main cumulative impact being permanent removal of NTGVVP associated with all projects. Overall, the cumulative impact is considered to be significant.

It is noted that most grassland within the airfield is highly modified and species-poor, having recolonised land that has previously been subject to earthworks as part of the original construction of the airport in the 1960s. Once construction works associated with the proposed action are complete, disturbed areas will be reinstated and re-vegetated, and routine maintenance within the airfield will continue as per current operations (i.e. regular mowing, management of weeds and pest animals).

7.3. Potential for existing pressures and threats to be exacerbated

The proposed action when considered with impacts from other current and future projects within the Airside Operations Precinct is likely to exacerbate existing pressures and threats to threatened species and ecological communities in the airport through the removal of threatened ecological communities; removal of habitat for threatened species; loss of habitat for local wildlife populations; and substantial alteration to landscape features.

These projects contain required upgrades to enable the airport to manage increased demand and comply with CASA safety standards and therefore are unable to be avoided. Design efforts have greatly reduced the impact areas of all projects and subsequently the impact on native vegetation and fauna habitat. The reduction in impact area able to be achieved for the proposed action is outlined in Section 8.1. This has similarly been addressed through the relevant EPBC Act approvals for other current projects.

Residual impacts from all projects are to be offset per the EPBC Act Environmental Offsets Policy (DSEWPaC, 2012b).

8. Avoidance, mitigation and management measures

8.1. Avoidance measures

The key measure for reducing impacts on ecological values associated with the proposed action is to minimise the removal of native vegetation wherever possible (given the location and scale of the projects, complete avoidance of impacts to ecological values is not possible). Likewise, minimising the impact or disturbance area for each project as far as practical will also reduce the likelihood for the mobilisation of any contaminants present in the underlying soils.

In accordance with these primary mitigation measures, the project areas, construction buffers and access roads have been reduced in size so far as reasonably practicable to reduce the impact to ecological areas and limit the potential for contaminant disturbance. The opportunity to re-use existing pit and duct infrastructure has also been realised in many areas to reduce the need for additional trenching.

Since the previous version of this Preliminary Documentation (Rev2, 30 January 2025), refinement of the project design has resulted in impact to 1.7 ha of NTGVVP being avoided.

Additional mitigation and avoidance measures that will be implemented for all projects, with the aim of reducing impacts to ecological communities and the potential for mobilization of PFAS and other contaminants as outlined in sections 8.2 to 8.4 below.

8.2. Construction phase management and mitigation measures

The construction phase of the projects will be managed under a Construction Environment Management Plan (CEMP) which will be developed for each project, to outline the appropriate environmental goals and objectives. As outlined in Section 2.1.1, each project will need to seek building approval from the ABC once approval under the EPBC Act is gained. The building approval process will require a detailed project-specific CEMP to be prepared, which must be reviewed and endorsed by the APAM Environment and Sustainability Team and the AEO before approval to commence works can be issued by the ABC.

At a minimum, CEMPs will outline environmental management procedures specific to each project and ensure they are consistent with the *Environmental Management Plan Guidelines* (DCCEEW 2024), the Melbourne Airport Environment Management Plan (APAM 2021), and the Melbourne Airport PFAS Management Framework (APAM 2025).

The Melbourne Airport PFAS Management Framework was developed to deliver consistent environmental management practices for potential environmental risks posed by PFAS impacted material on construction and maintenance projects at Melbourne Airport and aligns with the PFAS NEMP. The framework has been reviewed by DITRDCSA and is being applied to current construction and maintenance projects across the Melbourne Airport estate.

The Melbourne Airport EMP outlines the minimum requirements that must be adhered to during any work conducted at Melbourne Airport. The CEMPs developed for each project are required to meet these minimum requirements and outline (but not be limited to) the following:

- Purpose and objectives of the CEMP.
- Roles and responsibilities.

- Reference to relevant environmental legislation and management plans developed by APAM.
- Summary of project details.
- Project details.
- Detailed outline on environmental management controls for all relevant receptors (land, water, flora, fauna) both inside the project areas and in the adjacent areas, as well as measures to be taken to manage potential noise, waste and air quality issues.
- Unexpected finds protocols.
- Emergency response procedures.
- CEMP implementation, monitoring and reporting/record keeping requirements.
- Audits and inspections.

Each CEMP will capture all stages of the relevant project and ensure adequate environmental controls are in place to address all potential risks and impacts that may arise during the project works.

8.2.1. Mitigation measures for ecological communities

The project specific CEMPs will document all processes and management strategies to minimise and/or prevent impacts on ecological values during construction. Implementation of the CEMP will limit impacts to the project area, and all downstream impacts will be considered negligible. The CEMP documents will include detail on the following mitigation and management strategies:

- Protection of EPBC Act listed communities (i.e. NTGVVP) and other areas of native vegetation that are to be retained adjacent to each project area. Exclusion fencing will be erected to protect these areas and identified with appropriate signage such as 'Environmental Protection Area' or 'No-go zone' at regular intervals along the fence line. Access to and from each project area will be restricted to designated access roads and traversing native and introduced grasslands outside of each project's development footprint will be strictly prohibited. In addition, restrictive, but sufficient buffers have been allowed for, to ensure that all construction works can be conducted within the development footprint, without encroaching on established 'No-go zones'. This approach has been adopted most recently for the Taxiway Zulu and northern compound project at Melbourne Airport (EPBC 2016/7837) and was successfully implemented. Refer to Figure 7 which provides examples of exclusion fencing and signage.
- Ensuring that all employees and contractors involved in each project complete environmental inductions prior to undertaking works within a project area.
- Implementation of strict hygiene protocols that reduce the risk of establishment of novel and/or high threat weeds or disease. It is noted that high threat weeds are already established at one or more locations within each project area. The establishment of new high threat weeds, introduction of disease or spread of existing weeds from or around each project area will be mitigated through vehicle washdown procedures, weed control measures, erosion control and surface water management that will be incorporated into each CEMP.
- Requirement to comply with the conditions of relevant CHMPs (12774 and/or 16792).



Figure 7 Examples of exclusion fencing and signage

8.2.2. Mitigation measures for potential PFAS and contamination impacts

The CEMP will document all processes and management strategies to minimise and/or prevent the potential for mobilising PFAS impacted soils/hardstand material or other potential contaminants during construction and earthworks. The CEMP documents will include detail on the following mitigation and management strategies for handling and encountering potentially contaminated soils/ hardstand material, and ensure the projects are completed in accordance with the Melbourne Airport EMP and the Melbourne Airport PFAS Management Framework:

- Staging works throughout the projects to limit the area of exposed surfaces at any one time.
- Designating areas for all material stockpiles, vehicle parking and machinery storage within the project footprint, and not in areas of retained native vegetation.
- Measures to be implemented to prevent and manage potential mobilisation of contaminants, such appropriate sediment fencing downslope of stockpiles, stabilisation of temporary stockpiles and diverting of stormwater away from exposed surfaces.
- Measures to be implemented in managing the offsite disposal (if unexpected contamination is unearthed) of soil/hardstand material excavated during excavation and construction works for each project, including sampling requirements, delineation of likely areas of contaminated soil/hardstand and disposal requirements.
- Double-handling of any excavated material will be reduced wherever possible. Minimising the stockpiling of material and maximising direct transportation of fill to the placement site will therefore be prioritised in the detailed works staging.
- Measures to verify that any fill material imported to the site is free from contamination.
- Requirements for vehicle and onsite personal hygiene regarding minimising the potential for transportation of PFAS and other potential contaminants offsite.
- Sediment and erosion control procedures.
- Refuelling and spill response procedures.

8.3. Post-construction rehabilitation and adaptive management

Post-construction rehabilitation of the project area will focus on establishing an erosion resistant ground condition. This will require a program of revegetation, erosion control, and targeted weed management that will be developed specifically for each project and outlined in the project CEMP.

8.4. Summary of avoidance, mitigation and management measures

A summary of the proposed avoidance, mitigation and management measures is presented in Table 19.

Table 19 Summary of avoidance, mitigation and management measures

Measure	Objectives	Responsibility	Timing	Ongoing management and monitoring	Framework
Development and implementation of CEMP	Avoid and/or minimise construction-related risks to environmental values	Contractor	APAM Environment and Sustainability team to approve and reviewed by Airport Environment Officer prior to the commencement of each project	As defined in the CEMP	• Environmental Management Plan Guidelines (DCCEEW 2024) • Melbourne Airport Environmental Management Plan (APAM 2021) • Melbourne Airport PFAS Management Framework (APAM 2025).
Post-construction rehabilitation	Management of weeds, sediment and erosion	Contractor	Until disturbance area has been stabilised in accordance with APAM EMP and project design requirements.	As per Section 8.2	• Environmental Management Plan Guidelines (DCCEEW 2024) • Melbourne Airport Environmental Management Plan (APAM 2021)

9. Offsets

9.1. Likelihood of residual significant impacts on MNES

The significant impact assessments presented in Section 5.2 and Section 6 detail the extent of impacts to threatened species, ecological communities, listed migratory species and relevant ecological features on Commonwealth land resulting from the proposed action.

With reference to the significant impact assessments:

- It is considered unlikely that the proposed action will result in a significant impact to EPBC listed species (the Gang-gang Cockatoo *Callocephalon fimbriatum*, White-throated Needletail *Hirundapus caudacutus*, Golden Sun Moth *Synemon plana*, and Grey-headed Flying-fox *Pteropus poliocephalus).*
- It is considered likely that the proposed action will result in a significant impact to the NTGVVP TEC.
- It is considered likely that the proposed action would result in a significant impact on Commonwealth land.

Residual significant impacts have been identified as the permanent removal of NTGVVP within project area.

9.2. Proposed offset strategy

APAM is committed to securing a direct offset to compensate for the permanent removal of 11.15 hectares of NTGVVP within the project area, in accordance with the EPBC Act *Environmental Offsets Policy* (DSEWPaC 2012a).

APAM proposes to secure 43.4 ha of NTGVVP as an advanced offset within a site located at Rokewood, VIC (the proposed offset site). The proposed offset site is within a broader site for which there is an existing agreement made under Section 69 of the *Conservation Forests & Lands Act 1987* in relation to the land, a copy of which is included in Appendix I. The location and extent of the proposed 43.4 ha NTGVVP offset is shown in Appendix J. This represents a portion of the broader site, and this area is not currently being used as an offset under any legislation.

The site has been managed since July 2020 in accordance with an Offset Management Plan (OMP), a copy of which is included in the Second Schedule of the landowner agreement (refer Appendix I). The OMP includes measures for the management of all high threats to native vegetation condition improvement, monitoring and reporting requirements and a 10-year management action plan with targets. The proposed offset site and existing OMP were previously approved by DCCEEW to satisfy NTGVVP offsets for another APAM project (EPBC 2022/09386). As such, APAM anticipates this arrangement will be acceptable to DCCEEW. The recent offset monitoring report (refer Appendix L) demonstrates that implementation of this OMP is having positive outcomes on the vegetation condition at the site.

At the time of preparing this Preliminary Documentation, APAM has an executed Memorandum of Understanding (MOU) in place with the landowner.

The Offsets Assessment Guide for the proposed 43.4ha offset is included in Appendix E with justification for the inputs to the calculator provided below. Consideration of EPBC Act *Environmental Offsets Policy* requirements for the offset site is provided in Table 20.

Table 20 Consideration of EPBC Act Environmental Offsets Policy Requirements

Reference	Requirement	Assessment
7.1	Suitable offsets must deliver an overall conservation outcome that improves or maintains the viability of the protected matter	The offset site has been selected as it meets the key attributes of the protected matter to be impacted by the project, and the quality of the NTGVVP present at the offset site exceeds the quality of NTGVVP within the impact area. The overall conservation outcome of the offset site will be improved through site management actions including but not limited to: • Exclusion of commercial agricultural practices and other inappropriate land uses • Pest control • Elimination of key weed species in line with management targets Without protection and management as an offset site, the quality of the NTGVVP would decline in the future.
7.2	Suitable offsets must be built around direct offsets but may include other compensatory measures	APAM proposes to offset 100% of the residual significant impact associated with the project.
7.2.1	Tenure for direct offsets	The offset site will require active conservation management (and improvements) for the first 10 years, after which the offset area is to be managed and maintained as a conservation area in perpetuity.
7.2.3	Impacting on existing EPBC Act offsets	The proposed action will not impact on an existing EPBC Act offset.
7.3	Suitable offsets must be in proportion to the level of statutory protection that applies to the protected matter	These requirements have been assessed using the Offsets Assessment Guide calculator (refer Appendix E).
7.4	Suitable offsets must be of a size and scale proportionate to the residual impacts on the protected matter	
7.5	Suitable offsets must effectively account for and manage the risks of the offset not succeeding	In line with the EPBC Act Environmental Offsets Policy, direct offsets are considered to present a lower risk than other compensatory measures. The OMP includes routine monitoring and evaluation of the effectiveness

Reference	Requirement	Assessment
		of management measures to support success of the offset.
7.6	Suitable offsets must be additional to what is already required, determined by law or planning regulations or agreed to under other schemes or programs	The procurement of the offset site is in addition to any requirements by law, planning regulations and has not been agreed to as a part of any other scheme or program.
7.6.1	Links with state and territory approval processes	Not applicable as Melbourne Airport is situated on Commonwealth land. Refer to Section 2 which outlines the relevant regulatory framework.
7.7	Suitable offsets must be efficient, effective, timely, transparent, scientifically robust and reasonable	The offset site has been assessed and it's potential to deliver the outcomes required to sufficiently offset residual significant impacts from the project is outlined in Table 23.
7.8	Suitable offsets must have transparent governance arrangements including being able to be readily measured, monitored, audited and enforced	These aspects are addressed by the landowner agreement, including the OMP.

9.2.1. Habitat quality scoring system for NTGVVP

As detailed in Section 4.5.2, VQA data was collected for all patches of NTGVVP in the project areas.

The assessment used was the Victorian Department of Energy, Environment and Climate Action (DEECA) VQA method, underpinning the 'habitat hectares' concept (DSE 2004c). Native vegetation was defined in accordance with the 'Guidelines for the removal, destruction or lopping of native vegetation' (DELWP 2017).

'Habitat hectares' is Victoria's standard metric to quantify native vegetation losses and gains for regulatory approvals and biodiversity offsets. It gives habitats a score out of 100: a site condition score out of 75 plus a landscape context score out of 25. When expressed as a decimal (i.e. divided by 100 for a score out of 1), the VQA score can then be multiplied by the area of the vegetation (in hectares) to calculate the number of habitat hectares in a patch of vegetation.

This method is a good surrogate for habitat quality because it considers important structural and functional elements. These include the density of large trees, understorey complexity, plant species richness, weediness, plant recruitment and coarse woody debris. It also considers the physical connectivity of native vegetation in the landscape (e.g. patch size, configuration and continuity). VQA scores are readily converted to habitat scores out of 10 for use in the Offsets Assessment Guide (Table 21).

A total weighted average VQA score (out of 100) was determined for NTGVVP within the project areas. The weighting was based on the area that each patch contributed to the total area of the TEC within the project area.

The weighted-average VQA score was then divided by 10 (for a score out of 10), and the score was rounded to the nearest whole number for entry in the Offsets Assessment Guide (Table 22). Rounding was completed as the final step, after a VQA score out of 100 had been determined.

Table 21 Habitat quality scoring system for NTGVVP

Parameter[1]	Scoring system
Site condition (max. 7.5 points)	• Lack of weed cover and proportion of weed cover due to high threat weeds contribute up to 20.45/100 to the VQA score (2/10 to the habitat quality score). • Percentage cover of recruitment area (i.e. recruitment opportunity, scaled according to herb species diversity, contributes up to 13.64/100 to the VQA score (1.4/10 to the habitat quality score). • Cover of organic litter, scaled to dominant litter type (native/non-native) and relative to the EVC benchmark, contributes up to 6.82/100 to the VQA score (0.7/10 to the habitat quality score). • Number of species and the cover and diversity of plant lifeforms, relative to the relevant EVC benchmark, contribute up to 34.09/100 to the VQA score (3.4/10 to the habitat quality score).
Site context (max. 2.5 points)	• Size of the patch of native vegetation within which the TEC is located contributes up to 10/100 to the VQA score (1/10 to the habitat quality score). • Amount and configuration of native vegetation within the neighbourhood, within a radius of up to 5 km, contributes up to 10/100 to the VQA score (1/10 to the habitat quality score). • Distance to the nearest core area of native vegetation (areas of native vegetation >50 ha) contributes up to 5/100 to the VQA score (0.5/10 to the habitat quality score).

[1] Through prior consultation with DCCEEW for the M3R project, species stocking rate does not contribute to the habitat quality for TECs. It is therefore not allocated a weighting within this scoring system.

Table 22 Conversion of VQA scores to habitat quality score for the Offsets Assessment Guide

Vegetation Quality Assessment score (/100)	Raw score for Offsets Assessment Guide (/10)	Rounded Score for Offsets Assessment Guide (/10)
0 to <5	0 to <0.5	0
≥5 to <15	≥0.5 to <1.5	1
≥15 to <25	≥1.5 to <2.5	2
≥25 to <35	≥2.5 to <3.5	3
≥35 to <45	≥3.5 to <4.5	4
≥45 to <55	≥4.5 to <5.5	5
≥55 to <65	≥5.5 to <6.5	6
≥65 to <75	≥6.5 to <7.5	7
≥75 to <85	≥7.5 to <8.5	8
≥85 to <95	≥8.5 to <9.5	9

9.2.2. Impact area

The impact area includes 11.15 hectares of NTGVVP with a weighted average VQA score of 39.02/100 (habitat quality score of 4/10). The impact calculator inputs into the Offsets Assessment Guide are shown in Table 23.

Table 23 Impact calculator inputs into the Offsets Assessment Guide

Parameter	Input	Justification for input
Annual probability of extinction	6.8%	The annual probability of extinction for NTGVVP, a critically endangered ecological community, is 6.8% based on IUCN category definitions. This % is set by DCCEEW guidance.
Area of habitat	11.15 hectares	The project will result in the direct, permanent removal of 11.14 hectares of NTGVVP and indirect loss of 0.01 hectares of NTGVVP (refer Section 5.1).
Quality	4/10	All field data for NTGVVP within the project area was collected by qualified ecologists across a number of assessments (refer Section 4.5.1). The weighted average VQA score of all NTGVVP within the project area is 39.02/100, which converts to a habitat quality score of 4/10.
Total quantum of impact	4.46 adjusted hectares	This value is set by the Offsets Assessment Guide and represents the value of the NTGVVP within the impact area, expressed in adjusted hectares. The absolute

Parameter	Input	Justification for input
		area (in hectares) has been adjusted to account for the quality of the NTGVVP.

9.2.1. Offset site

The offset calculator inputs into the Offsets Assessment Guide for the proposed offset site are shown in Table 24.

Table 24 Offset assessment guide inputs for offset site

Parameter	Input	Justification for input
Risk-related time horizon	20 years	The offset sites has been managed as an offset since July 2020 and will continue to require active conservation management (and improvements) for the 10 years of the executed Section 69 Agreement (until July 2030). From this time ongoing management will continue in perpetuity in accordance with the executed Section 69 Agreement. However, 20 years is the maximum value that can be entered into the Offsets Assessment Guide.
Start area	43.4 ha	APAM has reserved via an executed MOU, a minimum 43.4 ha and up to 46.3 ha of NTGVVP for the proposed offset.
Risk of loss (%) without offset	0%	As advised by DCCEEW with reference to *Guidance for deriving 'Risk of Loss' estimates when evaluating biodiversity offset proposals under the EPBC Act* (Maseyk et al. 2017).
Risk of loss (%) with offset	0%	As above for risk of loss without offset.
Confidence in result – risk of loss	90%	The offset site has been managed as an offset since July 2020. Based on monitoring and reporting completed in accordance with the executed Section 69 Agreement, the NTGVVP at the offset site has increased in quality over this time. As such, there is a high degree of confidence that there is no risk of loss at the offset site.
Time until ecological benefit	5 years	Typically, and as proposed by APAM for other approved NTGVVP offset sites, NTGVVP offsets will include a 10-year time until ecological benefit. For this site, the timeframe is set at 5 years to recognise that 5 years of active management have already been completed in accordance with the executed Section 69 Agreement that has been in place since July 2020. Based on monitoring and reporting completed over these 5 years, the NTGVVP has already increased in quality over this 5 year period.
Start quality (/10)	6	Biodiversity Offsets Victoria assessed the quality of the NTGVVP at the proposed offset site in July 2017 using the habitat hectares method (DSE 2004). The weighted average start quality score of the NTGVVP at the proposed offset site was 60.52/100, which

Parameter	Input	Justification for input
		rounds to 6/10. A copy of the assessment report is included in Appendix K.
Future quality without offset (/10)	5	The assumption of a 1-point decline in future quality without offset draws on literature and observed trends for NTGVVP under passive management. Literature includes: • *Williams et al. (2005)* documented a 21% loss of NTGVVP over 15 years due to weed invasion without active management. • Ajax Road case study (EPBC Act Referral 2014/7208) (Biosis 2014): 40.1% decline over 11 years under minimal intervention. APAM works with ecological consultants in the industry who estimate that 90% of potential NTGVVP offset sites have been destroyed or degraded in recent years, even under managed grazing regimes. Observations of specific offset sites observed to have up to 50-60% loss over nine years despite light grazing. Recent La Niña conditions have accelerated exotic species dominance, further increasing decline risk. Passive management (including set stocking and spot spraying) does not prevent gradual structural and compositional decline. Weed invasion and climatic variability are key drivers of quality loss. A conservative estimate has been adopted, predicting a modest decline (6 → 5) rather than severe degradation. This assumption aligns with the precautionary principle by recognising documented risks and avoiding underestimation of ecological decline. It is noted that some level of management had been implemented by the landowner of the proposed offset site prior to establishment of the offset site. However, without implementation of the management commitments outlined in the site management plan, such as installation and upgrade of perimeter fencing, specific targets for control and elimination of weeds and routine management of pest animals, it is considered that the NTGVVP future quality without offset would decline over time. Evidence from peer-reviewed studies, case examples, and industry data demonstrates that NTGVVP remnants deteriorate without targeted offset management. The assumption of a 1-point decline is therefore scientifically justified and precautionary.
Future quality with offset (/10)	7	It is anticipated that through intensive control of weeds, pest animals and biomass as part of implementation of the OMP, the weighted average quality score for existing NTGVVP would be elevated from around 60/100 to approximately 70/100, which would round to 7/10. Implementation of the OMP is expected to reduce total weed cover (a potential weighted quality improvement of 2/100), which is likely to increase inter- tussock space, total recruitment area (a potential weighted quality

Parameter	Input	Justification for input
		improvement of 4/100) and understorey life form diversity (a potential weighted quality improvement of 4/100). This level of improvement has already been observed in the most recent offset monitoring report (Appendix L).
Confidence in result – future quality	95%	The offset site has been managed as an offset since July 2020. Based on monitoring and reporting completed in accordance with the executed Section 69 Agreement, the NTGVVP at the offset site has increased in quality over this time. As such, there is a high degree of confidence that there is no risk of loss at the offset site.

10. Ecologically sustainability development (ESD)

Section 3(1)(b) of the EPBC Act states that an object of the Act is 'to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources'. Section 3A of the EPBC Act sets out the principles of ESD. Table 25 lists these principles, and outlined how they have been considered and addressed in relation to the proposed action.

More broadly, APAM has an Environment, Social and Governance Strategy (ESG Strategy) which includes a commitment to driving initiatives such as reducing carbon emissions and waste, and sustainable procurement. These initiatives have been embedded in the action plans within the Airport Environment Strategy, and progress is tracked annually.

With regard to ESD, The Melbourne Airport Planning and Urban Design Strategy (2015) provides a framework to encourage the adoption of ESD principles and initiatives in Melbourne Airport projects. The incorporation of ESD principles into asset management and operational practices at the airport drives efficiencies in resource use, minimises environmental impacts, and maximises commercial returns.

APAM recognises the need to achieve a balance between future development and its environmental impacts. The mitigation of environmental impacts will be addressed by the integration of ESD principles into design guidelines, construction management, and the operation and maintenance of buildings and infrastructure.

APAM has developed several initiatives and design principles aimed at mitigating environmental impacts and improving the efficiency of resources in development projects. For example, the *Contractor Guide to Working at Melbourne Airport* provides direction for incorporating ESD principles into the design and fit-out of Melbourne Airport developments. The guide recognises the importance of environmentally sensitive design and construction practices to achieve high-performance operations that are efficient and effective, and fit for purpose. This includes the use of environmentally sustainable materials, and improved energy and water efficiency.

Table 25 How the principles of ESD have been addressed

ESD principle	Project details
Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations	Considerations relating to impact on the environment are discussed in Sections 5 to 6.10.1. Economic and social aspects are discussed in Section 11. Other than management of offsets for the residual significant impact to NTGVVP which are yet to be finalised, there are not expected to be any long-term economic, environmental, social and equitable considerations in relation to the proposed action.
If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing	N/A - There are not considered to be any areas where lack of full scientific certainty has prevented the assessment of impacts and development of avoidance, mitigation and management measures for the project.

ESD principle	Project details
measures to prevent environmental degradation	APAM has undertaken a significant number of assessments across the Airport (including the project areas) to identify threatened species and any potential contamination that may be encountered.
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	As discussed in Section 7.1, the proposed action involves maintenance and upgrade of existing infrastructure across various locations at the Melbourne Airport, which is required to comply with CASA standards and to allow for the airport to continue to operate in a safe and efficient manner to meet modern demands. As such, the proposed action cannot be avoided.
The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making	At the time of preparing this documentation, APAM were in the process of finalising an offset Site for these projects, in accordance with the EPBC Act Environmental Offsets Policy (DSEWPaC, 2012b). In accordance with the offset management strategy developed by APAM in the Melbourne Airport Master Plan 2022, by offsetting the removal of native vegetation required for these projects, conservation gains will aim to mitigate significant impacts to the environment as a whole. APAM has a broader approach to the conservation of biological diversity and ecological integrity across the airport as a whole, as outlined in the Airport's Environment Strategy. The Environment Strategy is detailed in the Melbourne Airport Master Plan 2022, and implementation of the strategy is reviewed regularly by the AEO.
Improved valuation, pricing and incentive mechanisms should be promoted.	One of the most common underlying goals or concepts of the Melbourne Airport is sustainability and economic efficiency, including improved valuation of the environment. Consideration is given to environmental factors in the valuation of assets and services associated with Melbourne Airport projects. Sustainable initiatives such as the use of recycled material and a reduction in carbon emissions during in construction and operation are incentivised, as well as encouraging additional solutions from contractors to provide their own responses to potential environmental problems. These principles reflect the idea that if the real value of natural resources is incorporated into the cost of using those resources during construction and development, it is more likely that resources will be used in a sustainable manner adequately managed and not wasted.

11. Economic and social matters

11.1. Public consultation

Generally, the use and development of the designated project areas for airfield activities is outlined in the Melbourne Airport Master Plan 2022, which was subject to public exhibition for 70 business days. During this time, APAM engaged the community with a program including the following activities:

- An online platform enabling the community to engage with the project team, seek information and provide feedback
- Community drop-in events, information sessions and listening posts
- Digital engagement, media, editorial and social media.

It is noted that each of the projects discussed in Section 3 are required for the upgrade or replacement of existing and aging infrastructure within the Melbourne Airport estate, which is in accordance with the Melbourne Airport Master Plan. Further details of APAM's broader community engagement process can be found in Part A3, Section 3.3, pp 51-54 of the Melbourne Airport Master Plan 2022 (APAM 2022b).

11.1.1. Public comments on the proposed action

In accordance with the requirements of section 95A of the EPBC Act, the following documents were published for 10 business days, along with a notice inviting public comments on the information provided:

- The original EPBC Referral documentation for EPBC 2024/09907
- Revision 3 of this Preliminary Documentation, dated 03/11/2025
- Associated ecology reports and soil contamination reports

One public comment was received on the documentation published relating to the offset assessment guide inputs for offset site, in particular the projected habitat quality decline without offset. A copy of the public submission along with APAM's response is included in Appendix O. In consideration of the comment, changes were also made to Table 24, Section 9.2.1 of this Preliminary Documentation.

11.2. Consultation with Indigenous stakeholders

While First Peoples – State Relations (FP-SR) (formerly Aboriginal Victoria) does not have jurisdiction on Commonwealth land under the *Airports Act (Airport Act, 1996),* Cultural Heritage Management Plans were developed by APAM on a voluntary basis in accordance with *Aboriginal Heritage Act 2006.* The aim was to develop an appropriate management methodology to ensure that Commonwealth requirements under the Airports Act (1996) and the EPBC Act (1999) were achieved. This process included extensive consultation with the Wurundjeri. The project areas that overlap with existing approved CHMPs are as follows:

- CHMP 12774: Projects A, B, C, D and E
- CHMP 16792: Projects A, B and C

CHMPs 12774 and 16792 were developed for the Melbourne Airport Runway Development Program and M3R respectively and were subsequently approved by the Wurundjeri Woiwurrung Cultural Heritage Aboriginal Corporation, the Registered Aboriginal Party (RAP) for the area. Consultation with the RAP was undertaken as part of the development of the CHMPs, and requirements for future consultation and engagement with the RAP are identified in each plan. Due to the sensitive nature of information included in the CHMPs, copies of these documents will not be made publicly available.

Copies of CHMP 12774 and CHMP 16792 are included in Appendix F.

11.3. Projected economic costs and benefits

High-level estimates indicate that the total construction cost of the projects will be approximately $270M, with the overall project cost being approximately $370M.

Whilst the main drivers of the project are required upgrades and replacement of end-of-life assets, a key benefit of the project is that there will be less ongoing maintenance of the taxiways and associated infrastructure.

11.4. Employment opportunities expected to be generated by the project

As part of Melbourne Airport's ESG Strategy, the project will require all tenderers to adhere to a new 'Local Employment Target' (LET). The LET demonstrates Melbourne Airport's commitment to local industry and employment opportunities with its contractors and service providers and will require all companies to have a local employment target of 5% in Victoria throughout the total estimated labour hours to deliver the project.

The project will create employment opportunities in excess of 100 people split across various fields including: engineering design, consulting, quantity surveying, legal, administration, operations and maintenance, and construction/contracting.

12. Environmental record of the person proposing to take the action

12.1. History of responsible environmental management

APAM has a satisfactory record of responsible environment management. There is no history of proceedings against APAM with regard to protection of the environment or the conservation and sustainable use of natural resources.

All projects will be undertaken in accordance with APAM's Environmental Management Framework, as described in Section 12.2 below.

12.2. Environmental Management Framework

APAM has an Environmental Management Framework designed to ensure that processes for continuous improvement and ongoing monitoring of compliance are embedded in the way it works. The airport's Environment Strategy is part of the Environmental Management Framework and one of the key mechanisms for ensuring commitments made in Melbourne Airport's Environment and Sustainability Policy are met (refer Appendix G).

More generally, Melbourne Airport operates within a framework of corporate governance, goals and values. These are reflected in the environmental management principles outlined in the Environment and Sustainability Policy. The Environmental Management Framework enables Melbourne Airport to effectively manage and adapt to environmental risks, and continually improve environmental management practices and performance.

Under the framework, environmental compliance is internally monitored and reviewed on an ongoing basis. Compliance is also externally (and annually) formally reviewed by the AEO, on behalf of DITRDCSA.

Central to the framework is Melbourne Airport's Environmental Management System (EMS) which has been in operation since 2004 and is certified against the current EMS standard (ISO14001:2015). The EMS consists of the policies, plans, procedures and activities that together form a system to manage the environmental aspects of the airport and enable compliance with environmental legislation. Internal and external audits of the EMS are undertaken regularly to assess the compliance of operational systems.

The proposed action will be undertaken in line with APAM's existing Environment and Sustainability Policy and Environmental Management Framework as described above.

More details on APAM's Environmental Management Framework can be found in Section 14.3, pages 228-232 of the Melbourne Airport Master Plan 2022 (APAM 2022b).

13. Conclusions

The projects which comprise the proposed action are planned to be undertaken over the next 5-10 years as part of future airfield developments at Melbourne Airport. The projects include:

- Project A – Airfield Renaming
- Project B – Melbourne Airport Pavement Maintenance Program 3 (MAPMP 3)
- Project C – Runway 09/27 overlay
- Project D – Hotel Apron South
- Project E – Staff Car Park Extension

The project area contains 21.72 hectares of EVC 132 Plains Grassland of which 15.85 hectares meets the diagnostic criteria and condition thresholds to be considered Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP). It also contains small amounts of 125 Plains Grassy Wetland (0.0048 hectares) and 803 Plains Woodland (0.0029 hectares). The remaining vegetated area of the project supports predominantly introduced vegetation.

A review of the potential for listed threatened flora and fauna species to be within 10 km of the project area was completed to evaluate the likelihood and potential impacts associated with the proposed action. Based on this review, several EPBC Act listed species were considered to have a medium to high likelihood of occurring within the project area, specifically:

- Gang-gang Cockatoo *Callocephalon fimbriatum*
- White-throated Needletail *Hirundapus caudacutus*
- Grey-headed Flying-fox *Pteropus poliocephalus*
- Golden Sun Moth *Synemon plana*

The review also identified FFG Act listed threatened species that are known or likely to be affected by the project.

The likelihood of the proposed action having a significant impact on listed threatened species and ecological communities and/or the environment on Commonwealth land was assessed in accordance with:

- Matters of National Environmental Significance: *Significant impact guidelines 1.1*, EPBC Act 1999 (DoE 2013).
- Actions on, or impacting upon, Commonwealth land, and actions by commonwealth agencies: *Significant impact guidelines 1.2*, EPBC Act 1999 (DSEWPaC 2013)

Taking the outcomes of the above assessments into account, the project was considered environmentally acceptable to be undertaken for the purpose of satisfying APAM's planning, maintenance and regulatory obligations based on the following:

- Threatened flora species predicted to occur within the project area are considered to have a negligible to low likelihood of occurrence. The project is therefore unlikely to constitute a significant impact on these species. For fauna species with a medium or higher likelihood of occurrence (Gang-gang Cockatoo *Callocephalon fimbriatum*, White-throated Needletail

Hirundapus caudacutus and Grey-headed Flying-fox *Pteropus poliocephalus)*, no suitable habitat occurs within the project area, therefore the project is unlikely to constitute a significant impact on these species. While potentially suitable habitat for the Golden Sun Moth *Synemon plana,* was identified in one or more project areas, no GSM have been identified in previous surveys undertaken in the project areas or on adjacent land. Due to the highly modified nature of any potentially suitable habitat onsite and ongoing airside maintenance (slashing, herbicide and insecticide spraying), it is considered highly unlikely that a GSM population is present in the project areas or will be impacted by the proposed action.

- The Melbourne Airport estate supports a broader area of grassland covering approximately 270 hectares. The project would result in permanent removal of 11.15 hectares of this grassland and therefore adversely affect about 4.13% of NTGVVP within the airport estate.
- Indirect impacts to threatened species were considered to be limited to dust and noise from excavation activities during construction only, which will be less than aircraft noise from operations.
- The proposed works will physically isolate several small areas of identified NTGVVP from adjoining broader patches, which will be less than the threshold size for NTGVVP of 0.05 hectares. As such the total of these areas (being 0.092 hectares) is considered an indirect loss.
- Based upon the removal of 11.15 hectares of NTGVVP from the project area (including direct removal of 11.14 hectares of and indirect loss of 0.01 hectares), it is considered likely that the proposed action will result in a significant impact to the NTGVVP TEC.
- The proposed action is likely to result in a significant impact on Commonwealth land, due to the following factors:
  - Substantial disturbance of contaminated soils has the possibility to occur
  - Medium scale native vegetation clearance is likely to occur
  - The introduction of potentially invasive species is possible
- The implementation of avoidance and mitigation measures is expected to reduce the likelihood of these significant impacts.
- A Construction Environment Management Plan (CEMP) will be developed to outline the appropriate environmental goals and objectives with respect to the project. The CEMP will document all processes and management strategies to minimise and/or prevent impacts on ecological values. Implementation of the CEMP will limit impacts to the project area, and all downstream impacts will be considered negligible.
- APAM is committed to securing a direct offset to compensate for the permanent removal of 11.15 hectares of NTGVVP within the project area, in accordance with the EPBC Act Environmental Offsets Policy (DSEWPaC 2012a). APAM is currently in the process of working to secure a suitable offset site to address the removal of NTGVVP associated with the proposed action and will provide offset site details once the site is procured and assessed.

With regard to Ecologically Sustainable Development, APAM has a broader approach to the conservation of biological diversity and ecological integrity across the airport as a whole, as outlined in the Airport's Environment Strategy. Specifically, APAM has developed several initiatives

and design principles aimed at mitigating environmental impacts and improving the efficiency of resources in development projects. APAM will ensure the actions associated with the project are undertaken with consideration of the key principles associated with the promotion of Ecologically Sustainable Development as follows:

- Long-term economic, environmental, social and equitable considerations will comprise the establishment and ongoing management of offsets designed to mitigate the residual impacts of NTGVVP loss associated with the project. The offset site will be managed in accordance with the EPBC Act Environmental Offsets Policy (DSEWPaC, 2012b).
- While significant efforts have been made to minimise impacts associated with the project, APAM also has a broader approach to the conservation of biological diversity and ecological integrity across the airport as a whole, as outlined in the Airport's Environment Strategy. This project will be undertaken in accordance with the broader airport approach and Environmental Strategy.
- Sustainable initiatives such as the use of recycled material and a reduction in carbon emissions during in construction and operation will be incentivised as part of this project, as well as encouraging additional solutions from contractors to provide their own responses to potential environmental problems. These principles are designed to reflect the idea that if the real value of natural resources is incorporated into the cost of using those resources during construction and development, it is more likely that resources will be used in a sustainable manner adequately managed and not wasted.

Based on the information summarised above, the historical record of APAM with regard to environmentally responsible initiatives and Ecologically Sustainable Development and the fact that the proposed action is unable to be avoided due to APAMs regulatory obligations, the project is considered suitable to be approved for development.

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15. Limitations

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Appendices

Appendix A

Review of listed flora and fauna

The following abbreviations and symbols are relevant to this Appendix:

Code	Meaning	Reference
National Listings (EPBC Act)		
EX	Extinct	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
CR	Critically endangered	
EN	Endangered	
VU	Vulnerable	
PMST	Protected Matters Search Tool	
State Listings (FFG Act)		
X	Extinct	Victorian *Flora and Fauna Guarantee Act 1988* (FFG Act)
Cr	Critically endangered	
E	Endangered	
V	Vulnerable	
T	Threatened	
P	Protected (public land only)	
Weed status (CaLP Act)		
SP	State prohibited species	Victorian *Catchment and Land Protection Act 1994* (CaLP Act)
RP	Regionally prohibited species	
RC	Regionally controlled species	
R	Restricted species	
Pest animal status (CaLP Act and Fisheries Act)		
PS	Declared pest animal	Victorian *Catchment and Land Protection Act 1994* (CaLP Act)
Other		
*	Introduced species	Victorian Biodiversity Atlas (VBA)
#	Native species outside its natural range	

The following table includes the listed flora species that have potential to occur within the project area. The list of species is sourced from the Protected Matters Search Tool and the Victorian Biodiversity Atlas.

Table 1 Listed flora species recorded / predicted to occur within 10 km of the project area

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Potential threatened Flora Species – National Significance (EPBC Act)								
Adamson's Blown-grass	*Lachnagrostis adamsonii*	EN	e		PMST	Low	Low-lying, seasonally wet or swampy areas of plains communities, often in slightly saline conditions.	Suitable habitat with moist saline soils is not present or very limited in the project area and, if present, is dominated by introduced grasses. Most records of this species are from south-west Victoria with only a few occurrences near Craigieburn north of Melbourne.
Austral Toad-flax	*Thesium australe*	VU	e	1904		Negligible	Most commonly in damp grassland and woodland, including subalpine grassy heathlands.	There is no suitable habitat located within the project area and no recent records from the local area.
Basalt Peppercress	*Lepidium hyssopifolium* s.s.	EN	e	2018		Negligible	Basalt plains grassland and woodland communities.	There are limited records within the local area and the most recent record is >20 years old. Habitat within the project area is marginal and unlikely to support this species. Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal.
Button Wrinklewort	*Rutidosis leptorhynchoides*	EN	e	2015	PMST	Negligible	Higher quality Plains Grassland and Grassy Woodland in Western Victoria, particularly those with fertile soil and light timber cover.	While there are recent records (<20 years old) from the local area, the project area is unlikely to support the species due to the high levels of land modification and continued land management

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
								practices (e.g. grazing), which have led to relatively species-poor grassland being present. The species is generally only known from relatively undisturbed native grassland remnants.
Buxton Gum	*Eucalyptus crenulata*	EN	e	2017		Negligible	Alluvial soils in seasonally inundated depressions along river flats; records away from Buxton and Yering in the northeast are likely to be introductions.	The project area is outside the natural range for this species. Any specimens in the local area are likely to be from cultivation.
Clover Glycine	*Glycine latrobeana*	VU	v	1995	PMST	Low	Grasslands and grassy woodlands, particularly those dominated by Kangaroo Grass.	There are limited records within the local area and the most recent is old >20 years old. Potential habitat within the project area is marginal and unlikely to support the species. Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal.
Fragrant Leek-orchid	*Prasophyllum suaveolens*	EN	cr	1962		Negligible	Open, species rich grasslands dominated by Themeda triandra on poorly draining red- brown soils in western Victoria.	There are limited records of this species within the local area and the closest record is >20 years old. The project area is also highly modified and likely to be unsuitable.
Green-striped Greenhood	*Pterostylis chlorogramma*	VU	e		PMST	Negligible	Heathy woodland; more specific habitat requirements are poorly known.	Suitable habitat is not present in the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Large-headed Fireweed	*Senecio macrocarpus*	VU	cr	2021	PMST	Low	Grassland, shrubland and woodland habitats on heavy soils subject to waterlogging and/or drought conditions in summer.	While there are recent records (<20 years old) from the local area, the project area is unlikely to support the species due to the high levels of land modification and continued land management practices (e.g. grazing), which have led to relatively species-poor grassland being present. This large and conspicuous herb is likely to have been detected during the past decade of vegetation surveys if a population were present.
Leafy Greenhood	*Pterostylis cucullata*	VU			PMST	Negligible	Protected areas of stabilised coastal sand dunes within scrub communities with an open ground layer; occasionally in Coastal Manna Gum woodland.	Suitable habitat is not present in the project area as this subspecies is known mostly from coastal scrub habitats.
Matted Flax-lily	*Dianella amoena*	EN	cr	2021	PMST	Low	Lowland grassland and grassy woodland, on well-drained to seasonally waterlogged fertile sandy loam soils to heavy cracking clays.	Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal. Historical land uses and disturbances mean that this species is unlikely to be present. The extent and coverage of vegetation surveys over the past decade is likely to have detected an important population if one existing in the project area. Other more common members of this genus which otherwise also occupy this type of habitat are also absent.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
River Swamp Wallaby-grass	*Amphibromus fluitans*	VU			PMST	Negligible	Swampy areas, mainly along the Murray River between Wodonga and Echuca with scattered records from southern Victoria.	No suitable habitat within the project area.
Slender Plum-orchid	*Thelymitra orientalis*	CR	cr		PMST	Negligible	Occur on white sands and sandy loams in heathland and in damper heaths.	There is no suitable habitat located within the project area and no recent records from the local area.
Small Golden Moths	*Diuris basaltica*	EN	cr	1962	PMST	Negligible	Plains Grassland dominated by tussock- forming perennial grasses (including Kangaroo Grass); often with embedded surface basalt.	No recent records from the local area. Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal.
Spiny Peppercress	*Lepidium aschersonii*	VU	e		PMST	Low	Heavy clay soils near salt lakes on the volcanic plains; disjunct records near Lake Omeo.	Suitable habitat with moist saline soils is not present or very limited in the project area and, if present, is dominated by introduced grasses. Most records of this species are from south-west Victoria with only a few occurrences near Craigieburn north of Melbourne.
Spiny Rice-flower	*Pimelea spinescens* subsp. *spinescens*	CR	cr	2020	PMST	Low	Primarily grasslands featuring a moderate diversity of other native species and inter- tussock spaces, although also recorded in grassland dominated by introduced perennial grasses.	The Spiny Rice-flower prefers intact grassland remnants (DCCEEW, 2024). While potentially suitable habitat is present within the project area and there are recent records of the species from the local area, the project area is unlikely to currently support the species due to the high levels of past landscape modification and current land

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
								management practices. Populations have been observed to persist in a wide range of grassland conditions, including disturbed and degraded patches, however the extensive vegetation surveys over the past decade is likely to have detected a population if one existed in the project area. Therefore a low likelihood of occurrence within the project area has been assigned.
Sunshine Diuris	*Diuris fragrantissima*	EN	cr	1974	PMST	Negligible	Grassland dominated by Themeda trianda, on plains with heavy basalt soils and embedded boulders; only known naturally occurring population is in Sunshine.	No recent records from the local area. Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal. Only known extant population is approximately 12 km south of the project area.
Swamp Everlasting	*Xerochrysum palustre*	VU	cr		PMST	Low	Sedge-swamps and shallow freshwater marshes and swamps in lowlands, on black cracking clay soils.	While there are recent records (<20 years old) from the local area, there is no suitable habitat within the project area.
Swamp Fireweed	*Senecio psilocarpus*	VU			PMST	Negligible	Seasonally inundated herb-rich swamps, growing on peaty soils or volcanic clays.	There is no suitable habitat located within the project area and the species is not known to be present in the local area.
Trailing Hop-bush	*Dodonaea procumbens*	VU			PMST	Negligible	Sandy or clay soils in low-lying, winter-wet areas in grasslands, woodlands, and low- open forest.	No suitable habitat exists within the project area and the species has never been recorded from the local area or during detailed vegetation surveys within the project area over the past decade. The project area is outside the known distribution for

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
								the species, the nearest record being approximately 45 km west.
White Sunray	*Leucochrysum albicans* subsp. *tricolor*	EN	e		PMST	Low	Grasslands of the Victorian Volcanic Plains, primarily on acidic clay soils derived from basalt, with occasional occurrences on adjacent sedimentary, sandy-clay soils.	Potential grassland habitat in the project area is modified and species poor. This species is generally known from intact species-rich basalt plains grasslands in south-west Victoria. This species is likely to have been detected during the past decade of vegetation surveys, if it were present.
Potential threatened Flora Species – State Significance (FFG Act)								
Arching Flax-lily	*Dianella* sp. aff. *longifolia (Benambra)*		t	2021		Low	The habitat requirements of this species are poorly known.	Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal. Historical land uses and disturbances mean that this species is unlikely to be present.
Austral Crane's-bill	*Geranium solanderi var. solanderi s.s.*		e	2019		Medium	Grasslands or grassy woodlands where hydrology is not a limiting factor.	There are recent records from the local area and suitable habitat within the project area. The species is known to recolonise modified or disturbed grassland.
Austral Moonwort	*Botrychium australe*		cr	1983		Negligible	Lowland forest and scrubland to subalpine grasslands, lightly wooded plains, at the base of granitic hills, alongside subalpine	There are limited records of the species within the local area and the closest record is >20 years old. There is no suitable habitat within the project area

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
							streams, and in some disturbed environments.	
Austral Tobacco	*Nicotiana suaveolens*		e	2021		Low	Areas of sandy or gravelly soil typically associated with streams, gullies and other drainage lines; also grasslands and escarpment shrublands.	While there are recent records of the species within the local area, grassland within the project area is highly modified and unlikely to still be suitable habitat. This large and conspicuous herb is likely to have been detected during the past decade of vegetation surveys if a population were present.
Bacchus Marsh Wattle	*Acacia rostriformis*		v	2020		Negligible	Occurs in low hilly areas in Eucalyptus woodland.	There is no suitable habitat located within the project area. This large and conspicuous shrub is likely to have been detected during the past decade of vegetation surveys if a population were present.
Basalt Podolepis	*Podolepis linearifolia*		e	2016		Low	Grasslands and grassy woodlands.	While there are recent records of the species within the local area, grassland within the project area is highly modified and unlikely to still be suitable habitat. This large and conspicuous herb is likely to have been detected during the past decade of vegetation surveys if a population were present.
Basalt Sun-orchid	*Thelymitra gregaria*		e	2016		Negligible	Open, species-rich grassland dominated by Themeda triandra on poorly draining soils of the volcanic plains.	There are no recent (<20 years old) records of the species from the local area and the highly modified grassland within the project area is unlikely to be suitable habitat for the species.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Branching Groundsel	*Senecio cunninghamii var. cunninghamii*		cr	1953		Negligible	Heavy soils that are sometimes winter-wet, or dry rocky soils; often on embankments or escarpments.	There are few records from the local area and all are >20 years old. The species is more commonly known from northern Victoria. This large and conspicuous herb is likely to have been detected during the past decade of vegetation surveys if an important population was present.
Brittle Greenhood	*Pterostylis truncata*		cr	1931		Negligible	Grassland and grassy woodland habitats, largely to the west of Melbourne.	There are no recent (<20 years old) records of the species from the local area and the highly modified grassland within the project area is unlikely to be suitable habitat for the species.
Broad-lip Diuris	*Diuris X palachila*		e	1904		Negligible	Heathlands, grasslands, open woodlands and dry open forests.	There is no suitably unmodified grassland habitat within the project area and no recent (<20 years old) records from the local area.
Buloke	*Allocasuarina luehmannii*		cr	1996		Low	Non-calcareous soils in drier areas on slopes and plains; often in woodlands associated with Grey Box.	While there are recent records (<20 years old) from the local area, there is no suitable habitat present within the project area.
Flat Spike-sedge	*Eleocharis plana*		cr	1986		Negligible	Shallow freshwater pools and the margins of lakes and rivers.	There is no suitably unmodified wetland habitat within the project area and no recent (<20 years old) records from the local area.
Fragrant Saltbush	*Rhagodia parabolica*		v	2021		Low	Plains and escarpment grassland, shrubland and woodland.	While there are recent records of the species within the local area, many of these records are likely to be planted specimens. This large and conspicuous shrub is likely to have been detected during the past

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
								decade of vegetation surveys if a population were present.
Giant Honey-myrtle	*Melaleuca armillaris* subsp. *armillaris*		e	2021		Negligible	Near coastal heath/scrub, rocky coast and foothill outcrops.	No suitable habitat present within the project area and outside natural range for this species. Nearby records are likely to be planted.
Glaucous Flax-lily	*Dianella longifolia* var. *grandis s.l.*		cr	2018		Low	Grassland, grassy woodland and rocky outcrops of the Victorian Volcanic Plain and Victorian Riverina.	Most grassland within the project area is species-poor, having been highly modified by grazing, sown pastures, earthworks and/or rock removal. Historical land uses and disturbances mean that this species is unlikely to be present. The extent and coverage of vegetation surveys over the past decade is likely to have detected an important population if one existing in the project area.
Large- flower Crane's-bill	*Geranium* sp. *1*		cr	2021		Medium	The habitat requirements of this species are poorly known.	There are recent records from the local area and suitable habitat within the project area. The species is known to recolonise modified or disturbed grassland.
Large-fruit Yellow-gum	*Eucalyptus leucoxylon* subsp. *megalocarpa*		cr	2018		Negligible	Coastal, near Nelson.	The project area is outside the natural range for this species. Any specimens in the local area are likely to be from cultivation.
Leafy Greenhood	*Pterostylis cucullate* subsp. *cucullata*		e	1770		Negligible	Protected areas of stabilised coastal sand dunes within scrub communities with an open ground layer; occasionally in Coastal Manna Gum woodland.	Species is not known to be present in the local area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Leafy Twig-sedge	*Cladium procerum*		e	2018		Negligible	Waterlogged soils, often along slow-flowing streams and lake margins.	There are recent (<20 years old) records within the local area but vegetation in wetlands and along drainage lines is highly modified within the project area. This distinctive species is likely to have been detected during the past decade of vegetation surveys if a population were present.
Melbourne Yellow-gum	*Eucalyptus leucoxylon* subsp. *connata*		e	2017		Negligible	Well-drained slopes in a restricted area around Melbourne and Geelong.	There are recent records of this species in the local area (e.g. at Bulla). However, this is a large and conspicuous species that would have been identified during previous survey efforts.
Mugga	*Eucalyptus sideroxylon* subsp. *sideroxylon*		e	2021		Negligible	Typically found on poor, shallow soils, including sands, gravels, ironstones and clays.	No suitable habitat present within the project area.
Pale Plover-daisy	Leiocarpa leptolepis		e	1912		Negligible	Grasslands and grassy woodlands, often in disturbed areas. In Victoria, confined to one known population approximately 4km east of Mildura.	There are no recent (<20 years old) records of this species from the local area and the species is currently only known from north-west Victoria.
Pale Swamp Everlasting	*Coronidium gunnianum*		cr	2017		Low	Widespread and sometimes locally common, particularly in high-rainfall areas of Victoria; often in moist sites in open forests and woodlands.	While there are recent (<20 years old) records within the local area, wetland and regularly inundated grassland habitat within the project area is highly modified and unlikely to support the species.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Pale-flower Crane's-bill	*Geranium* sp. *3*		e	2016		Medium	Grasslands and dry woodlands.	There are recent records from the local area and suitable habitat within the project area. The species is known to recolonise modified or disturbed grassland.
Plump Windmill Grass	*Chloris ventricosa*		e	2011		Low	Woodlands. Mainly found on clay soils, sometimes in winter-wet depressions.	While there are recent records (<20 years old) in the local area, grassland within the project area is highly modified.
Purple Blown-grass	*Lachnagrostis semibarbata* var. *semibarbata*		e	2001		Low	Wet marshes and slightly saline swamps and depressions in plains communities.	Suitable habitat with moist saline soils is not present or very limited in the project area and, if present, is dominated by introduced grasses.
Purple Diuris	*Diuris punctata* var. *punctata*		e	1982		Negligible	Fertile, loamy soils and periodically wet areas in lowland grasslands, grassy woodlands, heathy woodlands and open heathlands.	There is no suitably unmodified grassland habitat within the project area and no recent (<20 years old) records from the local area.
Rough-grain Love-grass	*Eragrostis trachycarpa*		e	1996		Low	Moist grassland or grassy woodland sites.	While there is potentially suitable habitat present within the project area, records from the local area are not recent and are thought to have been an accidental introduction.
Rye Beetle-grass	*Tripogonella loliiformis*		cr	1953		Low	Dry sites in association with escarpments and rocky outcrops.	While there are recent (<20 years old) records from the local area and the species may have gone undetected during past surveys (due to its nature as a resurrection plant), most grassland within the project area is species-poor, having been modified

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
								by grazing, sown pastures, earthworks and/or rock removal.
Small Milkwort	*Comesperma polygaloides*		cr	2014		Low	Grasslands on the western basalt plains; less commonly in grassy woodlands between Bendigo and the Wimmera.	While there is potentially suitable (albeit highly modified) grassland habitat present within the project area, there are not recent (<20 years old) records from the local area. The species is relatively conspicuous when flowering and is likely to have been detected during the past decade of vegetation surveys if a population were present.
Small Scurf-pea	*Cullen parvum*		e	1986		Low	Lowland grasslands, including pastures and occasionally in otherwise disturbed grassy areas.	While there are limited recent records within the local area, grassland within the project area is highly modified and unlikely to support a population of this species.
Snowy Mint-bush	*Prostanthera nivea* var. *nivea*		v	2014		Low	Largely confined to shrubland and open woodland associated with granite outcrops.	No suitable habitat within the project area.
Southern Blue-gum	*Eucalyptus globulus* subsp. *globulus*		e	2020		Negligible	Damp forest communities. Restricted to South Gippsland and the Otway Ranges.	The project area is outside the natural range for this species. Any specimens in the local area are likely to be planted.
Spotted Emu-bush	*Eremophila maculate* subsp. *maculata*		cr	2021		Negligible	Mainly in Black Box forests or woodlands on heavy clay soils.	No suitable habitat present within the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Spotted Gum	*Corymbia maculata*		v	2021		Negligible	In Victoria, naturally confined to a small population near Mt Tara in the east of the state.	The project area is outside the natural range for this species. Any specimens in the local area are likely to be planted.
Sticky Wattle	*Acacia howittii*		v	2016		Negligible	Moist forest. Natural occurrences are confined to South Gippsland and Central Highlands.	No suitable habitat present within the project area.
Swamp Diuris	*Diuris palustris*		e	1979		Negligible	Grasslands and open woodlands, often in swampy depressions; confined to the west of the State.	There is no suitably unmodified grassland habitat within the project area and no recent (<20 years old) records from the local area.
Tough Scurf-pea	*Cullen tenax*		e	2021		Low	Lowland grasslands, including pastures and occasionally in otherwise disturbed grassy areas.	While there are limited recent records within the local area, grassland within the project area is highly modified and unlikely to support a population of this species.
Truncate Leionema	*Leionema bilobum* subsp. *bilobum*		v	2006		Negligible	Endemic to heathland and heathy woodland, in the Grampians and mostly in the north and east (e.g. Mt Difficult, Mt William, Wonderland and Serra Ranges), but with isolated occurrences at Mt Zero and Wallaby Rocks. Usually in rocky, elevated sites.	There is no suitable habitat within project area and the project area is outside of the natural range for this species. The species is a relatively conspicuous shrub and is likely to have been detected during the past decade of vegetation surveys.
Western Golden-tip	*Goodia medicaginea*		e	2021		Negligible	Drier sites within wet or dry sclerophyll forests.	While there are recent records from the local area, the species is a conspicuous shrub and is likely to have been detected during the past decade of

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
								vegetation surveys if a population were present within the project area.
Yellow Burr-daisy	*Calotis lappulacea*		v	2014		Low	Dry rocky country, open woodland, and fertile, loam or clay soils.	While there are recent records (<20 years old) from the local area, there is no suitable habitat present within the project area. Vegetation within the project area is relatively species-poor.

The following table includes the listed fauna species that have potential to occur within the project area. The list of species is sourced from the Protected Matters Search Tool and the Victorian Biodiversity Atlas.

Table 2 Listed fauna species recorded / predicted to occur within 10 km of the project area

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Potential threatened Fauna Species – National Significance (EPBC Act)								
Australasian Bittern	*Botaurus poiciloptilus*	EN	cr	1950	PMST	Negligible	Shallow freshwater and brackish wetlands with abundant emergent aquatic vegetation.	No suitable habitat within the project area.
Australian Fairy Tern	*Sternula nereis nereis*	VU			PMST	Negligible	Fairy Terns inhabit coastal environments including intertidal mudflats, sand flats and beaches.	No suitable habitat for this species in the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
							Nests above high- water mark on sandy shell-grit beaches.	
Australian Grayling	*Prototroctes maraena*	VU	e	2015	PMST	Low	Adults inhabit cool, clear, freshwater streams.	No suitable habitat within the project area.
Australian Painted-snipe	*Rostratula australis*	EN	cr		PMST	Negligible	Shallows of well- vegetated freshwater wetlands.	No suitable habitat within the project area.
Bar-tailed Godwit	*Limosa lapponica*	VU	v	1977		Negligible	Bar-tailed Godwits inhabit estuarine mudflats, beaches and mangroves. They are common in coastal areas around Australia. They are social birds and are often seen in large flocks and in the company of other waders.	No suitable habitat for this species in the project area.
Blue- winged Parrot	*Neophema chrysostoma*	VU		2009	PMST	Low	A range of coastal, sub-coastal and semi-arid regions throughout south-eastern Australia. Nests in tree hollows in coastal eucalypt forests and woodlands. Feeds on seeds of a range of native grasses and herbs.	Suitable habitat located within the woodland, however there is no suitable habitat within this project area and the species may only fly over.
Brown Treecreeper	*Climacteris picumnus*	VU		1991	PMST	Negligible	Open eucalypt forests, woodlands and Mallee, often where there are stands of dead trees.	No suitable habitat for this species in the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Curlew Sandpiper	*Calidris ferruginea*	CR	cr	1977	PMST	Negligible	Large intertidal sandflats, banks, mudflats, estuaries, inlets, sewage farms, saltworks, harbours, coastal lagoons and bays.	No suitable habitat for this species in the project area.
Diamond Firetail	*Stagonopleura guttata*	VU	v	1990	PMST	Negligible	Open forests and woodlands with a grassy ground layer.	No suitable habitat for this species in the project area.
Eastern Barred Bandicoot	*Perameles gunnii*	EN	e	2021		Negligible	Natural temperate grasslands and grassy woodlands.	Although the species historically would have occurred within the open plains grassland and woodland at Melbourne Airport the species is now extinct in the wild in Victoria.
Eastern Barred Bandicoot (Mainland)	*Perameles gunnii Victorian subspecies*	EN			PMST	Negligible	Natural temperate grasslands and grassy woodlands.	No suitable habitat for this species in the project area.
Eastern Curlew	*Numenius madagascariensis*	CR	cr	1977	PMST	Negligible	Large intertidal sandflats, banks, mudflats, estuaries, inlets, coastal lagoons and bays.	No suitable habitat for this species in the project area.
Eltham Copper Butterfly	*Paralucia pyrodiscus lucida*	EN	e	1922		Negligible	Drier sclerophyll forests and woodlands supporting Sweet Bursaria Bursaria spinosa, especially along ridgelines. State significance	Project area is outside accepted range of the species, and no suitable habitat present.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Fairy Tern	*Sternula nereis*	VU	cr	1977		Negligible	Fairy Terns inhabit coastal environments including intertidal mudflats, sand flats and beaches. Nests above high- water mark on sandy shell-grit beaches.	No suitable habitat for this species in the project area.
Gang-gang Cockatoo	*Callocephalon fimbriatum*	EN	e	2002	PMST	Medium	S Vic to E NSW. Forests and woodlands from coast to alpine areas. Autumn- winter dispersal from highlands to lower elevations. Forages in eucalypts, acacias and some exotic garden trees and shrubs.	Species likely to utilise the adjacent woodland patches north of the project area, which may result in flights over the project area at times.
Golden Sun Moth	*Synemon plana*	VU	v	2020	PMST	Medium	Natural temperate grassland, grassy woodland and pasture supporting spear grasses and wallaby grasses and exotic grassland dominated by Chilean needle grass.	The species has been recorded in two areas in the northern-most portion of Melbourne Airport only. Despite previous surveys not detecting the species within the project area, there is an area of GSM habitat between Sunbury Road and Moonee Ponds Creek, to the northwest of project area B.
Grassland Earless Dragon	*Tympanocryptis pinguicolla*	CR	cr	1884	PMST	Negligible	Natural temperate grassland.	Considered to be locally extinct.
Greater Sand Plover	*Charadrius leschenaultii*	VU	v		PMST	Negligible	Intertidal mudflats and sandbanks of sheltered bays and estuaries.	No suitable habitat for this species in the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Grey Falcon	*Falco hypoleucos*	VU	v		PMST	Low	Lightly timbered plains and Acacia scrub.	May fly over the project area, but would be a rare visitor to the area. No previous records from the local area.
Grey- headed Flying-fox	*Pteropus poliocephalus*	VU	v	2021	PMST	Medium	Rainforest, wet and dry sclerophyll forest, woodland and urban areas.	Species likely to utilise flowing trees adjacent to the project area, which may result in flights over the project area at times.
Growling Grass Frog (GGF)	*Litoria raniformis*					Low	Still or slow-flowing waterbodies and surrounding terrestrial vegetation.	Growling Grass Frog has been recorded in Arundel Creek and Moonee Ponds Creek within the Melbourne Airport, and Deep Creek and the Maribyrnong River adjacent to the Melbourne Airport. No potential habitat for the species was observed to be present in the project areas.
Hooded Robin	*Melanodryas cucullata*	EN	v	1846	PMST	Low	Woodlands of eucalypt, Mallee, semi-cleared farmland.	Suitable habitat located within the woodland, however there is no suitable habitat within this project area and the species may only fly over.
Lesser Sand Plover	*Charadrius mongolus*	EN	e	1978		Negligible	Intertidal mudflats and sandbanks of sheltered bays and estuaries.	No suitable habitat for this species in the project area.
Macquarie Perch	*Macquaria australasica*	EN	e	1970		Low	Streams with clear water and deep, rocky holes with abundant cover.	Project area is outside accepted range of the species. Historic records represent failed translocations.
Murray Cod	*Maccullochella peelii*	VU	e	1981	PMST	Low	A diverse range of stream habitats in the Murray- Darling basin; principally the main channels of rivers and their major tributaries.	Project area is outside accepted range of the species. Historic records represent failed translocations.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
New Holland Mouse	*Pseudomys novaehollandiae*	VU	e		PMST	Negligible	Coastal heathland, heathy woodland and dry sclerophyll forest.	No suitable habitat for this species in the project area.
Painted Honeyeater	*Grantiella picta*	VU	v		PMST	Negligible	Dry open woodlands and forests. Typically forages for fruit and nectar in mistletoes and in tree canopies.	Species rarely recorded south of the Great dividing range and not recorded regularly within 50km of Melbourne Airport. No suitable woodland habitat is present within the project area.
Pink-tailed Worm- Lizard	*Aprasia parapulchella*	VU	e		PMST	Negligible	Woodland and grassland with partially buried rocks.	Suitable grassland habitat for this species within the project area, however the species has only been recorded around the Bendigo area.
Plains-wanderer	*Pedionomus torquatus*	CR	cr	1949	PMST	Negligible	Native grassland with a sparse, open structure	Historically the open plains grassland at Melbourne Airport would have provided suitable habitat for this species but the area has since been heavily utilised for agriculture and the development of infrastructure such that suitable habitat is no longer present. The species is rarely recorded around Melbourne, a few recent records from the past 10 years occur around Ravenhall, Melton /Eynesbury and Balliang.
Red Knot	*Calidris canutus*	EN	e		PMST	Negligible	Large intertidal sandflats, banks, mudflats, estuaries, inlets, sewage farms, saltworks, harbours, coastal lagoons and bays.	No suitable habitat for this species in the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Red-tailed Black-Cockatoo	*Calyptorhynchus banksia graptogyne*	EN	e	1846		Negligible	Desert Stringybark, Brown Stringybark and Buloke woodlands.	Victorian population does not extend east of the Grampians. This species does not occur within the project area.
Regent Honeyeater	*Anthochaera phrygia*	CR	cr	1846	PMST	Negligible	A range of dry woodlands and forests dominated by nectar- producing tree species.	Although on occasion the odd individual of this species turns up in the local area Melbourne is considered outside of the species current range and no suitable woodland habitat is present within the project area.
Silver Perch	*Bidyanus bidyanus*	CR	e	1981		Negligible	Lowland streams within the Murray-Darling Basin.	No suitable habitat within the project area
Southern Whiteface	*Aphelocephala leucopsis*	VU		1995	PMST	Low	Occurs in a wide range of open woodlands and shrublands, favouring sparsely treed areas with an herbaceous understorey containing grasses and/or shrubs.	Suitable habitat located within the woodland, however there is no suitable habitat within this project area and the species may only fly over.
Spot-tailed Quoll	*Dasyurus maculatus maculatus (SE mainland population)*	EN	e		PMST	Negligible	Rainforest and wet and dry sclerophyll forests and woodlands.	No suitable habitat for this species in the project area.
Striped Legless Lizard	*Delma impar*	VU	e	2019	PMST	Low	Natural temperate grassland, grassy woodland and exotic grassland.	Extensive targeted surveys have been previously undertaken at Melbourne Airport, and the species was not detected. Based on the results of previous surveys undertaken more broadly, and the modified nature of habitat present, this species is considered to have a low likelihood of occurrence.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Superb Parrot	*Polytelis swainsonii*	VU	e	1846		Low	Red-gum and box- dominated forests and woodlands.	Project area is outside of the species known range. This species does not occur within the project area.
Swamp Skink	*Lissolepis coventryi*	EN	e		PMST	Low	Densely vegetated swamps and associated watercourses, and adjacent wet heaths, sedgelands and saltmarshes.	No suitable habitat for this species in the project area.
Swift Parrot	*Lathamus discolor*	CR	cr	2000	PMST	Low	A range of forests and woodlands, especially those supporting nectar-producing tree species. Also well-treed urban areas	The species has been recorded from the woodland located to the north of the project area in 2010, however there is no suitable habitat within this project area and the species may only fly over.
Trout Cod	*Maccullochella macquariensis*	EN	e	1908		Low	Streams characterised by a high abundance of large woody debris.	Project area is outside accepted range of the species. Historic records represent failed translocations.
White-throated Needletail	*Hirundapus caudacutus*	VU	v	2019	PMST	High	An almost exclusively aerial species within Australia, occurring over most types of habitat, particularly wooded areas.	It is likely that the species utilises the airspace at Melbourne Airport with the woodland providing preferable habitat for the species. There is an incidental record of the species from 2010 (Birdlife Australia) over Sky Road in Melbourne Airport and other records surrounding the Airport.
Yarra Pygmy Perch	*Nannoperca obscura*	VU	v		PMST	Negligible	Lakes, pools and slow-flowing streams with abundant aquatic vegetation.	No suitable habitat within the project area

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Yellow-bellied Glider	*Petaurus australis*	VU	v		PMST	Negligible	Sclerophyll forest with large hollow-bearing trees, prefers mature eucalypt dominated forest and woodland. Distributed along South-eastern Australia.	No suitable habitat for this species in the project area.
Potential threatened Fauna Species – State Significance (FFG Act)								
Amethyst Hairstreak Butterfly	*Jalmenus icilius*		e	1921		Low	Occurs in open woodland, grassland and arid woodland in all mainland states. Adults feed on flowers and are generally seen in or near patches of suitable larval food plants. In Victoria, the larvae feed mainly on acacias. The larvae are attended by the ant species Iridomyrmex rufoniger. This species was considered to be extinct in the Melbourne region until it was rediscovered in the Amber fields Grassland Reserve in Craigieburn in 2015.	One recorded from similar habitat within 10km of the project area. Records of this species in the Melbourne area are very uncommon and the species has not been observed during other various ecological surveys at Melbourne Airport to date.
Australasian Shoveler	*Spatula rhynchotis*		v	2019		Low	Variety of wetlands, with a preference for large, permanent, freshwater lakes/swamps with dense fringing vegetation.	No suitable habitat within the project area.
Australian Bustard	*Ardeotis australis*		cr	1846		Negligible	Grassland, open dry woodlands of Mallee and mulga, arid heathland saltbush and bluebush.	Locally extinct.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Australian Little Bittern	*Ixobrychus dubius*		e	1980		Negligible	Freshwater swamps, lakes and rivers with dense reedbeds, saltmarsh and coastal lagoons.	No suitable habitat within the project area.
Australian Mudfish	*Neochanna cleaveri*		e	2008		Low	Freshwater habitats with abundant aquatic vegetation such as streams, backwaters, billabongs and floodplain wetlands.	No suitable habitat within the project area.
Bearded Dragon	*Pogona barbata*		v	1988		Low	Woodlands, forests and heathlands with abundant cover of course woody debris.	No suitable habitat within the project area, outside current accepted range for the species.
Black Falcon	*Falco subniger*		cr	2018		Medium	Woodlands, open country and around terrestrial wetlands areas, including rivers and creeks. Primarily occurs in arid and semi-arid zones in the north, north-west and west of Victoria.	Area adjacent to runways is highly managed to prevent prey (rabbits, rodents etc) and scare cannon guns are used to prevent bird activity in the area. However, suitable habitat present in the broader local area and the species may forage over the project area occasionally.
Blue-billed Duck	*Oxyura australis*		v	2019		Low	Open or densely vegetated wetlands.	No suitable habitat within the project area.
Brown Toadlet	*Pseudophryne bibronii*		e	1994		Low	A wide variety of woodland, forest and grassland habitats, where it shelters under leaf litter and other debris in moist soaks and depressions. Breeds in swamps and inundated habitats, and along creek lines.	Suitable habitat present for the species in wooded areas near the project area, however no suitable habitat within the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Brush-tailed Phascogale	*Phascogale tapoatafa*		v	2017		Negligible	Drier sclerophyll forests and woodlands.	No woodland habitat within the project area.
Bush Stone-curlew	*Burhinus grallarius*		cr	1846		Negligible	Open woodland, treed farmland.	Lack of suitable habitat. Site is outside accepted range of the species.
Caspian Tern	*Hydroprogne caspia*		v	2007		Low	Estuaries, inlets, bays, lagoons, inland lakes, flooded pasture, sewage ponds.	No suitable habitat within the project area.
Common Greenshank	*Tringa nebularia*		e		PMST	Negligible	A variety of ephemeral and permanent inland wetlands and sheltered coastal wetlands.	No suitable habitat within the project area.
Common Sandpiper	*Actitis hypoleucos*		v	1981	PMST	Negligible	Migrates to Australia from Eurasia in August where it inhabits a wide variety of coastal and inland wetlands with muddy margins before departing north in March.	No suitable habitat within the project area.
Diamond Dove	*Geopelia cuneata*		v	1999		Low	Drier woodlands and scrub, spinifex and mulga.	No suitable habitat within the project area.
Eastern Bent-winged Bat	*Miniopterus orianae oceanensis*		cr	2013		Low	A variety of treed and treeless habitats. Roosts in caves and man-made structures.	May fly over the project area, however no suitable roosting habitat within the project area.
Eastern Great Egret	*Ardea alba modesta*		v	2021		Low	Flooded crops, pasture, swamps, lagoons, saltmarsh, sewage ponds, estuaries, dams, roadside ditches. Breeds in trees standing in water.	No suitable habitat within the project area.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Fat-tailed Dunnart	*Sminthopsis crassicaudata*		v	1990		Low	Inhabits sparse grasslands and open shrubland habitats, usually where there is a significant component of bare ground and suitable refuge sites such as surface rocks or logs where it constructs nests of grass or other dried plant material.	Low quality habitat within the project area, lacking suitable habitat components such as logs and rocks. The species has not been recorded within the local area (<10 kms) within the last 20 years.
Freckled Duck	*Stictonetta naevosa*		e	2007		Low	Large freshwater wetlands, generally with dense vegetation.	No suitable habitat within the project area.
Grey-crowned Babbler	*Pomatostomus temporalis*		v	1846		Negligible	Open forests and woodlands.	Site is outside current accepted range of the species.
Grey Goshawk	*Accipiter novaehollandiae*		e	2018		Low	Rainforest, gallery forest, tall wet forest and woodland. Also partially cleared agricultural land.	No suitable habitat within the project area.
Hardhead	*Aythya australis*		v	2020		Low	Deep freshwater swamps and wetlands, with abundant aquatic and terrestrial vegetation for roosting. Can occur in sheltered estuaries.	No suitable habitat within the project area.
Lewin's Rail	*Lewinia pectoralis*		v	1991		Low	Swamps, dense riparian vegetation and saltmarsh.	Confined to vicinity of watercourses and dams however there is limited suitable habitat present in the project area for this species.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Little Eagle	*Hieraaetus morphnoides*		v	2017		Medium	Woodland and open areas. Rabbits are a key component of their diet. Nesting occurs in mature trees in open woodland or riparian vegetation.	Suitable habitat present in the broader local area and the species may forage over the project area.
Little Egret	*Egretta garzetta*		e	2019		Low	Swamps, billabongs, floodplain pools, mudflats, mangroves and channels; breeds in trees standing in water.	No suitable habitat within the project area.
Magpie Goose	*Anseranas semipalmata*		v	2016		Negligible	Swamps, lakes, sewage ponds, flooded pasture, dams	No suitable habitat within the project area.
Marsh Sandpiper	*Tringa stagnatilis*		e	2018		Negligible	Permanent or ephemeral wetlands, mudflats and saltmarshes in coastal and inland environments.	No suitable habitat within the project area.
Murray River Turtle	*Emydura macquarii*		cr	2017		Low	A medium sized freshwater turtle that inhabits inland river systems including the Murray- Darling catchment.	Introduced to waterways in the local area, but considered unlikely to be present within the project area.
Musk Duck	*Biziura lobata*		v	2019		Low	Deep, permanent freshwater wetlands with areas of open water and patches of dense aquatic vegetation.	No suitable habitat within the project area.
Platypus	*Ornithorhynchus anatinus*		v	1999		Low	A variety of freshwater waterbodies, particularly those with stable banks suitable for burrows, and shallow waters for foraging.	No suitable habitat within the project area, and no downstream records of the species within the last 20 years.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
Plumed Egret	*Ardea intermedia plumifera*		cr	1980		Low	Densely-vegetated freshwater wetlands including lakes, swamps and billabongs. Breeds in trees standing in water.	No suitable habitat within the project area.
Southern Toadlet	*Pseudophryne semimarmorata*		e	1961		Low	A wide variety of woodland, forest and grassland habitats, where it shelters under leaf litter and other debris in moist soaks and depressions. Breeds in swamps and inundated habitats, and along creek lines.	Very few records from the broader local area, as the project area is outside current accepted range.
Speckled Warbler	*Pyrrholaemus sagittatus*		e	2018		Low	Eucalypt woodland with rocky gullies, ridges, tussock grasses and a sparse shrub understorey.	Confined to woodland areas and therefore unlikely to occur within the project area.
Turquoise Parrot	*Neophema pulchella*		v	2000		Low	Woodlands and associated grasslands.	No recent records in the local area. Some suitable habitat nearby but is likely only to be a rare visitor.
Tussock Skink	*Pseudemoia pagenstecheri*		e	2020		High	On the ground in a range of grasslands or sparse grassy woodlands from alps to coast.	Seventeen Tussock Skink were recorded during the targeted SLL tile surveys. Suitable habitat is present within grassland habitat throughout Melbourne Airport and project areas A, B, C, D, E and F and was recorded from tile grids both landside and airside.

Common name	Scientific name	Conservation status		Most recent database record	Other record	Likely occurrence in project area	Habitat description	Rationale for likelihood ranking
		EPBC	FFG					
White-bellied Sea-Eagle	*Haliaeetus leucogaster*		e	2019		Low	Coastal areas such as beaches and estuaries, inland wetlands and major inland streams.	May visit waterways and dams in the broader local area but unlikely to make significant use of the project area.
Yellow-bellied Sheathtail Bat	*Saccolaimus flaviventris*		v	1932		Low	A variety of habitats, ranging from wet forests to desert.	May occasionally fly over the project area, however no suitable roosting habitat within the project area.

Table 3 Migratory fauna species recorded or predicted to occur within 10 km of the project area

Scientific name	Common name	Most recent record
Migratory species		
Gallinago hardwickii	Latham's Snipe	2019
Plegadis falcinellus	Glossy Ibis	2006
Hirundapus caudacutus	White-throated Needletail	2019
Apus pacificus	Fork-tailed Swift	2006
Pandion haliaetus	Osprey	PMST
Ardenna tenuirostris	Short-tailed Shearwater	2008
Sterna hirundo	Common Tern	2006
Hydroprogne caspia	Caspian Tern	2007
Thalasseus bergii	Crested Tern	2021
Charadrius mongolus	Lesser Sand Plover	1978
Charadrius bicinctus	Double-banded Plover	2004
Charadrius leschenaultii	Greater Sand Plover	PMST
Numenius madagascariensis	Eastern Curlew	1977
Limosa lapponica	Bar-tailed Godwit	1977
Actitis hypoleucos	Common Sandpiper	1981
Tringa nebularia	Common Greenshank	PMST
Tringa stagnatilis	Marsh Sandpiper	2018
Calidris ferruginea	Curlew Sandpiper	1977
Calidris acuminata	Sharp-tailed Sandpiper	2009
Calidris canutus	Red Knot	PMST
Calidris alba	Sanderling	1977
Calidris melanotos	Pectoral Sandpiper	PMST
Motacilla flava	Yellow Wagtail	PMST
Rhipidura rufifrons	Rufous Fantail	2021
Myiagra cyanoleuca	Satin Flycatcher	1979
Monarcha melanopsis	Black-faced Monarch	PMST

Appendix B

Detailed survey methods

1. Overview

This appendix describes the:

- Detailed native vegetation survey methods
- Detailed threatened ecological community assessment methods
- Detailed targeted fauna survey methods for:
  - Golden Sun Moth

2. Detailed native vegetation survey methods

Vegetation assessments followed a three-step approach:

1. Identifying and mapping all native vegetation using the Victorian EVC classification system
2. Identifying and mapping all areas of native vegetation that satisfy the criteria for a TEC listed under the EPBC Act
3. Assessing the quality of all TECs present.

Native vegetation patches were identified and mapped using the ArcGIS Collector app on a GPS-enabled tablet. This mapping relied on definitions provided in the Victoria Planning Provisions (VPP), NatureKit (DELWP 2020) and Guidelines for the Removal, Destruction or Lopping of Native Vegetation (DELWP 2017). Key definitions are outlined in Table B1.

Patches of native vegetation were assigned to appropriate EVCs with reference to EVC benchmarks for the appropriate bioregion (DSE 2004a, DSE 2004b), NatureKit's EVC modelling (DELWP 2020), maps dating back to 1840 (Kemp 1840, DoL c. 1849, Hoddle 1850, DoD 1915, DoD 1938, DCLS 1946), geological mapping (Mines Department 1970, Mines Department 1973, DNRE 1997, Senversa 2020 (unpublished)) and previous studies (McDougall 1987, Biosis 2015, Biosis 2019).

Vegetation patches were mapped at a scale of 10 square metres (0.001 hectares) for the following reasons:

- The EPBC Act Offset Assessment Guide (DSEWPaC 2012b) requires a scale of at least 0.01 hectares for quantifying impacts on threatened ecological communities. Melbourne Airport's mapping, on a 0.001-hectare scale (i.e. one order of magnitude finer resolution), allows for accurate addition and rounding of impacts
- A scale of 0.001 hectares is the scale required to map 0.001 habitat hectares (assuming a perfect vegetation condition score) which is the scale required by DELWP's Native Vegetation Offset Register for securing offset sites in Victoria
- A scale of 10 square metres was approximately within the resolution of the error of the GPS-enabled tablet.

Table B1 Key definitions used for identifying and mapping native vegetation at Melbourne Airport

Term	Definition	Reference
Native vegetation	Plants that are indigenous to Victoria, including trees, shrubs, herbs, and grasses.	VPP, cl. 73.01
Patch of native vegetation	An area of vegetation where at least 25% of total perennial understorey plant cover is native or any area with three or more native canopy trees where the drip line of each tree touches the drip line of at least one other tree, forming a continuous canopy (Note that the Current Wetlands Map has been excluded from this definition).	DELWP 2017, p.6
Scattered tree	A native canopy tree that does not form part of a patch.	DELWP 2017, p.6
Canopy tree	A mature tree (i.e. it is able to flower) greater than 3 metres in height and normally found in the upper layer of the relevant vegetation type (EVC).	DELWP 2017, p.35
Ecological Vegetation Class (EVC)	A native vegetation type classified on the basis of a combination of its floristics, lifeforms and ecological characteristics.	DELWP 2017, p.35

3. Detailed Threatened Ecological Communities (TEC) assessment methods

Vegetation corresponding to a TEC listed under the EPBC Act was identified and mapped using ArcGIS Collector on a GPS-enabled tablet. EVC mapping helped identify the potential presence of TECs. The following TEC was identified and mapped within the project area:

- Natural Temperate Grassland of the Victorian Volcanic Plain (critically endangered).

When mapping this TEC, the following considerations applied:

- Only naturalised flora species were considered. Planted vegetation was not considered as contributing to total vegetation cover
- Vegetation boundaries were mapped as they appeared on the ground at the time of the assessment. For example, the presence and cover of introduced annuals is not considered when mapping NTGVVP. When introduced species that may have annual or perennial life histories (e.g. Ox-tongue *Helminthotheca echioides*) were encountered, only the life history traits that the plants appeared to be exhibiting at the time of the assessment were considered. Therefore, if plants appeared to be one year old and persisting in favourable conditions (e.g. high-nutrient drainage lines) they were considered perennial. When there was doubt, it was assumed the plants were annual.

A field checklist was devised for determining the presence of the NTGVVP TEC (Table B2), which relies upon the diagnostic characteristics and condition thresholds outlined in the listing advice (TSSC 2008). Where the listing advice was unclear, further clarity was sought from the NTGVVP Information Sheet (DSEWPaC 2011) and, if required, guidance provided by DCCEEW (and its predecessors).

The field checklist was used to identify the presence or absence of NTGVVP in areas mapped as suitable EVCs (e.g. Heavier-soils Plains Grassland). The checklist was also used in areas of predominantly introduced vegetation previously mapped as NTGVVP to confirm they no longer satisfied the key diagnostic characteristics and condition thresholds of the TEC.

The field checklist relies on accurate plant-cover estimates being obtained. To ensure that assessments were consistent and standardised, cover estimates were made with reference to predefined cover charts.

Where cover estimates were close to a condition threshold, gridded 1x1 metre quadrats were used to objectively sample plant covers within the grassland patch and confirm the veracity of the cover estimates.

The 1x1 metre quadrats were gridded with 10 horizontal and 10 vertical string lines, resulting in 100 intersection points at which flora species were recorded (allowing for an objective estimate of the percentage cover of each plant species across the square metre). Where the gridded 1x1 metre quadrats were used, patches were randomly sampled to avoid sampling bias.

The listing advice includes minimum contiguous size thresholds for a grassland patch to qualify as NTGVVP. It uses terms such as 'native vegetation remnant' and 'grassland patch' (TSSC 2008, p.3).

For the purpose of assessing size thresholds, the 'grassland patch' was taken to be the NTGVVP patch rather than the (generally larger) Heavier-soils Plains Grassland patch. In addition, the 'native vegetation remnant' was taken to be the contiguous 'patch of native vegetation' as defined in Table B1 rather than a contiguous area of one or more TECs. DAWE confirmed that this was an appropriate interpretation of the listing advice (J. Vranjic, DAWE, pers. comm., March 2020).

This literal interpretation of the NTGVVP listing advice size thresholds had the following implications for grassland patches that otherwise met all other key diagnostic characteristics and condition thresholds for NTGVVP:

- The grassland patch was not considered to be NTGVVP if the grassland patch was less than 0.05 hectares even if all other key diagnostic characteristics and condition thresholds were met
- Where the grassland patch was contiguous with other native vegetation that did not satisfy key diagnostic characteristics or condition thresholds for NTGVVP, together forming a native vegetation remnant of one hectare or less, the grassland patch was considered to be NTGVVP only if the grassland patch was at least 0.05 hectares
- Where the grassland patch was contiguous with other native vegetation that did not satisfy key diagnostic characteristics or condition thresholds for NTGVVP, together forming a native vegetation remnant of more than one hectare, the grassland patch was considered to be NTGVVP only if the grassland patch was at least 0.5 hectares.

This literal interpretation results in an anomaly whereby small patches of grassland (at least 0.05 hectares but less than 0.5 hectares) are considered to be NTGVVP when they are part of small native vegetation remnants (one hectare or less) but not when they form part of larger vegetation remnants (greater than one hectare). In effect, small patches of grassland with greater connectivity with surrounding native vegetation are less likely to meet the minimum size thresholds for NTGVVP. DAWE has confirmed that this anomaly is nevertheless the correct interpretation of the listing advice (J. Vranjic, DAWE, pers. comm., 19 March 2020).

Table B2 NTGVVP Field Checklist

Habitat zone:		**Date:**		**Recorder:**	
1.	Time since mowing/grazing/burning:	Days	Weeks	Months	
2.	Do native flora make up ≥50% of total vegetation cover, ex. introduced annuals?				Y / N
	% cover of all native flora (incl. native annuals):				
	% cover perennial weeds:				
3.1	Do *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* (circle genera that are present) make up ≥50% native cover AND ≥50% of total perennial tussock cover?				Y / N
	% cover of *Themeda*/*Rytidosperma*/*Austrostipa*/*Poa*:				
	% cover of all perennial tussocks (native and introduced):				
3.2	If total perennial tussock cover represented by *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* is <50%, then is ground cover of native forbs (wildflowers) ≥50% of total vegetation cover during spring-summer (September to February)?				Y / N
	% cover of all vegetation (native and introduced, ex. moss, lichen and introduced annuals):				
	% cover of native forbs:				
3.3	Do *Themeda*, *Rytidosperma*, *Austrostipa* and/or *Poa* (circle genera that are present) make up ≥50% native cover AND is cover of perennial non-grass weeds <30% of total vegetation cover at any time of the year?				Y / N
	% cover of all vegetation (native and introduced, ex. moss, lichen and introduced annuals):				
	% cover of perennial non-grass weeds:				
4.1	For native vegetation remnant of ≤1ha: is contiguous grassland patch ≥0.05ha AND do shrubs/trees >1m tall have % crown cover of ≤5%?				Y / N
	Area (ha) of contiguous grassland patch:				
	% crown cover of shrubs and trees >1m tall:				
4.2	For native vegetation remnant of >1ha: is contiguous grassland patch ≥0.5ha AND are there <2 mature (*not defined) trees/ha?				Y / N
	Area (ha) of contiguous grassland patch:				
	# mature trees within patch:				
5.	Is NTGVVP present (i.e. responded Y to 2, 3 and 4)? If Y, proceed to VQA.				Y / N

4. Quality assessments

The quality of native vegetation corresponding to a TEC was assessed using the habitat hectare (vegetation quality assessment) methodology (DSE 2004c).

DCCEEW has previously endorsed the 'habitat hectare' method as appropriate for assessing the condition of TECs such as NTGVVP in Victoria.

The habitat hectare score comprised the following:

- A condition score (out of 75) incorporating values for understorey, lack of weeds, recruitment, organic litter and, where relevant, large trees, canopy cover and logs. The following qualifications should be noted:

- Condition scores were determined with reference to relevant EVC benchmarks maintained by DELWP
- Where components of the score were not relevant (e.g. values for large trees, canopy cover and logs are not part of the benchmark for Heavier- soils Plains Grassland) the condition score was standardised to provide a score out of 75
- The condition score considered only the condition of native vegetation corresponding to the TEC. The condition of any contiguous vegetation of the same EVC was not considered. For example, where a patch of NTGVVP formed part of a broader patch of Heavier-soils Plains Grassland EVC, the condition score only considered what was present within the smaller NTGVVP patch
- In accordance with the habitat hectare methodology, vegetative life forms in the understorey were 'assessed according to their current appearance and height, not according to their predicted mature expression' (DSE 2004c, p.18) with reference to the life-form category definitions provided in Appendix 6 of the Vegetation Quality Assessment Manual (DSE, 2004 p.58). As a result, if a grass species (e.g. Spear Grass *Austrostipa* spp.) that would normally have an inflorescence more than one metre in height had been slashed to a height of 20 centimetres, it was recorded as a medium tufted graminoid rather than a large tufted graminoid. Similarly, if both woody and non-woody individuals of a species (e.g. Berry Saltbush *Atriplex semibaccata* or Ruby Saltbush *Enchylaena tomentosa* var. *tomentosa*) were observed, they were recorded in both shrub (woody) and herb (non-woody) life-form categories.

- A landscape score (out of 25), incorporating values for patch size, percentage of native vegetation in the surrounding area (neighbourhood) and distance to core area. The following qualifications should be noted:
  - Patch size was taken to be the size of the entire contiguous patch of native vegetation (as defined in Table B1) rather than the size of the TEC that may have been a subset of the broader patch of native vegetation. For example, where a patch of NTGVVP was part of a larger patch of contiguous Heavier-soils Plains Grassland EVC patch, patch size was taken to be the size of the broader Heavier-soils Plains Grassland patch. This means that TECs, buffered by areas of native vegetation that did not meet the criteria of the threatened ecological community, nevertheless received slightly higher patch-size values than TECs with no native vegetation buffers
  - Percentage of native vegetation in the neighbourhood was determined with reference to contemporary native vegetation mapping that had been completed in the surrounding area as part of the same project and, where areas of the neighbourhood had not been assessed, DELWP's 2005 EVC modelling via NatureKit.

5. Detailed targeted fauna survey methods for Golden Sun Moth (GSM)

5.1. Previous survey effort

A desktop review was undertaken of all previous GSM survey reports at Melbourne Airport. These reports include:

- GAGIN 2008. Habitat Assessment and Presence of *Synemon plana* (Golden Sun Moth), Melbourne Airport, Tullamarine. Report prepared for Australia Pacific Airports Melbourne

- GAGIN 2009. Second Report Presence of the Golden Sun Moth *Synemon plana* Melbourne Airport 2008. Report prepared for Australia Pacific Airports Melbourne.
- GAGIN 2010. Survey for the Presence of Golden Sun Moth *Synemon plana* Melbourne Airport, Tullamarine 2009. Report prepared for Australia Pacific Airports Melbourne.
- Biosis 2015. Flora and fauna assessment of the Runway Development Program, Melbourne Airport: Existing conditions and impact assessment report. Authors: Kay K, Smales I & Byrne A, Biosis Pty Ltd, Melbourne.
- Biosis 2019. Melbourne Airport Golden Sun Moth habitat survey. Letter report to Australia Pacific Airports Melbourne. Author: Campbell, K, Biosis Pty Ltd, Melbourne.

This information was then used to determine whether adequate survey effort existed for the species and if not what the level of additional survey was to be.

It was determined that there were no surveys undertaken within the Melbourne Airport Third Runway (M3R) project area in the last three years and as such an updated assessment for the entire project area was to occur.

5.2. Habitat assessment

Prior to the GSM flight season between October–November the entire M3R project area was traversed by one zoologist experienced in GSM habitat surveys to determine the project area habitat values.

The project area was subsequently classified as:

- Not habitat:
  - Pasture improved paddocks
  - Paddocks with no food plants
  - Degraded areas covered in fill with no food plants
  - Areas of infrastructure, roads, stockpiles etc.
- Potential habitat
  - Any areas where there was cover of known food plants.

All areas of potential habitat located within and immediately adjacent to the M3R project area were subject to targeted surveys.

The areas of potential habitat were divided into five survey areas. Each survey area was assessed four times during the targeted surveys. A summary of the survey areas and habitat descriptions are provided in Table B3 below.

Table B3 M3R Project Golden Sun Moth survey sites and details

GSM survey site	Site size (hectares)	Transect	No of surveyors	Distance between transects	Site characteristics
GSM survey site Northern area	62.88	Walk	3	Approx. 100 meters	North of the woodland Open Grey Box woodland with mixed understory of Chilean Needle Grass *Nassella neesiana*, Blanket Weed *Galenia pubescens*, Serrated Tussock *Nassella trichotoma*, scattered wallaby grass *Rytidosperma* sp. and Spear Grass *Austrostipa* sp. there are also some larger expanses of open Chilean Needle Grass patches throughout. Area up the hill from Deep CreeK tributary. Characterised by Serrated Tussock and Chilean Needle Grass. Thistles and Blanket weed. Sub-optimal habitat but scattered Wallaby Grass present. Sunbury Road Paddock. A mix of Phalaris *Phalaris aquatica*, brassicas and scattered occurrence of Chilean Needle Grass and Wallaby Grass. HIAL disturbed ground story.
GSM survey site Mcnabs Road West	178.81	All areas of native grassland walked. In some degraded areas transects were driven	2	Approx. 100 meters	Broad area that includes habitat ranging from high cover of wallaby grass and optimal habitat to degraded areas with scattered occurrence of wallaby grass and paddocks dominated by Chilean Needle Grass, Rye *Lolium* Sp., Oat *Avena* sp., Phalaris and grazed by cattle in areas.
GSM survey site Arundel Creek	71.32	Walked/ driven were possible	2	Approx. 100 meters	Predominantly Phalaris, Oat, Blanket Weed, one square patch of Chilean Needle Grass. Includes some areas dominated by Wallaby Grass.
GSM survey site Southern area	50.66	Walk	2	Approx. 100 Meters	Areas of native grassland dominated by Wallaby Grass and other areas dominated by Phalaris with scattered occurrences of Chilean Needle Grass, *Brassica* Sp., Oat and Wallaby Grass.
GSM survey site Airside	172	Walk	2	Approx. 100 meters	Dominated by Wallaby Grass and Spear Grass throughout with scattered areas of Chilean Needle Grass and Serrated Tussock.

5.3. Targeted surveys

Targeted surveys were conducted on 8, 17, 23, 24 and 29 December 2019. All four surveys were conducted on days of appropriate weather conditions as set out in the survey guidelines within the *Significant impact guidelines for the critically endangered golden sun moth (Synemon plana)* (DEWHA 2009a).

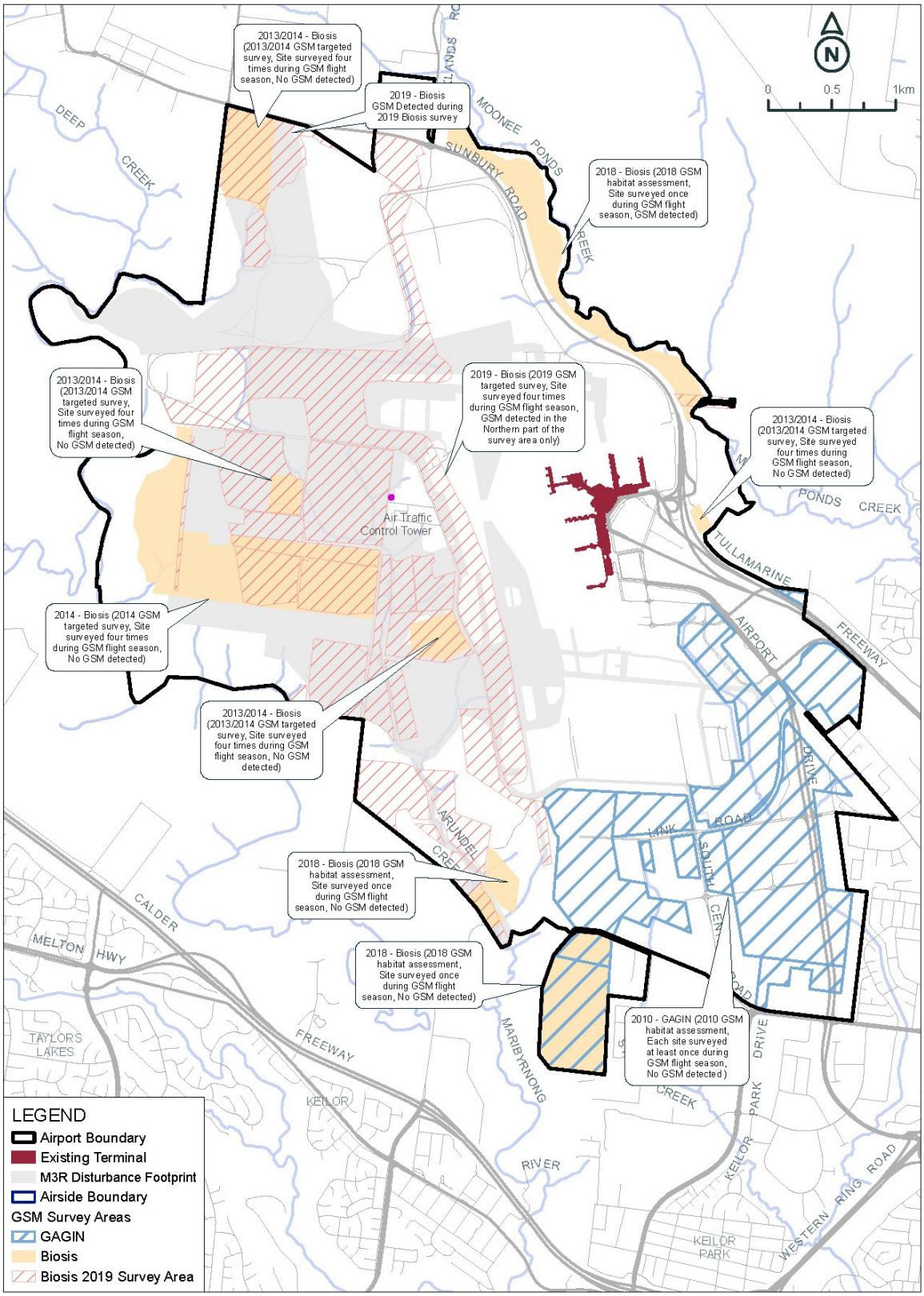
Adults of the species, especially males, can be observed during their diurnal flights. However, their flights are generally restricted to sunny days with little wind and when temperatures are above 20°C by 10 am. Hence, capacity to detect the species is limited to active searching when conditions are precisely appropriate.

To detect any GSM within the site, two or three ecologists experienced in GSM identification walked transects approximately 100 metres apart. Where possible transects were driven across the survey sites.

Appendix C

Overview of previous surveys for GSM

Previous survey effort for GSM at Melbourne Airport



Appendix D

Direct impacts on NTGVVP

MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

- Grey Box Grassy Woodlands and Derived Native Grasslands of SE Australia
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains

Native Vegetation

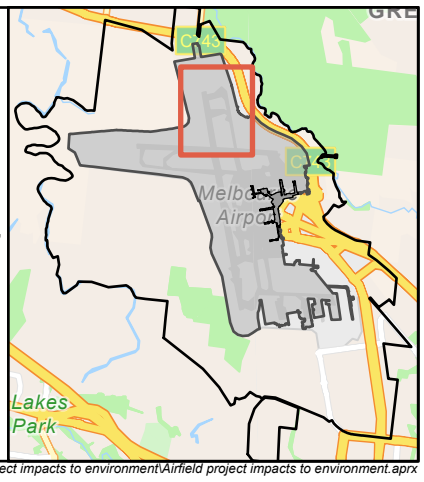
- 125 Plains Grassy Wetland
- 132 Plains Grassland
- 803 Plains Woodland
- 821 Tall Marsh

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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
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- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

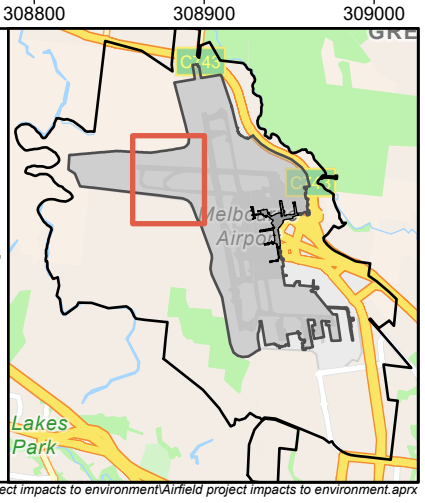
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
- Existing Approvals
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EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

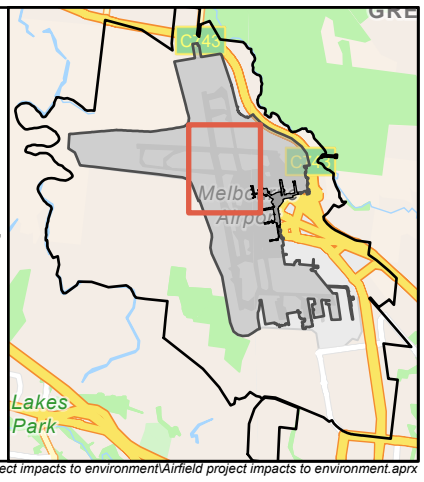
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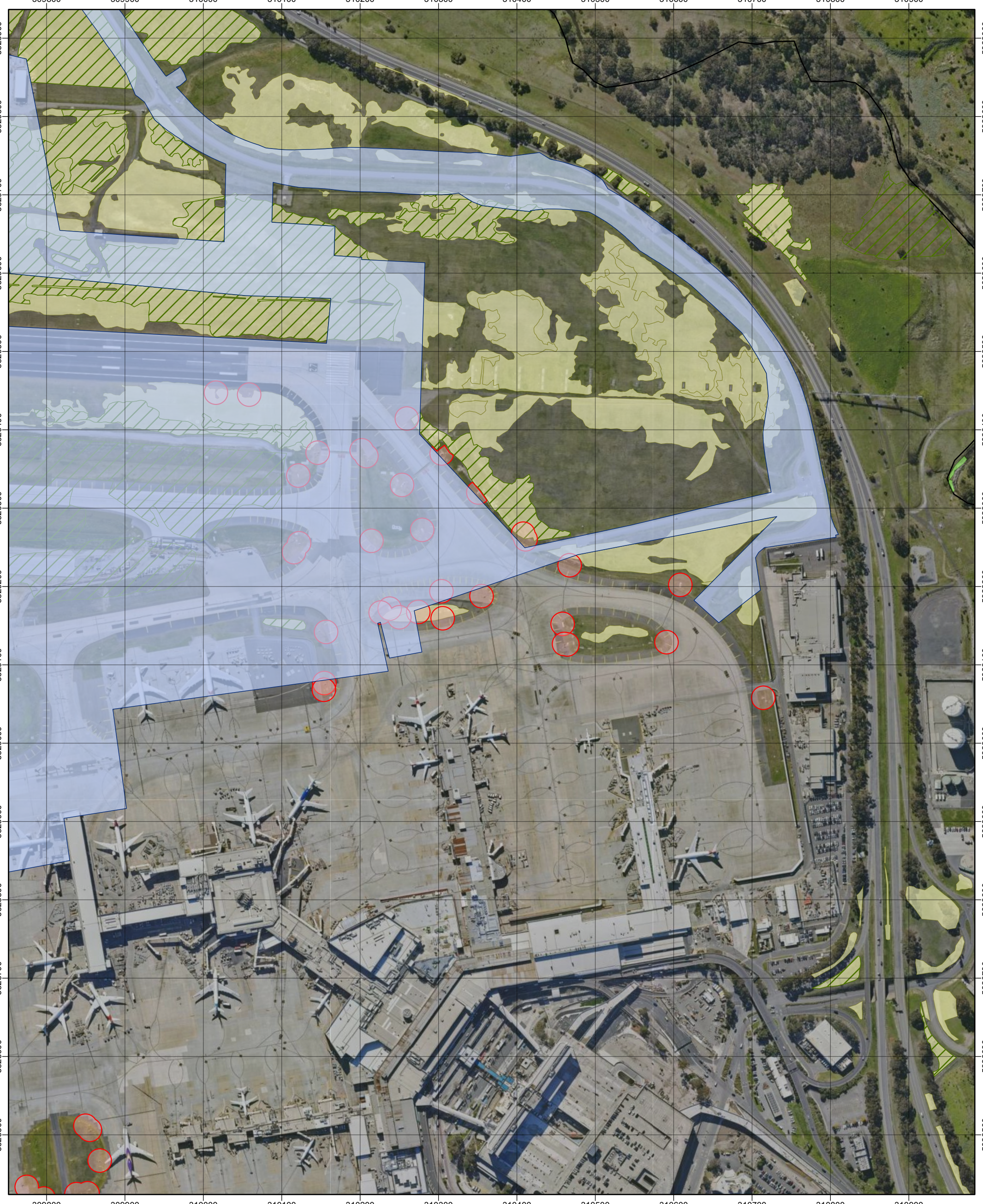
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

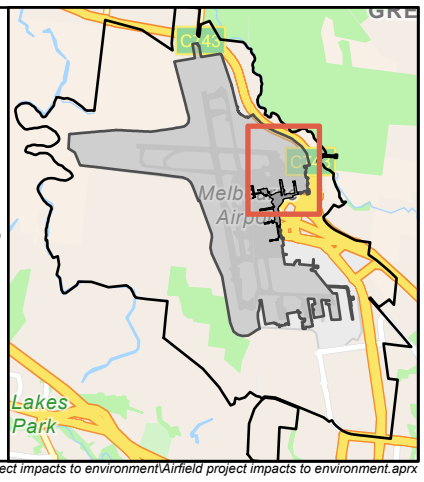
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
A - Airfield Renaming

Scale @ A3 1:4,860

0 75 150m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

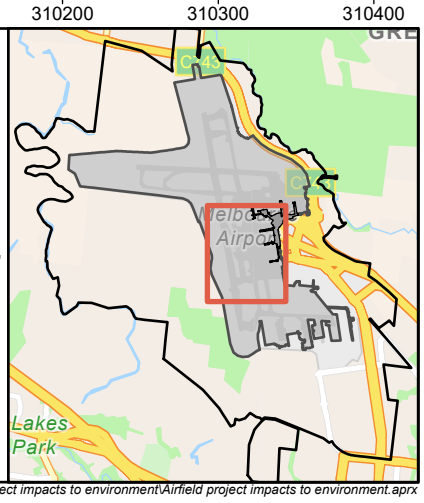
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
A - Airfield Renaming

Scale @ A3 1:5,970

0 90 180m

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LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

- Grey Box Grassy Woodlands and Derived Native Grasslands of SE Australia
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Native Vegetation

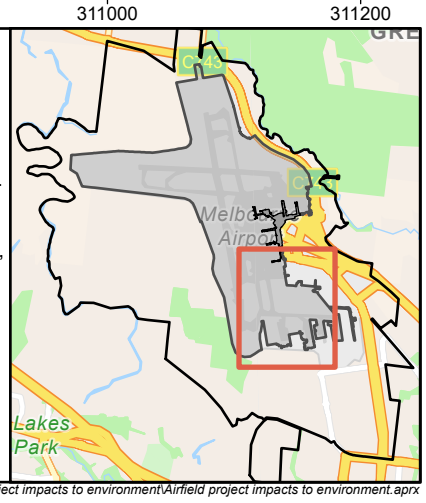
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
B - Melbourne Airport Pavement Maintenance Program 3 (MAPMP 3)

Scale @ A3 1:4,880

0 75 150m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

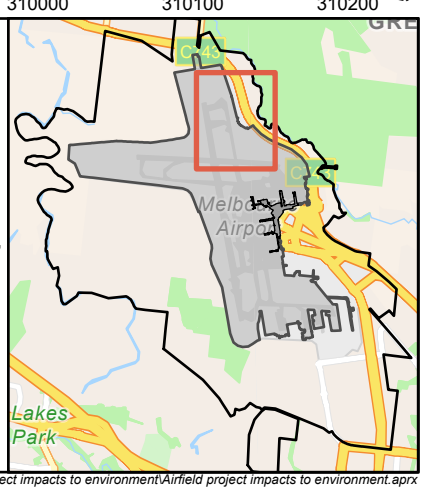
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
C - Runway 09/27 Overlay

Scale @ A3 1:5,970

0 90 180m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

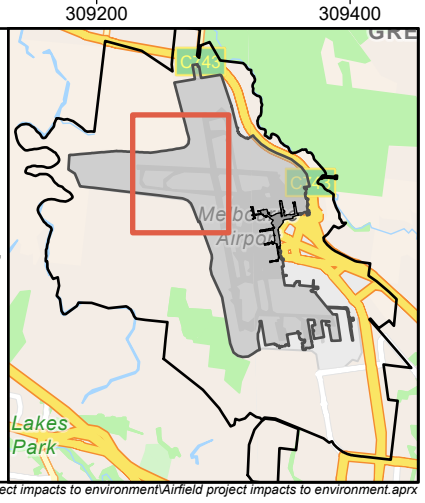
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5830400 5830200 5830000 5829800 5829600 5829400 5829200 5829000 5828800 5828600

MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
C - Runway 09/27 Overlay

Scale @ A3 1:5,970

0 90 180m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

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Native Vegetation

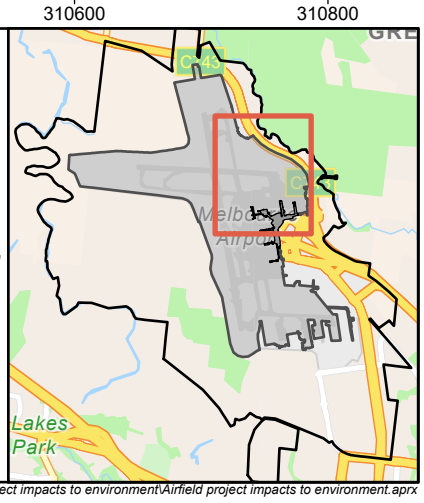
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MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
D - Hotel Apron South

Scale @ A3 1:3,490

0 50 100m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

- Grey Box Grassy Woodlands and Derived Native Grasslands of SE Australia
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains

Native Vegetation

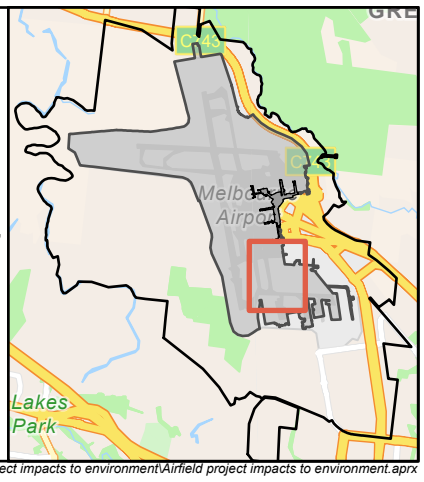
- 125 Plains Grassy Wetland
- 132 Plains Grassland
- 803 Plains Woodland
- 821 Tall Marsh

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Aerial imagery: © Aerometrex

*Co-ordinates in MGA Zone 55, GDA 94 Australian Height Datum

Map Printed: 27/10/2025 12:36 PM



MELBOURNE AIRPORT

Airfield Capital Projects

Ecological Impacts
E - Staff Car Park Extension

Scale @ A3 1:3,490

0 50 100m

N

LEGEND

- Airport Boundary
- Existing Approvals
- Proposed Development / Disturbance Footprint (Full Extents)

EPBC Act Listed Ecological Community / Fauna Habitat

- Grey Box Grassy Woodlands and Derived Native Grasslands of SE Australia
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Seasonal Herbaceous Wetlands (Freshwater) of the Temperate Lowland Plains

Native Vegetation

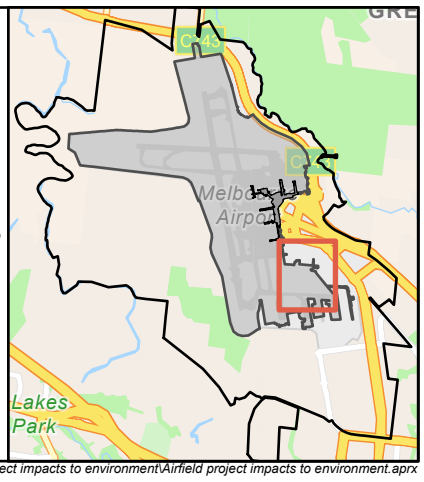
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Appendix E

Offsets assessment guide

Offsets Assessment Guide

For use in determining offsets under the *Environment Protection and Biodiversity Conservation Act 1999*
2 October 2012

This guide relies on Macros being enabled in your browser.

Matter of National Environmental Significance	
Name	NTGVVP
EPBC Act status	Critically Endangered
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	Yes	Impact area: 11.15 ha of NTGVVP with weighted average quality score of 39.02/100.	**Area**	11.15	Hectares	
			Quality	**4**	Scale 0-10	
			Total quantum of impact	4.46	Adjusted hectares	
Threatened species habitat						
Area of habitat	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
Protected matter attributes	**Attribute relevant to case?**	**Description**	**Quantum of impact**		**Units**	**Information source**
Number of features e.g. Nest hollows, habitat trees	No					
Condition of habitat Change in habitat condition, but no change in extent	No					
Threatened species						
Birth rate e.g. Change in nest success	No					
Mortality rate e.g Change in number of road kills per year	No					
Number of individuals e.g. Individual plants/animals	No					

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?	Cost ($ total)	Information source
Ecological Communities																				
Area of community	Yes	4.46	Adjusted hectares	Offset site: advanced offset within a site located at Rokewood, VIC, comprising 43.4 ha of NTGVVP with a weighted average start quality score of 60.52/100	**Risk-related time horizon (max. 20 years)**	20	**Start area (hectares)**	43.4	**Risk of loss (%) without offset**	0%	**Risk of loss (%) with offset**	0%	0.00	90%	0.00	0.00	5.93	133.06%	Yes		
									Future area without offset (adjusted hectares)	43.4	**Future area with offset (adjusted hectares)**	43.4								
					Time until ecological benefit	5	**Start quality (scale of 0-10)**	**6**	**Future quality without offset (scale of 0-10)**	**5**	**Future quality with offset (scale of 0-10)**	**7**	2.00	95%	1.90	1.37				
Threatened species habitat																				
Area of habitat	No				**Time over which loss is averted (max. 20 years)**		**Start area (hectares)**		**Risk of loss (%) without offset**		**Risk of loss (%) with offset**									
									Future area without offset (adjusted hectares)	0.0	**Future area with offset (adjusted hectares)**	0.0								
					Time until ecological benefit		**Start quality (scale of 0-10)**		**Future quality without offset (scale of 0-10)**		**Future quality with offset (scale of 0-10)**									
Protected matter attributes	**Attribute relevant to case?**	**Total quantum of impact**	**Units**	**Proposed offset**	**Time horizon (years)**		**Start value**		**Future value without offset**		**Future value with offset**		**Raw gain**	**Confidence in result (%)**	**Adjusted gain**	**Net present value**	**% of impact offset**	**Minimum (90%) direct offset requirement met?**	**Cost ($ total)**	**Information source**
Number of features e.g. Nest hollows, habitat trees	No																			
Condition of habitat Change in habitat condition, but no change in extent	No																			
Threatened species																				
Birth rate e.g. Change in nest success	No																			
Mortality rate e.g Change in number of road kills per year	No																			
Number of individuals e.g. Individual plants/animals	No																			

Appendix F

Cultural Heritage Management Plans

PROVIDED SEPARATELY

Appendix G

Environment and Sustainability Policy

MELBOURNE AIRPORT
Environment and Sustainability Policy

Purpose
The purpose of this policy is to set the direction for our business and incorporate environment, social and governance (ESG) strategies into our decision making, investments and operations.

As a vital piece of strategic infrastructure that benefits the national economy, Melbourne Airport facilitates tourism, freight and trade, and connects people and businesses to the global marketplace. We are **committed to reducing our environmental impact and continuing to operate sustainably**.

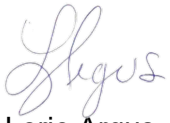
Our goal and commitments
Our goal is to be best practice in environmental and sustainability management across our sector in Australia and the Pacific.

Working proactively with governments, customers, airport partners and other stakeholders, the Australia Pacific Airports (Melbourne) (APAM) Board and Executive Leadership Team is committed to provide the necessary focus and resources for our organisation to:

- adopt measures to conserve natural resources and adapt to climate change;
- reduce energy consumption and operational carbon emissions under our direct control and under our influence;
- optimise the use of our existing facilities and design, construct and operate new infrastructure, emphasising resource efficiency and reducing embodied carbon to support our environmental and sustainability goals;
- be responsible for and protect the environment directly and indirectly impacted by Melbourne Airport's operations;
- prevent, minimise, and manage pollution to protect the environment;
- drive continuous improvement in our environmental performance through our certified Environmental Management System (ISO14001);
- reduce landfill waste wherever possible across all terminals and facilities by applying circular economy principles in construction and operation, focusing on material reuse and repurposing;
- manage our land in a way that protects and enhances First Nations and European cultural heritage, conserves ecology values, while ensuring aircraft safety;
- engage with our employees, tenants, business partners, First Nations communities, regulators and communities to drive continuous improvement in environmental and sustainability performance;
- build respectful and meaningful engagement with First Nations peoples, guided by our Reconciliation Action Plan and honour their connection to Country and culture;
- comply with all relevant heritage, environmental and energy laws, policies, procedures and other compliance obligations and, where appropriate, exceed these requirements.

Accountabilities and responsibilities
This policy applies to all activities related to the management and operation of Melbourne Airport. This includes the activities of employees, tenants, retailers, airline and ground transport partners and contractors.

All parties are required to comply with this policy and to consider this policy during decision making.



Lorie Argus
Chief Executive Officer
Australia Pacific Airports (Melbourne)
June 2025

Appendix H

Response to DCCEEW Comments

Australian Government
Department of Climate Change, Energy, the Environment and Water

EPBC ref: 2024/09907

Ms Rachael Young
Environmental Officer
Melbourne Airport, Tullamarine

Further information required for preliminary documentation for Future Airfields Project, Melbourne Airport, Tullamarine (2024/09907)

Dear Rachael

I am writing to you about your proposal to clear vegetation and undertake construction activities to upgrade infrastructure at Melbourne Airport.

On 29 August 2024, a delegate of the Minister for the Environment and Water decided that the proposed action is a controlled action and that it will be assessed by preliminary documentation. Further information was required to assess the relevant impacts of the proposed action.

I now request, under s95A(2) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), further information as outlined in the attached.

Details on the assessment process for the project and the responsibilities of the proponent are set out in the EPBC Act — Environment Assessment process[1] fact sheet. Further information on the referral and assessment process[2] can be found on the department's website.

If you have any questions about the assessment process or this decision, please contact the project manager, [redacted], by email to [redacted] or telephone [redacted] and quote the EPBC reference number shown at the beginning of this letter.

Yours sincerely

[redacted]

[redacted]
Environment Assessments (Vic and Tas) and Post Approvals Branch
Nature Positive Regulation Division
24 October 2024

[1] https://www.dcceew.gov.au/environment/epbc/publications/factsheet-environment-assessment-process

[2] https://www.dcceew.gov.au/environment/epbc/referral-and-assessment-process

	Further Information Request (24/10/2024)	Section of PD* addressing item	DCCEEW response (23/10/2025)	Item met/not met	BEC Response / APAM reponse (29/10/2025)	Report/Chapter Revision	Response Section / Page number	Response Date	DCCEEW response revised PD dated 4 Nov 2025	RFI Met/ Not Met	BEC / APAM response dated 19/12/2025
	Species information										
1.	Residual significant impact assessment for NTGVVP and GSM and the nature, likelihood, and severity of the impacts. Please use this section in reference to section 5 for discussion on compensatory measures to offset these significant residual impacts.	Section 5 Table 8 Assessment of relevant MNES. Table 9 Significant Impact assessment for NTGVVP	Please include maps that demonstrate overlap with other listed EPBC referrals/approvals. Please provide evidence (including any survey data and associated reports) regarding your assessment of impacts to **Golden Sun Moth**. Please provide a specific map for each project area and a stand alone map identifying all project areas collectively. Please provide stand alone maps for each project area documenting **NTGVVP** survey areas.	Not met	Mapping in Appendix D has been updated for clarity. Summary of other EPBC approvals relevant to the project area has been updated in Table 7. The overall project area is shown in Figure 1. Survey reports for GSM now provided.	Rev 3	Appendix D, Table 7 Figure 1		PD Appendix D updated to include maps for each project area, which identify project footprint, 'existing approval' overlay and locations of NTGVVP. **Appendix D Figures could include relevant EPBC Reference number?** Table 7 'Summary of other EPBC Approvals' updated to revise project timing. Section 4.4 GSM summary - states surveys were not completed specifically for future airfields project, the scope of targeted surveys included footprints of projects A, B, C, D & E and were considered sufficient to determine if species were present and if so, extent to which they use any habitat. Section 4.4.1 A GSM habitat survey (Biosis, 2019) report was provided which documents surveys undertaken within the Melbourne Airport Estate in three areas (Moonee Ponds Creek, Annandale Grassland, 200 Arundel road, Keilor). 67 GSM were detected in Moonee Ponds Creek, but not other two locations. (Noting survey areas were outside of Furture Airfields land). Biosis (2019) recommends 'All areas of potential habitat for GSM on Melb Airport Land should be assessed prior to any works that may result in disturbance to or removal of native grassland and/or introduced Chilean Needle-grass habitat. 3rd Runway report (Biosis, 2023) included targeted surveys for GSM in Northern Area only where eight males were recorded. Figure 10 (Biosis, 2023) shows previous GSM survey results,with no GSM detected at various times/locations surveyed. Figure 15 (Biosis, 2023) shows current GSM survey areas. Section 4.4.1 States despite surveys not detecting the species within the project area, there are areas of potential suitable habitat location along Moonee Ponds Creek, to the northwest of Project B (Pavement Maintenance Program 3).	Met	
2.	Residual significant impact assessment for any other EPBC listed species in the project area and the nature, likelihood and severity of the impacts.	Section 4,5,6,7 & 8	Please provide all survey reports and maps for all project sites relative to the impact assessment, including results from targeted surveys and historical desktop records.Please include specific information regarding past and current land management practices, including maintenance regimes, pest management regimes etc for all project sites, to support impact assessment findings.	Not met	All survey reports now provided. New section 4.3 added which outlines past and current land management practices.	Rev 3	Section 4.3		4 x Ecology reports provided, which includes other EPBC listed species. Section 4.3 updated to include 'Past and current land management practices'. Identifies that several management activities take place within the arifield to ensure safe aircraft operations in line with CASA requirements, including regular slashing of grasses, with some areas mowed up to once per week, use of bird deterrents and insecticides applied alongside some lengths of runway to reduce foraging by birds in these high risk strike zones. Refers to Airside Opertaions Precinct undergoing or recently undergone signficant disturbance, subject to relevant approvals with major earthworks being undertaken for a number of construction projects. (Refers to Table 7 recent EPBC approvals).	Met	
	Impacts to the environment of Commonwealth Land information										
3.	For actions impacting on Commonwealth land, the information will need to identify and evaluate impacts to the environment as described in section 26 of the EPBC Act.	Section 2.2. EPBC Act	Please update to reflect Section 26 '*Requirement for approval of activities involving Commonwealth land*' of the EPBC Act. Sec 26 refers to Part 9 '*Approval of Actions*' .	Not met	Section updated.	Rev 3	Section 2.2		Section 2.2 updated and refers to EPBC Act Section 26 which requires that APAM seek approval for any action on Commonwealth land. Refers to Sig Impact Guidelines 1.2.	Met	
4	Information regarding characterisation of site contamination. This should be in the form of a preliminary site investigation (PSI) and, if considered necessary, a detailed site investigation (DSI), undertaken in accordance with National Environment Protection (Assessment of Site Contamination) 1999 (“the ASC NEPM”), the PFAS National Environmental Management Plan 2.0 (as amended from time to time), and the National Water Quality Management Strategy (NWQMS). The assessments should include but not be limited to:										
4.1	Site history, physical setting, and site conditions.	Section 6.10 ‘Site contamination’	Please provide copies of referenced, site contamination reports, clearly specifying which reports relate to which project site.	Not met	All referenced contamination assessment reports now provided. Note that the approach to assessing site contamination has considered extensive contamination assessments which have previously been completed across Melbourne Airport to date. These assessments provide a comprehensive understanding of the historical practices within the airport estate, the contamination status of soil across the airport precinct and the likely contamination status within each of the project areas. Figure 4 has been added which shows the location of current data relative to the project area. Due to the location of the project area within an operational airfield, access is constrained and the ability for gathering additional soil contamination data is limited. Soil classification testing within each project area will be completed as part of the construction phase of works to inform soil management options as required by the CEMPs and PFAS Management Plan. Introductory text in Section 6.10 of the PD has been updated to reflect this. All available analytical data is included in the provided reports.	-	-	-	Section 6.10 updated and 4 x site contamination reports (AECOM (2023), Elgin (2017), GHD (2023) & Jacobs (2018) provided to DCCEEW. APAM state the reports provide a likely contamination status within each of the project areas. Summary of previous investigations is provided in section 6.10.1 to 6.10.3. PD Figure 5 is the over lap with previous site contamination investigations (which documents the 4 reports provided to DCCEEW) - shows testing boreholes but doesn't indicate any chemical conc ranges. APAM state that soil classification within each project area will be completed as part of the construction phase of works to inform soil management as required by CEMP and PFAS Management Plan. **Please confirm who undertakes the soil classfication (e.g - is this a suitably qualified site contamination consultant). Please consider including additional detail about who and when the soil classification is undertaken (e.g - is there a validation/classification report prepared).**	Minor Comment	Additional text included at the end of the second paragraph in Section 6.10.
4.2	A conceptual site model (CSM) regarding contamination sources, receptors and exposure pathways between those sources and receptors.	Section 6.10	Please provide a CSM for each project area	Not met		-	-	-	CSM for each project area has not been provided at this stage, noting that the site contamination assessment has been undertaken mainly in vicintiy of project areas, and not specifically in relation to each of Future Airfields project areas.Proponent have indicated that there will be further soil classification undertaken, which will be used be used to update the CSM for each project area. which will then be provided to DCCEEW.	Met	
4.3	Characterisation of chemical contamination at the proposed action site.	Section 6.10	Please provide copies of referenced site contamination reports, clearly specifying which reports relate to which project site	Not met		Rev 3	Section 6.10, Figure 4		4 x site contamination assessement reports provided (AECOM (2023), Elgin (2017), GHD (2023) & Jacobs (2018)	Met	
4.4	Analytical results of laboratory analysis should also be provided in an ESdat compatible format.	Section 6.10	Please provide	Not met		-	-	-	Laboratory analysis is available in site contamination reports provided.	Met	
5	Information and data regarding the proposed works, with emphasis on those with the potential to disturb and/or remobilise contamination. This should include, but not be limited to, the following:										
5.1	The locations and depths of any earthworks, including whether groundwater is expected to be intersected.	Section 3 ‘Description of Action’. Section 3.3 ‘Project Description’. Section 6.10.6 ‘Status of PFAS impacts across the project areas	Please include clearly labelled maps for each project area identifying location of contamination.		Figure 4 has been added which shows the location of current data relative to the project area. This information is shown in more detail for each project area in Appendix M. The location of PFAS contamination is shown in Figure 5.	Rev 3	Figure 4, Figure 5, Appendix M		Figure 4 referred to in the APAM response shows overlap with CHMP? However Figure 5 provides overview of previous contamination assessment (ie the location of boreholes for each of the s/c reports provided). Figure 6 identifies PFAS conc in soils across airport. **Noting Figure 6 indicates the staff carpark extension area (Project E) may have higher conc of PFAS in soil and Fig 5 infers that Elgin (2017) undertook assessment in Project E area, the Elgin (2017) report assesses for OCP and not PFAS. Please confirm PFAS report for Project E area.**	Minor comment	Incorrect reference. Our previous response should have referred to Figure 5 (Overview of previous contamination assessments) and Figure 6 (PFAS concentrations in soil – Project footprint overlay). Correct - Project E may have higher PFAS concentrations with reference to the data shown in Figure 6, and the Elgin report assessed OCP contamination, not PFAS. As per response to Item 4.1, soil classification testing within each project area will be completed as part of the construction phase of works to inform soil management options as required by the CEMPs and PFAS Management Plan.
5.2	The expected volumes of potential contaminated materials, if any, to be produced including soil, water and hardstand material, and the fate of such material.	Section 3.3	Estimated volumes of contaminated soils or hardstand are currently not included in PD.	Not met	Estimated volumes of soil to be excavated are outlined in Section 3.3.2 for each project. Estimated volumes of excavated hardstand has been added to Section 3.3.2 for each project where relevent.	Rev3	Section 3.3.2		Section 3.3.2 estimated volume of excavated hardstand has not been included. Eg Project B states "the amount of hardstand to be excavated has not been estimated at this stage". **Please include additional summary details of how the excavated hardstand works will be managed with regard to PFAS.**	Partially Met	Section 8.2.2 details how excavated material will be managed with regard to potential PFAS contamination. Have clarified the wording in Section 8.2.2 to state "soils / hardstand material".

Further Information Request (24/10/2024)		Section of PD* addressing item	DCCEEW response (23/10/2025)	Item met/not met	BEC Response / APAM reponse (29/10/2025)	Report/Chapter Revision	Response Section / Page number	Response Date	DCCEEW response revised PD dated 4 Nov 2025	RFI Met/ Not Met	BEC / APAM response dated 19/12/2025
5.3	The expected duration of excavations / bare earth being exposed.	Section 3.3.2 'Construction'	Documented for each project.	Met	-	-	-	-		Previously Met	
5.4	Assessment of environmental suitability of any fill material proposed to be imported onto the site.	Section 3.3.2	Please ensure CEMPs detail the information addressing this item.	Partially met	Project CEMPs will meet the requirements of the Melbourne Airport Environmental Management Plan at a minimum, which addresses this requirement. The Melbourne Airport Environmental Management Plan is now linked in Section 8.2, in response to Item 13.1. Specific bullet point has also been added to Section 8.2.2 regarding imported fill material.	Rev 3	Section 8.2, Section 8.2.2		CEMP's for each project have not been provided as will be prepared by contractor for each project. Section 8.2 has been updated to include link to Melbourne Airport EMP and PFAS Management Framework. **Confirm links to these reports are working.**	Met - Minor comment	Links now working correctly
6	Mitigation measures and management protocols proposed to be implemented to protect the environment during the proposed action. This should include, but not be limited to, the following:										
6.1	Measures to prevent and / or manage any potential for mobilisation of PFAS and other contaminants.	Section 8.2 'Construction phase management and mitigation measures'	Please include how this information aligns with the PFAS NEMP.	Partially met	The Melbourne Airport PFAS Management Framework aligns with the PFAS NEMP. Text has been added to Section 8.2 accordingly.	Rev 3	Section 8.2		Section 8.2 now refers to PFAS Management Framework aligning with PFAS NEMP.	Met	
6.2	Known / likely trenching operations, stockpile sites, laydown / cleared areas, access areas, disturbed soil areas, etc	Section 8.2	Please provide further site specific information regarding how this item has been addressed.	Partially met	All disturbance areas are included in the proposed development/disturbance footprint (including allowance for construction buffers), which is shown in Figure 1. Project methodologies are described in Section 3.3.	Rev 3	Figure 1, Section 3.3		Figure 1 referred to in APAM response is the 'overview of approval process', possibly should have referred to Figure 2 which identifies the 5 project areas? Section 3.3 provides description of each project methodologies with CEMP to be prepared by project contractors.	Met	
6.3	A commitment to ensuring that the vehicle hygiene, risk- based management, on-site stockpiling, storage and containment, transport of PFAS contaminated materials is consistent with the guidance in the PFAS NEMP 2.0 (HEPA 2020: 46-60), as updated from time to time.	Section 8.2, 8.2.1, 8.2.2 & Table 19.	Please ensure documentation specifies alignment with PFAS NEMP – for example not currently referenced in relation to construction/management.	Partially met	As per Item 6.1.	-	-	-	PD Sec 6.1 numbering referred to by APAM in initial response may have changed since PD revision. PD Section 8.2 states Melbourne Airport PFAS Management Framework was developed to deliver consistent environmental practices for potential enviornmental risks posed by PFAS impacted material on construction and maintenance projects at Mel. Airport and aligns with PFAS NEMP.	Met	
7	Further, consideration could be given to the need for:										
7.1	A Construction Environmental Management plan (CEMP), including an unexpected finds protocol (UFP).	Section 8.2		Met	-	-	-	-		Previously Met	
7.2	Airport Environment Officer (AEO) review of Melbourne Airport's PFAS Management Framework.	Section 8.2	Please ensure reference and alignment with the most up to date Framework (2025).	Partially met	Updated.	Rev 3	Section 8.2		Section 8.2 now includes link to Melb Airport PFAS Management Framework (APAM, 2025). **Please confirm working link.**	Met - Minor comment	Link now working correctly
AVOIDANCE, MITIGATION AND MANAGEMENT MEASURES											
8	The details on the mitigation measures that will be applied to the project area to ensure that there are no significant direct or indirect impacts to native vegetation within the adjacent reserves.										
8.1	including the on-going management plans that has:										
8.1.1	A statement of the objectives, ongoing management and monitoring, and locations and timing	Section 8.2.1 'Mitigation measures for ecological communities.	Please ensure the CEMP details mitigation/management strategies specific to protection of EPBC Act listed communities (NTGVVP) and other areas of native vegetation. Please ensure each project site is addressed as a stand-alone.	Partially met	This is already noted/addressed in Section 8.2 and 8.2.1. Additional text has been added to Section 2.2.1 and Section 8.2 regarding the Melbourne Airport building approval process for context.	Rev 3	Section 2.2.1, Section 8.2, Section 8.2.1		Additional information regarding the Melb airport building approval process has been included in section 2.1.1. **Mitigation/management to protect MNES (NTGVVP) to be outlined in CEMPs.**	Met	
8.1.2	The party responsible	Table 19		Met	-	-	-	-		Previously Met	
8.1.2	The policy basis.	Section 8.2 & Table 19	Please ensure to include information on how you have proposed that works are in accordance with PFAS NEMP.	Partially met	As per Item 6.1.	-	-	-	PD Section 8.2 refers to Melbourne Airport PFAS Management Framework alignment with PFAS NEMP in relation to construction and maintenance. **The details of how the specific project area works align with the PFAS NEMP are not included in the revised PD, confirm to be included in the CEMPs?**	Minor comment	As outlined in Section 8.2, the project CEMPs will be required to meet the requirements of the Melbourne Airport PFAS Management Framework at a minimum, which is aligned to the PFAS NEMP.
8.2	Development and implementation of a Construction Environment Management Plan (CEMP).	Section 8.2	Please provide the CEMP specific details for each individual project site.	Not Met	The approach to developing project-specific CEMPs is detailed in Section 8.2. As outlined, all project CEMPs will meet the minimim requirements of the Environmental Management Plan Guidelines (DoE, 2014), the Melbourne Airport Environmental Management Plan (EMP) (APAM 2021), and the Melbourne Airport PFAS Management Framework (APAM 2025).	Rev 3	Section 8.2		DCCEEW acknowledge CEMP's to be developed by project contractors, as identified in section 8.2	Met	
8.3	Draft action management plans (AMP) must be prepared by a suitably qualified ecologist and in accordance with the department's Environmental Management Plan Guidelines (2024), available at: www.environment.gov.au/epbc/publications/environmental- management-plan-guidelines.	Section 8.4 & Table 19	Please provide links to relevant documents.	Not Met	Based upon discussion with DCCEEW, we understand that this relates to any applicable management plans for the proposed action (e.g. CEMP, PFAS Management Plan, OMP). Links to relevant documents are provided via responses to other comments.	-	-	-	Section 8.3 includes a link to Melbourne Airports Environment Management Plan (APAM 2021). **Please ensure link is working.**	Met - Minor comment	Link now working correctly
OFFSETS											
9.	A delegate noted at the referral decision stage that there was likely to be significant residual impacts to the following species in the project area, including: 1) Natural Temperate Grasslands of the Victorian Volcanic Plain (NTGVVP) – Critically Endangered 2) Golden Sun Moth (Synemon Plana) – Vulnerable Please ensure that your offsets assessment includes these species and any other species that your project has, or is likely to have, significant residual impacts on.	Section 9 'Offsets'	Please provide all supporting information related to offsets including draft OMP's and all relevant survey reports supporting offset findings. For example: - The OMP for the proposed 43.4ha offset - The survey report conducted to determine the initial quality of the offset site in 2017 - Justification for the "future quality without offset" (e.g., additional survey report to show degradation between 2017 and 2020)	Not met	Section 9 has been updated with informaton regarding the proposed offset site. The OMP is included in the landowner agreement, which is now included as Appendix I. The location of the proposed offset site is provided in Appendix J. The baseline condition monitoring report is included as Appendix L, and the year 5 monitoring report as Appendix L.	Rev 3	Section 9, Appendices I to L		Section 9 'Offsets' updated. States unlikely to have a significant impact on GSM, and likely to have a significant impact on NTGVVP (ie permanent removal of NTGVVP in project areas). Section 9.2 details the offset strategy. APAM propose to secure 43.4 ha of NTGVVP as an advanced offset within site at Rokewood. Offset site has existing agreement under section 69 of Conservation Forests & Lands Act 1987, provided in Appendix I. Appendix E 'Offset assessment guide'. Appendix J identifies offset location. Appendix K Offset site assessment report. Offset site comprises 160.6 ha Plains Grassland (EVC 132), states meets minimum thresholds EPBC Act listed NTGVVP. Appendix K includes an Offset Monitoring: Year 5 Vegetation Quality Assessment report prepared by Biodiversity Offsets Victoria dated Feb 2025 - includes an assesment of NTGVVP against condition thresholds).	Met.	
OTHER INFORMATION REQUIRED											
Ecologically sustainable development (ESD) Principles of ESD, as defined in section 3A of the EPBC Act											
10	A statement outlining how the proposed action follows the principles of ecologically sustainable development:										

Further Information Request (24/10/2024)		Section of PD* addressing item	DCCEEW response (23/10/2025)	Item met/not met	BEC Response / APAM reponse (29/10/2025)	Report/Chapter Revision	Response Section / Page number	Response Date	DCCEEW response revised PD dated 4 Nov 2025	RFI Met/ Not Met	BEC / APAM response dated 19/12/2025
10.1	Decision making processes should effectively integrate both long term and short term economic, environmental, social and equitable considerations.	Section 9.2 'proposed Offset', Section 10 'ESD'& Table 25 'How the principles of ESD have been met'.	Will be met once relevant outstanding RFI component/s met	Partially met	Noted	-	-	-	PD Section 9.2 updated and additional offset information provided.	Met	
10.2	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.	Section 10 & Table 25	Will be met once relevant outstanding RFI component/s met	Partially met	Noted	-	-	-		Met	
10.3	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.	Section 10 & Table 25	Will be met once relevant outstanding RFI component/s met	Partially met	Noted	-	-	-		Met	
10.4	The conservation of biological diversity and ecological integrity should be a fundamental consideration in decision making.	Section 10 & Table 25	Will be met once relevant outstanding RFI component/s met	Partially met	Noted	-	-	-		Met	
10.5	Improved valuation, pricing and incentive mechanisms should be promoted.	Section 10 & Table 25		Met	-	-	-	-		Previously Met	
Economic and social matters											
11	A summary outlining how the proposed action has considered economic and social matters, including:										
11.1	Details of any public consultation activities undertaken and their outcomes.	Section 11.1 'Public consultation'		Met	-	-	-	-		Previously Met	
11.2	Projected economic costs and benefits of the project, including the basis for their estimate through cost/benefit analysis or similar studies.	Section 11.3 'Projected economic costs and benefits'		Met	-	-	-	-		Previously Met	
11.3	Employment opportunities expected to be generated by the project (including construction and operational phases).	Section 11.4		Met	-	-	-	-		Previously Met	
12	Although a cultural heritage management plan (CHMP) may not be mandatory, the department recommends that you engage with the Victorian State Government, First Peoples State Relations section to ensure that all cultural heritage issues are managed appropriately.										
12.1	A statement overviewing the any consultation with Indigenous stakeholders and the Victorian State Government, First Peoples State Relations section to ensure that all cultural heritage issues are managed appropriately.	Section 11.2 'Consultation with indigenous stakeholders'. Figure 3 identifies project area overlap with existing approved CHMPs.	Please include CHMP	Not met	The CHMPs have already been provided in the EPBC portal. These have been provided separately as opposed to appended to the submission as they are sensitive documents that are not suitable for public exhibition.	-	-	-	Confirmed the CHMPs were provided previously.	Met	
Action Management Plans											
13	Please provide a copy of the proposed:										
13.1	Construction Environment Management Plan (CEMP)	Section 8.2 & Table 19	Please include website link in PD 202109_APAM-EMP_Rev-2_FINAL.pdf	Partially met	Added in Section 8.2	Rev 3	Section 8.2		Link to APAM EMP in Section 8.2 - **Confirm link is active**	Met - Minor comment	Link now working correctly
13.2	Per- and Poly Fluoroalkyl Management Plan (PFAS MP)	Section 8	Please update and ensure alignment with most recent version (2025). Please include website link to the Melbourne Airport PFAS Management Framework, Rev 3.0 (2025) Microsoft Word - 20250611_APAM PFAS Management Framework Rev3_June 2025_DITRDCSA Approved	Partially met	Added in Section 8.2	Rev 3	Section 8.2		Sec 8.2 includes link to PFAS Management Framework (2025) - **confirm link is active**	Met - Minor comment	Link now working correctly
13.3	Cultural Heritage Management Plan (CHMP)	Section 11.2	2 x CHMP referred to as included in Appendix F – however the CHMP are not included.	Partially met	As per Item 12.1	-	-	-	CHMP's Previously provided to DCCEW	Met	
13.4	Draft Offset Management Plans	Section 9.2 'Proposed Offset Strategy' and Appendix E 'Offset Assessment Guide'.	Previously requested copy of draft OMP be provided to DCCEEW.	Not met	As per Item 9	-	-	-	Section 9 updated - includes additional 'offsets' information	Met	
APPENDIX A											
A1 - Content requirements											
A1.1	Be a stand-alone document/s containing sufficient information to avoid the need to search out previous or supplementary reports.	General	PD refers to numerous other reports including 'Melbourne Airport PFAS Management Framework, Melbourne Airport EMP, Ecologists surveys, Site Contamination assessments etc, please include this information where relevant within the PD.	Not met	Addressed per responses to other relevant comments	-	-	-	Information requested by DCCEEW has been included in PD or additional reports received.	Met	
A1.2	Enable interested stakeholders and the Minister to easily understand the consequences of the project on MNES.	General	Please provide requested ecologist surveys for impact sites.	Not met	As per Item 2	-	-	-	Ecological survey reports provided. PD section 4.5 provides a summary of target surveys for TEC. 'Stating each area was previoulsy assessed by ecologists to determine the presence and extent of native vegetation. Field surveys for each area were completed across multiple asesesments (2016 - 2024). A list of relevant ecological reports relating to each project is povided. PD Section 5.1.1 outlines direct impacts to NTGVVP. Where NTGVVP exists and overlap with project areas is documented in appendix D figures.	Met	
A1.3	Be written so that any conclusions reached can be independently assessed. Include all key claims, findings, proposals and undertakings.	Section 13 'Conclusions'	Survey reports not provided to enable verification of conclusions. PD report concludes that the project area is unlikely to constitute a significant impact for GSM, however delegate referral decision likely significant impact on NTGVVP & GSM.	Not met	As per Item 2, survey reports have now been provided. Further justification for the likelihood of occurrence of the GSM in the project area has been added to Section 5.1.1 and 5.1.2, and this is also carried over to Table 8.	Rev 3	Section 5.1.1, Section 5.1.2, Table 8		Section 5.1.1 States that while surveys have confirmed the presence of potential suitable habitat for GSM to exist within one or more of the project areas, past surveys have failed to detect species within Project sites (Biosis 2023). Further info re GSM included in cell J4.	Met	
A1.4	Refer to all relevant standards, policies and other guidance material published by the department. Any instances where published guidance is not followed must be justified. Where no Commonwealth standards exist, state government and industry standards may be useful.		Will be met once relevant outstanding RFI component/s met	Partially met	Noted	-	-	-	Updated and refers to relevant APAM EMP & PFAS Framework.	Met	
A1.5	Include the names, roles and qualifications (where relevant) of all persons involved in preparing the preliminary documentation.	Document control (pg i)	Includes names of author and reviewer, but the role or qualification is not documented.	Not met	CVs for main author and reviewer are now included in Appendix N.	Rev 3	Appendix N		CV's of BAJWA Consultant's (Maya Brennan & Amelia Donato) included in Appendix N. **The document control could be updated to include role (job title) of relevant staff.**	Minor comment	Role titles added to the document control on page i

Further Information Request (24/10/2024)		Section of PD* addressing item	DCCEEW response (23/10/2025)	Item met/not met	BEC Response / APAM reponse (29/10/2025)	Report/Chapter Revision	Response Section / Page number	Response Date	DCCEEW response revised PD dated 4 Nov 2025	RFI Met/ Not Met	BEC / APAM response dated 19/12/2025
A1.6	Include a copy of this request for information and a cross- reference table indicating where the information fulfilling this request is included in the preliminary documentation (e.g., Section 4.2.2 and Appendix A, Chapter 2.1).	Appendix H	Includes DCCEEW information request dated 24/10/2024 and DCCEEW comment and APAM response.	Met, to be updated with DCCEEW comments.	Noted, will be updated with final comments register.	Rev 3	Appendix H		Noted	Met	
A1.7	The preliminary documentation must state the following for all information provided: • The source and date of the information. • How the reliability of the information was tested. • The uncertainties (if any) in the information. • The guidelines, plans, and/or policies considered.		Will be met once relevant outstanding RFI component/s met	Partially met	Noted	-	-	-	Ecology and site contamination reports have been provided. Acknowledge some project areas may have limited assessment, in relation to s/c further soil classification work to be undertaken. **As per previous comment by who and when will the further soil classification be undertaken? Please confirm if there is a classification/validation report preapred.**	Minor comment	Addressed as per Item 4.1
A2 - Format and style requirements											
A2.1	Be in a suitable format to be published in hardcopy (A4 or A3 size, with maps and diagrams in A4 or A3 size and in colour) and published in electronic format (e.g., MSWord or PDF) on the internet.		Further details and maps requested in previous comments.	Partially met	Per responses to previous comments	-	-	-	Additional maps provided which document the location of the project areas and protected matters (NTGVVP). (appendix D)	Met	
A2.2	Include detailed technical information, studies or investigations necessary to support the information in the stand-alone document as appendices.	General	Will be met once relevant outstanding RFI component/s met	Not met	Noted	-	-	-	APAM provided reports requested and included relevant links to other guidance.	Met	
A2.3	Be objective, clear, succinct, avoid technical jargon and, where appropriate, be supported by maps, plans, diagrams, data or other descriptive detail.	General	Provide clear mapping related to each project area. 1) Clear map that identifies the 5 project areas and names (as provided at site visit. 2) Clear map for each project area that identifies MNES and disturbance area, and total ha NTGVVP removal at each project area.	Not met	Mapping in Appendix D has been updated for clarity.	Rev 3	Appendix D		Appendix D includes relevant map for each project.	Met	
A2.4	Reference all sources using the Harvard standard of referencing. Ensure that other supporting documents (e.g., academic studies, regulatory standards) are publicly accessible, with electronic links provided where possible.	General	Refer to previous comments in regard to links to information on Melbourne Airport website.	Not met	Addressed per previous comments	-	-	-	Relevant links included - **Confirm link active**	Met	
A2.5	Redact the contact details of departmental officers.	Appendix H	Please quality check – DCCEEW letter appendix H contains DCCEEW staff contact details.	Not met	Document has now been redacted.	Rev 3	Appendix H		The DCCEEW letter (Appendix H) is redacted to remove assessment officer details.	Met	
A2.6	Not contain any commercial in confidence markings. If the preliminary documentation contains sensitive information, please discuss this with the assessment officer.			Met	-	-	-	-		Previously Met	
A3. Ecological data provision											
A3.1	The further preliminary documentation must include an appendix of occurrence records (both sightings and evidence of presence) for identified MNES, above, and any other MNES encountered during field surveys for the proposed action. This data may be used by the department to update the relevant species distribution models that underpin the publicly available Protected Matters Search Tool (PMST).		Request for previous survey reports referred to in the PD.	Not met	As per Item 2, survey reports have now been provided.	-	-	-	Ecology reports provided to DCCEEW that identify the presence of NTGVVP.	Met	
A3.2	The species occurrence records must be provided in accordance with the department's *Guidelines for biological survey and mapped data* (2018). Sensitive ecological data must be identified and treated in accordance with the department's *Sensitive Ecological Data – Access and Management Policy V1.0* (2016) or subsequent revision.		Request for previous survey reports referred to in the PD.	Not met	As per Item 2, survey reports have now been provided.	-	-	-	Ecology reports provided to DCCEEW - don't appear redacted and assume don't contain sensitive data	Met	

Appendix I

Landowner agreement for offset site

Imaged Document Cover Sheet

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Number of Pages (excluding this cover sheet)	**70**
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AU182953Y

Application for recording of an agreement under
Section 72 Conservation
Forests & Lands Act 1987

Lodged by Department of Environment, Land, Water and Planning

Name: Angela Robb
Phone: (03) 9637 8653
Address: Level 1, 8 Nicholson Street, East Melbourne
Customer Code: 14354H

The Secretary to the Department of Environment, Land, Water and Planning applies for a recording of an agreement made under Section 69 of the Conservation Forests & Lands Act 1987 in relation to the land.

Land: - Being part of the land at Lot 100, Lot 101 and Lot 102 on Title Plan TP 944788Y, Parish of Kuruc-a-ruc, and being part of the land in Volume 11175, Folio 238, and being the land hatched on the plan in the First Schedule to the Agreement, and being part of the land at Lot 64, Lot 65 and Lot 66 on Title Plan TP944787B, Parish of Kuruc-a-run, and being part of the land in Volume 11175, Folio 237, and being the land hatched on the plan in the First Schedule to the Agreement.

Name of party to agreement: John Chatham of 2436 Ballarat Maryborough Rd Epsom, Victoria.

Date of Agreement: 17 July 2020

The Agreement is expressed to be binding on the land owners successors in title.

Date: 18 November 2020

Signature: 

Signed by Angela Robb, Project Officer, Native Vegetation Regulation, on behalf of the Secretary to the Department of Environment Land Water and Planning.

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AU182953Y

LANDOWNER AGREEMENT

VC_CFL-3697_01

BETWEEN

THE SECRETARY TO THE DEPARTMENT OF

ENVIRONMENT, LAND, WATER AND PLANNING
(***Secretary***)

- and -

John Henry Chatham
(***Landowner***)

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Landowner Agreement

This Agreement is made on the ....17..... day of ....July.....2020 between the Landowner specified in the First Schedule and the Secretary to the Department of Environment, Land, Water and Planning of the State of Victoria in respect of the Subject Land.

INTRODUCTION

1 Native vegetation is described in Clause 72 of the Victoria Planning Provisions as *plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses.*

2 Offsets for Native Vegetation removal may be required in order to comply with regulatory requirements, permits or approvals in Victoria, including the requirements of Victorian planning schemes and the *Planning & Environment Act 1987* (Vic). Permits issued under clause 52.16 or 52.17 of a Planning Scheme may require Offsets of the appropriate quantity (amount of gain) and attributes to be provided for Native Vegetation removal.

3 The Credit Register, maintained by the Department, records the ownership, trading and use of Native Vegetation Credits in Victoria. The Credit Register sets minimum standards for the establishment of credit sites and undertakes quality assurance to provide certainty that all Native Vegetation Credits meet minimum requirements for site eligibility, permanence and additionality, and are suitable as Offsets.

4 The Credit Register has developed a series of standard agreements to provide a consistent contractual framework for parties to establish and trade Native Vegetation Credits. These agreements include this Agreement; a Site Assessor Agreement between the Secretary and a Site Assessor; a Credit Trade Agreement between a Credit Owner (typically the Landowner) and a purchaser (with or without a Broker); a Broker Agreement between the Secretary and a Broker confirming a Broker's ability to act in a brokering capacity, an Over the Counter Credit Owner Agreement between a Credit Owner and a Broker.

5 This Agreement is made pursuant to Part 8 of the *Conservation, Forests and Lands Act 1987* (Vic). The Secretary and the Landowner have agreed to enter into this Agreement in order to protect and improve the extent and quality of Native Vegetation on the Site on an ongoing basis. This Agreement provides for a ten year Site Management Plan designed to improve the condition of the Site and to protect the Site in perpetuity.

6 The Landowner agrees to manage the Site in accordance with the Site Management Plan and to permit the Secretary to have access to the Subject Land for the purposes of evaluating the Site Management Plan and the Landowner's management of the Site.

7 The Landowner acknowledges that the purpose of this Agreement is to achieve the Management Commitments in order to improve the condition of Native Vegetation on the Site on an ongoing basis, and, in particular, to:

(a) conserve and enhance wildlife habitat on the Site;

(b) enhance the ecological significance of the Native Vegetation on the Site;

(c) improve the bushland and trees on the Site; and

(d) protect natural features on the site including rock formations, watercourses, lakes, ponds, marshes and other bodies of water on the Site.

8 The Landowner also acknowledges that this Agreement can be used to secure the right to trade Native Vegetation Credits via the Credit Register. The Landowner and the Secretary may execute other agreements which allow Native Vegetation Credits created by this Agreement (which remain unsold) to be sold to other persons via the Credit Register.

9 As at the date of this Agreement, the Subject Land is encumbered by Mortgage No. AK16066N in favour of the Mortgagee. The Mortgagee has consented to the Owner entering into this Agreement with respect to the Subject Land.

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IT IS AGREED:

1 DEFINITIONS

Allocated in relation to a Native Vegetation Credit means that the Native Vegetation Credit has been attributed to a particular offset condition in order to satisfy requirements under a regulatory permit, approval, consent or authorisation for a philanthropic purpose, after which it cannot be sold or used for another purpose.

Agreed Price means the amount payable by a person who purchases Native Vegetation Credits under a Credit Trade Agreement.

Agreement means this Landowner Agreement and includes the schedules and any annexure to it or documents incorporated by reference.

Annual Report means a report provided to the Secretary within one year of the date of execution of this Agreement and prior to each anniversary of that date for each year thereafter for a period of ten years, in accordance with clause 9.

Annual Payment Date means the anniversary of the date of commencement on which the annual payment is due, continuing for the first 10 years of this agreement.

Available Gain means the estimated gain from security and management in the extent or condition of Native Vegetation on the Site as assessed by or on behalf of the Secretary in accordance with Department's Gain Scoring Manual and as recorded on the Credit Register as Credits.

Biodiversity Assessment Guidelines means the *Permitted clearing of Native Vegetation - Biodiversity assessment guidelines* dated September 2013

Business Day means a day which is not a Saturday, Sunday or a public holiday (being a public holiday appointed as such under the Public Holidays Act 1993 (Vic)) in Victoria.

Commencement Date means the date of commencement of this Agreement specified in the First Schedule.

Commonwealth Privacy Act means the *Privacy Act 1998* (Cth), including the Australian Privacy Principles under that Act.

Credit Owner means the legal entity recorded as the owner of the specified Native Vegetation Credits on the Credit Register.

Credit Owner Agreement means the agreement executed by the Credit Owner and a person who has agreed to act as a broker under a broker agreement with the Department.

Credit Register means the Native Vegetation Credit Register, administered by the Registrar under the direction of the Secretary and any successor to it, which records all Native Vegetation Credits, ownership details of Native Vegetation Credits and whether they are allocated or unallocated.

Credit Trade Agreement means the agreement between the Landowner and a purchaser or the Landowner, a purchaser and a broker, which allows Native Vegetation Credits created pursuant to this Agreement to be sold via the Credit Register.

Department means the Department of Environment, Land, Water and Planning or its successor.

Department Trust Account means the bank account in which the Secretary holds funds from the sale of Native Vegetation Credits by the Landowner. The funds are held in trust for payments to the Landowner in accordance with this Agreement.

Department Website means the Native Vegetation Credit Register section of the website of the Department.

Domestic or Feral Animal means any animal that is not native fauna or livestock.

Establishment of a Weed means the stage of the weed's development at which it is able to reproduce.

EVC means an Ecological Vegetation Class as defined in the Guidelines.

First Trade means the first Credit Trade Agreement executed by the Landowner and a purchaser in respect of any Native Vegetation Credits created pursuant to this Agreement.

Gain Scoring Manual means the *Native Vegetation Gain Scoring Manual Version 2* dated December 2017, as varied from time to time, a copy of which is available from the website administered on behalf of the Secretary, which at commencement is <(www.delwp.vic.gov.au)>.

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Guidelines means the *Guidelines for the removal, destruction or lopping of native vegetation* dated December 2017, as varied from time to time, a copy of which is available from the website administered on behalf of the Secretary, which at Commencement is <(www.delwp.vic.gov.au)>.

Habitat Zone means a habitat zone described in the Second Schedule.

Information means information, including Personal Information, relating to Landowners (or their directors and employees) which the State or the Department receives or has access to under this Agreement.

Initial Payment means the amount set out in Part A of the Third Schedule.

Landowner means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as proprietor or proprietors of an estate in fee simple of the Subject Land or any part of it and includes a mortgagee-in-possession.

Landowner Collection Statement means the statement set out in the Fourth Schedule.

Landowner Agreement Fee means the amount payable to DELWP in accordance with clause 5.1 and set out in the First Schedule.

Management Action means the works and other requirements to be carried out by the Landowner as specified in the Site Management Plan under the Second Schedule.

Management Commitment means the outcomes for the improved quality and extent of Native Vegetation on the Site to be achieved by the Landowner carrying out the Management Actions.

Management Notice means a notice issued under clause 7 of this Agreement.

Minister has the same meaning as in the *Conservation, Forests and Lands Act 1987* (Vic).

Mortgagee means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as Mortgagee of the Subject Land or any part of it.

Native Vegetation has the same meaning as in the Guidelines.

Native Vegetation Credit means a Unit listed on the Credit Register which may be unallocated and therefore available for sale, or allocated as an Offset, subject to the Rules.

New Recruit has the same meaning as in the NV Framework.

NV Framework means the *Native Vegetation Management - A Framework for Action* dated August 2002.

Offset has the same meaning as in the Guidelines 2017, Guidelines 2013 or the NV Framework, as appropriate.

Parties means the Landowner and the Secretary.

Periodic Report means an additional report requested by the Secretary from time to time which relates to a specified period for the purpose of demonstrating compliance with the Agreement, including the Site Management Plan.

Personal Information means any information which is 'personal information' under the *Victorian Privacy Act 2000* or the *Commonwealth Privacy Act 1988.*

Planning Scheme means a planning scheme made under the *Planning and Environment Act 1987* (Vic) which applies to the Subject Land from time to time.

Regionally Prohibited Weed or **Regionally Controlled Weed** have the same meaning as in the *Catchment and Land Protection Act 1994* (Vic).

Revegetation means any Native Vegetation established within the Site in accordance with the Second Schedule.

Rules means the Native Vegetation Credit Register business rules, as amended from time to time and available from the Department at nativevegetation.offsetregister@delwp.vic.gov.au.

Second and Subsequent Trade means the sale of Native Vegetation Credits created pursuant to this Agreement by the Landowner under a Credit Trade Agreement that is executed with a purchase at a time after the First Trade.

Secretary has the same meaning as in the *Conservation, Forests and Lands Act 1987* (Vic), and, where the context requires, includes the Secretary's officers, employees, agents, contractors, invitees and licensees.

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Site means that part of the Subject Land upon which the Site Management Plan is to be carried out as specified in the First Schedule.

Site Assessor means a person contracted by the Department to assess the Site for Available Gain and to assist with the development, review or update of the Site Management Plan pursuant to a Native Vegetation Credit Register Site Assessor Agreement.

Site Management Plan means the plan detailing the Management Actions to be carried out for a period of ten years and ongoing as specified in the Second Schedule and according to the timeframes specified for the purposes of achieving the Management Commitments.

Specific Biodiversity Equivalence Unit has the same meaning as set out in the Guidelines.

State means the Crown in right of the State of Victoria.

Subject Land means all those parcels of land containing the Site as identified in the First Schedule.

Supplementary Planting means any Native Vegetation (overstorey and/or understorey plants) established within a native vegetation patch Habitat Zone in accordance with the Second Schedule.

Transferee means a person to whom title to the Subject Land is transferred by the landowner upon a change of ownership, as recorded on a certificate of title for the Subject Land.

Unit means:

- General Habitat Unit (GHU) or Species Habitat Unit (SHU) as defined in the Guidelines 2017; or
- General Biodiversity Equivalence Unit (also GBEU), Specific Biodiversity Equivalence Unit (also SBEU) as defined in the Guidelines 2013; or
- Habitat Hectare, Medium Old Tree, Large Old Tree, Very Large Old Tree, New Recruit as defined in the NV Framework, as appropriate.

Victorian Privacy Act means the *Privacy and Data Protection Act 2014* (Vic), including the Information Privacy Principles under that Act.

2 INTERPRETATION

In this Agreement unless the context admits otherwise:

2.1 the singular includes the plural and vice versa;

2.2 a reference to a gender includes a reference to each other gender;

2.3 a reference to a person includes a reference to a firm, corporation or other corporate body and that person's successors in law;

2.4 if a party consists of more than one person this Agreement binds them jointly and each of them severally;

2.5 a term used in this Agreement has its ordinary meaning unless that term is defined in this Agreement. If a term is not defined in this Agreement and it is defined in the Guidelines, or the NV Framework, it has the meaning as in the Guidelines, the *Conservation, Forests and Lands Act 1987*, or the NV Framework, as appropriate;

2.6 a reference to an Act, Regulation or a Planning Scheme includes any Acts, Regulations or amendments amending, consolidating or replacing the Act, Regulation or Planning Scheme;

2.7 the Introduction to this Agreement forms part of this Agreement;

2.8 in this clause words that are defined in *A New Tax System (Goods and Services Tax) Act 1999* (Cth) have the same meaning as their definition in that Act. Except as otherwise provided in this Agreement, all consideration payable under this Agreement in relation to any supply is exclusive of GST;

2.9 a reference to writing includes any method of representing or reproducing words, figures, drawings or symbols in a visible and tangible form but excludes a communication by electronic mail;

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2.10 a reference to an *agreement* includes any undertaking, deed, agreement and legally enforceable arrangement, whether or not in writing, and a reference to a *document* includes an agreement (as so defined) in writing and any certificate, notice, instrument and document of any kind;

2.11 a *month* means a calendar month;

2.12 a reference to *dollars* or *$* is to Australian currency; and

2.13 a Site Management Plan may expressly provide for the Landowner to carry out any activity that would otherwise contravene clauses 5.8, 5.9, 5.10, 5.19 and 5.21.

3 COMMENCEMENT OF THIS AGREEMENT

This Agreement commences on the Commencement Date.

4 LANDOWNER'S SUCCESSORS TO BE BOUND

The Landowner agrees that this Agreement binds the Landowner and the Landowner's successors in title, and that section 72 of the *Conservation, Forests and Lands Act 1987* (Vic) as amended from time to time applies in perpetuity.

5 OBLIGATIONS OF THE LANDOWNER

Landowner Agreement

5.1 The Landowner agrees to pay the Landowner Agreement Fee set out in the First Schedule to the Secretary within 12 months of the Commencement Date.

5.2 The Landowner agrees to comply with the terms of this Agreement and the Site Management Plan, which forms part of this Agreement.

5.3 The Landowner acknowledges and agrees that it has had the opportunity to obtain independent legal advice in respect of entering this Agreement.

Management of the Site

In relation to the Site, the Landowner covenants and agrees:

5.4 to complete the Management Actions for the purpose of achieving the Management Commitments, to the standards required by the Site Management Plan and to the satisfaction of the Secretary, regardless of whether all Native Vegetation Credits have been sold to other people. Where the Landowner has completed the Management Actions specified in the Site Management Plan to the satisfaction of the Secretary, but a Management Commitment is not achieved for reasons out of the control of the Landowner, the Secretary will not withhold any payment to the Landowner;

5.5 to allow the Secretary and the Secretary's officers, employees, agents, contractors, invitees and licensees access to, and entry onto the Site in accordance with this Agreement or the *Conservation Forests and Land Act 1987*; and

5.6 to undertake the works required to implement the Site Management Plan in compliance with all relevant laws, regulations and statutes, including subordinate instruments and authorisation.

Protection of Native Vegetation

5.7 The Landowner must:

5.7.1 not cause or consent to the removal, destruction, lopping or any other interference with any Native Vegetation on the Site;

5.7.2 take all reasonable steps to ensure that no Native Vegetation on the Site is removed, destroyed, lopped or otherwise interfered with; and

5.7.3 subject to clause 6.4, not apply for, or consent to an application for, a permit under the *Planning and Environment Act 1987* (Vic) to remove, destroy or lop Native Vegetation on the Site.

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Protection of other habitat

5.8 Subject to clauses 2.13 and 6.4, the Landowner must:

5.8.1 not cause or consent to the removal or interference with any rocks or fallen vegetation on the Site; and

5.8.2 take all reasonable steps to ensure that no rock or fallen vegetation on the Site is removed or interfered with.

Exclusion of livestock

5.9 Subject to clauses 2.13 and 6.4, and except as provided for in any Management Notice under clause 7, the Landowner must:

5.9.1 not cause or consent to the introduction of any livestock on the Site; and

5.9.2 take all reasonable steps to ensure that no livestock enter or remain on the Site.

Introduction of animals other than livestock

5.10 Subject to clauses 2.13, 5.11 and 6.4, the Landowner must:

5.10.1 not bring, or consent to the bringing of, any Domestic Animal onto the Site; and

5.10.2 take all reasonable steps to exclude any Domestic Animal that enters onto the Site.

5.11 The Landowner may bring domestic dogs on to the Site provided that any dogs so brought are under the immediate control of the Landowner or another person authorised by the Landowner at all times.

Installation or upgrade of fencing

5.12 This clause applies if the Site is adjacent to any land from which any stock or person (whether or not the person is in a vehicle):

5.12.1 has ready access to the Site;

5.12.2 is reasonably likely to have ready access to the Site; or

5.12.3 becomes reasonably likely to have ready access to the Site.

5.13 If clause 5.12 applies, the Landowner must, subject to clause 6.4, ensure that there is adequate fencing and gates between the land and the Site so as to protect the Site from being readily accessible by stock or persons.

5.14 Subject to clause 6.4, any works required under clause 5.13 must be carried out:

5.14.1 in the case of a site to which clauses 5.12.1 or 5.12.2 apply at the Commencement of this Agreement, within three months of the Commencement Date of this Agreement or at any earlier time specified in the Site Management Plan; or

5.14.2 in any other case, within three months of any change in circumstance that creates a reasonable likelihood of any stock or person having ready access to the Site for the purposes of clause 5.12.3, or at any earlier time specified by the Secretary by written notice to the Landowner.

Maintenance of fencing

5.15 Subject to clause 6.4, the Landowner must maintain any fencing required by clause 5.10.2 or clause 5.13 in good repair and condition at all times.

Statutory pest management obligations

5.16 From the Commencement Date of this Agreement and on an ongoing basis, the Landowner must, in relation to the Site, ensure compliance with:

5.16.1 the requirement to prevent the growth and spread of Regionally Controlled Weeds under section 20(1)(e) of *the Catchment and Land Protection Act 1994* (Vic);

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5.16.2 the requirement to prevent the spread of, and as far as possible, eliminate established pest animals under section 20(1)(f) of the *Catchment and Land Protection Act 1994* (Vic); and

5.16.3 the requirement to eradicate Regionally Prohibited Weeds under section 20(1)(d) of the *Catchment and Land Protection Act 1994* (Vic).

Weeds identified in Site Management Plan

5.17 The Landowner must, to the extent specified in the Site Management Plan, eradicate or prevent the growth and spread of any Weed or other plant as specified in the Site Management Plan.

Application of fertiliser

5.18 The Landowner must:

5.18.1 not apply any fertiliser to any part of the Site;

5.18.2 not consent to the application of any fertiliser to any part of the Site; and

5.18.3 take all reasonable steps to ensure that fertiliser is not applied to any part of the Site.

Buildings and structures

5.19 Subject to clauses 2.13, 6.4 and 5.20, the Landowner must:

5.19.1 not erect or place any building or structure on the Site; and

5.19.2 take all reasonable steps to ensure that no building or structure is placed on the Site by any other person.

5.20 The Landowner may erect temporary structures on the Site as part of any grazing of livestock authorised under the Site Management Plan, consent under clause 6.4 or Management Notice under clause 7.

Alterations to the natural state of water bodies

5.21 Subject to clauses 2.13 and 6.4, the Landowner must not cause or consent to, and must take all reasonable steps to avoid any occurrence of, any act which alters the natural state of, or the flow, supply, quantity or quality of, any body of water on to or from the Site.

Rubbish and other materials

5.22 The Landowner must not cause or consent to, and must take all reasonable steps to avoid, the dumping of any rubbish or the storage of any materials on the Site.

Further restrictions on using the land

5.23 Subject to clause 6.4, the Landowner must not cause or consent to any of the following, and must take all reasonable steps to ensure that the following do not occur on the Site:

5.23.1 the removal, introduction or disturbance of any soil, rocks or other minerals or the construction of dams or modification of existing dams;

5.23.2 subdivision;

5.23.3 the operation of any trade, industry or business;

5.23.4 the recreational use of trail bikes or four wheel drive vehicles;

5.23.5 the carrying out of any works on the Site other than those required by this Agreement or by law; and

5.23.6 the carrying out of any other activities not consistent with the purposes of this Agreement.

Extractive industry and utility installations

5.24 The Landowner must not permit, unless required by law:

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5.24.1 the issue of any licence or approval for exploration, mining, extraction or production of gas, petroleum, minerals or other substances on the Site; or

5.24.2 the installation of any transmission lines or other services or works on the Site.

5.25 The Landowner must bring this Agreement to the attention of any person who notifies the Landowner that they have applied for or will be applying for a licence, approval or proposal to take an action of the kind described in clauses 5.24.1 and 5.24.2, and to any other person or body whose approval is required to take that action.

5.26 The landowner must notify the Secretary of any notification of an application for a licence, approval or proposal to take an action of the kind described in clauses 5.24.1 and 5.24.2.

6 EXCEPTIONS TO OBLIGATIONS OF THE LANDOWNER

The Landowner may be exempted from compliance with the obligations under clause 5 to the extent set out in this clause.

General exceptions

6.1 The Landowner may remove, destroy or lop any Native Vegetation on the Site to the minimum extent that any such removal, destruction or lopping is necessary:

6.1.1 to keep vegetation clear of an electric line, provided that the removal, destruction or lopping is carried out in accordance with a code of practice prepared under Part 8 of the *Electricity Safety Act 1998* (Vic);

6.1.2 to remove vegetation from an electricity supply easement in accordance with any code of practice prepared in accordance with Part 8 of the *Electricity Safety Act 1998* (Vic) in order to minimise the risk of bushfire ignition in the proximity of electric lines;

6.1.3 to mitigate an immediate risk of personal injury or damage to property;

6.1.4 as part of measures for the suppression of fire in emergency circumstances;

6.1.5 to comply with a fire prevention notice issued under:

(i) section 41 of the *Country Fire Authority Act 1958* (Vic); or

(ii) section 87 of the *Metropolitan Fire Brigades Act 1958* (Vic); and

6.1.6 to comply with a direction given under section 65 of the *Forests Act 1958* (Vic).

6.2 The Landowner must provide the Secretary with a written notice at least 7 days before removing, destroying or lopping any Native Vegetation under clauses 6.1.1 or 6.1.2.

6.3 The reference in clause 6.1.4 to measures for the suppression of fire in emergency circumstances does not include fire prevention works outside of emergency circumstances, such as planned burning or the construction of fire breaks.

Exceptions granted by the Secretary

6.4 Upon application by the Landowner, the Secretary may, in the Secretary's sole discretion, exempt a Landowner from compliance with any of the following provisions of this Agreement:

6.4.1 clause 5.7.3;

6.4.2 clause 5.8;

6.4.3 clause 5.9;

6.4.4 clause 5.10;

6.4.5 clause 5.11;

6.4.6 clause 5.12;

6.4.7 clause 5.19;

6.4.8 clause 5.21;

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6.4.9 clause 5.23; and

6.4.10 clause 5.24.

6.5 An exception granted under this clause may be conditional and applies only to the circumstances described in the exception.

7 MANAGEMENT NOTICES

7.1 Without prejudice to its rights under the *Conservation, Forests and Lands Act 1987* (Vic), the Secretary may from time to time issue in writing a Management Notice to the Landowner requiring the Landowner to carry out specified works or activities on the Site to secure compliance with this Agreement within a timeframe specified in the Management Notice.

7.2 The Landowner must at his or her own expense comply with, and carry out the requirements specified in, any Management Notice issued under clause 7.1.

7.3 A Management Notice under clause 7.1 may be issued:

7.3.1 in response to one or more statements contained in an Annual Report or a Periodic Report submitted by the Landowner under clause 9;

7.3.2 following an inspection of the Site which identifies a need to carry out works or activities to secure compliance with this Agreement; or

7.3.3 upon request by the Landowner.

7.4 Where a Management Notice has been issued under clause 7.3.1 or 7.3.2, the Secretary may withhold any payments and prevent the sale or allocation of any Native Vegetation Credits listed on the Credit Register under this Agreement until the Landowner has complied with the Management Notice.

8 COMPLIANCE WITH LAWS

The Landowner must comply with all laws and the lawful requirements of any public authority in the carrying out of this Agreement.

9 REPORTING

9.1 The Landowner covenants and agrees to submit an Annual Report to the Secretary, which sets out, among other matters:

9.1.1 progress under and compliance with the Agreement for the period since the previous Annual Report; and

9.1.2 progress under, completed actions and compliance with the Site Management Plan for the period since the previous Annual Report.

9.2 The Secretary may require the Landowner to prepare a Periodic Report after the period during which Annual Reports are required under clause 9.1 if:

9.2.1 no part of the period specified by the Secretary for a Periodic Report falls within the 10 year period during which Annual Reports are required in accordance with clause 9.1; and

9.2.2 the Secretary has not requested a Periodic Report from the Landowner more than twice in a ten year period before the date on which the Secretary requires a Periodic Report under this clause 9.2.

10 NATIVE VEGETATION CREDITS

10.1 In relation to any Native Vegetation Credit established, created, issued or otherwise recorded pursuant to this Agreement, the Landowner covenants and agrees that:

10.1.1 the value of any Native Vegetation Credit depends on market conditions;

10.1.2 the Secretary makes no promises in relation to the likely market value of a Native Vegetation Credit or that any offer will be made to purchase a Native Vegetation Credit; and

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10.1.3 once the Credit Register is amended to record that a Native Vegetation Credit has been traded to another person the Landowner cannot lay any further claim to the value of the Native Vegetation Credit.

11 INDEMNITY

11.1 The Landowner hereby indemnifies the Secretary and agrees to keep the Secretary indemnified from and against all claims, demands, loss or damage which the Secretary may suffer or sustain in respect of:

11.1.1 the death or injury to any person or loss of or damage to property which is attributable to or is the result or consequence of the Secretary's access to the Subject Land or any part of the Subject Land for the purposes of this Agreement or the works and activities for which the Secretary is responsible under the Site Management Plan except to the extent that any such loss or damage is caused by or is attributable to any negligent act or omission of the Secretary; or

11.1.2 any costs incurred by the Secretary in obtaining any remedy against the Landowner in respect of any contravention of this Agreement or the *Conservation Forests and Land Act 1987* (Vic).

11.2 The Landowner hereby acknowledges and agrees that:

11.2.1 the Secretary is not and will not at any time be construed as the employer or principal of the Landowner or any employees that the Landowner might have, for the purposes of any relevant legislation; and

11.2.2 the Landowner is solely responsible and liable for making any payments in respect of superannuation, payroll or any other tax, WorkCover levy or any similar payments in relation to any employees that the Landowner might have.

12 OBLIGATIONS OF THE SECRETARY

12.1 Upon commencement of this Agreement, the Secretary will record the value of the Available Gain as one or more Native Vegetation Credits on the Credit Register and assign that Native Vegetation Credit in favour of the Landowner.

12.2 The Secretary will maintain the Credit Register as an accurate record of all Native Vegetation Credits issued pursuant to this Agreement which shall be available to be searched by any person who may wish to purchase a Native Vegetation Credit.

12.3 The Secretary will record the sale of Native Vegetation Credits by the Landowner to another person in accordance with a Credit Trade Agreement and the rules of the Credit Register.

12.4 The Secretary will make payments into the Landowner's nominated bank account in accordance with clauses 12.7 and 12.11.

12.5 Notwithstanding clause 12.4, the Secretary will only be bound to make payments to the Landowner to the extent that:

12.5.1 Credits created pursuant to this Agreement have been purchased through the Credit Register; and

12.5.2 monies have been paid to the Secretary in return for the Credits purchased.

Payment into Department Trust Account

12.6 When the Landowner agrees to sell any Native Vegetation Credits created pursuant to this Agreement:

12.6.1 The Secretary, on receipt of the executed Credit Trade Agreement, will invoice the Purchaser of the Native Vegetation Credit for the agreed trade amount inclusive of GST.

12.6.2 The Secretary will receive payment from the Purchaser and hold it in the Department Trust Account.

First Trade in relation to the Site

12.7 Where the Landowner enters into a Credit Trade Agreement for the first time within 12 months of the Commencement Date of this Agreement, the Secretary will make the Initial Payment in Part A of the Third Schedule to the Landowner as soon as practicable after the execution of the Credit Trade Agreement and upon receipt of an invoice from the Landowner. The amount payable will be subject to any relevant conditions under clause 5.1.

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12.8 Where the Landowner enters into a Credit Trade Agreement for the first time more than 12 months after the Commencement Date of this Agreement, the Secretary will pay to the Landowner as soon as practicable after execution of the Credit Trade Agreement, in accordance with Part A of the Third Schedule:

12.8.1 the Initial Payment;

12.8.2 the payment due in that year of the Landowner Agreement; and

12.8.3 all payments due for each preceding year of the Landowner Agreement.

12.9 All subsequent payments relating to the First Trade must be made by the Secretary, in accordance with Part A of the Third Schedule, as close as practicable to the Annual Payment Date.

12.10 Payments made by the Secretary to the Landowner under clauses 12.8 and 12.9 are subject to:

12.10.1 the Secretary being satisfied that the Landowner is compliant with this Agreement;

12.10.2 the receipt of an Annual Report from the Landowner which is satisfactory to the Secretary unless the Landowner is advised in writing by the Secretary that a Report is not required for that year;

12.10.3 any relevant conditions under clause 5.1; and

12.10.4 the Landowner submitting a correctly rendered invoice.

Second and Subsequent Trades in Relation to the Site

12.11 Where the Landowner sells any Native Vegetation Credits through a Second and Subsequent Trade, the Secretary must pay to the Landowner, as soon as practicable after execution of the Credit Trade Agreement and in accordance with Part B of the Third Schedule:

12.11.1 the payment due in that year of the Landowner Agreement; and

12.11.2 all payments due for each preceding year of the Landowner Agreement.

12.12 All subsequent payments relating to a Second and Subsequent Trade must be made by the Secretary, in accordance with Part B of the Third Schedule, as close as practicable to the Annual Payment Date.

12.13 Payments made by the Secretary to the Landowner under clauses 12.11 and 12.12 are subject to:

12.13.1 the Secretary being satisfied that the Landowner is compliant with this Agreement;

12.13.2 the receipt of an Annual Report from the Landowner which is satisfactory to the Secretary unless the Landowner is advised in writing by the Secretary that a Report is not required for that year;

12.13.3 any relevant conditions under clause 5.1; and

12.13.4 the Landowner submitting a correctly rendered invoice.

13 TRANSFER OF LAND

13.1 If title to the Subject Land is transferred from the Landowner to a Transferee, a Native Vegetation Credit created for the Site is transferred to the Transferee if that Native Vegetation Credit:

13.1.1 is held by the Landowner immediately before the transfer; and

13.1.2 has not been Allocated.

13.2 The Landowner must not trade and must not procure any other person to trade any Native Vegetation Credits created for a Site after the date on which the Landowner transfers title to the Subject Land to the Transferee.

13.3 The Landowner must immediately upon transferring title to the Subject Land to the Transferee notify the Secretary in writing of the transfer date, and the Transferee's name, address and contact details.

13.4 The Secretary will, as soon as reasonably practicable after receiving notification under clause 13.2 make all necessary recordings on the Credit Register to transfer any unallocated Native Vegetation Credits from the name of the Landowner into the name of the Transferee.

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13.5 The parties acknowledge that on and from the date that the unallocated Native Vegetation Credits are registered in the name of the Transferee, the Transferee may trade unallocated Native Vegetation Credits in accordance with this Agreement and the rules of the Credit Register.

14 MONITORING AND INVESTIGATION

14.1 The Landowner acknowledges the statutory powers of the Secretary under the *Conservation Forests and Lands Act 1987* and agrees that the Secretary and the Secretary's officers, employees, agents, contractors, invitees and licensees can upon seven days' notice and at a reasonable time enter the Site to:

14.1.1 determine whether the Landowner has complied with this Agreement or the *Conservation Forests and Lands Act 1987*;

14.1.2 verify information contained in an application for the creation of Native Vegetation Credits for the Site;

14.1.3 verify information contained in an Annual Report or Periodic Report submitted under clause 9 of this Agreement; and

14.1.4 determine whether a requirement of this Agreement has been breached or an offence against the *Conservation Forests and Lands Act 1987* has been or is being committed.

14.2 The Landowner agrees that the Secretary and the Secretary's officers, employees, agents, contractors, invitees and licensees may collect information that may be used to determine whether there has been a breach of this Agreement or the *Conservation Forests and Lands Act 1987*.

14.3 The Secretary agrees to use reasonable endeavours to minimise inconvenience to the Landowner and to leave the Site as far as reasonably possible in the condition in which it was immediately before the inspection, subject to exceptions under clause 15.2.2.

14.4 The Landowner agrees not to hinder, intimidate or obstruct an inspection of the Site carried out under clause 14.1.

15 DEFAULT

Breach by the Landowner

15.1 If the Landowner defaults or fails to perform any of its obligations under this Agreement the Secretary may without prejudice to any other remedies vary or terminate this Agreement.

15.2 Without limiting the Secretary's powers under clause 15.1 or the *Conservation Forests and Lands Act 1987*, if the Landowner fails to comply with this Agreement and as a consequence of such failure to comply, the ecological condition of the Site is degraded:

15.2.1 the Secretary may demand the immediate reimbursement of any payments previously made to the Landowner under this Agreement; and

15.2.2 the Landowner will be liable to compensate the Secretary for the reasonable cost of carrying out works to reinstate the condition of the Site to its condition prior to the relevant contravention of the Agreement, or to achieve an equivalent Available Gain in another location.

15.3 Without limiting the Secretary's powers under clause 15.1 or 15.2, if the Landowner fails to comply with this Agreement the Secretary may cancel the recording of any Native Vegetation Credit on the Credit Register, only to the extent that:

15.3.1 the Native Vegetation Credit relates to the Available Gain pursuant to this Agreement; and

15.3.2 the Native Vegetation Credit remains assigned in favour of the Landowner.

Breach by the Secretary

15.4 If the Secretary defaults or fails to perform any of the Secretary's obligations under this Agreement the Landowner may without prejudice to any other remedies apply to the Minister to vary or terminate this Agreement.

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16 Collection, use and disclosure of Information

16.1 Without limiting the Secretary or Department's other rights under the *Privacy and Data Protection Act 2014* or otherwise, the Landowner agrees that the Secretary and Department may collect, use and disclose Information concerning the Credit Owner and (where relevant) its employees and directors in accordance with the Landowner Collection Statement.

16.2 The Landowner must provide copies of the Landowner Collection Statement to any of its employees or directors who disclose any Personal Information to the Secretary, the Department, or any broker or site assessor contracted to assist with the creation or sale of Native Vegetation Credits under this Agreement.

17 TERMINATION

17.1 The Secretary may terminate this Agreement at any time by notice in writing to the Landowner if the Landowner breaches any obligations specified in clause 5 of this Agreement.

17.2 The Secretary terminates this Agreement in accordance with clause 17.1, the Secretary may, at his or her sole discretion, withhold from the Landowner any outstanding payments under this Agreement and subject to conditions under clause 15.2.

17.3 The Secretary and Landowner may terminate this Agreement at any time by mutual agreement in writing.

17.4 In the event that this Agreement is terminated, the Secretary is entitled to cancel the recording of any Native Vegetation Credit on the Credit Register.

17.5 The Secretary must, in cancelling this Agreement, apply to the Registrar of Titles to remove the record of this Agreement from any folio of the land register for land that is subject to the Agreement.

18 GENERAL

Costs

18.1 Each party shall bear that party's own legal costs in respect to the drafting, execution and stamping of this Agreement.

Service of Notices

18.2 Any notice to be served under this Agreement shall be in writing and in English and shall be sufficiently served if sent by registered post addressed to the recipient or left:

18.2.1 in the case of the Secretary, at the Secretary's service address specified in the First Schedule;

18.2.2 in the case of the Landowner, at the address of the Landowner shown in the First Schedule;

provided that any party may give notice of change of address to the other parties and the changed address so notified shall for the purpose of this clause stand in lieu of the address it replaces as from the date of its notification;

18.3 a notice sent by registered post shall be deemed to have been received on the seventh day after its posting.

Variations

18.4 This Agreement may only be varied in accordance with the *Conservation Forests and Lands Act 1987* including by agreement between the parties.

18.5 An application by the Landowner to the Secretary to vary this Agreement must be made in writing.

18.6 If a proposed variation of this Agreement has the effect of reducing the Available Gain improvement or protections for Native Vegetation provided in this Agreement, the Secretary must not vary this Agreement unless as agreed by the parties.

18.7 No modification, variation or amendment of this Agreement agreed upon by the parties shall be of any force or effect unless such modification, variation or amendment is in writing and has been executed by all parties.

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Review of decisions

18.8 The parties acknowledge that the review mechanisms under the *Conservation Forests and Lands Act 1987* apply to this Agreement.

18.9 Without limiting the scope of the review mechanisms under the *Conservation Forests and Lands Act 1987*, if there is a dispute or difference between the parties arising out of or in connection with this Agreement, the parties agree that within five business days of a party notifying the other party in writing, a senior representative from each party must meet and use all reasonable endeavours acting in good faith to resolve the dispute or disagreement by joint discussions.

18.10 If the parties cannot reach agreement after following the procedure in clause 18.9, the parties agree to follow the review mechanisms set out in section 76 of the *Conservation Forests and Lands Act 1987*.

No waiver

18.11 Any time or other indulgences granted by the Secretary to the Landowner or any other variation of the terms and conditions of this Agreement or any judgment or order by the Secretary against the Landowner will not in any way amount to a waiver of any rights or remedies of the Secretary in relation to the terms of this Agreement.

Severability

18.12 If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this Agreement is unenforceable, illegal or void, then it shall be severed and the other provisions of this Agreement shall remain operative.

Governing Law

18.13 This Agreement shall be subject to and construed in accordance with the laws of the State of Victoria.

19 GST

Recovery of GST

19.1 If GST is payable, or notionally payable, on a supply made under or in connection with this Agreement, the party providing the consideration for that supply must pay as additional consideration an amount equal to the amount of GST payable, or notionally payable, on that supply (the ***GST Amount***). Subject to the prior receipt of a tax invoice, the GST Amount is payable at the same time that the other consideration for the supply is provided. If a tax invoice is not received prior to the provision of that other consideration, the GST Amount is payable within 10 days of the receipt of a tax invoice. This clause does not apply to the extent that the consideration for the supply is expressly stated to be GST inclusive or the supply is subject to reverse charge.

Liability net of GST

19.2 Where any indemnity, reimbursement or similar payment under this Agreement is based on any cost, expense or other liability, it shall be reduced by any input tax credit entitlement, or notional input tax credit entitlement, in relation to the relevant cost, expense or other liability.

Adjustment events

19.3 If an adjustment event occurs in relation to a supply made under or in connection with this Agreement, the GST Amount will be recalculated to reflect that adjustment and an appropriate payment will be made between the parties.

Survival

19.4 This clause will not merge upon completion and will continue to apply after expiration or termination of this Agreement.

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Definitions

19.5 Unless the context requires otherwise, words and phrases used in this clause that have a specific meaning in the GST law (as defined in the *A New tax System (Goods and Services Tax) Act 1999* (Cth)) have the same meaning in this clause.

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First Schedule AGREEMENT DETAILS

Date of Commencement of Agreement: 17 day of July 2020

Secretary's Service Address

Name (or) Title of Office	The Secretary Department of Environment, Land, Water and Planning
Address	Level 2 – 8 Nicholson Street, EAST MELBOURNE VICTORIA 3002
Telephone / Mobile	(03) 9637 8721

The Landowner

Name of landowners	John Henry Chatham
Mailing address	2436 Ballarat Maryborough Road, Ascot VIC 3364
Contact name of person who should receive correspondence	John Chatham

Details of land within which the Agreement applies

Property name	
Property address	Rokewood-Shelford Road, Rokewood VIC 3330

Description of the Subject Land to which the Agreement applies

Site: VC_CFL-3697_01 Site 1

Part of the land in Certificates of title set out on the Attached Plan

Volume	11175		Folio	238		Site area (hectares):
Lot	102		Plan	TP944788Y		22.0275
Crown allotment	102	Section		Parish	Kuruc-a-ruc	

Site: VC_CFL-3697_01 Site 2

Part of the land in Certificates of title set out on the Attached Plan

Volume	11175		Folio	238		Site area (hectares):
Lot	101		Plan	TP944788Y		36.8032
Crown allotment	101	Section		Parish	Kuruc-a-ruc	

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Site: VC_CFL-3697_01 Site 3

Part of the land in Certificates of title set out on the Attached Plan

Volume	11175		Folio	238		Site area (hectares):
Lot	100		Plan	TP944788Y		27.9037
Crown allotment	100	Section		Parish	Kuruc-a-ruc	

Site: VC_CFL-3697_01 Site 4

Part of the land in Certificates of title set out on the Attached Plan

Volume	11175		Folio	238		Site area (hectares):
Lot	100		Plan	TP944788Y		0.1196
Crown allotment	100	Section		Parish	Kuruc-a-ruc	

Site: VC_CFL-3697_01 Site 5

Part of the land in Certificates of title set out on the Attached Plan

Volume	11175		Folio	237		Site area (hectares):
Lot	66		Plan	TP944787B		34.0976
Crown allotment	66	Section		Parish	Kuruc-a-ruc	

Site: VC_CFL-3697_01 Site 6

Part of the land in Certificates of title set out on the Attached Plan

Volume	11175		Folio	237		Site area (hectares):
Lot	65		Plan	TP944787B		21.1780
Crown allotment	65	Section		Parish	Kuruc-a-ruc	

Site: VC_CFL-3697_01 Site 7

Part of the land in Certificates of title set out on the Attached Plan

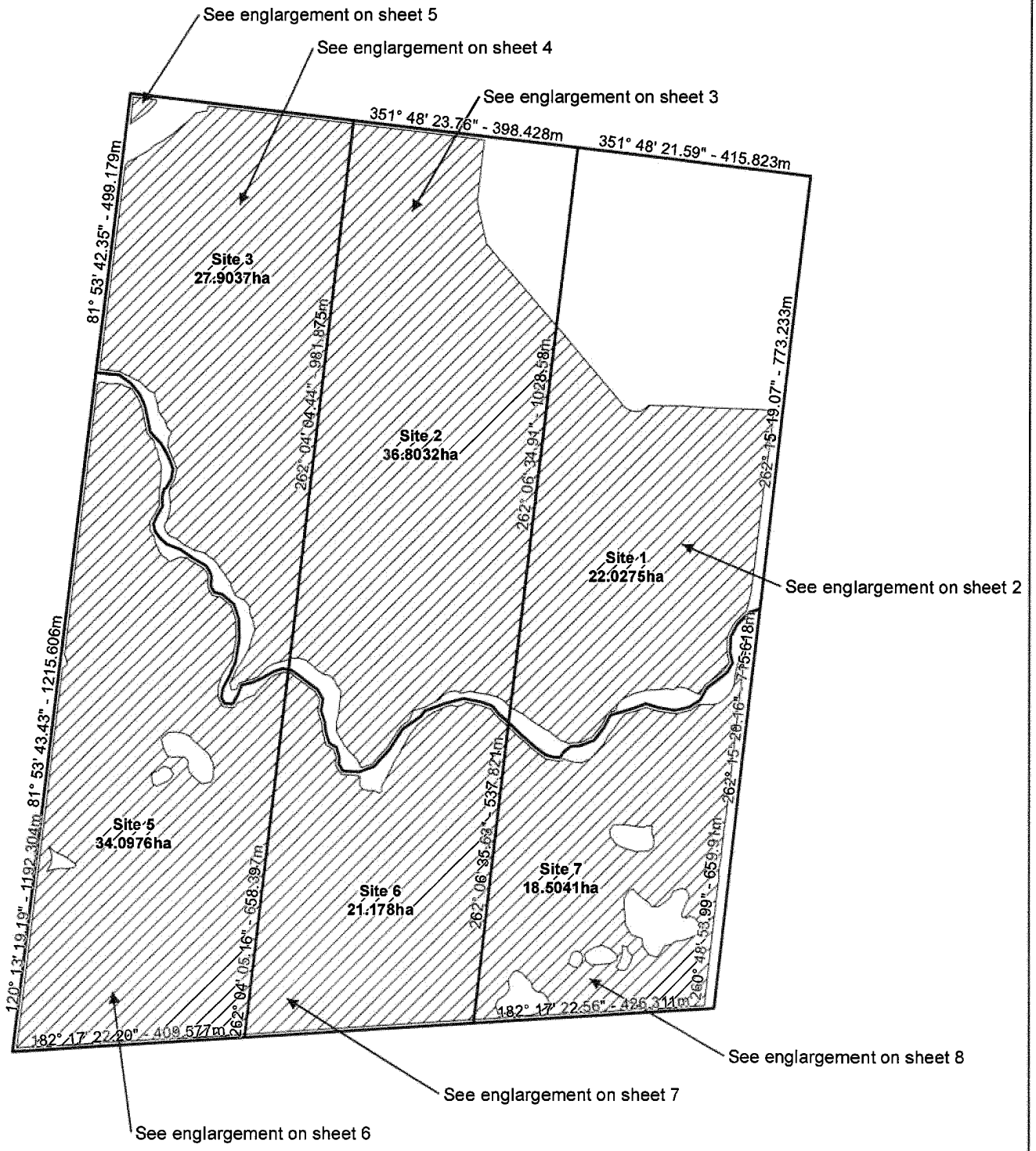
Volume	11175		Folio	237		Site area (hectares):
Lot	64		Plan	TP944787B		18.5041
Crown allotment	64	Section		Parish	Kuruc-a-ruc	

Landowner Agreement Fee: $16,979.60 (GST Inclusive)

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AU182953Y

SITE OVERVIEW
VC_CFL-3697_01 Site 01, 02, 03, 04, 05, 06, 07



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 01, 02, 03, 04, 05, 06, 07

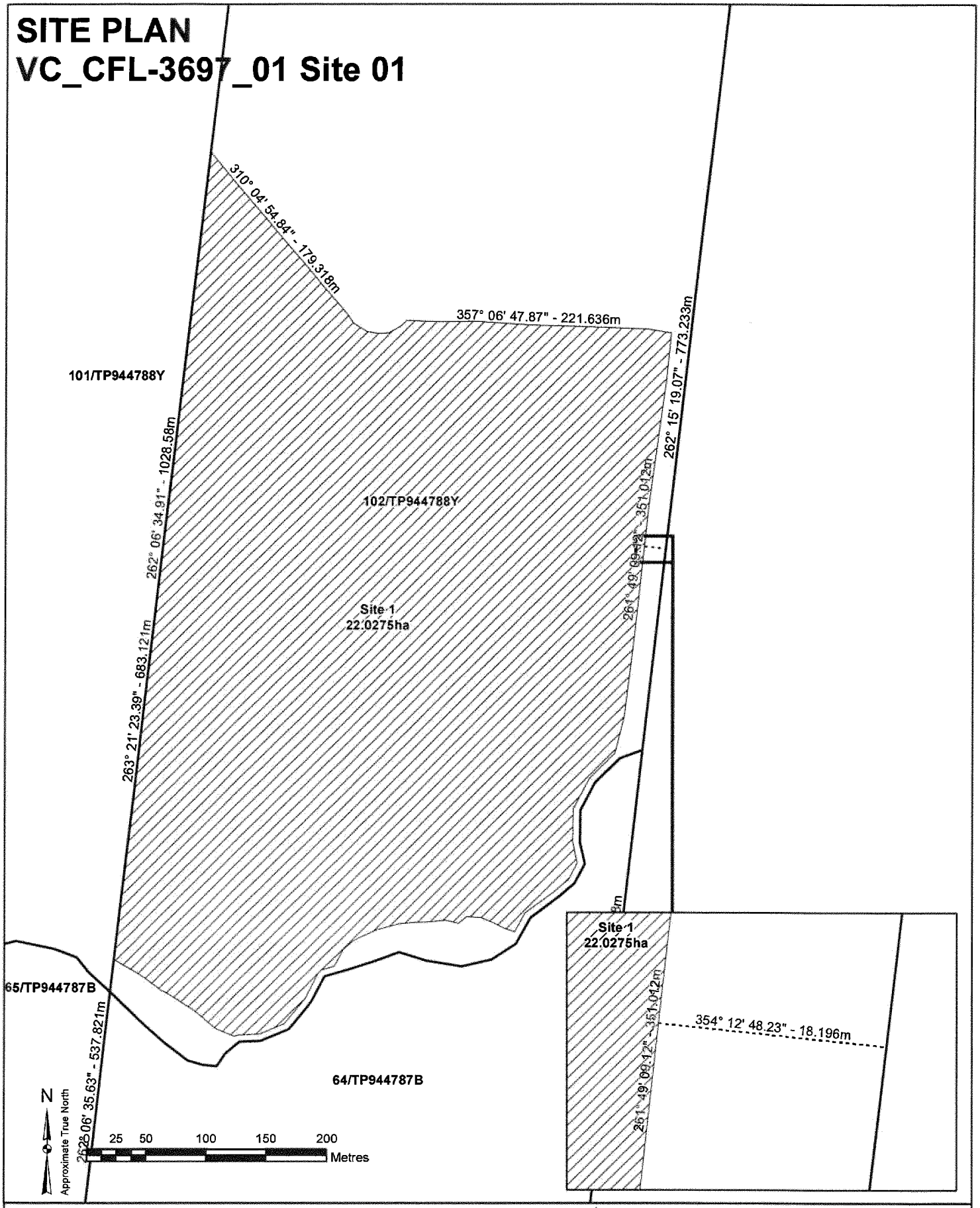
Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 238, VOL 11175 FOL 237
PLAN REF: LOTS 100, 101 & 102 TP944788Y, LOTS 64, 65 & 66 TP944787B
SHEET 1 OF 8

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AU182953Y

SITE PLAN
VC_CFL-3697_01 Site 01



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 01

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/04/2020

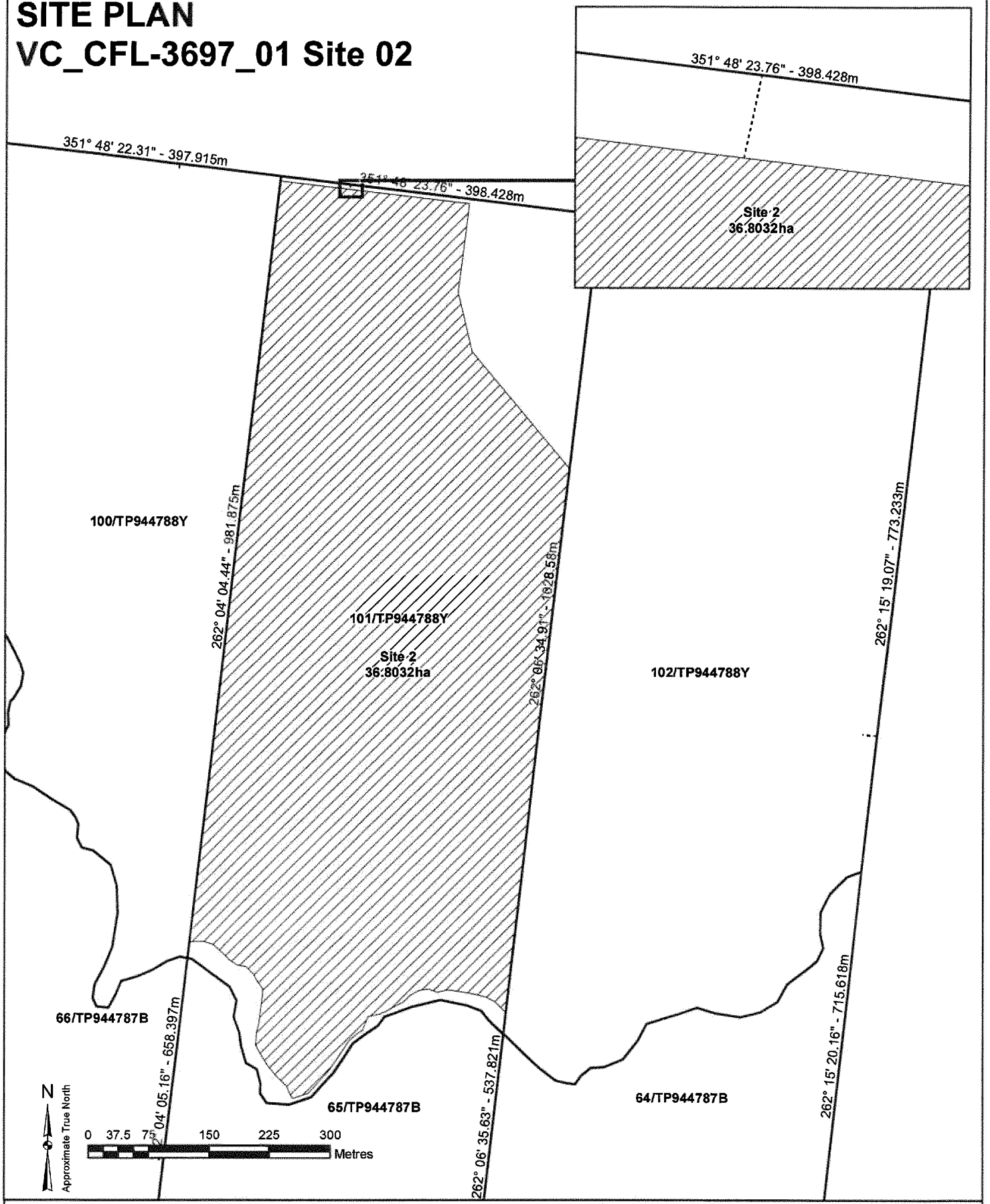
PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 238
PLAN REF: LOT 102 TP944788Y

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SITE PLAN
VC_CFL-3697_01 Site 02



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 02

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/04/2020

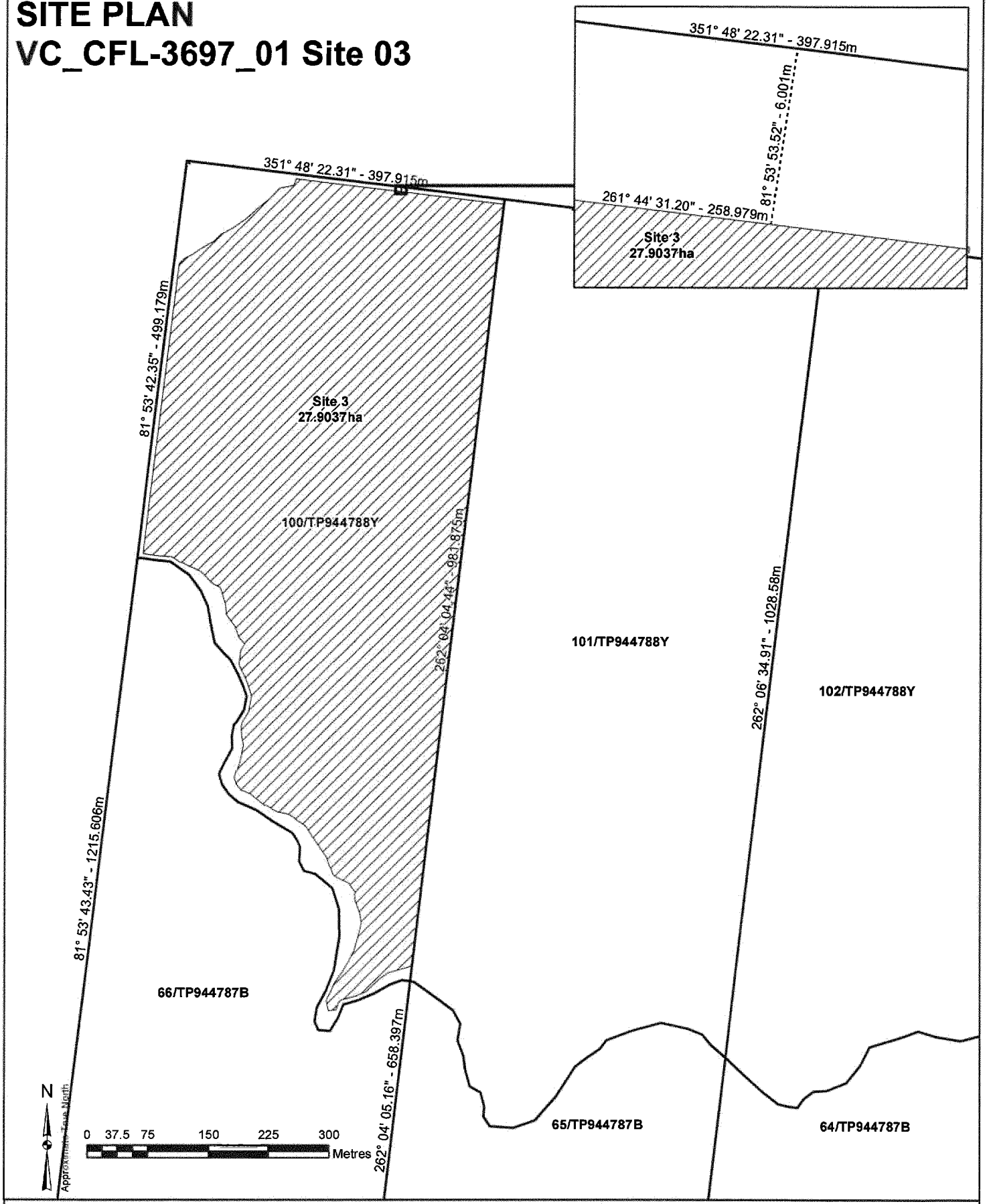
PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 238
PLAN REF: LOT 101 TP944788Y

SHEET 3 OF 8

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SITE PLAN
VC_CFL-3697_01 Site 03



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 03

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/04/2020

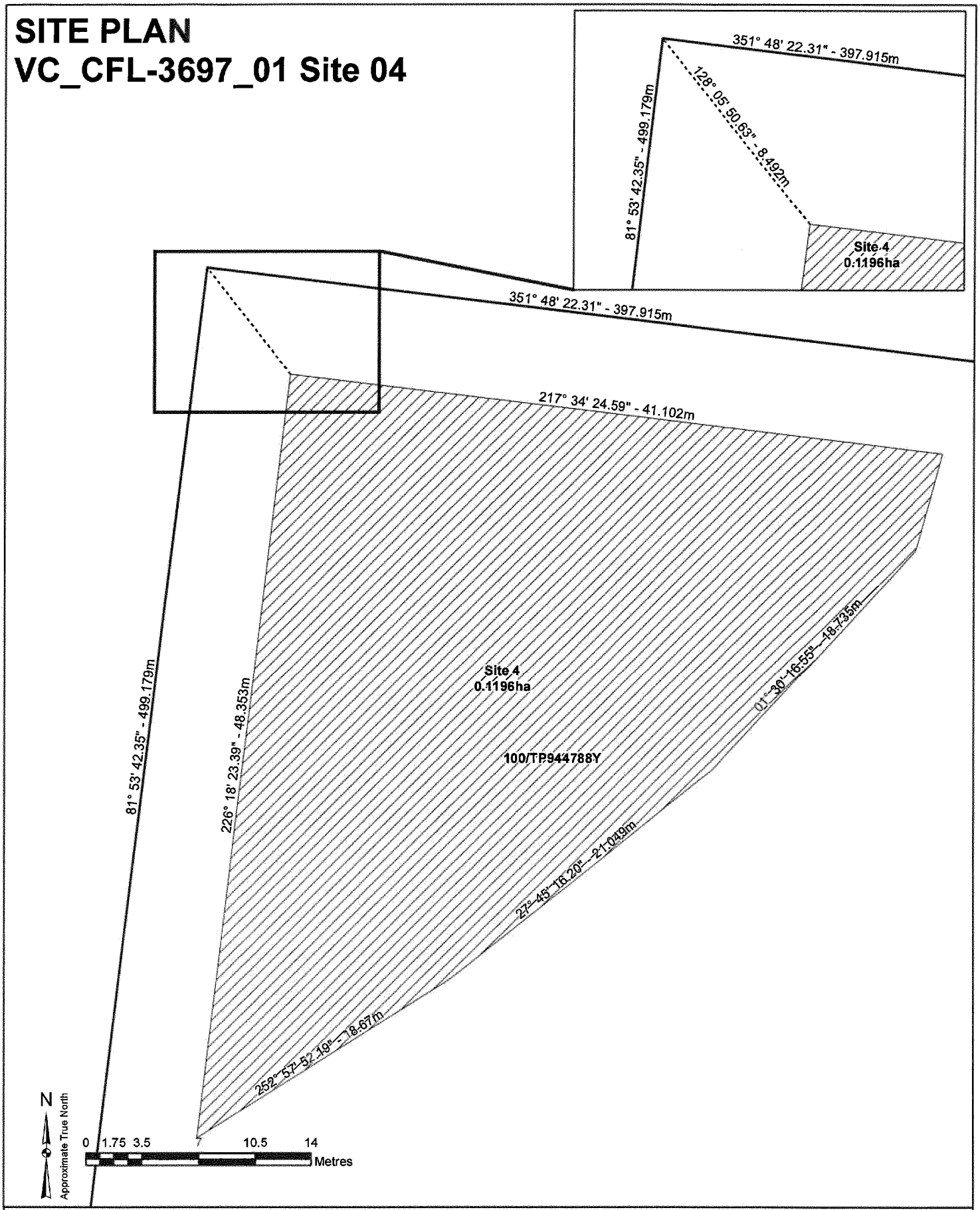
PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 238
PLAN REF: LOT 100 TP944788Y

SHEET 4 OF 8

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SITE PLAN
VC_CFL-3697_01 Site 04



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 04

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/04/2020

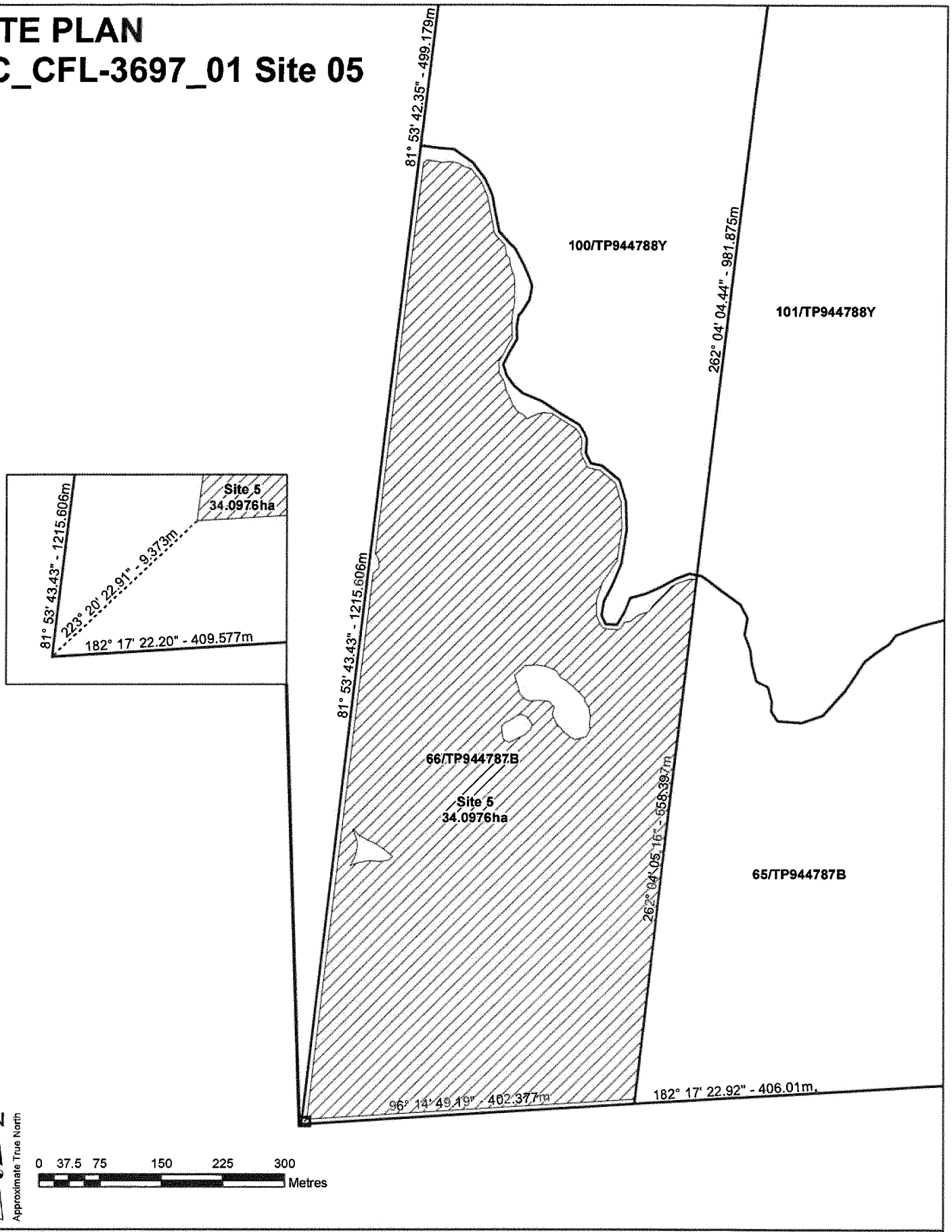
PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 238
PLAN REF: LOT 100 TP944788Y

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SITE PLAN
VC_CFL-3697_01 Site 05



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 05

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/034/2020

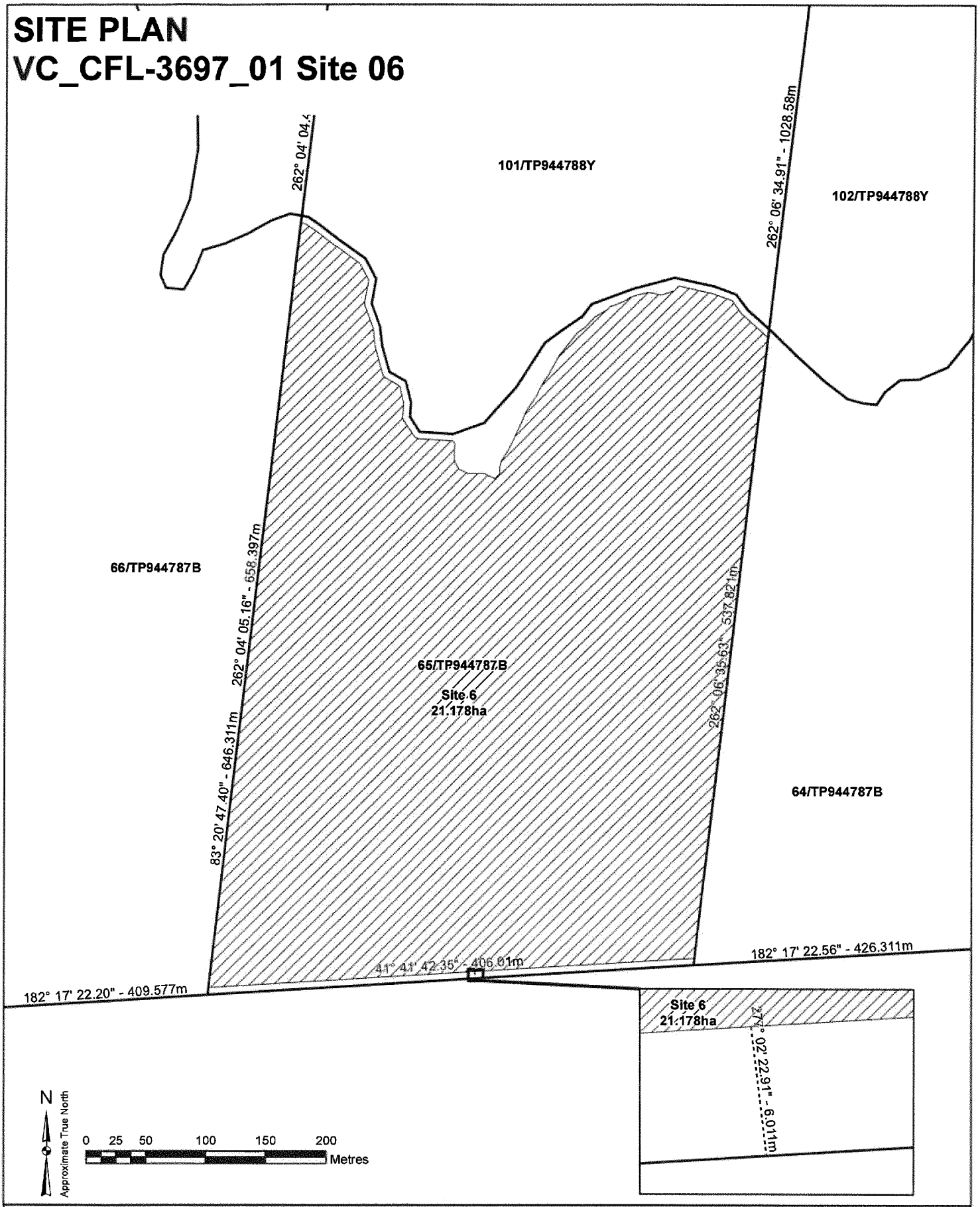
PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 237
PLAN REF: LOT 64 TP944787B

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SITE PLAN
VC_CFL-3697_01 Site 06



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 06

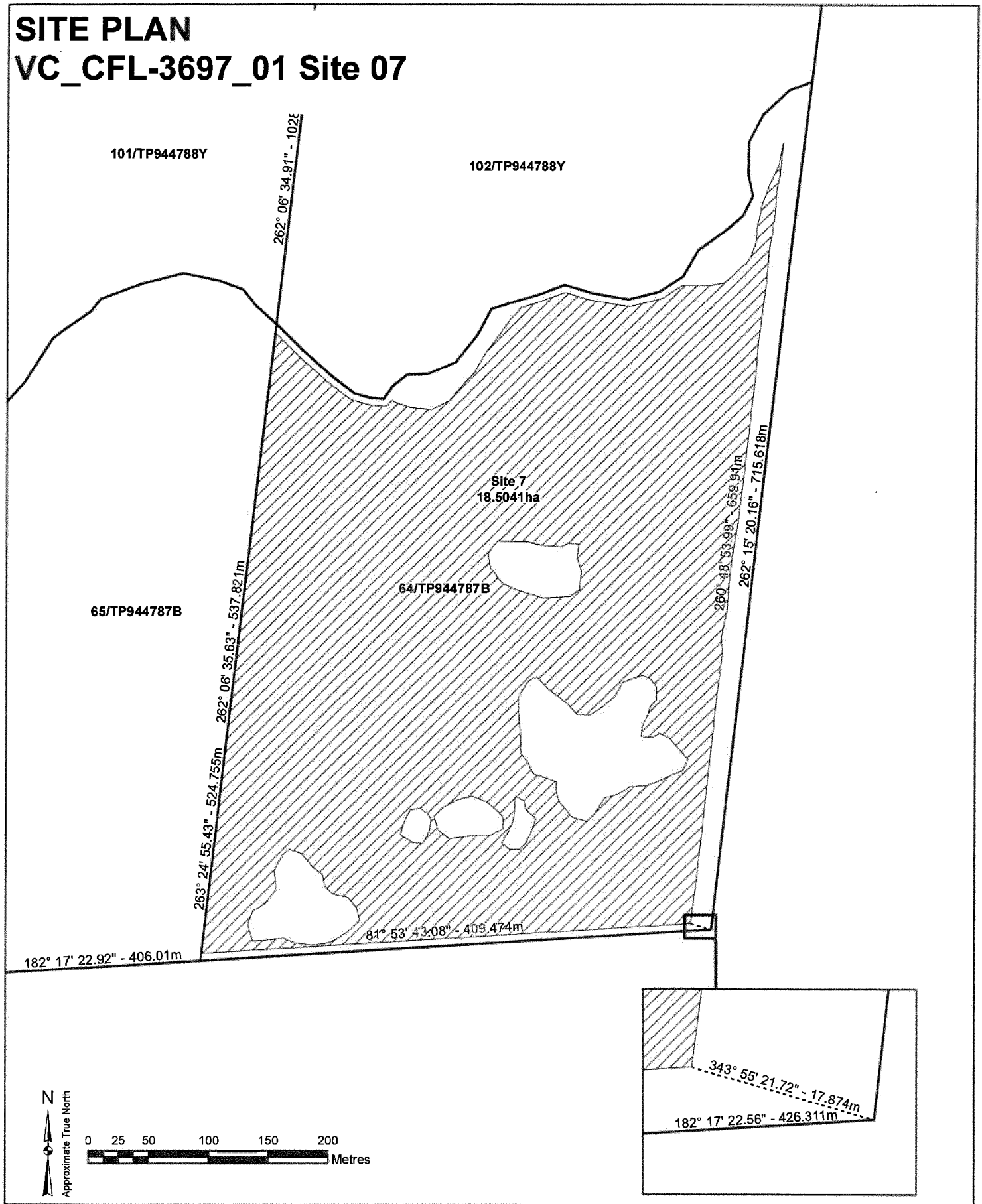
Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/034/2020

PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 237
PLAN REF: LOT 65 TP944787B

SHEET 7 OF 8

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SITE PLAN
VC_CFL-3697_01 Site 07



PLAN FOR AGREEMENT PURSUANT TO s.69 OF THE CONSERVATION FORESTS & LANDS ACT 1987

Legend

VC_CFL-3697_01 Site 07

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/034/2020

PARISH OF KURUC-A-RUC
TITLE REF: VOL 11175 FOL 237
PLAN REF: LOT 66 TP944787B

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Second Schedule MANAGEMENT PLAN

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MANAGEMENT PLAN FOR CREDIT APPLICATIONS

Native Vegetation Patch

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MANAGEMENT PLAN 1

Credit Site Details

Address of credit site	Rokewood-Shelford Road, Rokewood VIC 3330
Land tenure	Freehold
Assessor details	
Site assessor	Anna O'Brien
Assessment date	17/07/2017 & 18/07/2017
Credit details	
Credit identifier	VC_CFL-3697_01
Number of sites(s)	7
Number of zone(s)	7
Total area of sites (ha)	160.6337
Asset type	Protection of native vegetation patch

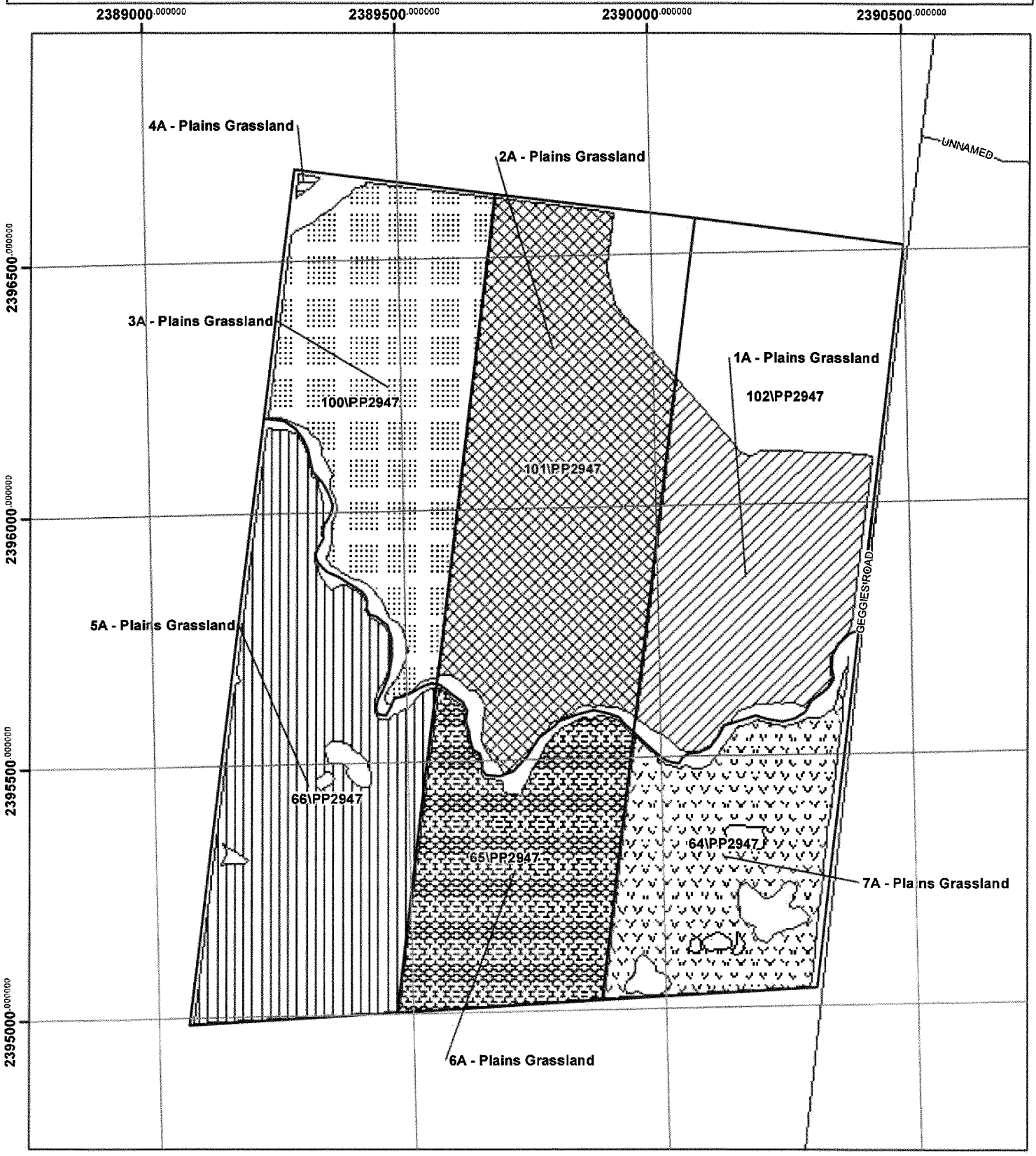
Zone details							
Asset Type *	P, NTGVVP, GSM, SLL	P, NTGVVP, GSM, SLL	P, NTGVVP, GSM, SLL	P, NTGVVP, GSM, SLL	P, NTGVVP, GSM, SLL	P, NTGVVP, GSM, SLL	P, NTGVVP, GSM, SLL
Zone number	01A	02A	03A	04A	05A	06A	07A
# Large ST's	n/a	n/a	n/a	n/a	n/a	n/a	n/a
# Medium ST's	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Zone area (ha)	22.0275	36.8032	27.9037	0.1196	34.0976	21.1780	18.5041

*Asset type = P = Native Vegetation Patch; Matters of Environmental Significance [NTGVVP = *Natural Temperate Grassland of the Victorian Volcanic Plain*; GSM = Golden Sun Moth *Synemon plana*; Striped Legless Lizard *Delmar impar*]

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AU182953Y

ZONE PLAN
CFL-3697_01 Sites 01, 02, 03, 04, 05, 06, 07



Habitat Sites

1A 5A
2A 6A
3A 7A
4A

N

0 62.5 125 250 375 500
Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 14/04/2020

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Statement of Landowner's management commitments to be achieved at the site

10-year management commitments

From the commencement of the agreement, the landowner agrees to undertake the following management commitments to improve the quality and condition of native vegetation in the site for a period of 10 years from the commencement of the agreement:

10-year management commitments	
Zone(s)	Commitment
	• control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, other threats as identified)

The landowner is required to maintain, in perpetuity, native vegetation condition and targets required to be achieved at the end of the 10-year management period, as outlined above.

Ongoing management commitments

From the commencement of the agreement, the landowner agrees to undertake the following management commitments to improve the quality and condition of native vegetation at the site in perpetuity:

Ongoing management commitments	
Zone(s)	Commitment
All	From the commencement of the agreement the landowner must, for all vegetation types: • eliminate all woody weeds < 1 % cover with no mature plants present • ensure that weed cover does not increase beyond the current level • monitor for any new and emerging weeds and eliminate to < 1% cover • control rabbits
	For high rainfall Victorian volcanic plains or Gippsland plains grassland, the landowner must also:
	• undertake periodic biomass management at agreed timing/frequency

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Summary of threats and actions required to be completed to achieve the management commitments

Fencing and Signage

Threats including stock must be excluded from the site(s) at all times. The intention of fencing is to protect the site(s) from threats. The location of fencing is not important as long as the site(s) are protected from all threats in perpetuity.

Under this agreement the exception is stock are permitted into all zones, for biomass management / strategic grazing, with the timing of permitted entry specified in this management plan under the management commitment biomass management/ strategic grazing. Additional internal fencing will be installed to support a strategic grazing regime. Prior to the installation of internal fencing, approval of an internal fencing proposal is required by DELWP to access the conservation works exemption under 52.17 of the Golden Plains Planning Scheme.

Where fencing exists or is required, ensure all fencing (around the perimeter of the site and internally where required for strategic grazing) is maintained in good condition according to *Fencing management standard* of *the Management Standards*, the standards detailed in DELWP *Management standards for native vegetation offset sites, September 2019* – Fencing management standard. Perimetre fencing will be up to standard within 3 months of signing the Agreement. Internal fencing will be installed during Year 1 when conditions are suitable, ie, ground is dry but not too hard (eg. Autumn), to avoid impacts to native vegetation from vehicles required.

Unauthorised vehicle or pedestrian access, and spray drift from adjacent cropland, are potential threats to the credit site. All access gates to the credit site will remain locked, and a minimum of four signs will be erected along the boundary fence to alert neighbouring properties, roadside managers and the public to the presence of the offset site and prohibited activities.

Table 1: Fencing and signage method and timing

Site(s)	Method	Location for fencing and length	Timing
All Sites	Install perimeter fencing along the eastern, southern and north-east boundaries	New perimeter fencing – approx. 3.535 km	Within 3 months of commencement of the agreement, or when conditions are suitable in Year 1
All Sites	Upgrade all perimeter fencing required according to DELWP's *Fencing management standard of the Management Standards**.	Existing perimeter fencing – approx. 1.986 km	Within 3 months of commencement of the agreement, or when conditions are suitable in Year 1
All Sites	Maintain fencing around boundary of all sites in good condition according to the *Fencing management standard of the Management Standards**. Conduct yearly monitoring to ensure all fencing meets the required standard.	Entire boundary around all sites where fencing exists or is required - approx. 5.521 km	Ongoing
All Sites	Install additional internal fencing according to approved internal fencing proposal and DELWP's *Fencing management standard of the Management Standards**.	Additional internal fencing – approx. 2.525 km	In Year 1 when conditions are suitable (eg. Autumn)
All Sites	Maintain all internal fencing for all sites in good	Entire length of internal	Ongoing

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	condition according to approved internal fencing proposal and DELWP's *Fencing management standard of the Management Standards**. Conduct yearly monitoring to ensure all fencing meets the required standard.	fencing – approx. 3.73 km	
All Sites	Signage to be erected along the boundary fence to alert neighbouring properties, roadside managers and the public to the presence of the offset site and prohibited activities.	At least 4 signs erected along the length of the perimeter fence	Within 3 months of commencement of the agreement
All Sites	Signage to be maintained along the boundary fence to alert neighbouring properties, roadside managers and the public to the presence of the offset site and prohibited activities.	At least 4 signs maintained along the length of the perimeter fence	Ongoing

**DELWP 2019, Management standards for native vegetation offset sites, September 2019, Department of Environment, Land, Water and Planning, East Melbourne.*

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Woody weeds

Elimination of all woody weeds

All woody weeds on site must be eliminated. Eliminate all woody weeds listed in Table 2 by the end of the first year of management using the methods outlined in Table 2. There should be no mature plants present on site by the end of the first year. Indigenous plants should not be impacted during treatment. Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).

Refer to DELWP *Management standards for native vegetation offset sites, September 2019* – Weed management standard.

New and emerging woody weeds

Monitoring for new and emerging woody weeds should be conducted throughout the year for the term of the agreement, and any new and emerging woody weeds eliminated.

Refer to DELWP *Management standards for native vegetation offset sites, September 2019* – Weed management standard.

Table 2: Woody weeds to be eliminated – method and timing

Common name	Scientific name	Zone(s)	Method	Timing
		All	Monitor for and eliminate all new and emerging woody weeds	Ongoing

Table 3: Total cover of woody weeds in the Zone

Zone(s)	Total cover of all woody weeds (%)
All	0%

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Herbaceous weeds

Control of all herbaceous weeds:

Ensure that weed cover does not increase beyond current levels. Weeds listed in Table 4 were found on site. These weeds should be monitored each year to ensure their cover is not increasing. Increasing cover of these weeds should be controlled using the methods outlined in Table 4. Treat weeds before the plant has flowered and set seed. Indigenous plants should not be impacted during treatment.

Refer to DELWP *Management standards for native vegetation offset sites, September 2019* – Weed management standard.

New and emerging herbaceous weeds

Monitoring for new and emerging herbaceous weeds should be conducted throughout the year for the term of the agreement, and any new and emerging weeds eliminated.

Refer to DELWP *Management standards for native vegetation offset sites, September 2019*- Weed management standards.

Table 4: Herbaceous weeds to be controlled – method and timing

Common name	Scientific name	Zone(s)	Method	Timing
Brown-top Bent	*Agrostis capillaris*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	All year
Capeweed	*Arctotheca calendula*	All	Spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring
Brome	*Bromus* spp.	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Winter and Spring
Spear Thistle	*Cirsium vulgare*	All	Spot spray with appropriate herbicide prior to flowering, chip or handpull. For significant infestations, control a feasible area each year (<70ha)	Spring and Summer
Couch	*Cynodon dactylon*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	All year
Big Heron's-bill	*Erodium botrys*	All	Control through strategic grazing. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring
Ox-tongue	*Helmintheca echinoides*	All	Spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring
Yorkshire Fog-grass	*Holcus lanatus*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	All year
Barley-grass	*Hordeum spp.*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Winter and Spring
Cat's Ear	*Hypochaeris radicata*	All	Control through strategic grazing. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring
Spiny Rush	*Juncus acutus* subsp. *acutus*	1A, 2A, 3A, 5A, 6A & 7A	Cut and paste, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring

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Hare's tail grass	*Lagurus ovatus*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Winter and Spring
Ryegrass	*Lolium* spp.	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Winter and Spring
Serrated Tussock	*Nassella trichotoma*	All	Spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring and Summer
Toowoomba Canary-grass	*Phalaris aquatica*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	All year
Onion Grass	*Romulea rosea*	All	Control through strategic grazing. If required in concentrated areas, spot spray with appropriate herbicide prior to flowering, chip or dig out corms.	Winter and Spring
Dock	*Rumex* spp.	All	Control through strategic grazing. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring and Summer
Sow-thistle	*Sonchus* spp	All	Control through strategic grazing. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring and Summer
Rat-tail Grass	*Sporobolus africanus*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	All year
Variegated Thistle	*Silybum marianum*	All	Spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring
Clover	*Trifolium spp.*	All	Control through strategic grazing.	Spring and Summer
Squirrel-tail Fescue	*Vulpia bromoides*	All	Control through strategic grazing and ecological burning. If required, spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring
Bathurst Burr	*Xanthium spinosum*	3A & 4A	Spot spray with appropriate herbicide prior to flowering, chip or handpull.	Spring and Summer

Table 5: Total cover of herbaceous weeds in the Zone

Zone(s)	**Total cover of all herbaceous and grassy weeds (%)** (including high threat herbaceous and grassy weeds)
1A	25%
2A	25%
3A	25%
4A	25%
5A	25%
6A	25%
7A	25%

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Pest animals

The *Catchment and Land Protection Act 1994* lists rabbits and foxes as established pest animals and requires that all landowners take reasonable steps to prevent the spread of, and as far as possible eradicate, established pest animals on their land.

Rabbits and foxes have been observed in the credit site. A number of warrens and dens have been recorded along the banks of Ferrers Creek, adjacent to the credit site.

Rabbits should be monitored and controlled throughout the year. If rabbit activity is detected on the site use an integrated approach in accordance with DELWP *Management standards for native vegetation offset sites, September 2019*, which would involve fumigation, hand collapsing of burrows and baiting. Remove any carcasses to prevent poisoning of native predators.

Foxes are a threat to native fauna and should be controlled if found on your property. Fox dens where present are required to be destroyed through fumigation and hand collapse.

Remove rubbish. Disperse artificial piles of logs and rocks that may be used as harbour by pest animals. Do not remove indigenous plants, fallen logs or rocks from the site.

Continue to monitor and control rabbits and foxes all year round as well as any new and emerging pest animals.

Table 6: Pest animals to be controlled – species, method and timing

Zone(s)	Common name	Method	Timing
All	Rabbits & Foxes	Fumigation and hand collapse of rabbit burrows and fox dens	Ongoing
All	Rabbits	Baiting (optional method)	September to January if required
All	Rabbits	When baiting, collect and dispose of carcasses to prevent poisoning of native predators.	September to January if required
All	Rabbits & Foxes	Shooting (optional method)	September to January if required
All	Rabbits & Foxes	Remove or disperse surface harbour	Ongoing
All	Rabbits & foxes	Monitor and control	Ongoing
All	New & Emerging pest animals	Monitor and control	Ongoing

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Control ALL high threats

All high threats to native vegetation condition improvement including threats to soil structure, natural water flow, vegetation condition and the recruitment cycle must be controlled, typical high threats requiring control include:

- grazing threats from introduced animals including deer, wild pigs, horses and goats
- overgrazing by native animals including kangaroos, wallabies and possums
- high threat weeds
- inappropriate fire or flood regime
- inappropriate drainage
- threats to condition from vehicles including motorbikes
- illegal firewood collection / tree/log harvesting
- other threats as identified or that may appear during the 10-year active management period.

Table 7: High threat control methods and timing

Site(s)	Description of high threat	Method for monitoring and control / Actions	Timing
All Sites	Uncontrolled livestock access	Internal and external fences will be stock-proof to prevent access by neighbouring stock and support a rotational grazing regime.	Within 3 months of commencement of the agreement.
All Sites	Potential for spray drift from nearby cropland.	Signage along the boundary fence will alert neighbouring properties and the public to the presence of the offset site and prohibited activities. Monitor for spray drift. If a threat arises, it will be addressed with the relevant landowners.	Signage to be erected within 3 months of commencement of the agreement. Monitoring will be ongoing.
All Sites	Unauthorised vehicle or pedestrian access	All access gates to the credit site will remain locked and signs will be erected along the external boundary fence to alert the public to the presence of the credit site, its purpose and prohibited activities.	Access gates are locked. Signage to be erected within 3 months of commencement of the agreement
All Sites	Impact by management vehicles	The site is accessible to vehicles when their threat to native vegetation and habitat is low (ie. when dry) to implement management actions. Close monitoring will be undertaken by the land manager and an ecologist during the annual rapid Spring assessment, or Vegetation Quality Assessments, to ensure vehicles do not impact native vegetation and habitat condition and extent.	Ongoing monitoring by land manager. Annual monitoring by ecologist during rapid Spring assessment.
All Sites	Litter	Litter collection to be undertaken as required. Signage along the boundary fence will alert the public to the presence of the credit site, its purpose and prohibited activities, including no littering.	Signage to be erected within 3 months of commencement of the agreement. Litter collection will be undertaken as required.
All Sites		Monitoring for new high threats and developing an integrated program of management and control actions for each new threat that is identified.	As required

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Biomass management for high rainfall plains grassland

Table 8: Biomass management - method and timing

Biomass control is an important management activity to promote floristic diversity in native grassland vegetation and to maintain suitable habitat for the Golden Sun Moth. Biomass control aims to maintain the inter-tussock spaces for germination and recruitment of native flora, in particular native herb species. Golden Sun Moths also require bare ground or inter-tussock spaces for habitat and breeding.

The assessed cover of bare ground was approximately 2%. Biomass control will aim to maintain at least 20% bare ground or inter-tussock spaces by mid to late Spring each year for the recruitment of native herbs and grasses, and to coincide with the start of the Golden Sun Moth breeding season. Biomass control may be undertaken through strategic grazing with sheep and ecological burning.

The method and timing of biomass control will be seasonal dependent and will largely respond to the growth and extent of introduced and native grasses each year. To assist landowner decisions on the most appropriate grazing regime relevant to the vegetation quality, species composition and seasonal conditions each year, a rapid spring vegetation assessment will be undertaken by a qualified botanist/ecologist in each management year. The survey will identify the flora species present and the composition of these species at the time of assessment, including the extent of native vs non-native and perennial vs annual grasses and herbs.

Table 8: Biomass management methods and timing

Zone(s)	Method	Timing
All	Strategic Grazing Regime: Approximately 2525 metres of internal fencing will be installed to support a rotational grazing regime for biomass and weed control. Prior to the installation of internal fencing, approval is required by DELWP to access the conservation works exemption under Clause 52.17 Native Vegetation of the Golden Plains Planning Scheme. Internal fencing will be installed in accordance with an internal fencing proposal approved by DELWP. A grazing and rest regime will be implemented using a maximum stocking rate of 12 Dry Sheep Equivalent (DSE) per hectare across the credit site. Grazing pressure will be reduced to 0-5 DSE/ha during dry or low growth periods, late Spring and Summer, to minimise impacts to native grass and forb species and allow for their natural recruitment. The purpose of the rotational grazing regime is to conserve and enhance native grassland and wetland vegetation, and Golden Sun Moth habitat. Close monitoring will be undertaken to determine the grazing pressure required relevant to vegetation, habitat and seasonal conditions.	Internal fencing will be installed in Autumn of Year 1, in accordance with the approved internal fencing proposal. The timing of grazing will depend largely on the vegetation, habitat and seasonal conditions. In each management year, the land manager will: - aim to maintain at least 70% vegetative cover; - allow native grasses sufficient recovery time after grazing (ie. until native grass species have at least three tillers); - reduce the grazing pressure from mid to late Spring (0-5 DSE/ha depending on seasonal conditions) to minimise impacts to native forb species; - maintain a minimal stocking rate over Summer (0-5 DSE/ha depending on seasonal conditions) to support the natural recruitment of native grass species; - where possible, aim for a 3-month exclusion period in either Spring or Summer if seasonal and vegetative conditions allow (eg. if annual introduced grasses and herbaceous weeds are not out-competing native flora); and, - reduce or remove grazing from the credit site at any other time as required (eg. during dry, low growth periods, or extreme wet conditions when site may be at risk of pugging), to avoid impacts to native grassland and wetland vegetation and habitat.
All	Ecological Burning: Ecological burning will be used to reduce both native and non-native biomass as required, and, where targeted, the cover of introduced grasses.	A minimum of two ecological burns will be implemented in Autumn across the credit site during management years 3-8. A Spring burn may only be implemented following advice from a qualified botanist/ecologist.

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	Prior to burning the land manager will: - Obtain a burn permit from Golden Plains council if within the fire danger period - Notify CFA and council of burn days - Prepare a burn plan with a consultant or CFA - Ensure appropriate containment equipment and protocols are in place - Any fire breaks to be slashed and wetted (no foam or mineral earth breaks) Each ecological burn will involve burning in either a non-targeted mosaic pattern to a maximum of 20% of the credit site, or over one or multiple targeted areas (each <1ha to a maximum of 20% of the credit site) with a high cover of introduced grasses or dense swards of native grass (eg. Kangaroo Grass) that are limiting inter-tussock spaces. The reintroduction of grazing will be delayed after a burn to allow sufficient recovery of native perennial grass (ie. plants have a minimum of three tillers). Close monitoring will be undertaken to review the outcomes of each ecological burn and plant recovery. Ecological burning must be undertaken in accordance the Golden Plains Shire and CFA planning requirements.	The ultimate timing, size and frequency of ecological burning will be at the discretion of the landowner depending on vegetation and seasonal conditions, the outcomes of other management activities and the availability of suitable personnel and equipment.
All	A rapid spring assessment by a qualified botanist/ecologist will be undertake each year to assist with biomass management decisions through reviewing vegetation and habitat condition, the composition of flora species present, including the cover of introduced grasses and herbaceous weeds, and the outcomes of strategic grazing and ecological burning undertaken.	Early to mid-Spring in each management year.

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Monitoring and Reporting

This Landowner Agreement requires the landowner to submit a report annually for each year of the ten years of this management plan and thereafter at the reasonable request of the Secretary. Reports are to be submitted at least 2 months prior to the anniversary date of the execution of the agreement to allow time for compliance to be assessed before the anniversary date.

The Annual Report addresses progress against the commitments set out in this agreement. Annual Reports should provide enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of/progress against the commitments for each zone.

The extent and condition of EPBC Act listed *Natural Temperate Grassland of the Victorian Volcanic Plan* (NTGVVP) and *Seasonal Herbaceous Wetland (Freshwater) of the Temperate Lowland Plains* (SHWTLP) vegetation, and Golden Sun Moth and Striped Legless Lizard habitat, and the distribution and population of Golden Sun Moth and Striped Legless Lizard will also be closely monitored across the credit site throughout the 10-year management period. Monitoring of these Matters of National Environmental Significance (MNES) will ensure that the landowner is meeting their obligations under the *Golden Plains Wind Farm Offset Strategy for Matters of National Environmental Significance (BLA 2018)**
**BLA (2018) Golden Plains Wind Farm Offset Strategy for Matters of National Environmental Significance, Report prepared by Brett Lane & Associates for West Wind Energy Pty Ltd.*

Table 9: Monitoring and Reporting requirements and timing

Zone(s)	Monitoring and Reporting	Timing
All	Annual monitoring and reporting: The landowner will record all management actions implemented in accordance with the Landowner Agreement, site observations and photos, and submit an annual report to DELWP.	Submit annual report to DELWP 2 months prior to the anniversary date of the execution of the agreement.

Maintaining native vegetation quality and condition in perpetuity

This Landowner Agreement outlines management commitments and targets required to be achieved at the site to improve the quality and condition of native vegetation. At the completion of the 10-year active management period, the landowner is required to continue to undertake management to maintain native vegetation quality and condition at the site. This includes maintaining native vegetation condition and targets required to be achieved at the end of the 10-year management period and all ongoing management commitments and targets in perpetuity.

Ten-year management action plan with targets

Table 10: 10-Year Management Actions Plan with Targets

Year from Commencement: Year 1

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Install and/or upgrade perimeter fencing at the credit site. The total extent of the perimeter and internal fence is approx. 5.44 km	Table 1	Within 3 months of commencement of the agreement, or when conditions are suitable in Year 1	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019.*
All Sites	Maintain perimeter fencing in good condition around entire boundary of all sites. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019.*
All Sites	Install additional internal fencing at the credit site approx. 2.525 km	Table 1	Before the end of Year 1	DELWP approved internal fencing proposal
All Sites	Maintain all internal fencing in good condition. The total extent of internal fencing is approx. 3.73 km.	Table 1	Ongoing	DELWP approved internal fencing proposal
Signage				
All Sites	Install signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Within 3 months of commencement of the agreement	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for and eliminate all woody weeds. Refer to Table 2 for list of woody weeds, their control method and timing of actions Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Tables 2 & 3	Refer to Table 2	Eliminate all listed woody weeds, with no mature plants present by end of Year 1 <1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				

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Year from Commencement: Year 1

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and Eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented. Control plant biomass for the purposes of native grassland and wetland conservation
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement

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Year from Commencement: Year 1

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
			agreement anniversary date	Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 2

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				

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Year from Commencement: Year 2

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented. Control plant biomass for the purposes of native grassland and wetland conservation.
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

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Year from Commencement: Year 3

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes

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Year from Commencement: Year 3

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented for the purposes of native grassland and wetland conservation.
All	Undertake ecological burn (optional year). Refer to Table 8 for method and timing.	Table 8	Autumn	A minimum of 2 ecological burns undertaken in the credit site in Years 3-8.
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 4

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites,*

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Year from Commencement: Year 4

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
	monitoring to ensure all fencing meets the required standard.			*September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date

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Year from Commencement: Year 4

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
	program of monitoring and control actions including method and timing of actions			
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented for the purposes of native grassland and wetland conservation.
All	Undertake ecological burn (optional year). Refer to Table 8 for method and timing.	Table 8	Autumn	A minimum of 2 ecological burns undertaken in the credit site in Years 3-8.
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 5

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours,	Table 1	Ongoing	A minimum of four signs erected along external boundary.

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Year from Commencement: Year 5

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
	roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.			
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.

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Year from Commencement: Year 5

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented for the purposes of native grassland and wetland conservation.
All	Undertake ecological burn (optional year). Refer to Table 8 for method and timing.	Table 8	Autumn	A minimum of 2 ecological burns undertaken in the credit site in Years 3-8.
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 6

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10

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Year from Commencement: Year 6

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
	pull)			Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented for the purposes of native grassland and wetland conservation.
All	Undertake ecological burn (optional year). Refer to Table 8 for method and timing.	Table 8	Autumn	A minimum of 2 ecological burns undertaken in the credit site in Years 3-8.

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Year from Commencement: Year 6

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 7

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				

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Year from Commencement: Year 7

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented for the purposes of native grassland and wetland conservation.
All	Undertake ecological burn (optional year). Refer to Table 8 for method and timing.	Table 8	Autumn	A minimum of 2 ecological burns undertaken in the credit site in Years 3-8.
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the

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Year from Commencement: Year 7

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
			months prior to agreement anniversary date	anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 8

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10

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Year from Commencement: Year 8

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
Biomass Management for high rainfall plains grassland				
All	Implement strategic grazing regime. Refer to Table 8 for method and timing.	Table 8	Ongoing	Controlled grazing regime is implemented for the purposes of native grassland and wetland conservation.
All	Undertake ecological burn (optional year). Refer to Table 8 for method and timing.	Table 8	Autumn	A minimum of 2 ecological burns undertaken in the credit site in Years 3-8.
All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone

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Year from Commencement: Year 8

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
				Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 9

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
Signage				
All Sites	Maintain signage along the external boundary of the credit site to alert neighbours, roadside managers and the public to the presence of the credit site, its purpose and prohibited activities.	Table 1	Ongoing	A minimum of four signs erected along external boundary.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull)	Table 2 & 3	Refer to Table 2	<1% cover of all listed woody weeds, with no mature plants present at the end of Year 10 Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds, with no mature plants present at the end of Year 10
Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present

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Year from Commencement: Year 9

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
				No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
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All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
Annual reporting				
All	Prepare and submit an annual report	Table 9	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report

Year from Commencement: Year 10

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Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing				
All Sites	Maintain all perimeter and internal fencing in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	DELWP fencing standards in *Management standards for native vegetation offset sites, September 2019* DELWP approved internal fencing proposal
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Herbaceous Weeds				
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Monitor for and eliminate all new & emerging herbaceous weeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions	Table 6	Refer to Table 6	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
All	Monitor for and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
All	Monitor for and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Control ALL high threats				

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Year from Commencement: Year 10

Zone(s)	Management Action Description	Reference Table for action	Timing	Target to be achieved
All	Control All high threats to native vegetation condition improvement. Refer to management action description and Table 7 for list of high threats and an integrated program of monitoring and control actions including method and timing of actions	Table 7	Ongoing	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date
All	Monitor for new high threats and for each new threat identified - develop an integrated program of management and control actions to be implemented	Table 7	Ongoing	Develop an integrated program of management and control actions for DELWP approval within 3 months of identification of threat. Implement program upon DELWP approval.
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All	Undertake rapid spring assessment. Refer to Table 8 for method and timing	Table 8	Spring	Rapid spring assessment completed and assists landowner biomass management decisions.
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Third Schedule SECRETARY'S COMMITMENT

Schedule of payments: Native Vegetation Patch

Zones: VC_CFL-3697_01 Sites 1A, 2A, 3A, 4A, 5A, 6A and 7A

(A) Payments following the First Trade in relation to the Site

Year of the Landowner Agreement	Payment due
Initial Payment *	25% of the value of the First Trade.
First Year	10% of the value of the First Trade.
Second Year	5% of the value of the First Trade.
Third Year	10% of the value of the First Trade.
Fourth Year	10% of the value of the First Trade.
Fifth Year	5% of the value of the First Trade.
Sixth Year	5% of the value of the First Trade.
Seventh Year	10% of the value of the First Trade.
Eighth Year	5% of the value of the First Trade.
Ninth Year	5% of the value of the First Trade.
Tenth Year	10% of the value of the First Trade.

* Timing of the Initial Payment is set out in clauses 12.7 and 12.8 of this Agreement.

(B) Payments in relation to Second and Subsequent Trades

Year of the Landowner Agreement	Payment due
First Year	35% of the value of the Second and Subsequent Trades.
Second Year	5% of the value of the Second and Subsequent Trades.
Third Year	10% of the value of Second and Subsequent Trades.
Fourth Year	10% of the value of the Second and Subsequent Trades.
Fifth Year	5% of the value of the Second and Subsequent Trades.
Sixth Year	5% of the value of the Second and Subsequent Trades.
Seventh Year	10% of the value of the Second and Subsequent Trades.
Eighth Year	5% of the value of the Second and Subsequent Trades.
Ninth Year	5% of the value of the Second and Subsequent Trades.
Tenth Year	10% of the value of the Second and Subsequent Trades.

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Fourth Schedule LANDOWNER COLLECTION STATEMENT

The Department and Secretary (we) collect your personal information (including your name and contact details) when you or a company of which you are an employee or director enquires about entering into an agreement to create Native Vegetation Credits (*Landowner Agreement*). We collect the information you provide to us and may also collect information about you from searches of public registers, other departments and authorities of the State of Victoria, and brokers or site assessors you engage in relation to entering into a Landowner Agreement.

We use your personal information to:

1 administer the Credit Register;

2 negotiate and administer this Agreement with you or a company of which you are a director or employee;

3 provide information in relation to the Subject Land, to brokers or site assessors engaged by you;

4 record Native Vegetation Credits on the Credit Register, including the Landowner's name, the location of the Subject Land and the name and contact details of the Landowner's employees or directors;

5 record any encumbrance in relation to the Native Vegetation Credits relating to the Subject Land on the Victorian Land Titles Register;

6 facilitate payments in relation to the Native Vegetation Credits in accordance with this Agreement;

7 monitor compliance by the Landowner with the terms of this Agreement and to enforce compliance with those agreements by the Landowner;

8 publish, whether on the internet or otherwise, all such information as is necessary to comply with the requirements of the contracts publishing system; and

9 as otherwise required or authorised by or under law.

We may disclose your personal information to:

1 potential purchasers of Native Vegetation Credits;

2 brokers or site assessors that you have engaged, for the purpose of providing services to you;

3 the Victorian Auditor General;

4 persons to whom the Department is required to disclose information under the *Freedom of Information Act 1982* (Vic);

5 IT Service providers engaged by the Department in relation to the Credit Register;

6 persons engaged by the Department to investigate compliance with this Agreement; and

7 the Victorian Auditor-General, if requested by the Auditor-General.

Your personal information may be disclosed and stored outside Victoria and Australia, including storage on cloud storage platforms and systems maintained by email service providers.

The Department may disclose to any person (including by publishing such information in a manner publicly available) the characteristics of the Native Vegetation Credits sold or the price at which the Native Vegetation Credits were sold, for any purpose including (without limitation) advertising or marketing other Native Vegetation Credits for sale or any program for the sale of Native Vegetation Credits. Any such disclosure will not disclose your name or contact details or the street address or title details of the land to which any relevant Native Vegetation Credit relates.

If you do not provide any of the information requested of you then you or the company of which you are an employee or director may not be able to enter into this Agreement.

You have a right to access any personal information held about you by the Secretary and the Department and brokers or site assessors. Sometimes there may be a reason why access will not be possible or refused.

In relation to any record of your personal information held by the Secretary, Department, brokers or site assessors, you can contact the Department's privacy manager at the details available here: https://www2.delwp.vic.gov.au/privacy

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Fifth schedule LANDOWNER ACKNOWLEDGEMENT: decision to not apply 6 metre SETBACK from internal parcel boundaries

The Landowner agrees and acknowledges that:

- they have received, read and understood the information sheet "*Excluding areas along parcel boundaries*" provided by the Site Assessor engaged by the Landowner, which is attached to this schedule (Attachment 1 of Fifth Schedule), and,
- the site plan (First schedule) reflects the Landowner's decision to not apply an area each side of the internal parcel boundaries

AGREED AND ACKNOWLEDGED BY:

John Henry Chatham

.....(signature)

John H Chatham (print)

6/7/2020 (date)

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Attachment 1: Excluding areas along parcel boundaries

Information sheet: deciding not to setback from internal parcel boundaries in your native vegetation offset site

A native vegetation offset site must be at least 6 metres from a landowner's property boundary.

Generally, a native vegetation offset site must also be at least 6 metres from internal parcel boundaries. This information sheet sets out future implications for landowners if they decide not to exclude the 6 metre area along internal parcel boundaries.

Background

Why does the Native Vegetation Credit Register require offset sites be setback at least 6 metres from the property boundary?

Native vegetation offset sites are set back from property boundaries to ensure landowner's can access certain exemptions included in Clause 52.17 of all planning schemes in Victoria. These would not be available if the native vegetation was included in the offset site under their security agreement.

There is no formal interaction between the planning system and the landowner's security agreement with relation to using the land. This means that while a landowner may be exempt from requiring a planning permit or be given a planning permit to remove native vegetation within a native vegetation offset site, they would be in breach of the security agreement if they carry out those works.

A landowner must comply with the planning scheme **AND** their security agreement. A local council should, but may or may not consider the security agreement when making a decision on a permit application. Landowners must therefore be aware of what they can and cannot do under both schemes.

Clause 52.17 of all planning schemes in Victoria include exemptions from needing a permit to remove, destroy or lop native vegetation that is to be removed, destroyed, or lopped to the minimum extent necessary:

- To enable the operation or maintenance of an existing fence; or the construction of a boundary fence between properties in different ownership.

  The clearing along both sides of the fence when combined must not exceed 4 metres in width, except where land has already been cleared 4 metres or more along one side of the fence, then up to 1 metre can be cleared along the other side of the fence.

- To carry out certain fire protection activities including making or maintenance of a fuelbreak or firefighting access track (or any combination thereof) that does not exceed a combined width of 6 metres.

Note: this information is current as at **October 2018** and may be subject to change. Always check the current local council planning scheme.

Because of these exemptions a native vegetation offset site:

- must be setback at least 6 metres from the landowner's property boundaries, and
- should be setback at least 6 metres from the landowner's internal parcel boundaries.

DELWP recommends a 6 metre setback from all internal parcel boundaries (Figure 1) to allow the smallest unit of land that can be sold separately. If a parcel was sold to a future landholder, the parcel boundary will become a property boundary, and the different landowners may wish to erect a fence or construct a fuelbreak along this property boundary. If this area is included in the native vegetation offset site, removing native vegetation to complete these works would be in breach of the security agreement.

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Excluding areas along parcel boundaries

What are the implications if a landowner does not exclude the 6 metre area either side of an internal parcel boundary?

If a landowner wishes to sell an individual parcel in the future that parcel will become its own property. The parcel boundary will become the new property boundary

The security agreement will stay with the property and it will prevent the landowners from accessing the exemptions stated above within the native vegetation offset site. A potential buyer should take this into consideration when looking to purchase the parcel as they will have restricted ability to:

- erect and maintain a new fenceline along the property boundary within the site, and
- establish firebreaks or firefighting access tracks.

How can a breach of the security agreement be prevented?

The best way to manage this scenario is to exclude the 6 metre setback along internal parcel boundaries when the offset site is established. If this is not done and landowner(s) wish to establish firebreaks, firefighting access tracks or erect a fence along the new property boundary the landowner(s) would require approval from the Native Vegetation Credit Register (NVCR) to amend the area of the offset site to exclude the 6 metre setback. They would need to:

- arrange and pay the costs for a site assessor to map the area to be excluded from the security agreement and determine the amount of native vegetation credits required
- provide an updated security agreement with an amended site plan, and
- make application to amend the security agreement to the NVCR team at nativevegetation.offsetmanagement@delwp.vic.gov.au

The NVCR team will assess the application and decide if the proposed changes are acceptable. If they are the landowners must pay the costs to terminate the existing agreement and replace it with the updated agreement(s). They will also be liable for cancelling the native vegetation credits associated with the 12 metre area between the two new properties by one of the following:

- allocating the equivalent native vegetation credits in their ownership to the vegetation removal, or
- if the landowner does not own sufficient equivalent native vegetation credits purchase them from the NVCR.

Landowners must consider the costs to:

- engage a site assessor to assess the area and determine the associated native vegetation credits
- have a new site plan created
- remove the existing agreement and replace it with an updated agreement with the new site plan
- purchase equivalent native vegetation credits (or loss of income due to allocating the native vegetation credits).

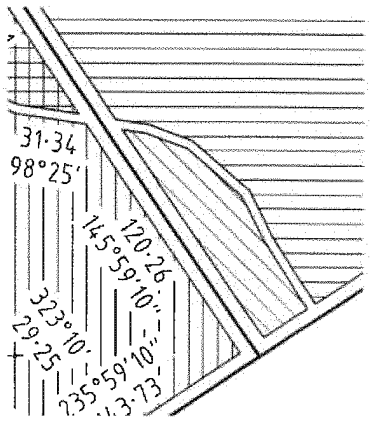


Figure 1: Site plan showing 6 metre setback from parcel boundaries and fire access track

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Executed as a Deed

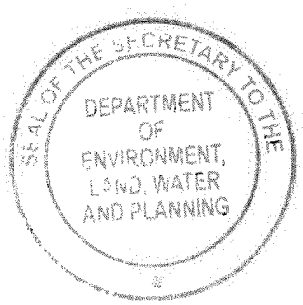
The Official Seal of the **Secretary to**
the Department of Environment, Land, Water and Planning,
a body corporate established under the
Conservation Forests and Lands Act 1987 was affixed

on: 17th / JULY / 2020

by: ..... (signature)

JAMES TODD ..... (print)

Executive Director Biodiversity,
pursuant to an instrument of delegation
dated 5th September 2016



SIGNED, SEALED AND DELIVERED by
John Henry Chatham

.....(signature)

JOHN H CHATHAM (print)

6/7/2020 ..... (date)

in the presence of:

..... (signature)

..... (print)

..... (date)

Delivered by LANDATA®, timestamp 19/01/2022 11:05 Page 70 of 70

Mortgagee's Consent

National Australia Bank Ltd as Mortgagee of registered Mortgage Numbers AK160666N, consents to the Landowner entering into this Agreement for the purposes of section 77 of the *Transfer of Land Act 1958* (Vic) and if the Mortgagee or an External Administrator (including a liquidator, receiver and manager, trustee, provisional liquidator, liquidator or any other person (however described) holding or appointed to an analogous office or acting or purporting to act in an analogous capacity) enters into possession of the Site, it will not be responsible for any liability of the Landowner in connection with this Agreement arising prior to the date it enters into possession of the Site or while it is in possession of the Site or after the date it ceases to be in possession of the Site.

Lauren Hale .....(signature)

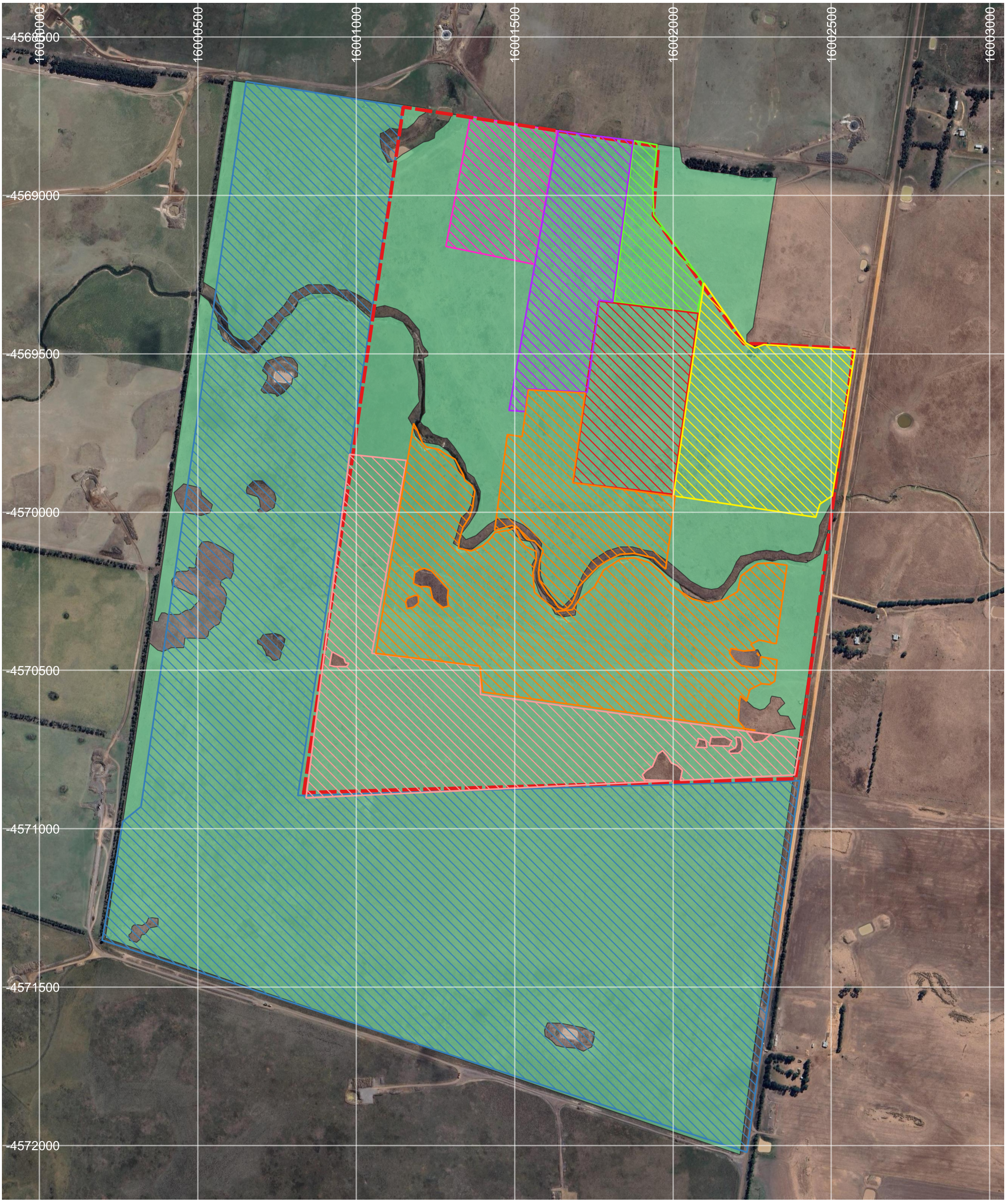
LAUREN MAHER
Agribusiness Manager
..... (print)

09/07/2020 ..... (date)

National Australia Bank Limited ABN 12004044937 083-849 083-849 Ballarat FSC VIC

Appendix J

Proposed offset site



0 80 160 240 320

MERCATOR
WGS 84 / PSEUDO-MERCATOR
UNITS: METERS

LEGEND

- EPBC 09386 Approved Offset (12 ha)
- EPBC 7358 Proposed Offset (19 ha)
- EPBC 8158 Approved Offset (11 ha)
- EPBC 9081 Approved Offset (5 ha)
- EPBC Act 8720 Proposed Offset
- EPBC 8049 Approved Offset (43.83 ha)
- EPBC 7965 Approved Offset (154.53 ha)
- Credit Site VC_CFL-3697_01 (s69 Agreement) Boundary
- Proposed Offset for EPBC 2024/09907 (Future Airfields) (43.4 ha)

DATA SOURCE: MAP DATA ©2015 GOOGLE, CREATED BY: MB

Appendix K

Offset site assessment report

ASSESSMENT REPORT FOR CREDIT APPLICATIONS

Credit site details

Overview statement of the site:

The credit site forms part of a larger sheep grazing property (342.72 hectares), approximately 3 kilometres south-west of Rokewood, in the Victorian Volcanic Plain bioregion. The credit site comprises 160.6337 hectares of remnant Plains Grassland (EVC 132) vegetation and has a degraded creek running through part of the site. This creek is excluded from the credit site, as it does not support native vegetation eligible for an offset under the Victorian Government's *Native vegetation gain scoring manual Version 2* (DELWP 2017).

Plains Grassland vegetation is dominated by native grasses, including Wallaby-grass *Rytidosperma* spp., Spear-grass *Austrostipa* spp., Tussock-grass *Poa* spp., Kangaroo Grass *Themeda triandra*, Common Wheat-grass *Anthosachne scabra* s.l. and Common Blown-grass *Lachnagrostis filiformis*, with occasional Tree Violet *Melicytus dentatus* s.l. shrubs, scattered Rushes *Juncus* spp. and native herbs, including Blue Devil *Eryngium ovinum*, Sheep's Burr *Acaena echinata*, Grassland Wood-sorrel *Oxalis perennans*, Kidney-weed *Dichondra repens* and Slender Speedwell *Veronica gracilis*.

It also comprises introduced pasture grasses and herbaceous weeds, including Browntop Bent *Agrostis capillaris*, Barley-grass *Hordeum* spp., Toowoomba Canary-grass *Phalaris aquatic*, Hare's tail grass *Lagurus ovatus*, Capeweed *Arctotheca calendula*, Big Heron's-bill *Erodium botrys* Cat's Ear *Hypochaeris radicata*, Dock *Rumex* spp., Sow-thistle *Sonchus* spp. and Clover *Trifolium* spp, a number of declared noxious weeds and one Weed of National Significance (WoNS), including Spear Thistle *Cirsium vulgare*, Spiny Rush *Juncus acutus* subsp. *acutus*, Serrated Tussock *Nassella trichotoma* Onion Grass *Romulea Rosea*, Variegated Thistle *Silybum marianum* and Bathurst Burr *Xanthium spinosum*, and pest animals, including the Red Fox *Vulpes vulpes* and European Rabbit *Oryctolagus cuniculus*.

All Plains Grassland vegetation recorded meets the minimum thresholds to qualify for the EPBC Act listed ecological community, *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP). This vegetation also provides suitable habitat for the EPBC Act listed Golden Sun Moth *Synemon plana* and Striped Legless Lizard *Delma impar*. Nine Golden Sun Moths were recorded in the credit site during targeted Golden Sun Moth surveys undertaken in December 2018. Four Striped Legless Lizards were recorded during targeted Striped Legless Lizard surveys from 26 September to 27 November 2019.

No woody weeds have been recorded in the credit site. Any emergent woody weeds will be eliminated, and high threat herbaceous and grassy weeds will be controlled through spot spraying, chipping and controlled grazing. If significant infestations occur of high-threat weed herbaceous weeds (ie. Spear Thistle), that are unfeasible to control within the same management year, the landowner will concentrate on controlling a feasible area (up to 10 hectares) each year.

Red Foxes *Vulpes vulpes* and European Rabbits *Oryctolagus cuniculus* were recorded on site. Multiple fox dens were recorded along Ferrers Creek, adjacent to the credit site. Foxes and rabbits will be controlled through shooting and/or baiting. Warrens and dens will be fumigated and collapsed if appropriate. Warrens and dens along the creek will not be collapsed due to the risk of streambank erosion.

The credit site has had a long history (more than 100 years) of sheep grazing, and the landowner has undertaken a set stocking grazing regime throughout the site (with intermittent destocking during dry periods) since they purchased the property approximately 60 years ago. The current landowner does not believe the site has ever been cropped and there is no evidence on site to suggest otherwise. The credit site had some fertiliser application more than 30 years ago, but not in recent years. Spot spraying with herbicides is undertaken each year on high threat grasses and herbaceous weeds. Broad acre spraying has not been undertaken in the credit site for at least 20 years and will not be undertaken in the future to avoid impacts to native vegetation. A rotational grazing regime with sheep will be implemented throughout the credit site for the purposes of conservation to control weeds and biomass. No cropping will be undertaken in the credit site in the future.

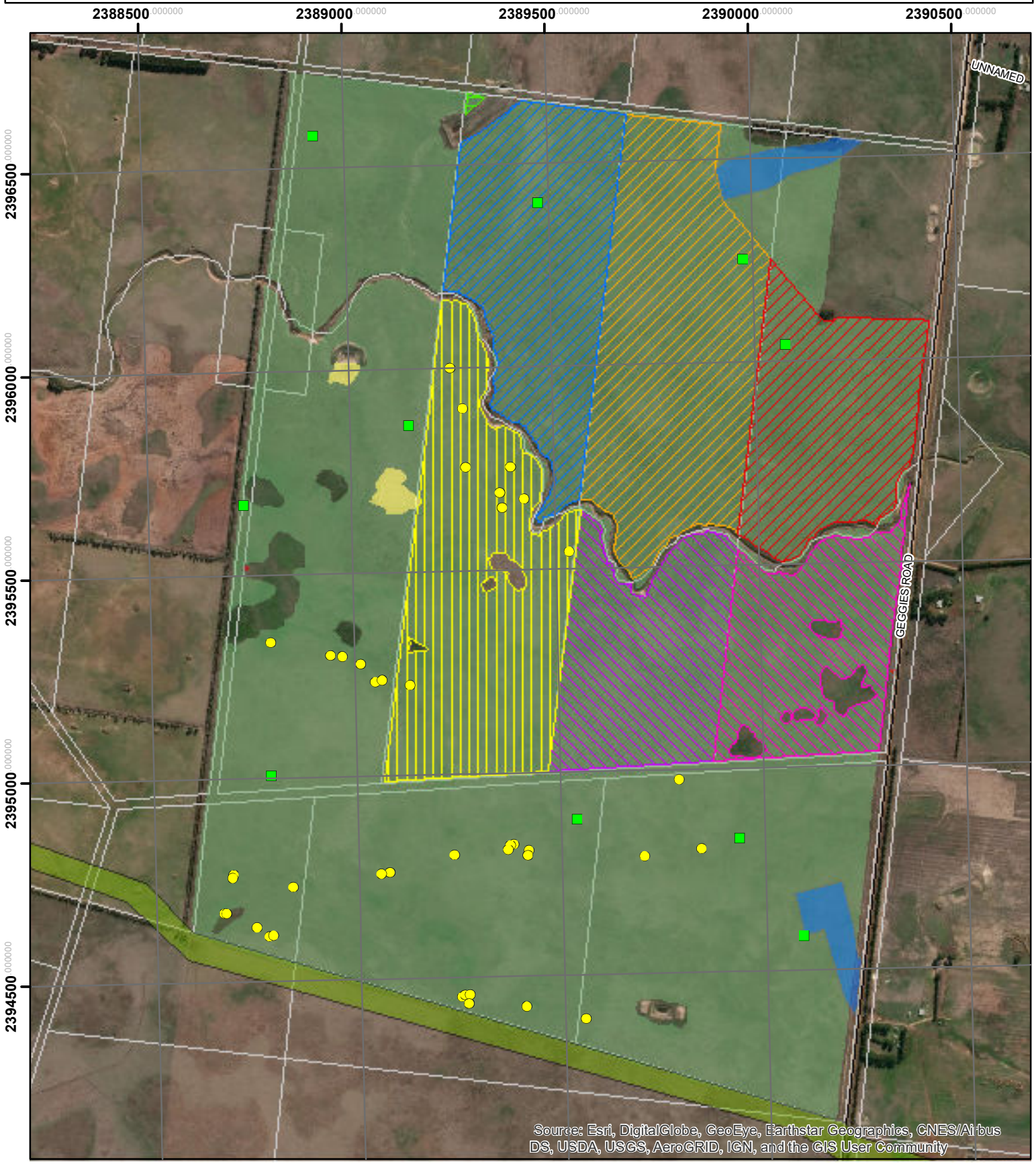
The grazing property, of which the credit site currently forms part of, is fenced along its boundary, with one internal fence dividing the property into two paddocks. The credit site will be fenced along its boundary within the first three months of the commencement of the Landowner Agreement to protect the site from livestock access from neighbouring properties. This will include installing new fencing (approx. 2.97 km) along its western, southern and north-eastern boundaries, and updating the existing fence along its northern and eastern boundaries. The boundary fencing will be erected in accordance with DELWP's minimum fencing standards.

Approximately 2535 metres of internal fencing will also be installed during Year 1 to divide the credit site into four paddocks to support the implementation of a rotational grazing regime for biomass and weed control. Prior to the installation of internal fencing, approval is required by DELWP to access the conservation works exemption under 52.17 of the Golden Plains Planning Scheme.

The credit site is bounded by a proposed offset site along its western and southern boundaries, private grazing and cropland along its northern boundary and Geggies Road along its eastern boundary. Spray drift from adjacent farming land has not occurred in the past and is considered unlikely to occur into the future, however it is a threat to the credit site and will be managed through maintaining open dialogue with adjacent land managers, encouraging best practice procedures, and erecting signage along all boundary fences to alert neighbouring properties and road-side managers to the presence of the offset site and prohibited activities. If spray drift from adjacent land, or any other threats, do arise in the future, these will be addressed accordingly.

There are no designated tracks through the credit site. However, the site is accessible to vehicles to assist with ongoing management of the site. The site will be closely monitored, particularly during wet periods (ie. Winter and Spring), by the land manager and an ecologist during a rapid Spring assessment each year, to ensure vehicles do not impact native vegetation condition and extent. The credit site will not be accessed by vehicles when it is at risk of being impacted. The credit site can be accessed via one locked gate off Geggies Road. This gate will remain locked to avoid unauthorised vehicle access.

AERIAL PLAN OVERVIEW
CFL-3697_01 Sites 01, 02, 03, 04, 05, 06, 07



Habitat Sites

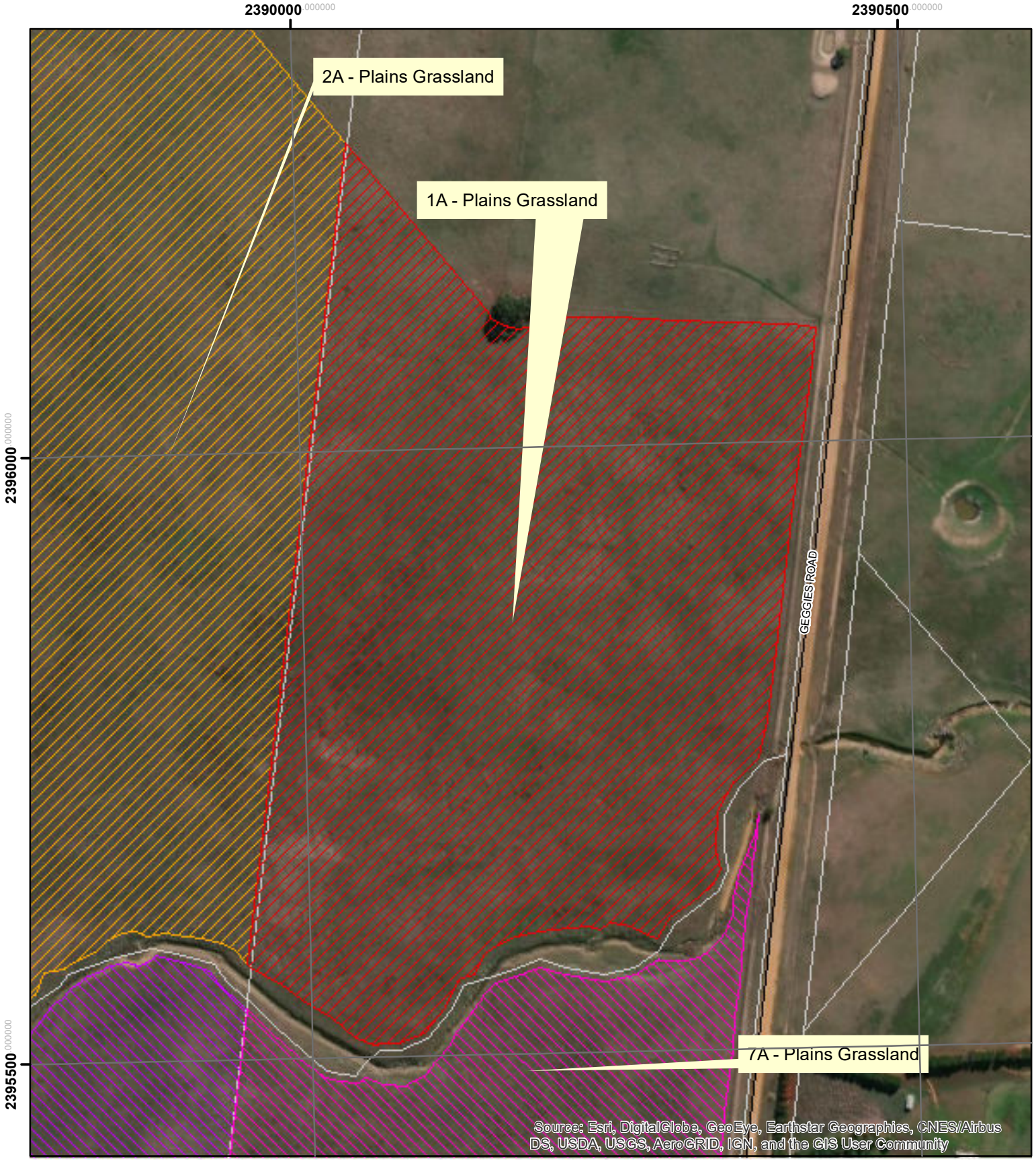
- 1A
- 2A
- 3A
- 4A
- 5A
- 6A
- 7A
- Easement
- Water Bore Exclusion Zone (15m x 15m)
- Wind Turbine Exclusion Zone
- Seasonal Herbaceous (Freshwater) Wetland of the Temperate Lowland Plains
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Golden Sun Moth Records
- Striped Legless Lizard Records

N

0 75 150 300 450 600 Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

AERIAL PLAN
CFL-3697_01 Site 01



Habitat Sites

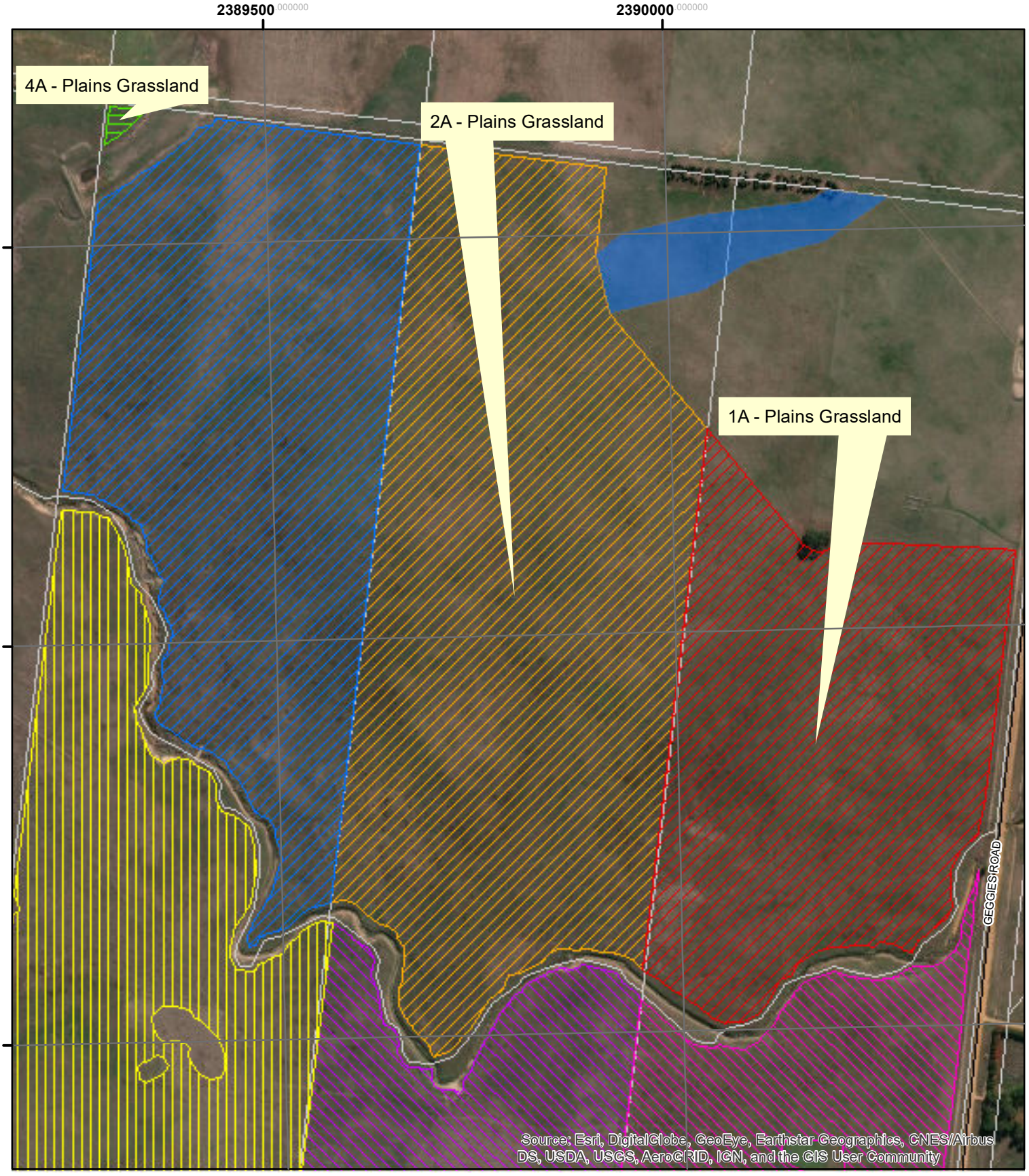
1A 6A
2A 7A

N

0 25 50 100 150 200
Metres

Prepared by GeoEccentric on behalf of
Biodiversity Offsets Victoria 07/04/2020

AERIAL PLAN
CFL-3697_01 Site 02



Habitat Sites

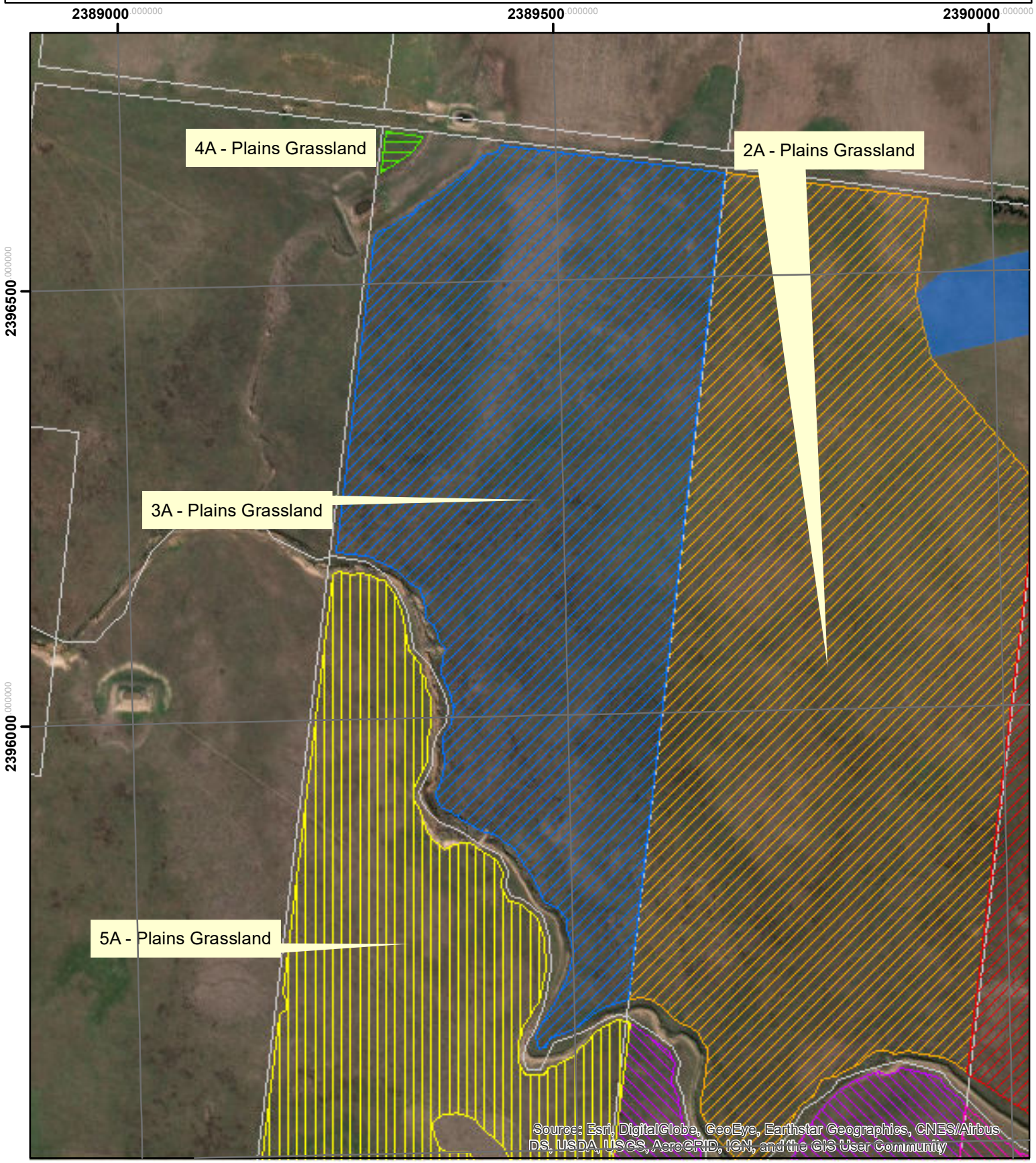
- 1A
- 2A
- 3A
- 4A
- 5A
- 6A
- 7A
- Wind Turbine Exclusion Zone

N

0 37.5 75 150 225 300 Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

AERIAL PLAN
CFL-3697_01 Site 03



Habitat Sites

- 1A
- 2A
- 3A
- 4A
- 5A
- 6A
- 7A
- Wind Turbine Exclusion Zone

N

0 30 60 120 180 240 Metres

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AERIAL PLAN
CFL-3697_01 Site 04



Habitat Sites

4A

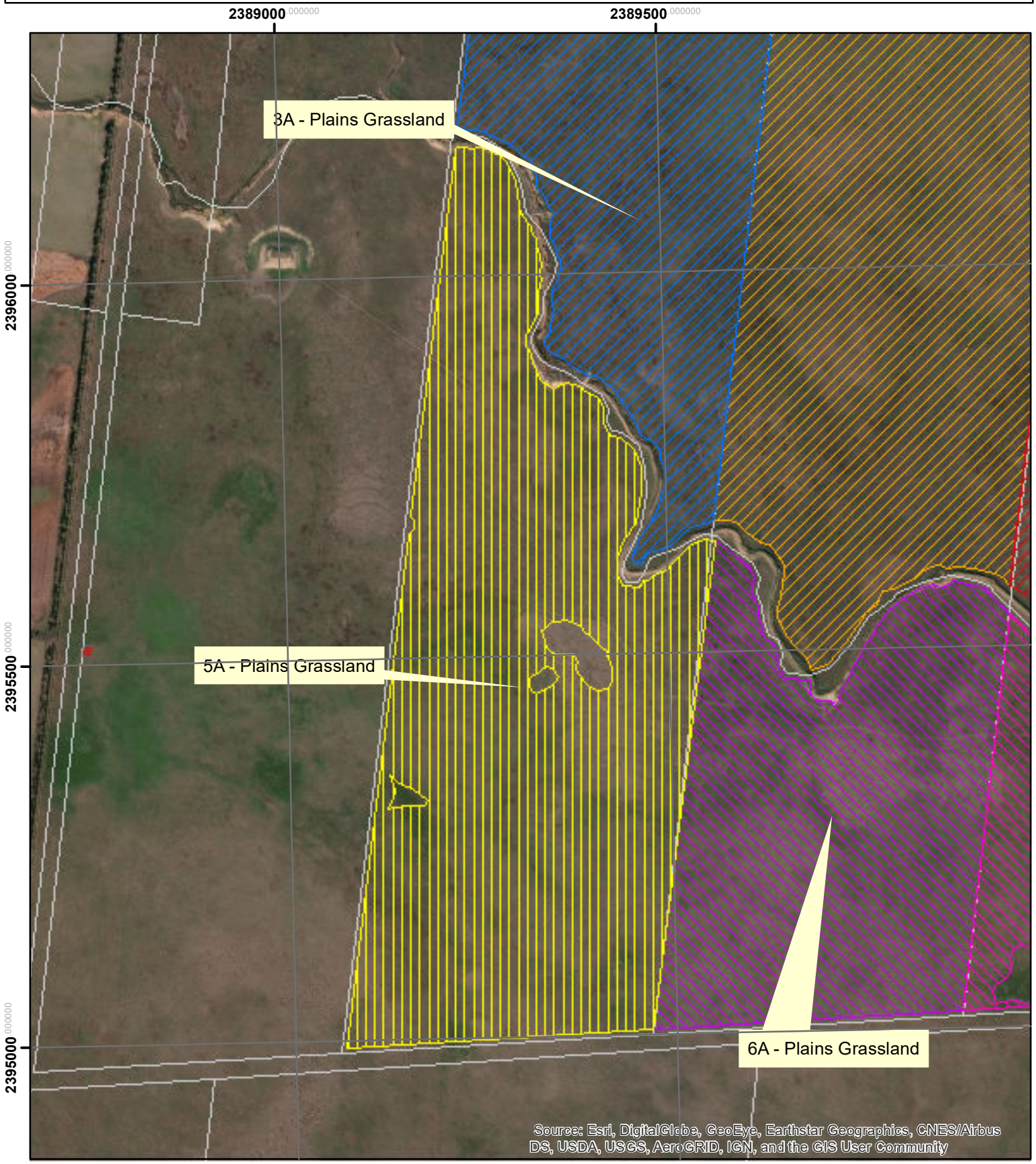
N

0 1.75 3.5 7 10.5 14

Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

AERIAL PLAN
CFL-3697_01 Site 05



Habitat Sites

- 1A
- 2A
- 3A
- 5A
- 6A
- 7A
- Water Bore Exclusion Zone (15m x 15m)

N

0 37.5 75 150 225 300 Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

AERIAL PLAN
CFL-3697_01 Site 06



Habitat Sites

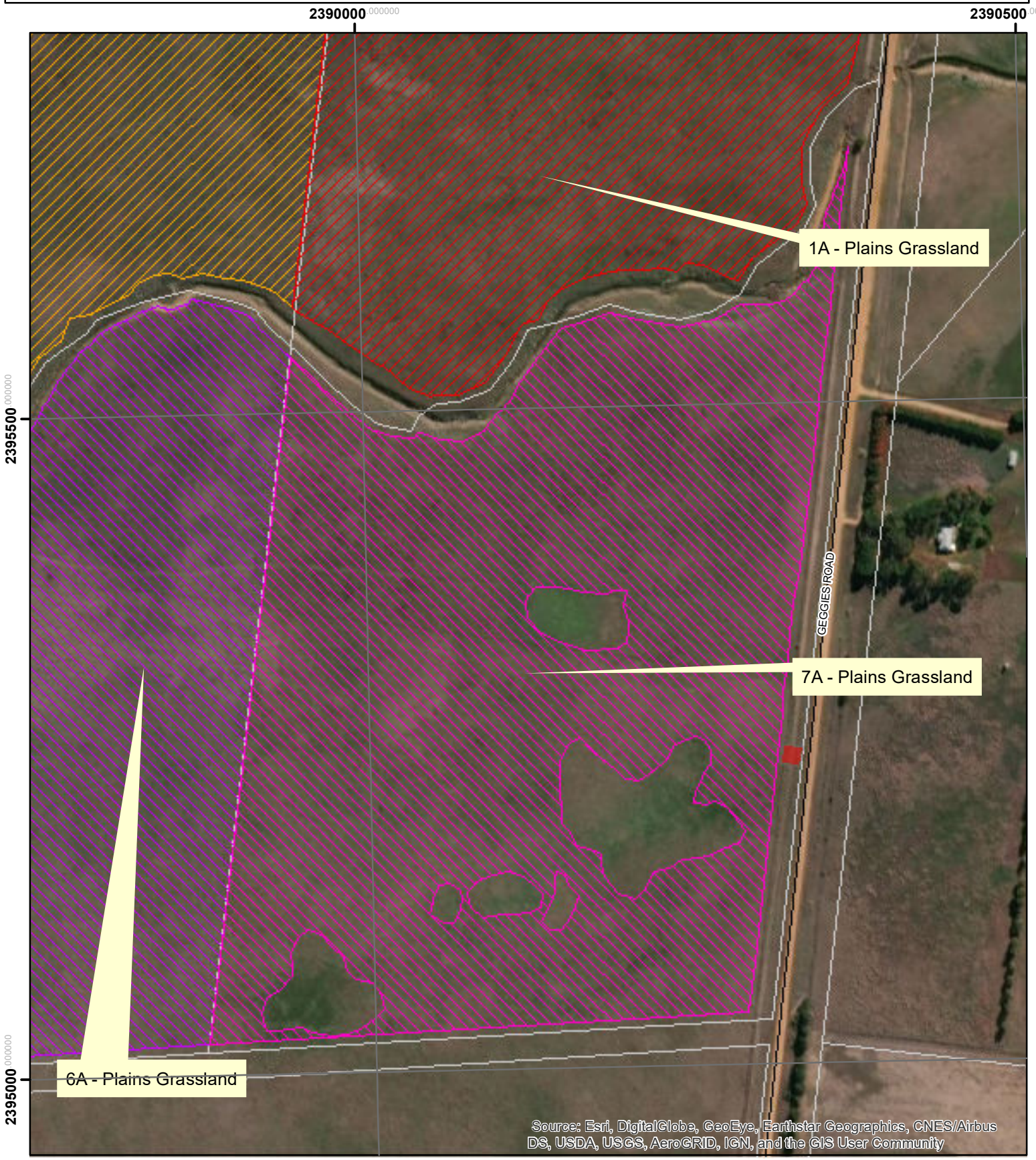
- 1A
- 2A
- 3A
- 5A
- 6A
- 7A

N

0 20 40 80 120 160 Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

AERIAL PLAN
CFL-3697_01 Site 07



Habitat Sites

1A 6A 2A 7A

Water Bore Exclusion Zone (15m x 15m)

N

0 20 40 80 120 160

Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

Credit site details Summary Table

Date of Assessment	17/07/2017 & 18/07/2017
Name of Site Assessor Name of consultancy assessor represents	Anna O'Brien Biodiversity Offsets Victoria
Management Plan prepared by (name and consultancy)	Anna O'Brien Biodiversity Offsets Victoria
Security Agreement package submitted for QA by (name and consultancy)	Anna O'Brien Biodiversity Offsets Victoria
Asset type	Remnant Patch
Landowner name	John Henry Chatham
Location and address of credit site	Rokewood-Shelford Road, Rokewood VIC 3330
Site details	
Land tenure	Freehold
Property size the credit site is located on	≥ 10 ha
Area of credit site (ha)	160.6337
Credit identifier	VC_CFL-3697_01
Offset purpose	
Is the site generating NV credits for Vic offset requirements	Yes
Is the site being used for Commonwealth offset requirements	Yes
For Commonwealth offsets: • List HZ's being used • Cmnwlth permit # (include copy of permit conditions) • If there is a Cmnwlth approved OMP (provide copy)	No current requirements
Details of the Land	
Volume / Folio	11175 / 238, 11175 / 237
Title plan number	TP944788Y, TP944787B
Parish	Kuruc-a-ruc
Allotment	Lot 100, 101 & 102 TP944788Y, Lot 64, 65 & 66 TP944787B
Local Government Area	Golden Plains
Catchment Management Authority	Corangamite
Planning scheme details	(Indicate which zones they apply to)
Planning zones	Farming Zone
Planning overlays	Environmental Significance Overlay Schedule 2

Existing restrictions on the land title	Instruments	Mortgage of Land AK169666N
	Caveats / easements	None
Other due diligence incl. other existing funding or agreements affecting the site/s		Contains an Area of Aboriginal Cultural Heritage Sensitivity (waterway) Entire Site is an Designated Bushfire Prone Area
Security mechanism		
Type of security agreement		s.69 – CF&L Act
History of sites		
Management		Used for sheep grazing for more than 100 years
Natural disturbance		Bushfire 1977

Eligibility assessment to be an offset/credit site

All offsets must meet the following eligibility requirements:

Are current and future land use(s) compatible with managing the native vegetation for conservation? Native vegetation management to reduce the risk of bushfire must be considered.	Yes
Is the native vegetation to be protected already being used to offset other removal of native vegetation or species habitat, required under Victorian or Commonwealth legislation?	No
Is the native vegetation to be protected subject to a current agreement or initiative to generate carbon credits?	No
Is the native vegetation to be protected subject to a current agreement under a biodiversity or native vegetation related incentive or grant program?	No
Can the landowner or manager control significant threats to the condition of the native vegetation (see below)?	Yes

In addition, assessors should ensure they consider all eligibility requirements set out in Section 9 of the *Guidelines for the removal, destruction or lopping of native vegetation* (the Guidelines) as well as Section 3 of the *Native vegetation gain scoring manual Version 2* (gain scoring manual) regarding offset site eligibility.

Describe the main threats or management issues at the credit site. If threats are significant and can't be controlled or managed by the landowner then the site may not be suitable as a credit site. These may include:

- management issues or threats such vehicle traffic / motorbike riders – traffic, erosion gully, unauthorised firewood collection, timber harvesting, salinity, soil acidity, extensive die-back or other plant diseases, nutrient runoff etc. (refer to Section 3 of the gain manual for further details).
- Other considerations for ineligible areas include:
    - sites that are adjacent to rivers or creeks that may be subject to flooding. If the adjacent parcel (other side of river or creek) is under different ownership, then there may be current or future issues with fencing the site boundary(s) against threats including stock. This is because areas within the site that may be subject to flooding

are difficult or unable to be fenced due to flood water or terrain and will likely be unable to be adequately protected. These areas should not be included within the credit site and only areas that can be adequately protected should be included.

- considering feasibility of access for management and fencing. Is the landowner and/or contractors able to access areas of the site for weed/pest animal management, fencing? If the site is too steep such as gorges / steep gullies etc. then how will these areas be adequately managed or protected? The terrain may be too difficult to access or fence and/or native vegetation may be required to be removed for fencing. In such situations, these areas of the site(s) should be considered and are likely not eligible.

- pest animals – including rabbits and their warrens; foxes and dens; hares and forms, pigs, goats, deer, horses. For overgrazing by pest animals or native herbivores non eligibility would be where it was considered the condition of native vegetation at the site would decline over time even with control actions and maintenance of quality and condition would not be possible.
- threats to establishing and achieving revegetation targets including soil profile and conditions that are not suitable for establishing revegetation, threats from pest animal and native herbivores that can't be controlled.
- weeds – woody and herbaceous – include regionally controlled weeds and high threat weeds

Table 1: Threats and management issues – with regard to offset eligibility

Habitat zone(s)	Threatening process / activity	Impact is Manageable or Significant?	Where manageable is it a High Threat (Y/N)	Notes on threat and management issue (where not described later under control ALL high threats)
All	*Livestock access*	Manageable	Y	Controlled grazing with sheep will used to manage weeds and biomass in the credit site. Internal fences will be stock-proof and support a rotational grazing regime and native plant recovery. External fences will be stock-proof to ensure that livestock from neighbouring properties do not access the credit site.
All	*Spray drift*	Manageable	Y	Widespread fertiliser or herbicide application that drifts onto the credit site has the potential to destroy native grassland vegetation. Cropland abutting the northern boundary is the only adjacent land where broadacre spraying occurs. To manage this potential threat, signage along all boundary fences will be erected to alert neighbouring properties and the public to the presence of the offset site and prohibited activities. An open dialogue will also be maintained with all adjacent land managers to ensure best practice procedures are undertaken at all times. If the threat of spray drift from adjacent land arises in the future, it will be addressed accordingly.
All	*Unauthorised vehicle or pedestrian access*	Manageable	N	Unauthorised vehicle access may impact native vegetation during wet periods, as well as act as a vector for new weed species. Any unauthorised pedestrian access is unlikely to cause significant impact to the native vegetation. All access gates to the credit site are locked and signs will be erected along the external boundary fence to alert the public to the presence of the credit site, its purpose and prohibited activities.
All	*Impact by management vehicles*	Manageable	N	The site is accessible to vehicles when their threat to native vegetation and habitat is low (ie. when dry) to implement management actions. Close monitoring will be undertaken by the land manager and an ecologist during the annual rapid Spring assessment, or Vegetation Quality Assessments, to ensure vehicles do not impact native vegetation condition and extent.
All	*Litter*	Manageable	N	Litter may blow onto the credit site. Litter collection will be undertaken throughout the site as required.

				Signage along the boundary fence will alert the public to the presence of the credit site, its purpose and prohibited activities, including no littering.

Ecological Vegetation Class

Table 2: Ecological Vegetation Classes, their conservation status and habitat score

Habitat zone(s)	Asset Type*	Area (ha)	Bioregion	Ecological Vegetation Class (EVC)	EVC number	Conservation status	Habitat score	# of Large Trees (P or ST HZ)
1A	P, NTGVVP, GSM, SLL	22.0275	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0
2A	P, NTGVVP, GSM, SLL	36.8032	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0
3A	P, NTGVVP, GSM, SLL	27.9037	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0
4A	P, NTGVVP, GSM, SLL	0.1196	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0
5A	P, NTGVVP, GSM, SLL	34.0976	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0
6A	P, NTGVVP, GSM, SLL	21.1780	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0
7A	P, NTGVVP, GSM, SLL	18.5041	Victorian Volcanic Plain	*Heavier-soils* Plains Grassland	132_61	Endangered	60.52	0

*P = Native Vegetation Patch; Matters of Environmental Significance [NTGVVP = *Natural Temperate Grassland of the Victorian Volcanic Plain*; GSM = Golden Sun Moth *Synemon plana*; Striped Legless Lizard *Delmar impar*; SHWTLP = *Seasonal Herbaceous (Freshwater) Wetland of Temperate Lowland Plains*]

Mapped Species Habitat - Offset Site Report *(EnSym Report)*

The 2017 native vegetation removal regulations rely on species habitat modelled mapping to determine the number of species habitat units available at an offset site. This information is obtained through the *Native vegetation offset report* generated through the EnSym system. The 2017 native vegetation removal regulations include a requirement to confirm that the habitat characteristics of an offset site are consistent with the habitat requirements of the species for which it generates credits. Section 9.4.4 and 11.1.2 of the Guidelines states that this confirmation must be made as part of a gain scoring assessment. Information gathered during a habitat hectare assessment is sufficient to confirm the habitat characteristics – targeted species surveys are not required. Appendix 5B of the *Assessor's handbook – applications to remove, destroy or lop native vegetation* (Assessor's handbook) includes more information on how this is applied.

In this section confirm that you have reviewed the species listed in the *Native vegetation offset report* (EnSym Report) for your site, and record any species whose habitat requirements are clearly inconsistent with the habitat at the offset site. For any species listed that the assessor wants removed please also provide brief information for consideration including the species and their habitat requirements, and what habitat / values are present in the applicable habitat zone(s). If there are many species that are considered to not have habitat requirements for a specific habitat zone then it may be possible (where applicable) to have one justification for all relevant species for that zone.

Table 3(i): Identification of obvious errors in Habitat Importance Map

Determination by VQA site assessor or competent ecologist	Y/N
Does the habitat zone have habitat characteristics that are clearly inconsistent with the habitat requirements for any species that generate species habitat units at the site (Ensym Report)?	N

Table 3(ii): Identification of obvious errors in Habitat Importance Map

Determination by VQA site assessor or competent ecologist	List Species (scientific name)	Habitat Zone(s)	Justification for removal including the species habitat requirements and the habitat / values present in the habitat zone(s).
If Yes, which species have been (or should be) removed?			

Management issues and threats - including eligibility assessment for improvement gains

Where management issues or threats to offset site eligibility have been described in the eligibility section earlier and considered by the site assessor and land manager as manageable, then those threats will need to be considered with regard to being able to achieve improvement gains in native vegetation condition.

Pest animal and plant activity, cover and information

Table 4: Pest animals recorded on credit site

Habitat zone(s)	Common name	Scientific name	Notes on threat and management issues (where not described later under Control ALL high threats)
All	Rabbit	*Oryctolagus cuniculus*	Rabbit warrens were recorded along the creek bank in between Sites 1A, 2A, 3A, 5A, 6A and 7A. A rabbit control program, including warren fumigation and collapse, shooting and monitoring, will be implemented.
All	Red Fox	Vulpes Vulpes	Foxes were recorded on site during the site assessment. Fox dens were also recorded along the creek bank in between Sites 1A, 2A, 3A, 5A, 6A and 7A. A fox control program, including den fumigation and collapse, shooting and monitoring, will be implemented.

Note: All woody weeds are considered high threat

Table 5a(i): Woody weeds recorded on credit site

Habitat zone(s)	Common name	Scientific name	Notes on threat and management issues

Table 5a(ii): Total cover of woody weeds recorded in Habitat Zone (for monitoring purposes)

Habitat zone(s)	Total cover of woody weeds recorded (%)
All	0%

Note: High threat herbaceous and grassy weeds includes all species that are perennial, listed under the CALP Act, described as high impact on the EVC benchmark or any annual species considered by the assessor as having an invasive ability to outcompete or reduce an indigenous lifeform at that particular site/zone.

Table 5b(i): Herbaceous and grassy weeds recorded on credit site

Habitat zone(s)	Common name	Scientific name	High Threat Weed	Notes on threat and management issues
All	Brown-top Bent	*Agrostis capillaris*	Yes	Scattered throughout the credit site. Maintain or reduce cover.
All	Capeweed	*Arctotheca calendula*	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Brome	*Bromus* spp.	No	Scattered throughout the credit site. Maintain or reduce cover.

All	Spear Thistle	*Cirsium vulgare*	Yes	Scattered throughout the credit site. Maintain, reduce cover or eradicate (<1% cover) where feasible
All	Couch	*Cynodon dactylon*	Yes	Scattered throughout the credit site. Maintain or reduce cover.
All	Big Heron's-bill	*Erodium botrys*	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Ox-tongue	*Helmintheca echinoides*	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Yorkshire Fog-grass	*Holcus lanatus*	Yes	Scattered throughout the credit site. Maintain or reduce cover.
All	Barley-grass	*Hordeum* spp.	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Cat's Ear	*Hypochaeris radicata*	Yes	Scattered throughout the credit site. Maintain or reduce cover.
All	Spiny Rush	*Juncus acutus* subsp. *acutus*	Yes	Scattered throughout creek and along creek bank in between Sites 1A, 2A, 3A and 5A, 6A, 7A. Eradicate (<1%) all emergent plants in credit site.
All	Hare's tail grass	*Lagurus ovatus*	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Annual Ryegrass	*Lolium rigidum*	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Serrated Tussock	*Nassella trichotoma*	Yes	Occasional plants. Eradicate (<1% cover).
All	Toowoomba Canary-grass	*Phalaris aquatica*	Yes	Scattered throughout the credit site. Maintain or reduce cover.
All	Onion Grass	*Romulea rosea*	Yes	Scattered throughout the credit site. Maintain or reduce cover.
All	Dock	*Rumex* spp.	No	Occasional plants. Maintain or reduce cover.
All	Sow-thistle	*Sonchus* spp.	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Rat-tail Grass	*Sporobolus africanus*	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Variegated Thistle	*Silybum marianum*	Yes	Small clump recorded. Eradicate (<1% cover) where feasible
All	Clover	*Trifolium* spp.	No	Scattered throughout the credit site. Maintain or reduce cover.
All	Fescue	*Vulpia* spp.	No	Scattered throughout the credit site. Maintain or reduce cover.
3A & 4A	Bathurst Burr	*Xanthium spinosum*	Yes	Small clumps recorded. Eradicate (<1% cover).

Table 5b(ii): Total cover of herbaceous and grassy weeds in Habitat Zone (for monitoring purposes)

Habitat zone(s)	**Total cover of all herbaceous and grassy weeds** (%) (including low and high threat herbaceous and grassy weeds)	Total cover of High Threat herbaceous and grassy weeds (%)
1A	25%	10%
2A	25%	10%
3A	25%	10%
4A	25%	10%
5A	25%	10%
6A	25%	10%
7A	25%	10%

Control ALL high threats

Describe all current and potential High Threats, the numbers of and/or cover of and activity level and impact of the threat at the time of assessment. Assessors must provide enough information so that the threat can be quantified, and a decision made as to whether control or elimination and management of the threat is realistic and achievable in the long term given the expertise, willingness and capacity of the land manager.

Refer to the management plan template manual for further information about what information needs to be included in the site management plan with regard to controlling all current and potential high threats.

Table 6: Current or potential high threats (complete one table for each threat)

Habitat zone(s)	All	All	All	All	All
Threatening process / activity	Uncontrolled livestock access	Spray drift	Unauthorised vehicle or pedestrian access	Impact by management vehicles	Litter
Numbers of / cover of / activity level at time of assessment	Sheep grazing at approximately 2-6 DSE/ha	None	None	None	None
Impact to vegetation condition at the time of assessment	Less organic litter and potential less diversity and cover of native herb species. Reduced weed cover	None	None	None	None
Activity level of threat in surrounding landscape	Sheep grazing on surrounding properties	Herbicide and fertiliser spraying may occur on cropland that abuts the northern boundary, however spray drift has never occurred from this area in the past and is unlikely to occur in the future under continued best practice spraying procedures.	None known	Vehicles access surrounding farmland regularly for maintenance. Impact on native vegetation unknown	Future wind farm development may result in increased litter during construction.
Notes on threat and management issues	Boundary and internal fencing control livestock movement in and out of site. All existing and future fencing must meet DELWP standards	Best practice spraying will be discussed with adjacent land manager. If spraying occurs on other adjacent farming land in the future, threat to be addressed accordingly .	Access gates are already kept locked.	The site will be accessed by vehicles when their threat to native vegetation and habitat is low to implement management actions.	Currently no litter
Level of risk to improvement in Tree canopy cover, Understorey, Recruitment and Organic litter condition	Moderate to low risk to organic litter, understorey and native recruitment depending on grazing pressure and timing.	High risk to all understorey, recruitment and organic litter condition	Low to moderate risk to understorey if unauthorised vehicles gain access during wet periods. Low risk during dry periods. No risk if unauthorised	Low to moderate risk to understorey if management vehicles access during very wet periods.	None

			pedestrians access.		
Outline of control method(s) to be implemented (man plan may have more detail)	Internal fences will be stock-proof and support a rotational grazing regime and plant recovery. Grazing pressure will be reduced in late spring and summer to allow natural recruitment of native grasses and herbs. External fences will be stock proof to ensure that livestock from neighbouring properties do not access the credit site.	Signage along all boundary fences will alert neighbouring properties and the public to the presence of the offset site and prohibited activities. If the threat of spray drift from adjacent land arises in the future, it will be addressed accordingly.	All access gates to the credit site will remain locked and signs will be erected along the external boundary fence to alert the public to the presence of the credit site, its purpose and prohibited activities.	The site will not be accessed when it is at risk of being impacted. Close monitoring will be undertaken by the land manager and an ecologist during a rapid Spring assessment each year to ensure vehicles do not impact native vegetation condition and extent.	Litter collection to be undertaken as required. Signage along the boundary fence will alert the public to the presence of the credit site, its purpose and prohibited activities, including no littering.
Permits / approvals under legislation to control threat required and able to be granted? (describe)	NA	NA	NA	NA	NA
Comment on appropriateness of control action(s) for threat & location	Rotational sheep grazing will improve current vegetation condition through controlling herbaceous weeds and assisting native plant recruitment and recovery.	Best practice spraying regimes will avoid spray drift. Signage will alert the public to the presence of the offset site and prohibited activities.	Restricting vehicle access to the credit site will prevent threat.	Restricting vehicle access during high risk times (ie. very wet periods) will prevent threat	Periodic litter collection and signage will address threat.
Expertise, willingness and capacity of land manager to monitor and control threat in long term	Land manager is capable of managing stock, repairing fences and monitoring.	Land manager is capable of maintaining signage and addressing issues of spray drift if they arise.	Land manager is capable of maintaining locked gates and signage.	Land manager is capable of monitoring threat and adjusting management accordingly.	Land manager is capable of litter collection and maintaining signage.

Quantification of gains

Table 7: Native vegetation protection and management for each zone

Site number / Zone ID	**1 / A**	**2 / A**	**3 / A**
Zone type	Patch	Patch	Patch
Size of zone (ha)	22.0275	36.8032	27.9037
Bioregion	Victorian Volcanic Plain	Victorian Volcanic Plain	Victorian Volcanic Plain
EVC name	Plains Grassland - Heavier-soils	Plains Grassland - Heavier-soils	Plains Grassy Wetland
EVC standardiser	1.36	1.36	1.36
BioEVC code / conservation status	VVP_0132_61 / E	VVP_0132_61 / E	VVP_0125 / E
Vegetation type	High rain. VVP/GiP grassland	High rain. VVP/GiP grassland	Non-woody wetland
Property size (ha)	≥ 10 ha	≥ 10 ha	≥ 10 ha
Total native veg. on property (ha)	≥ 20 ha	≥ 20 ha	≥ 20 ha
Current security	None	None	None
Proposed security	On-title agreement	On-title agreement	On-title agreement
Current land management restrictions	Restriction 2, 3	Restriction 2, 3	Restriction 2, 3
Type of overlay	ESO	ESO	ESO

Habitat scoring	*Habitat score*	*Maint. gain*	*Impr. gain*	*Habitat score*	*Maint. gain*	*Impr. gain*	*Habitat score*	*Maint. gain*	*Impr. gain*
Large trees	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Tree canopy cover	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Understorey	15	7.5	1.25	15	7.5	1.25	15	7.5	1.25
Lack of weeds	9	N/A	1	9	N/A	1	9	N/A	1
Recruitment	3	1.5	1	3	1.5	1	3	1.5	1
Organic litter	5	N/A	0	5	N/A	0	5	N/A	0
Logs	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Site condition (/75)	***43.52***			***43.52***			***43.52***		
Landscape context (/25)	17			17			17		
Habitat score (/100)	**60.52**			**60.52**			**60.52**		
Maintenance gain (standardised)	12.2400			12.2400			12.2400		
Improvement gain (standardised)	4.4200			4.4200			4.4200		
Prior management gain	6.0520			6.0520			6.0520		
Security gain	6.0520			6.0520			6.0520		
Gain score (out of 100)	**28.76**			**28.76**			**28.76**		
Gain score divided by 100	0.2876			0.2876			0.2876		
Habitat hectares of gain	6.3360			10.5861			8.0262		
Number of large trees in zone	0			0			0		

Table 7: Native vegetation protection and management for each zone, cont'd

Site number / Zone ID	**4 / A**	**5 / A**	**6 / A**
Zone type	Patch	Patch	Patch
Size of zone (ha)	0.1196	34.0976	21.1780
Bioregion	Victorian Volcanic Plain	Victorian Volcanic Plain	Victorian Volcanic Plain
EVC name	Plains Grassland - Heavier-soils	Plains Grassland - Heavier-soils	Plains Grassy Wetland
EVC standardiser	1.36	1.36	1.36
BioEVC code / conservation status	VVP_0132_61 / E	VVP_0132_61 / E	VVP_0125 / E
Vegetation type	High rain. VVP/GiP grassland	High rain. VVP/GiP grassland	Non-woody wetland
Property size (ha)	≥ 10 ha	≥ 10 ha	≥ 10 ha
Total native veg. on property (ha)	≥ 20 ha	≥ 20 ha	≥ 20 ha
Current security	None	None	None
Proposed security	On-title agreement	On-title agreement	On-title agreement
Current land management restrictions	Restriction 2, 3	Restriction 2, 3	Restriction 2, 3
Type of overlay	ESO	ESO	ESO

Habitat scoring	*Habitat score*	*Maint. gain*	*Impr. gain*	*Habitat score*	*Maint. gain*	*Impr. gain*	*Habitat score*	*Maint. gain*	*Impr. gain*
Large trees	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Tree canopy cover	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Understorey	15	7.5	1.25	15	7.5	1.25	15	7.5	1.25
Lack of weeds	9	N/A	1	9	N/A	1	9	N/A	1
Recruitment	3	1.5	1	3	1.5	1	3	1.5	1
Organic litter	5	N/A	0	5	N/A	0	5	N/A	0
Logs	0	N/A	N/A	0	N/A	N/A	0	N/A	N/A
Site condition (/75)	***43.52***			***43.52***			***43.52***		
Landscape context (/25)	17			17			17		
Habitat score (/100)	**60.52**			**60.52**			**60.52**		
Maintenance gain (standardised)	12.2400			12.2400			12.2400		
Improvement gain (standardised)	4.4200			4.4200			4.4200		
Prior management gain	6.0520			6.0520			6.0520		
Security gain	6.0520			6.0520			6.0520		
Gain score (out of 100)	**28.76**			**28.76**			**28.76**		
Gain score divided by 100	0.2876			0.2876			0.2876		
Habitat hectares of gain	0.0344			9.8078			6.0916		
Number of large trees in zone	0			0			0		

Table 7: Native vegetation protection and management for each zone, cont'd

Site number / Zone ID	**7 / A**
Zone type	Patch
Size of zone (ha)	18.5041
Bioregion	Victorian Volcanic Plain
EVC name	Plains Grassland - Heavier-soils
EVC standardiser	1.36
BioEVC code / conservation status	VVP_0132_61 / E
Vegetation type	High rain. VVP/GiP grassland
Property size (ha)	≥ 10 ha
Total native veg. on property (ha)	≥ 20 ha
Current security	None
Proposed security	On-title agreement
Current land management restrictions	Restriction 2, 3
Type of overlay	ESO

Habitat scoring	*Habitat score*	*Maint. gain*	*Impr. gain*
Large trees	0	N/A	N/A
Tree canopy cover	0	N/A	N/A
Understorey	15	7.5	1.25
Lack of weeds	9	N/A	1
Recruitment	3	1.5	1
Organic litter	5	N/A	0
Logs	0	N/A	N/A
Site condition (/75)	***43.52***		
Landscape context (/25)	17		
Habitat score (/100)	**60.52**		
Maintenance gain (standardised)	12.2400		
Improvement gain (standardised)	4.4200		
Prior management gain	6.0520		
Security gain	6.0520		
Gain score (out of 100)	**28.76**		
Gain score divided by 100	0.2876		
Habitat hectares of gain	5.3225		
Number of large trees in zone	0		

Appendix 1 Vascular plant species recorded on site

Key:

EPBC Act
- CR – Critically Endangered
- EN – Endangered
- VU - Vulnerable

VROT = Victorian rare or threatened
- e - endangered
- v - vulnerable
- r - rare
- k - poorly known but thought to be rare or threatened

FFG = Listed under the *Flora and Fauna Guarantee Act 1988*
- L – listed as threatened under FFG Act

Weed = plant taxa introduced into Victoria or Australia
- * - weed
- # - native species outside natural range

Status	Scientific name	Common name
	Acaena echinata	Sheep's Burr
*	*Agrostis capillaris*	Brown-top Bent
*	*Arctotheca calendula*	Capeweed
	Anthosachne scabra s.l.	Common Wheat-grass
	Austrostipa bigeniculata	Kneed Spear-grass
	Austrostipa scabra subsp. *falcata*	Rough Spear-grass
	Austrostipa scabra subsp. *scrabra*	Rough Spear-grass
	Austrostipa spp.	Spear-grass
*	*Bromus diandrus*	Great Brome
*	*Bromus hordeaceus subsp. hordeaceus*	Soft Brome
*	*Callitriche palustris*	Swamp Water Starwort
	Calocephalus lacteus	Milk Beauty-heads
*	*Cirsium vulgare*	Spear Thistle
k	*Convolvulus angustissimus* subsp. *omnigracilis*	Slender Bindweed
*	*Cynodon dactylon*	Couch
	Dichondra repens	Kidney-weed
	Eleocharis acuta	Common Spike-sedge
*	*Erodium botrys*	Big Heron's-bill
	Eryngium ovinum	Blue Devil
	Eryngium vesiculosum	Prickfoot
*	*Helmintheca echinoides*	Ox-tongue
*	*Holcus lanatus*	Yorkshire Fog-grass
*	*Hordeum marinum*	Barley-grass
*	*Hordeum* spp.	Barley-grass
*	*Hypochaeris radicata*	Cat's Ear
*	*Juncus acutus* subsp. *acutus*	Spiny Rush

	Juncus flavidus	Gold Rush
	Juncus pallidus	Pale Rush
	Juncus subsecundus	Finger Rush
	Juncus spp.	Rush
	Lachnagrostis filiformis	Common Blown-grass
*	*Lagurus ovatus*	Hare's tail grass
	Leptorhynchos squamatus	Scaly Buttons
*	*Lolium perenne*	Perennial Ryegrass
	Lythrum hyssopifolia	Small Loosestrife
	Melicytus dentatus s.l.	Tree Violet
*	*Nassella trichotoma*	Serrated Tussock
	Oxalis perennans	Grassland Wood-sorrel
*	*Phalaris aquatica*	Toowoomba Canary-grass
	Poa labillardierei	Common Tussock-grass
	Poa rodwayi	Velvet Tussock-grass
*	*Romulea rosea*	Onion Grass
*	*Rumex crispus*	Curled Dock
*	*Rumex pulcher subsp. Pulcher*	Fiddle Dock
*	*Rumex* spp.	Dock
	Rytidosperma caespitosum	Common Wallaby-grass
	Rytidosperma duttonianum	Brown-back Wallaby-grass
	Rytidosperma racemosum var. racemosum	Slender Wallaby-grass
	Rytidosperma spp.	Wallaby-grass
*	*Silybum marianum*	Variegated Thistle
*	*Sonchus asper*	Prickly Sow-thistle
*	*Sonchus oleraceus*	Common Sow-thistle
	Themeda triandra	Kangaroo Grass
*	*Trifolium* spp.	Clover
*	*Trifolium subterraneum*	Subterranean Clover
	Veronica gracilis	Slender Speedwell
*	*Vulpia bromoides*	Squirrel-tail Fescue
*	*Vulpia* spp.	Fescue
*	*Xanthium spinosum*	Bathurst Burr

Appendix 2

Photos with description:

Site 1



Plate 1 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 1A, facing north-west (photo taken by Anna O'Brien 17/07/2017)

Site 2



Plate 2 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 2A, facing west (photo taken by Anna O'Brien 17/07/2017)



Plate 2 Fox den along Creek in between Sites 2A and 6A (photo taken by Anna O'Brien 17/07/2017)

Site 3



Plate 4 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 3A, facing north (photo taken by Anna O'Brien 17/07/2017)



Plate 5 Spiny Rush in Creek in between Sites 3A and 5A, facing east (photo taken by Anna O'Brien 17/07/2017)

Site 4



Plate 6 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 4A, facing west (photo taken by Anna O'Brien 17/07/2017)

Site 5



Plate 7 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 5A, facing north (photo taken by Anna O'Brien 17/07/2017)

Site 6



Plate 8 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 6A, facing west (photo taken by Anna O'Brien 17/07/2017)

Site 7



Plate 9 Plains Grassland (and EPBC Act Listed NTGVVP) vegetation, Site 7A, facing south (photo taken by Anna O'Brien 17/07/2017)



Plate 10 Eastern Boundary fence with Geggies Rd (left), facing south (photo taken by Anna O'Brien 17/07/2017). High cover of Toowoomba Canary-grass in road reserve (left). Plains Grassland (and EPBC Act Listed NTGVVP) vegetation in Site 7A (right).

Appendix L

Offset monitoring report for proposed offset site

Credit Site VC_CFL-3697_01

Offset Monitoring: Year 5 Vegetation Quality Assessment, Rokewood-Shelford Road, Rokewood, Victoria.



Prepared by Biodiversity Offsets Victoria Pty Ltd
on behalf of the Landowner

February 2025

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Cover Photos: *Natural Temperate Grassland of the Victorian Volcanic Plain* vegetation, and Golden Sun Moth and Striped Legless Lizard habitat, Site 7A, Rokewood-Shelford Road, Rokewood (photos taken by Anna O'Brien, 5/12/2024).

Disclaimer

Although Biodiversity Offsets Victoria Pty Ltd has taken all the necessary steps to ensure that this document is accurate, and in accordance with relevant legislation and policies, Biodiversity Offsets Victoria Pty Ltd does not accept responsibility for any damages or losses incurred as a result of actions that are undertaken as a result of either the report or its constituent parts.

1 Introduction

John Chatham engaged Biodiversity Offsets Victoria to conduct a vegetation quality assessment (VQA) at the established offset site: Credit Site VC_CFL-3697_01, Rokewood-Shelford Road, Rokewood, Victoria. This site was registered on the land title via a Section 69 (*Conservation, Forests and Lands Act 1987*) Agreement in July 2020 (Attachment 1), to protect and improve three Matters of National Environmental Significance (MNES) listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) for the purposes of providing a contiguous, 160.6337-hectare advanced offset for multiple impacts to these MNES. The MNES include the EPBC Act listed ecological community, *Natural Temperate Grassland of the Victorian Volcanic Plains* (NTGVVP), and habitat for two EPBC Act listed fauna species, Golden Sun Moth *Synemon plana* and Striped Legless Lizard *Delma impar*.

The *VC_CFL-3697_01 Landowner Agreement* registered on the land title (Attachment 1) includes a 10-year offset management plan currently being implemented. A VQA assessment is recommended to be undertaken in Year 5 to monitor the quality of NTGVVP, and habitat for Golden Sun Moth and Striped Legless Lizard across the entire offset site, and determine if the offset management is successfully protecting these MNES and achieving any improvement in their quality.

1.1 Matters of National Environmental Significance

Matters of National Environmental Significance (MNES) relevant to the impact and proposed offset are described below.

1.1.1 Natural Temperate Grassland of the Victorian Volcanic Plain

Natural Temperate Grassland of the Victorian Volcanic Plains (NTGVVP) is an ecological community listed as critically endangered under the EPBC Act. NTGVVP occurs on the fertile and poorly drained basalt soils in the Victorian Volcanic Plain bioregion that extends from the north and west of Melbourne to far-west Victoria (DCCEEW 2025a). It is dominated by native tussock-forming perennial grasses, including Kangaroo-grass *Themeda triandra*, Wallaby-grasses *Rytidospema* spp., Spear-grasses *Austrostipa* spp. and Tussock-grasses *Poa* spp., with native herbs, mostly from the daisy (*Asteraceae*), lily (*Anthericaceae, Asphodelaceae, Phormiaceae*), pea (*Fabaceae*) and orchid (*Orchidaceae*) families, occupying inter-tussock spaces. Native shrubs and trees are absent or sparse. NTGVVP is a dynamic and inherently variable ecological community. Its species richness and composition are subject to seasonal and climatic conditions, weather patterns, site and land management practices (TSSC 2008).

NTGVVP has been listed as critically endangered under the EPBC Act, as its original area of occupancy has reduced by more than 98% from clearance primarily for agriculture, including livestock grazing and cropping, and urbanisation. Remaining areas of NTGVVP continue to be threatened by these land uses, weed invasion, fragmentation and other pressures (TSSC 2008: CES 2018).

1.1.2 Golden Sun Moth

The Golden Sun Moth is listed as Critically Endangered under the EPBC Act. It is a medium-sized, diurnal moth with a wingspan up to 3.4 cm. They spend most of their lifecycle underground in a larval stage, feeding on the roots of Wallaby-grasses *Rytidospema* spp. However, the species may also inhabit degraded grasslands dominated by the exotic Chilean Needle-grass *Nassella neesiana*, a Weed of National Significance (WONS). Adults emerge during summer to breed, with males flying approximately one metre above the grass actively searching for a female. Adult moths generally survive for one to four days as they lack functional mouth parts (DAWE 2021).

The distribution of Golden Sun Moths corresponds with native temperate grassland and open grassy woodlands communities dominated by Wallaby-grasses across NSW, ACT, Victoria and South Australia (DCCEEW 2025b). The species has been listed as Critically Endangered under the EPBC Act as it has undergone a significant reduction in its area of occupancy and is dependent on grassland habitat which is susceptible to ongoing threats.

Other typical native grasses in Golden Sun Moth habitat may include Spear-grasses, Tussock Grasses, Weeping Grass *Microlena* spp., Wire-grasses *Aristida* spp. and Kangaroo Grass. Habitat containing a high cover (≥40%) of suitable host plants combined with well drained and north facing sites, with minimal shading, are preferred by the species. Areas of bare or sparsely covered ground between grass tussocks (inter-tussock spaces) are important in helping males locate females during the breeding period (October-January) (DAWE 2021).

1.1.3 Striped Legless Lizard

The Striped Legless Lizard is listed as Vulnerable under the EPBC Act. It is a member of the family Pygopodidae, the legless or flap footed lizards (Cogger 2000). It is up 300mm in length and is typically pale grey-brown above and cream below, with the head darker than the body and a series of stripes along the sides of the body which become diagonal bands on the tail. Other distinguishing features of this species are visible ear openings, a rounded tongue and the presence of scaly hind limb flaps.

The Striped Legless Lizard inhabits natural temperate grasslands, often with rocky rises, and nearby grassy woodlands and introduced pastures, in Victoria, Eastern South Australia and Southern New South Wales. It utilises rocks, soil cracks, burrows and grass tussocks for sheltering (Coulson 1990). The species has been listed as Vulnerable under the EPBC Act as it is dependent on grassland habitat that is under threat of ongoing loss, degradation and fragmentation (TSSC 2016).

2 Methodology

A site assessment was undertaken on 5 December 2024 by Anna O'Brien (Vegetation Quality Assessor Accreditation SA17) at the offset site (VC_CFL-3697_01), Rokewood-Shelford Road, Rokewood, Victoria (Figure 1). The site was traversed on foot to take photos and record the following observations:

- Native and introduced flora species present;
- Cover of bare ground, organic litter, and native and introduced vegetation, including native grasses and herbs, woody and herbaceous weeds, and high threat herbaceous weeds; and,
- Review the extent of remnant patches of native vegetation.

In accordance with the requirements of the *VC_CFL-3697_01 Landowner Agreement*, the total offset site has been divided into 7 different site numbers relevant to the property's internal parcel boundaries and excluded areas (Table 1; Figure 1). A Vegetation Quality (Habitat Hectare) Assessment (VQA) was undertaken within each site in accordance with the Victorian Department of Energy, Environment and Climate Action (DEECA) VQA methodology (DSE 2004; Parkes et al 2003) in all remnant vegetation, and the vegetation quality score was determined accordingly.

The vegetation and habitat assessment data was reviewed against the condition thresholds for NTGVVP, and habitat for Golden Sun Moth and Striped Legless Lizard, to determine whether the vegetation and habitat continue to qualify for these MNES.

2.1 Limitations

As with any ecological assessment of terrestrial flora and fauna species and communities, the findings were limited by the timing and short duration of the assessment. The assessment was undertaken over one day in early Summer. This is an optimal period to detect the diversity of native grass and herb species. Notwithstanding these limitations, the information collected during the site assessment is adequate to achieve the purposes of the VQA required.

3 Results

3.1. Vegetation Description

A total of 39 indigenous flora species and 36 introduced flora species were recorded during the site assessment (Appendix 1). These included two new native grass species, being Windmill Grass *Chloris truncata* and Weeping Grass *Microlaena stipoides*, and six new native herb species, being Smooth Willow-herb *Epilobium billardiereanum*, Common Cudweed *Euchiton involucratus*, *Crassula* spp., Jersey Cudweed *Laphangium luteoalbum*, Poison Lobelia *Lobelia pratioides* and Wiry Dock *Rumex dumosus*, not previously detected in the site (see Attachment 2). Three native herb species that had been previously recorded in the offset site, Lesser Joyweed *Alternanthera denticulata*, Beauty-heads *Calocephalus* spp. and Slender Speedwell *Veronica gracilis*, were also not detected during the current site assessment. The absence of Lesser Joyweed and Slender Speedwell may have been due to the drier conditions experienced in 2024 (BOM 2025), as well as the short duration of the assessment. Three new low-threat grassy or herbaceous weed species, being Sheep Sorrel *Acetosella vulgaris*, Tiny Flat-sedge *Isolepis levynsiana* and Willow-leaf Lettuce *Lactuca saligna*, were also detected during the site assessment at very low cover (<1%).

The extent of remnant vegetation previously detected on site, being 160.6337 hectares of remnant Plains Grassland (EVC 132) secured on-title via a Section 69 Agreement, was identified during the VQA assessment (Plates 1-5; Figure 1). Plains Grassland vegetation was dominated by native grasses, including Spear-grass, Wallaby-grass, Kangaroo Grass, Tussock-grass, Common Wheat-grass *Anthosachne scabra* and Common Blown-grass *Lachnagrostis filiformis*, with Rushes *Juncus* spp. and scattered native herbs, including Sheep's Burr *Acaena echinata*, Bindweed *Convolvulus* spp., Kidney-weed *Dichondra repens, Eryngium* spp., Varied Rapwort *Haloragis heterophylla*, Scaly Buttons *Leptorhynchos squamatus* Grassland Wood-sorrel *Oxalis perennans* and Slender Dock *Rumex Brownii*. The occasional Tree Violet *Melicytus dentatus* shrub occurs around the property boundaries. The cover of bare ground varied from 15-30% and organic litter from 10-15%.

The offset site also comprised a varying cover (10-50%) of weeds, including introduced pasture grasses, such as Browntop Bent *Agrostis capillaris*, Bearded Oat *Avena barbata*, Soft Brome *Bromus hordeaceus*, Couch *Cynodon dactylon*, Yorkshire Fog *Holcus lanatus*, Barley-grass *Hordeum* spp., Hare's tail grass *Lagurus ovatus*, Perennial Rye-grass *Lolium perenne*, Paspalum *Paspalum dilatatum*, Toowoomba Canary-grass *Phalaris aquatic*, and Fescue *Vulpia* spp., scattered herbaceous weeds, including Capeweed *Arctotheca calendula*, Cat's Ear *Hypochaeris radicata*, Flaxleaf Fleabane *Erigeron bonariensis*, Big Heron's-bill *Erodium botrys*, Dock *Rumex* spp., Sow-thistle *Sonchus* spp. and Clover *Trifolium* spp, and a number of declared noxious weeds and one Weed of National Significance (WoNS), including Spear Thistle *Cirsium vulgare*, Spiny Rush *Juncus acutus* subsp. *acutus*, Serrated Tussock *Nassella trichotoma* (WoNS), Onion Grass *Romulea Rosea*, Variegated Thistle *Silybum marianum* and Bathurst Burr *Xanthium spinosum* (Plate 5; Appendix 1).

An ecological burn was undertaken in a mosaic pattern across approximately 8 hectares of Sites 2A and 3A in early Spring 2023, followed by the dispersal of locally sourced native Kangaroo Grass seed. During the current assessment, these areas were more open, providing more recruitment area in site 2A and 3A. Native grasses,

including Kangaroo Grass, Wallaby-grass and some Spear-grass, were recruiting in these burnt areas (approximately 60-80% of vegetative cover), as well as introduced grasses and scattered herbaceous weeds, such as Fescue (Plate 3).



Plate 1 NTGVVP vegetation, and Golden Sun Moth and Striped Legless Lizard habitat, dominated by native Spear-grass, Kangaroo Grass and Wallaby-grass, Site 5A (photo taken by Anna O'Brien, 5/12/2024)



Plate 2 NTGVVP vegetation, and Golden Sun Moth and Striped Legless Lizard habitat, Site 4A (photo taken by Anna O'Brien, 5/12/2024)



Plate 3 Regenerating native grassland flora post-burn 2023, Site 3A (photo taken by Anna O'Brien, 5/12/2024)



Plate 4 Slender Bindweed and Spear-grass, Site 6A (photo taken by Anna O'Brien, 5/12/2024)



Plate 5 Toowoomba Canary-grass, Site 1A (photo taken by Anna O'Brien, 5/12/2024)

3.2. Vegetation Quality Assessment

Table 1 outlines the results of the VQA undertaken in accordance with Habitat Hectare methodology (Appendix 2; DSE 2004). The vegetation and habitat quality of all Plains Grassland vegetation was 6 out of 10 (or 60.52 out of 100) at the beginning of the offset (see Attachment 2 for baseline VQA results). Since the commencement of the offset, the habitat (quality) score has increased in all sites. However, this improvement varies across the site, and has not been consistent over the first 4 ½ years of the offset, as three of the seven sites have experienced a small decline since the Year 2 VQA was undertaken (Biodiversity Offsets Victoria 2022).

All sites have maintained their high "Understorey", "Recruitment" and "Organic Matter" scores since the Year 2 VQA. Site 6A scored the highest Understorey score of 20 due to the presence of all Plains Grassland vegetation life-forms, including the large herb life-form, with the presence of native Slender Dock *Rumex brownii*. This species was not recorded in the other sites. Nevertheless, the increasing number of native grassland flora species recorded in all sites however demonstrates an ongoing improvement native flora diversity throughout the offset site (Appendix 1).

The Recruitment score was high across all sites due to the availability of suitable recruitment area (15-30%), with the exception of the small site 4A (0.1196 ha) which supported a lower recruitment area of 10% (Plate 2). The recruitment area is the cumulative percentage cover of bare ground, bryophytes, lichens and soil crust (Appendix 2; DSE 2004). Due to the location of site 4A on the north-western side of a dam, access by livestock is limited to a narrow walkway on the western boundary of the dam, and sheep grazing therefore occurs less in this area. Other management strategies may be considered if necessary, such as ecological burning and/or the use of temporary fencing to undertake crash grazing. The Organic Litter score has remained high across all sites due to the good cover of mostly native organic litter.

The "Lack of Weeds" score varied between sites due to the varying cover (10-50%) of introduced grasses and herbaceous weeds, and the dominance of this cover by high threat perennial grasses, particularly Toowoomba Canary-grass *Phalaris aquatica* and Yorkshire Fog, in sites 1A and 2A. The increased cover of weeds in sites 1A, 2A and 3A (30-50%) has led to a decline in the Lack of Weeds score since the Year 2 VQA, and therefore a decline in the overall vegetation and habitat quality score in these sites. Above average rainfall experienced throughout 2022 and 2023 may have favoured the recruitment of introduced species (BOM 2025). And while vegetation quality and composition (including the cover of native versus introduced flora) is expected to fluctuate seasonally and in response to seasonal variations, management should be adapted to respond to these changes as required. The ongoing spread of Toowoomba Canary-grass and other high threat introduced grasses in sites 1A, 2A and 3A is of significant concern and should be targeted through adaptive management to reverse the recent decline in the Lack of Weeds score.

The Lack of weeds score in site 5A increased to 9 since the Year 2 VQA due to the increasing cover (65-90%) of native flora. The Lack of weeds score in all other sites has remained high at 9, due to the low cover of weeds (10-35%) and lower proportion of high threat weeds species. A small (1pt out of 100) improvement also occurred in the "Neighbourhood" score across all sites due to the improvement in cover of native grassland vegetation on neighbouring properties.

Table 1. Year 5 Vegetation quality assessment results, 5 December 2024.

Site Number			**1 / A**	**2 / A**	**3 / A**	**4 / A**	**5 / A**	**6 / A**	**7 / A**
Area (ha)			**22.0275**	**36.8032**	**27.9037**	**0.1196**	**34.0976**	**21.1780**	**18.5041**
MNES			**NTGVVP GSM SLL**	**NTGVVP GSM SLL**	**NTGVVP GSM SLL**	**NTGVVP GSM SLL**	**NTGVVP GSM SLL**	**NTGVVP GSM SLL**	**NTGVVP GSM SLL**
EVC name			**PG**	**PG**	**PG**	**PG**	**PG**	**PG**	**PG**
Bioregion			**VVP**	**VVP**	**VVP**	**VVP**	**VVP**	**VVP**	**VVP**
		Max Score	**Score**	**Score**	**Score**	**Score**	**Score**	**Score**	**Score**
Site Condition Score	Large Old Trees	10	NA	NA	NA	NA	NA	NA	NA
	Canopy Cover	5	NA	NA	NA	NA	NA	NA	NA
	Understorey	25	15	15	15	15	15	20	15
	Lack of Weeds	15	4	4	6	9	9	9	9
	Recruitment	10	10	10	10	6	10	10	10
	Organic Matter	5	5	5	5	5	5	5	5
	Logs	5	NA	NA	NA	NA	NA	NA	NA
	Standardiser		1.36	1.36	1.36	1.36	1.36	1.36	1.36
	Total Site Condition Score	**75**	**46.24**	**46.24**	**48.96**	**47.6**	***53.04***	**59.84**	**53.04**
Landscape value	Patch Size	10	8	8	8	8	8	8	8
	Neighbourhood	10	6	6	6	6	6	6	6
	Distance to Core	5	4	4	4	4	4	4	4
	Total Landscape Score	**25**	**18**	**18**	**18**	**18**	**18**	**18**	**18**
Habitat points out of 100		**100**	**64.24**	**64.24**	**66.96**	**65.6**	**71.04**	**77.84**	**71.04**
Habitat (Quality) Score out of 10		**10**	**6**	**6**	**7**	**7**	**7**	**8**	**7**

Note: NTGVVP=*Natural Temperate Grassland of the Victorian Volcanic Plain*, GSM = Golden Sun Moth habitat, SLL = Striped Legless Lizard habitat, PG = EVC 132_61 *Heavier-soils* Plains Grassland.

3.3. Matters of National Environmental Significance

All Plains Grassland vegetation assessed met the condition thresholds to qualify for the EPBC Act listed ecological community, NTGVVP, and provide habitat for EPBC listed species, Striped Legless Lizard and Golden Sun Moth. Tables 2, 3 and 4 below outline the condition thresholds for these matters of environmental significance, and how the offset meets these condition thresholds.

Table 2. Response to Condition Thresholds for EPBC Act listed *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP) in the offset (TSSC 2008).

	NTGVVP Condition Thresholds	Offset Site
Vegetation Description	Natural Temperate Grassland of the Victorian Volcanic Plain is mostly limited to a ground layer of grasses and herbs. Large shrubs and trees are absent to sparse. The ground layer is dominated by native tussock-forming perennial grasses with a variety of herbs, mostly from the daisy (*Asteraceae*), lily (*Anthericaceae, Asphodelaceae, Phormiaceae*), pea (*Fabaceae*) and orchid (*Orchidaceae*) families, occupying the spaces among grass tussocks. The main grass species present are Kangaroo-grass *Themeda triandra*, particularly on drier sites, Wallaby-grasses *Rytidosperma* spp., Spear-grasses *Austrostipa* spp. and Tussock-grasses *Poa* spp.. Low gradient ephemeral and intermittent drainage lines may be dominated by a dense sward of the Tussock-grass *Poa labillardierei*.	This site supports native grassland vegetation dominated (>50% cover) by the following native grasses: Spear-grasses, Wallaby-grasses, Tussock-grass and Kangaroo Grass. Other native grasses present include Common Wheat-grass, Common Blown-grass Weeping Grass and Windmill Grass. The site also contains Rushes and native herbs, including Blue Devil, Prickfoot, Jersey Cudweed, Scaly Buttons, Sheep's Burr, Grassland Wood-sorrel, Kidney-weed, Varied Raspwort and Bindweed (Appendix 1).
Ecological Vegetation Classes (EVCs)	The native vegetation within the site includes one or both of the following EVCs: Plains Grassland (EVC 132) or Creekline Tussock Grassland (EVC 654).	The site supports Plains Grassland (EVC 132) vegetation.
Bioregions	Site is in the Victorian Volcanic Plain or near to the Victorian Volcanic Plain (Central Victorian Uplands, Dundas Tablelands and Otway Plain Bioregions)	The site is within the Victorian Volcanic Plain
Size of Patch	If grassland remnant is ≤1 hectare, grassland patch needs to be at least 0.05 hectares in size with no more than 5% canopy cover of trees or shrubs. If grassland remnant is >1 hectare, grassland patch needs to be at least 0.5 hectares in size with no more than 2 trees per hectare.	The site forms part of a 315-hectare patch of native grassland, with no canopy trees and <1% cover of native shrubs
Condition Thresholds	One or more of the following native grass genera accounts for at least 50% of the perennial ground layer cover: *Themeda*, *Rytidosperma*, *Austrostipa*, *Poa* and/or *Microleana*. OR Native wildflowers account for 50% or more of the total vegetation from September to February. OR Non-grassy weeds account for less than 30% of the total vegetation cover at any time of the year.	Perennial native grass genera, including *Themeda*, *Rytidosperma*, *Austrostipa* and *Poa*, make up for more than 50% of the vegetative cover across the site.
Additional Characteristics	The conservation value of a patch of the ecological community is enhanced if it shows any of the following features: ▪ A high native plant species richness; ▪ Large patch size or connectivity with a large patch of remnant vegetation; ▪ Minimal weed invasion; ▪ Presence of threatened plant and/or animal species; ▪ Presence of natural exposed rock platforms and outcrops; or ▪ Presence of mosses, lichens or a soil crust on the soil surface.	The site forms part of very large patch of native grassland vegetation, with embedded and surface rock and a diversity of native plant species. This site also provides habitat for EPBC listed Golden Sun Moth and Striped Legless Lizard.

Table 3. Response to Habitat Condition Thresholds of the EPBC Act listed Striped Legless Lizard *Delma impar* in the offset (TSSC 2016).

	Striped Legless Lizard Habitat Condition Thresholds	Offset Site
Location	Important populations known to occur in Victoria: -North Melbourne, Vic -West Melbourne, Vic -East and West Volcanic Plains, Vic -North Ballarat, Vic -East Grampians, Vic -Northern alluvial plains, Vic -North eastern slopes, Benalla, Vic -Horsham, Vic -North eastern slopes, Alexandra, Vic -South-east Bendigo, Vic	The site is located in the Victorian Volcanic Plain
Vegetation Type	Native Grasslands associated with the following EPBC Act listed ecological communities: *-Natural Temperate Grassland of the Victorian Volcanic Plain* *-Grassy Eucalypt Woodland of the Victorian Volcanic Plain* *-Natural Temperate Grassland of the South Eastern Highlands* *-White Box-Yellow Box-Blakely's Red Gum Grassy Woodland*	The site supports *Natural Temperate Grassland of the Victorian Volcanic Plain*
Habitat Quality	Native grassland with a high structural complexity and floristic diversity to provide for breeding, foraging and refuge, including tussock grasses, surface rocks, and anthropod burrows or cracking soils	The site supports native grasslands with structural complexity and floristic diversity, including native tussock grasses, non-tufted grasses, rushes, herbs, surface rock and cracking soils.
Size of Habitat	Site forms part of a large (>0.5 hectares, non-urban) area of habitat and is connected to breeding habitat or areas subject to conservation management.	The site forms part of a large 315-hectare patch of native grassland vegetation, providing connectivity between breeding, foraging and refuge habitat, and will be subject to conservation management.
Species Presence	Appropriate targeted surveys have been undertaken (SEWPaC 2011), which confirmed presence of an important population of Striped Legless Lizards. OR	A total of 89 Striped Legless Lizards have been recorded over four monitoring seasons across the entire (315 hectare) patch of native grassland vegetation since 2019, with 35 recorded in the offset site (Nature Advisory 2020; 2021a; 2021c; 2022a; 2022c; 2024a; 2024c).
	Previous records of Striped Legless Lizards show a high density of lizards on site or nearby, and the site is large in size and has complex grass structures and refuges.	Striped Legless Lizards have also been previously recorded within 5km of the offset (DEECA 2025).
Security	Site to be secured under an on-title security agreement to protect the site from development and to manage it for conservation in perpetuity.	The site has been secured under a Section 69 (*Conservation, Forests and Lands Act 1987*) Agreement for the purposes of offsetting impacts to MNES.

Table 4. Response to Habitat Condition Thresholds of the EPBC Act listed Golden Sun Moth *Synemon plana* in the offset (DoE 2013; TSSC 2002).

	Golden Sun Moth Habitat Condition Thresholds	Offset Site 1
Location	Important populations known to occur in Victoria: -Victorian Midlands -Southern Volcanic Plain -South East Coastal Plain IBRA Bioregions -Port Phillip and Westernport CMA -Glenelg Hopkins CMA -North Central CMA	The site is located in the Southern Victorian Volcanic Plain
Vegetation Type	Native Grasslands associated with the following EPBC Act listed ecological communities in Victoria: *-Natural Temperate Grassland of the Victorian Volcanic Plain* *-Grassy Eucalypt Woodland of the Victorian Volcanic Plain* *-White Box-Yellow Box-Blakely's Red Gum Grassy Woodland* *-Grey Box (Eucalyptus macrocarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia*	The site supports *Natural Temperate Grassland of the Victorian Volcanic Plain*
Habitat Requirements	Native grassland with at least 40% cover of Wallaby Grasses *Rytidosperma* spp. and/or Spear Grasses *Austrostipa* spp. OR Introduced pastures with at least 40% cover of Chilean Needle Grass Nasella neesiana.	The site supports native grasslands with at least 40% cover of Wallaby Grass and Spear Grass species. No Chilean Needle Grass was recorded at the site.
Size of Habitat	Site forms part of a large area (minimum area not known) of habitat, or provides connectivity to larger areas, and is subject to conservation management.	The site forms part of a large 315-hectare patch of native grassland vegetation, and will be subject to conservation management to protect MNES.
Species Presence	Appropriate targeted surveys have been undertaken (DSE 2010), which confirmed presence of an important population of Golden Sun Moth. OR Previous records of Golden Sun Moth show a high density of moths within the vicinity, and the site is large in size and has at least 40% cover of native Wallaby and/or Spear Grasses, or introduced Chilean Needle Grass.	A total of 72 Golden Sun Moths have been recorded across the contiguous (315 hectare) patch of native grassland vegetation since 2018, with 26 recorded in the offset site (Biodiversity Offsets Victoria 2020; Nature Advisory 2021b, 2021d, 2022b; 2022d; 2024b; 2024d). Golden Sun Moths have also been previously recorded within 5km of the offset (DEECA 2025).
Security	Site to be secured under an on-title security agreement to protect the site from development and to manage it for conservation in perpetuity.	The site has been secured under a Section 69 (*Conservation, Forests and Lands Act 1987*) Agreement for the purposes of offsetting impacts to MNES.

4 Conclusion

The findings of the Year 5 VQA show that the quality of NTGVVP vegetation, and habitat for Golden Sun Moth and Striped Legless Lizard, has improved by 0-2 points out of 10 since the commencement of the offset. However, this improvement has not been consistent across the site, and a small decline in quality occurred in three of the seven sites since the Year 2 VQA.

Since the commencement of the offset:

1. The diversity of native grasses and herbs has increased throughout the offset site;
2. 21.178 hectares (site 6A) has improved in quality from 6/10 to 8/10;
3. 80.625 hectares (sites 3A, 4A, 5A and 7A) has improved in quality from 6/10 to 7/10; and
4. 58.8307 hectares (sites 1A and 2A) has maintained a quality score of 6/10.

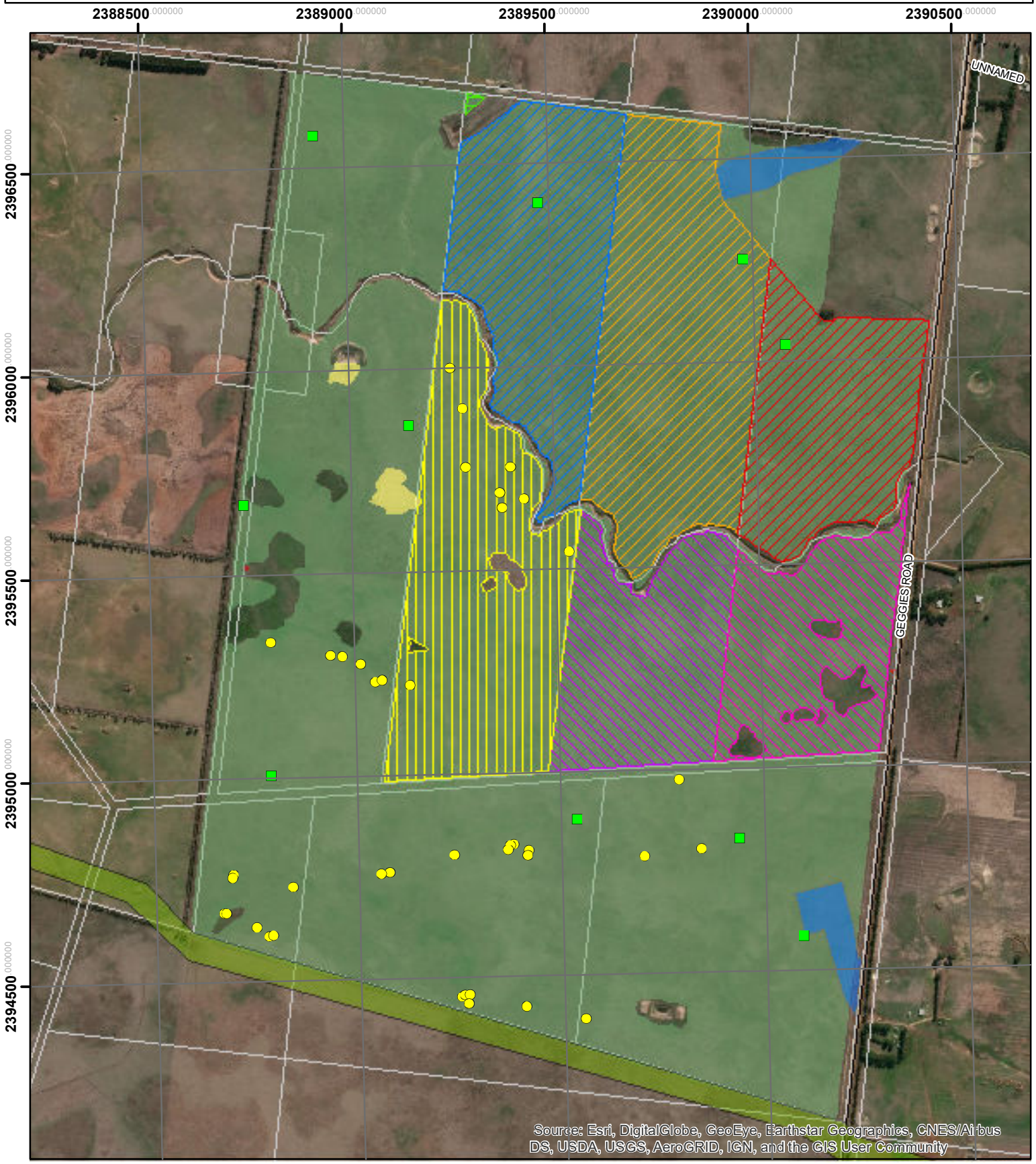
Since the Year 2 VQA:

1. The diversity of native grasses and herbs has increased throughout the offset site;
2. The Lack of Weeds score declined in sites 1A, 2A and 3A due to the increasing cover of introduced grasses, in particular Toowoomba Canary-grass in sites 1A and 2A;
3. The Lack of Weeds score improved in site 5A due to the increasing cover of native grassland flora, and low weed cover; and,
4. The neighbourhood score improved slightly for all sites due to the improvement in native grassland vegetation cover on neighbouring properties.

Fluctuations in native grassland composition and quality in response to seasonal variations are normal in grassland ecosystems. The wet conditions in 2022 and 2023 would have also favoured the germination of introduced pasture grasses and herbaceous weeds, thereby requiring additional weed and introduced biomass control during and post these periods. The increasing cover of introduced grasses in sites 1A, 2A and 3A is concerning and should be targeted through adaptive management to reverse the recent decline in the Lack of Weeds score. Additional biomass control could also be considered in site 4A to provide more recruitment area for native flora and inter-tussock space for the Golden Sun Moth breeding season.

Figures

AERIAL PLAN OVERVIEW
CFL-3697_01 Sites 01, 02, 03, 04, 05, 06, 07



Habitat Sites

- 1A
- 2A
- 3A
- 4A
- 5A
- 6A
- 7A
- Easement
- Water Bore Exclusion Zone (15m x 15m)
- Wind Turbine Exclusion Zone
- Seasonal Herbaceous (Freshwater) Wetland of the Temperate Lowland Plains
- Natural Temperate Grassland of the Victorian Volcanic Plain
- Golden Sun Moth Records
- Striped Legless Lizard Records

N

0 75 150 300 450 600 Metres

Prepared by GeoEccentric on behalf of Biodiversity Offsets Victoria 07/04/2020

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Appendices

Appendix 1. Flora Species Recorded

[#] – Declared Noxious Weed of Victoria
[W] – Weed of National Significance

Scientific Name	Common Name
Indigenous Species	
Acaena echinata	Sheep's Burr
Anthosachne scabra s.l.	Common Wheat-grass
Austrostipa bigeniculata	Kneed Spear-grass
Austrostipa scabra subsp. *falcata*	Rough Spear-grass
Austrostipa spp.	Spear-grass
Chloris truncata	Windmill Grass
Convolvulus angustissimus subsp. *angustissimus*	Australian Bindweed
Convolvulus angustissimus subsp. *omnigracilis*	Slender Bindweed
Crassula spp.	Crassula
Dichondra repens	Kidney-weed
Eleocharis acuta	Common Spike-sedge
Epilobium billardiereanum	Smooth Willow-herb
Eryngium ovinum	Blue Devil
Eryngium vesiculosum	Prickfoot
Euchiton involucratus	Common Cudweed
Haloragis heterophylla	Varied Raspwort
Juncus flavidus	Gold Rush
Juncus holoschoenus	Joint-leaf Rush
Juncus pallidus	Pale Rush
Juncus subsecundus	Finger Rush
Juncus spp.	Rush
Lachnagrostis filiformis	Common Blown-grass
Laphangium luteoalbum	Jersey Cudweed
Leptorhynchos squamatus	Scaly Buttons
Lobelia pratioides	Poison Lobelia
Lythrum hyssopifolia	Lesser Loosestrife
Melicytus dentatus s.l.	Tree Violet
Microlaena stipoides	Weeping Grass
Oxalis perennans	Grassland Wood-sorrel
Poa labillardierei	Common Tussock-grass
Poa sieberiana var. *sieberiana*	Grey Tussock-grass
Rumex brownii	Slender Dock
Rumex dumosus	Wiry Dock
Rytidosperma caespitosum	Common Wallaby-grass

Rytidosperma duttonianum	Brown-back Wallaby-grass
Rytidosperma racemosum var. *racemosum*	Slender Wallaby-grass
Rytidosperma spp.	Wallaby-grass
Schoenus apogon	Common Bog-rush
Themeda triandra	Kangaroo Grass
Introduced Species	
Acetosella vulgaris	Sheep Sorrel
Agrostis capillaris	Brown-top Bent
Arctotheca calendula	Capeweed
Avena barbata	Bearded Oat
Bromus hordeaceus	Soft Brome
# *Cirsium vulgare*	Spear Thistle
Cynodon dactylon	Couch
Erigeron bonariensis	Flaxleaf Fleabane
Erodium botrys	Big Heron's-bill
Holcus lanatus	Yorkshire Fog-grass
Hordeum marinum	Barley-grass
Hordeum spp.	Barley-grass
Hypochaeris radicata	Cat's Ear
Isolepis levynsiana	Tiny Flat-sedge
# *Juncus acutus* subsp. *acutus*	Spiny Rush
Lactuca saligna	Willow-leaf Lettuce
Lagurus ovatus	Hare’s tail grass
Lolium perenne	Perennial Ryegrass
# W *Nassella trichotoma*	Serrated Tussock
Paspalum dilatatum	Paspalum
Phalaris aquatica	Toowoomba Canary-grass
# *Romulea rosea*	Onion Grass
Rumex crispus	Curled Dock
Rumex pulcher subsp. *Pulcher*	Fiddle Dock
Rumex spp.	Dock
Sonchus asper	Prickly Sow-thistle
Sonchus oleraceus	Common Sow-thistle
# *Silybum marianum*	Variegated Thistle
Trifolium spp.	Clover
Trifolium angustifolium var. *angustifolium*	Narrow-leaf Clover
Trifolium subterraneum	Subterranean Clover
Vulpia bromoides	Squirrel-tail Fescue
Vulpia spp.	Fescue
# *Xanthium spinosum*	Bathurst Burr

Appendix 2. Treeless Vegetation Quality (Habitat Hectares) Assessment Scoring Framework.

Treeless Vegetation Quality Field Assessment Sheet

Version 1.4 - July 2009

Department of Sustainability and Environment

Site Name/No. ..... Location ..... Date .....

Assessor(s) ..... Map Name/No. ..... AMG / MGA .....

Tenure ..... EVC ..... Bioregion .....

---------- 'Site Condition Score' ----------

Understorey Life forms

LF Code from EVC benchmark	# spp observed / Benchmark spp.	% cover observed / Benchmark % cover	Present (✓)	Modified (✓)
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		
	/	/		

Present	For life forms with benchmark cover of < 10%, considered 'present' if • any specimens are observed. For life forms with benchmark cover of ≥ 10%, considered 'present' if • the life form occupies at least 10% of benchmark cover.
Modified (apply only where life form is 'present')	For life forms with benchmark cover of <10%, then considered substantially 'modified' if the life form has either: • < 50% of the benchmark species diversity; or • no reproductively-mature specimens are observed. For life forms with benchmark cover of ≥ 10%, then considered substantially 'modified' if the life form has either: • < 50% of benchmark cover; or • < 50% of benchmark species diversity; or • ≥ 50% of benchmark cover due largely to immature canopy specimens but the cover of reproductively-mature specimens is < 10% of the benchmark cover.

Understorey *Score*

Category & Description		
All strata and Life forms effectively absent		0
Up to 50% of life forms present		5
≥ 50% to 90% of Life forms present	• of those present, ≥ 50% substantially modified	10
	• of those present, < 50% substantially modified	15
≥ 90% of Life forms present	• of those present, ≥ 50% substantially modified	15
	• of those present, < 50% substantially modified	20
	• of those present, none substantially modified	25

Lack of Weeds *Score*

Category & Description	*'high threat' weeds**		
	None	*≤ 50%*	*> 50%*
> 50% cover of weeds	4	2	0
25 - 50% cover of weeds	7	6	4
5 - 25% cover of weeds	11	9	7
< 5% cover of weeds**	15	13	11

* proportion of weed cover due to 'high threat' weeds - see EVC benchmark for guide.

'High threat' weed species are defined as those introduced species (including non-indigenous 'natives') with the ability to out-compete and substantially reduce one or more indigenous life forms in the longer term assuming on-going current site characteristics and disturbance regime.

The EVC benchmark lists typical weed species for the EVC in the bioregion and provides an estimate of their 'invasiveness' and 'impact'. In general, those weed species considered to have a *high impact* are considered *high threat* regardless of their invasiveness.

** if total weed cover is negligible (<1%) and high threat weed species are present then score '13'.

Recruitment *Score*

Percentage cover of recruitment area#	High native herb diversity*	Low native herb diversity*
0 to 5% cover	0	0
> 5% to 20% cover	6	3
> 20% to 40% cover	10	6
> 40% to 60% cover	6	3
> 60% to 90% cover	3	1
> 90% cover	0	0

\# cumulative % cover of bare ground, bryophytes/lichens and soil crust

* high native herb diversity defined as ≥ 50% of benchmark diversity within 'herb' life forms

Organic Litter *Score*

Category & Description	Dominated by native organic litter	Dominated by non-native organic litter
< 10% of benchmark cover	0	0
< 50% or > 150% of benchmark cover	3	2
≥ 50% or ≤ 150% of benchmark cover	5	4

Treeless Vegetation Quality Field Assessment Sheet

Version 1.4 - July 2009

Department of Sustainability and Environment

Logs (where applicable+)

Score ☐

Category & Description	Large logs present*	Large logs absent#
< 10% of benchmark length	0	0
< 50% of benchmark length	3	2
≥ 50% of benchmark length	5	4

Large logs defined as those with diameter ≥ 0.5 of benchmark large tree dbh.

\+ Applicable to some shrublands and scrubs (refer to EVC benchmark as a guide). Where applicable assess in accordance with the habitat hectares method for logs in treed EVCs. Note that most shrublands and scrubs do not contain a large tree component and hence a large log assessment is not required (refer to EVC benchmark as a guide). Such EVCs should be scored as if 'large logs present'.

* present if large log length is ≥ 25% of EVC benchmark log length.

\# absent if large log length is < 25% of EVC benchmark log length.

'Landscape Context Score'

Patch Size

Score ☐

Category & Description	
< 2 ha	1
Between 2 and 5 ha	2
Between 5 and 10 ha	4
Between 10 and 20 ha	6
≥ 20 ha, but 'significantly disturbed'*	8
≥ 20 ha, but not 'significantly disturbed'*	10

* 'significantly disturbed' defined as per RFA 'Old Growth' analyses eg. roading, coupes, grazing etc. – effectively most patches within fragmented landscapes.

Neighbourhood

Score ☐

Radius from site	% Native vegetation*	Weighting	
100 m		0.03	
1 km		0.04	
5 km		0.03	
	subtract 2 if the neighbourhood is 'significantly disturbed'		
		Add Values and 'round-off'	

* to nearest 20%.

Multiply % native vegetation x Weighting for each radius from the zone (eg. 40% x 0.03 = 1.2); then add values to obtain final Neighbourhood Value.

Distance to Core Area

Score ☐

Distance	Core Area not significantly disturbed*	Core Area significantly disturbed*
> 5 km	0	0
1 to 5 km	2	1
< 1 km	4	3
contiguous	5	4

* defined as per RFA 'Old Growth' analyses.

Final Habitat Score

Component	'Site Condition Score'							'Landscape Context Score'			Total
	Understorey	Lack of Weeds	Recruitment	Organic Litter	Logs (*if applicable*)	Standardiser	Subtotal	Patch Size	Neighbourhood	Distance to Core Area	100
Score											

Victoria The Place To Be

Attachments

Attachment 1: *VC_CFL-3697_01 Landowner Agreement*

Attachment 2: *Assessment Report for Credit Site VC_CFL-3697_01*

Appendix M

Location of previous contamination testing



MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

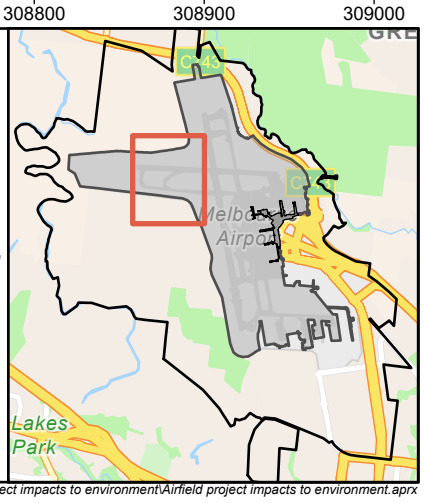
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MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

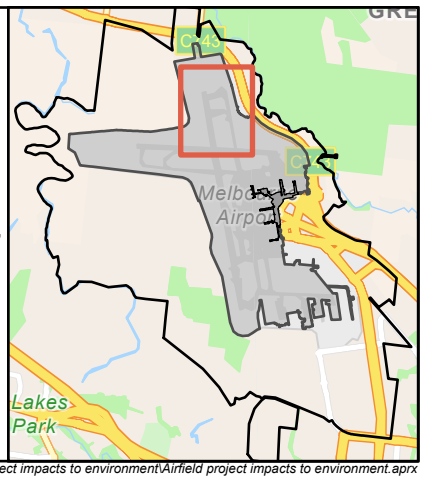
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MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

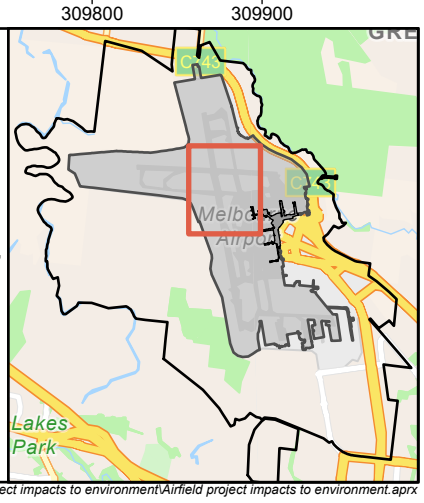
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MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
A - Airfield Renaming

Scale @ A3 1:4,450

0 60 120m

N

LEGEND

Airport Boundary

Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

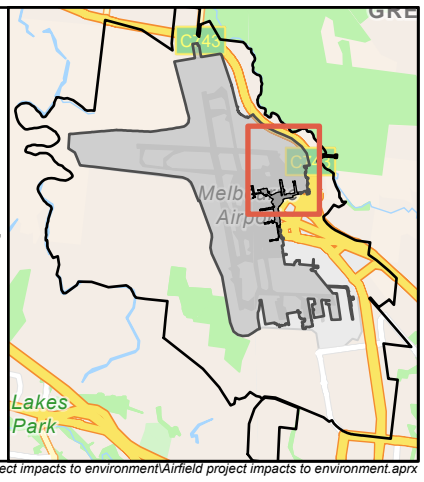
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5828900 5828800 5828700 5828600 5828500 5828400 5828300 5828200 5828100 5828000 5827900 5827800 5827700 5827600 5827500 5827400 5827300

MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
A - Airfield Renaming

Scale @ A3 1:4,860

0 75 150m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

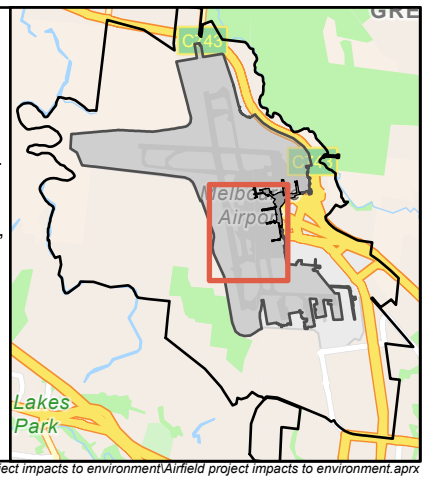
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MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
A - Airfield Renaming

Scale @ A3 1:5,970

0 90 180m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

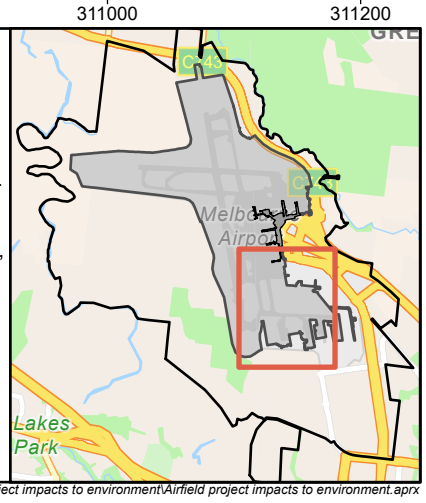
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MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
B - Melbourne Airport Pavement Maintenance Program 3 (MAPMP 3)

Scale @ A3 1:4,880

0 75 150m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

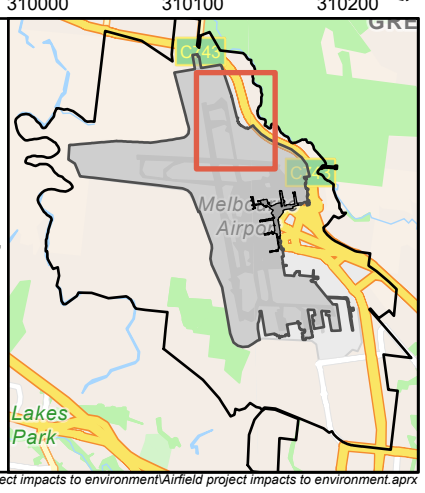
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5830400 5830200 5830000 5829800 5829600 5829400 5829200 5829000 5828800 5828600

MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
C - Runway 09/27 Overlay

Scale @ A3 1:5,970

0 90 180m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

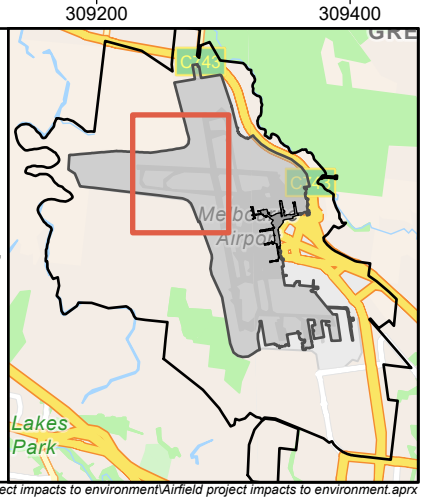
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5830400 5830200 5830000 5829800 5829600 5829400 5829200 5829000 5828800 5828600



309200 309400 309600 309800 310000 310200 310400 310600 310800

MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
C - Runway 09/27 Overlay

Scale @ A3 1:5,970

0 90 180m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

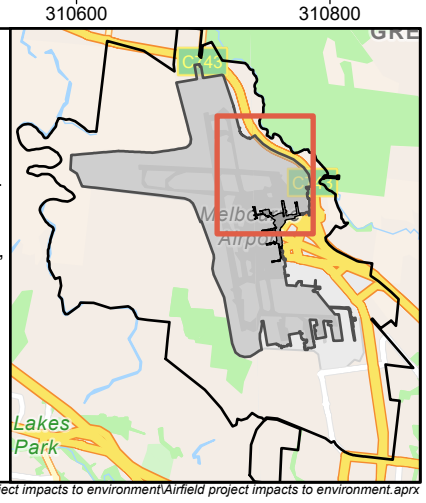
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309800 309900 310000 310100 310200 310300 310400 310500 310600 310700

MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
D - Hotel Apron South

Scale @ A3 1:3,490

0 50 100m

N

LEGEND

Airport Boundary

Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

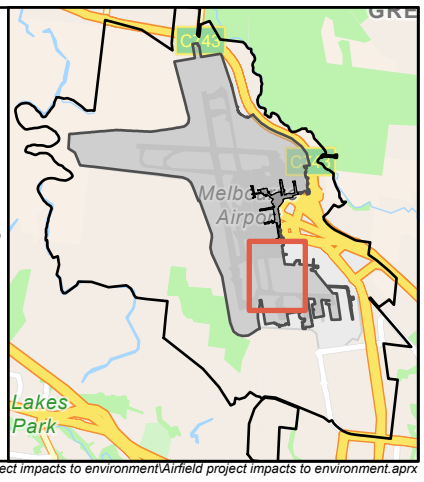
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MELBOURNE AIRPORT

Airfield Capital Projects

Contamination Testing Boreholes
E - Staff Car Park Extension

Scale @ A3 1:3,490

0 50 100m

N

LEGEND

- Airport Boundary
- Proposed Development / Disturbance Footprint (Full Extents)

Contamination Testing Boreholes

Report:

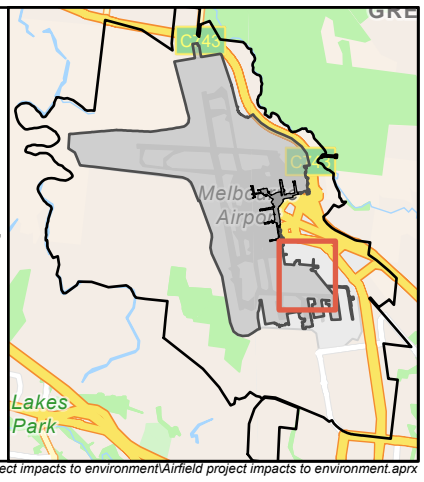
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Appendix N

CVs

Maya Brennan

Environmental Consultant

EDUCATION

- Bachelor of Environmental Science – RMIT University

KEY EXPERIENCE AREAS

- Contaminated Land and Remediation
- Environmental Monitoring

SUMMARY

Maya is an environmental scientist with 4 years' experience in the environmental and contaminated land industry, with direct experience in the coordination and supervision of sampling and analysis of soil, groundwater and asbestos. Maya has gained experience working across a range of different projects across VIC, WA, TAS and SA.

KEY PROJECTS

ENVIRONMENTAL MONITORING

- Provided assistance in ongoing PFAS monitoring programs for groundwater, surface water and sediment. The program spanned across a number of sites in VIC and NSW. The work involved the bi-annual collection of samples and collation of monitoring data to assess PFAS concentration trends and track changes in the risk profiles of contamination on or migrating from the sites.
- Conducted annual groundwater monitoring at a licensed major hazard facility in Victoria with a number of contamination issues. Ongoing monitoring reports were prepared for the client and EPA to assess changes in the risk profile to known sensitive receptors in the area.

DETAILED SITE INVESTIGATIONS

- Contributed to large-scale environmental site assessments to inform environmental audits at historic industrial depots in QLD and VIC. The work involved detailed ongoing assessment of hydrocarbon impacts to groundwater, surface water, soil and soil vapor.

REMEDIATION WORKS

- Contributed to active remediation of LNAPL at a licensed major hazard facility in Victoria in response to a pollution abatement notice. The works involved the use of active (submersible pump) and passive (product recovery canister) skimmers to remove the LNAPL.
- Coordinated the excavation, removal and validation of contaminated soils at a licensed landfill facility at numerous sites across VIC and WA.

OTHER KEY WORK

Maya has also gained experience in preparing other key documents for landfill sites and transfer stations including:

- RMMPs
- Risk Assessments
- Operations Audits

EMPLOYMENT HISTORY

2022 - 2024	Environmental Scientist at Cardno/Stantec
2024 - present	Environmental Consultant at Bajwa EnviroConsult

Amelia Donato

Principal Environmental Consultant

QUALIFICATIONS

- Bachelor of Engineering (Chemical) (Hons.) - University of Melbourne

KEY EXPERIENCE AREAS

- Environmental monitoring and compliance
- Environmental management systems
- Environmental audits
- Environmental approvals
- Landfill environmental management
- Environmental policy and strategy
- Site contamination assessments

PROFESSIONAL AFFILIATIONS

- Member, Waste Management and Resource Recovery Association of Australia (WMRR)
- Member, Australasian Land & Groundwater Association (ALGA)

SUMMARY

Amelia has over 17 years of experience in environmental management, as an environmental consultant and environmental advisor in industry. Her key skill sets include environmental monitoring and compliance, environmental auditing, environmental management systems and environmental approvals.

Amelia is passionate about driving innovative solutions with positive environmental outcomes. She is skilled at defining the core nature of issues, identifying and analysing root causes and developing effective improvement strategies.

Throughout her career, Amelia has worked on many complex and unique environmental approvals at the local, State and Commonwealth level.

KEY PROJECTS

Environmental monitoring and compliance, Environmental management systems

- As Senior Environment Advisor at Melbourne and Launceston Airports was responsible for annual environmental reporting, review and preparation of environmental management plans, assessing environmental compliance of operational and construction sites, preparing and maintaining EMS documentation.
- Project Director for various projects at Essendon and Moorabbin airports, including environmental site assessments, identification and assessment of PFAS contaminated soils, regular environmental monitoring, implementation of environmental strategy actions, preparation of environmental management plans and reviewing the implementation of construction environmental management plans for multiple development projects.

Environmental audits

- As Senior Environment Advisor at Melbourne and Launceston Airports was responsible for conducting internal environmental audits and preparing for external EMS audits.
- Auditor's assistant and Project Manager for the preparation of landfill operational audits for Clayton Regional landfill, Stawell landfill and Violet Town landfill.
- Auditor's assistant for construction verification audits, including Cell 2 (Stages 2 and 3) at the Hi-Quality landfill in Bulla, a new leachate pond at the Smythesdale landfill, Cell 1 Johns Land at the Dooen landfill, Cell 3 at the Koonwarra landfill and capping of the Trafalgar landfill.

Environmental approvals

- As Senior Environment Advisor at Melbourne and Launceston Airports had a key role in project environmental approvals including environmental inputs for Major Development Plans.

- Assistance with coordination of specialist environmental studies and preparation of EPA works approval application for the Victorian Desalination Project Environment Effects Statement.
- Preparation of EPA works approval applications for a proposed in-vessel composting facility in Bulla, a proposed thermal desorption facility to remediate contaminated soils and a new wastewater treatment plant in Murrabit.

Landfill environmental management

- Project Director for the delivery of various landfill environmental consultancy services, including regular environmental monitoring, EPA licence and PAN compliance, hydrogeological assessments, landfill gas assessments, environmental risk assessments and annual reporting.

Environmental policy and strategy

- As Senior Environment Advisor at Melbourne and Launceston Airports assisted with the development and implementation of site-wide environmental strategy, including regular reporting to management and the environmental regulator.
- Completed a secondment with EPA Victoria to undertake a licence compliance assessment for 65 operational landfills in Victoria.
- Reviewed EPA Victoria's system for the appointment and management of environmental auditors and identified improvement opportunities.

Site contamination assessments

- As Senior Environment Advisor at Melbourne and Launceston Airports was responsible for reviewing site contamination assessment reports, providing advice regarding PFAS management, developing a site-wide PFAS management framework and assisting with the development of a temporary PFAS storage facility including water treatment plant.
- Project Director for the delivery a site contamination assessment and remediation plan for a site in Fisherman's bend, to be converted into a public park.

EMPLOYMENT HISTORY

2021 - present	Bajwa EnviroConsult Principal Environmental Consultant
2016 - 2021	Australia Pacific Airports Corporation (Melbourne and Launceston Airports) • Senior Environment Advisor (2019 – 2021) • Environment Advisor (2016 2019)
2015 - 2016	Meinhardt Associate Director, Environmental Services
2006 - 2015	GHD • Team Leader, Waste Management & Environmental Compliance (2010 – 2015) • Waste Management Consultant (2009 – 2010) • Graduate Chemical Engineer (2006 -2009)

Appendix O

Response to public comments

[redacted]

Head of Environment and Sustainability
Level 2, Terminal 4
Melbourne Airport VIC 3054

[redacted]
community@melair.com.au

Future Airfields Project, Gate 22 Operations Rd, Tullamarine, Victoria (EPBC 2024/09907)

Dear [redacted],

Please accept my submission on the Preliminary Documentation for Australia Pacific Airports (Melbourne) Pty Limited's (**APAM**) proposal to clear vegetation and undertake construction activities to maintain and upgrade airport roads, runways, carparks and other infrastructure at Melbourne Airport, Tullamarine (EPBC 2024/09907).

My comments are directed at the offset strategy (**OS**) at Section 9 of the Preliminary Documentation dated 3 November 2025 (the **PD**), and have been prepared with regard for the requirements of the EPBC Act Environmental Offsets Policy 2012 (the **Policy**) and the How to use the Offset Assessment Guide (the **Guide**).

I note that APAM proposes to offset impacts to the Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) with a direct offset exceeding 100%. This is because APAM considers as very likely (95%) that the proposed Rokewood offset site will, over a 5 year period:

- unless managed as an offset, decline in quality from 6/10 to 5/10; and
- managed as an offset, increase in quality from 6/10 to 7/10.

I do not agree with APAM's inputs to the offsets assessment guide at Appendix E of the PD, specifically the claimed decline in quality without offset. This is because Principle 9 of the Policy states:

> 'In *assessing the suitability of an offset, government decision-making will be informed by scientifically robust information and incorporate the precautionary principle in the absence of scientific certainty*'.

I consider this principle implies that uncertainty regarding OAG inputs should be identified and, in the absence of certainty, inputs to the OAG should favour the protected matter.

Quality decline without offset

The claimed decline in quality without offset is not supported by site-specific evidence and/or knowledge provided in the PD. On the contrary, the 2020 *Assessment Report for Credit Applications* at Appendix K of the PD gives the reader confidence the site has

been managed by the landowner, over the long term, to at least maintain the ecological values and quality of the site:

> *The credit site has had a long history (more than 100 years) of sheep grazing, and the landowner has undertaken a set stocking grazing regime throughout the site (with intermittent destocking during dry periods) since they purchased the property approximately 60 years ago. The current landowner does not believe the site has ever been cropped and there is no evidence on site to suggest otherwise. The credit site had some fertiliser application more than 30 years ago, but not in recent years. Spot spraying with herbicides is undertaken each year on high threat grasses and herbaceous weeds. Broad acre spraying has not been undertaken in the credit site for at least 20 years and will not be undertaken in the future to avoid impacts to native vegetation.*

The above is repeated in March 2022, for the EPBC 2017/7965 Golden Plains Wind Farm Offsets Strategy area adjacent to the Agreement area, for the same property:

> *Offset site 1 has had a long history (more than 100 years) of sheep grazing, and the landowner has undertaken a set stocking grazing regime throughout the site since they purchased the property approximately 60 years ago. Rock removal and cropping occurs on adjacent land and is common in the area. Offset site 1 presents no evidence of significant ground disturbance (ie. cropping or rock removal), and, to the knowledge of the current landowner, the site has ever been cropped. The site had some fertiliser application approximately 30 years ago. Spot spraying with herbicides is undertaken each year on high threat grasses and herbaceous weeds. Broad acre spraying has not been undertaken in the offset site for approximately 20 years.*

Notwithstanding, APAM explains the claimed future decline without offset on the following basis:

> *Without the proposed offset site, it is anticipated that the known existing threats will contribute to a decline in the quality of existing NTGVVP. The management of remnants on this site prior to the commencement of the offset did not prioritise the ecological values, and as such these remnant values were in slow decline due to weed invasion, less appropriate grazing regimes, application of herbicides, potential application of fertiliser and inconsistent pest animal management.*

APAM's claim is not supported by information provided in the OS. I have not read evidence demonstrating that prior to the 2020 Section 69 Agreement the offset site was managed in a manner that would prejudice site quality over a 5-10 year period.

Section 3.1.6 of the EPBC 2017/7965 Offsets Strategy speaks to NTGVVP future quality without offset, populating a VQA scoring table. Regardless, the populated 'without offset' table is speculative and, if accepted, substantially reduces offset obligations and the likelihood of offset no net loss/gain. Given the above, scientific uncertainty, and

the ecological risks with offset decision-making, I consider Principle 9 of the Policy should apply and the future quality without offset remain at 6/10.

I respect APAM, Bajwa Enviro Consulting and Biodiversity Offsets Victoria have a deeper understanding of the content and operation of the OS. If my assessment has inadvertently overlooked evidence demonstrating the claimed quality decline without offset, I would appreciate being directed to the relevant section/s.

I hope APAM finds my submission helpful. Would you please advise me by text [redacted] or return email that my submission has been received and will be considered.

Yours sincerely.

[redacted]

9 December 2025

19 December 2025

[redacted]

Dear [redacted],

Subject: Response to Submission on Preliminary Documentation – EPBC 2024/09907

Thank you for your submission dated 9 December 2025 regarding the Preliminary Documentation for the Future Airfields Project at Melbourne Airport (EPBC 2024/09907). We appreciate your thoughtful review and welcome the opportunity to share more about the approach and considerations behind our offset strategy.

You highlighted an important question regarding our assumption that, without offset management, the Rokewood site's condition could decline from 6/10 to 5/10 over five years. We'd like to explain the basis for this assumption and the evidence informing it.

The assumption of a 1-point decline draws on literature and observed trends for Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) under passive management. Literature includes:

- *Williams et al. (2005)* documented a 21% loss of NTGVVP over 15 years due to weed invasion without active management.
- *Ajax Road case study (EPBC Act Referral 2014/7208)*: 40.1% decline over 11 years under minimal intervention.

APAM also works with ecological consultants in the industry who estimate that 90% of potential NTGVVP offset sites have been destroyed or degraded in recent years, even under managed grazing regimes. Observations of specific offset sites observed to have up to 50-60% loss over nine years despite light grazing.

Recent La Niña conditions have accelerated exotic species dominance, further increasing decline risk. Passive management (including set stocking and spot spraying) does not prevent gradual structural and compositional decline. Weed invasion and climatic variability are key drivers of quality loss.

We adopted a conservative estimate, predicting a modest decline (6 → 5) rather than severe degradation. This assumption aligns with the precautionary principle by recognising documented risks and avoiding underestimation of ecological decline.

APAM notes that some level of management had been implemented by the landowner of the proposed offset site prior to establishment of the offset site. However, without implementation of the management commitments outlined in the site management plan, such as installation and upgrade of perimeter fencing, specific targets for control and elimination of weeds and routine management of pest animals, it is considered that the NTGVVP future quality without offset would decline over time. Evidence from peer-reviewed studies, case examples, and industry data demonstrates that NTGVVP remnants deteriorate without targeted offset management. Our assumption of a 1-point decline is therefore scientifically justified and precautionary.

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We hope this provides useful context on how these assumptions were developed. Should you require further detail, please contact us at community@melair.com.au

Thank you again for your engagement in this process.

Yours Sincerely,

[redacted]

[redacted]

Head of Environment & Sustainability

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