CPS 9182/1 - EPBC 2019/8480

OFFSET STRATEGY

Albany Heritage Park Link Trails (V2) Project

Document Control

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1.0	14 December 2023	Draft for review
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Contents

1. Background

The City of Albany (hereafter referred to as 'the City' or 'CoA') is proposing to construct a walk and ride trail network at Albany Heritage Park ('AHP' or 'the Mounts').

The Albany Heritage Park/AHP is a 242 ha single area of remnant native vegetation utilised as parkland. It is bordered by the key precincts of the CBD, waterfront and Binalup/Middleton Beach, and is adjoined by residential development to the north and west.

The project area is made up of a number of Crown reserves with management responsibilities held by the City, and an area of freehold land owned by the City.

There have been longstanding problems with unsanctioned trails being illegally constructed at the Mounts, and a key purpose of this project is to rationalise the existing trail network to reduce its environmental impacts and remedy user conflict issues. This will be achieved both through construction of best-practice trails and through closure and rehabilitation of existing trails.

The planning processes for the project include consideration of both long-term and short-term economic, environmental, social and equitable values. The Albany Heritage Park Link Trails project is guided by the Albany Heritage Park Trails Concept Plan and the Mounts Master Plan, which aim to respect and enhance the significant natural, cultural, social and recreational assets, ensuring any future development is undertaken with a careful balance of conservation and enhancement.

1.1 Purpose and Scope

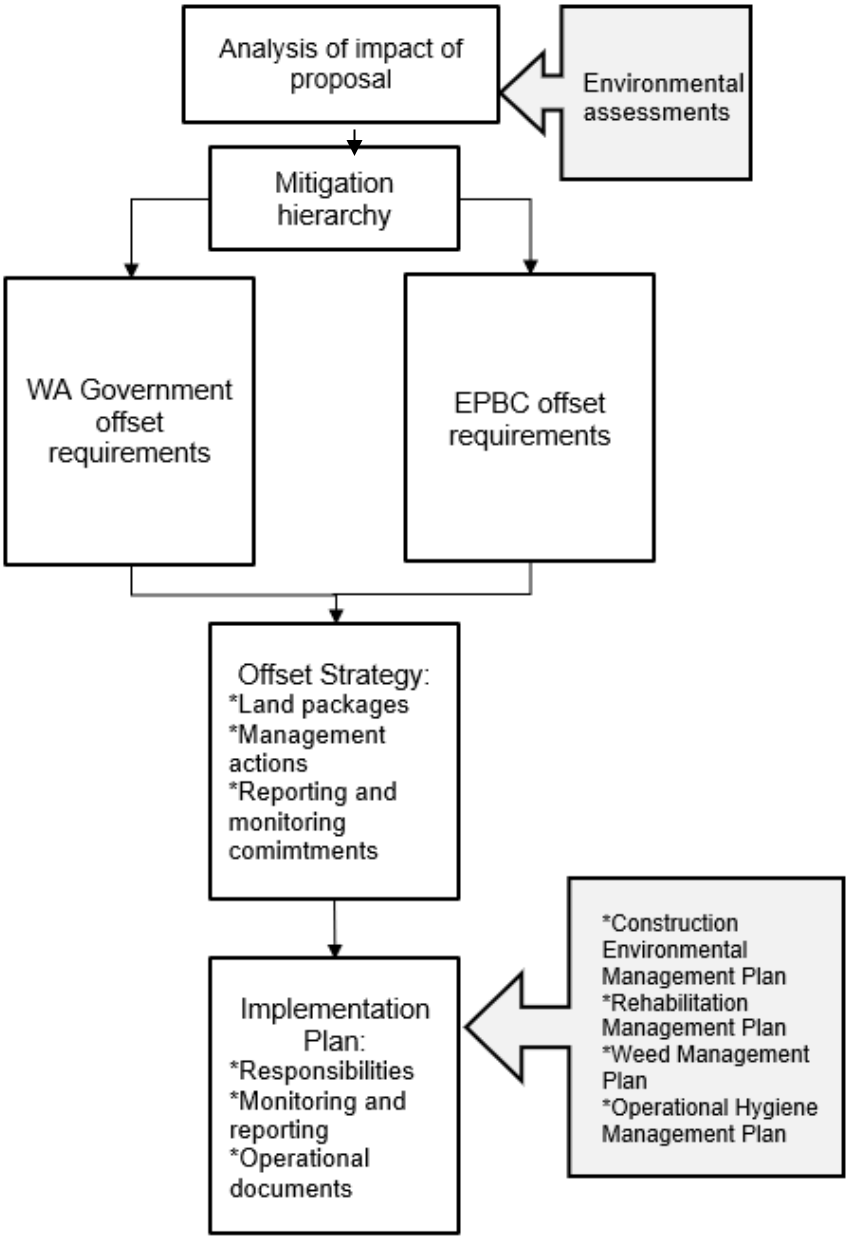
The Proposal has been referred under Western Australia's Environmental Protection Act 1986 (EP Act) and the Commonwealth's Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act). The Proposal will be assessed on Referral Information (ARI) under the EP Act.

This Offset Strategy has been prepared in accordance with both State and Commonwealth offset policy and guidance, and addresses the request for additional information required for Assessment on Referral Information issued by the Department of Climate Change, Energy, the Environment and Water (DCCEEW). The format of this document follows that of the information requirements for both State and Commonwealth offset proposals.

In addition to flora of conservation significance to the WA Government, potential habitat for *Caladenia harringtoniae* (Harrington's spider orchid) has been identified at AHP. *Drakaea micrantha* (the dwarf hammer orchid) was considered to be potentially present at the outset of these assessments. Several targeted searches in appropriate vegetation types identified a lack of suitable habitat for the species, apart from in wet soaks in the Sheoak woodland vegetation unit. The flora surveys were suitably timed, extensive, carried out across three separate years, and were considered adequate by the Department of Water and Environmental Regulation (DWER) to have identified the orchid if it had been present.

The Mounts are home to western ringtail possums, and black cockatoos are known to forage there - both of which are EPBC-protected fauna. Please note that references to 'black cockatoos' in this document are intended to mean all three species observed at the Mounts – Carnaby's, Baudin's, and the Forest red-tailed black cockatoo – unless specifically identified as a particular species.

1.2 Albany Heritage Park Link Trails project Offset Strategy process



1.3 State Offset Requirements

1.3.1 EPA Objective

The EPA's environmental objective for proposals that may require Environmental Offsets is:

> *"To counterbalance any significant residual environmental impacts and/or uncertainty through the application of offsets"* (EPA, 2014).

1.4 State Offset Policy and Guidance

The following State policies and guidance are relevant to the offsets:

- WA Environmental Offsets Policy (EPA, 2011);
- Environmental Protection Bulletin Number 1: Environmental Offsets (EPA 2014a);
- WA Environmental Offsets Guidelines (GoWA 2014); and
- Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual (EPA, 2021).

The WA Environmental Offsets Policy (EPA, 2011) and WA Environmental Offsets Guideline (EPA, 2014) provide guidance to proponents on the approach needed to determine offset requirements for proposals. The Environmental Offsets Guideline (EPA, 2014) states that:

> *"In general, significant residual impacts include those that affect rare and endangered plants and animals (such as declared rare flora and threatened species that are protected by statute), areas within the formal conservation reserve system, important environmental systems and species that are protected under international agreements (such as Ramsar listed wetlands) and areas that are already defined as being critically impacted in a cumulative context. Impacts may also be significant if, for example, they could cause plants or animals to become rare or endangered, or they affect vegetation which provides important ecological functions".*

The City has considered the six principles outlined in the WA Environmental Offsets Policy (EPA, 2011) and WA Environmental Offsets Guideline (EPA, 2014) (Table 1.1).

Table 1.4: WA State government principles for the use of Environmental Offsets

Principle	Consideration
Environmental offsets will only be considered after avoidance and mitigation options have been pursued.	The potential impacts from the Proposal have been reduced wherever possible, with measures applied during the design phase and the environmental assessment process. The City has revised the proposal entirely, significantly reducing the clearing footprint and number/length of trails to ameliorate the impact on fauna habitat several-fold. Following the reduction of the proposal, the City subsequently varied the clearing application twice to realign the development envelope away from potential habitat of significant flora. Where direct or indirect impacts to significant flora have been identified through extensive environmental assessment, the City has micro-sited the trail rather than utilising a corridor of potential alignment options to be selected by the construction contractor. The environmental offsets proposed are required to offset significant residual impacts and will deliver a net environmental benefit. Environmental offsets have only been considered after avoidance and mitigation options have been pursued.
Environmental offsets are not appropriate for all projects.	The Proposal has been designed in accordance with the mitigation hierarchy and, as such, has considered and implemented measures to avoid and minimise impacts prior to considering environmental offsets. For most environmental factors, environmental impacts are not significant, and offsets are not required. Offsets are proposed where significant residual impacts are identified.
Environmental offsets will be cost-effective, as well as relevant and proportionate to the significance of the environmental value being impacted.	The proposed offsets package takes place entirely within the footprint of the Mounts, ensuring habitat connectivity and offsetting residual impacts to the same localised populations. It is also cost-effective to consolidate efforts, compared to rehabilitating and conserving pockets of bushland across other sites. The proposed offset sites will provide habitat for conservation significant species impacted by the proposal, and foraging habitat at proportions that meets or exceeds the values of the impact site.

	The offsets are considered relevant and proportionate to the significance of the impact as the required offset quantum was derived through the use of the WA Offsets Template. This has ensured the offsets are relevant - in that the same matter that is impacted will be secured and/or rehabilitated through the offsetting process - and in proportion to the significance of the matter, given the ratio has been determined through the conservation status of the matter as well as the extent and quality of the matter to be impacted. As such, the offset package comprises acquisition of freehold land providing black cockatoo foraging and western ringtail possum foraging and nesting habitat into conservation reserve, and conservation of reserve land which provides the same.
Environmental offsets will be based on sound environmental information and knowledge.	The impacts on flora and fauna have been assessed through an extensive body of work indexed in this document, including field surveys undertaken by qualified consultants in accordance with relevant guidance. Both the impact and offset sites are well understood.
Environmental offsets will be applied within a framework of adaptive management.	The Offsets Strategy is based on outcome-based completion criteria with specified monitoring requirements, and contingency measures to be applied where monitoring indicates a potential failure to meet those completion criteria through early indicators and triggers. As such, the proposed offsets will be based on an adaptive cycle of actions, monitoring, review of measures, and adoption of revised actions where monitoring learnings show potential failure. The specification of outcome-based completion criteria mean actions will be adaptive, to be amended where necessary to achieve the desired outcome and effectively achieve the required offset. Additionally, the Offset Strategy includes reporting requirements to both government agencies and the public. Where this reporting identifies any potential inadequacies in the strategy, consultation will be undertaken with relevant departmental stakeholders to obtain advice and implement any required amendments to achieve more desirable outcomes.
Environmental offsets will be focussed on longer term strategic outcomes	The Offset properties represent a significant area of remnant native vegetation in an area that is largely cleared for residential purposes. The 8.09ha freehold land offered as a Conservation reserve has development potential, but conserving it as bushland, undertaking weed eradication works and closing unsanctioned access tracks traversing the land retains its connectivity to the rest of the Albany Heritage Park bushland and almost entirely eliminates the risk of its degradation. The 8.75ha of Conservation offset Reserve areas have been selected to provide protection to areas of bushland that have been evidenced as possum habitat, with night spotlighting surveys showing these areas contain higher densities of western ringtail possums than the periphery of the AHP. The project in a wider sense is to further the strategic outcome of rationalising the trail network at the Mounts, prevent further illegal trail construction, ameliorate user conflict and safety issues and realign trails away from conservation significant areas.

	The rehabilitation component of this offset furthers the strategic outcome of closing and revegetating illegally constructed trails.

1.5 Commonwealth Offset Requirements

The EPBC Act Environmental Offsets Policy (October 2012) outlines the Commonwealth government's approach to the use of offsets under the EPBC Act.

The Policy defines offsets as *'measures that compensate the residual adverse impacts of an action on the environment'*. The policy states that avoidance and mitigation measures must be the primary strategy to manage significant impacts, and that offsets do not reduce likely impacts but rather compensate for residual significant impacts.

1.6 Policy and Guidance

The following policies and guidance are relevant to offsets:

- Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy (October 2012)
- Offset Assessments Guide (2012);
- Offset Calculator Guidelines (2012); and
- Guidance for Delivering 'Risk of Loss' Estimates when Evaluating Biodiversity Offset Proposals under the EPBC Act (2017).

In addition to the above documents, consideration has been given to the EPBC Act referral factsheet in determining the significance of the Proposed Action in terms of the number of NES matters affected, the scale and nature of the impacts, public concern and the completeness of the assessments of these issues.

1.6.1 Consideration of EPBC Principles

Table 1.6 provides a summary of how the EPBC offset principles have been given consideration.

Table 1.6: Consideration of Proposed Offset Against EPBC Act Environmental Offset Policy Principles

EPBC offset principle	Consideration
Suitable offsets must deliver an overall conservation outcome that improves or maintains the viability of the aspect of the protected matter that is protected by national environmental laws and affected by the proposed action.	The proposed offset aligns closely with the recovery actions for this species, with the most relevant to the proposed offset sites being 'Protect and Manage Important Habitat'. The studies conducted indicate the proposed sites provides habitat for both black cockatoos and western ringtail possums. The protection mechanisms identified ensure the property will be maintained into the future, with degraded areas of bushland to be improved.
Suitable offsets must be built around direct offsets but may include other compensatory measures.	The entirety of the required offset quantum are direct in nature.
Suitable offsets must be in proportion to the level of statutory protection that applies to the protected matter.	The proposed offset is consistent with the requirements of the EPBC Act Environmental Offsets Policy and the accompanying offset calculators.
Suitable offsets must effectively account for and manage the risk of the offset not succeeding.	The risk of the offset options not fulfilling the aims for which it is designed is considered to be very low – the City is land manager or owner of all land parcels and has dedicated in-house resources to fulfilling management actions; it is recommended that a confidence level of 90% be assigned in the offset calculator. The City has a good environmental record and is committed to protecting and enhancing the natural environment of the Albany region. The sites will be protected in perpetuity through the Conservation reserve vesting, ensuring that the offset measures undertaken are enduring in terms of their

	maintenance of the local habitat values.
Suitable offsets must be additional to what is already required, determined by law or planning regulations or agreed to under other schemes or programs (this does not preclude the recognition of State or Territory offsets that may be suitable as offsets under the EPBC Act for the same action).	All components of the offset are in addition to any statutory or regulatory requirements the City is subject to, or any internal planning documents or policies. Indeed, the freehold land represents a significant offer of property immediately neighbouring a high-value residential neighbourhood.
Suitable offsets must be efficient, effective, timely, transparent, scientifically robust and reasonable.	The proposed offset meets the requirements of the EPBC Act Environmental Offsets Policy. The conservation and active management of the offset sites will provide both immediate and longer-term permanent protections for the significant values contained within the site.
Suitable offsets must have transparent governance arrangements, including being able to be readily measured, monitored, audited and enforced.	The proposed offset sites will be secured by applying to the Department of Planning, Lands and Heritage (WA) under section 51 of the Land Administration Act 1997 (WA) to change the Reserve vestings to include Conservation. The Management Order/s for the reserves will also be amended under section 46 of the Act. This will require that the City submit a plan for the environmental management of the reserve in line with its Conservation status to the Minister for approval.

1.7 Application of the Mitigation Hierarchy

Environmental offsets are 'actions that provide environmental benefits which counterbalance the significant residual environmental impacts or risks of a proposal.'

The assessment and potential application of offsets for the Proposal has been undertaken as described in the following paragraphs.

To determine whether offsets were required, the potential environmental impacts, following the application of mitigation measures, were reviewed. The mitigation measures developed for the Proposal were developed and applied based on the mitigation hierarchy:

- Avoidance;
- Minimisation;
- Rehabilitation; and
- Offsets.

Environmental offsets have been applied where the residual impacts of the project are considered to be significant following application of the mitigation hierarchy of risk management (Avoid, Reduce, Minimise, Rehabilitate) (Government of Western Australia 2014). Figure 1.7 illustrates how the mitigation hierarchy is applied to reduce the residual impact before its significance is assessed in order to determine whether an offset is required.

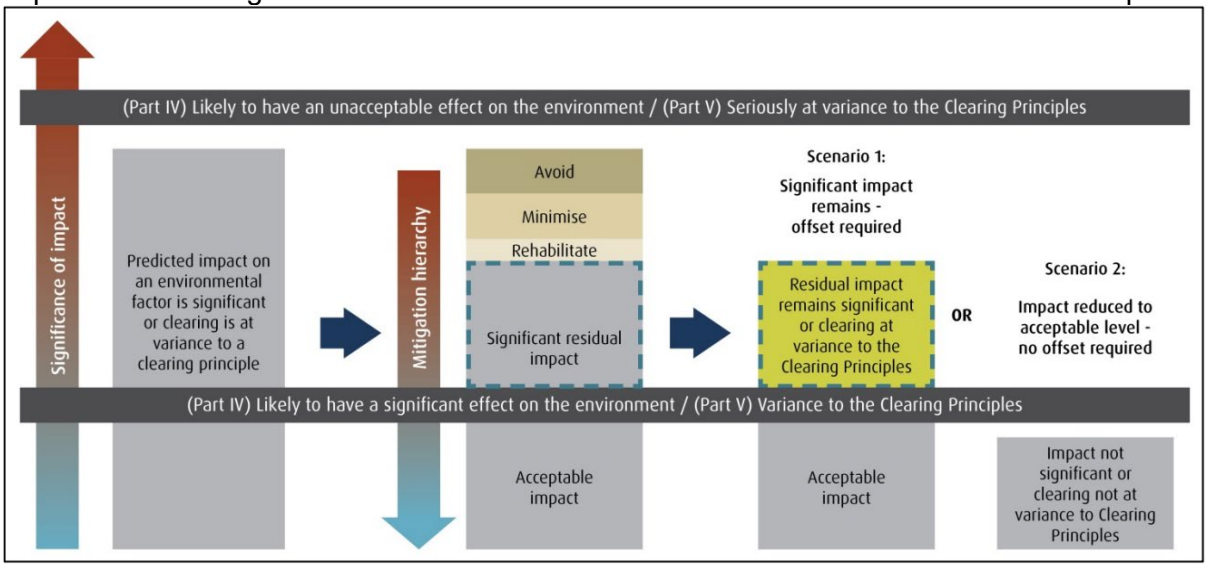


Figure 1.7: Mitigation Hierarchy (Government of Western Australia 2014)

Environmental offsets have been considered where the residual impacts of the Proposal are considered to be significant following application of the mitigation hierarchy of risk management (Avoid, Mitigate, Minimise, Rehabilitate; Government of Western Australia 2014).
To reduce the potential environmental impacts associated with the Project, the following strategies are proposed:

Avoid
The Disturbance Footprint has been located to avoid native vegetation and mapped locations of conservation significant flora to the maximum extent possible. A number of threatened flora are associated with ridge features, which have been avoided through design of the Proposal. The Development Envelope has been substantively revised twice to realign trails away from potential habitat of EPBC-significant flora. This has included micro-siting to avoid habitat areas.
The City has committed to avoiding any impacts to the individuals of *Synaphea preissii* identified within the application area during the surveys, as well as ensuring no individuals of *Caladenia harringtoniae* are cleared.

Minimise
Existing access tracks and other cleared areas have been used where possible to minimise the extent of vegetation clearing required. Flowline and trunkline construction corridors have been minimised to the extent possible, and further reduced in areas supporting populations of conservation significant species to minimise the extent of impact on individual species.
Impacts on priority flora species have been reduced to direct impacts to 30 individuals of *Spyridium spadiceum* (P4), 24 individuals of *Stylidium falcatum* (P2), and three individuals of *Thysanotus isantherus* (P4).

Rehabilitate
A total of 8.16ha of degraded / already cleared bushland across the Albany Heritage Park will be rehabilitated. This includes the closure of several kilometres of illegally-constructed trails, which have been a long-standing problem at the Mounts as non-professionally designed trails cause erosion, weed spreading and user conflict issues. They also traverse habitat of significant flora. Vegetation recovery will be monitored against established completion criteria.

1.8 Significant Residual Impacts

Environmental offsets will only be applied where the residual impacts of a project are determined to be significant after avoidance, minimisation and rehabilitation have been pursued (Australian Government 2012; Government of Western Australia 2014).
Significant residual impacts to environmental values are summarised in Table 1.3 and were determined in accordance with the Residual Impact Significant Model (RISM) and the WA Offsets template in the WA Environmental Offsets Guidelines (GoWA 2014). Significant impacts for Matters of National Environmental Significance (MNES) have also been presented in Table 1.3 under their respective State environmental factor.
The RISM defines four levels of impact in the context of determining whether offsets are required for State environmental values (GoWA 2014):

- Unacceptable impacts – those impacts which are environmentally unacceptable or where no offset can be applied to reduce the impact. Offsets are not appropriate in all circumstances, as some environmental values cannot be offset;
- Significant impacts requiring an offset – any significant residual impact of this nature will require an offset. These generally relate to any impacts to species, ecosystems, or reserve areas protected by statute or where the cumulative impact is already determined to be at a critical level;

- Potentially significant impact which may require an offset – the residual impact may be significant depending on the context and extent of the impact. These relate to impacts that are likely to result in a species or ecosystem requiring protection under statute or increasing the cumulative impact to a critical level. Whether these impacts require an offset will be determined by the decision-maker based on information provided by the proponent or applicant and expert judgement; and
- Impacts which are not significant – impacts which do not trigger the above categories are not expected to have a significant impact on the environment and therefore do not require an offset.

Following the application of measures to avoid, mitigate and rehabilitate, the environmental impacts associated with the proposal, the following significant residual impacts are expected (as per DWER's calculations):

- Loss of 3.16 hectares of native vegetation that provides significant habitat for western ringtail possum.
- Loss of 3.05 hectares of native vegetation that provides significant foraging habitat for all three species of black cockatoo.

All other aspects from of the Proposal have been deemed by DWER to be manageable within the mitigation hierarchy or able to be avoided with conditions on the clearing permit and will not result in a significant residual impact.

Given the above, the proposal is considered to result in significant residual impacts to matters listed under the EPBC Act and EP Act. Accordingly, this proposed offset strategy has been prepared in accordance with the EPBC Act Offsets Policy and WA Offsets Policy and associated guidelines.

1.9 Table 1.9: Assessment of Impacts, Mitigation, Significant Residual Impacts and Offsets against the WA Environmental Offsets Guidelines (EPA 2014)

Potential impact	Avoid/minimise	Rehabilitation type	Rehabilitation success	Significant Residual Impact
Terrestrial fauna				
Loss of 3.16 hectares of native vegetation that provides significant habitat for western ringtail possum.	• The Development Envelope has been substantially reduced from the original (v1) trails proposal, reducing the trails corridor from 35ha to a clearing footprint of 3.61ha, which was again reduced to 3.16ha by refining trail alignments. • Substantial realignment of trails away from habitat areas. • Mapping of all potential dreys and a commitment to avoid them entirely with a significant buffer. • Engagement of qualified fauna spotters prior to and during clearing. • A commitment to avoid clearing trees greater than 100mm diameter at breast height (DBH). • Strict hygiene measures will be implemented to minimise the risk of introducing or spreading weeds or dieback – refer Operational Hygiene Management Plan. • Dust suppression measures will be utilised to minimise significant dust lift off during construction, minimising the risk of impacts to native vegetation. • All machinery and vehicles undertaking clearing activities will have fire extinguishers, plus other measures to minimise fire risk as per the Construction Environmental Management Plan. • Laydown areas are to be on already cleared and developed areas. • Maintaining canopy connectivity.	• The rehabilitation of 8.16 hectares of native vegetation that comprises significant habitat for WRP, and foraging habitat for Carnaby's cockatoo, Baudin's cockatoo, and forest red-tailed black cockatoo within the Albany Heritage Park Crown Reserves (Reserve 2682, Reserve 27068, and Reserve 38226). • Rehabilitate land to meet closure criteria in accordance with the Rehabilitation Management Plan. • Manage rehabilitation and weeds in accordance with Rehabilitation Management Plan and Weed Management Plan. • Use of stockpiled topsoil and cleared vegetation to facilitate vegetation recovery. • Closure of unauthorised driveways at the Mounts, with weed eradication measures and passive rehabilitation in place. This proposed rehabilitation has not been used to reduce the significant residual impact of the proposal. • Additional weed measures.	Rehabilitate from a Completely Degraded-Degraded (Keighery, 1994) condition to a Good-Very Good (Keighery, 1994) condition within the timeframes of the WA Government's monitoring requirements (six years), and then to an Excellent condition within 20 years. Please see 2.3.3 for targets and refer to the Albany Heritage Park Trails Link Project Rehabilitation Management Plan for methodology.	**Extent** The Proposal will result in permanent clearing of 3.16 hectares of native vegetation that provides significant habitat for western ringtail possum. **Quality** Vegetation is in 'Excellent' condition. **Conservation Significance** The vegetation provides significant habitat for western ringtail possums, and foraging habitat for black cockatoos. According to the agreed significance framework, western ringtail possum and cockatoo habitat is considered significant, requiring an offset.
Loss of 3.05 hectares of native vegetation that provides significant	• The Development Envelope has been substantially reduced from the original (v1) trails proposal, reducing the trails	• The rehabilitation of 8.16 hectares of native vegetation that comprises significant habitat for	Rehabilitate from a Completely Degraded-Degraded (Keighery, 1994)	**Extent**

foraging habitat for all three species of black cockatoo.	corridor from 35ha to a clearing footprint of 3.61ha, which was again reduced to 3.16ha by refining trail alignments. • Substantial realignment of trails away from habitat areas. • Mapping of all potential black cockatoo habitat trees and hollow-bearing trees. Buffers designed between these trees and the trails. • Engagement of qualified fauna spotters prior to and during clearing. • A commitment to avoid clearing trees greater than 100mm diameter at breast height (DBH). • Strict hygiene measures will be implemented to minimise the risk of introducing or spreading weeds or dieback – refer Operational Hygiene Management Plan. • Dust suppression measures will be utilised to minimise significant dust lift off during construction, minimising the risk of impacts to native vegetation. • All machinery and vehicles undertaking clearing activities will have fire extinguishers, plus other measures to minimise fire risk as per the Construction Environmental Management Plan. • Laydown areas are to be on already cleared and developed areas.	WRP, and foraging habitat for Carnaby's cockatoo, Baudin's cockatoo, and forest red-tailed black cockatoo within the Albany Heritage Park Crown Reserves (Reserve 2682, Reserve 27068, and Reserve 38226). • Rehabilitate land to meet closure criteria in accordance with the Rehabilitation Management Plan. • Manage rehabilitation and weeds in accordance with Rehabilitation Management Plan and Weed Management Plan. • Use of stockpiled topsoil and cleared vegetation to facilitate vegetation recovery. • Closure of unauthorised driveways at the Mounts, with weed eradication measures and passive rehabilitation in place. This proposed rehabilitation has not been used to reduce the significant residual impact of the proposal. • Additional weed measures.	condition to a Good-Very Good (Keighery, 1994) condition within the timeframes of the WA Government's monitoring requirements (six years), and then to an Excellent condition within 20 years. Please see 2.3.3 for targets and refer to the Albany Heritage Park Trails Link Project Rehabilitation Management Plan for methodology.	The Proposal will result in permanent clearing of 3.16 hectares of native vegetation that provides significant foraging habitat for all three species of black cockatoo. **Quality** Vegetation is in 'Excellent' condition. **Conservation Significance** Majority of vegetation communities were assessed to be of low conservation significance, representing units that are likely to be widely distributed and well represented in the local area and the region. The vegetation provides foraging habitat for black cockatoo species. According to the agreed significance framework, black cockatoo habitat is considered significant requiring an offset.
Flora and vegetation				
Caladenia harringtoniae	It was initially assessed that the clearing proposal would result in the loss of 0.026 hectares of critical habitat for *Caladenia harringtoniae*. The possibility of a boardwalk over the potential habitat area was assessed by engineers and a botanist consultant. It was determined that due to the requirement for footings and construction access, the	Impact avoided and mitigated.	Impact avoided and mitigated.	Impact avoided and mitigated.

	installation of a boardwalk was a less effective avoidance strategy than a balustrade or barrier to prevent inadvertent foot traffic downslope into potential *Caladenia harringtoniae* habitat.			
Significant flora	The initial assessment found the potential for these impacts: • Indirect impacts to one individual of *Adenanthos x cunninghamii* (Priority 4) • Potential indirect impacts to three individuals of *Corysanthes limpida* (Priority 4) • Direct impacts to one individual of *Lasiopetalum sp. Denmark* (Priority 3) • Direct impacts to 30 individuals of *Spyridium spadiceum* (Priority 4) within the application area and potential indirect impacts to an additional 16 individuals • Direct impacts to 10 individuals of *Stylidium falcatum* (Priority 2) within the application area and potential indirect impacts to an additional 32 individuals • Direct impacts to five individuals of *Thysanotus isantherus* (Priority 4) within the application area and potential indirect impacts to an additional 79 individuals. Through realignment of trails, reducing the Development Envelope and through conditions imposed on the clearing permit the impacts have been reduced to impacts to: • 30 individuals of Spyridium spadiceum (P4), • 24 individuals of Stylidium falcatum (P2), and • Three individuals of Thysanotus isantherus (P4).	Impact avoided and mitigated.	Impact avoided and mitigated.	Impact avoided and mitigated.

2. Offsets strategy

2.1 Objective

Environmental offsets are actions that provide environmental benefits intended to counterbalance the significant residual environmental impacts associated with a proposal (GoWA 2014). The Proponent intends to counterbalance the residual impact of the Proposal through implementation of an environmental offset.

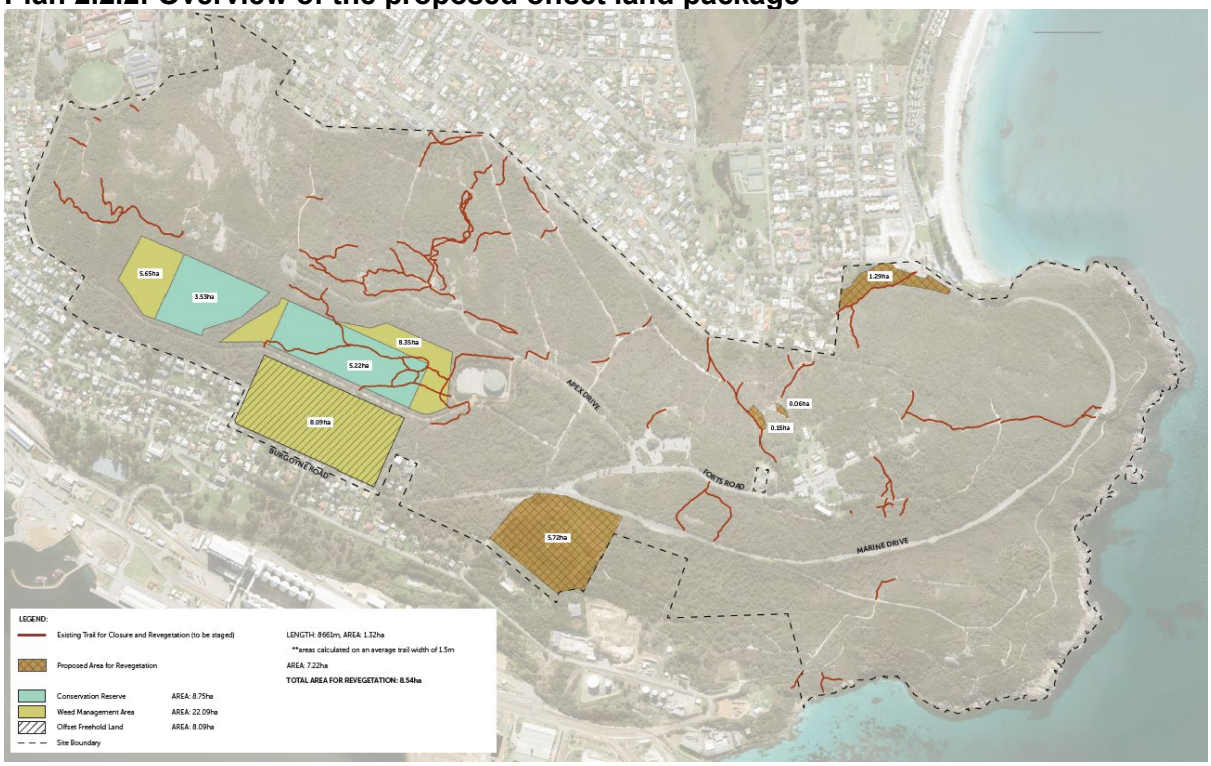
2.2 Proposed Strategy

The offset strategy has been prepared in accordance with the EPBC Act Environmental Offset Policy (DSEWPaC 2012a), the WA Government's Environmental Offset Policy (GoWA 2011), and the WA Offset Guidelines (GoWA 2014). As such, the proposed offset is proportionate to the level of impact and significance of the environmental impact (Table 2.2.1).

Table 2.2.1: Overview of the proposed offset land package

Offset type	Offset summary	Property location	Existing tenure
Securing offset land	Protection of a 8.75ha portion of Reserve 2682 within the same park as the Proposal via the change of vesting of the Reserve to include Conservation.	Reserve 2682, Albany Heritage Park	Crown Reserve vested in the City of Albany
Securing offset land	Protection and improvement of 8.09ha of bushland via acquisition to the State as a Conservation reserve. Facilitating the closure of unauthorised driveways and access points traversing Lot 172 on Deposited Plan 222002;	Lot 172 on Deposited Plan 222002	Freehold land belonging to the City of Albany
On-ground management	Targeted weed management across 22.09ha of native vegetation to reduce the threat to the Conservation areas presented by weed encroachment	20.9ha within Reserve 2682 and across Lot 172	Crown Reserve vested in the City of Albany Freehold land belonging to the City of Albany
On-ground management	Unauthorised access closures and associated weed management to prevent weed encroachment and allow passive rehabilitation	Lot 172 on Deposited Plan 222002	Freehold land belonging to the City of Albany
On-ground management	Rehabilitation of 8.16ha of bushland within the AHP from a completely degraded condition to Excellent (see 2.3.3 for more details)	Reserves 29075, 2682, 16746, 27068, 38226	Crown Reserve vested in the City of Albany

Plan 2.2.2: Overview of the proposed offset land package



Plan 2.2.2, attached to this Offset Strategy, illustrates the entire offset offer, comprising freehold land acquisition, conservation of reserves, weed management and rehabilitation of degraded bushland.

Plan 2.2.3: Closures of Unauthorised Driveways Constructed in Lot 172

2.3 Management actions

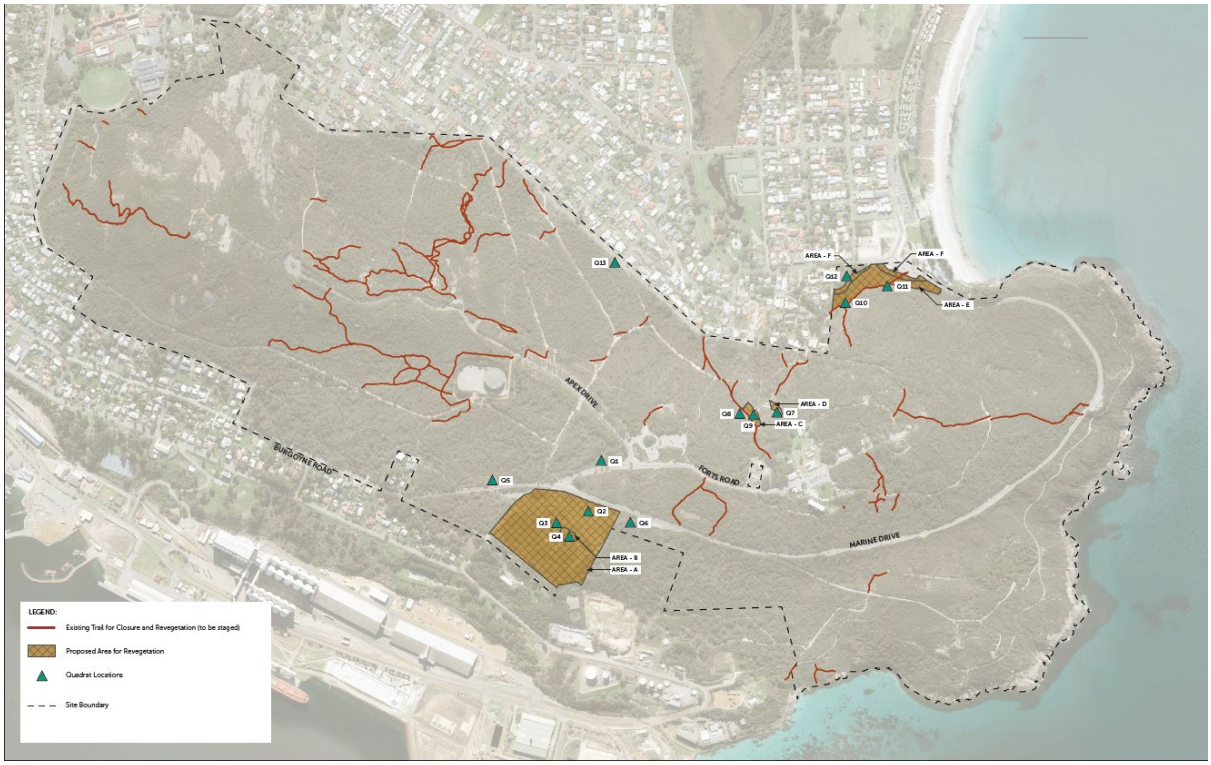
Table 2.3.1 provides the objectives, targets and completion criteria for the proposed offsets strategy. The completion criteria in Table 2.5 are also linked to the relevant management actions described below.

2.3.1 Objectives, targets and completion criteria

Objective	Target	Completion criteria
Counterbalance the significant residual impact to 3.16ha of native vegetation that provides significant habitat for WRP and 3.05ha of native vegetation that provides significant foraging habitat for black cockatoo species	To conserve, maintain and/or enhance 25ha of native vegetation evidenced as significant habitat for both WRP and black cockatoo species	Land agreements secured with DPLH for Reserve vesting changes
		Rehabilitation of 8.16 hectares of native vegetation within the AHP Crown Reserves
		Acquisition of City freehold land into reserve completed
		Unauthorised trail closures
		Access restricted to conservation areas
	Prevent deterioration of existing WRP/black cockatoo habitat through implementation of the Weed Management Strategy across 20.9ha of the park	Achieving weed reduction targets as set in the Weed Management Plan (City of Albany 2023)
		Closure of unsanctioned driveways combined with weed management to allow passive rehabilitation
		Targeting key weed infestations of concern as identified in the baseline weed mapping (Southern Ecology 2023)

2.3.2 Rehabilitation targets

Plan 2.3.2 showing monitoring quadrat locations and rehabilitation areas



2.3.3 Rehabilitation targets by location

Area A Marri/Jarrah Coastal Hills Forest

Criterion	Baseline	Completion target (6 years)	Completion target (20 years)
Species richness	Site average of 31 native species	Minimum 60% native species, based on reference sites	Minimum 80% based on the reference sites
Weeds	Weeds are absent at reference site	Weed cover is no greater than 30%	Weed cover is no greater than 5%
Total native vegetation	Reference site: Upper <10 – 30% Middle 10 – 70% Ground 30 – 70%	At least 60% native vegetation cover in comparison to the reference site	At least 80% of cover based on the reference site
Dominant tree species	Four dominant tree species	Same as the reference site	Same as the reference site

Area B Melaleuca persiana Low Woodland

Criterion	Baseline	Completion target (6 years)	Completion target (20 years)
Species richness	Site average of 25 native species	Minimum 60% native species, based on reference sites	Minimum 80% based on the reference sites
Weeds	Weeds are absent at reference site	Weed cover is no greater than 30%	Weed cover is no greater than 5%
Total native vegetation	Reference site: Upper >70% Middle <10% Ground >70%	At least 60% native vegetation cover in comparison to the reference site	At least 80% of cover based on the reference site
Dominant tree species	Three dominant tree species	Same as the reference site	Same as the reference site

Area C and D Jarrah/Sheoak/E.staeri Sandy Woodland

Criterion	Baseline	Completion target (6 years)	Completion target (20 years)
Species richness	Site average of 24 native species	Minimum 60% native species, based on reference sites	Minimum 80% based on the reference sites
Weeds	Weeds are absent at reference site	Weed cover is no greater than 30%	Weed cover is no greater than 5%
Total native vegetation	Reference site: Upper 10-30% Middle <10% Ground >70%	At least 60% native vegetation cover in comparison to the reference site	At least 80% of cover based on the reference site
Dominant tree species	Four dominant tree species	Same as the reference site	Same as the reference site

Area E Gastrolobium bilobum/Hakea elliptica Granite Shrubland/Yate Woodland

Criterion	Baseline	Completion target (6 years)	Completion target (20 years)
Species richness	Site average	Minimum 60% native species, based on reference sites	Minimum 60%

Weeds	Weeds are absent at reference site	Weed cover is no greater than 30%	Weed cover is no greater than 5%
Total native vegetation	Reference site: Upper 10 – 30% Middle 30 – 70% Ground 10-30%	At least 60% native vegetation cover in comparison to the reference site	At least 80% of cover based on the reference site
Dominant tree species	Three dominant tree species	Same as the reference site	Same as the reference site

Area F Marri/Jarrah Forest/Peppermint Woodland

Criterion	Baseline	Completion target (6 years)	Completion target (20 years)
Species richness	Site average	Minimum 60% native species, based on reference sites	Minimum 60%
Weeds	Weeds are absent at reference site	Weed cover is no greater than 30%	Weed cover is no greater than 5%
Total native vegetation	Reference site: Upper 10 – 30% Middle 30 – 70% Ground 30-70%	At least 60% native vegetation cover in comparison to the reference site	At least 80% of cover based on the reference site
Dominant tree species	Two dominant tree species	Same as the reference site	Same as the reference site

Trail rehabilitation criteria

The City has committed to rehabilitating these areas on a staged basis. A site inspection will occur at each of the trail locations prior to rehabilitation activities commencing to confirm site-specific requirements.

The appropriate ARVS vegetation unit reference site data used for areas A – F will be used to inform species selection and the corresponding completion criteria. In locations where ARVS vegetation units are not considered appropriate for species selection, a suitably qualified expert will be engaged to determine a species list and completion criteria.

For more information on the methodology and vegetation types please refer to the Albany Heritage Park Trails Link Project Rehabilitation Management Plan appended to this strategy.

3. Implementation

3.1 Responsibility

The City of Albany is responsible for the implementation of the Offsets Strategy.

The process for the land transfer of City freehold land into Conservation reserve and the change in existing reserve vesting to Conservation will be managed between the City and the WA Government's Department of Planning, Lands and Heritage (DPLH).

The rehabilitation activities as detailed in the Rehabilitation Management Plan will be packaged into a scope of work for a qualified contractor, including seed collection, propagation, planting, and establishment. These activities are fully funded under the project budget.

Weed eradication will be undertaken in-house through the City's Reserves department, with the Mounts as a Priority 1 reserve for weed management. Additional resourcing through consultants and, potentially, Aboriginal Ranger groups is available for these activities.

Monitoring (including contingency measures to be taken if thresholds or triggers are met) will be packaged into each program of works, with analysis and reporting managed by the City for consistency and accountability.

3.2 Monitoring at the Offset Properties (Reserve 2682, Albany Heritage Park & Lot 172 on Deposited Plan 222002)

Parameter	Management action	Plan / strategy	Responsibility	Contingency actions
Active management of high priority weeds and/or weeds that threaten priority flora	Methodologies as contained in the Weed Management Plan	Weed Management Plan	City of Albany	Tailored to the specific issue as per the Weed Management methodologies
Closure of unauthorised driveways traversing Lot 172 to restrict access to conservation area	Compliance action against landowners utilising the access. Physical closure and barriers installed. Weed eradication	Weed Management Plan Rehabilitation Management Plan	City of Albany	Determine how access was gained and implement remedy, including barriers or compliance actions. Weed management measures and revegetation contingency measures if insufficient native flora species reestablish
Introduction of new weeds prevented	Methodologies as contained in the Weed Management Plan and Operational Hygiene Management Plan	Weed Management Plan Operational Hygiene Management Plan Construction Environmental Management Plan	City of Albany	Implement revised hygiene control and education measures.
Establishment of native flora species in rehabilitation areas	Monitoring against completion criteria Infill planting		City of Albany Revegetation contractor/s	Identify cause and implement remedy, e.g. collecting additional seed, applying fertilisers or wetting agents
Dieback measures compliance and monitoring	Annual ongoing	Rehabilitation Management Plan Construction Hygiene Management Plan	Contractors City of Albany	Signage/fencing Ensuring hygiene measures are implemented
Closure of access to conservation areas	Signage, fencing	Weed Management Plan Rehabilitation Management Plan	City of Albany 'Friends of' groups	Educational measures and review of physical infrastructure

3.3 Reporting

The key mechanism for the City to report on the progress of the Offset Strategy measures will be through an annual progress and monitoring report to both DWER and DCCEEW.

This will cover the implementation of the rehabilitation program and land actions, plus progress towards meeting completion criteria and contingency actions. The report is likely to include:

- Works undertaken during current reporting period;
- Compliance with approval conditions;
- Any new environmental risks;
- Evidence of weed control events undertaken (photos and receipts/invoices);
- Weed species observed during weed control events;
- Evidence of vehicle inspections in accordance with the Operational Hygiene Management Plan (inspection records);
- Photos of public access prevention;
- Photos of weed prevention;
- Results of vegetation condition mapping including:
    - Percentage of each condition type across rehabilitation areas;
- Results of revegetation monitoring, including:
    - Percentage survival / mortality of planted seedlings within revegetation areas; and
    - Any evidence of water stress / potential factors contributing to mortality.

4. References

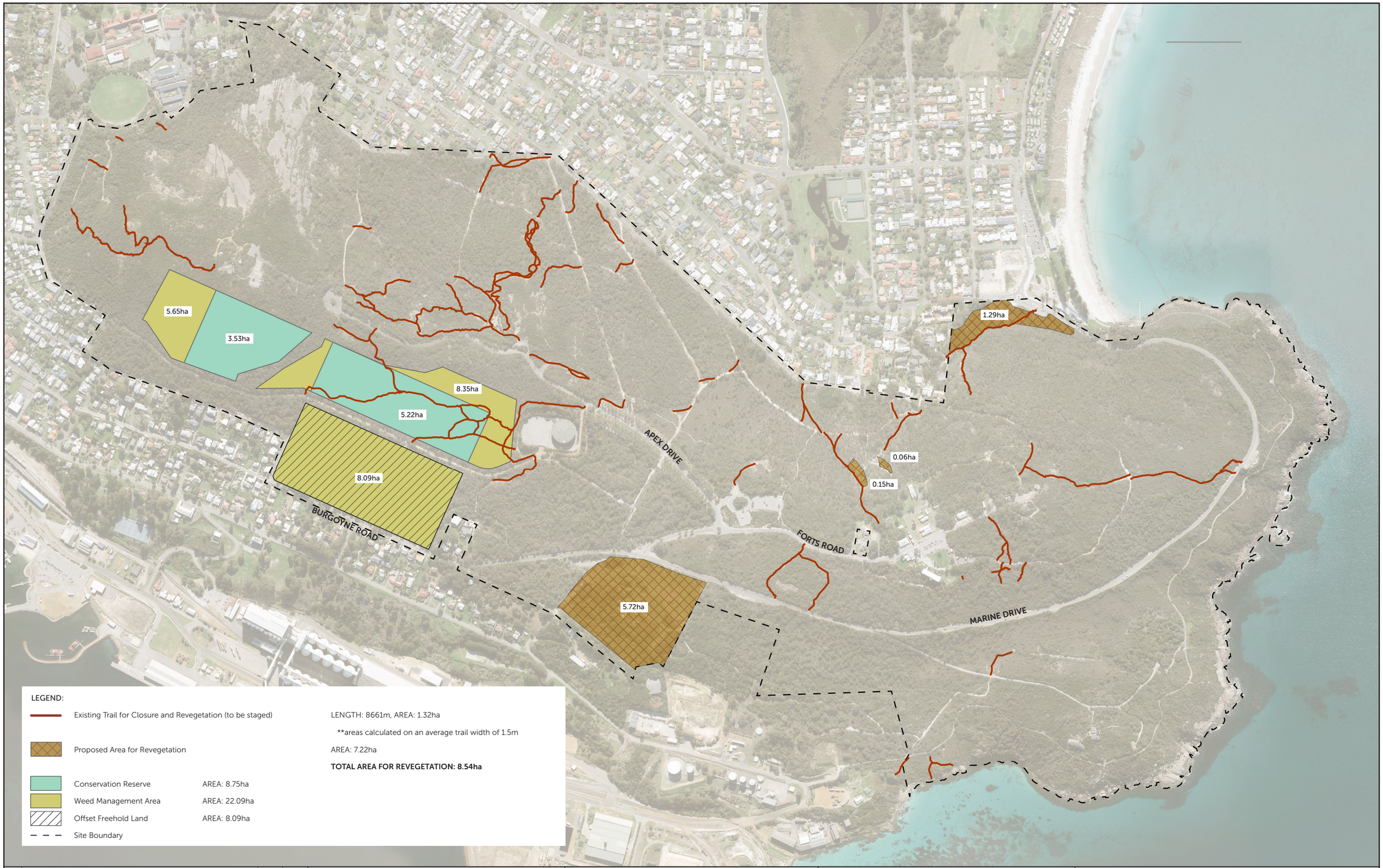
Great Southern Bio Logic (2016). Phytophthora dieback Hygiene Survey of the proposed Mt Clarence/Corndarup and Mt Adelaide/Irrerup Mountain Bike Trails Area. Unpublished report prepared for Common Ground Trails, March 2016.

Great Southern Bio Logic (2022). Operational Hygiene Management Plan. Unpublished report prepared for City of Albany, August 2022.

JBS&G (2023) Albany Heritage Park Trails Link Project Rehabilitation Management Plan, January 2023

Weed Management Plan, City of Albany, November 2023

Construction Environmental Management Plan, Albany Heritage Park Link Trails, City of Albany, December 2023



LEGEND:

- Existing Trail for Closure and Revegetation (to be staged) — LENGTH: 8661m, AREA: 1.32ha
  **areas calculated on an average trail width of 1.5m
- Proposed Area for Revegetation — AREA: 7.22ha
- **TOTAL AREA FOR REVEGETATION: 8.54ha**
- Conservation Reserve — AREA: 8.75ha
- Weed Management Area — AREA: 22.09ha
- Offset Freehold Land — AREA: 8.09ha
- Site Boundary

REV	DESCRIPTION	APPROVED	DATE
-	-	-	-

N

0 50 100 150 200m

SCALE: 1:8000 @ A3

COORD. SYSTEM: GDA 1994 MGA Zone 50
AERIAL DATED: APRIL 2022

CITY OF Albany

102 NORTH ROAD, YAKAMIA WA 6330
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ISSUED FOR APPROVALS

	APPROVED	DESIGNED	DRAWN
MAJOR PROJECTS	AMC	KW	KW

PROJECT

ALBANY HERITAGE PARK LINK TRAILS

DRAWING NAME

CONSERVATION, REVEGETATION + TRAIL CLOSURES PLAN

FILE REF	LAST UPDATED	SCALE	DRAWING No	SHEET No	REV
NS23174505	19.12.2023	1:8000 @ A3	2.2.2	01	-

LOT 172

MALCOLM STREET

BURGOYNE ROAD

Proposed Alternative Driveway Access

LEGEND:

- Unauthorised Driveway
- Road Reserve
- Offset Freehold Land, AREA: 8.09ha
- Site Boundary

REV	DESCRIPTION	APPROVED	DATE
-	-	-	-

N

0 10 20 30 40 50m

SCALE: 1:2000 @ A3

COORD. SYSTEM: GDA 1994 MGA Zone 50
AERIAL DATED: APRIL 2022

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ISSUED FOR APPROVALS

	APPROVED	DESIGNED	DRAWN
MAJOR PROJECTS	AMC	KW	KW

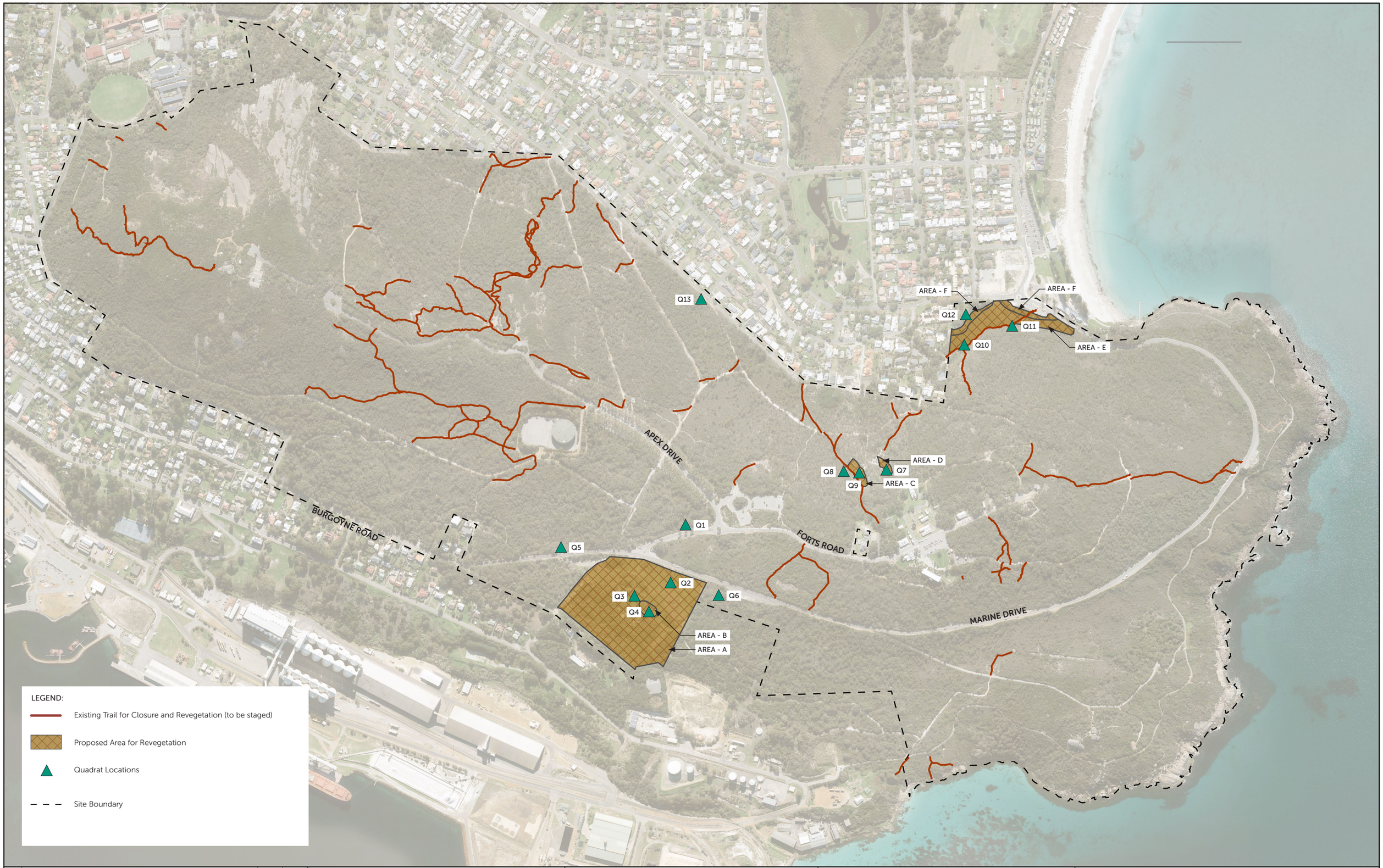
PROJECT

ALBANY HERITAGE PARK LINK TRAILS

DRAWING NAME

PLANNED CLOSURES OF UNAUTHORISED DRIVEWAYS - LOT 172

FILE REF	LAST UPDATED	SCALE	DRAWING No	SHEET No	REV
NS23174505	19.12.2023	1:2000 @ A3	2.2.3	02	-



REV	DESCRIPTION	APPROVED	DATE
-	-	-	-

N

0 50 100 150 200m

SCALE: 1:8000 @ A3

COORD. SYSTEM: GDA 1994 MGA Zone 50
AERIAL DATED: APRIL 2022

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ISSUED FOR APPROVALS

	APPROVED	DESIGNED	DRAWN
MAJOR PROJECTS	AMC	JBS&G	KW

PROJECT

ALBANY HERITAGE PARK LINK TRAILS

DRAWING NAME

QUADRAT LOCATIONS

FILE REF	LAST UPDATED	SCALE	DRAWING No	SHEET No	REV
NS23174505	19.12.2023	1:8000 @ A3	2.3.2	03	-