

Cars waiting at the Calder Park Drive level crossing



Calder Park Drive and Holden Road

Publication of Finalised Documentation
under the Environmental Protection and
Biodiversity Conservation Act 1999 (EPBC Act)

July 2024

LEVEL CROSSING REMOVAL PROJECT

000 - Multiple Sites 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

Document Control

Release

Revision	Date Released	Release Status	Comment
A	02/02/23	Draft	For Review
0	02/06/23	Final	For Use
1	15/03/24	Final	For Use
2	26/03/24	Final	For Use

LXRP Distribution List

Name	Title	Email
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

AECOM-GHD JV Authorisation

Name	Originator	Checker	Verifier	Package Lead	Project Manager
[REDACTED]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[REDACTED]	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[REDACTED]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
[REDACTED]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issue

Draft	<input type="checkbox"/>	Final	<input checked="" type="checkbox"/>
--------------	--------------------------	--------------	-------------------------------------

QA Sign Off

ON FILE

Package Lead

ON FILE

Project Manager

Limitations - This document has been prepared by the AECOM-GHD Joint Venture ABN 57 194 323 595 (JV) for LXRP and may only be used and relied on by LXRP for the agreed purpose as expressly stated within this document. The JV disclaims responsibility to any person other than LXRP arising in connection with this document. The JV also excludes implied warranties and conditions, to the extent legally permissible. No section or element of this document may be removed from this document, reproduced, electronically stored or transmitted in any form without the written permission of an authorised officer of the JV team. This document has been prepared based on LXRP's description of its requirements and the JV's experience, having regard to assumptions that the JV can reasonably be expected to make in accordance with sound professional principles. The JV may also have relied upon information provided by LXRP and other third parties to prepare this document, which may not have been verified by the JV. The opinions, conclusions and any recommendations in this report are based on site conditions encountered and information reviewed at the date of preparation of this document. Site conditions may change after the date of this document. The JV does not accept responsibility arising from, or in connection with, any change to the site conditions or to account for events or changes occurring subsequent to the date that this document was prepared.

Table of Contents

1.	Introduction.....	1
1.1	Purpose.....	1
1.2	Objectives.....	1
1.3	Roles and responsibilities.....	1
2.	Ecological Values to be Protected	2
3.	Management Actions	4
3.1	Induction.....	4
3.2	No-Go Zones	5
3.3	Weed control.....	6
3.4	Sediment and erosion control	8
3.5	Light pollution.....	9
3.6	Surface water hydrology.....	10
3.7	Dust management.....	11
3.8	Accidental spills	12
3.9	Wildlife management.....	13
4.	Monitoring, Reporting and Review.....	15
4.1	Environmental inspections.....	15
4.2	Environmental audit program.....	15
4.3	Management Plan review	15
5.	References.....	16

Table Index

Table 1	Induction.....	4
Table 2	No-Go Zone.....	5
Table 3	Weed control.....	6
Table 4	Sediment and erosion control	8
Table 5	Light pollution.....	9
Table 6	Surface water hydrology.....	11
Table 7	Dust management.....	11
Table 8	Accidental spills	12
Table 9	Wildlife management.....	13

Figure Index

Figure 1	Lights should be shielded to avoid lighting anything but the target area or object (reproduced from DoEE 2020, Figure 11, pg 23)	10
Figure 2	Walkway lighting should be mounted as low as possible and shielded (reproduced from DoEE 2020, Figure 12, pg 23)	10
Figure 3	Retained EPBC listed Natural Temperate Grassland.....	18
Figure 4	Retained Spiny Rice-flower.....	24
Figure 5	Retained Matted Flax-lily	29
Figure 6	Retained Striped Legless Lizard Habitat.....	31

Appendices

Appendix A – Figures

Appendix B – Implementation Strategy

1. Introduction

The AECOM-GHD Joint Venture (JV) was engaged by the Level Crossing Removal Project (LXRP) to prepare a Native Vegetation and Threatened Species Management Plan (the Plan) for the Calder Park Drive and Holden Road Level Crossing Removal Project (the Project). The Project will remove the Calder Park Drive level crossing by construction of 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.

An existing conditions assessment was completed for the Investigation Area (IA) defined for the project (AECOM-GHD JV 2023a), the results of which informed development of the Project's design. The Project area boundary was minimised in some areas to exclude areas of environmental or heritage significance, to protect them from impact during Project works. Subsequently a construction footprint was determined, enabling the specific impacts associated with the Project to be assessed. An impact assessment was then prepared to identify impacts to ecological values based on the Project's construction footprint and advised on the implications in relation to referrals and approval requirements likely to be required under relevant State and Commonwealth environmental legislation (AECOM-GHD JV 2023b). The construction footprint defined for the Project has avoided many of the ecological values identified and it is those retained areas of native vegetation and threatened species summarised in Section 2, which are the subject of this Plan.

The Project has committed to implementing measures to protect retained native vegetation and threatened species habitat from impacts during construction. This Plan outlines those controls for protecting retained native vegetation, threatened ecological communities and species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and Victorian *Flora and Fauna Guarantee Act 1988* (FFG Act) from inadvertent disturbance, management of weeds listed under the *Catchment and Land Protection Act 1994* (CaLP Act) and protection of wildlife protected under the *Wildlife Act 1975*.

1.1 Purpose

The purpose of this Plan is to outline measures to avoid impacts of the Project on retained native vegetation and threatened species and communities listed under the EPBC Act and/or FFG Act.

1.2 Objectives

The principal objective of this Plan is to achieve no adverse impacts on retained native vegetation and threatened species habitat.

1.3 Roles and responsibilities

The implementation of this Plan, including all stipulated construction and post construction mitigation, management and monitoring requirements are the responsibility of LXRP. It is the responsibility of LXRP to ensure that all personnel involved in the Project are suitably qualified and experienced to complete their specific tasks and are aware of this plan and its specific requirements.

A Site Environment Manager will be appointed to oversee the implementation of measures to protect retained ecological values and ensure corrective actions are executed.

All monitoring and management activities are to be completed by suitably qualified and experienced specialists in their respective fields.

2. Ecological Values to be Protected

The Project will retain and protect the following values from disturbance during construction:

- Native Vegetation: 0.972 ha of EVC 132: Plains Grassland; this EVC is synonymous with Western (Basalt) Plains Grassland that is a threatened ecological community under the FFG Act.
- Natural Temperate Grasslands of the Victorian Volcanic Plain (NTGVVP) (listed as critically endangered under the EPBC Act). Two patches of NTGVVP identified (combined area of 0.18 ha) are to be retained. Both of these patches are in Metro Trains Melbourne (MTM) biosites in the rail corridor. There is also 0.45 ha of NTGVVP within Banchory Grove Grassland Nature Conservation Reserve (Banchory Grove Reserve) that has been mapped and will not be affected by the construction footprint of the Project.
- Western (Basalt) Plains Grasslands (WPG) (listed as threatened under the Victorian FFG Act). Patches of EVC 132 Plains Grassland are synonymous with Western (Basalt) Plains Grasslands, and as such 0.972 ha will be retained by the Project.
- Spiny Rice-flower (SRF) *Pimelea spinescens* subspecies *spinescens* (listed as critically endangered under the EPBC Act and FFG Act). The Project will retain 67 plants: 55 in MTM biosites, 11 in the rail corridor outside the MTM biosites, and one in Banchory Grove Reserve.
- Victorian Grassland Earless Dragon *Tympanocryptis pinguicolla* (listed as critically endangered under the EPBC Act and FFG Act). There is no suitable habitat within the construction footprint for the reptile and any potential habitat in the broader landscape will be avoided.
- Matted Flax-lily (MFL) *Dianella amoena* (listed as endangered under the EPBC Act and critically endangered under the FFG Act). Three MFL plants north-west of the Calder Park Drive level crossing are to be retained by the Project.
- Striped Legless Lizard (SLL) *Delma impar* (listed as vulnerable under the EPBC Act and endangered under the FFG Act). Potential habitat for SLL in five patches to be retained (1.7 ha) due to moderate quality habitat features and, in most instances, the presence of NTGVVP. Four of the sites are in MTM biosites in the rail corridor and one in Banchory Grove Reserve.
- Growling Grass Frog (GGF) *Litoria raniformis* (listed as vulnerable under the EPBC Act and FFG Act). Ten GGF potential habitat sites will be avoided by the Project - dams and Taylors Creek within the Calder Park Stabling Yards.
- Tussock Skink *Pseudemoia pagenstecheri* (Volcanic Plains) (listed as endangered under the FFG Act). This species was detected during surveys for SLL, in an area adjacent to Banchory Grove Reserve and is likely to occur elsewhere in grassy environments within the Project Area. Not all Tussock Skink habitat will be retained by the Project.
- Protected flora species listed under the FFG Act that were recorded in MTM biosites and that are also likely to occur in Banchory Grove Reserve. Species comprised:
 - Two Tufted Burr Daisy *Calocephalus scapigera* recorded adjacent to Holden Road
 - More than ten Lemon Beauty Heads *Calocephalus citreus* recorded north of the Holden Road level crossing
 - One Jersey Cudweed *Helichrysum luteoalbum* recorded south of Holden Road level crossing
 - Five Common Everlasting *Chrysocephalum apiculatum* south of the Calder Park Drive level crossing

Most of these values are contained within existing MTM biosites and/or Banchory Grove Reserve. While the biosites and Banchory Grove Reserve are currently afforded protection, LXRP will implement measures to protect those areas from threats such as weed invasion, incursions by vehicles, machinery or personnel, soil spill, light spill, chemical spills, and dust during construction.

The location of the ecological values to be retained is shown in Figure 3, Figure 4, Figure 5 and Figure 6, Appendix A.

3. Management Actions

This Plan has been developed to outline measures to avoid and/or minimise potential impacts of the Project on retained native vegetation and threatened species and their habitat during construction. These measures and their timing, duration and frequency have been summarised in an Implementation Strategy in Appendix B.

Many of the ecological values to be protected are contained within MTM biosites, most of which are fenced and are managed by MTM. Others are within the Banchory Grove Reserve that is managed by Parks Victoria. Protection of those areas will therefore require coordination with the respective land managers.

3.1 Induction

Table 1 outlines the measures in relation to inductions.

Table 1 Induction

Induction	
Objective	<ul style="list-style-type: none"> To ensure all staff/contractors are aware of protective measures and obligations while undertaking construction activities
Management Strategy	<ul style="list-style-type: none"> Manage the potential for inadvertent damage to protected values by inducing all contractors/staff on the presence and location of ecological values and their obligations
Control(s)	<ul style="list-style-type: none"> Conduct inductions for all contractors/staff outlining the presence and location of ecological values to be protected, the relevant protective measure and obligations while undertaking construction activities Conduct weekly toolbox talks to reiterate the presence of values and obligations Identify ecological values in daily pre-starts when works are in proximity to No-Go Zones/areas of ecological value to be retained and protected Provide maps on notice boards with clear demarcation of No-Go Zones and ecological values to be protected
Performance Indicator(s)	<ul style="list-style-type: none"> All contractors/staff inducted to site No damage to retained values
Monitoring	<ul style="list-style-type: none"> Induction register to be maintained
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> Induction to be mandatory for all staff/contractors Contractors will not be allowed onsite until induction is completed

3.2 No-Go Zones

Table 2 outlines measures in relation to No-Go Zones.

Table 2 No-Go Zone

No-Go Zone	
Objective	<ul style="list-style-type: none"> To protect retained native vegetation and habitat from inadvertent damage
Management Strategy	<ul style="list-style-type: none"> Manage the potential for inadvertent incursions by vehicles, machinery, personnel, spills, etc. by establishing No-Go Zones around retained values and clearly demarcating on site plans, including digital GIS mapping available to Project staff for works planning
Control(s)	<ul style="list-style-type: none"> Establish a No-Go Zone prior to construction to demarcate vegetation to be retained Clearly demarcate No-Go Zones on site plans Attach No-Go Zone maps to all work activity packs that include works in proximity to No-Go Zones Include No-Go Zones in excavation permit drawings For No-Go Zones already fenced (biosites and reserves), ensure works methodologies in close proximity to existing fencing adequately protect the existing fence For No-Go Zones without an existing fence, use a temporary fence and ensure it is maintained for the duration of construction. The exception to this is the dams in the Calder Park Stabling Yard as they are either separated from the light vehicle access track by the frog fence installed by the Rail Infrastructure Alliance or are more than 70 m from the access track to be used by light vehicles only. Install signage identifying No-Go Zones Locate components of the works which pose the greatest environmental risk (e.g. construction compounds, stockpiles, unloading points, wash bays, chemical storage, refuelling areas, areas which require lighting, or which generate the most noise) as far from the No-Go Zones as possible Implement measures to prevent movement of sediment (from earth stockpiles) or refuse (from any other materials stockpiled) into No-Go Zones/areas of retained ecological value Use surface stabilising material on areas of high potential for erosion where practicable Develop a response plan for possible incursion scenarios in order to facilitate rapid response to rectify any events
Performance Indicator(s)	<ul style="list-style-type: none"> MTM biosites, Banchory Grove Reserve protected and not damaged during construction works Patches of Western (Basalt) Plains Grasslands (WPG) outside of biosites are protected and not damaged during construction works Dams within the Calder Park Stabling Yard protected from damage resulting directly from LXP construction works No incursions into No-Go Zones without supervision by a qualified environmental advisor or ecologist

No-Go Zone	
Monitoring	<ul style="list-style-type: none"> No-Go Zone fencing and signage in close proximity (~1 m) to the works to be inspected prior to commencement of works each day to ensure intact and effective
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> Damage to No-Go Zone fencing or signage will be reported to the Site Environment Manager immediately. Corrective actions to be completed within 24 hours (or the following work shift in the event of closures or weekends) and documented. Incursions into No-Go Zones will be reported to the Site Manager immediately. Incursions will be rectified as soon as practicable in accordance with the response plan based on the nature of the incursion. Corrective actions will be documented

3.3 Weed control

Table 3 outlines measures in relation to weed control.

Table 3 Weed control

Weed control	
Objective	<ul style="list-style-type: none"> To protect retained native vegetation and habitat from introduction and/or spread of weeds
Management Strategy	<ul style="list-style-type: none"> Monitor and control weeds by identifying and implementing measures to minimise their introduction and spread, identifying weed infestations, and implementing controls in a timely manner
Control(s)	<ul style="list-style-type: none"> Incorporate weed management measures in the Construction Environmental Management Plan (CEMP) Prohibit the use of materials potentially infected by weeds (e.g. bulk fill); ensure any soil introduced to the site is at low risk of containing weeds Stockpile topsoil (including the top 20 mm of soil along with vegetative material) separately to sub-surface material (sub 20 mm) as the topsoil possesses the greatest risk of weed seed spread from the Project Area Retain topsoil within the Project Area to prevent the spread of weeds outside the Project Area Keep vehicles, plant and machinery on sealed surfaces and designated access tracks and in designated work areas wherever possible Avoid driving through highly infested areas of weeds, in water or areas of wet soil, where possible Install rumble grids at entry/exit points of construction site Establish and maintain wash-down locations for machinery, vehicles, tools and footwear where necessary (i.e. at heavily trafficked areas). Wash-down locations should: <ul style="list-style-type: none"> Be located at least 30 m from native vegetation, dams, waterways and drains Be sited close to site entry and exit points Collect wastewater and sediment and dispose of appropriately Include signage to advise personnel of the methods to use wash-downs properly

Weed control	
	<ul style="list-style-type: none"> • Engage experienced land management contractor/s familiar with native plant and weed identification and possess a detailed working knowledge of herbicide selection and use and mechanical removal techniques to undertake weed control in areas adjacent to MTM biosites (managed by MTM) and Banchory Grove Reserve (managed by Parks Victoria). • Avoid any mechanical and chemical control of weeds from drifting into areas of retained vegetation • Identify known areas of significant weed infestations on site plans and in contractor induction material • Implement a monitoring and control program for noxious weed species in the Project Area as required under the CaLP Act. Noting that: <ul style="list-style-type: none"> ○ MTM biosites are managed by MTM via the MTM Biodiversity Management Plan. Weed management will continue to be undertaken by MTM as the land manager, in accordance with the MTM Biodiversity Management Plan. LXRП will facilitate MTM access to biosites while those areas are under possession for the Project. ○ Banchory Grove Reserve is managed by Parks Victoria. It is assumed Parks Victoria already implement a management plan for the reserve and will continue to manage the reserve in accordance with that plan. • Conduct inspections to check for evidence of weed invasion near work areas and in retained areas of native vegetation
Performance Indicator(s)	<ul style="list-style-type: none"> • No new incursions of CaLP Act listed weeds into MTM biosites, Banchory Grove Reserve or other areas of retained native vegetation
Monitoring	<ul style="list-style-type: none"> • Establish baseline conditions (including mapping) for noxious weeds within 30 m of MTM biosites and Banchory Grove Reserve prior to construction. Understanding baseline conditions will allow changes in weed levels to be detected. Establish baseline conditions for noxious weeds within MTM biosites, if not already completed by MTM. • Establish baseline conditions for noxious weeds within 30 m of the construction footprint inside Banchory Grove Reserve, if not already completed by Parks Victoria as a means of mitigating risk of any weed incursions being attributed to the Project. • Conduct quarterly weed monitoring and control within 30 m of MTM biosites and Banchory Grove Reserve for the duration of construction • It is assumed MTM and Parks Victoria complete regular monitoring and control of weeds within their respective management areas, therefore no monitoring or control is required by the Project in those areas
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> • Maintain weed monitoring data for the construction footprint • Weed incursion addressed as soon as practicable by a suitably qualified weed management contractor familiar with native vegetation and threatened species • Corrective actions to be documented

3.4 Sediment and erosion control

Table 4 outlines measures in relation to sediment and erosion control.

Table 4 Sediment and erosion control

Sediment and erosion control	
Objectives	<ul style="list-style-type: none"> Prevent contamination of, or damage to native vegetation, dams, and waterways Ensure sediment from the site is retained on-site during construction work
Management Strategy	<ul style="list-style-type: none"> Silt loads to be treated as close to their source as possible using effective sediment traps such as geotextile fences and other standardised sediment control measures Undertake monitoring of any water that is released into the environment to ensure it complies with the correct standards of discharge
Control(s)	<ul style="list-style-type: none"> Design the works area to ensure stormwater runoff drains do not have an immediate impact to retained native vegetation and threatened species habitat Install sediment controls where required. These will include, but not be limited to, rock check dams, sediment basins, sediment fences and silt socks. Locate wash-down areas away from areas of ecological values and ensure they are appropriately bunded to contain all soil and contaminated water Stockpile topsoil in a stable way based on the nature of the material, stockpiles that are within 50 metres of retained native vegetation or threatened species should be restricted in height Use surface stabilising material on areas of high potential for erosion Conduct visual inspections of sediment controls to ensure functionality Conduct visual inspections after significant rainfall events to check on erosion and allow remedial work to be undertaken as soon as practicable Undertake work over or within proximity to waterways during a time where there is minimal water present within the waterway where practicable Conduct inspections to check for evidence of sedimentation or erosion near work areas
Performance Indicator(s)	<ul style="list-style-type: none"> No downstream impacts from contamination of local waterways No evidence of significant sediment deposition outside the works area No evidence of significant run-off erosion
Monitoring	<ul style="list-style-type: none"> Sediment controls will be reviewed during site inspections and/or after significant rainfall (more than 20 mm in 24 hours resulting in significant site runoff) Weekly inspections of worksite Monthly water monitoring programme

Sediment and erosion control	
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> • Incident report for non-conformance of sediment control • Logging of sediment control structures - location and condition during weekly site inspection • Weekly inspection during construction by Project Environmental Team members • Monthly internal reporting on the findings of the water monitoring and retention of records for future reference • Incidents to be reported immediately to the Site Environment Manager • Investigate cause of sediment control failure • Review flow path and determine most appropriate controls are in place, additional controls which can be place in-stream and/or changes that can be made to flow path

3.5 Light pollution

Table 5 outlines measures in relation to light pollution.

Table 5 Light pollution

Light pollution	
Objective	<ul style="list-style-type: none"> • To minimise impacts of lighting on retained native vegetation and habitat
Management Strategy	<ul style="list-style-type: none"> • Manage the adverse impacts of artificial lighting by strategic placement of lighting infrastructure, the use of directional lighting and by restricting construction to daylight hours
Control(s)	<ul style="list-style-type: none"> • Undertake construction works during daylight hours to negate the need for artificial lighting, as much as possible • Do not locate any site compounds immediately adjacent to No-Go Zones and direct any external lighting (if required) away from the perimeter • Design the number, type, and layout of lights to light only the areas that need to be illuminated. Based on the guidance in National Light Pollution Guidelines for Wildlife (DoEE 2020), the design should: <ul style="list-style-type: none"> ○ Keep lights close to the ground ○ Direct and fully shield lights to avoid light spill beyond the construction area ○ Use lowest intensity lighting that is appropriate for safe working conditions ○ Use lights with reduced or filtered blue, violet and ultra-violet wavelengths where possible ○ Avoid the use of LEDs where possible <p>Refer to extract of diagrams below.</p>
Performance Indicator(s)	<ul style="list-style-type: none"> • No external lighting used outside of hours of construction if possible • Minimal light spill into drainage lines, dams, MTM biosites and Banchory Grove Reserve

Light pollution	
Monitoring	<ul style="list-style-type: none"> Site Environment Manager to keep record of hours of site operation beyond daylight hours
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> External lighting left on after hours will be reported to the Site Environment Manager. Exceedances and corrective actions to be documented.

Light Pollution impacts on wildlife should be considered, extracts from the National Light Pollution Guidelines for Wildlife (DoEE 2020) are provided to illustrate various potential scenarios. Two extracts from the Guidelines are provided in Figure 1 and Figure 2 demonstrating the need to shield lights for areas and objects, and targeted walkway lighting, respectively.

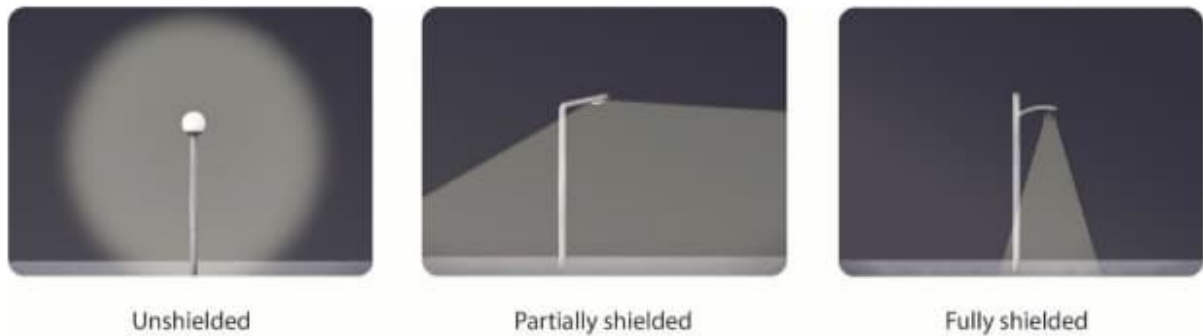


Figure 1 Lights should be shielded to avoid lighting anything but the target area or object (reproduced from DoEE 2020, Figure 11, pg 23)

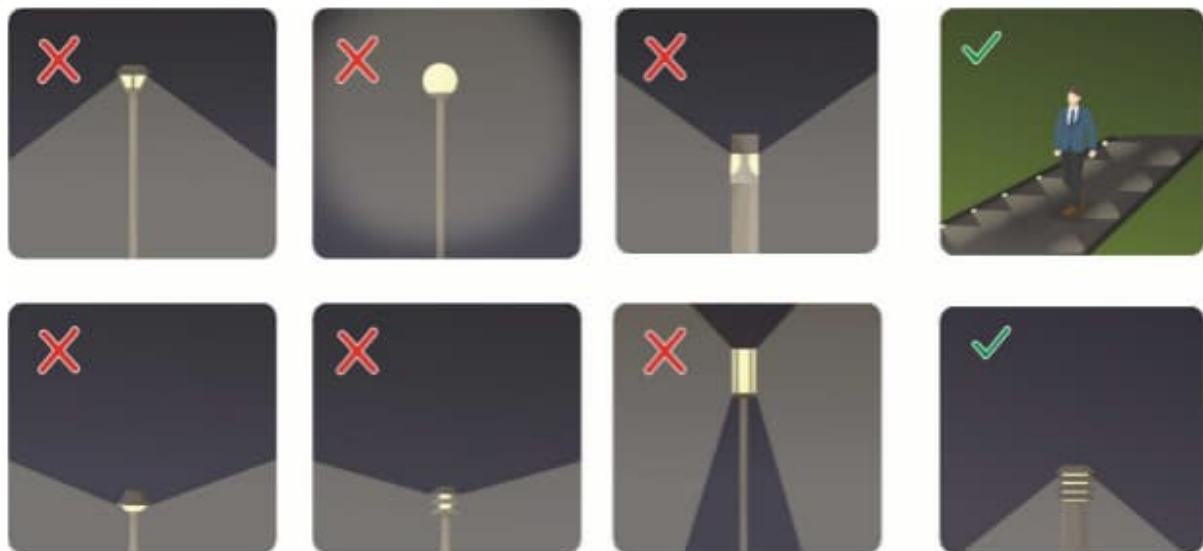


Figure 2 Walkway lighting should be mounted as low as possible and shielded (reproduced from DoEE 2020, Figure 12, pg 23)

3.6 Surface water hydrology

Table 6 outlines measures in relation to surface water and hydrology.

Table 6 Surface water hydrology

Surface water hydrology	
Objective	<ul style="list-style-type: none"> To protect retained native vegetation patches, threatened ecological communities, and threatened species habitat from changes to surface water hydrology
Management Strategy	<ul style="list-style-type: none"> Manage changes to surface topography to ensure changes to surface water hydrology do not affect retained native vegetation, threatened ecological communities, or threatened species
Control(s)	<ul style="list-style-type: none"> Maintain existing surface hydrology conditions Ensure flood levels are not made worse by alterations to surface flow characteristics set out in the Melbourne Water standards for infrastructure projects in flood-prone areas (MW 2019) Assess impacts to ecological values if future hydrology modelling suggests potential alterations to existing hydrology conditions
Performance Indicator(s)	<ul style="list-style-type: none"> No change to surface water hydrology within area of retained native vegetation patches MTM biosites, Banchory Grove Reserve or other areas of retained native vegetation beyond what has already been modelled and assessed
Monitoring	<ul style="list-style-type: none"> Flooding and surface water conditions to be monitored weekly during standard site inspections Any changes to the condition of native vegetation to be monitored, including intended mitigation measures
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> Any changes to surface water hydrology (e.g. additional water pooling that can be attributed to a Project activity) must be assessed to ensure that there is no impact to native vegetation or threatened species Any changes to the condition of native vegetation to be reported on including intended mitigation measures

3.7 Dust management

Table 7 outlines measures in relation to dust management.

Table 7 Dust management

Dust management	
Objective	<ul style="list-style-type: none"> To protect retained native vegetation, threatened ecological communities or species habitat from dust
Management Strategy	<ul style="list-style-type: none"> Manage dust to minimise incursion of dust settling on retained native vegetation, threatened ecological communities or species habitat
Control(s)	<ul style="list-style-type: none"> Use of water carts on roads and exposed surfaces Cessation of works during high wind conditions Reduced speed for vehicles Minimisation of exposed areas by progressive clearance of vegetation Progressive establishment of vegetation on topsoil/overburden stockpiles and rehabilitated landforms

Dust management	
Performance Indicator(s)	<ul style="list-style-type: none"> Minimal dust settling in MTM biosites or Banchory Grove Reserve
Monitoring	<ul style="list-style-type: none"> Dust monitoring to take place on site during construction activities with results recorded and monitored for exceedances
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> Dust monitoring to be reported along with other data recordings Employ additional dust management measures if those already identified are not effective at keeping dust out of the MTM biosites or Banchory Grove Reserve

3.8 Accidental spills

Table 8 outlines measures in relation to accidental spills.

Table 8 Accidental spills

Accidental spills	
Objective	<ul style="list-style-type: none"> To protect retained native vegetation, threatened ecological communities or species habitat from accidental spills
Management Strategy	<ul style="list-style-type: none"> Manage the potential for inadvertent incursions by chemical or poor water quality spills on retained native vegetation threatened ecological communities or species habitat
Control (s)	<ul style="list-style-type: none"> Include a detailed waste management plan within the CEMP that designates areas where refuelling is prohibited, chemical storage areas and a procedure to minimise chemical spills Carry out maintenance activities and refuelling at an appropriate distance with appropriate spill protection measures in place to avoid impacts to vegetation, habitat, and waterways, in accordance with relevant regulatory requirements Develop and implement a response plan to deal with accidental spills and leaks Ensure spill kits are available on site that are appropriate for the substances in use Adhere to regulations, guidelines; and best practice measures will be adhered to for the storage, handling, transport and use of materials that may contaminate the environment including (but not limited to) those listed under: <ul style="list-style-type: none"> <i>Environment Protection Act 2017</i> <i>Dangerous Good (Storage and Handling) Regulations 2012</i> <i>1698: Liquid storage and handling guidelines (EPA 2018)</i> <i>Australian Standard AS1940: The storage and handling of flammable and combustible liquids (Standards Australia 2017)</i> Advice from WorkSafe Victoria
Performance Indicator(s)	<ul style="list-style-type: none"> No refuelling or chemical storage areas in close proximity to areas of retained native vegetation, threatened ecological communities or threatened species habitat No spills affecting No-Go Zones, MTM biosites, Banchory Grove Reserve or waterways

Accidental spills	
Monitoring	<ul style="list-style-type: none"> Monitoring of all chemical spills that occur anywhere on the Project Area to ensure that current mitigations are effective for protecting native vegetation and habitats
Reporting and Corrective Action(s)	<ul style="list-style-type: none"> Spills will be reported to the Site Environment Manager immediately. For major spills, or incidents that cannot be immediately contained will require a Stop Work notice to be issued for the related activity, corrective actions completed immediately and documented.

3.9 Wildlife management

Table 9 outlines measures in relation to wildlife management.

Table 9 Wildlife management

Wildlife management	
Objective	<ul style="list-style-type: none"> To protect wildlife from injury or death during construction
Management Strategy	<ul style="list-style-type: none"> Manage construction works to minimise risk to wildlife by restricting their ability to access the construction footprint and ensuring any open pits or trenches are managed appropriately
Control(s)	<ul style="list-style-type: none"> Manage any open pits or trenches to reduce potential for fauna entrapment through measures such as: <ul style="list-style-type: none"> Covering any excavation not being worked on with steel sheets Minimising the length of trench open at a time Minimising the amount of time trenches and other excavations are open Provide exit ramps with slopes less than a 45 degree angle where practicable and safe to do so Daily inspections of open trenches by appropriately certified personnel to remove trapped fauna as required Checking for fauna prior to backfilling trenches Install fauna proof fencing adjacent to Banchory Grove Reserve to restrict the potential for Striped Legless Lizard (and other small, ground-dwelling species) to move into the construction area Ensure fauna are discouraged from work areas by erecting barriers where practicable Develop and implement a procedure for finding trapped fauna
Performance Indicator(s)	<ul style="list-style-type: none"> No death or entrapment of wildlife as a direct result of a lack of mitigation
Monitoring	<ul style="list-style-type: none"> Trenches to be inspected daily for presence of trapped wildlife Fauna proof fencing along Banchory Grove Reserve to be inspected during site inspections for effectiveness

Wildlife management

Reporting and Corrective Action(s)

- Damage to fauna proof fencing will be reported to the Site Environment Manager immediately. Corrective actions to be completed within 24 hours and documented on site.
- Instances of entrapment of fauna in open pits or trenches will be reported to the Site Environment Manager immediately.
- Incursions of wildlife into the construction footprint will be reported to the Site Environment Manager. Corrective actions to be determined based on location and type of wildlife.

4. Monitoring, Reporting and Review

4.1 Environmental inspections

Site supervisory personnel will, as part of their daily duties, inspect the site, and issues arising will be noted in a site diary and communicated to the Site Environment Manager or LXP as required.

Site inspections will be undertaken on a weekly basis and immediately prior to and/or following extreme weather events.

4.2 Environmental audit program

A six-monthly internal/external audit for compliance against this Plan will be undertaken.

Incident reports will be prepared following any onsite environmental incidents. Incident reports will document the investigations undertaken and detail possible contributory factors and recommended system improvements.

During internal/external audits, an auditor will be assigned to review reporting outputs. Audits to include a brief site inspection. This auditor will compile a brief report including:

- Images taken during the site inspection
- Further mitigation measures needed following the review of the six-monthly report and issues identified during their walkover

This internal report (prepared in a brief letter format) will be prepared and retained in a manner suitable for submission to regulatory authorities when requested.

4.3 Management Plan review

This Plan will be reviewed in conjunction with Environmental Risk Assessments to ensure it remains valid and up to date. The review will be completed by the Project Manager or Construction Manager. Based on the performance indicators and the Project's compliance with this Plan, a suitably qualified ecologist will also be consulted to undertake a review and provide feedback for improvements to prevent future infringements/incidents.

Any changes made to the Plan will be communicated to the wider team where necessary through toolbox talks, specific training, and other methods. Any material updates as they relate to environmental management and contingency measures will be provided to stakeholders and necessary authorities as required and as relevant to those authorities.

5. References

AECOM-GHD JV (2023a). Calder Park Drive and Holden Road Level Crossing Removal Project - Flora and Fauna Existing Conditions Report.

AECOM-GHD JV (2023b). Calder Park Drive and Holden Road Level Crossing Removal Project - Flora and Fauna Impact Assessment Report.

DoEE (2020). *National Light Pollution Guidelines for Wildlife including marine turtles, seabirds and migratory shorebirds*. Version 1.0. Australian Government Department of Energy and Environment, Canberra.

EPA (2018). *1698: Liquid storage and handling guidelines*. Environment Protection Authority.

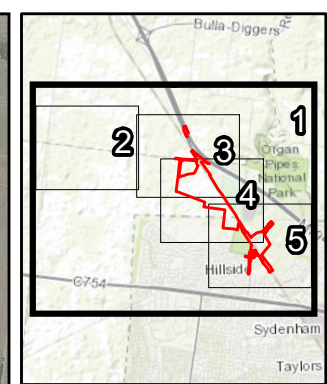
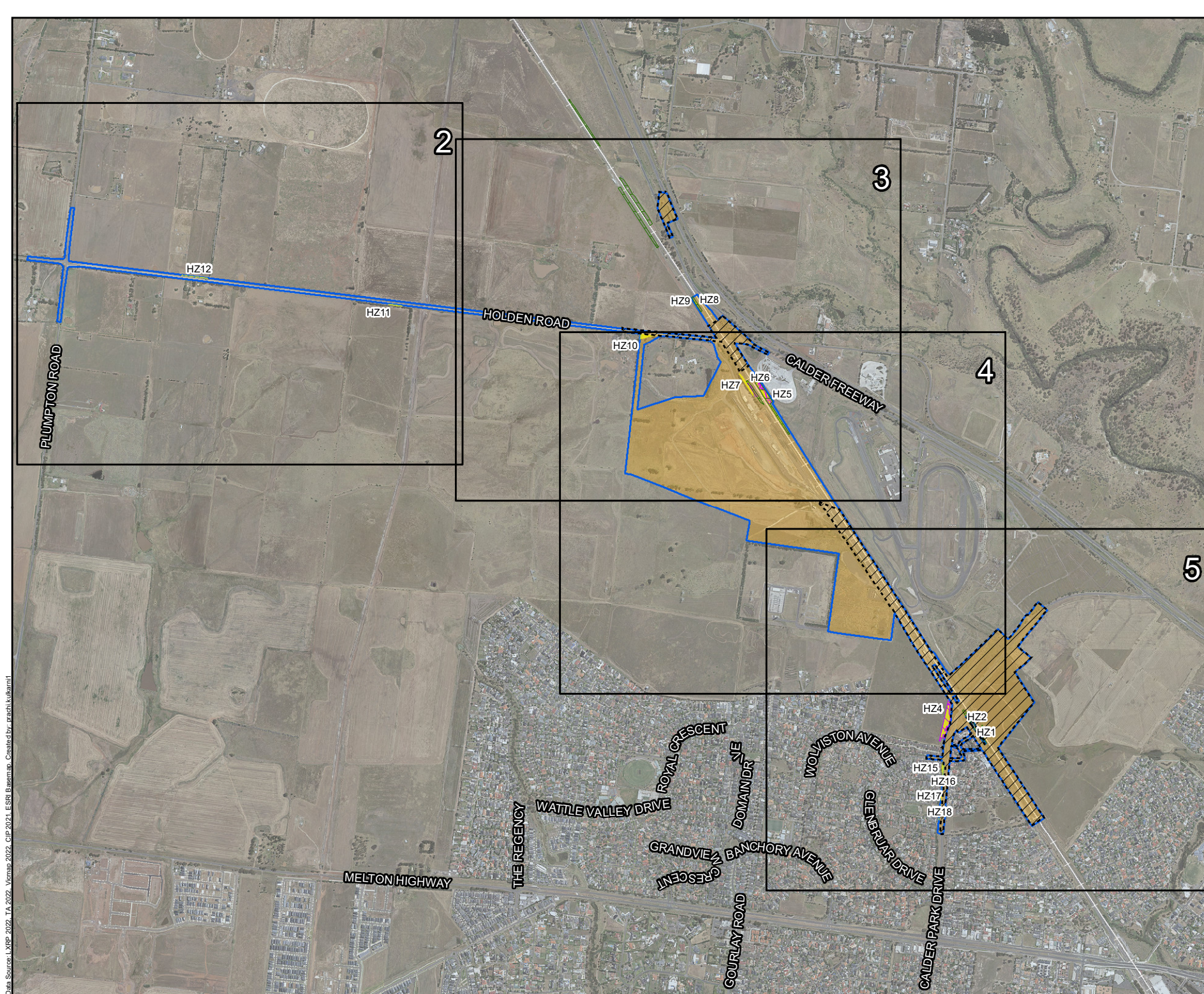
MW (2019). *Standards for infrastructure projects in flood-prone areas*. Melbourne Water, Docklands.

SA (2017). *Australian Standards AS1940: The storage and handling of flammable and combustible liquids*. Standards Australia, Sydney.

Appendices

Appendix A – Figures

Figure 3 Retained EPBC listed Natural Temperate Grassland



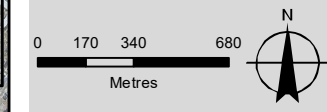
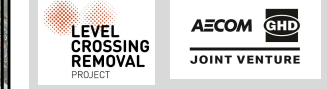
LEGEND

- Project area
- Investigation area
- Construction footprint
- MTM Biosite boundary
- NTGVVP
- Railway

Ecological Vegetation Class

- 132 Plains
- Grassland/WBPG

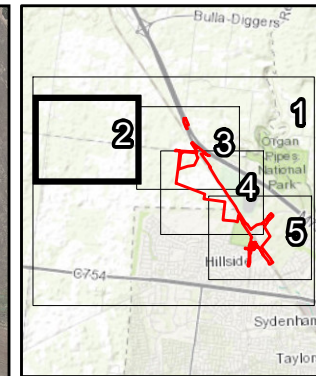
Native Vegetation
 Figure 3 - 1
 Overview
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXP, 2022, TA, 2022, Vicmap, 2022, GIP, 2021, ESRI Basemap, Created by: trachit.kulkarni



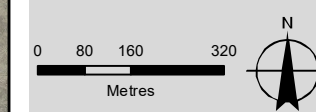
LEGEND

- Investigation area
- MTM Biosite boundary
- NTGVVP

Ecological Vegetation Class

- 132 Plains
- Grassland/WBPG

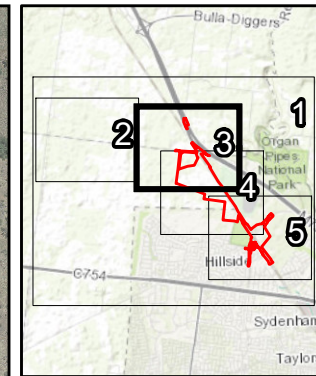
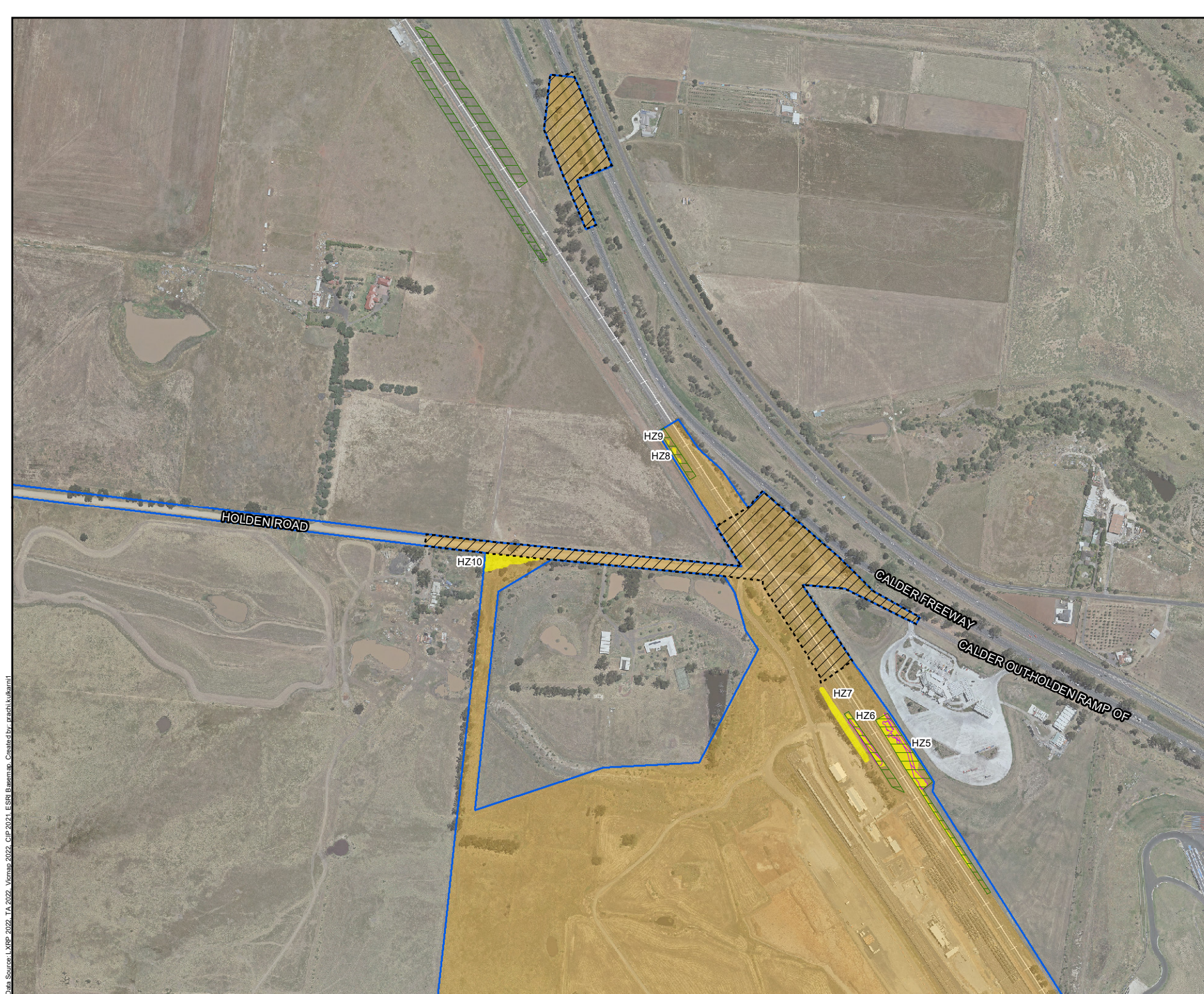
Native Vegetation
 Figure 3 - 2
 Holden Road
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

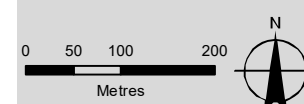
Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: L:\XPB_2022_TIA_2022_Vicmap_2022_GIP_2021_ESRI_Basemap_Created_by_trachikulkarni



- LEGEND**
- Project area
 - Investigation area
 - Construction footprint
 - MTM Biosite boundary
 - NTGVVP
 - Railway
- Ecological Vegetation Class**
- 132 Plains
 - Grassland/WBPG

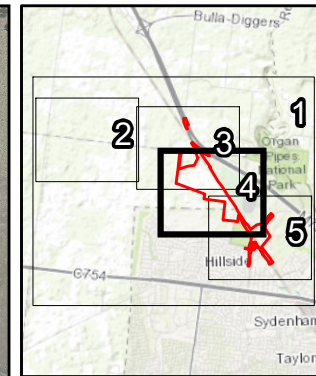
Native Vegetation
 Figure 3 - 3
 Holden Road and Stabling yard
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

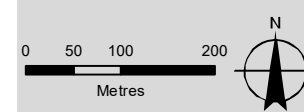
Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXP, 2022, TA, 2022, Vicmap, 2022, GIP, 2021, ESRI Basemap, Created by: trachit.kulkarni



- LEGEND**
- Project area
 - Investigation area
 - Construction footprint
 - MTM Biosite boundary
 - NTGVVP
 - Railway
- Ecological Vegetation Class**
- 132 Plains
 - Grassland/WBPG

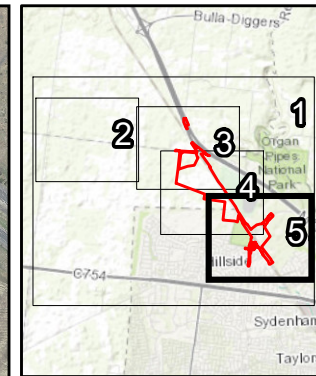
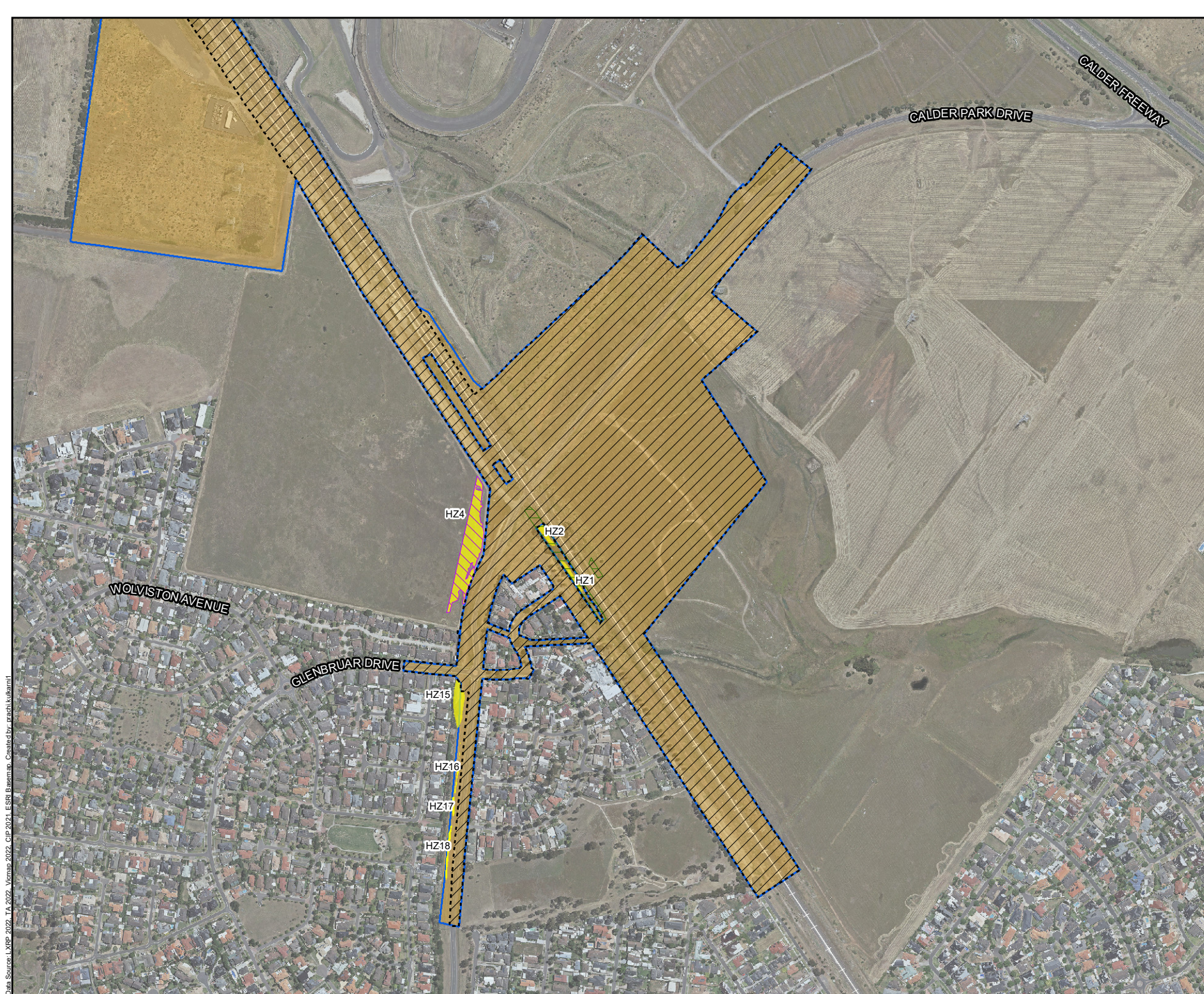
Native Vegetation
 Figure 3 - 4
 Stabling yard
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

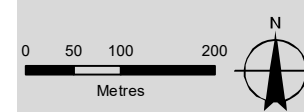
Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXPB 2022, TA 2022, Vicmap 2022, GIP 2021, ESRI Basemap, Created by: trachit.kulkarni



- LEGEND**
- Project area
 - Investigation area
 - Construction footprint
 - MTM Biosite boundary
 - NTGVVP
 - Railway
- Ecological Vegetation Class**
- 132 Plains
 - Grassland/WBPG

Native Vegetation
 Figure 3 - 5
 Calder Park Drive
 Flora and Fauna
 Management Plan

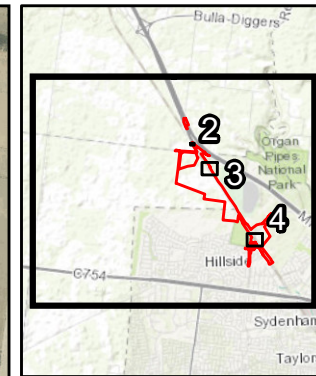
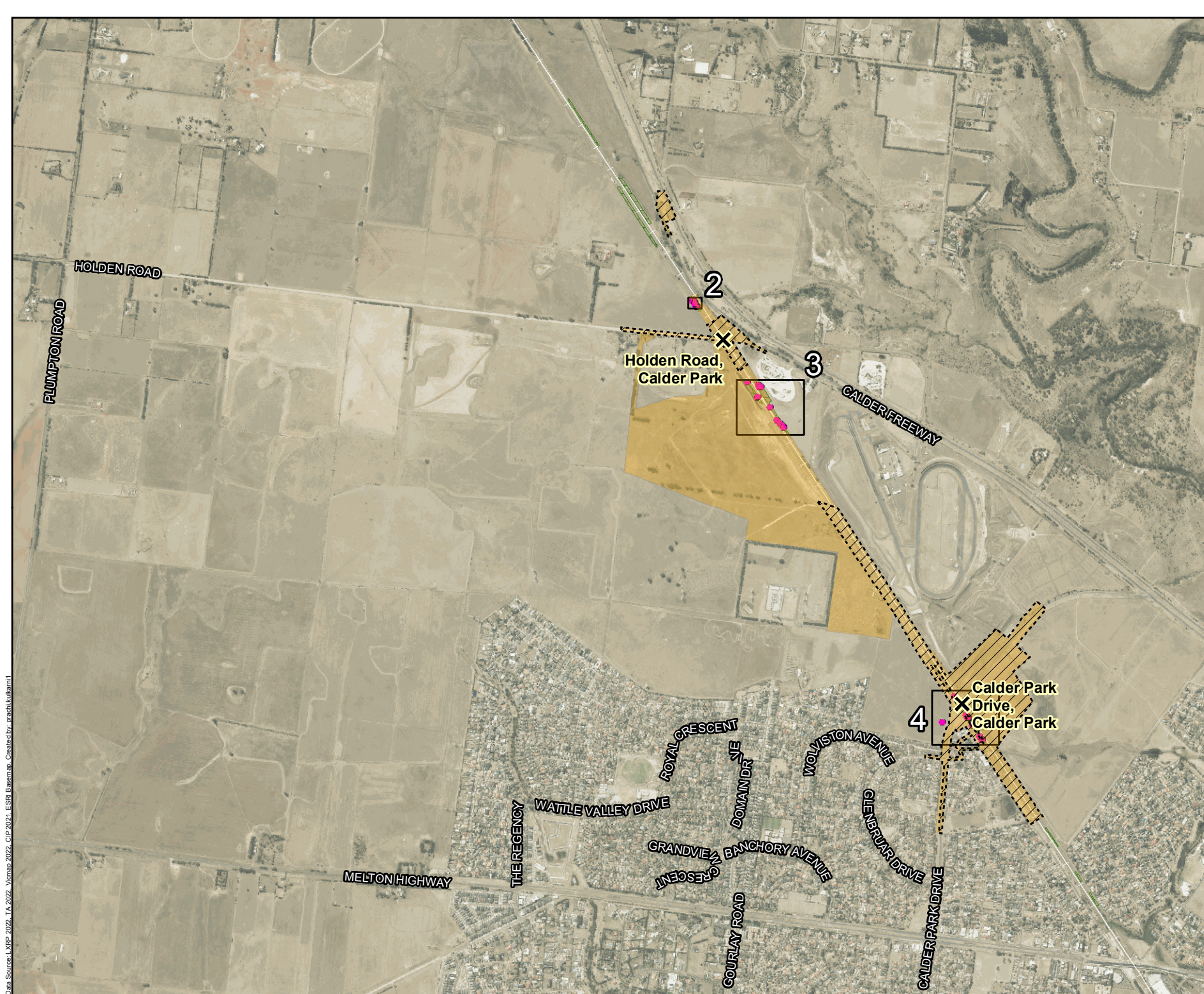


Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: L:\XPB_2022_Vicmap_2022_CIP_2021_ESRI_Basemap_Created_by_rachitkulkarni

Figure 4 Retained Spiny Rice-flower



- LEGEND**
- Level crossing site
 - Project area
 - Construction footprint
 - MTM Biosite boundary
 - SRF observations
 - Railway

Spiny Rice Flower

Figure 4-1
Flora and Fauna
Management Plan

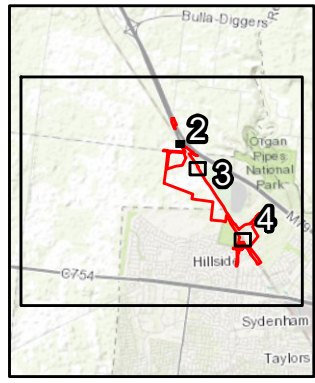


Paper Size A4
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXPB 2022, TIA 2022, Vicmap 2022, GIP 2021, ESRI Basemap, Created by: trachit.kulkarni

X:\Project Data\PRGM\GIS\MXDL\XRP3\CalderParkDr_HoldenRd\Ecology\20230516_ManagementPlan\004_CalderParkDr_HoldenRd_MgmPlan_SRF_A4L_RevB.mxd



- LEGEND**
- Project area
 - MTM Biosite boundary
 - SRF observations
 - Railway

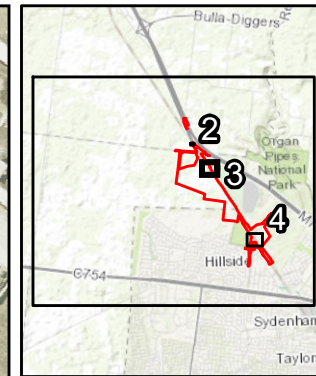
Spiny Rice Flower

Figure 4-2
Flora and Fauna
Management Plan



Paper Size A4
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.



LEGEND

- Project area
- MTM Biosite boundary
- SRF observations
- Railway

Spiny Rice Flower

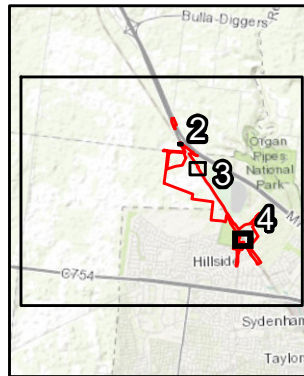
Figure 4-3
Flora and Fauna
Management Plan



Paper Size A4
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXP 2022, TA 2022, Vicmap 2022, GIP 2021, ESRI Basemap, Created by: trachikulkarni



- LEGEND**
- Level crossing site
 - Project area
 - Construction footprint
 - MTM Biosite boundary
 - SRF observations
 - Railway

Spiny Rice Flower

Figure 4-4
Flora and Fauna
Management Plan



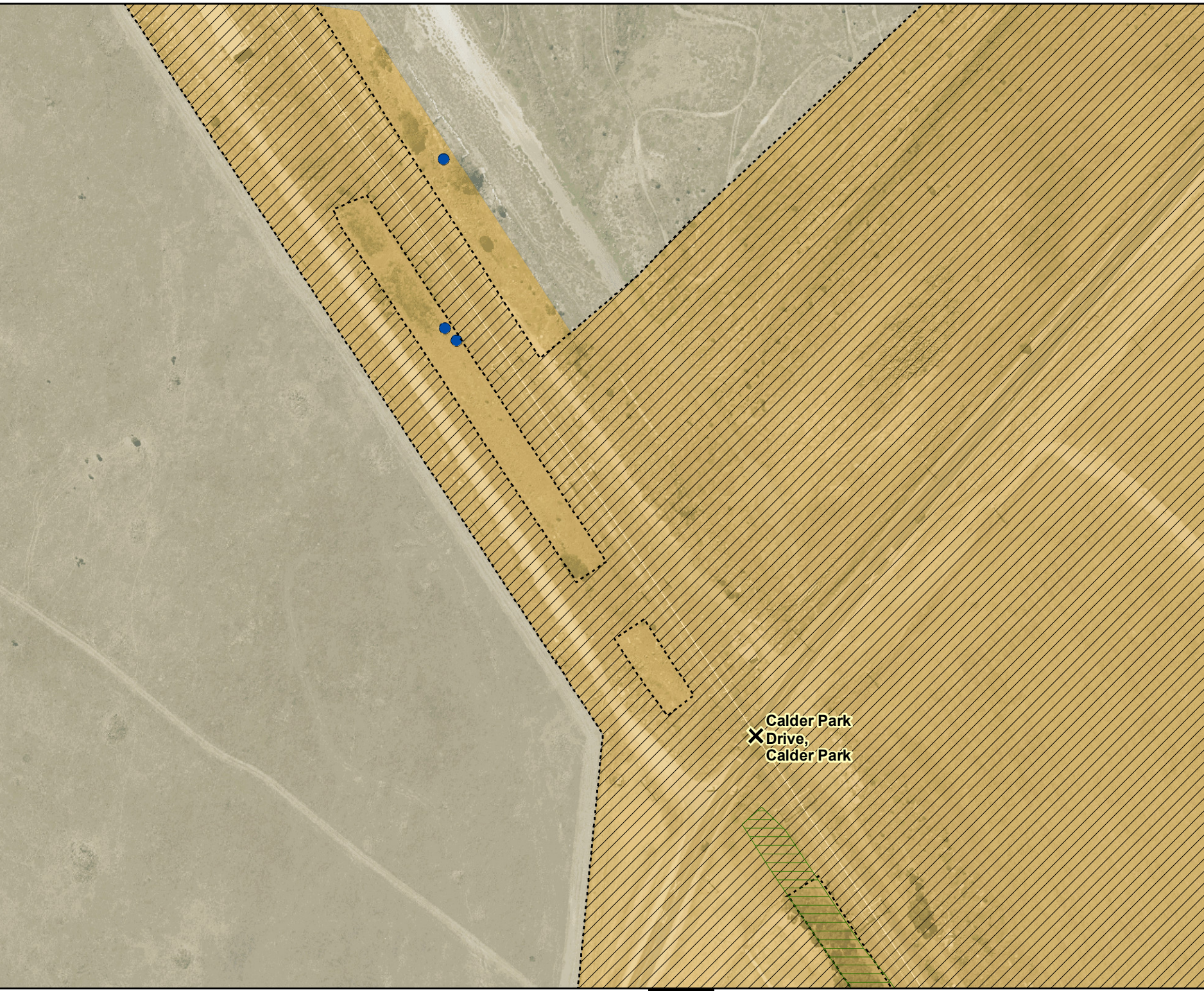
Paper Size A4
Map Projection: Transverse Mercator
Horizontal Datum: GDA 1994
Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXP 2022, TA 2022, Vicmap 2022, GIP 2021, ESRI Basemap, Created by: trachit.kulkarni

Figure 5 Retained Matted Flax-lily

X:\Project Data\PRGM\GIS\XDL\XRP3\CalderParkDr_HoldenRd\Ecology\20230516_ManagementPlan\005_CalderParkDr_HoldenRd_MgmPlan_MFL_A4L_RevB.mxd



Calder Park
 X Drive,
 Calder Park



LEGEND

- Level crossing site
- Project area
- Construction footprint
- MTM Biosite boundary
- MFL observations
- Railway

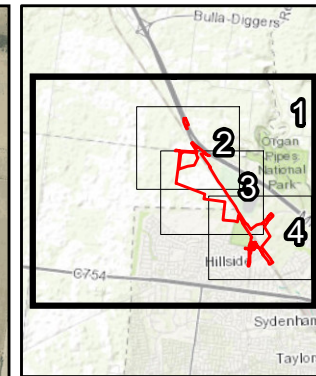
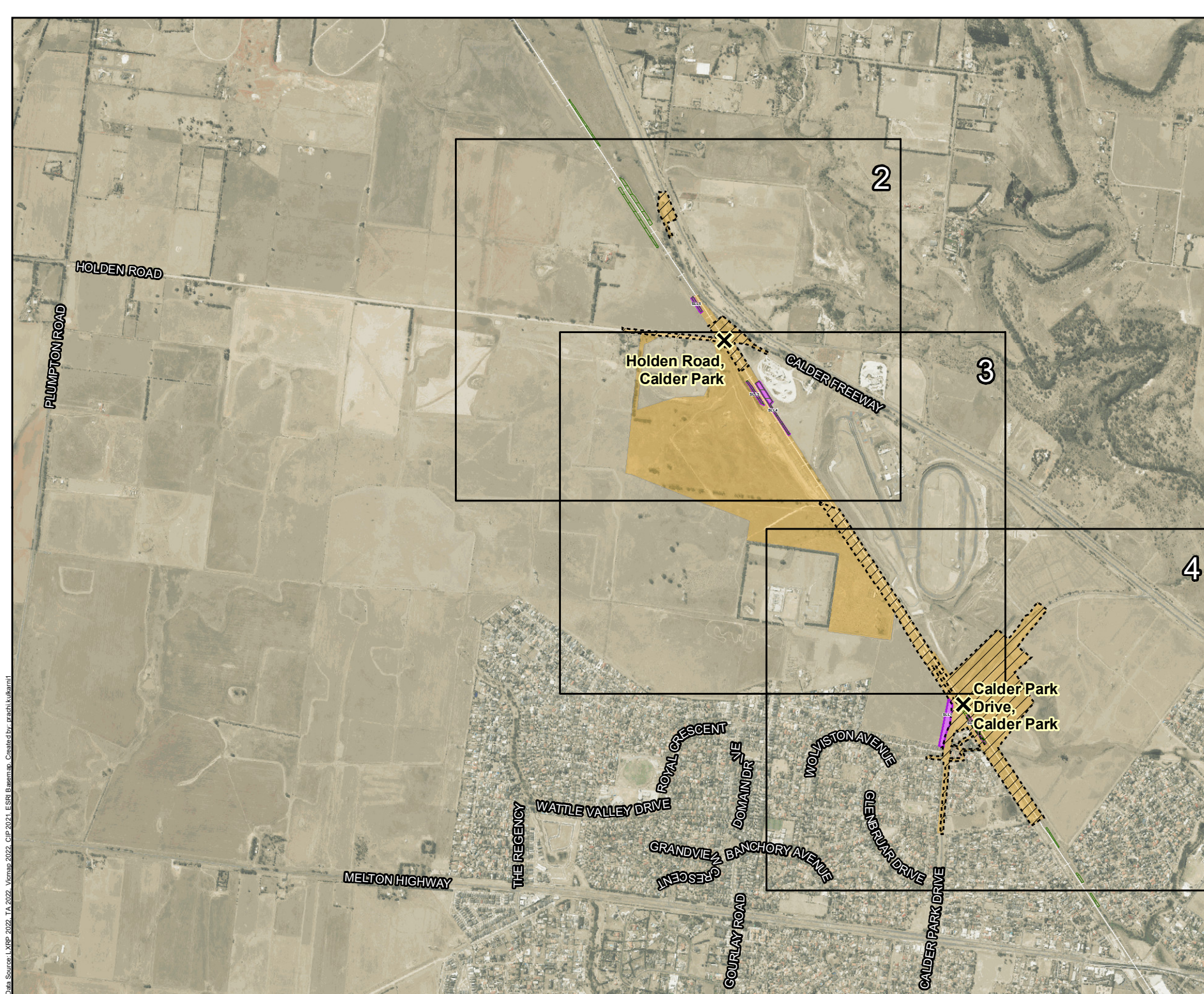
Matted Flax lily
 Figure 5
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Figure 6 Retained Striped Legless Lizard Habitat



- LEGEND**
- Level crossing site
 - Project area
 - Construction footprint
 - MTM Biosite boundary
 - SLL habitat
 - Railway

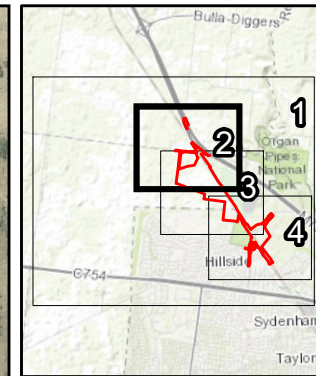
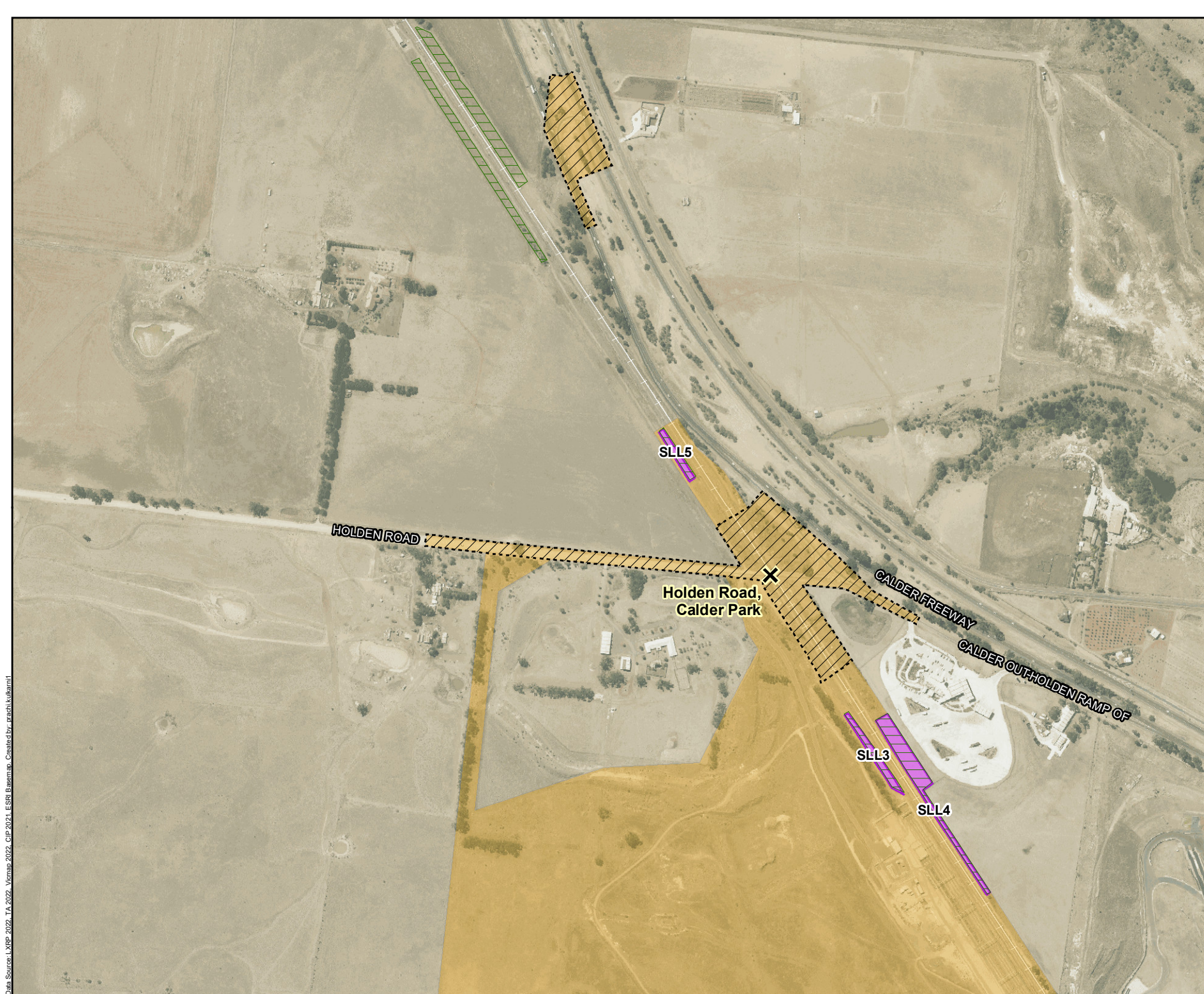
Striped Legless Lizard habitat
 Figure 6-1
 Overview
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXP, 2022, TA, 2022, Vicmap, 2022, GIP, 2021, ESRI Basemap, Created by: trachikulkarni



- LEGEND**
- Level crossing site
 - Project area
 - Construction footprint
 - MTM Biosite boundary
 - SLL habitat
 - Railway

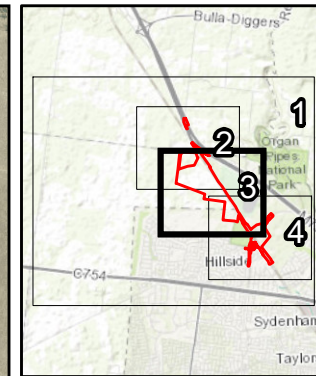
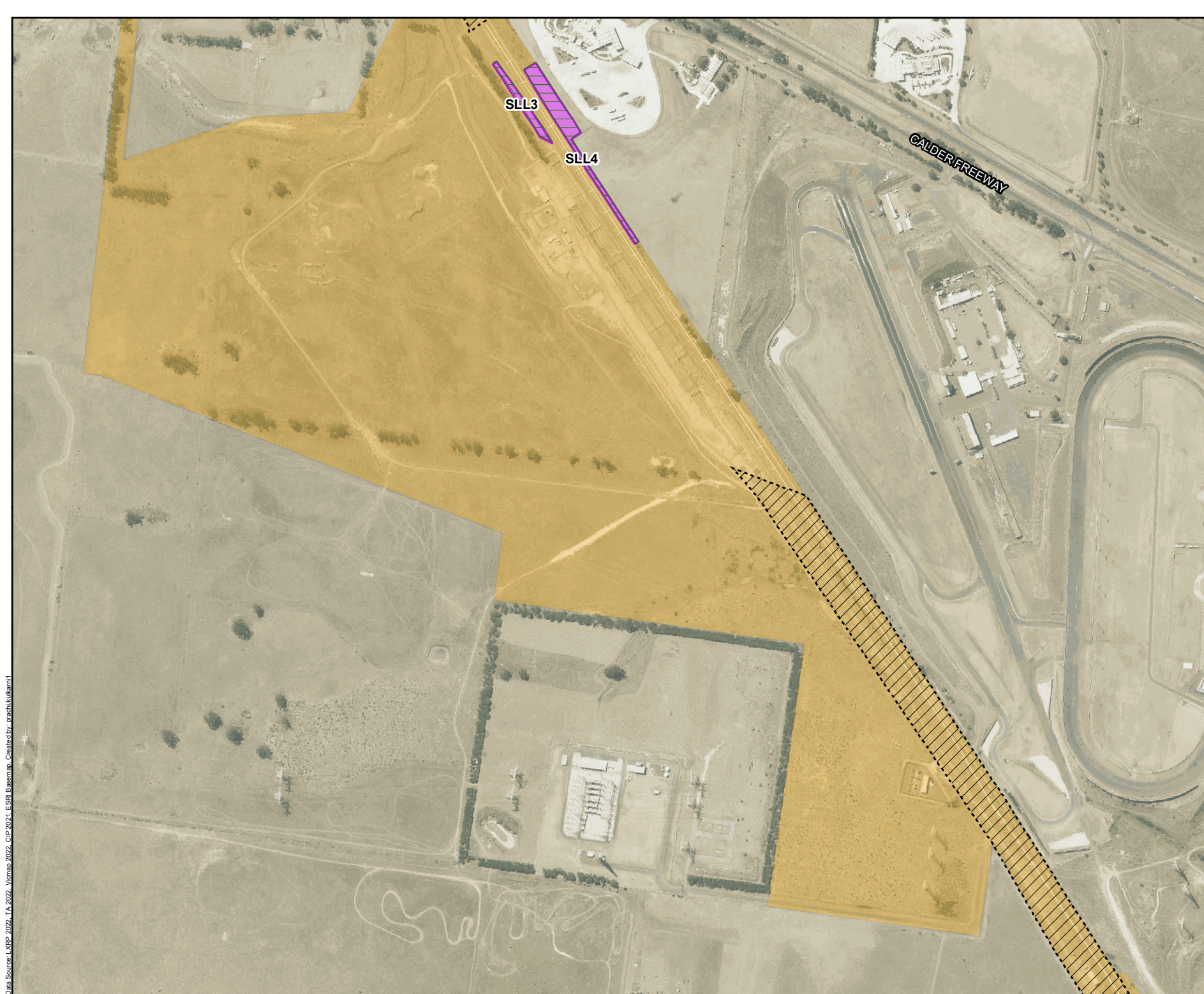
Striped Legless Lizard habitat
 Figure 6-2
 Holden Road and Stabling yard
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXPB 2022, TA 2022, Vicmap 2022, GIP 2021, ESRI Basemap, Created by: trachitkulkanonit



- LEGEND**
- Project area
 - Construction footprint
 - MTM Biosite boundary
 - SLL habitat
 - Railway

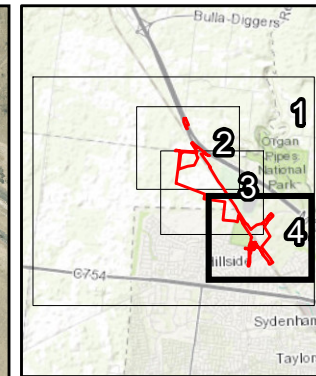
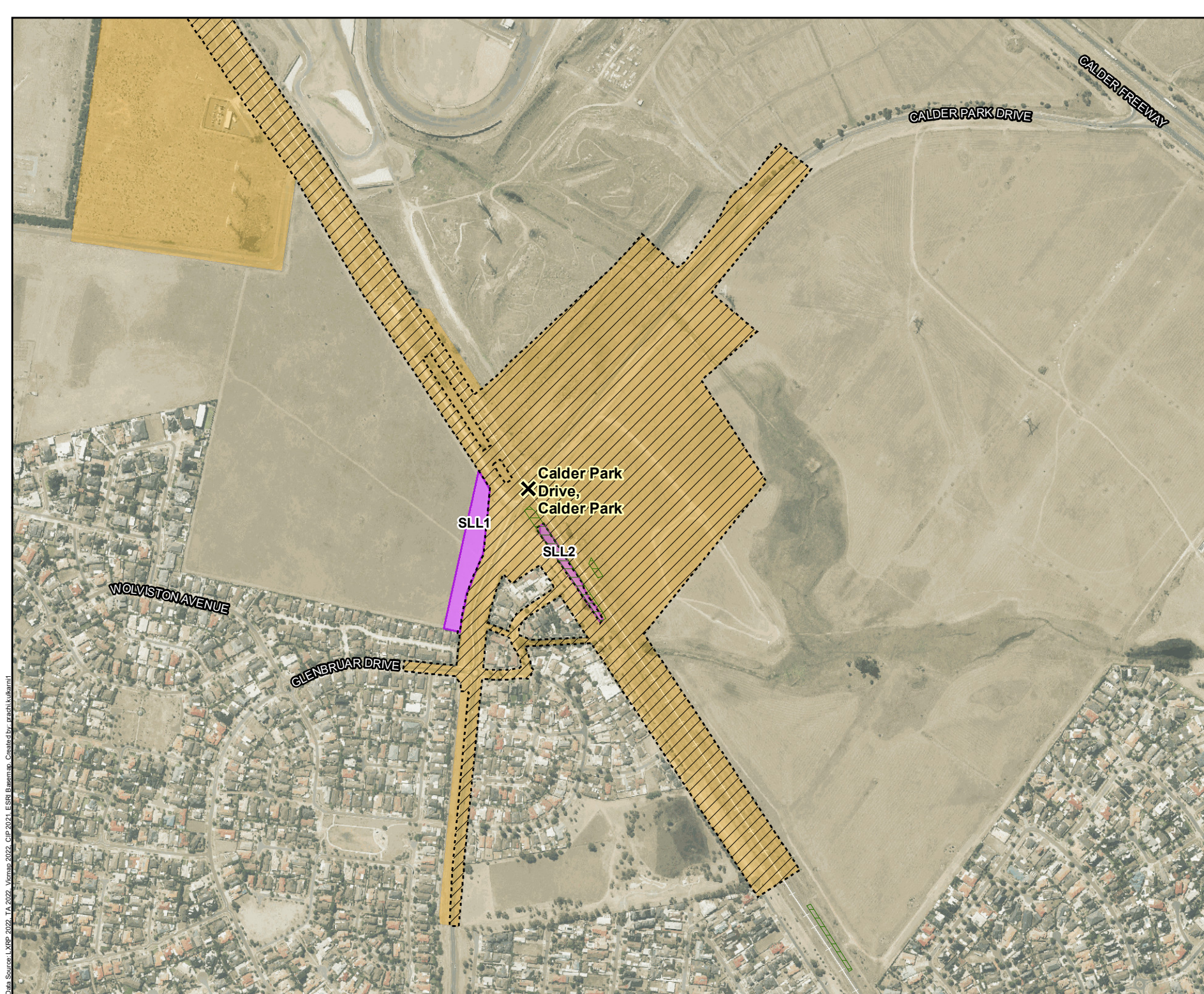
Striped Legless Lizard habitat
 Figure 6-3
 Stabling yard
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXPB 2022, TA 2022, Vicmap 2022, GIP 2021, ESRI Basemap, Created by: trachikulkanit



- LEGEND**
- Level crossing site
 - Project area
 - Construction footprint
 - MTM Biosite boundary
 - SLL habitat
 - Railway

Striped Legless Lizard habitat
 Figure 6-4
 Calder Park Drive
 Flora and Fauna
 Management Plan



Paper Size A4
 Map Projection: Transverse Mercator
 Horizontal Datum: GDA 1994
 Grid: GDA 1994 MGA Zone 55

Conditions of Use. This document may only be used by the client of the AECOM and GHD Joint Venture (JV) (and any other person who the JV has agreed can use this document) for the purpose for which it was prepared and must not be used by any other person or for any other purpose.

Data Source: LXP, 2022, Vicmap, 2022, GP, 2021, ESRI Basemap. Created by: rachel.kulkarni

Appendix B – Implementation Strategy

Objectives	Performance Targets	Timing	Duration	Frequency	Corrective Actions
Induction					
<ul style="list-style-type: none"> Conduct induction to ensure all staff/contractors are aware of protective measures and ecological value mitigation/management obligations while undertaking construction activities. Manage the potential for inadvertent damage to protected values by inducting all contractors/staff on the presence and location of ecological values and their obligations. 	<ul style="list-style-type: none"> No non-inducted contractors onsite. Induction register to be maintained. Conduct inductions for all contractors/staff outlining the presence and location of ecological values to be protected, the relevant protective measure and obligations while undertaking construction activities. Advice and obligations outlined during work site inductions during pre-work inductions, weekly toolbox talks, daily pre-starts and advice on notice boards. Provide maps on notice boards with clear demarcation of No-Go Zones and ecological values to be protected. 	<ul style="list-style-type: none"> Conduct weekly toolbox talks to reiterate the presence of values and obligations. Identify ecological values in daily pre-starts when works are in proximity to No-Go Zones/areas of ecological value to be retained and protected. 	<ul style="list-style-type: none"> Pre-Construction Construction 	<ul style="list-style-type: none"> Daily, weekly, as required for new inductees 	<ul style="list-style-type: none"> Contractors will be removed from site if induction not completed
No-Go Zones					
<ul style="list-style-type: none"> Demarcate No-Go Zones (NGZs) to protect retained native vegetation and habitat from inadvertent damage. Manage the potential for inadvertent incursions by vehicles, machinery, personnel, spills, etc. by establishing NGZs around retained values and clearly demarcating on site plans, including digital GIS mapping available to Project staff for works planning 	<ul style="list-style-type: none"> MTM biosites, Banchory Grove Reserve protected and not damaged during construction works. Patches of Western (Basalt) Plains Grasslands (WPG) outside of biosites are protected and not damaged during construction works. Dams within the Calder Park Stabling Yard protected from damage resulting directly from LXRP construction works. No incursions into NGZs without supervision by a qualified environmental advisor or ecologist. Establish a NGZ prior to construction to demarcate vegetation to be retained. Clearly demarcate NGZs on site plans. Attach NGZ maps to all work activity packs that include works in proximity to NGZs. Include NGZs in excavation permit drawings. For NGZs already fenced (biosites and reserves), ensure works methodologies in close proximity to existing fencing adequately protect the existing fence. For NGZs without an existing fence, use temporary fencing panels and ensure it is maintained for the duration of construction. The exception to this is the dams in the Calder Park Stabling Yard as they are either separated from the light vehicle access track by the frog fence installed by the Rail Infrastructure Alliance or are more than 70 m from the access track to be used by light vehicles only. Install signage identifying NGZs. Locate components of the works that pose the greatest environmental risk (e.g. construction compounds, stockpiles, unloading points, wash bays, chemical storage, refuelling areas, areas which require lighting, or which generate the most noise) as far from the NGZs as possible. 	<ul style="list-style-type: none"> NGZ fencing and signage near the works (~1 m) to be inspected prior to commencement of works each day to ensure intact and effective. Incursions into NGZs will be reported to the Site Manager immediately. Damage to NGZ fencing or signage will be reported to the Site Environment Manager immediately 	<ul style="list-style-type: none"> Pre-Construction Construction Ongoing 	<ul style="list-style-type: none"> Daily 	<ul style="list-style-type: none"> Incursions will be rectified as soon as practicable in accordance with the response plan based on the nature of the incursion. Corrective actions to be completed within 24 hours (or the following work shift in the event of closures or weekends) and documented.

Objectives	Performance Targets	Timing	Duration	Frequency	Corrective Actions
	<ul style="list-style-type: none"> Implement measures to prevent movement of sediment (from earth stockpiles) or refuse (from any other materials stockpiled) into NGZs/areas of retained ecological value. Use surface stabilising material on areas of high potential for erosion where practicable. Develop a response plan for possible incursion scenarios to facilitate rapid response to rectify any events. 				
Weed Control					
<ul style="list-style-type: none"> Protect retained native vegetation and habitat from introduction and/or spread of weeds. Monitor and control weeds by identifying and implementing measures to minimise their introduction and spread, identifying weed infestations, and implementing controls in a timely manner. 	<ul style="list-style-type: none"> No new incursions of CaLP Act listed weeds into MTM biosites, Banchory Grove Reserve or other areas of retained native vegetation (against baselines): <ul style="list-style-type: none"> Establish baseline conditions (including mapping) for noxious weeds within 30 m of MTM biosites and Banchory Grove Reserve prior to construction. Establish baseline conditions for noxious weeds within MTM biosites, if not already completed by MTM. Establish baseline conditions for noxious weeds within 30 m of the construction footprint inside Banchory Grove Reserve, if not already completed by Parks Victoria as a means of mitigating risk of any weed incursions being attributed to the Project. Prohibit the use of materials potentially infected by weeds (e.g. bulk fill); ensure any soil introduced to the site is at low risk of containing weeds. Stockpile topsoil (including the top 20 mm of soil along with vegetative material) separately to sub-surface material (sub 20 mm) as the topsoil possesses the greatest risk of weed seed spread from the Project Area. Retain topsoil within the Project Area to prevent the spread of weeds outside the Project Area. Keep vehicles, plant and machinery on sealed surfaces and designated access tracks and in designated work areas wherever possible. Avoid driving through highly infested areas of weeds, in water or areas of wet soil, where possible. Install rumble grids at entry/exit points of construction site. Establish and maintain wash-down locations for machinery, vehicles, tools and footwear where necessary (i.e. at heavily trafficked areas). Wash-down locations should: <ul style="list-style-type: none"> Be located at least 30 m from native vegetation, dams, waterways and drains. Be sited close to site entry and exit points. Collect wastewater and sediment and dispose of appropriately. Include signage to advise personnel of the methods to use washdowns properly. Engage experienced land management contractor/s familiar with native plant and weed identification and possess a detailed working knowledge of herbicide selection and use and mechanical removal techniques to undertake weed control in areas adjacent to MTM biosites (managed by MTM) and Banchory Grove (managed by Parks Victoria). 	<ul style="list-style-type: none"> Conduct quarterly weed monitoring and control within 30 m of MTM biosites and Banchory Grove Reserve for the duration of construction. Ongoing maintenance of weed monitoring data for the construction footprint. 	<ul style="list-style-type: none"> Pre-Construction Construction Ongoing 	<ul style="list-style-type: none"> Quarterly 	<ul style="list-style-type: none"> Weed incursion addressed as soon as practicable by a suitably qualified weed management contractor familiar with native vegetation and threatened species. It is assumed MTM and Parks Victoria complete regular monitoring and control of weeds within their respective management areas, therefore no monitoring or control is required by the Project in those areas. Corrective actions to be documented

Objectives	Performance Targets	Timing	Duration	Frequency	Corrective Actions
	<ul style="list-style-type: none"> Avoid any mechanical and chemical control of weeds from drifting into areas of retained vegetation. Identify known areas of significant weed infestations on site plans and in contractor induction material. Implement a monitoring and control program for noxious weed species in the Project Area as required under the CaLP Act. Noting that: <ul style="list-style-type: none"> MTM biosites are managed by MTM via the MTM Biodiversity Management Plan. Weed management will continue to be undertaken by MTM as the land manager, in accordance with the MTM Biodiversity Management Plan. LXP will facilitate MTM access to biosites while those areas are under possession for the Project. Banchory Grove is managed by Parks Victoria. It is assumed Parks Victoria already implement a management plan for Banchory Grove and will continue to manage Banchory Grove in accordance with that plan. Conduct inspections to check for evidence of weed invasion near work areas and in retained areas of native vegetation. 				
Sediment and Erosion Control					
<ul style="list-style-type: none"> Prevent contamination of, or damage to native vegetation, dams, and waterways. Ensure sediment from the site is retained on-site during construction work 	<ul style="list-style-type: none"> No downstream impacts from contamination of local waterways. No evidence of significant sediment deposition outside the works area. No evidence of significant run-off erosion. Silt loads to be treated as close to their source as possible using effective sediment traps such as geotextile fences and other standardised sediment control measures. Undertake monitoring of any water that is released into the environment to ensure it complies with the correct standards of discharge. Design the works area to ensure stormwater runoff drains do not have an immediate impact to retained native vegetation and threatened species habitat. Install sediment controls where required. These will include, but not be limited to, rock check dams, sediment basins, sediment fences and silt socks. Locate wash-down areas away from areas of ecological values and ensure they are appropriately bunded to contain all soil and contaminated water. Stockpile topsoil a stable way based on the nature of the material, stockpiles that are within 50 metres of retained native vegetation or threatened species should be restricted in height. Use surface stabilising material on areas of high potential for erosion. Conduct visual inspections of sediment controls to ensure functionality. Conduct visual inspections after significant rainfall events to check on erosion and allow remedial work to be undertaken as soon as practicable. Undertake work over or within proximity to waterways during a time where there is minimal water present within the waterway where practicable. Conduct inspections to check for evidence of sedimentation or erosion near work areas. 	<ul style="list-style-type: none"> Weekly inspections of worksite. Monthly water monitoring programme. Logging of sediment control structures - location and condition during weekly site inspection. Weekly inspection during construction by Project Environmental Team Members. Monthly internal reporting on the findings of the water monitoring and retention of records for future reference. Incidents to be reported immediately to the Site Environment Manager 	<ul style="list-style-type: none"> Pre-Construction Construction 	<ul style="list-style-type: none"> As required, weekly and monthly 	<ul style="list-style-type: none"> Sediment controls will be reviewed during site inspections and/or after significant rainfall (more than 20 mm in 24 hours resulting in significant site runoff). Incident report for non-conformance of sediment control. Investigate cause of sediment control failure. Review flow path and determine most appropriate controls are in place, additional controls which can be place in-stream and/or changes that can be made to flow path

Objectives	Performance Targets	Timing	Duration	Frequency	Corrective Actions
Light Pollution					
<ul style="list-style-type: none"> Minimise impacts of lighting on retained native vegetation and habitat. Manage the adverse impacts of artificial lighting by strategic placement of lighting infrastructure, the use of directional lighting and by restricting construction to daylight hours. 	<ul style="list-style-type: none"> No external lighting used outside of hours of construction if possible. Minimal light spill into drainage lines, dams, MTM biosites and Banchory Grove Reserve. Undertake construction works during daylight hours to negate the need for artificial lighting, as much as possible. Do not locate any site compounds immediately adjacent to No-Go Zones and direct any external lighting (if required) away from the perimeter. Design the number, type, and layout of lights to light only the areas that need to be illuminated. Based on the guidance in National Light Pollution Guidelines for Wildlife (DoEE 2020), the design should: <ul style="list-style-type: none"> Keep lights close to the ground. Direct and fully shield lights to avoid light spill beyond the active construction area. Use lowest intensity lighting that is appropriate for safe working conditions. Use lights with reduced or filtered blue, violet and ultra-violet wavelengths where possible. Avoid the use of LEDs where possible. 	<ul style="list-style-type: none"> Site Environment Manager to keep record of hours of site operation beyond daylight hours. 	<ul style="list-style-type: none"> Pre-Construction Construction Ongoing 	<ul style="list-style-type: none"> Immediate reporting upon exceedance 	<ul style="list-style-type: none"> External lighting left on after hours will be reported to the Site Environment Manager. Exceedances and corrective actions to be documented
Surface Water Hydrology					
<ul style="list-style-type: none"> Protect retained native vegetation patches, threatened ecological communities, and threatened species habitat from changes to surface water hydrology. Manage changes to surface topography to ensure changes to surface water hydrology do not affect retained native vegetation, threatened ecological communities, or threatened species. 	<ul style="list-style-type: none"> No change to surface water hydrology within area of retained native vegetation patches MTM biosites, Banchory Grove Reserve or other areas of retained native vegetation beyond what has already been modelled and assessed. Maintain existing surface hydrology conditions. Ensure flood levels are not made worse by alterations to surface flow characteristics set out in the Melbourne Water standards for infrastructure Projects in flood-prone areas (MW 2019). Assess impacts to ecological values if future hydrology modelling suggests potential alterations to existing hydrology conditions. 	<ul style="list-style-type: none"> Flooding and surface water conditions to be monitored weekly during standard site inspections. Any changes to the condition of native vegetation to be monitored, including intended mitigation measures 	<ul style="list-style-type: none"> Pre-Construction Construction Ongoing 	<ul style="list-style-type: none"> Weekly, as required during high rainfall events 	<ul style="list-style-type: none"> Any changes to surface water hydrology (e.g. additional water pooling that can be attributed to a Project activity) must be assessed to ensure that there is no impact to native vegetation or threatened species. Corrective actions to be completed within 24 hours and documented
Dust Management					
<ul style="list-style-type: none"> Protect retained native vegetation, threatened ecological communities or species habitat from dust. Manage dust to minimise incursion of dust settling on retained native vegetation, threatened ecological communities or species habitat. 	<ul style="list-style-type: none"> Minimal dust settling in MTM biosites or Banchory Grove Reserve. Use of water carts on roads and exposed surfaces. Cessation of works during high wind conditions. Reduced speed for vehicles. Minimisation of exposed areas by progressive clearance of vegetation. Progressive establishment of vegetation on topsoil/overburden stockpiles and rehabilitated landforms. 	<ul style="list-style-type: none"> Dust monitoring to take place on site during construction activities with results recorded and monitored for exceedances. Dust monitoring to be reported along with other data recordings. 	<ul style="list-style-type: none"> Pre-Construction Construction 	<ul style="list-style-type: none"> Continuous, as required during high wind events 	<ul style="list-style-type: none"> Employ additional dust management measures if those already identified are not effective at keeping dust out of the MTM biosites or Banchory Grove Reserve.
Accidental Spills					






Objectives	Performance Targets	Timing	Duration	Frequency	Corrective Actions
<ul style="list-style-type: none"> Protect retained native vegetation, threatened ecological communities or species habitat from accidental spills. Manage the potential for inadvertent incursions by chemical or poor water quality spills on retained native vegetation threatened ecological communities or species habitat. 	<ul style="list-style-type: none"> No refuelling or chemical storage areas near areas of retained native vegetation, threatened ecological communities or threatened species habitat. No spills affecting No-Go Zones, MTM biosites, Banchory Grove Reserve or waterways. Include a detailed waste management plan within the CEMP that designates areas where refuelling is prohibited, chemical storage areas and a procedure to minimise chemical spills. Carry out maintenance activities and refuelling at an appropriate distance with appropriate spill protection measures in place to avoid impacts to vegetation, habitat, and waterways, in accordance with relevant regulatory requirements. Develop and implement a response plan to deal with accidental spills and leaks. Ensure spill kits are available on site that are appropriate for the substances in use. Adhere to regulations, guidelines; and best practice measures will be adhered to for the storage, handling, transport and use of materials that may contaminate the environment including (but not limited to) those listed under: <ul style="list-style-type: none"> Environment Protection Act 2021 Dangerous Good (Storage and Handling) Regulations 2012 1698: Liquid storage and handling guidelines (EPA, 2018) Australian Standard AS1940: The storage and handling of flammable and combustible liquids (Standards Australia 2017). Advice from WorkSafe Victoria. 	<ul style="list-style-type: none"> Monitoring of all chemical spills that occur anywhere on the Project site to ensure that current mitigations are effective for protecting native vegetation and habitats 	<ul style="list-style-type: none"> Pre-Construction Construction 	<ul style="list-style-type: none"> Continuous 	<ul style="list-style-type: none"> Spills will be reported to the Site Environment Manager immediately. For major spills, or incidents that cannot be immediately contained will require a Stop Work notice to be issued for the related activity, corrective actions completed immediately and documented.
Wildlife Management					
<ul style="list-style-type: none"> Protect wildlife from injury or death during construction. Manage construction works to minimise risk to wildlife by restricting their ability to access the construction footprint and ensuring any open pits or trenches are managed appropriately. 	<ul style="list-style-type: none"> No death or entrapment of wildlife as a direct result of a lack of mitigation. Manage any open pits or trenches to reduce potential for fauna entrapment through measures such as: <ul style="list-style-type: none"> Covering any excavation not being worked on with steel sheets. Minimising the length of trench open at a time. Minimising the amount of time trenches and other excavations are open. Provide exit ramps with slopes less than a 45-degree angle where practicable and safe to do so. Daily inspections of open trenches by appropriately certified personnel to remove trapped fauna as required. Checking for fauna prior to backfilling trenches. Install fauna proof fencing adjacent to Banchory Grove Reserve to restrict the potential for SLL (and other small, ground-dwelling species) to move from Banchory Grove Reserve into the construction area. Ensure fauna are discouraged from work areas by erecting barriers where practicable. Develop and implement a procedure for finding trapped fauna. 	<ul style="list-style-type: none"> Trenches to be inspected daily for presence of trapped wildlife. Fauna proof fencing along Banchory Grove Reserve to be inspected during site inspections for effectiveness. 	<ul style="list-style-type: none"> Pre-Construction Construction 	<ul style="list-style-type: none"> Daily 	<ul style="list-style-type: none"> Damage to fauna proof fencing will be reported to the Site Environment Manager immediately. Corrective actions to be completed within 24 hours and documented on site. Instances of entrapment of fauna in open pits or trenches will be reported to the Site Environment Manager immediately. Incursions of wildlife into the construction footprint will be reported to the Site Environment Manager. Corrective actions to be determined based on location and type of wildlife.

levelcrossings.vic.gov.au

contact@levelcrossings.vic.gov.au



For languages other than English, please call 9209 0147.

1800 105 105 (call anytime)     

Please contact us if you would like this information in an accessible format. If you need assistance due to a hearing or speech impairment, visit relayservice.gov.au

