AECOM GHD JOINT VENTURE

LEVEL CROSSING REMOVAL PROJECT

Calder Park Drive and Holden Road Level Crossing Removal Project, Calder Park, Victoria (EPBC 2023/09569) Offset Management Plan

LXRP-LX14-000-0-00-PA-RPT-0008

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LEVEL CROSSING REMOVAL PROJECT

VICTORIA State Government

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LXRP Distribution List

Name	Title	Email
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AECOM-GHD JV Authorisation

Name	Originator	Checker	Verifier	Package Lead	Project Manager
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QA Sign Off

ON FILE	ON FILE
Package Lead	**Project Manager**

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Abbreviations

Table 1 Summary of the key reference terms

Acronym	Definition
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DEECA	Department of Energy, Environment and Climate Action (Victoria) (formerly DELWP)
DELWP	Department of Environment, Land, Water and Planning (Victoria) (now DEECA)
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
EVC	Ecological Vegetation Classes
ha	Hectare(s)
LXRP	Level Crossing Removal Project
MNES	Matters of National Environmental Significance
NTGVVP	Natural Temperate Grassland of the Victorian Volcanic Plain
OMP	Offset Management Plan
OMS	Offset Management Strategy
SRF	Spiny Rice-flower
VQA	Vegetation Quality Assessment

Cover Page and Declaration of Accuracy

Item	Details
EPBC Act Reference Number	EPBC 2023/09569
Project Name	Calder Park Drive and Holden Road Level Crossing Removal Project, Calder Park Victoria
Proponent/approval holder	Major Transport Infrastructure Authority (MTIA)
ACN/ABN	69 981 208 782
The proposed/approved action	To remove the Holden Road level crossing and replace Calder Park Drive level crossing by constructing a road bridge, including shared path, road realignment, earthworks, and ancillary infrastructure.
Location of the action	377 Calder Freeway, Calder Park
Date of preparation of the OMP	25 March 20205
Persons accepting responsibility for the OMP	[redacted] Program Director, Level Crossing Removal Project

DECLARATION OF ACCURACY

In making this declaration, I:

a) am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the *Environment Protection and Biodiversity Conservation Regulations 2000* (EPBC Regulations). The offence is punishable on conviction imprisonment or a fine, or both.

b) am authorised to bind MTIA to this declaration and have no knowledge of that authorisation being revoked at the time of making this declaration.

Signature

[redacted]

Full name (please print)

[redacted]

Organisation (please print)

Level Crossing Removal Project

Date: 16 / 04 / 2025

Title/position	Role	Responsibility	Emergency contact details
MTIA	Approval holder	Implement the management actions and monitoring actions attributed to LXRP as stipulated in this OMP	[redacted] Program Director, Level Crossing Removal Project [redacted] [redacted]
Landowner	Owner of the Offset Site	Implement the management actions and monitoring actions attributed to the landowner as stipulated in this OMP	[redacted] Director – [redacted] [redacted] [redacted]

Executive Summary

The AECOM-GHD Joint Venture (AECOM-GHD JV) on behalf of the Level Crossing Removal Project (LXRP), an administrative office of the Victorian Infrastructure Delivery Authority (VIDA), has prepared this Offset Management Plan (OMP) for the [redacted] Offset Site.

The proposed action for the Calder Park Drive and Holden Road Level Crossing Removal Project (the Project) was referred to the Australian Government Minister for Environment and determined to be likely to have a significant impact on listed threatened species and communities (sections 18 and 18A) protected under Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 19 September 2023 (EPBC 2023/09569).

The Project will result in the direct removal of eight (8) Spiny Rice-flower (SRF) plants, a significant impact as a result of the proposed action. The proposed action was approved on 9 October 2024, authorising the clearance of 8 SRF individuals subject to conditions, including compensating the residual significant impacts through submission of an OMP for the Offset Site. This document demonstrates how the environmental offsets proposed will compensate for the loss of SRF individuals and addresses Condition 6 of Project Approval EPBC 2023/09569.

[redacted] offset parcel and is currently registered on the Victorian Native Vegetation Offset Register and is secured under an existing agreement with the Secretary to DELWP (now DEECA) under [redacted] of the *Conservation, Forests and Lands Act 1987* (herein referred to as [redacted] Agreement).

[redacted]. [redacted] Agreement restricts permitted land uses and obliges the Landowner to protect and improve native vegetation and habitat in accordance with the agreed management plan in perpetuity. Since 2017 the landowner has demonstrated successful compliance with the [redacted]

The environmental outcome to be achieved by the Offset Site is no net loss in SRF individuals within Victoria as a result of the Calder Park Drive and Holden Road Level Crossing Removal Project (the Project). It is a requirement of Condition 8 of the EPBC Act approval for this Project that the OMP must include detailed information setting out how a minimum population increase of 24 SRF will be achieved at the Offset Site over the 10 years following approval of the OMP. This OMP describes how the Offset Site will be secured, managed and monitored to meet the environmental outcome. Management actions to be completed at the Offset Site include supplementary planting of SRF, seed collection, reducing the presence and extent of pest plants and animals and additional watering. The management actions outlined in this OMP are complementary to and do not contradict any existing management actions under the [redacted] This OMP has been reviewed by the landholder and all required management actions and obligations have been agreed.

Based on the EPBC Act Offset Assessment Guide (herein referred to as the EPBC Offset Calculator), the retention and management of 64 SRF individuals at the Offset Site achieves a direct offset of **124.31%** of the impact (Appendix A). The OMP aligns with the Request for Information (RFI) as outlined in Appendix C (DCCEEW, 2023).

1. Introduction

1.1 Background

The AECOM-GHD Joint Venture (AECOM-GHD JV) is engaged by the Level Crossing Removal Project (LXRP), a division of the Victorian Infrastructure Delivery Authority (VIDA), to provide specialist planning and environmental advice for the Calder Park Drive and Holden Road Level Crossing Removal Project (the Project). An existing conditions assessment was completed (AECOM-GHD JV, 2023a) that informed the development of the design for the Project.

Subsequently a construction footprint was determined, enabling the specific impacts associated with the Project to be assessed. An impact assessment report was prepared (AECOM-GHD JV, 2023b) to identify impacts to ecological values based on the Project's construction footprint and to advise on the implications of any required approvals and/or in relation to referrals and approval requirements likely to be required under relevant State and Commonwealth environmental legislation.

The proposed action was referred to the Australian Government Minister for Environment and determined to be likely to have a significant impact on listed threatened species and communities (sections 18 and 18A) protected under Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 19 September 2023 (EPBC 2023/09569).

The proposed action was assessed through Preliminary Documentation. The Australian Government Department of Climate Change, Energy, the Environment, and Water (DCCEEW) issued a request for additional information (RFI) to further assess the action (DCCEEW, 2023). In response, an Offset Management Strategy (OMS) was developed to address the significant residual impact on the critically endangered Spiny Rice-flower (*Pimelea spinescens subsp. spinescens*), a Matter of National Environmental Significance (MNES) under the EPBC Act. The approval decision (EPBC 2023/09569) was granted on 9 October 2024, with conditions (Appendix B). This OMP addresses Conditions 6, 7, 8, and 9.

The EPBC Act offset for the Project will be achieved via a third party offset on land owned by another party (a native vegetation credit owner). Third party Offset Sites are established by the Landowner via a security agreement registered on the land title that runs in perpetuity.

This document is the EPBC Act Offset Management Plan (OMP) for the Offset Site at [redacted] identified for the Project in the Level Crossing Removal Project 000 – Multiple Sites Offset Management Strategy - Calder Park Drive and Holden Road LXRP-LX14-000-0-00-PA-RPT-0004 (AECOM-GHD JV, 2024a). This OMP has been prepared to outline the key commitments and additional management actions for delivering and implementing proposed offsets for SRF as required by Conditions 6, 7, 8 and 9 of the EPBC Approval. Furthermore, the ways in which the OMP directly responds to the RFI is outlined in Appendix C.

Table 2 Conditions of approval reference table

Ref	Cond.	Condition Requirement	Plan reference	Demonstration of how the plan addresses the condition requirements and commitments made in the plan to address condition requirements
1	6)	To compensate for the residual significant impacts of the Action on the **Spiny Rice-flower**, the approval holder must submit an Offset Management Plan (OMP) for the **Offset Site** to the **department** for approval by the **Minister**	Section 1 to Appendix E	This document is the OMP, submitted to the department for approval by the Minister.
2	7)	The OMP must be approved by the **Minister before** the Calder Park Drive Road bridge is opened for public use.	Section 1 to Appendix E	This document is the OMP, submitted to the department for approval by the Minister.
3	8	The OMP must meet the requirements of the **Environmental Offsets Policy** and **Environmental Management Plan Guidelines** to the satisfaction of the **Minister**. All commitments, including environmental outcomes, management measures, corrective actions, trigger values and performance indicators in the OMP must be **SMART**/ The OMP must be prepared by an **independent suitably qualified ecologist** and must include:	Sections 5, 6, 7, 9 Throughout this OMP	Section 5 outlines the committed management actions. Section 6 outlines the monitoring requirements. Section 7 details the corrective actions and thresholds, and Section 9 lists the performance indicators for the OMP.
4	8a)	Detailed information setting out how a minimum population increase of 24 **Spiny Rice-flower** will be achieved at the **Offset Site** over the 10 years following the approval of the OMP.	Sections 5	Section 5 outlines the management actions to maintain and increase the population of Spine Rice-flowers, including, seed collection, seed propagation, planting, weeding, targeted scorching, soil moisture monitoring, watering and rabbit-proof caging.
5	8b)	A map specifying the location area and boundaries of the **Offset Site**.	Figure 5 in Appendix E	Figure 5 in Appendix E includes the location area and the boundary of the Offset Site.
6	8c)	Detailed baseline information on the habitat quality and population of **Spiny Rice-flower**.	Sections 3.4 6 and 6.5	Sections 3.4 identifies the baseline habitat quality and population of Spiny Rice flower at the Offset Site. 6 and 6.5 describe the baseline monitoring required.

Ref	Cond.	Condition Requirement	Plan reference	Demonstration of how the plan addresses the condition requirements and commitments made in the plan to address condition requirements
7	8d)	A table summarising all commitments to achieve the offset outcomes and reference to where in the OMP the commitment is described in detail.	Section 7	Section 5 outlines the management actions to achieve the offset outcomes. Section 7 describes the commitments and thresholds that require corrective action.
8	8e)	Reporting and review mechanisms to inform the **department** annually regarding compliance with the implementation of management measures and the attainment and maintenance of the offset outcomes.	Section 8	Section 8 details the reporting requirements to the department regarding compliance with the implementation measures and attainment of offset outcomes.
9	8f)	An assessment of risks to achieving each offset outcome and what risk management measures and/or strategies will be applied to address these.	Section 10	Section 10 Risk Assessment and Contingency measures identifies the risks to achieving the offset outcomes, and the measures to address the risks.
10	8g)	A monitoring program to measure and inform how the outcomes of the plan are being achieve including: i) Measurable performance indicators and the timeframes for their achievement to gauge attainment of each offset outcome. ii) Corrective actions to be implemented to ensure all offset outcomes for the **protected matters** are achieved or maintained if trigger values are reached or performance indicators not achieved in the specified timeframes.	Sections 6 and 7	Section 6 details the monitoring program to measure and inform how the outcomes of the plan are being achieved. Section 7 details the corrective actions to be implemented when the defined thresholds are triggered.
11	8h)	References to related plans and conditions of approval (including state requirements).	Section 1.4	Section 1.4 refers to related plans and the conditions of approval.
12	9)	To compensate for the residual significant impacts of the Action on **Spiny Rice-flower**, the approval holder must ensure that the approved OMP is implemented.	Section 10	Implementation is monitored through Section 6, and Section 7 describes the corrective actions applied when the defined thresholds are triggered.

1.2 Project description

The Project is located on the Sunbury, Echuca, and Swan Hill railway lines, approximately 25 km north-west of the Melbourne Central Business District. The Project is situated within the:

- Victorian Volcanic Plain (VVP) bioregion
- Brimbank and Melton City Council areas
- Port Phillip and Westernport Catchment Management Authority area (CMA)

The Project will remove the Calder Park Drive level crossing by constructing a road bridge to provide a grade-separated connection over the Sunbury rail line and close the Holden Road level crossing by truncating the road at both sides of the rail line. Removal of the level crossings will allow for increased public transport capacity on the regional and Sunbury and regional rail line following completion of the Metro Tunnel Project, whilst also enabling improved pedestrian and cycling connections in the area as part of the future Strategic Cycling Corridor Network, improving safety and providing opportunities for local urban design improvements.

Removal of the level crossings will also eliminate lengthy delays to vehicles near the level crossings, particularly during morning and evening peak periods when boom gates are down for up to 25 minutes of the morning peak.

Specifically, the Project will require the following key works:

- Construction of a grade separated road bridge at Calder Park Drive over the Sunbury, Echuca, and Swan Hill rail lines on a combination of embankment and structures
- Realignment of Calder Park Drive on the approaches to the new road bridge
- Construction of a shared use path along the east side of Calder Park Drive bridge
- Works including retaining walls, earth embankments, drainage and roadworks associated with the elevation and realignment of Calder Park Drive
- Works including roadworks, barriers, fencing, and signage associated with the closure of Holden Road
- Works associated with the removal of the U-Turn facility on Calder Fwy, north of Holden Road
- Construction of a new road connecting Calder Park Drive to the existing Victoria Road
- Temporary works including construction of temporary side and access roads, and construction of hardstands and working platforms
- Installation, removal and modification of rail infrastructure and associated communications, signalling and electrical infrastructure
- Relocation and protection of existing underground and overhead utility services including power, Telstra/NBN communications, water, sewer, and Metro Trains Melbourne (MTM) rail assets
- Street lighting and landscaping

The entire proposed development footprint is 127 ha, the disturbance footprint is 41.6 ha, and retained or avoided area is 85.4 ha. The Project Action Area is shown in Appendix F.

1.3 Proposed impacts to SRF and EPBC Act Offset requirements

Offsets are measures that compensate for the residual adverse impacts of an action on the environment. Offsets are only required if residual impacts on a protected MNES are significant and assessed under the EPBC Act. It has been determined that offsets are required due to unavoidable removal of eight individuals of SRF to enable the Project to be developed.

Works within the construction footprint will remove a cluster of eight SRF individuals in the Calder Park Drive roadside. The impacts have been assessed against the EPBC Act significant impact criteria and the loss of eight SRF individuals constitutes a significant impact on the species (DEWHA, 2009).

Condition 8 of the EPBC Approval requires this OMP to meet the requirements of the *EPBC Act Environmental Offsets Policy* (DSEWPaC, 2012). It is the expectation of this policy that a minimum of 90% of the offsets proposed for an impact are comprised of direct offsets. Direct offsets are those actions that provide a measurable and immediate conservation gain for impacts on a MNES and most projects can provide a direct offset that will satisfy 100% of the offset requirement (DSEWPaC, 2012).

1.4 Other related plans and condition of approval

Condition 8h of the EPBC Act approval requires the OMP to reference other relevant plans and conditions of approval. Relevant plans and conditions of approval, required by Australian and Victorian legislation, are outlined below.

EPBC Act

The Native Vegetation and Threatened Species Management Plan (AECOM-GHD JV, 2024b) outlines measures to avoid impacts by the Project on retained native vegetation and threatened species and communities listed under the EPBC Act and/or FFG Act.

Flora and Fauna Guarantee Act 1988 (FFG Act)

The FFG Act provides a legal framework for enabling and promoting the conservation of Victoria's native flora and fauna, and to enable management of potentially threatening processes. Threatened and protected species and communities of flora and fauna and the potentially threatening processes, listed under the FFG Act are published on the DEECA website (DELWP 2021; 2019; undated; 2016). Spiny Rice-flower and Matted Flax-lily are identified as threatened species under the FFG Act.

The Spiny Rice-flower & Matted Flax-lily Translocation Plan (Abzeco, 2023) was prepared to inform salvage and translocation of Spiny Rice-flower and Matted Flax-lily being impacted by the Project, in accordance with the FFG permit requirements (Permit No. 7-1-2023-180).

Planning and Environment Act 1987 (P&E Act)

The P&E Act establishes the framework for the use, development, and protection of land in Victoria and provides for the preparation of standard provisions for planning schemes. Clause 52.03 (Level Crossing Removal Project) of the Victoria Planning Provisions (VPP) applies to the use and development of land for projects undertaken by the Level Crossing Removal Project and declared under section 10(1)(b) of the *Major Transport Project Facilitation Act 2009*. Clause 52.03 states that:

'Any requirement of this planning scheme to obtain a permit or any provision of this planning scheme that prohibits the use or development of land, requires the use or development of land to be carried out in a particular manner, or requires a specified thing to be done to the satisfaction of a specified person or body, does not apply to any use or development this Clause 52.03 applies to if the requirements of Clause 52.03 are met.'

As such, any proposed impacts to native vegetation by the Project need to comply with the requirements of Clause 52.03-7 (Native vegetation requirements), which include providing information in accordance with the *Guidelines for the removal, destruction or lopping of native vegetation* (the Guidelines) to the satisfaction of the Secretary to the Department of Energy, Environment and Climate Action (DEECA) and securing relevant offsets. A Native Vegetation Removal report (NVR report) has been prepared by the Project as required the Guidelines and identified a total of 0.047 General Habitat Units (GHU) to be offset by the Project via a third party offset.

1.5 Spiny Rice-flower species profile

Spiny Rice-flower (SRF) is a small shrub that grows between 5-30 cm in height (DEWHA, 2009). Flowering typically occurs between April and August, producing small white, cream or yellow flowers (Flora of Victoria, 2017). It is most commonly found in grasslands and occasionally in grassy woodlands and open shrublands (DEWHA, 2009). Habitat suitable for SRF is associated with Kangaroo Grass *Themeda triandra*, Wallaby Grass *Rytidosperma* spp. and Spear Grass *Austrostipa* spp. (DEWHA, 2009). The location of SRF is often associated with EVC 132 Plains Grassland and the EPBC Act-listed ecological community Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP). SRF is also associated with woodland EVCs including EVC 55 Plains Grassy Woodland, EVC 803 Plains Woodland and EVC 897 Plains Grassland/Grassy Woodland Mosaic. An image of SRF in flower is provided in Plate 1 and Plate 2. SRF plants are generally dioecious, producing either only male or female flowers on each individual plant, but hermaphrodites are usually recorded within populations. Images of male and female flowers are presented in Plate 3 and Plate 4.

Some of the key threating processes for SRF is degradation, modification, and fragmentation of habitat through native vegetation removal, inappropriate fire regimes, weed invasion, agricultural practices and excessive grazing (DEWHA, 2009).

Plate 1 SRF at [redacted]

Plate 2 Flowering SRF bush

Plate 3 Male SRF with bright yellow anthers

Plate 4 Female SRF lacking anthers, with single pale white stigma

1.6 Purpose

The purpose of this OMP is to:

- Document the initial site conditions of the Offset Area, including the location of remnant SRF
- Detail the specific management actions required to meet additional environmental outcomes
- Establish monitoring and reporting protocols
- Provide a table of actions for the 10 year management period

It has been prepared specifically to:

- Follow the requirements of the EPBC Act Environmental Offsets Policy
- Follow the Environmental Management Plan Guidelines (DCCEEW, 2024a)
- Adopt the *Management standards for native vegetation Offset Sites* (DEECA, 2023) which replace the BushBroker management standards for fencing, weeds, rabbits, scattered trees, supplementary planting and revegetation
- Include the Department of Environment, Land, Water and Planning (Victoria) (DELWP) Output delivery standards – for the delivery of environmental activities (DELWP, 2015)
- Include information in the *National Recovery Plan for the Spiny Rice-flower (Pimelea spinescens subsp. spinescens)* (DCCEEW, 2024b)
- Be measurable against the commitments made in the Offset Management Strategy - Calder Park Drive and Holden Road, Calder Park (AECOM-GHD JV, 2024a) and requirements of EPBC 2023/09569 and relevant conditions
- Conduct additional measures where necessary to increase conservation benefit of the SRF population including:
    - Seed Collection
    - Seed Propagation
    - Plantings of additional SRF
    - Additional Weeding
    - Targeted Scorching
    - Additional Treatments
    - Soil Moisture Monitoring
    - Supplemental Watering
    - Rabbit-proof Caging
    - Additional Surveys for in-situ SRF Recruitment
- Meet the requirements of the Minister for Environment's Conditions.

1.7 Environmental outcomes to be achieved

The environmental outcomes to be achieved for SRF, through the security, protection and enhancement of the Offset Site, is no net loss of SRF individuals within Victoria as a result of the Calder Park Drive and Holden Road Level Crossing Removal Project.

The environmental outcome is to be achieved by protecting and managing an area of freehold land at [redacted]. The proposed site [redacted] which is currently registered on the Victorian Native Vegetation Offset Register and is secured under an existing Landowner Agreement [redacted] with the Secretary to DELWP under [redacted] of the *Conservation, Forests and Lands Act 1987* (CFL Act), prohibiting any future clearing of SRF individuals and habitat at the site (Appendix D).

[redacted] Agreement stipulates management actions to be conducted across the broader site. Additional management methods are proposed in this OMP. Additional offset gain of SRF at this Offset Site will also be achieved and improved through completing the following management actions:

- Seed Collection
- Seed Propagation
- Plantings of additional SRF
- Additional Weeding
- Targeted Scorching
- Additional Treatments
- Soil Moisture Monitoring
- Supplemental Watering
- Rabbit-proof Caging
- Additional Surveys for in-situ SRF Recruitment

Based on the EPBC Act Offset Assessment Guide (herein referred to as the EPBC Offset Calculator), the goal retention and management of 64 SRF individuals at the Offset Site achieves an offset of **124.31%** of the impact (Appendix A). A minimum of 40 existing SRF are to be protected within the Offset Site. Currently 42 exist within the Offset Site. An additional 24 SRF are required to meet the proposed 124.31% offset gain for SRF. The additionality of 24 individuals may be achieved through a mix of supplementary plantings, targeted management actions aimed towards improving recruitment potential for the species and increased protection and management of any new germinants.

The primary aim is to establish 24 additional surviving SRF at the Offset Site. This OMP will offer invaluable insights into the species' ecological requirement, responses to management practices and resilience to environmental stresses.

1.8 Additionality through closing of knowledge gaps and informing future SRF management

The management actions identified in Table 3 contribute valuable knowledge about the species' ecological requirements, responses to management practices, and resilience to environmental stresses. This information is crucial for informing future conservation strategies and refining management techniques, ultimately leading to better outcomes for the species in the long term. This is especially important for this population as it adjoins and shares similar site ecology with the [redacted], which is described in the Recovery Plan as an 'important population' given its atypical environment.

Additionally, these interventions may stimulate more germinants locally, and in conjunction with other additionality measures like supplementary watering and increased monitoring (refer to sections 5.6 and 5.9) providing enhanced opportunities for establishment and growth of recruited and planted individuals. Thus, the 'gain' is not solely in the number of surviving planted SRF, but also in the potential increase in germinants and the advancement of the understanding of population specific SRF fire ecology, which is crucial for informing future conservation strategies for the species.

If less than 24 planted SRF survive at the end of the 10 year Management Plan, gains for SRF more broadly will still be achieved through other management methods and ongoing monitoring of the population in-line with the following actions committed to in the SRF recovery Plan (DCCEEW, 2024). Section 5 includes details of the proposed additional actions and alignment with the SRF Recovery Plan Action Strategies.

Table 3 Additional management actions and monitoring for SRF including alignment with the species recovery plan, action number, and description

Recovery Plan Action Strategy	Action No. and Description	Action details - Offset Site	Alignment with Recovery Plan Performance Criteria	Proposed Partners
Strategy 1 – Protecting and managing populations and habitats	1.6 Further investigate Spiny Rice-flower disturbance ecology by monitoring populations across different habitats and management regimes.	The investigation, trialling and monitoring of targeted scorching for a SRF population that adjoins and shares ecological characteristics with the [redacted] important population.	Detail prescription of threats mitigation and control in the management plan and improve understanding on threats across populations to establish suitable management regimes (refer to section 3.5 for threats and section 5.4 for management actions. Implement population monitoring protocol and monitoring plots (refer to section 5.4).	*Pimelea spinescens* Recovery Team
	1.9 Reintroduce populations in suitable habitat adjoining or near existing populations or supplement populations on secure land tenure.	Collect seed from the Offset Site for supplementary planting into the in-situ population, make available to the *Pimelea spinescens* Recovery Team any surplus seed or propagated individuals.	All populations survive and are self-sustaining. Monitor the survival and health of supplementary plantings for the duration of the 10 year active management period of this OMP to inform survival rates and planting success (refer to Sections 5.1 and 6.5).	
Strategy 2 – Research on population and management requirements	2.2 Understanding the population attributes and threats, that can be useful to inform the management action specific for each site.	Collect population information census, including population demography annually for the duration of the 10 year OMP (this OMP) and supply to the data to the *Pimelea spinescens* Recovery Team.	All known populations accurately assessed, mapped and stored under state-wide database to determine population growth, assess long-term viability and inform assessment of conservation priority (refer to Section 6.5).	*Pimelea spinescens* Recovery Team

2. Description of the Action

2.1 Summary of the impacts to SRF

The Project will remove the Calder Park Drive level crossing by constructing a road bridge to provide a grade-separated connection over the Sunbury rail line and close the Holden Road level crossing by truncating the road at both sides of the rail line. Removal of the level crossings will allow for increased public transport capacity on the regional and Sunbury and regional rail line following completion of the Metro Tunnel Project, whilst also enabling improved pedestrian and cycling connections in the area as part of the future Strategic Cycling Corridor Network, improving safety and providing opportunities for local urban design improvements.

Removal of the level crossings will also eliminate lengthy delays to vehicles near the level crossings, particularly during morning and evening peak periods when boom gates are down for up to 25 minutes of the morning peak.

Specifically, the Project will require the following key works:

- Construction of a grade separated road bridge at Calder Park Drive over the Sunbury, Echuca, and Swan Hill rail lines on a combination of embankment and structures
- Realignment of Calder Park Drive on the approaches to the new road bridge
- Construction of a shared use path along the east side of Calder Park Drive bridge
- Works including retaining walls, earth embankments, drainage and roadworks associated with the elevation and realignment of Calder Park Drive
- Works including roadworks, barriers, fencing, and signage associated with the closure of Holden Road
- Works associated with the removal of the U-Turn facility on Calder Fwy, north of Holden Road
- Construction of a new road connecting Calder Park Drive to the existing Victoria Road
- Temporary works including construction of temporary side and access roads, and construction of hardstands and working platforms
- Installation, removal and modification of rail infrastructure and associated communications, signalling and electrical infrastructure
- Relocation and protection of existing underground and overhead utility services including power, Telstra/NBN communications, water, sewer, and Metro Trains Melbourne (MTM) rail assets
- Street lighting and landscaping

The entire proposed development footprint is 127 ha, the disturbance footprint is 41.6 ha, and retained or avoided area is 85.4 ha.

[redacted]

The Project will directly impact on a cluster of eight SRF in the Calder Park Drive roadside and indirectly impact an area of habitat within Banchory Grove Grassland Nature Conservation Reserve adjacent to the construction footprint by afflux.

The Project considered retaining the eight SRF in a No Go Zone however that excised area would be surrounded by construction and the Project resolved that was not a feasible option. Those eight plants would have still been assumed lost due to indirect impacts of shading affecting the ability of the plants to persist (AECOM-GHD JV, 2023). Thus, removal of the eight SRF in the Calder Park Drive roadside is considered unavoidable.

One of the key impact thresholds for a significant impact to SRF is the loss of >5 individuals (DEWHA, 2009). Given the Project will result in the removal of eight individuals of SRF, the Project works will result in a significant impact to the species.

Another of the key impact thresholds for a significant impact to SRF is a long-term decrease in the size of a population. The Project will result in the loss of eight individuals which represents a direct loss of 11% of the 75 known plants in the IA. This represents a long-term decrease in the size of the population identified during the existing conditions assessment.

3. Spiny Rice-flower Offset Site

3.1 Offset details

Table 4 below summarises the location, planning restrictions, and proposed security and management arrangement for the proposed Offset Site.

Table 4 Offset Site security and management

Item	Details
Landholder	[redacted]
Address/Lot details	[redacted]
Parcel identifier	[redacted]
Local Government Area	[redacted]
Catchment Management Authority	[redacted]
Bioregion	[redacted]
Total Offset Parcel Area	[redacted]
Offset Site Area (Zone 1H)	[redacted]
EPBC Individuals in Offset Site Area	[redacted]
Planning Zones and Overlays	[redacted]

3.2 Site location and context

The proposed Offset Site is located within an offset parcel that is protected under Landowner Agreement [redacted] with the Secretary to the Department of Environment, Land, Water and Planning (DELWP) under [redacted] of the CFL Act. [redacted]

This extent will be divided to accommodate two EPBC Act offset areas to be to be purchased by VIDA and managed by the Landowner; Calder Offset Purchased Area (0.43 ha) and Watergardens Offset Purchased Area (1.369 ha). Figure 5, Appendix E denotes the 'Watergardens Offset Site', 'Calder Offset Site'; and 'Calder Park Offset Purchased Area'.

In order to satisfy the conditions under [redacted], the whole Zone 1H area requires management, this will be achieved through the application of both the Calder Park OMP and Watergardens OMP. The area subject to management within this plan (except where otherwise stated) is the same as the area to be purchased and displayed in Figure 2. The area subject to management in the Watergardens OMP extends beyond the area to be purchased and will be outlined in the Watergardens OMP.

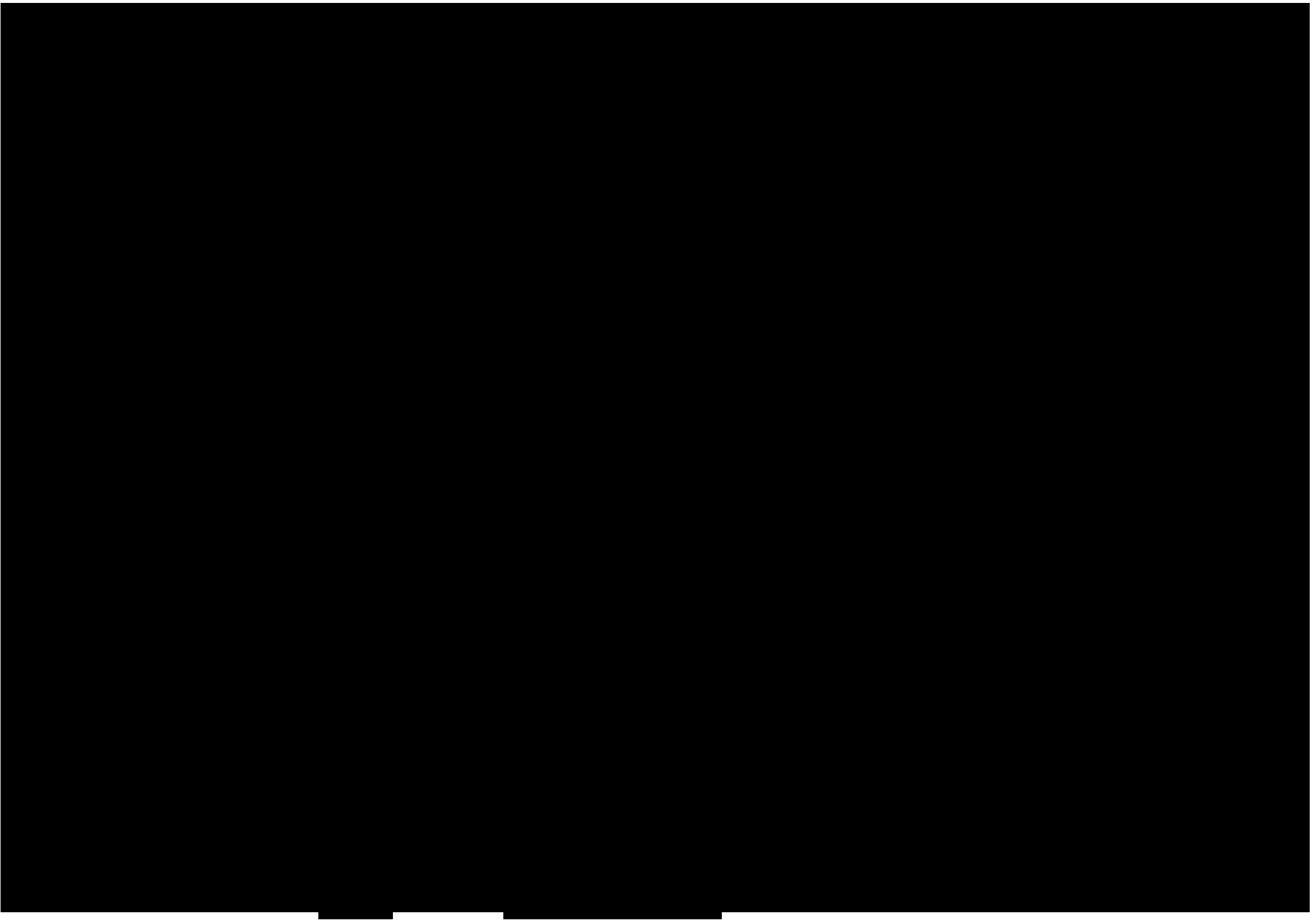
The broader offset parcel is located within [redacted] the site has been under continual management since then with the goal of improving native vegetation.

A number of surveys for SRF have been conducted in Habitat Zone 1H. [redacted] The cause of differing survey results is not known but may be due to:

- Natural population flux
- Detection of individuals (e.g. Individuals may have been hidden by leaf litter)
- A natural decline in the population
- Differences in survey effort and method. For example, the survey team in 2016 and 2022 were different than the survey team in 2024.

Figure 1 shows the entire Habitat Zone 1H and SRF found within.

Figure 1 SRF in Habitat Zone 1H (2024)



3.2.1 Vegetation

The broader Offset Site (blue boundary line Figure 2) has been assessed as containing a mosaic of EVC 882_61 Shallow Sandy Woodlands and EVC 283 Plains Sedgy Woodland. The area is dominated by Yellow Box *Eucalyptus melliodora* and Grey Box *Eucalyptus microcarpa*, with a canopy contiguous with adjoining habitats. Understory species cover is sparse, but there is a high leaf litter biomass. Soil crust and bryophyte cover varied across the site. Some SRF were observed with bryophytes and lichens fully surrounding them, whilst other SRF lacked this.

Understory species that are present include Cranberry Heath *Styphelia humifusa*, Common Eutaxia *Eutaxia microphylla var. microphylla*, Golden Wattle *Acacia pycnantha* and Fuzzy New Holland Daisy *Vittadinia cuneata*. Weed cover was recently estimated to be 25% in Zone 1H (spring survey) according to the [redacted]2023 annual report to Department of Energy, Environment and Climate Action (Victoria) (DEECA).

A more detailed description of vegetation within the Offset Site is provided in Section 3.4.

3.3 Spiny Rice-flower surveys

Site assessments were undertaken on 15 and 16 July 2024 to confirm the occurrence of SRF and to inform additional management measures to be implemented to improve the health and number of SRF.

To assess the number of SRF on site, a targeted survey was conducted by two ecologists in which 5 meter (m) wide transects were walked across the site. Each individual SRF that was discovered was mapped using a hand-held phone to an accuracy of ~5 m. A majority of individuals were in flower, so individuals were also sexed.

[redacted]

Locations of SRF within the Calder Park Offset Site are mapped in Figure 2.

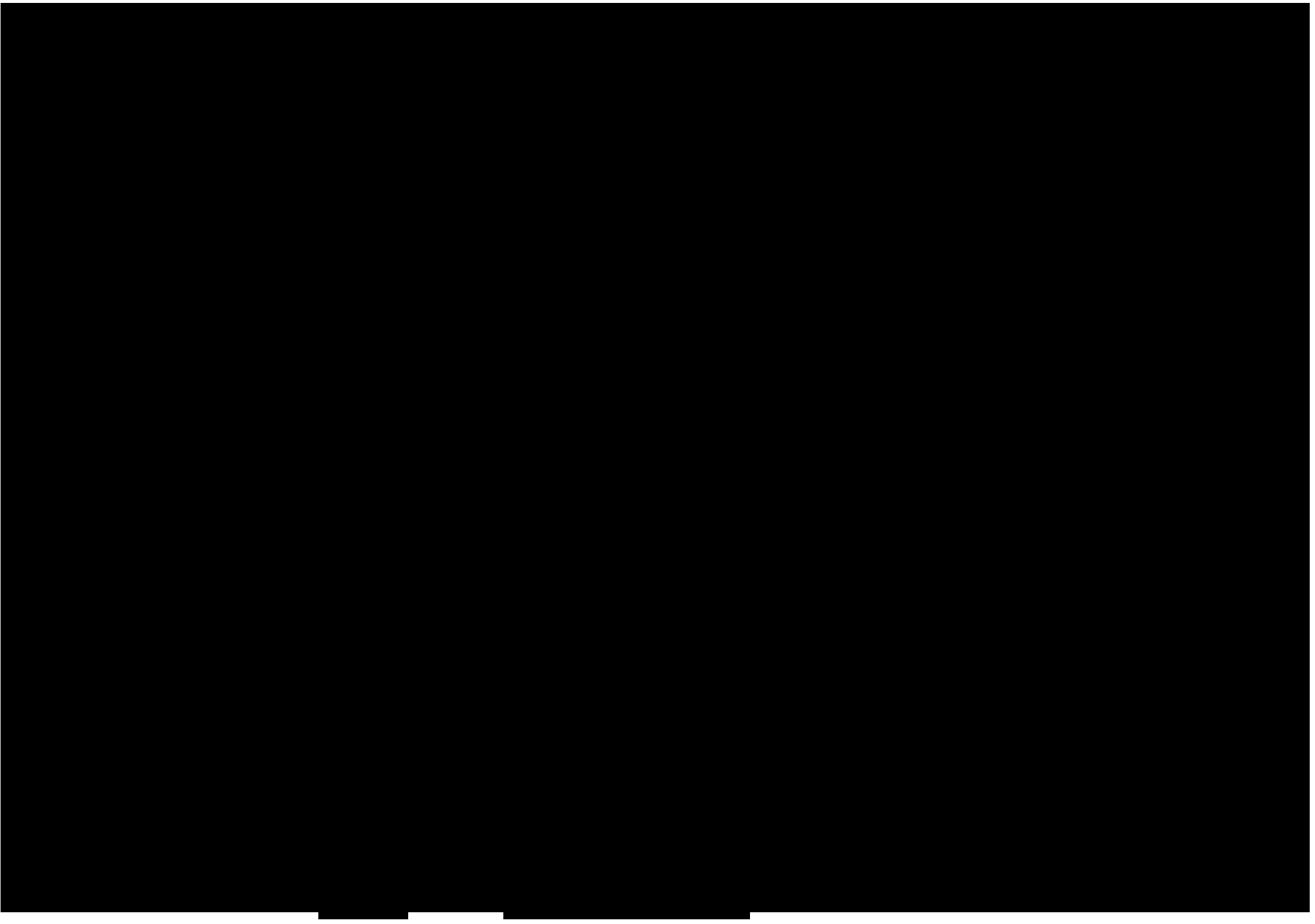
SRF were generally observed growing in slightly raised areas of the site with a more open canopy. SRF grew on the edges of shallow depressions containing Black Bristle-rush *Chorizandra enodis* but were not observed growing within these wetter areas. Areas with denser canopy cover and less light also lacked SRF, and SRF was more common within areas that receive dappled light.

Plate 5 SRF were not observed growing in shallow depressions containing Black Bristle-rush

Plate 6 Raised areas with an open canopy are ideal for SRF

Plate 7 Areas with a denser canopy are less suitable for SRF

Figure 2 SRF locations within offset site



3.4 Offset Site quality

An assessment of the quality of the vegetation was undertaken during the site assessment on 15 and 16 July 2024.

Whilst it is recognised that the application of the Victorian Vegetation Quality Assessment (VQA) data is not immediately applicable to areas containing MNES, it is considered to provide a quantitative analysis of the quality of the vegetation at the site. The assessment was undertaken by two DEECA accredited VQA assessors. The results of the VQA are provided below in Table 5. It is recognised that the time of survey is not ideal for determining annual weeds, which is likely to be higher in spring.

The Offset Site was assessed against the benchmarks for EVC 882_61 Shallow Sands Woodland in the [redacted]. Bioregion boundaries are fluid and may be extended into nearby adjacent areas. As no benchmark EVC score exists for EVC 882_61 Shallow Sands Woodland in the [redacted] the benchmark from the [redacted] has been used.

Table 5 Habitat Zone 1H VQA scores

Habitat Zone			Habitat Zone 1H
EVC			882_62 Shallow Sands Woodland
Bioregion			[redacted]
Bioregional Conservation Status (BCS)			Vulnerable
Site Condition	Large Old Trees	10	3
	Tree Canopy Cover	5	5
	Lack of Weeds	15	13
	Understorey	25	15
	Recruitment	10	10
	Organic Litter	5	3
	Logs	5	0
	Total Site Score	75	49
Standardiser		-	1
Standardised Site Score		-	49
Landscape Context	Patch Size	10	8
	Distance to Core Area	5	5
	Neighbourhood	10	4
	Total Landscape Score	25	17
Habitat Score		100	66
Habitat Points = Score/100		1	0.66
Total area of Habitat Zone (ha)			6.4
Habitat Hectares (Hha)			4.224

In general, the Offset Site was dominated by a canopy of Yellow Gum *Eucalyptus leucoxylon*, Grey Box *Eucalyptus microcarpa* and Yellow Box *Eucalyptus melliodora*. Canopy cover is to 10% across the Offset Site, with variation across the site. Some areas contain denser stands of Eucalypts, whilst other areas have a sparser canopy, allowing more light to hit the ground. Micro-variation within the Offset Site means there are areas of damp depressions and raised areas that are drier.

Damp depressions lack species diversity and are generally dominated by Black Bristle-rush *Chorizandra enodis* and some Juncus species. These areas were not observed as containing any SRF growing within them, though some were observed growing on the drier edges.

Drier areas in the understory generally lacked species diversity. The most common indigenous species observed included Golden Wattle *Acacia pycnantha*, Fuzzy New Holland Daisy *Vittadinia cuneata*, Wallaby Grass *Rytidosperma* sp., Cranberry Heath *Styphelia humifusa* and Common Eutaxia *Eutaxia microphylla var. microphylla*. Other species occurring sporadically throughout the site included Gold Dust Wattle *Acacia acinacea*, Greenhood *Pterostylis* sp., Sundew *Drosera* sp., Common Raspwort *Gonocarpus tetragynus*, Cottony Fireweed *Senecio quadridentatus* and Sheep's Burr *Acaena echinata.* SRF was observed in areas with a more open canopy.

Weed cover at the time of assessment was low at under 5%, however the time of survey was not ideal for determining annual weeds. Weed cover is therefore expected to increase during other times of the year, such as spring. Annual Veldt-grass *Ehrharta longiflora* was generally observed growing around the base of trees. Onion Grass *Romulea rosea* and germinant Spear Thistle *Cirsium vulgare* were observed throughout the entire Offset Site. The only observed woody weeds were mature Sugar Gums *Eucalyptus cladocalyx* growing along the eastern fence line adjacent to the rail corridor. Representative images of the Offset Site are provided above in Plates 5-7, and below in Plates 8-10.

Adjacent to the east and separated by the railway line, is the [redacted]

Plate 8 The understory is generally lacking species diversity

Plate 9 The ground contains native organic litter predominately eucalyptus leaves

Plate 10 The Offset Site is fenced

3.5 Ongoing threats to Spiny Rice-flower

Threats to SRF across the offset parcel and surrounds have been highlighted in the Landowner Agreement [redacted]. Key threats outlined include:

- Grazing: Grazing by European Rabbits or other mammals may occur, although this was not observed at the time of the 2024 assessment.
- Weed Invasion: Weeds in the zone may outcompete or smother SRF
- Biomass: Leaf litter biomass in the zone may reduce available recruitment space for SRF

It is expected that these threats will be similar across the entire offset parcel, given the immediate proximity. Therefore, grazing, weed invasion and biomass threats will require additional management to ensure the survival success of the offset SRF.

Herbivory of SRF was not observed during the time of the July 2024 assessment, however this does not mean that herbivory is not still a threat.

At the time of the July 2024 assessment, additional key threats identified included:

- Lack of management actions specific to SRF
- Lack of germination of SRF

Another previously unrecognized threat is water stress. Given that this SRF population is located in the Wimmera Bioregion, drought-induced water stress presents an additional factor that must be managed for the population's continued survival.

4. Offset Security and Management Responsibilities

This OMP outlines the additional management actions that will be implemented at the Offset Site, in addition to those under the existing [redacted]

A memorandum of understanding has been signed by the approval holder and the offset provider to commit the offset provider to holding these offsets specifically for the Calder Park Drive and Holden Road Level Crossing Removal Project until 15 February 2025. This has been extended until September 2025.

4.1 Landowner, Offset Broker and Others

[redacted]

[redacted]. The Landowner agrees to:

- Manage the site for conservation
- Achieve the management commitments outlined in this EPBC Act OMP

This OMP allows opportunity and flexibility for the Landowner to collaborate with a suitably qualified and experienced native vegetation management contractor to support the implementation of management actions such as seed collection and germination, planting, biomass management and additional watering.

4.2 In-perpetuity security

The Offset Site will be managed for the purposes of conservation. All works will be conducted by the Landowner or a suitably qualified and experienced native vegetation management contractor. The Offset Site has been secured in-perpetuity via an agreement under [redacted] of the Conservation, Forests and Lands Act 1987, which was registered on the title on 19 September 2017. The Offset Site has been managed, protected and secured in-perpetuity for the purposes of biodiversity conservation since September 2017.

4.3 Funding

The approval holder is responsible for providing funding to the manager of the proposed Offset Site for the management, monitoring and reporting (as outlined in this OMP) of the Offset Site until the expiry date of the approval (2044).

4.4 Adaptive management

This plan provides actions to manage the land for a period of 10 years for the purposes of conservation and achieving an ongoing improvement in its condition. The plan is based on a premise of adaptive management whereby the implementation and timing of actions can be adjusted over time if a more appropriate approach is identified. Adjustments may be required in response to factors such as new information on the ecology of the vegetation community, the emergence of new management techniques or seasonal conditions which vary considerably from year to year. Timing of the actions will be at the discretion of the Landowner, except where specific timing commitments have been specified in this OMP.

Management actions are described in Section 5 and summarised in Table 9.

Some actions that may be required for the ongoing management and improvement of the Offset Site will be decided after the examination of monitoring data. This is particularly important for the re-establishment SRF individuals.

Changes to management actions described in this plan will be made in consultation with DEECA and DCCEEW.

5. Management Actions

This section discusses the EPBC Offset Management obligations at the proposed Offset Site. The landholder has committed to the management actions outlined in the [redacted] Agreement on-title and will further commit to these additional actions. These obligations are discussed in detail in Sections 5.1 to 5.10. Commitments in this plan need to be achievable and practical. They also need to be measurable against the commitments made in the EPBC Act Offset Strategy (AECOM-GHD JV, 2024a) in the calculation of improvement over time to achieve conservation gains. Since the writing of the EPBC Act Offset Strategy, additional management actions have been explored. Performance targets for these management actions are set in Section 9. In summary, the key focus of the management actions and therefore key gains of the Offset Site, include:

- Seed Collection
- Seed Propagation
- Planting of additional SRF
- Additional Weeding
- Targeted Scorching, if required
- Additional Treatments, if required
- Soil Moisture Monitoring
- Supplemental Watering
- Rabbit-proof Caging, if required
- Additional Surveys for in-situ SRF Recruitment

The management actions listed above and described in Table 6 below are in addition to those that have been undertaken across the wider offset parcel since the property was registered under [redacted] of the *Conservation, Forests and Lands Act 1987* in 2017 and therefore represent a conservation gain. These actions have been proposed in consultation with DEECA. All additional management measures will be implemented in areas of Habitat Zone 1H that are not otherwise managed by an Offset Management Plan.

Table 6 High-level description of actions

Action	High-level description	Relevant section
Seed Collection	Seed collection to occur each year from the SRF population on the Offset Site and in surrounding areas of local provenance.	Section 5.1
Seed Propagation	Seed propagated to create 100 SRF in the first year and maintain a nursery stock of 50 SRF each year of the OMP thereafter.	Section 5.2
Plantings of Additional SRF	Planting of 48 SRF into the Offset Site, with the successional replacement of those that die each year.	Section 5.3
Additional Weeding	Hand-weeding around clusters of SRF.	Section 5.4

Action	High-level description	Relevant section
Targeted Scorching	Scorching of experimental quadrats at the Offset Site. If successful in improving germination and/or SRF health, additional areas and SRF will be scorched in future years at the discretion of the Landowner and suitably qualified and experienced native vegetation management consultants and contractors.	Section 5.5
Additional Treatments	Light hand digging and manual removal of leaf litter around SRF to be conducted to encourage germination of the seed bank.	Section 5.6
Soil Moisture Monitoring	Installation of soil moisture monitors to collect data and determination of a soil moisture threshold that triggers additional watering events.	Section 5.7
Supplemental Watering	Supplemental watering SRF prior to flowering, planted SRF and all SRF during dry conditions, and when the soil moisture threshold is met.	Section 5.8
Rabbit-proof Caging	Rabbit-proof caging to be placed over SRF if grazing is determined to pose a threat to SRF.	Section 5.9
Additional Surveys	Additional survey of the area to identify and find new SRF recruits and enact additional protection and management actions for them.	Section 5.10

5.1 Seed collection

Seed will be collected from SRF growing on the Offset Site and in surrounding areas of local provenance to ensure ongoing genetic diversity in nursery stock, and further protect populations against stochastic events. Seed collection can be conducted by the Landowner, or suitably qualified and experienced native vegetation management contractor engaged by the Landowner. A permit will be required to undertake seed collection and this will need to be secured by those responsible for seed collection. The requirement of seed collection in local areas is not guaranteed and will be subject to FFG Act approval.

Seed collection at the Offset Site will follow the methodology outlined by the *Seed Collection Protocol* by the *Pimelea spinescens* Recovery Team (2018). Seed collection permits generally recommend collecting only 10% of seed from a population. Seed harvesting will begin approximately late July to August, depending on weather conditions. This timing is indicative and depends on weather conditions and plant development. Plants used for seed collection will be temporarily marked using flagging tape or pin flags. Stockings will be placed over female branches that show signs of high pollination and swelling ovaries and tied off at the end. Seed will be left to develop for at least four to six weeks and collected approximately mid-October to early November once seeds have fully developed and dropped. A container with a split cut must be used to slide the branch into and collect seed fall once the stocking is removed.

The first seed collection event is to occur during the first year of this OMP. The best current success rates of germinating seed are at approximately 4% (that is, for every 25 seeds, approximately one plant is produced for planting) ([redacted] As the initial SRF nursery propagation goal is 70 to 100 plants (48 of which are planted, others will remain as nursery stock – see Section 5.2), the first collection event will aim to collect approximately 1,750 or more seeds. Seeds are to be collected from areas of local provenance to ensure the genetics of the [redacted] are protected and maintained [redacted]

Seed collection events in future years will be adaptive to collect seed to maintain a nursery population of approximately 50 SRF for the duration of the OMP. The goal of growing 70 to 100 plants in the first year is to establish nursery stock for future successional replacement events. If this target is not met, ongoing stock will be grown from seeds collected during subsequent seed collection events.

5.2 Seed propagation

Collected seed is to be propagated and grown for future planting into the Offset Site. Seed propagation will be managed by the Landowner or by a suitably qualified and experienced native vegetation management contractor engaged by the Landowner. A suitably qualified ecologist with SRF experience will be contacted for advice on propagation. The first propagation event is to occur after the initial seed collection event, with the aim of propagating 70 to 100 SRF. This will allow for 48 SRF to be planted into the site, while approximately 22 to 52 will be reserved as nursery stock. Seed propagation is to continue in subsequent years to ensure a nursery stock of at least 50 SRF is maintained, allowing for the replacement of SRF at the Offset Site as needed.

Prior to planting, the nursery seedlings must be gradually 'hardened off' (i.e. exposed to conditions similar to those occurring at the Offset Site) to prevent stress from sudden changes in watering, sunlight, wind exposure, or temperature.

5.3 Plantings of additional SRF

SRF typically has poor in-situ recruitment and germination rates, largely due to drought conditions and higher than average rainfall years (DCCEEW, 2024b). Supplementary planting of SRF into the Offset Site will aim to increase the size of the population, bolster the genetic diversity of the population and contribute to the ongoing persistence of SRF at the Offset Site. Propagated SRF individuals are to be planted successionally into the site, with an aim of contributing towards achieving 24 additional individuals at the end of the 10-year management period.

48 SRF will be planted into the site, with successional replacement of dead individuals occurring each year to aim to achieve survival of 24 individuals by the end of the 10-year period. If 24 planted individuals do not survive by the end of this monitoring period, then it is expected that the population will increase through other management actions discussed in this OMP which aim to improve germination rates and germinant survival (e.g. targeted scorching, supplementary watering).

All planted SRF will be tagged for identification and ongoing monitoring. The remaining plants will be kept in a nursery as replacements for any individuals that die, with additional plants grown each year to ensure a stock of at least 50 replacement plants is always available. Each year planted SRF that have died will be successionally replaced.

Planting at the Offset Site is to be conducted by the Landowner, or by a suitably qualified and experienced native vegetation management contractor engaged by the Landowner. Consideration will be given to the planting procedure, as described below.

Planting Procedure

The Planting Procedure will be undertaken in accordance with the SRF Recovery Team's 'Translocation Protocol' (2013) as well as the Biosis (2014) '*Review of Spiny Rice-flower Translocations in Victoria'* Report. The latter evaluates performance of past SRF translocation efforts, providing important information and learnings to consider when planting additional SRF tubestock into this Offset Site. It is imperative that the below factors are considered when planting SRF to ensure the greatest chance of survival; this process has been developed in consultation with [redacted]

Plant Positioning

Additional SRF are only to be planted in areas of suitable habitat. Areas identified as suitable habitat have the following key qualities:

- Slightly raised mounds that are not excessively damp
- Areas not containing shallow depressions where Black Bristle-rush *Chorizandra enodis* is present (SRF was observed growing on the outer edges of these depressions)
- Lack excessive weed cover
- Have minimal, open canopy cover and are not shaded by dense stands of juvenile eucalypts
- Contain SRF

Drone imagery from 5 and 6 December 2024 informed a map that identifies suitable planting areas, totalling 0.53 ha of unsuitable planting area, 5.75 ha of suitable planting area, and 0.14 ha of ideal planting area. To support SRF plantings in the most suitable locations, SRF planting sites will be informed by this map, shown in Figure 3, and the Calder Park Offset Purchased Area and Calder Park Offset Site boundaries in consultation with the Landowner and suitably qualified and experienced native vegetation management consultants and contractors. Planted SRF will only be counted as additional SRF and attributable to this OMP if they are planted within the Calder Park Offset Purchased Area and the Calder Park Offset Site. SRF will be tagged to denote that they attribute to this OMP.

Figure 3 Additional SRF planting locations

X:\Project Data\PRGM\GIS\MXD\LXRP3\CalderParkDf_HoldenRd\Ecology\20250104 Rev B | Date: 15 Apr 2025

Planting method

When planting SRF tubestock at the Offset Site, it is crucial to ensure that the holes created match the size of the tubestock. Failure to do so can lead to raised mounds or sunken depressions, which adversely affect plant survival (Biosis, 2014). Planting will be conducted by suitably qualified and experienced native vegetation management contractors with knowledge on planting of SRF. It is suggested that the 48 SRF be planted by hand with a small spade used to dig the hole, and SRF tubestock planted into the space, with any gaps backfilled with extra soil. Considerations are as follows:

- Raised mounds
    - When holes are smaller than the tubestock, planting can result in raised mounds. These mounds expose the roots to desiccation as the soil settles around them.
- Sunken depressions
    - Conversely, oversized holes can cause sunken depressions during planting. These depressions collect water, potentially waterlogging the roots.
- Soil type
    - To mitigate changes in hole and tubestock size due to wetting and drying periods, SRF tubestock must be grown in substrate similar to that found on site. The soil type on site will need to be analysed, and a similar substrate used to grow the SRF.
- Distance to other SRF clusters
    - In accordance with the Translocation Protocol (SRF Recovery Team, 2013), seedlings will be planted “in clusters (next to each other 10 to 30 cm apart) of at least four to six individuals and positioned no more than ~2 metres from another cluster”
- Tree canopy
    - In accordance with the DEECA ‘Management Standards for Native Vegetation Offset Sites’, no soil disturbance is allowed within the tree canopy dripline
    - However, SRF are to be planted <2 m from each other and these locations are generally under the canopy dripline
    - Hand planting of SRF will minimise soil disturbance and planting SRF under trees in this location is supported by suitably qualified ecologists/botanists experienced with SRF [redacted]
- Timing
    - SRF planting can occur around from early autumn through to Winter, 6 to 12 months after a targeted scorch (if a scorch occurs on site). It is recommended that planting occurs once the heat of Summer has dissipated. This allows plants to “settle during benign conditions before the summer period” (DCCEEW, 2013).

5.4 Additional weeding

Under the [redacted] Agreement, weeding already broadly occurs across the site. This plan requires that additional hand weeding of non-indigenous species is to be undertaken around SRF individuals and clusters. This will prevent SRF from becoming smothered by weeds and promote further germination around existing SRF. Additional weeding will be managed by the Landowner or suitably qualified and experienced native vegetation management contractor engaged by the Landowner.

5.5 Targeted scorching

The SRF recovery Team suggests that:

- "Biomass reduction should occur at known *P. spinescens* sites at least once every 3 years (though in areas of high productivity/high rainfall it may be necessary to burn more frequently).
- If a site has not been burnt in a period of greater than 4 years then anytime it can be burnt is likely to be beneficial to *P. spinescens.*
- Targeted scorching from late spring (November) through summer or into early autumn (April) is considered optimal" (SRF Recovery Team, 2017)."

Targeted scorching of sites containing SRF is beneficial as the deliberate use of fire creates bare ground and gaps that provide " an opportunity for SRF to recruit from the soil seed bank" (DCCEEW, 2024b). An appropriate fire regime for northern populations of SRF (including the [redacted]) is unknown, but it is accepted that northern populations are declining more dramatically than southern populations (which do receive fire). An inappropriate fire regime will negatively impact SRF and may result in negative impacts on SRF including reduced reproductive output and plant mortality. For example, juvenile SRF and those recently planted do not have a well-established taproot which can re-sprout after fire and, when fire occurs prior to or during flowering and seed production, the reproductive output of the population is removed for that year and reduces seed accumulation in the soil (Regan et al. 2021).

This Offset Site is a woodland and an appropriate fire regime has not been widely documented for management of SRF in such an environment. The SRF Recovery Plan (DCCEEW, 2024b) expresses a need for closing knowledge gaps on key biological attributes including Action Number 2.3 "germination ecology, including potential seasonal dormancy and fire-related cues, and seedling establishment, including fire-recruitment dynamics" (DCCEEW, 2024b). This OMP therefore provides a unique opportunity to expand and build upon this knowledge through the rigorous testing of targeted scorching at the Offset Site. If targeted scorching is implemented at the site, the results must be documented to guide the use of fire in future projects.

Targeted scorching at the Offset Site must be conducted by the Landowner or a suitably qualified and experienced native vegetation management contractor engaged by the Landowner, in consultation with a suitably qualified ecologist/botanist experienced with SRF.

Given the Offset Site is located in the [redacted] the region dries out earlier than other regions of the state like the Victorian Volcanic Plains Bioregion. Scorching is highly unlikely to be permitted in late Spring and could be implemented in early Spring around September [redacted] The Fire Danger Period may be declared as early as October in some years. Prior to undertaking targeted scorching the Fire Danger Period must be checked and the Municipal Fire Prevention Officer contacted to check local restrictions. Targeted scorching at the Offset Site must follow the below restrictions that apply to 'Burning Off' during the Fire Danger Period:

- You have a Fire Danger Period permit issued by CFA, FRV or a Municipal Fire Prevention Officer, depending on the location of the activity
- You have a written permit issued by a Fire Prevention Officer of a public authority if planning to burn on land under their jurisdiction
- You comply with the conditions of that permit
- A person is in attendance at all times while the fire is alight and has the capacity and means to extinguish the fire
- The fire is completely extinguished before the person leaves" (CFA, 2024).

As the Offset Site has not previously been scorched for SRF, an experimental approach will be taken to determine the most beneficial method in which targeted scorching of the Offset Site will be done. Targeted scorching must be conducted as soon as possible, likely in the second year to allow for appropriate preparation.

There is flexibility as to how this is trialled at the site and the approach will ultimately be decided upon by the Landowner and suitably qualified and experienced native vegetation management contractor as to how this is trialled. Guidance to this approach is provided below:

1. Six quadrats are to be set up: 3 scorched, 3 unscorched. The size of each quadrat may be 5m by 5m (25 m^2) or 10m by 10m (100 m^2) and each quadrat must contain SRF.
2. A pre-scorch survey must be conducted by suitably qualified botanists adhering to the survey methodology outlined in the Guidelines for Monitoring *Pimelea spinescens* (Reynolds, 2015). This survey must especially focus on identifying and tagging all germinants within the quadrats. Other indigenous species must also be flagged.
3. Germinants are to be covered with ceramic pots at the scorched quadrat to protect them from the fire (Biosis, 2013; and [redacted]. Other indigenous species are to also be protected using heat shields or ceramic pots. In instances where not all indigenous species can be covered with ceramic pots, scorching will be targeted so as to avoid impacting these species, only focusing on the SRF. Larger SRF must remain uncovered.
4. Targeted scorching is to then be introduced at the scorched quadrat through the use of a scorch torch. The following must be scorched in a highly controlled manner within the three scorched quadrats:
    - Organic litter
    - Weeds
    - The above-ground portions of larger SRF
5. Once the scorch has been conducted, a post-scorch survey is to be conducted. The timing of this post-scorch survey is dependent on timing of the scorch and seasonal conditions. As outlined in the Monitoring Protocol "…if regular precipitation occurs biomass will accumulate quickly and assessment could occur within 4 to 6 weeks but if in drought (infrequent to low precipitation levels) conditions, assessments need to wait for material to grow and may need a delay of up to 6 to 12 months following the biomass reduction event (depending on timing and growth)" [redacted]. The germinant count data between scorched and unscorched sites is to then be analysed pre- and post-scorch to help inform if scorching is beneficial at improving germination within the Offset Site.

If scorching is deemed to improve recruitment within the test quadrats, new quadrats must be scorched in ensuing years. The number and frequency of future scorches is to be determined by the Landowner in consultation with suitably qualified ecologists/botanists experienced with SRF, once results from the initial scorch are analysed.

If results are deemed to be inconclusive or targeted scorching does not increase recruitment within the test quadrats, then future use of targeted scorching at the site is to be re-evaluated by the Landowner.

Clause 5.7.2 Compliance under the [redacted] Agreement

It is explicitly stipulated under Clause 5.7.2 of the [redacted] Agreement that the Landowner must "take all reasonable steps to ensure that no Native Vegetation on the Site is removed, destroyed, lopped, or otherwise interfered with…". In keeping with this, targeted scorching will be undertaken in a manner that will enhance the native vegetation at the Offset Site. If the pre-scorch survey identifies native vegetation that will be negatively impacted by fire, then alternative targeted scorching quadrats will be identified. The targeted scorching will encourage the SRF to conserve resources during the hotter summer months, fostering stronger and more resilient growth during milder conditions. Additionally, the comprehensive pre-scorch survey and protection of other indigenous vegetation within the quadrat will directly prevent the destruction of native vegetation, further fulfilling the requirements of the [redacted] Agreement. The exact data that is to be collected and methodology in which this is done must be decided upon by the landowner in conjunction with relevant SRF experts prior to targeted scorching.

5.6 Additional treatments

In the areas not subjected to scorching, benefit can still be gained by introducing slight disturbance to the SRF. The following methods must be employed at the unscorched quadrat sites:

- Light handed digging around SRF
    - Light scratching and diggings on the surface of the soil around the SRF clusters is to be created. This may be done using a hand trowel, but the exact method is at the discretion of the Landowner in consultation with suitably qualified ecologists/botanists experienced with SRF.
    - Manual soil disturbance around SRF aims to mimic disturbance created by foraging native animals (such as Bandicoots) and may encourage dormant seed germination [redacted]).
- Removal of leaf litter around SRF clusters
    - The removal of leaf litter will also expose areas of soil containing seedbank and encourage the germination of dormant SRF seeds [redacted]).

Additional treatments at the unscorched plots can be conducted by the Landowner, or by a suitably qualified and experienced native vegetation management contractor engaged by the Landowner. The Landowner is to decide upon an exact methodology to introduce these additional treatments, and this must be done in consultation with suitably qualified ecologists/botanists experienced with SRF.

5.7 Soil moisture monitoring

Increased and prolonged drought conditions are linked to a reduction in recruitment potential for SRF (including a reduction in viable seed production) and increased risk of individual plant mortality (DCCEEW, 2024b). Watering and soil moisture monitoring is to be conducted for the planted additional SRF, as well as supplemental watering of existing individuals during prolonged drought conditions. Currently, no prescribed methodology exists for the soil moisture monitoring of SRF. The Translocation Protocol highlights a need for frequent monitoring (once weekly or more) but does not outline how this is to be done (*Pimelea spinescens* Recovery Team, 2013).

Previously described soil moisture monitoring frequency and thresholds

According to the Translocation Protocol (*Pimelea spinescens* Recovery Team, 2013) soil moisture monitoring must be conducted:

- Weekly for at least the first three months of additional SRF plantings
- Monthly for an additional three months
- Bi-monthly for an additional 12 months
- Quarterly for the next 2.5 years
- Six-monthly OR quarterly for the remaining six years of the OMP (quarterly is preferred)

However, if drought conditions are forecast, soil moisture monitoring must be conducted weekly during drought periods to inform soil moisture and enact watering protocol. If soil is 'dry', watering is to occur. This methodology fails to define 'dry' soil conditions. Therefore, a new methodology is proposed below.

Proposed new soil moisture monitoring frequency and methodology

To improve outcomes through the use of innovative technology, an ongoing soil moisture monitoring system must be installed at the Offset Site. The Landowner will select and install an appropriate system to monitor soil moisture around the SRF. The system is expected to feature 4G capabilities, be solar powered, have multiple sensors, have soil moisture probes to the depth of 60 mm or more, and take readings at multiple depths, but the exact specifications, locations and number of probes are at the discretion of the Landowner. To avoid conflict with the Native Vegetation Revegetation Planting Standards (DSE, 2006), the probes shall not be inserted under the drip line of the canopy. Probes inserted at the edges of canopies within approximately <1 m of existing SRF will still gather useful data on soil moisture around SRF [redacted]

Soil moisture monitoring is to begin in the first year of the OMP to gain threshold data. From this data, a threshold soil moisture level will be determined by the Landowner in consultation with suitably qualified ecologists/botanists experienced with SRF. Soil moisture monitoring will continue for the entirety of the 10 years. The threshold will guide future watering events, allowing them to be triggered based on soil moisture levels rather than a fixed timeframe, ensuring more targeted and efficient watering when needed.

5.8 Supplemental watering

Supplemental watering of SRF is to occur at the Offset Site. Supplemental watering is to be conducted by the Landowner, or by a suitably qualified and experienced native vegetation management contractor engaged by the Landowner. The three instances in which supplemental watering will be required is described below:

- **Before flowering:** If conditions are dry before SRF come into flower, supplemental watering must be applied to mature individuals. Increased watering will encourage additional viable seed production in SRF [redacted]
- **Planted individuals:** Planted individuals are to be watered every week during their first, second and third summer (December-February). Under the correct conditions, some SRF will flower and produce seed within the first year of planting [redacted]. Watering during the first three summers is essential to cover the minimum expected time period. It must be done weekly or until adequate rainfall raises soil moisture levels (as indicated by the monitoring system) and persistent moist conditions are maintained for the first three years. This generally occurs during the first Autumn rain of the Autumn Break (Recovery Team, 2013). However, during the summer, watering will depend on the weather. If drought conditions do not persist and the SRF are not showing signs of drought stress, weekly watering may not be necessary.

- **All areas containing SRF:** Once a soil moisture threshold has been determined by the Landowner and agreed upon with suitably qualified ecologists/botanists experienced with SRF (see Section 5.6), watering of SRF at the site is to occur. Prior to this threshold being determined, SRF at the Offset Site are to be watered at the discretion of the Landowner during dry periods and prolonged drought.

5.9 Rabbit-proof caging

At the time of assessment, no evidence of rabbits was observed on the Offset Site. The [redacted] Agreement prescribes the fumigation and collapse of rabbit burrows and baiting to control rabbit populations. This has been ongoing since 2017. The Offset Site is currently fitted with a fence surrounding the property boundary (2,288 m). This fence excludes livestock and the public but still allows for Kangaroos and other small mammals to enter the site. Ongoing management of the Offset Site must continue to implement the pest animal measures implemented in the [redacted] Agreement.

At present, rabbit-proof fencing is not required for the entire Offset Site. Instead, temporary rabbit-proof fencing is to be installed where necessary around planted SRF and SRF germinants to protect them from potential grazing, allowing them to establish roots and help to prevent transplant shock. Fencing can be conducted by the Landowner, or by a third-party engaged by the Landowner. Steel cages will be constructed and placed around patches of SRF on an as-needed basis, as determined by the Landowner [redacted]. This will occur if any herbivores (including rabbits) are identified as a threat to the survivorship of SRF at the Offset Site. The placement of steel cages at the Offset Site will be carried out in accordance with the existing [redacted] Agreement, as it will prevent soil disturbance (cages will not be dug into the ground) and ensure no harm to native vegetation.

5.10 Additional surveys for in-situ Spiny Rice-flower recruitment

Annual survival of SRF recruits is generally low (observed to be 14% across multiple sites, [redacted] and early identification of *in situ* germinants is crucial to allow for additional management measures to be undertaken (e.g. supplementary watering, additional weed control). Annual targeted surveys are to be conducted mid-winter to identify all SRF present on-site, including any new germinants. At least one suitably qualified ecologist/botanist experienced with SRF is to conduct targeted surveys at the Offset Site.

Surveys need to be conducted between April and August, when the SRF are in flower. SRF at this Offset Site were observed in flower during mid-July, so this is likely the ideal time to survey for this site. Surveys must be conducted four to six weeks after active management and biomass reduction has occurred. Individual SRF are to be recorded with GPS in accordance with [redacted] Data to be collected will include sex, if planted, and maturity (germinant or mature).

6. Monitoring

The purpose of this OMP is to conserve, maintain and increase the existing SRF population within the [redacted] Offset Site by a minimum of 24 individuals.

Monitoring is an important component of implementing this OMP as it allows the effectiveness of management measures to be determined and any new or emerging management issues to be identified. Monitoring for fence condition and pest animals will be undertaken by the Landowner. Monitoring of the SRF population and additional monitoring of vegetation condition (including weed cover, photo points, planted SRF and scorched plots) will be undertaken by a suitably qualified ecologist/botanist experienced with SRF.

The results of monitoring will be used to assess the effectiveness of management actions being conducted on site. This will help to inform the adaptive management actions if required (Section 4.4).

A summary of monitoring timelines and responsibilities is provided below in Table 7.

Monitoring must ensure that the targets and requirements outlined in Section 9 are met.

Table 7 Monitoring actions and responsibilities

Monitoring Action	Monitoring Description	Responsibility	Timing and Frequency	Duration
Whole Site Targeted Survey	Undertake annual monitoring of SRF population during flowering period. For whole site: • Number of individuals • Recruitment of individuals • Potential dieback • Presence of threats For individual SRF: • Sex • If planted • Maturity (germinant or mature) Any additional notes: weeds, stress etc	Landowner or suitably qualified ecologist/botanist experienced with SRF.	April to August (July preferred or when flowers are observed), annually.	10 years

Monitoring Action	Monitoring Description	Responsibility	Timing and Frequency	Duration
Planted SRF	Frequent monitoring of planted SRF to adapt management actions for improved survival: • Health • Water stress Dead and in need of replacement	Landowner or suitably qualified ecologist/botanist experienced with SRF.	Onwards from winter planting: • Monthly for the first six months • Every 2 months for the following 12 months Annually thereafter	10 years
Establish Photo Points	Establish the locations and first photo points that are to be repeated each year.	Landowner	First Spring	Once, Year 1
Photo Monitoring	Photo monitoring point quadrat and site photos.	Landowner or suitably qualified ecologist/botanist experienced with SRF.	Every Spring	10 years
Soil Moisture Monitoring	Soil moisture monitoring to occur using a soil moisture monitor.	Landowner or suitably qualified ecologist/botanist experienced with SRF.	Ongoing	10 years
General Condition	Monitoring of the general condition of the vegetation is to include a walk-over to note changes and a VQA.	Landowner or suitably qualified ecologist/botanist experienced with SRF that is an accredited VQA assessor.	Annually during Spring	10 years
Scorch quadrats	Undertake pre- and post-scorch monitoring of scorch quadrats.	Landowner or suitably qualified ecologist/botanist experienced with SRF.	From Year 2 Pre-Scorch • Spring Post Scorch • Condition dependent • 4-6 weeks if regular precipitation has occurred and biomass is increasing 6-12 months if growth is slow	Years when targeted scorch occurs

Monitoring Action	Monitoring Description	Responsibility	Timing and Frequency	Duration
General Condition	Monitoring of the general condition of the vegetation is to include a walk-over to note changes and a VQA.	Landowner or suitably qualified ecologist/botanist experienced with SRF that is an accredited VQA assessor.	Annually during Spring	10 years
Independent Audit	Independent audit of compliance with the conditions (EPBC 2023/09569) to be conducted for each audit period.	Approval holder to engage Independent Auditor.	Each subsequent three-year period following the commencement of the OMP.	Until the expiry date of the approval (2044)

Appropriate records are to be kept for each monitoring event (date, time, observations etc).

Further details regarding each monitoring type are described below.

6.1 Baseline survey

A survey to determine the extent and number of SRF present within the Offset Site was undertaken on 15 and 16 July 2024 (details and method is outlined is Section 3.3) and was undertaken in accordance with the EPBC Act Survey Guidelines for Spiny Rice-flower (DEWHA, 2009). This survey recorded the presence of 42 individual SRF within the Offset Site and is considered the baseline survey for the Offset Site.

6.2 SRF population monitoring

The purpose of this OMP is to conserve, maintain and increase the existing SRF population within the [redacted] Offset Site by a minimum of 24 individuals. Monitoring of the population is a requirement of this OMP and is the key measure when determining completion of the. Monitoring of the SRF is to be conducted in accordance with the EPBC Act Survey Guidelines for Spiny Rice-flower (DEWHA, 2009), with additional species and biometric data collected where an individual is detected.

Targeted survey monitoring for SRF at the Offset Site is to be conducted annually by the Landowner or a suitably qualified ecologist/botanist. A SRF census will be conducted within the Offset Site during the SRF flowering time (April to August) to identify the following:

- Number of individuals within the Offset Site
- Recruitment of individuals
- Potential dieback
- Presence of threats

All SRF individuals within the Offset Site are to be mapped and recorded using GPS technology.

Each individual SRF point is to note the following:

- Sex
- If planted
- Maturity (germinant or mature)
- Plant Health
- Weed cover (%) within 2 m of SRF individual
- Any additional notes: new weeds, stress, etc.

More frequent monitoring is to be conducted for planted additional SRF. These planted SRF are to be tagged, in addition to being plotted using a GPS, to allow for easy identification. Monitoring of planted SRF is to be conducted:

- Monthly for the first six months
- Every two months for the following 12 months

Monitoring of planted SRF will allow for detectability of threats; and adaptive management measures such as additional watering or weed control can be implemented.

6.3 Planted SRF monitoring

Frequent monitoring of planted SRF must be conducted to adapt management actions for improved survival, focusing on plant health, water stress, and identifying any dead plants that may need replacement. This monitoring must be carried out by a Landowner or a suitably qualified ecologist/botanist with experience in SRF. Starting from the winter planting, the monitoring schedule must include monthly checks for the first six months, followed by bi-monthly checks for the next 12 months, and annual monitoring thereafter. This monitoring process must continue for a period of 10 years to ensure the continued success of the planted SRF.

6.4 Establish photo points and photo monitoring

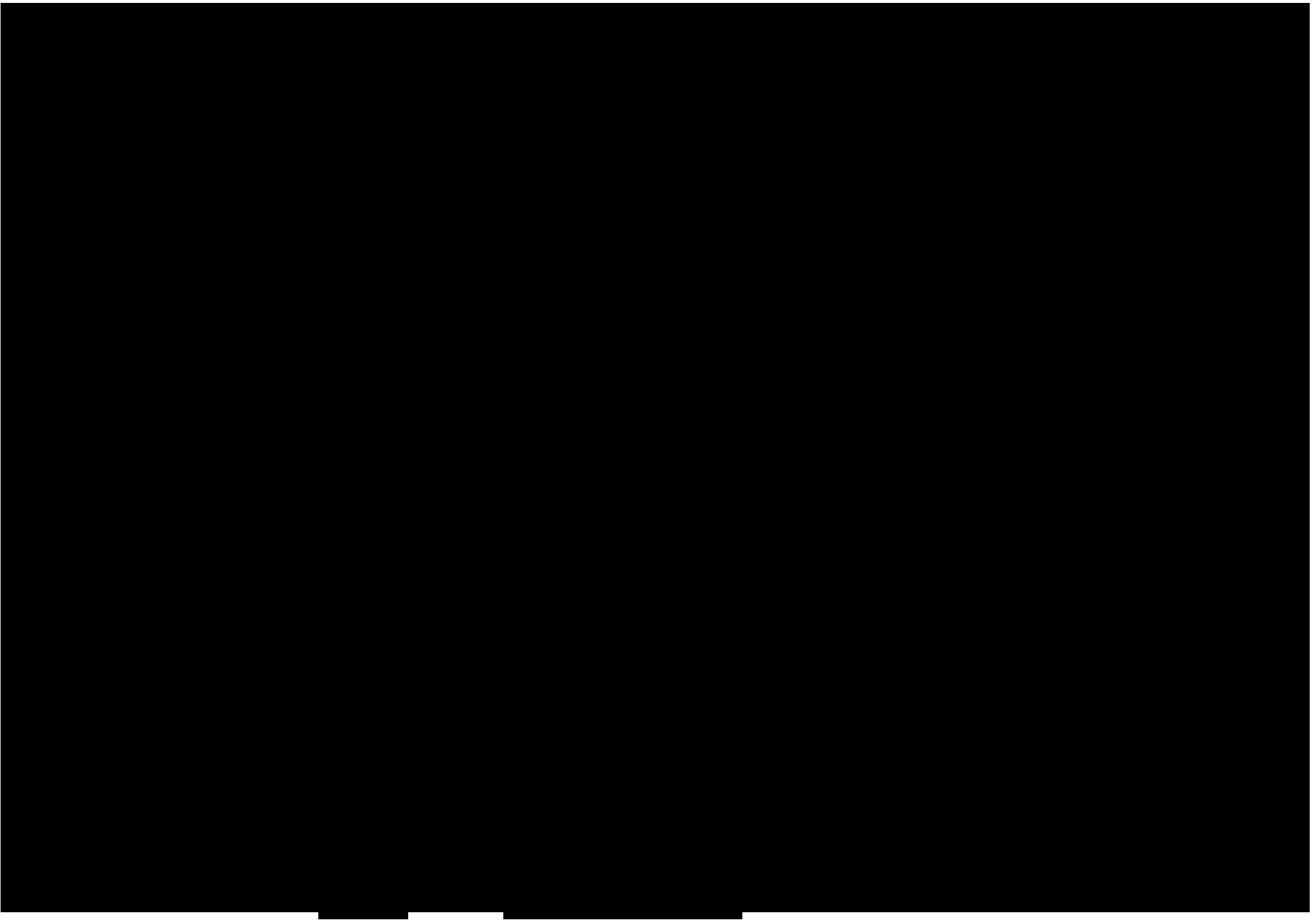
Photo monitoring of the Offset Site is to be conducted by the Landowner, or a third-party engaged by the Landowner. Photo monitoring points must be implemented at this Offset Site to accurately capture the condition of the site as the years progress. Permanent photo monitoring points are to be established, with a minimum of nine photo monitoring points at the Offset Site. Each photo point will comprise two images:

- Ground view of a square 5 m x 5 m plot which will be clearly marked and accurately located by GPS or similar. Each plot will be assessed for percentage total vegetation cover, percentage cover of native and exotic life-forms, inter-tussock space and average height of the vegetation. Using the north-east corner of the plot as the top right corner of the photo frame, a photo will be taken from around 1.2 m keeping the frame of the photo as square as possible to the boundary of the plot.
- Overview (wide-angle landscape view) of photo monitoring point, with the direction indicated in Figure 4 below. The photo must be taken from around 1.5 m to capture the canopy of trees and ground-layer of vegetation, and photos captured during the first monitoring event will be used to guide future photo monitoring events in future years.

Photo points will be monitored annually in Spring and the baseline photo point monitoring will be conducted during the first monitoring event, before the first weed control action.

Photos will be taken using a reasonable quality phone camera or similar, horizontal orientation, using 1X zoom and the same aspect ratio for photograph cropping. The photographic field of view will be matched year to year (using photos taken during the first monitoring event as a guide), using landmarks present in the original baseline photo

Figure 4 Photo monitoring locations and direction



6.5 Soil moisture monitoring

Soil moisture monitoring is to be ongoing at the site for the entire ten years. Please refer to Section 5.7 for further details.

Each individual SRF point is to note the following:

- Sex
- If planted
- Maturity (germinant or mature)
- Any additional notes: weeds, stress, etc.

All SRF individuals within the Offset Site are to be mapped and recorded using GPS technology. The results of monitoring will be used to assess the effectiveness of management actions being conducted on site. This will help to inform the adaptive management actions if required (Section 4.4).

More frequent monitoring is to be conducted for planted additional SRF. These planted SRF are to be tagged, in addition to being plotted using a GPS, to allow for easy identification. Monitoring of planted SRF is to be conducted:

- Monthly for the first six months
- Every two months for the following 12 months

Monitoring of planted SRF will allow for detectability of threats; and adaptive management measures such as additional watering or weed control can be implemented.

6.6 SRF scorch quadrat monitoring

The six quadrats are to be monitored pre- and post-scorch. Monitoring timings are dependent on the conditions but will generally occur:

- Pre scorch
    - Spring
- Post scorch
    - Condition dependent
    - 4-6 weeks if regular precipitation has occurred and biomass is increasing
    - 6-12 months if growth is slow

Before and after targeted scorching, all SRF will be counted and tagged within the quadrats.

6.7 General vegetation condition

Monitoring of the general condition of the vegetation is to include a walk-over of the site to identify improvements in vegetation condition as a result of management actions or other changes including weed outbreaks, rabbit warrens and the success of supplementary planting/seeding efforts. A VQA is to be conducted by an accredited VQA assessor. Short inspections by the Landowner or suitably qualified ecologist/botanist with SRF experience to monitor management progress are recommended every three months for the first two years and then on an annual basis for the remaining eight years. Feedback is to be provided to the vegetation management contractor. General vegetation condition monitoring is to occur annually during Spring.

6.8 Independent audits

An independent audit of compliance with the conditions outlined in EPBC 2023/09569 will be conducted for each audit period by an independent auditor. This audit will take place every three years following the commencement of the Environmental Management Plan (OMP), with audits continuing for a total of 10 years. For further details on the reporting requirements of DEECA and DCCCEEW, please refer to Section 8.

7. Corrective Actions and Thresholds

Table 8 outlines the corrective actions to be implemented if a variety of thresholds are met.

Table 8 Corrective actions and thresholds

Theme	Threshold	Corrective Action	Timing
Herbivory	Any loss of SRF attributed to herbivory. Rabbits are deemed to be present on site and other control works are not effective. A rabbit population is expected to become established in the [redacted] area in the future.	Rabbit-proof caging over SRF.	Immediately following detection of herbivory of SRF
Drought	Drought conditions.	Additional watering of SRF within Offset Site.	Within 2 weeks of detection of drought conditions (refer to Section 5.7 for determination of drought conditions).
Planted SRF	Planted SRF die.	Replace planted dead SRF the following winter.	The winter following detection of planted SRF mortality
Weeds	Woody weed cover exceeds % cover greater than levels stated in the [redacted] Agreement (<1%). Herbaceous weed cover exceeds % cover greater than levels stated in the [redacted] Agreement (<39%).	Increase weed control works.	Once the threshold is exceeded, action will be commenced within 4 weeks provided appropriate weed control conditions (species specific).
Biomass	If leaf litter cover is over 30% (>150% benchmark 20% organic litter cover).	Increase biomass removal.	Prior to SRF setting seed.
Targeted Scorching	Quadrat testing shows an increase in recruitment of SRF, and health of existing SRF. Current weed control is proving ineffective and weed cover is increasing across years. Indigenous species (including juvenile Eucalypts) are outcompeting SRF. Eucalypt leaf litter is not effectively being reduced by manual removal.	Investigate further areas to introduce targeted scorching at the site in future years.	Post scorching when results of scorching are evident and prior to next appropriate scorching seasonal window.

8. Reporting

The Landowner must submit a report annually to DEECA through 2027 and thereafter at the reasonable request of the Secretary, as per the [redacted] Agreement. For the 10 years of this SRF OMP, the Landowner will submit annual reports to the approval holder. The approval holder will then submit this annual report to DCCEEW. The purpose of the annual report is to assess progress of management against the commitments set out in this OMP. Reports are to be submitted at least two months prior to the anniversary date of the execution of the OMP to allow time for compliance to be assessed before the anniversary date.

The annual report must include:

- Details of management actions undertaken within the reporting period
- Results of monitoring activities including fence condition, weeds, pest animals, understory biomass and overstorey condition
- Site photographs
- Assessment of compliance or non-compliance with the schedule of management actions, performance targets
- Details of any new and emerging management issues, with recommendations for corrective action and plan review
- Data, surveys, maps, spatial data and meta data that is compliant with Guidelines for biological survey and mapped data, Commonwealth of Australia 2018

The Approval Holder must also submit a report to DCCEEW within 40 business days of the 10th anniversary of the date on which the approval holder commenced implementation of the approved SRF OMP. This report must undertake the following:

- Have an **independent suitably qualified ecologist** assess the presence of **Spiny Rice-flower** and **habitat quality** of its habitat within the **SRF Offset Site** and determine if the offset outcomes specified in the approved SRF OMP have been achieved, and if not, recommend necessary measures to remedy progress towards offset outcomes
- Submit to the **department** a report prepared by the **independent suitably qualified ecologist** detailing the findings of their assessment
- Notify the **department** in writing of any offset outcomes that have not been achieved at the **SRF Offset Site** and the likely reasons that the offset outcomes have not been met

All work that is to be conducted by a third party must be followed by a report that is provided to the Landowner.

9. Performance Targets and Implementation

Table 9 outlines the 10-year performance targets and steps to achieve these for the actions identified within this OMP and the year they will be achieved.

Table 9 10-year performance targets

Years	Action Number	Management Action	Activity Description	Responsibility	Timing of activity	Performance Target
Every Year (1-10)	1	Fencing	Maintain existing fence in good working order.	Landowner	Ongoing	Fencing maintained and repaired within Offset Site.
Every Year (1-10)	2	Access and Signage	Gates and signage to be maintained.	Landowner	Responsive	Gates and/or signage to be maintained within Offset Site.
Every Year (1-10)	3	Weed Control	Monitor and control all herbaceous weeds. Refer to [redacted] Agreement for list of herbaceous weeds, their control method and timing of actions. Remove all woody recruit weeds. Hand weed all introduced species from around SRF ***additionality**	Landowner or suitably qualified ecologist/botanist experienced with SRF	Ongoing	No increase in cover beyond the cover listed in the [redacted] Agreement for all herbaceous weeds. Herbaceous weeds not to interfere with shrub and canopy recruitment. Control of herbaceous weeds to <39% cover and no woody weed recruitment within Offset Site. Maintain 0% coverage of weeds across all SRF Zones (2 m buffer). No herbicide to be used within 2 m o5f SRF zone.
Year 2 onwards (2-10)	4	Targeted Scorch ***additionality**	Targeted Scorching to be conducted in test quadrats. Refer to Section 5.5.	Landowner or third-party chosen by the Landowner, in consultation with a suitably qualified ecologist/botanist experienced with SRF	Early Spring (approx. September but may be adjusted to suit appropriate burn conditions)	Evaluate effectiveness of targeted scorching at increasing recruitment of SRF. Provision of data and findings to *Pimelea spinescens* Recovery Team. Reduction in biomass, increase to health of older SRF, increase to area of bare ground and increased recruitment potential for SRF, with the aim of contributing to 24 additional surviving SRF by the 10 year mark.
Every Year (1-10)	5	Pest Control	Control pest animals (e.g. rabbits, hares) within the offset.	Landowner	Ongoing	Control of feral animals, particularly rabbits. No surface disturbance within Offset Site. No active rabbit warrens present within Offset Site, minimal surface harbour for rabbits and hares present (excluding natural harbour such as rocks).
Every Year (1-10)	6	Seed Collection ***additionality**	Use method outlined in Section 5.1.	Landowner or suitably qualified ecologist/botanist experienced with SRF	Late July to Early-November	Collection of seed to build and maintain a stock supply of approximately 50 SRF. Supply surplus seed to *Pimelea pinescens* Recovery Team for discretionary use.
Year 1 onwards (1-10)	7	Propagate SRF from seed ***additionality**	Begin growing SRF from seed collected that year.	Landowner or suitably qualified ecologist/botanist experienced with SRF	March	Grow SRF to build and maintain a stock supply of approximately 50 SRF. Supply any surplus tubestock to *Pimelea spinescens* Recovery Team for discretionary use.

Years	Action Number	Management Action	Activity Description	Responsibility	Timing of activity	Performance Target
Year 2 onwards (2-10)	8	SRF additional plantings ***additionality**	Plant 48 SRF on site (replacing as necessary).	Landowner or suitably qualified ecologist/botanist experienced with SRF	To begin in the first 2-3 years with yearly successional replacement as needed to reach minimal survival of 24 planted SRF	Planting of additional 48 SRF with the aim of contributing to 24 additional surviving SRF by the 10 year mark.
Every Year (1-10)	9	Soil moisture monitoring ***additionality**	Soil moisture monitors to be installed across the Offset Site. One year of soil moisture monitoring to occur before a threshold soil moisture level is determine between the Landowner and suitably qualified ecologists/botanists experienced with SRF that will trigger water events at the site.	Landowner in consultation with a suitably qualified ecologist/botanist experienced with SRF	Ongoing	Soil moisture monitors installed at the Offset Site. Soil moisture threshold determined. Soil moisture data to be collected in ensuring years.
Every Year (1-10)	10	Supplemental Watering ***additionality**	**Before flowering:** If conditions are dry in the first year, watering of existing SRF is to occur prior to flowering. After Year 1 and a soil moisture threshold is determined, and will influence watering frequency. **Planted individuals:** planted SRF are to be watered every week during summer for the first 3 years, unless there has been rain of a volume that replaces a need to water. **All SRF:** watered during dry conditions at the discretion of the landowner during the first year of the OMP. After Year 1 and a soil moisture threshold is determined, and will influence the frequency of watering.	Landowner or suitably qualified ecologist/botanist experienced with SRF	Ongoing	Soil moisture is maintained at a determined threshold during dry conditions. Avoid loss of SRF due to water stress. Increase survival rates of recruiting individuals with the aim of contributing to 24 additional surviving SRF by the 10 year mark.
Every Year (1-10)	11	Rabbit-proof caging and pest monitoring ***additionality**	Evaluate effectiveness of rabbit control and determine if the SRF at the Offset Site require rabbit-proof caging. Rabbit-proof cages to be erected around planted SRF. Maintain rabbit-proof caging each year. See Section 5.9.	Landowner	Ongoing	No herbivory of SRF. Rabbit-proof caging is maintained if implemented.
Every Year (1-10)	12	SRF surveys ***additionality**	Undertake annual monitoring of SRF population during flowering period. Use methods described in Section 6.5.	Landowner	April to August (July preferred)	Increase in SRF population and/or Provision of data to *Pimelea spinescens* Recovery Team.
Every Year (1-10)	13	Habitat Condition Monitoring	Undertake annual monitoring of Offset Site including general condition and photo point monitoring and prepare report. See Section 6.2 and Section 6.7.	Landowner	Spring (October)	Annual report submitted to DCCEEW detailing improvement or maintained habitat quality and condition.
Years (2-10)	14	Evaluate Adaptive Management Actions ***additionality**	If required, update management actions or the following year (in consultation with DEECA and DCCEEW), based the monitoring results of the previous year.	Landowner	Spring (November)	Adaptive Management of SRF throughout the 10 year management period.

10. Risk Assessment and Contingency Measures

This OMP has considered the risks that may inhibit achieving the completion criteria for the Offset Site, including risks that may be wholly outside the approval holder's and Landowner's control. It is acknowledged that the management of natural environments can be unpredictable and management activities need to be flexible to respond to changing conditions and unpredictable events.

An assessment of the relevant risks is provided as part of this OMP in Table 12. Using the likelihood and consequence listing in Table 10 and the subsequent matrix in Table 11, the risk analysis:

- Identifies events and threats that will, may, or are likely to impact the attainment of the completion criteria
- Assesses the likelihood and consequences of those events and threats eventuating, both before and after risk controls are applied, and assesses residual risk levels
- Identifies levels of uncertainty in mitigating the risks, with appropriate corrective actions and associated trigger criteria if risks and threats eventuate

This risk assessment process if adopted from DCCEEW's Environmental Management Plan Guidelines (DCCEEW, 2024a). The environmental risk assessment will yield a risk rating that is based upon an assessed likelihood (i.e. chance of impact occurring) and consequence (i.e. the negative result or outcome of the impact occurring) of potential impacts (hazards) of a Project on the environment.

Table 10 Likelihood and consequence listings

Risk Matrix	
Likelihood (L)	A qualitative measure of likelihood how likely is it that this event/circumstances will occur both before and after management activities are implemented
Highly Likely	Is expected to occur in most circumstances
Likely	Will probably occur during the life of the Project
Possible	Might occur during the life of the Project
Unlikely	Could occur but considered unlikely or doubtful
Rare	May occur in exceptional circumstances
Consequence (C)	Qualitative measure of what will be the consequence/result if the issue does occur
Minor	Minor incident of environmental damage that can be reversed (*e.g. short-term delays to achieving strategy objectives, implementing low-cost, well-characterised corrective actions*).
Moderate	Isolated but substantial instances of environmental damage that could be reversed with intensive efforts (*e.g. short-term delays to achieving strategy objectives, implementing well-characterised, high cost/effort corrective actions*).
High	Substantial instances of environmental damage that could be reversed with intensive efforts (*e.g. medium-long term delays to achieving objectives, implementing uncertain, high-cost/effort corrective actions*).

Risk Matrix	
Major	Substantial instances of environmental damage that could be reversed with intensive efforts (*e.g. medium-long term delays to achieving objectives, implementing uncertain, high-cost/effort corrective actions*).
Critical	Severe widespread loss of environmental amenity and irrecoverable environmental damage. (e.g. strategy objectives are unable to be achieved, with no evidenced mitigation strategies).

Table 11 Risk matrix

Likelihood		Consequence				
		Minor	Moderate	High	Major	Critical
		A	B	C	D	E
Highly Likely	5	Low	Moderate	Significant	Extreme	Extreme
Likely	4	Low	Low	Moderate	Significant	Extreme
Possible	3	Negligible	Low	Moderate	Significant	Extreme
Unlikely	2	Negligible	Negligible	Low	Moderate	Significant
Very Unlikely	1	Negligible	Negligible	Low	Moderate	Moderate

Table 12 Risk assessment

Risk Event	Outcome	Likelihood	Consequence	Risk Rating	Mitigation	Likelihood	Consequence	Revised Risk
The offset failing (regardless of cause)	The implementation of proposed offset and resulting activities does not deliver the desired conservation benefit for SRF and its suitable habitat within the proposed offset area over the life of the approval.	Unlikely	Critical	Significant	The approval holder will commit to finding an alternative offset in the unlikely event the offset fails due to unforeseen reasons.	Rare	Major	Moderate
Unauthorised land clearing in the Offset Area	Land clearing or destructive activities occur which are beyond the approved land uses allowed at the Offset Property.	Unlikely	Major	Moderate	Area is already under a [redacted] Agreement preventing unauthorised clearing by the Landowner.	Unlikely	Moderate	Negligible
Introduction of novel weeds	Contractors and ecologists accessing the site have the potential to transport viable seed from outside of the Offset Site which may establish and develop into novel populations.	Possible	Major	Significant	The contractor engaged to manage the Offset Site will conduct all site-based activities in accordance with best practice management measures related to weed hygiene.	Possible	Minor	Low
Proliferation of existing weeds	A failure to conduct an appropriate level of work at an appropriate time or the occurrence of persistent adverse conditions restricting an appropriate management response.	Possible	Major	Significant	The Offset Site is already under a [redacted] Agreement with weed control already occurring on site. Further management actions proposed in this OMP will further reduce weed cover. Well timed management actions will be able to take advantage of seasonal fluctuations to achieve weed control. Regular monitoring events and site inspections will allow the Landowner to anticipate changes in seasonal conditions and respond accordingly.	Unlikely	Moderate	Negligible
Uncontrolled entry of domestic stock	Uncontrolled domestic stock enter Offset Site, negatively impacting the overall condition of the site, and/or reducing the abundance or extent of SRF.	Unlikely	Major	Moderate	The site is already under a [redacted] Agreement in which grazing has been stopped on site. The site is fenced with a livestock fence preventing access.	Unlikely	Minor	Negligible
Uncontrolled increase in woody weed cover.	A failure to conduct an appropriate level of woody weed control at an appropriate time or the occurrence of persistent adverse conditions restricting an appropriate management response.	Possible	Major	Significant	The site is already under a [redacted] Agreement with woody weed control occurring. Increase weed control works and investigate use of targeted scorching across whole Offset Site.	Possible	Minor	Negligible
Uncontrolled increase in herbaceous weed cover	A failure to conduct an appropriate level of herbaceous weed control at an appropriate time or the occurrence of persistent adverse conditions restricting an appropriate management response.	Possible	Major	Significant	The site is already under a [redacted] Agreement with herbaceous weed control occurring. Increase weed control works and investigate use of targeted scorching across whole Offset Site.	Possible	Minor	Negligible
Pest animals within Offset Site	Pest animals like rabbits enter site and damage SRF through herbivory.	Possible	High	Moderate	The site is already under a [redacted] Agreement with rabbit control occurring. Rabbit-proof caging is to be constructed around planted SRF. Rabbit-proof caging of all SRF at the Offset Site will occur if SRF are lost due to pest herbivory.	Possible	Moderate	Low

Risk Event	Outcome	Likelihood	Consequence	Risk Rating	Mitigation	Likelihood	Consequence	Revised Risk
Entry of unauthorised vehicles	Entry of unauthorised vehicles may cause damage to SRF through tyre impacts or dumping of rubbish.	Possible	High	Moderate	The site is already under a [redacted] Agreement with unauthorised access excluded and no dumping of rubbish occurring.	Possible	Moderate	Low
Unplanned fire outbreak (bushfire)	Unpredictable fire events may have a detrimental impact on the condition of the Offset Site.	Possible	High	Moderate	Monitor SRF post-fire and re-plant to increase population.	Possible	Minor	Low
Unplanned fire outbreak (targeted scorching)	Damage to non-target native species.	Possible	High	Moderate	Pre-scorch surveys will identify and protect native plants to avoid during targeted scorching. If the pre-scorch survey identifies native vegetation that will be negatively impacted by fire, then alternative targeted scorching quadrats will be identified, further minimising the risk. All fires will be extinguished before leaving site.	Unlikely	Moderate	Negligible
Persistent low rainfall due to drought like conditions	Overall condition of the woodland and SRF is negatively impacted due to lack of seasonal rainfall.	Possible	Major	Significant	Regular monitoring activities to assess and record the condition of the Offset Area will inform ongoing management actions. Increase frequency watering during dry periods.	Possible	Moderate	Moderate
Severe storm	Damage or loss of fencing.	Possible	Moderate	Low	The site is already under a [redacted] Agreement with fence maintenance occurring.	Possible	Minor	Negligible

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Appendices

Appendix A – Offset Calculator

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	
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	No		**Area**			
			Quality			
			Total quantum of impact	0.00		
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	Yes		8		Count	

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	No				**Risk-related time horizon (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)**								
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	Yes	8	Count	40	10	40	40	64	24	80%	19.20	9.94	124.31%	Yes		

Summary

Protected matter attributes	Quantum of impact	Net present value of offset	% of impact offset	Direct offset adequate?	Cost ($)		
					Direct offset ($)	Other compensatory measures ($)	Total ($)
Birth rate	0				$0.00		$0.00
Mortality rate	0				$0.00		$0.00
Number of individuals	8	9.94	124.31%	Yes	$0.00	N/A	$0.00
Number of features	0				$0.00		$0.00
Condition of habitat	0				$0.00		$0.00
Area of habitat	0				$0.00		$0.00
Area of community	0				$0.00		$0.00
					$0.00	**$0.00**	**$0.00**

Appendix B – Approval Decision

Australian Government
Department of Climate Change, Energy, the Environment and Water

Notification of approval decision

Calder Park Drive and Holden Road Level Crossing Removal Project, Calder Park, Victoria (EPBC 2023/09569)

This decision is made under section 130(1) and 133(1) of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Note that section 134(1A) of the EPBC Act also applies to this approval. That provision provides, in general terms, that if the approval holder authorises another person to undertake any part of the Action, the approval holder must take all reasonable steps to ensure that the other person is informed of any conditions attached to this approval, and that the other person complies with any such conditions.

Approved Action

person to whom the approval is granted (approval holder)	Major Transport Infrastructure Authority ABN: 69 981 208 782
proposed Action	To remove the Holden Road level crossing and replace Calder Park Drive level crossing by constructing a road bridge, including shared path, road realignment, earthworks, and ancillary infrastructure (see EPBC Act referral 2023/09569).

Approval decision

decision	My decision on whether or not to approve the taking of the Action for the purposes of the controlling provision for the Action is as follows.	
	Controlling Provision	**Decision**
	Listed threatened species and communities (section 18 and section 18A)	Approved
period for which the approval has effect	This approval has effect until 31 December 2044.	
conditions of approval	The approval is subject to conditions under the EPBC Act as set out in Annexure A.	

Person authorised to make decision

name and position	[redacted] [redacted] Environment Assessments (Vic and Tas) and Post Approvals Branch Nature Positive Regulation Division
signature	[redacted]
date of decision	9 October 2024

Annexure A

Note: Words and terms appearing in **bold** (excluding headings) have the meaning assigned to them at **Part C – Definitions**.

Part A – Avoidance, mitigation, and compensation conditions

CLEARING LIMITS

1) The approval holder must not undertake any **clearing** or **construction** outside of the **Action area**.

2) The approval holder must not **clear** more than

- 8 **Spiny Rice-flower** individuals
- 1 **Matted Flax-lily** individual
- 0.06 hectares of **Striped Legless Lizard habitat**

NATIVE VEGETATION AND THREATENED SPECIES MANAGEMENT PLAN

3) To avoid and mitigate **harm** as a result of the Action on **protected matters** and their habitat, the approval holder must commence implementing the **Native Vegetation and Threatened Species Management Plan** no later than the **commencement of the Action** and continue to implement the **Native Vegetation and Threatened Species Management Plan** until the **completion of the Action**.

OFFSETS

4) To compensate for the residual significant impacts of the Action on the **Spiny Rice-flower**, the approval holder must implement the **Offset Strategy.**

5) To compensate for the residual significant impacts of the Action on **Spiny Rice-flower** the approval holder must ensure that the **offset site** remains **secured** at least until the expiry date of this approval.

6) To compensate for the residual significant impacts of the Action on the **Spiny Rice-flower**, the approval holder must submit an Offset Management Plan (OMP) for the **offset site** to the **department** for approval by the **Minister**.

7) The OMP must be approved by the **Minister before t**he Calder Park Drive Road bridge is opened for public use.

8) The OMP must meet the requirements of the **Environmental Offsets Policy** and the **Environmental Management Plan Guidelines** to the satisfaction of the **Minister**. All commitments, including environmental outcomes, management measures, corrective actions, trigger values and performance indicators in the OMP must be **SMART**. The OMP must be prepared by an **independent suitably qualified ecologist** and must include:

    a) detailed information setting out how a minimum population increase of 24 **Spiny Rice-flower** will be achieved at the **offset site** over the 10 years following the approval of the OMP

    b) a map specifying the location area and boundaries of the **offset site**

    c) detailed baseline information on the habitat quality and population of **Spiny Rice-flower**

    d) a table summarising all commitments to achieve the offset outcomes and reference to where in the OMP the commitment is described in detail

    e) reporting and review mechanisms to inform the **department** annually regarding compliance with the implementation of management measures and the attainment and maintenance of the offset outcomes

    f) an assessment of risks to achieving each offset outcome and what risk management measures and/or strategies will be applied to address these

    g) a monitoring program to measure and inform how the outcomes of the plan are being achieved, including:

        i) measurable performance indicators and the timeframes for their achievement to gauge attainment of each offset outcomes

        ii) corrective actions to be implemented to ensure all offset outcomes for the **protected matters** are achieved or maintained if trigger values are reached or performance indicators not achieved in the specified timeframes.

    h) references to related plans and conditions of approval (including state requirements).

9) To compensate for the residual significant impacts of the Action on **Spiny Rice-flower**, the approval holder must ensure that the approved OMP is implemented.

10) The approval holder must, within 40 **business days** of the 10th anniversary of the date on which the OMP was approved:

a) have an **independent suitably qualified ecologist** assess the **offset site** to determine if the offset outcomes have been achieved, and if not, recommend necessary measures to remedy progress towards offset outcomes;

b) submit to the **department** a report prepared by the **independent suitably qualified ecologist** of the findings of their assessment; and

c) notify the **department** in writing of any offset outcomes that have not been achieved at the **offset site** and the likely reasons that the offset outcomes have not been met.

Part B – Administrative conditions

REVISION OF ACTION MANAGEMENT PLANS

11) The approval holder may, at any time, apply to the **Minister** for a variation to an action management plan approved by the **Minister**, by submitting an application in accordance with the requirements of section 143A of the **EPBC Act**. If the **Minister** approves a revised action management plan (RAMP) then, from the date specified, the approval holder must implement the RAMP in place of any previous version of the action management plan.

12) The approval holder may choose to revise an action management plan approved by the **Minister** under condition 3, or as subsequently revised in accordance with these conditions, without submitting it for approval under section 143A of the **EPBC Act**, if the taking of the Action in accordance with the RAMP would not be likely to have a **new or increased impact**.

13) If the approval holder makes the choice under condition 12 to revise an action management plan without submitting it for approval, the approval holder must:

a) Notify the **department** electronically that the approved action management plan has been revised and provide the **department** with:

i) An electronic copy of the RAMP.

ii) An electronic copy of the RAMP marked up with track changes to show the differences between the approved action management plan and the RAMP.

iii) An explanation of the differences between the approved action management plan and the RAMP.

iv) The reasons the approval holder considers that taking the Action in accordance with the RAMP would not be likely to have a **new or increased impact**.

v) Written notice of the date on which the approval holder will implement the RAMP (RAMP implementation date), being at least 20 **business days** after the date of providing notice of the revision of the action management plan, or a date agreed to in writing with the **department**.

b) Subject to condition 15, implement the RAMP from the RAMP implementation date.

14) The approval holder may revoke its choice to implement a RAMP under condition 12 at any time by giving written notice to the **department**. If the approval holder revokes the choice under condition 12, the approval holder must implement the action management plan in force immediately prior to the revision undertaken under condition 12.

15) If the **Minister** notifies the approval holder that the **Minister** is satisfied that the taking of the Action in accordance with the RAMP would be likely to have a **new or increased impact**, then:

    a) Condition 12 does not apply, or ceases to apply, in relation to the RAMP.

    b) The approval holder must implement the action management plan specified by the **Minister** in the notice.

16) At the time of giving the notice under condition 15, the **Minister** may also notify that for a specified period of time, condition 12 does not apply for one or more specified action management plans.

    Note: Conditions 12-15 are not intended to limit the operation of section 143A of the **EPBC Act** which allows the approval holder to submit a revised action management plan, at any time, to the **Minister** for approval.

SUBMISSION AND PUBLICATION OF PLANS

17) Wherever these conditions require the approval holder to submit any **plan** to the **department**, all such **plans** must be submitted to the **department** electronically.

18) Unless otherwise agreed to in writing by the **Minister**, the approval holder must publish each **plan** on the **website** within 15 **business days** of the date:

    a) of this approval, if the version of the **plan** to be implemented is specified in these conditions,

    b) the **plan** is approved by the **Minister** in writing, if the **plan** requires the approval of the **Minister**,

    c) the **plan** is submitted to the **department** in accordance with a requirement of these conditions, if the **plan** does not require the approval of the **Minister**.

19) The approval holder must keep all **plans** published on the **website**, in a format that is easily accessible and downloadable, from the first date which that **plan** must be published and until the expiry date of this approval. This requirement applies to all current and superseded versions of **plans**.

20) The approval holder is required to exclude or redact **sensitive biodiversity data** from any version of a **plan** before that **plan** is published on the **website** or otherwise provided to a member of the public. If **sensitive biodiversity data** is excluded or redacted from a **plan**, the approval holder must notify the **department** in writing what exclusions and redactions have been made in the version published on the **website**.

COMMENCEMENT OF THE ACTION

21) The approval holder must notify the **department** electronically of the date of **commencement of the Action**, within 5 **business days** following **commencement of the Action**.

22) The approval holder must not **commence the Action** later than 5 years after the date of this approval decision.

COMPLIANCE RECORDS

23) The approval holder must maintain accurate and complete **compliance records** and document the procedure for recording and storing **compliance records**.

24) If the **department** makes a request in writing, the approval holder must provide electronic copies of **compliance records** to the **department** within the timeframe specified in the request.

Note: Compliance records may be subject to audit by the **department**, or by an **independent auditor** in accordance with section 458 of the **EPBC Act**, and/or be used to verify compliance with the conditions. Summaries of the results of an audit may be published on the **department's** website or through the general media.

25) The approval holder must ensure that any **monitoring data**, surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the *Guidelines for biological survey and mapped data*, Commonwealth of Australia 2018, or as otherwise specified by the **Minister** in writing.

26) The approval holder must ensure that any **monitoring data**, surveys, maps, and other spatial and metadata required under the conditions of this approval are prepared in accordance with the *Guide to providing maps and boundary data for EPBC Act projects*, Commonwealth of Australia 2021, or as otherwise specified by the **Minister** in writing.

27) The approval holder must submit all **monitoring data**, surveys, maps, other spatial and metadata and all species occurrence record data (sightings and evidence of presence) electronically to the **department** within 20 **business days** of the next anniversary of the date of this approval decision except where otherwise specified in a **plan**.

ANNUAL COMPLIANCE REPORTING

28) The approval holder must prepare a **compliance report** for each **Annual Compliance Report period** (**ACR period**).

29) The approval holder must ensure each **compliance report** includes:

    a) accurate and complete details of compliance and any non-compliance with:

        i) each condition attached to this approval decision, and

        ii) all commitments made in each **plan**,

    b) a schedule of all **plans** in effect in relation to these conditions during the **ACR period**,

    c) accurate and complete details of how each **plan** was implemented during the **ACR period**, and

d) if any **incident** occurred, accurate and complete details of each **incident**.

30) The approval holder must ensure each **compliance report** is completed to the satisfaction of the **Minister** and is consistent with the *Annual Compliance Report Guidelines*, Commonwealth of Australia 2023.

31) The approval holder must, within 20 **business days** following the end of each **ACR period**, in a format that is easily accessible and downloadable, publish on the **website**:

a) each **compliance report**, and

b) a **shapefile** showing all **clearing** of **protected matters**, and their habitat, undertaken within the **ACR period**.

32) The approval holder must:

a) Exclude or redact **sensitive biodiversity data** from each **compliance report** and **shapefile** published on the **website** or otherwise provided to a member of the public.

b) If **sensitive biodiversity data** is excluded or redacted from a version of a **compliance report** published or otherwise provided to a member of the public, submit the full **compliance report** to the **department** within 5 **business days** of its publication on the **website** and notify the **department** in writing what exclusions and redactions have been made in the version published on the **website** or otherwise provided to a member of the public.

c) If **sensitive biodiversity data** is excluded or redacted from a version of a **shapefile** published or otherwise provided to a member of the public, submit the full **shapefile** to the **department** within 5 **business days** of its publication on the **website** and notify the **department** in writing what exclusions and redactions have been made in the version published on the **website** or otherwise provided to a member of the public.

33) The approval holder must notify the **department** electronically, within 5 **business days** of each date of publication that the **compliance report** has been published on the **website**. In this notification, the approval holder must provide the **department** with the web address for where the **compliance report** and related **shapefile** are published on the **website**.

34) The approval holder must keep each **compliance report** and related **shapefile** published on the **website** from the first date which that **compliance report** must be published and until the expiry date of this approval.

Note: Compliance reports may be published on the **department's** website.

REPORTING NON-COMPLIANCE

35) The approval holder must notify the **department** electronically, within 2 **business days** of becoming aware of any **incident**. The approval holder must specify in each notification:

a) any condition or commitment made in a **plan** which has not been, or may have not been, complied with,

b) a short description of the **incident**, and

c) the location (if applicable, including co-ordinates), date and time of the **incident**.

36) The approval holder must provide to the **department** in writing, within 12 **business days** of becoming aware of an **incident**, the details of that **incident**. The approval holder must specify:

a) all corrective measures and investigations which the approval holder has already taken in respect of the **incident**,

b) the potential impacts of the **incident**,

c) the method and timing of any corrective measures that the approval holder proposes to undertake to address the **incident**, and

d) any variation of these conditions or revision of a **plan** that will be required to prevent recurrence of the **incident** and/or to address its consequences.

INDEPENDENT AUDIT

37) The approval holder must ensure that an **independent audit** of compliance with the conditions is conducted for every **audit period**.

38) The approval holder must submit details of the proposed **independent auditor** and their qualifications to the **department** within 10 **business days** following the end of each **audit period**.

39) The approval holder must ensure the scope of each **independent audit** is sufficient to determine the compliance status for each condition of approval, and each commitment made in each **plan**.

40) The approval holder must ensure the criteria for each **independent audit** and the undertaking of each **independent audit** are consistent with the **Independent Audit and Audit Report Guidelines**

41) The approval holder must submit an **audit report** to the **department** for written agreement from the **department** within 3 months following the end of each **audit period**, or as otherwise directed by the **Minister** in writing.

42) The approval holder must ensure each **audit report** is completed to the satisfaction of the **Minister** and is consistent with the **Independent Audit and Audit Report Guidelines**.

43) The approval holder must publish each **audit report** on the **website**, in a format that is easily accessible and downloadable, within 10 **business days** of the date the **department** agrees to that **audit report** in writing.

44) The approval holder must notify the **department** within 5 **business days** of the date the **audit report** is published on the **website**. In this notification, the approval holder must provide the **department** with the web address for where the **audit report** is published on the **website**.

45) The approval holder must keep each **audit report** published on the **website** from the first date which that **audit report** must be published and until the expiry date of this approval.

COMPLETION OF THE ACTION

46) Within 20 **business days** after the **completion of the Action**, and, in any event, at least 20 **business days** before this approval expires, the approval holder must notify the **department** electronically of the date of **completion of the Action** and provide **completion data**. The approval holder must submit any spatial data that comprises **completion data** as a **shapefile**.

47) The approval holder must notify the **department** electronically 60 **business days** prior to the expiry date of this approval, that the approval is due to expire.

Note: Section 145C of the **EPBC Act** entitles the approval holder to request an extension to the period of effect of this approval.

Part C – Definitions

Words and terms appearing in **bold** (excluding headings) have the meaning assigned to them in the list below:

Action area means the location of the Action, represented in Attachment A by the zone illustrated in black hatching and marked as 'Proposed Action Area'.

Annual Compliance Report period or **ACR period** means each subsequent 12-month period following the date of this approval decision until the expiry date of this approval, unless otherwise specified in writing by the **Minister**.

Audit period means each subsequent three-year period following the **commencement of the Action** until the expiry date of this approval unless otherwise specified in writing by the **Minister**.

Audit report means a written report of an **independent audit**.

Biodiversity data means 'biodiversity data' as described in the *Policy on Accessing and Sharing Biodiversity Data*, Commonwealth of Australia 2024.

Business day means a day that is not a Saturday, a Sunday, or a public holiday in Victoria.

Clear, **cleared** or **clearing** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting, or burning of vegetation but does not include weeds (see the *Australian Weeds Strategy 2017-2027*, Commonwealth of Australia 2017 for further guidance).

Commence the Action or **commences the Action** means the first instance of any on-site **clearing**, **construction** or other physical activity associated with the Action, but does not include minor physical disturbance necessary to:

- Undertake pre-clearance surveys or monitoring programs.

- Install signage and/or temporary fencing to prevent unapproved use of the **Action area**, so long as the signage and/or temporary fencing is located where it does not **harm** any **protected matter**.
- Protect environmental and property assets from fire, weeds, and feral animals, including use of existing surface access tracks.
- Install temporary site facilities for persons undertaking pre-commencement activities so long as these facilities are located where they do not **harm** any **protected matter**.

Commencement of the Action means the date on which the approval holder **commences the Action**.

Completion data means an environmental report and spatial data clearly detailing how the conditions of this approval have been met.

Completion of the Action means the date on which all activities associated with the approved Action have permanently ceased and/or been completed.

Compliance records means all documentation or other material in whatever form required to demonstrate compliance with these conditions of approval (including compliance with commitments made in **plans**) in the approval holder's possession, or that are within the approval holder's power to obtain lawfully.

Compliance report means a written report of compliance with, and fulfilment of, these conditions (including compliance with commitments made in **plans**).

Construction means:

- the erection of a building or structure that is, or is to be, fixed to the ground and wholly or partially fabricated on-site,
- the alteration, maintenance, repair or demolition of any building or structure,
- any work which involves breaking of the ground (including pile driving) or bulk earthworks,
- the laying of pipes and other prefabricated materials in the ground, and
- any associated excavation work.

Construction does not include the installation of temporary fences or signage.

Department means the Australian Government agency responsible for administering the **EPBC Act**.

Environmental Management Plan Guidelines means the *Environmental Management Plan Guidelines*, Commonwealth of Australia 2014.

Environmental Offsets Policy means the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*, Commonwealth of Australia 2012.

EPBC Act means the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Harm means to cause any measurable direct or indirect disturbance or deleterious change as a result of any activity associated with the Action.

Incident means any:

- event which has the potential to, or does, **harm** any **protected matter**,
- potential non-compliance with these conditions, including the administrative requirements,
- actual non-compliance with these conditions, including the administrative requirements,
- potential non-compliance with one or more commitment made in a **plan**, and/or
- actual non-compliance with one or more commitment made in a **plan**.

Independent audit means an audit, conducted by an **independent auditor**, of compliance with and fulfilment of these conditions and the commitments made in **plans**, objectively evaluated against the audit criteria developed by the **independent auditor**, in accordance with the **Independent Audit and Audit Report Guidelines**.

Independent Audit and Audit Report Guidelines means the *Environment Protection and Biodiversity Conservation Act 1999 Independent Audit and Audit Report Guidelines*, Commonwealth of Australia 2019

Independent auditor means a person, or firm, who:

- does not have any individual, financial*, employment* or family affiliation or any conflicting interests with the Action, the approval holder or the approval holder's staff, representatives, or associated persons,
- has demonstrated experience in undertaking government-regulated environmental compliance audits, and
- holds relevant professional qualifications and accreditations.

*Other than for the purpose of undertaking the role for which an independent person, or firm, is required.

Independent suitably qualified ecologist means a person who has professional qualifications, training, skills and/or experience related to the nominated subject matter and can give authoritative independent assessment, advice and analysis on performance relative to the subject matter using the relevant protocols, standards, methods and/or literature.

Matted Flax lily means the **EPBC Act** listed threatened species Matted Flax-lily (*Dianella amoena*).

Minister means the Australian Government Minister administering the **EPBC Act**, including any delegate thereof.

Monitoring data means the data required to be recorded under the conditions of this approval, including **sensitive biodiversity data**.

Native Vegetation and Threatened Species Management Plan means the document titled *Native Vegetation and Threatened Species Management Plan – Calder Park Drive and Holden Road, Calder Park, LXRP-LX14-000-0-00-PA-RPT-0003 Revision: 2* March 2024, or a later subsequent version approved in writing by the **Minister**.

New or increased impact means any direct or indirect increase in the impacts of an Action, an increase to the likelihood of an impact occurring, a reduction to the monitoring or mitigation measures for a **protected matter**, and/or a change to the nature or management of an environmental offset as outlined in the *Guidance on 'new or increased impact' relating to changes to approved management plans under EPBC Act environmental approvals*, Commonwealth of Australia 2017.

Offset Strategy means the document titled *Offset Management Strategy – Calder Park Drive and Holden Road, Calder Park*, *LXRP-LX14-000-0-00-PA-RPT-0004, Revision 1*, May 2024.

Offset site means the offset area described by Figure 2 on page 14 of the **Offset Strategy.**

Plan means any action management plan or strategy that the approval holder is required by these conditions to implement.

Protected matter means a matter protected under a controlling provision in Part 3 of the **EPBC Act** for which this approval has effect.

Secure or **secured** means to provide enduring conservation protection on the title of land under agreement with the Secretary to the Department of Environment, Land, Water and Planning (DEWLP) under [redacted] of the *Conservation, Forests and Lands Act 1987* or another enduring protection mechanism agreed to in writing by the **department**, to provide protection for the site against development incompatible with conservation.

Sensitive biodiversity data means **biodiversity data** which, if released, published or otherwise exposed, may result in **harm** to the relevant **protected matter** as a result of the intentional or unintentional misuse of that **biodiversity data**.

Shapefile means location and attribute information about the Action provided in an Esri shapefile format containing:

- '.shp', '.shx', '.dbf' files,
- a '.prj' file which specifies the projection or geographic coordinate system used, and
- an '.xml' metadata file that describes the shapefile for discovery and identification purposes.

SMART means specific, measurable, achievable, relevant and time bound.

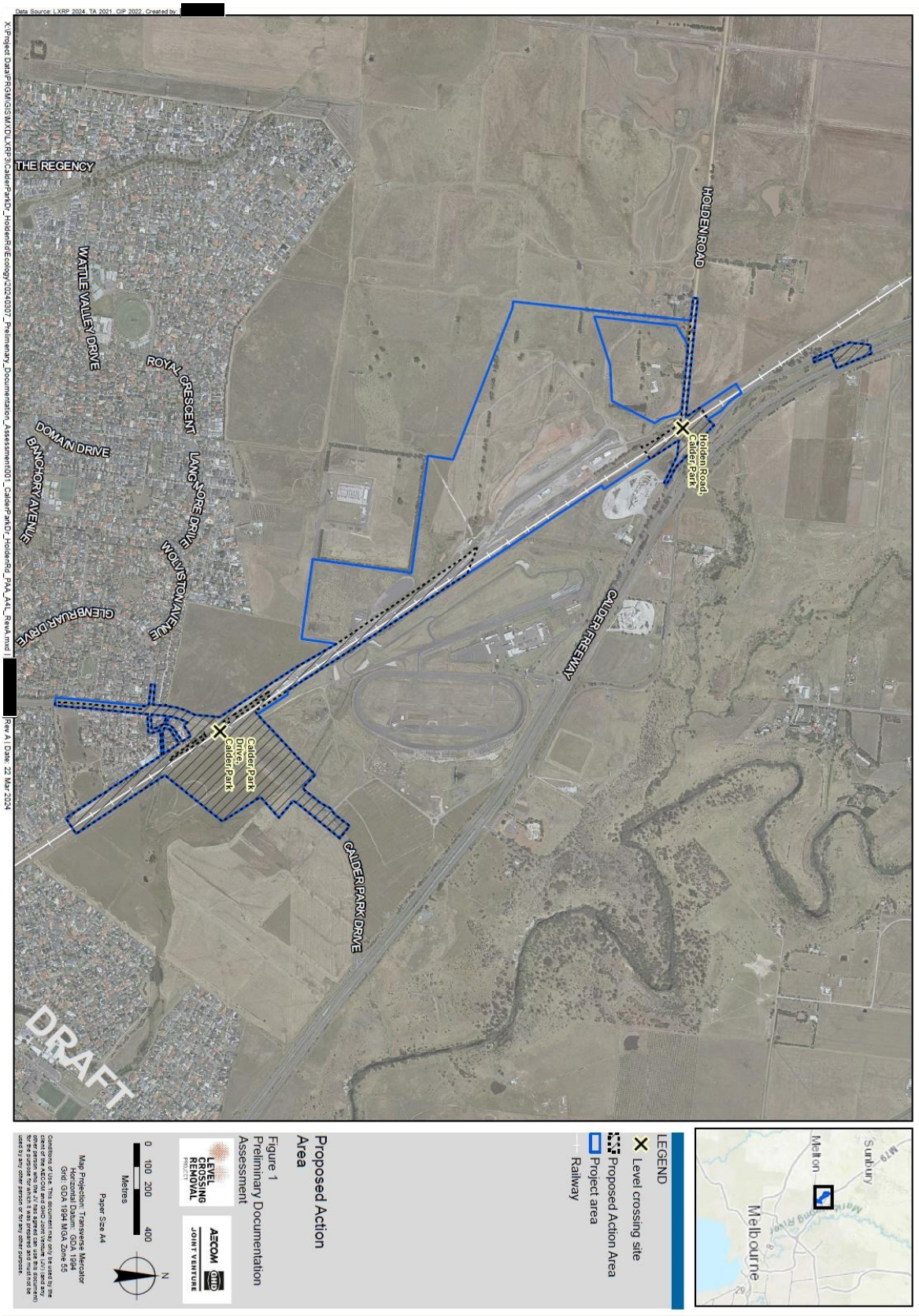
Spiny Rice-flower means the **EPBC Act** listed threatened species Spiny Rice-flower (*Pimelea spinescens* subsp. *spinescens*).

Striped Legless Lizard habitat means the habitat of the Striped Legless Lizard (*Delma impar*) as identified in Figure 8 of the Preliminary Documentation *Striped Legless Lizard Targeted Survey* dated June 2023.

Website means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Attachments

A:



Map of the Project Area

Appendix C – Response to Requirements for a Draft Offset Management Plan (DCCEEW, 2023)

Requirement	Description	Response
B2.1	Specific, committal and measurable environmental outcomes which detail the nature of the conservation gain to be achieved for relevant MNES, including the creation, restoration and revegetation of habitat in the proposed offset area/s.	As per Section 1.5.
B2.2	Details, with supporting evidence, to demonstrate how the environmental offset/s compensate for residual significant impacts of the proposed action on relevant MNES, and/or their habitat, in accordance with the principles of the Offsets Policy and all requirements of the Offsets Assessment Guide including: • Time over which loss is averted (max. 20 years) • Time until ecological benefit • Confidence in result (%)	As per Section 1, the environmental offset for residual significant impacts has been calculated based on the number of individuals. The addition of 24 SRF through management actions encouraging germinants or planting of additional SRF will provide a gain from 40 to 64 individuals, or a 124.31% impact of offset.
B2.3	A description of the offset area/s, including location, size, condition, environmental values present and surrounding land use.	As per Section 3.
B2.4	Baseline data and other supporting evidence that documents the presence of the relevant MNES, and the quality of their habitat within the offset area/s.	As per Section 3.
B2.5	An assessment of the site habitat quality for the offset area/s.	As per Section 3.
B2.6	Details of how the offset area/s will provide connectivity with other habitats and biodiversity corridors and/or will contribute to a larger strategic offset for the relevant MNES.	As per Section 3.4. [redacted]
B2.7	Maps and shapefiles to clearly define the location and boundaries of the offset area/s, accompanied by the offset attributes (e.g. physical address of the offset area/s, coordinates of the boundary points in decimal degrees, the relevant MNES that the environmental offset/s compensates for, and the size of the environmental offset/s in hectares).	As per Figure 2.
B2.8	Specific offset completion criteria derived from the site habitat quality to demonstrate the improvement in the quality of habitat in the offset area/s over a 20-year period.	As per Section 8.
B2.9	Details of the management actions, and timeframes for implementation, to be carried out to meet the offset completion criteria.	As per Section 5.

Requirement	Description	Response
B2.10	Interim milestones that set targets at 5-yearly intervals for progress towards achieving the offset completion criteria.	As per Section 8.
B2.11	Details of the nature, timing and frequency of monitoring to inform progress against achieving the 5-yearly interim milestones (the frequency of monitoring must be sufficient to track progress towards each set of milestones, and sufficient to determine whether the offset area/s are likely to achieve those milestones in adequate time to implement all necessary corrective actions).	As per Section 8.
B2.12	Proposed timing for the submission of monitoring reports which provide evidence demonstrating whether the interim milestones have been achieved.	As per Section 8.
B2.13	Timing for the implementation of tangible, on-ground corrective actions to be implemented if monitoring activities indicate the interim milestones have not been achieved.	As per Section 7.
B2.14	Risk analysis and a risk management and mitigation strategy for all risks to the successful implementation of the OMP and timely achievement of the offset completion criteria, including a rating of all initial and post-mitigation residual risks in accordance with a risk assessment matrix.	As per Section 10.
B2.15	Evidence of how the management actions and corrective actions take into account relevant approved conservation advice and are consistent with relevant recovery plans and threat abatement plans.	As per Section 5.
B2.16	Details and execution timing of the mechanism to legally secure the proposed offset area/s, such that legal security remains in force over the offset area/s for at least 20 years to provide enduring protection for the offset area/s against development incompatible with conservation.	As per Section 4.
B2.17	All proposed management actions, monitoring approach and corrective actions must be written using committed language (e.g. ‘will’ and ‘must’).	As per Section 5.

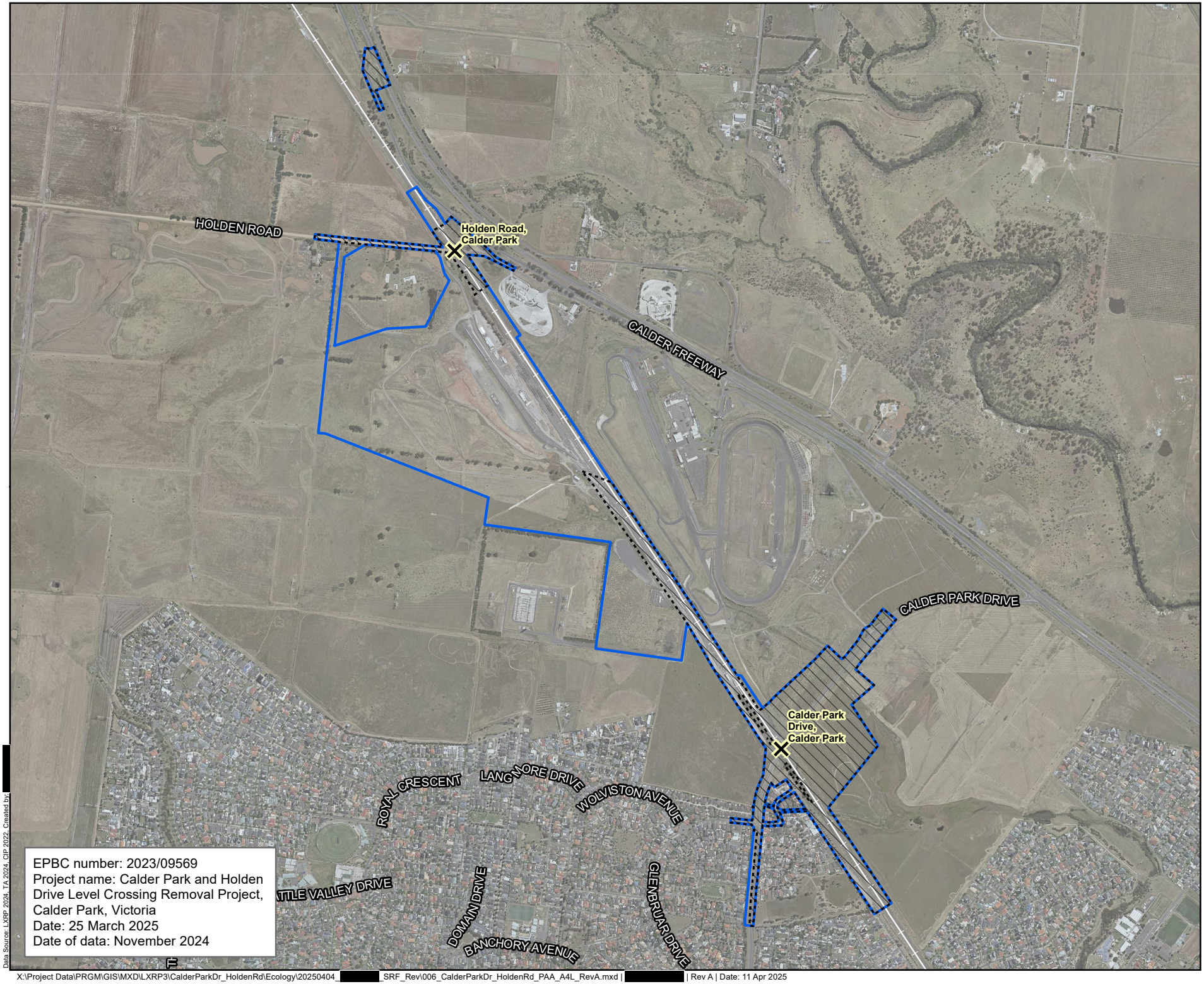
Appendix D – [redacted] Agreement

Appendix E – Offset Site Locations

Figure 5 Offset locations

Appendix F – Project Action Area

Figure 6 Project action area



EPBC number: 2023/09569
Project name: Calder Park and Holden Drive Level Crossing Removal Project, Calder Park, Victoria
Date: 25 March 2025
Date of data: November 2024

LEGEND

- Level crossing site
- Project Action Area
- Project area
- Railway

Project Action Area

Figure 6
Offset Management Plan

LEVEL CROSSING REMOVAL PROJECT

AECOM GHD JOINT VENTURE

0 100 200 400
Metres

N

Paper Size A4

Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Data Source: LXRP, 2024, TA 2024, CIP 2022, Created by:

X:\Project Data\PRGM\GIS\MXD\LXRP3\CalderParkDr_HoldenRd\Ecology\20250404_[redacted]_SRF_Rev\006_CalderParkDr_HoldenRd_PAA_A4L_RevA.mxd | [redacted] | Rev A | Date: 11 Apr 2025