

# ALBANY HERITAGE PARK LINK TRAILS (V2)

## PROJECT OVERVIEW

### 1. THE SITE

- The Albany Heritage Park (AHP) encompasses a total area of approximately 257 hectares (ha), bound by the town centre of Albany, Princess Royal Harbour and Middleton Beach. The Park is formed by the two mounts, Mount Clarence and Mount Adelaide, known by the local Menang Noongar community as *Corndarup* and *Irrerup*. (refer to Attachment 3)
- The AHP and the surrounding environs are places of unique social, cultural and natural value, containing assets of national significance within a worldclass natural environment.
- The AHP has been a favoured recreation and tourism destination since Albany was first colonised. Sought-after increases in visitor attraction and experiences require diversification, further investment and detailed planning.
- The AHP comprises a number of reserves on Crown land, with management responsibilities held primarily by the City of Albany and a number of key stakeholders. Water storage, reticulation and power supply infrastructure and easements all occur within the Park. A number of Aboriginal Heritage sites have been identified within the Park and are protected under the *Aboriginal Heritage Act 1972*.
- AHP is home to a number of military heritage sites of national significance, including; National Anzac Centre, Desert Mounted Corps Memorial, Avenue of Honour, Padre White Lookout and the Princess Royal Fortress.

### 2. ENVIRONMENTAL VALUES

- The AHP occurs within the Jarrah Forest Interim Biogeographic Regionalisation of Australia (IBRA) Region (Department of the Environment [DotE] 2014). The soil-landscapes (Department of Agriculture and Food Western Australia [DAFWA] 2014) are mapped as:
  - Gardner sandy Phase described as "Leached sands and podzols; mallee-heath"
  - Gardner granite Phase described as "Granite outcrop".
- Broad scale pre-European vegetation mapping (*Shepherd et al.* 2002) describes the AHP as a Forest of *Eucalyptus marginata/Corymbia calophylla* (Association: Albany\_3) or Rock (Association: Albany\_128) and more detailed vegetation mapping has been undertaken more recently in the Albany Regional Vegetation Survey (Sandiford and

Barrett 2010). Flora surveys within the AHP have been undertaken by the Albany Wildflower Society and for an existing 840m demonstration trail (Bio Diverse Solutions 2016).

- The AHP supports a number of significant flora and fauna conservation species, the habitat requirements of which were investigated and considered when planning the Link Trail. Notably, these included the following species:
  - Western Ringtail Possum *Pseudocheirus occidentalis* (raised as a concern by DEE as part of EPBC Act referral)
  - Carnabys Black Cockatoo *Calyptorhynchus latirostris*
  - Baudin's Black Cockatoo *Calyptorhynchus baudinii*
  - Forest Red Tailed Black Cockatoo *Calyptorhynchus banksii naso*
  - Pink Spider Orchid *Caladenia harringtoniae* (raised as a concern by DEE as part of EPBC Act referral)
  - Dwarf Hammer Orchid (raised as a concern by DEE as part of EPBC Act referral)

Dieback, weeds and erosion through uncontrolled access are threatening processes.

### 3. CONTEXT AND PLANNING FRAMEWORK

#### City Mounts Management Plan

- In 2006, the City of Albany Council adopted the City Mounts Management Plan. This Plan identified 64 recommended management actions for the AHP area, plus a number of generic recommendations that applied across all the "Mounts" covered by the Plan (also covers Mount Melville and Bluff Rock). There are 13 recommendations in the management plan that specifically relate to trails in the project area.

#### City of Albany Trails Hub Strategy

- In 2015, the City of Albany Council adopted the City of Albany Trails Hub Strategy. This Strategy was developed to provide strategic guidance to the City for the future management of recreational trails with a focus on protecting our unique environment. The Vision for the Trails Hub Strategy is: 'A World Class Trail Tourism Hub situated around high quality trail systems, supported by a complete package of hospitality and visitor services set within our unique natural landscapes.'

- With significant community consultation and input, the Albany Trails Hub Strategy reviewed the entire supply and demand of trails and user groups across the City of Albany, and significant gaps in all areas were identified. The Trails Hub Strategy identified suitable locations for trail development, and further recommended the most appropriate development for each location, including user types and trail styles.

#### Albany Heritage Park Trails Network Concept Plan

- In December 2016, the City of Albany Council adopted the *Albany Heritage Park Trails Network Concept Plan* (refer to Attachments 27 + 28)
- The following strategies, policies, guidelines and plans were reviewed in the preparation:
  - Western Australian State Trails Strategy (DSR 2008)
  - Western Australian Mountain Bike Strategy (Parks & Wildlife 2015)
  - The Western Australian Mountain Bike Strategy (WestCycle 2015)
  - Albany Trails Hub Strategy (2015)
- Over the past 10 years, the City has continued to maintain existing trails and manage the ongoing construction of illegal trails and changing/increasing use of the trail network as best as possible. However, throughout this time, it became evident that the previously constructed trails are not able to adequately cater for the increasing and changing use of the network which is resulting in significant environmental impacts in many areas. Therefore, it has been determined that the construction of well-designed trails is the best strategy to address increasing demand for designated mountain bike and walk trails, user conflict and the environmental damage being caused by the ad-hoc illegal clearing of native vegetation for trails.





# ALBANY HERITAGE PARK LINK TRAILS (V2)

## PROJECT OVERVIEW

### Mounts Master Plan (refer to Attachment 25)

- Since 2016, the City of Albany has undertaken a comprehensive Mounts Master Plan process, which provides a long-term vision for Mount Clarence and Mount Adelaide. The Plan aims 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.
- The Mounts Master Plan establishes a clear vision and refined set of guiding principles, which drive an overarching, but flexible, framework and simple criteria to guide project outcomes. The Plan also identifies strategies and informs decision-making to guide sustainable investment and management over time.

**Master Plan Working Vision:** *'Regional Australia's iconic coastal parkland and botanic gardens, showcasing world recognised and inspirational natural, cultural, heritage and recreational experiences and commemorating the Anzac legacy.'*

- The Master Plan addresses the need to establish a strategic approach to achieve:
  - a long term vision and strategic objectives for the site;
  - an integrated master plan with long-term context;
  - sustainable management and protection of significant natural and cultural assets;
  - a strong market identity and brand;
  - prioritised implementation;
  - enhanced community ownership and place activation;
  - increase visitation to tourism assets and commercial enterprises (such as National Anzac Centre);
  - a strong governance framework; and
  - outcomes that will target a diverse range of user groups and generations.
- Feedback from the Mounts Master Plan community consultation in 2019 deemed the rationalisation, consolidation and construction of new trails on the Mounts to be one of the highest priority projects.  
(refer to Attachment 26)

- The Master Plan is to reflect a well-balanced, site responsive trail network system - linking major destinations, neighbourhoods and activity nodes within the City. It will cater for a range of different trail users, styles, levels of difficulty and experience (active, passive, heritage, nature) - whilst ensuring the protection of the site's environmental, cultural and heritage values.

### Great Southern Regional Trails Master Plan (GSRTMP) 2020-2029 (refer to Attachment 37)

- The GSRTMP aims to provide a clear outlined program of trail infrastructure development across the Great Southern region over a ten-year period to position the Great Southern as a world class trails destination. The plan has been developed to guide decisions about the management of, and investment in trails and provides a vision of the trail network for the Great Southern.
- The GSRTMP is an agreement to collaborate and prioritise regional trail development and supports to AHP Link Trails V2 proposal as a priority. It aims to minimise the duplication of initiatives and maximise efforts to reach common goals by establishing shared priorities across the active recreation and tourism sectors.

## 4. WHAT PROCESS HAS BEEN UNDERTAKEN TO DATE?

### AHP Trails Concept Plan referral under the Environmental Protection Biodiversity Conservation Act 1999 (EPBC 2019840) (refer to Attachment 38)

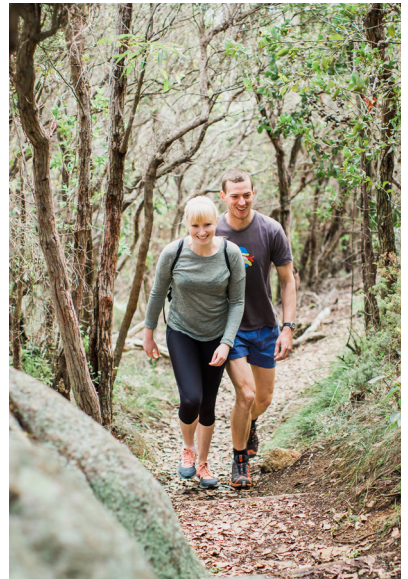
- The City received concern from the community and other organisations such as South Coast Natural Resource Management over the scale and potential environmental impact of the trail network. In December 2016 the City also received a letter from the Department of Environment and Energy (DEE) which stated, *"the Department is concerned about the potential impact on matters of national environmental significance, particularly to reserves in the 'Mt Clarence' and 'Mt Adelaide' areas."*
- It was decided at the time that given the scale of the AHP trails project and to protect the City's reputation, that it was the best course of action to refer the project to DEE to be assessed under the EPBC Act.
- Following advice from the DEE that the AHP Concept Plan was a controlled action, the City withdrew the referral to reconsider community feedback.

### AHP Link Trail (V1) referral to the DEE in 2019 (refer to Attachment 29)

- The referral for the AHP Concept Plan had come back as a controlled action, and the withdrawal letter (City ref: ICR19327656) again strongly suggested that any amended project be referred to the DEE.
- Given the public interest around the project, the City decided it would refer the project to make sure that all possible approvals were in place. The determination was that it was a controlled action, which suggests that it was the right choice to refer the project.
- Feedback from the Mounts Master Plan community consultation determined the conflict between trail users was one of the leading issues on the Mounts. The trails concept plan required a clear definition of trail use, with a separation of walkers and riders. Thus, additional walk link trails have been added to the overall footprint.
- Ongoing and extensive environmental damage from illegal trail building continues to undermine all the good planning work that has been undertaken.

### In Summary

- The City received letter from DEE (December 2016)
- AHP Concept Plan was referred to DEE (May 2017)
- Concept Plan was determined a controlled action. (October 2017)
- The City withdrew the referral (January 2019)
- The City referred the Link Trail (30 July 2019)
- The Link Trail was determined to be a controlled action (October 2019)
- City of Albany staff met with DWER Acting Manager in Perth to review the trails concept plan and to gain an understanding of the clearing permit submission process they expected us to follow (11th February 2020)
- City staff also met with Perth DWER officers and walked the site to present the proposed concept and discuss key issues such as illegal trails and conflict between different users. (13th February 2020)





# ALBANY HERITAGE PARK LINK TRAILS (V2)

## PROJECT OVERVIEW

### 5. AHP LINK TRAILS V2 2020 : PROPOSED ACTION

- As part of a strategy to address environmental impacts associated with illegal trail construction, community engagement and the changing use of the current poorly designed and constructed trail network in the Albany Heritage Park (AHP), it is proposed to construct new walk and ride trails, collectively known as the "AHP Link Trails V2".
- The development of the AHP Link Trails are based on the following general principles:
  - Design trails to be site responsive, i.e. minimise damage and protect significant character;
  - Separate user groups (walkers/riders) to improve the visitor experience and address safety issues;
  - Purpose designed trails to maximise experience and respect natural systems;
  - Rationalisation and consolidation of current trails as much as possible;
  - Provide multiple access points to the trail system;
  - Build trails to current best practice standards
  - Development of Code of Conduct and yield hierarchy.

### 6. ALIGNMENT TO STRATEGIC PLANS

- The proposed project aligns with the following Regional and City of Albany Strategic Plans:
  - Great Southern Regional Investment Blueprint: Aligns with the transformational themes Destination of Natural Choice and Strong Communities
  - Great Southern Regional Trails Master Plan 2020-2029: Supports the enhancing of new and existing trails at the Albany Heritage Park (**refer to Attachment 37**)
  - City of Albany 2030 Community Strategic Plan: Aligns with the key themes Smart, Prosperous & Growing and Community Health & Participation
  - Albany Trails Hub Strategy 2015-2025: Aligns with the priority project Albany Heritage Park (Mounts Adelaide & Clarence).
  - Westcycle's Western Australian Mountain Bike Strategy 2015-2020, embraces sustainable mountain biking as a leading recreational sport and tourism experience.
  - Albany Heritage Park Trails Concept Plan, 2016 (**refer to Attachment 27 + 28**)
  - Albany Mounts Master Plan (Draft), 2019 (**refer to Attachment 25**)

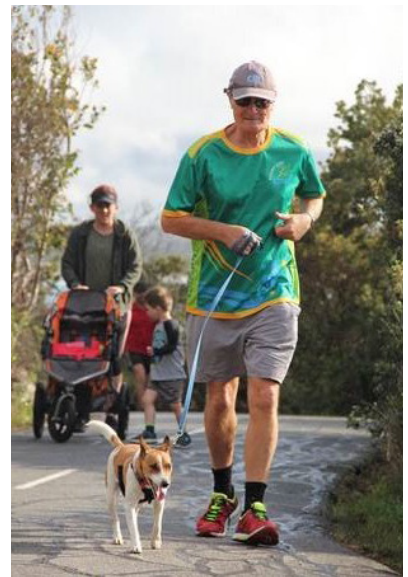
- AHP Link Trails V2 comprises the following iconic link trails:
  - Mounts MTB Link Trail – (existing/proposed)
  - Granite Link Walk Trail – (existing/proposed)
  - Mounts Botanic Link Trail - Dual use (existing/proposed)
  - Port to Point Coastal Trail - Dual use (existing/proposed)
  - Mt Adelaide (*Irrerup*) Nature Walk Trail – (existing/proposed)
  - Mt Adelaide (*Irrerup*) Heritage Walk Trail – (existing/proposed)
  - Mt Clarence (*Corndarup*) Nature Trail – Dual use (existing)

- The total area impact is as follows:
  - Proposed MTB, new trail: 10,410 Lin m
  - Proposed MTB, upgrade existing trail: 1,188 Lin m
  - Proposed dual use, dual direction, new trail: 1116 Lin m
  - Proposed dual use, dual direction, upgrade existing trail: 949 Lin m
  - Proposed walk, new trail: 2579 Lin m
  - Proposed walk, upgrade existing trail: 3877 Lin m
  - Total new trail: 14,105 Lin m**
  - Total upgraded Trail: 6,014 Lin m**
  - Total area to be cleared for proposed trails within the 30 m buffer will be up to 3.42 Ha**

#### NOTE:

- The clearing widths in the table below are deliberately wider than the final planned trail widths to allow for the following:
  - room to move when constructing the trail, especially in steep rocky sites;
  - the inclusion of trail features (e.g. jumps) and possible adjacent easier options; and
  - possible edge effects post construction (e.g. by bike riders running off track).
- During the construction stage, all efforts will be made to minimise the clearing required to successfully implement the project. Wherever possible, previously cleared areas/ trails will be utilised to minimise disturbance. The City would prefer to over-estimate the area to be cleared for the purpose of environmental approvals.
- (Refer to Mounts Master Plan Iconic Trails, Page 8 and Proposed Link Trails, Page 9 of this document)**

TRAIL TYPE	Total Trail (length m)	Existing Trail (length m)	Proposed Trail (length m)	Proposed Clearing 2m average width (area m <sup>2</sup> )	Proposed Clearing 2.8m average width (area m <sup>2</sup> )	Total Area of Disturbance (area m <sup>2</sup> )
Walk Trail	6,456	3,877	2,579	5,158		5,158
Mountain Bike Trail Easy (Green)	6,410	77	6,333		17,732	17,732
Mountain Bike Trail Intermediate (Blue)	5,188	1,111	4,077	8,154		8,154
Dual Use Sealed Trail	2,065	949	1,116		3,125	3,125
<b>TOTAL</b>	<b>20,119</b>	<b>6,014</b>	<b>14,105</b>			<b>34,169</b>





# ALBANY HERITAGE PARK LINK TRAILS (V2)

## ENVIRONMENTAL + HERITAGE IMPACT MITIGATION

### 1. MINIMISE IMPACT FOOTPRINT

- Vegetation clearing will be minimised, through careful trail design and construction works. Wherever possible, existing trails and cleared areas will be incorporated into the new trail networks. Access to the new trail sections will be from along the trail alignment, not through adjacent vegetation.
- Vegetation will be cleared and the trails will be constructed using hand tools and small trail construction equipment to minimise disturbance and to allow any animals present to move away safely.
- Impact of construction works on surrounding vegetation will also be minimised. Cleared material will be removed from work sites and placed on nearby illegally constructed or eroded trails that will be permanently closed once the new trails are open.
- Granite boulders and outcrops will, where possible be left in-situ and incorporated into the trail, creating interesting features and control run-off. In areas where crossing granite is unavoidable (this must be minimised), access is planned to be bridged over to reduce/minimise the need to clear vegetation in these areas. Where necessary, small granite boulders will be mechanically relocated to allow for trail construction. These boulders will remain on site and used to define the trail alignment by creating anchor points or to discourage trail users from deviating from the constructed trail.
- An Environmental Code of Conduct, such as that developed for the Pilot Mountain Bike Trail (Refer to Attachment 22), will be prepared for this project based on the mitigation measures indicated in this referral. Construction crews will be trained on the Code of Conduct at a start-up meeting, and will be closely monitored by the City's Reserves Officers.
- Trail users will be encouraged to stay on approved trails, through strategically placed objects such as natural boulders, chunky brushing and soft ground. Trail markers will be installed, and a User Code of Conduct will also be promoted.
- Strict conditions will be placed on organisers of any trail related events, to prevent the disturbance of vegetation along trails by the organisers or by spectators.
- The City is confident that the number of illegal trails being built will cease, or be considerably reduced, as the result of constructing well designed purpose built trails.

### 2. OFF-SETS

- Unrequired trails in the vicinity of the Link Trail will be closed and rehabilitated. Other nearby degraded areas will also be rehabilitated. Rehabilitation sites will be ripped where necessary, weeds will be controlled and bare areas covered with vegetation cleared from new trail alignments. It is predicted that these areas will rehabilitate from the seed contained in the cleared material, or seed from adjacent vegetation. Where necessary, sites will be planted with seedlings, grown from seed that has already been collected from the project area for this purpose. (Refer to Trail Closures + Rehabilitation Plan, Page 10 of this document)
- In addition, the City of Albany is currently implementing a 3-year revegetation project at the nearby (1 km north) Lake Seppings to enhance the coastal vegetation corridor between the AHP and Emu Point, for the Western Ringtail Possum and other fauna. This project is partly funded through the 20 Million Trees Program, and involves planting 50,000 seedlings over 1.7 Ha.

### 3. MITIGATE IMPACTS ON POSSUMS

- No Possums will be killed, injured or removed from site as a result of constructing these trails. Vegetation will be physically disturbed/shaken before clearing to allow any animals present to move away safely. In addition, clearing will be undertaken by hand or small machinery. These mitigation measures eliminates the risk of Possums being injured, so the need for a licensed handler for rescuing Possums is not required.
- No large hollow bearing trees will be removed. This measure will avoid reducing potential refuges of Possums (and cockatoos).
- Trees over 100mm diameter will be avoided where ever possible, to retain habitat and canopy connectivity for the Western Ringtail Possum. However the removal of some trees over this size will be unavoidable in some areas, as tree growth is too dense and the trail cannot fit between trees.
- Existing canopy connectivity will be retained wherever possible to allow for the movement of possums across the trails, off the ground to avoid extra exposure to predators or possible bike strike at night.

- No possum dreys will be removed. A search for dreys will be conducted immediately before clearing works commence to ensure no new dreys have been built since initial trail alignments were selected.
- According to the CoA Policy on Dog Exercise Areas, dogs are to be kept on leads within the AHP. Signs have been installed notifying reserve users of this rule.
- Any reports of possums being injured or killed along the trails will be registered at the City and investigated. Signs will be installed advising night riders of the potential for bicycle strikes, to be vigilant as possible, and what to do if a Possum is found dead or injured i.e. take injured animals to a local vet, and dead animals to DBCA.

### 4. MITIGATE IMPACTS ON BLACK COCKATOOS

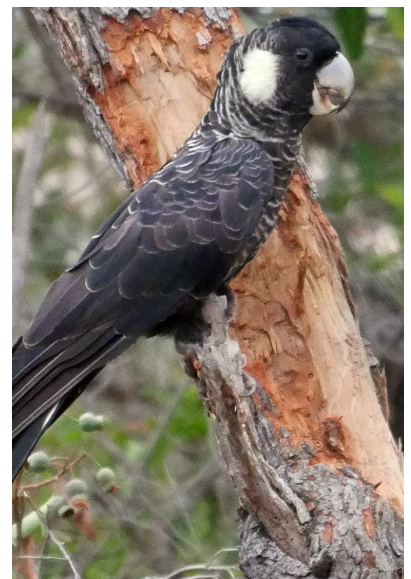
- No large hollow bearing trees will be removed.
- Where possible, trail alignments will avoid common food plants of the black cockatoos such as marri and jarrah trees, and proteaceous trees and shrubs.

### 5. MITIGATE IMPACTS ON PINK SPIDER ORCHID CALADENIA HARRINGTONIAE

- Plants species of conservation significance have been avoided during the detailed design of the trails. In the case of the *Caladenia harringtoniae*, which has not been recorded within the AHP since 1983, areas most likely to support this species (i.e. large granite outcrops) will be avoided in most instances.
- No *C. harringtoniae* will be knowingly taken or disturbed as a result of constructing the trails. No known locations of this species exist in the project area.
- Mapped critical habitat for *C. harringtoniae* has been avoided where possible during the detailed planning of the trails. However, given the value of these areas as features and view points for trail users, one area of critical habitat (i.e. surface granite) will be traversed by the new trails. To minimise impact of the trail on this habitat during construction and use, a boardwalk will be built over the area.
- Once the trails are built, any newly discovered plants of conservation significance near trails will be recorded and protected from trail users and maintenance works.



Ring Tail Possum



Baudin's Black Cockatoo



Pink Spider Orchid



# ALBANY HERITAGE PARK LINK TRAILS (V2)

## ENVIRONMENTAL + HERITAGE IMPACT MITIGATION

- Gaining control over public access within the project area through the proposed project, will in itself, help protect suitable habitat for this species, by encouraging people to stick to official designated trails.

### 6. MITIGATE IMPACTS ON DIEBACK, WEEDS AND EROSION

Whilst dieback is present within the project area, and the whole of the AHP has been mapped as unprotectable, it is believed that there are still areas where the disease is not present. Therefore, the City is committed to protecting native vegetation from the introduction and spread of dieback to and within the AHP, and to areas outside of the AHP. All future trail construction within the AHP will follow the below hygiene measures.

#### Best Practice Trail Design

- Trails will be designed in accordance with the *Western Australian Mountain Bike Management Guidelines*. (Refer to Attachment 36). Trails will be designed to suit the site specific terrain and soil types, and will involve frequent drainage features, such as grade reversals, rolling grade dips and kicks to avoid erosion events. These features are essential for sustainable trail development, to minimise damage to the trail and the surrounding area, and to minimize on-going maintenance costs to the City and community.

#### Experienced Trail Builder

- The City will engage a reputable trail builder for the project. The consultant who developed the AHP Network Concept Plan, designed and built the Pilot Mountain Bike Trail and is currently engaged to design the trail network, is an experienced trail builder. David Wilcox, from Common Ground, is a respected trail consultant having built successful trails in other areas of WA, as well as presented at a number of trails conferences as an expert in the field, including presenting on Sustainable Trail Development for the Department of Sport and Recreation, and supported by the Department of Biodiversity, Conservation and Attractions.

#### Community Education

- Information about dieback and the way that community members can assist in reducing its spread will be included in interpretive signage and promotional material for the trails network. This will include encouraging walkers to clean their boots, and riders to clean down their bikes prior to entering the AHP or leaving to travel to other areas.
- Educational signage at the start and end of trails will also be installed, encouraging riders and walkers to "Arrive Clean, Leave Clean". These signs will be developed in consultation with South Coast Natural Resource Management, and will be in line with the Standard Signage Protocol for WA (2009) developed by the Dieback project Control Group.
- Users will also be directed to stay on trails to avoid sensitive areas such as moss beds and granite.

#### Managing dieback and weeds during construction

- All machinery and equipment will be clean upon entry to the project area, to minimise the risk of introducing diseases or weeds to the project area.
- All machinery and equipment will be cleaned before moving from one site to another within the project area, and when moving from an infected to uninterpretable area, to reduce the risk of spreading disease and weeds within the AHP. These disease boundaries will be marked in the field for ease of identification by construction crews.
- All machinery and equipment will be clean upon exiting the project area, to avoid spreading disease or weeds to areas outside of the project area.
- Features will be built into trails such as "rattle points" that will assist in dislodging dirt off bikes when leaving a dieback infected area and entering an uninterpretable area. Trails will also be built and maintained to avoid water pooling on trails to minimise risk of users picking up soil on boots and bikes.
- A Phyto Fighter 3000 boot, wheelchair and bike cleaning station will be installed in a prominent location in the AHP, located in the car park at the bottom of the existing Demonstration Trail. This will include educational signage about dieback and the importance of keeping your equipment clean.
- Trails will be constructed in late spring and summer to avoid the wettest part of the year.

- Where necessary, the trail surface will be managed with low risk dieback material (e.g. crushed granite), such as crushed granite, limestone or gravel. Rock armouring will also be used where required to protect the trail surface.
- Surface material will be stock piled on existing cleared areas that have minimal chance of being infected with weed seed.

### 7. MONITORING AND MAINTENANCE

#### City of Albany Trails Project Control Group

- The City of Albany Trails Project Control Group meets monthly to discuss trail and other recreational issues in relation to City of Albany managed land. This Group provides the opportunity for City staff from different directorates to come together to discuss trail projects and any trail or recreational issues. The AHP trails are always on the agenda at these meeting, where any planning or maintenance issues are raised and discussed.

#### City of Albany

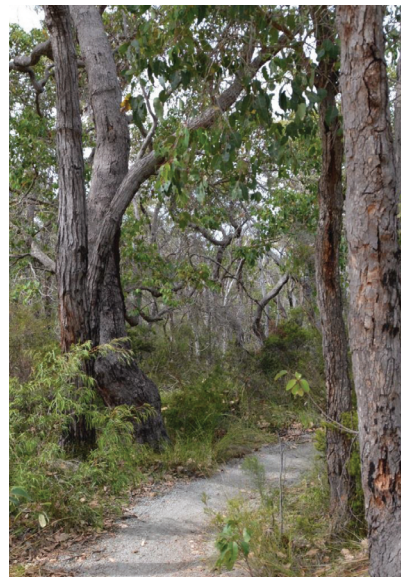
- All trails will be walked by City of Albany reserves staff, once every four months, to identify any maintenance or management issues that need to be addressed. The main issues that may occur include weeds, erosion after heavy rainfall events, trail users creating short cuts or over shooting bends, and vegetation falling or growing out onto the trails.
- Works will be undertaken by the City of Albany's Reserves Maintenance Workers or by the Albany Mountain Bike Club.

#### Albany Mountain Bike Club

- A Maintenance Agreement will be developed between the City of Albany and the Albany Mountain Bike Club, to formalise roles and responsibilities for the maintenance of designated single use Mountain Bike Trails in the AHP. The agreement will form a partnership between the City and the Bike Club, and provide guidance on how this partnership will work.



Existing Walk Trail Over Granite



Existing Mountain Bike Trail



Illegal Clearing of Trail



# ALBANY HERITAGE PARK LINK TRAILS (V2)

## ENVIRONMENTAL + HERITAGE IMPACT MITIGATION

### Friends of the Mounts

- Feedback from community engagement on the Mounts Master Plan showed strong support for the establishment of a 'Friends of the Mounts' group, incorporating members from all stakeholder groups and supported by City of Albany and other key stakeholders such as Albany Southern Ports Authority.

### University of Western Australia

- The University of Western Australia (Albany) has developed a monitoring plan for assessing impacts of recreational use of mountain bike trails on Mounts Clarence and Adelaide. Students from UWA have completed three periods of monitoring along the Demo Trail. The monitoring of the Demo Trail will continue, and the plan is to also monitor the impacts of the Link Trail, commencing immediately after construction and prior to use. Outcomes from this monitoring will be used to direct maintenance works and to improve on the design of any new trails.

### General Public

- Any trail maintenance requirements noticed by the general public can be reported to the City at any time. These reports are registered through the City of Albany's Customer Services system, where queries or works required are forwarded to the responsible staff member, and addressed within a predetermined timeframe, depending on request type. Therefore, if any requirements arise between the City's routine monitoring of the trail, they will likely be reported through this system.

### 8. PROTECT ABORIGINAL HERITAGE VALUES

- All known Aboriginal heritage values were identified in the early stages of planning, and more surveys were completed in 2016. Trail corridors have been designed to go around / avoid impacting on these values. **(Refer to Aboriginal Heritage Survey, Page 14 of this document and Attachment 6)**
- Aboriginal monitors will be used during the clearing operations. If previously unknown values come to light, then the trail will be realigned to also avoid impacting on these values.

### 9. PROTECT EUROPEAN HERITAGE VALUES

In addition to its significant environmental values, AHP is valued by the community for containing a number of military sites of national significance, including: the National Anzac Centre, Princess Royal Fortress, Desert Mounted Corps Memorial and the Padre White Lookout, the place of Australia's first Dawn Service. The AHP with its natural vegetation, rugged terrain with granite outcrops and coastal interface, all within an urban area is a landmark feature, important to the local community and regional, interstate and international visitors.

- Trail alignments are respectful of heritage infrastructure and cultural sites and will not impact these values.
- Impact on landscape values will be mitigated by minimising the trail footprint (i.e. keeping it as narrow as possible) and avoiding the clearing of canopy trees wherever possible as described above for mitigating impacts on possums and cockatoos.

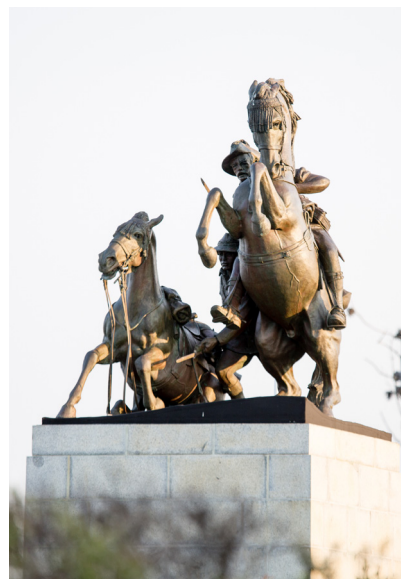
### REFERENCES

- Biota. 2019. Albany Heritage Park Link Trail: Western Ringtail Possum Impact Assessment. Prepared for the City of Albany.
- Department of Environment and Energy. 2018. Threat Abatement Plan for disease in natural ecosystems caused by *Phytophthora cinnamomi*. Commonwealth of Australia.
- Department of the Environment, Water, Heritage and the Arts. 2008. *Approved Conservation Advice for Caladenia harringtoniae (Harrington's Spider-orchid)*. Canberra:
- Department of the Environment, Water, Heritage and the Arts. Department of Environment, Water, Heritage and the Arts. 2009. Significant impact guidelines for the vulnerable western ringtail possum (*Pseudocheirus occidentalis*). In the southern Swan Coastal Plan, Western Australia. There are no guidelines for the South Coast population.
- Department of Sustainability, Environment, Water, Populations and Communities. 2012. EPBC Act referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered) *Calyptorhynchus latirostris*, Baudin's cockatoo (vulnerable) *Calyptorhynchus baudinii* and Forest red-tailed black cockatoo (vulnerable) *Calyptorhynchus banksii naso*.

Mt Clarence Granite Walk



Desert Mounted Corps Memorial



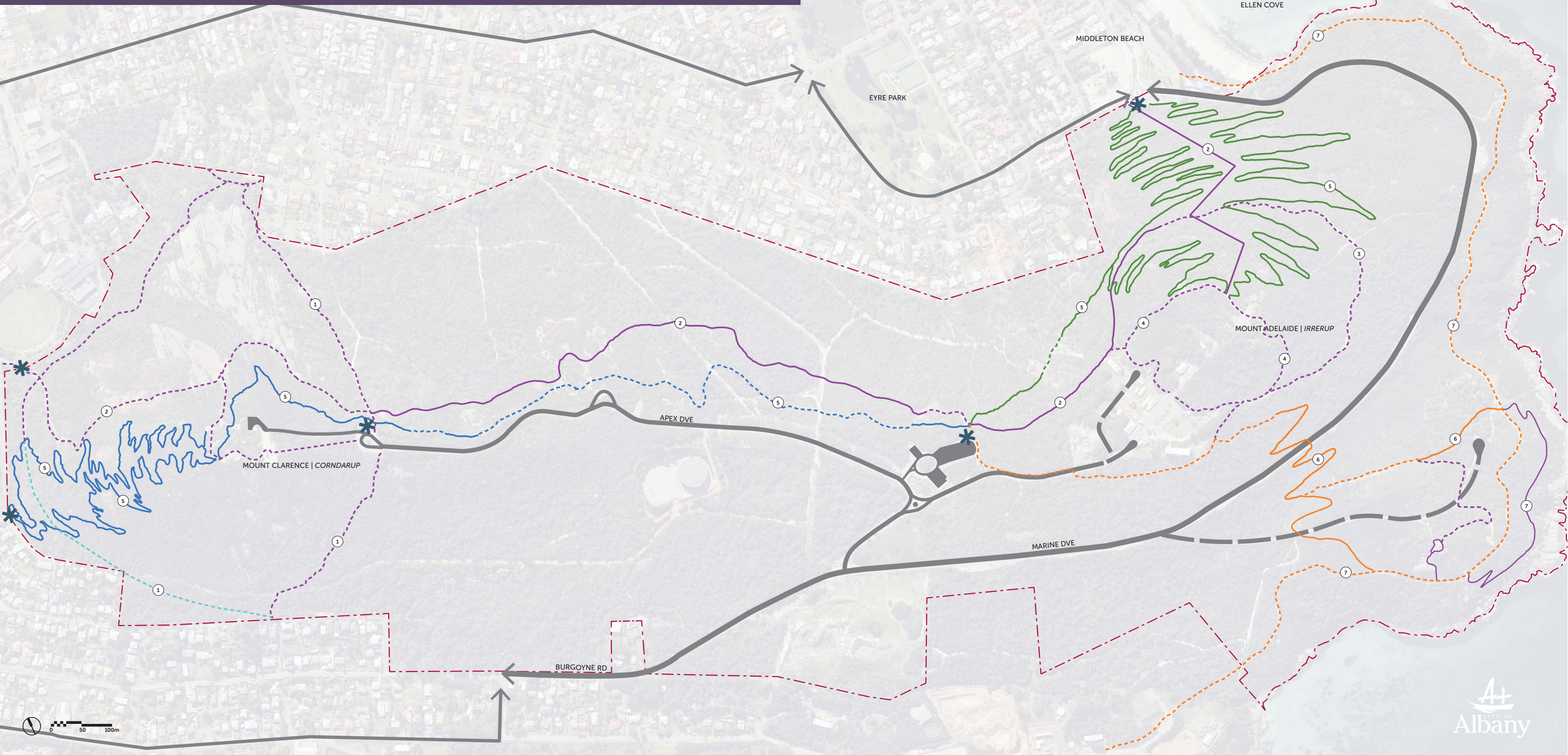
Mounts Coastal Walk





# ALBANY HERITAGE PARK LINK TRAILS (V2)

## MOUNTS MASTER PLAN ICONIC TRAILS



### GENERAL LEGEND

- - - Existing Walk Trail
- Proposed Walk Trail
- - - Existing Trail - Mountain Bike Trail (easy, single direction)
- Proposed Mountain Bike Trail (easy, single direction)
- - - Existing Mountain Bike Trail (intermediate, single direction)
- Proposed Mountain Bike Trail (intermediate, single direction)
- - - Existing Dual Use Trail, (dual direction), sealed
- Proposed Dual Use Trail (dual direction), sealed
- - - Existing Dual Use Trail (dual direction), unsealed

- \* Trail Head
- - - Site Boundary
- Vehicle Road

### ICONIC TRAILS

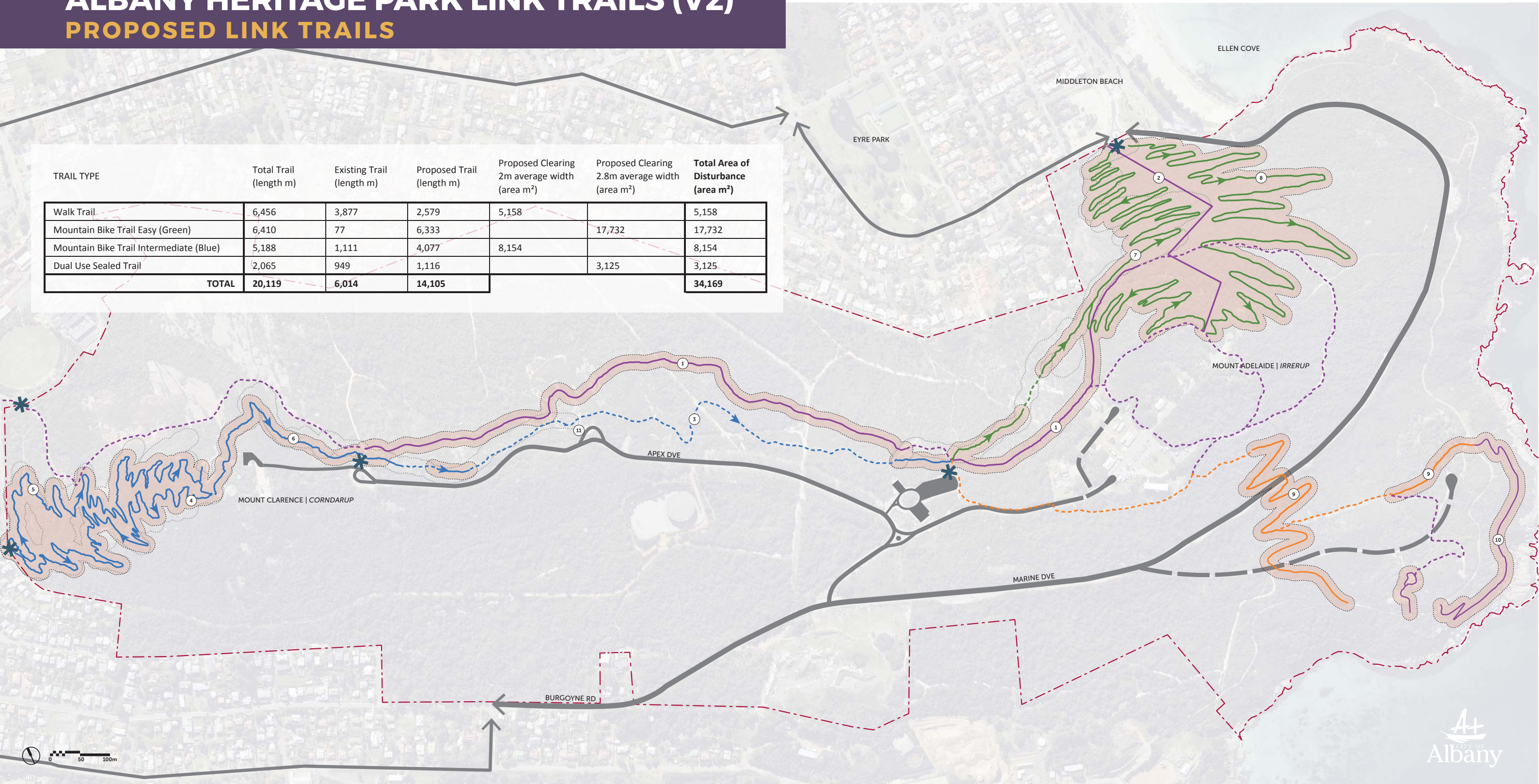
- 1** **MT CLARENCE (CORNDARUP) NATURE TRAIL**  
Loop trail with one section of unsealed dual use trail, (existing)
- 2** **GRANITE LINK WALK TRAIL**  
A single use link trail for walkers along the northern slope of the ridge, connecting Mt Clarence (Corndarup) Nature Trail + Mt Adelaide (Irrerup) Nature Walk Trail  
Trail between Mt Adelaide + Middleton Beach will include steps  
(existing + proposed)
- 3** **MT ADELAIDE (IRRERUP) NATURE WALK TRAIL**  
A single use loop walk trail  
(existing + proposed)
- 4** **MT ADELAIDE (IRRERUP) HERITAGE WALK TRAIL**  
A single use loop walk trail  
(existing + proposed)
- 5** **MOUNTS MOUNTAIN BIKE LINK TRAIL**  
Single use, single direction (ascending + descending) trails for mountain bikes. Classified into beginner (green) + intermediate (blue) difficulty levels.  
(existing + proposed)
- 6** **MOUNTS BOTANIC LINK TRAIL**  
Dual use, sealed trail linking Princess Royal Fortress to the Lower Forts, incorporating bushland botanic garden features  
(existing + proposed)
- 7** **PORT TO POINT COASTAL TRAIL**  
Dual use, sealed trail from Emu Pt + Middleton Beach to the Port + City Centre linking sites of natural, cultural and historical significance  
Sections of walk only trail branch off to access historical sites  
(existing + proposed)



# ALBANY HERITAGE PARK LINK TRAILS (V2)

## PROPOSED LINK TRAILS

TRAIL TYPE	Total Trail (length m)	Existing Trail (length m)	Proposed Trail (length m)	Proposed Clearing 2m average width (area m <sup>2</sup> )	Proposed Clearing 2.8m average width (area m <sup>2</sup> )	Total Area of Disturbance (area m <sup>2</sup> )
Walk Trail	6,456	3,877	2,579	5,158		5,158
Mountain Bike Trail Easy (Green)	6,410	77	6,333		17,732	17,732
Mountain Bike Trail Intermediate (Blue)	5,188	1,111	4,077	8,154		8,154
Dual Use Sealed Trail	2,065	949	1,116		3,125	3,125
<b>TOTAL</b>	<b>20,119</b>	<b>6,014</b>	<b>14,105</b>			<b>34,169</b>



### GENERAL LEGEND

- Existing Walk Trail LENGTH: 3877m
- Proposed Walk Trail LENGTH: 2579m
- Existing Trail - Mountain Bike Trail (easy, single direction) LENGTH: 77m
- Proposed Mountain Bike Trail (easy, single direction) LENGTH: 6333m
- Existing Mountain Bike Trail (intermediate, single direction) LENGTH: 1111m
- Proposed Mountain Bike Trail (intermediate, single direction) LENGTH: 4077m
- Existing Dual Use Trail, (dual direction), sealed LENGTH: 949m
- Proposed Dual Use Trail (dual direction), sealed LENGTH: 1116m

**TOTAL NEW TRAIL: 14,105m**  
**TOTAL EXISTING TRAIL: 6014m**

- \* Trail Head
- Original Buffer (30m) TOTAL AREA: 155,543m<sup>2</sup> = 15.5 Ha
- Revised Buffer (30m) TOTAL AREA: 346,170m<sup>2</sup> = 34.6 Ha
- Site Boundary

**NOTE:**  
 • Mountain bike trails to avoid granite outcrops where possible. In areas where crossing granite is unavoidable, mountain bike access to be bridged over the granite outcrop.

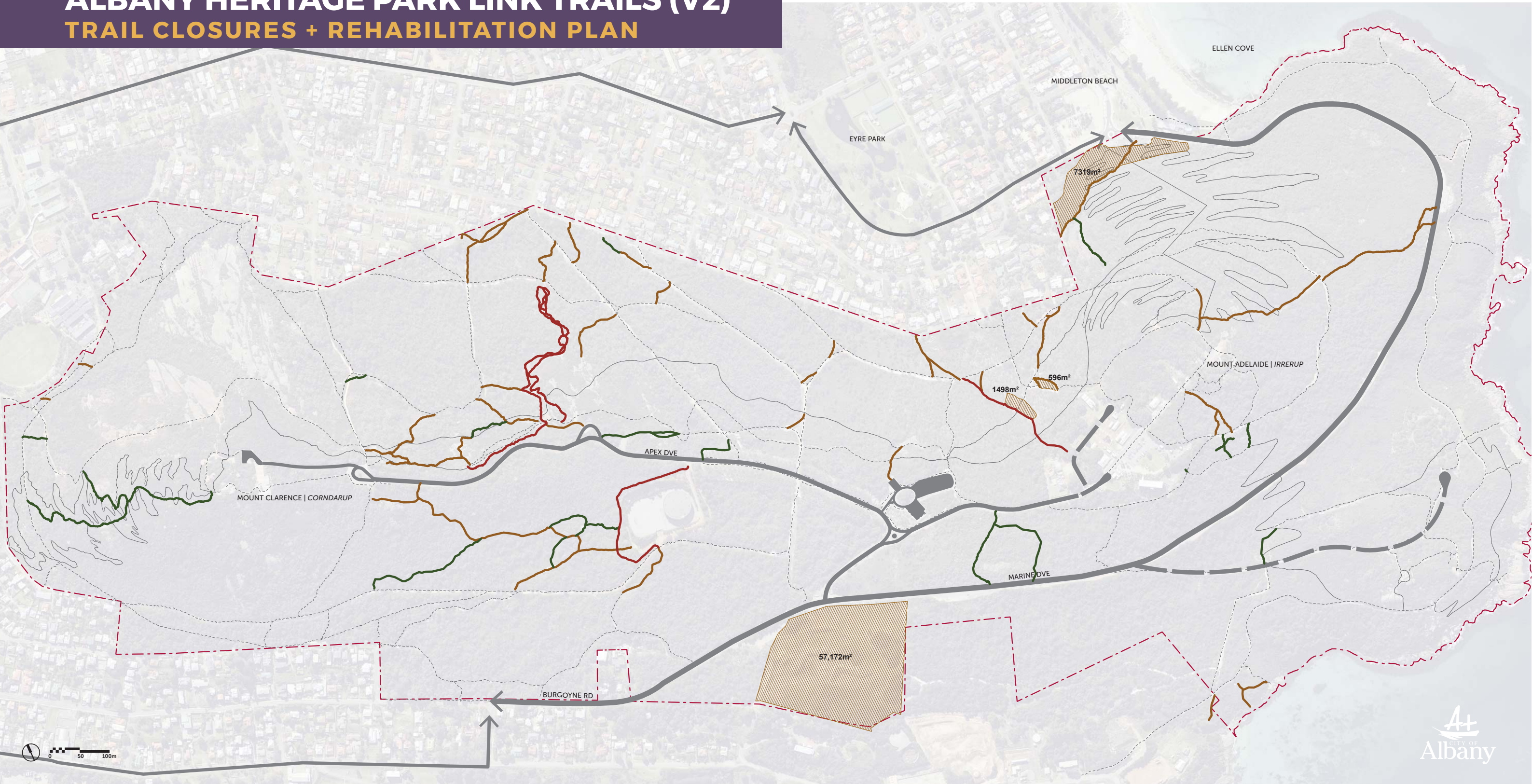
### TRAIL NOTES

- 1** PROPOSED GRANITE LINK WALK TRAIL  
A single use link trail for walkers along the northern slope of the ridge, connecting Mt Clarence (Corndarup) Nature Trail + Mt Adelaide (Irrerup) Nature Walk Trail
- 2** PROPOSED GRANITE LINK WALK TRAIL - STEPS  
Trail between Mt Adelaide + Middleton Beach will include steps
- 3** EXISTING MOUNTAIN BIKE PILOT TRAIL  
Existing (intermediate) MTB trail
- 4** PROPOSED INTERMEDIATE MOUNTAIN BIKE TRAIL  
A single use descending (intermediate) MTB trail from Padre White Lookout to the CBD
- 5** PROPOSED INTERMEDIATE MOUNTAIN BIKE TRAIL  
A single use ascending (intermediate) MTB trail from the CBD to the Padre White Lookout
- 6** PROPOSED INTERMEDIATE MOUNTAIN BIKE TRAIL  
A single use descending (intermediate) MTB trail linking Mt Clarence to Mt Adelaide
- 7** PROPOSED EASY MOUNTAIN BIKE TRAIL  
A single use descending (easy) MTB trail from Mt Adelaide to Middleton Beach
- 8** PROPOSED EASY MOUNTAIN BIKE TRAIL  
A single use ascending (easy) MTB trail from Middleton Beach to Mt Adelaide
- 9** PROPOSED MOUNTS BOTANIC LINK TRAIL  
Dual use, sealed trail linking Princess Royal Fortress to the Lower Forts, incorporating bushland botanic garden features
- 10** PORT TO POINT COASTAL TRAIL  
Sections of walk only trail branch off the existing dual use trail to access historical sites
- 11** CLOSE EXISTING TRAIL HEAD  
Close existing trail head/MTB trail access point at Apex Lookout and relocate to Desert Mounted Corps Carpark



# ALBANY HERITAGE PARK LINK TRAILS (V2)

## TRAIL CLOSURES + REHABILITATION PLAN



### GENERAL LEGEND

- Existing Trail
- Proposed Trail
- Revised Buffer (30m)
- Site Boundary
- Existing Rehabilitated Trail
- Proposed Trail for Rehabilitation (immediate)
- Possible Future Trail for Rehabilitation (Staged)
- Proposed Area for Weed removal and Rehabilitation (immediate)

TOTAL LENGTH: 2534m, AREA: 3801m<sup>2</sup>  
 TOTAL LENGTH: 4325m, AREA: 6487m<sup>2</sup>  
 TOTAL LENGTH: 1802m, AREA: 2703m<sup>2</sup>  
 \*\*areas calculated on an average trail width of 1.5m

### NOTE:

In addition, the City of Albany is currently implementing a 3-year revegetation project at the nearby (1 km north) Lake Seppings to enhance the coastal vegetation corridor between the AHP and Emu Point, for the Western Ringtail Possum and other fauna. This project is partly funded through the 20 Million Trees Program, and involves planting 50,000 seedlings over 1.7 Ha.



# ALBANY HERITAGE PARK LINK TRAILS (V2)

## SIGNIFICANT FLORA + ARVS VEGETATION UNITS

### REFER TO ATTACHMENTS:

ATTACHMENT 11: FLORA SURVEY REPORT, Dec 2017; MAP 3A + B: CONSERVATION SIGNIFICANT FLORA, PAGE 28

ATTACHMENT 14: ARVS VEGETATION UNITS / COMMUNITIES, 2010



### GENERAL LEGEND

- Existing Trail
- Proposed Trail
- Original Buffer (30m)
- Revised Buffer (30m)

### ALBANY REGIONAL VEGETATION UNITS (ARVS)

#### GRANITE OUTCROPS

- Hakea spp* Transitional Shrubland
- Acacia sulcata/Leucopogon assimilis* Granite Shrubland
- Gastrolobium bilobum/Hakea elliptica* Granite Shrubland/ Yate Woodland
- Taxandria marginata* Granite Shrubland

#### WETLANDS

- Callistachys spp* Thicket
- Homalospermum firmum/Callistemon glaucus* Peat Thicket
- Melaleuca preissiana* Low Woodland
- Miscellaneous Drainage Woodland/Shrubland

#### DAMPLANDS/CREEKLINES

- Mixed *Banksia littoralis* Open Woodland
- Pericalymma spongiocaula* Low Heath

#### COASTAL

- Coastal Heath
- Coastal *Banksia ilicifolia*/Peppermint Low Woodland
- Peppermint Low Forest

#### UPLAND EUCALYPT WOODLAND/FOREST

- Jarrah Woodland
- Jarrah/Sheoak/*E.staeri* Sandy Woodland
- Marri/Jarrah Coastal Hills Forest
- Marri/Jarrah Forest/Peppermint Woodland

#### NON NATIVE

- Non-indigenous
- Weeds

### CONSERVATION SIGNIFICANT FLORA

- Stylidium falcatum* (P1)
- Spyridium spadicum* (P4)
- Melaleuca ringens* (P4)
- Thysanotus isantherus* (P4)

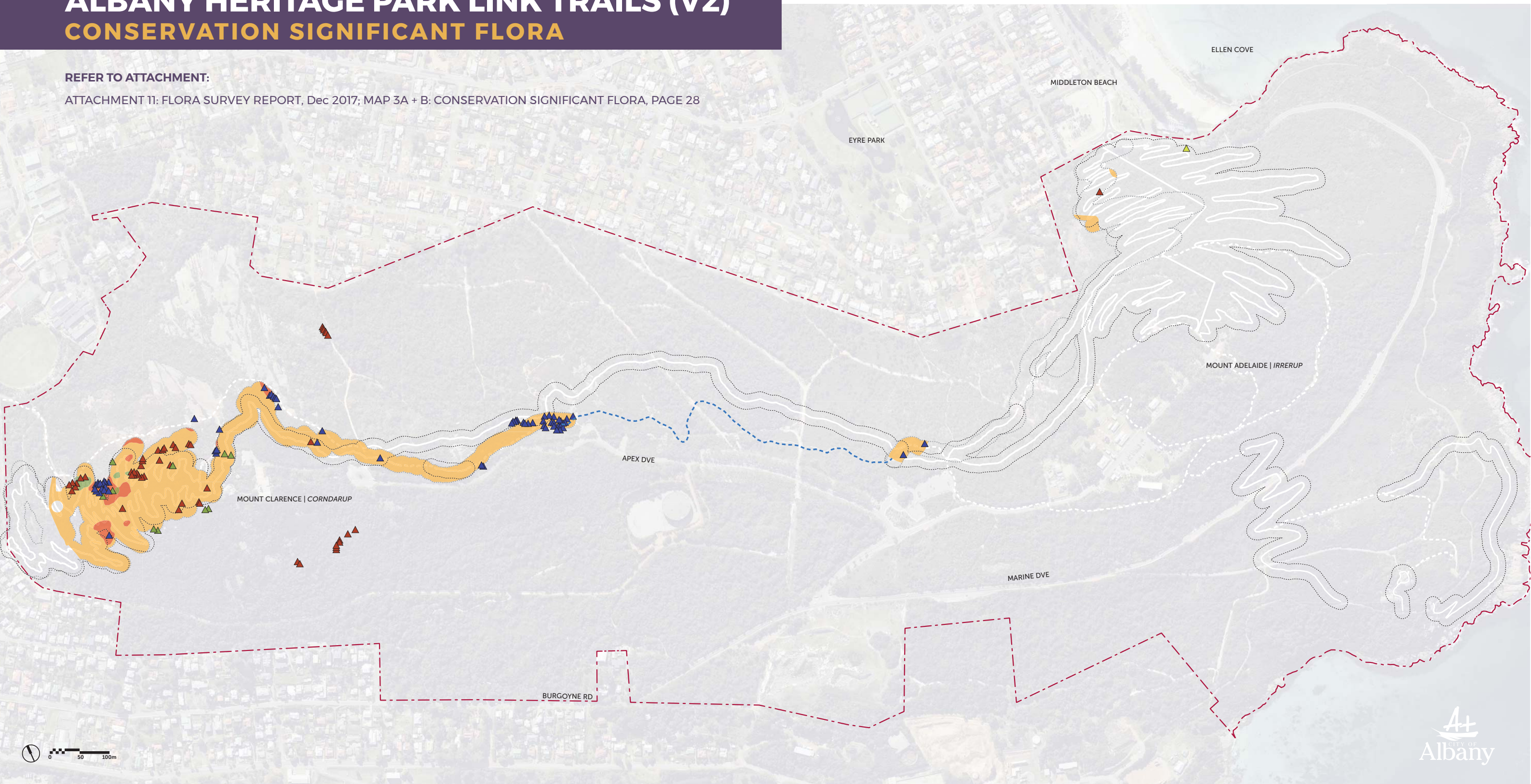


# ALBANY HERITAGE PARK LINK TRAILS (V2)

## CONSERVATION SIGNIFICANT FLORA

REFER TO ATTACHMENT:

ATTACHMENT 11: FLORA SURVEY REPORT, Dec 2017; MAP 3A + B: CONSERVATION SIGNIFICANT FLORA, PAGE 28



### GENERAL LEGEND

- - - Existing Trail - Mountain Bike Pilot Trail
- Original Buffer (30m)
- Revised Buffer (30m)

### CONSERVATION SIGNIFICANT FLORA

- ▲ *Styliidium falcatum* (P1)
- ▲ *Spyridium spadiceum* (P4)
- ▲ *Melaleuca ringens* (P4)
- ▲ *Thysanotus isantherus* (P4)
- Caladenia harringtoniae* (T) Critical Habitat
- Caladenia harringtoniae* (T) Potential Habitat
- Spyridium spadiceum* (P4)

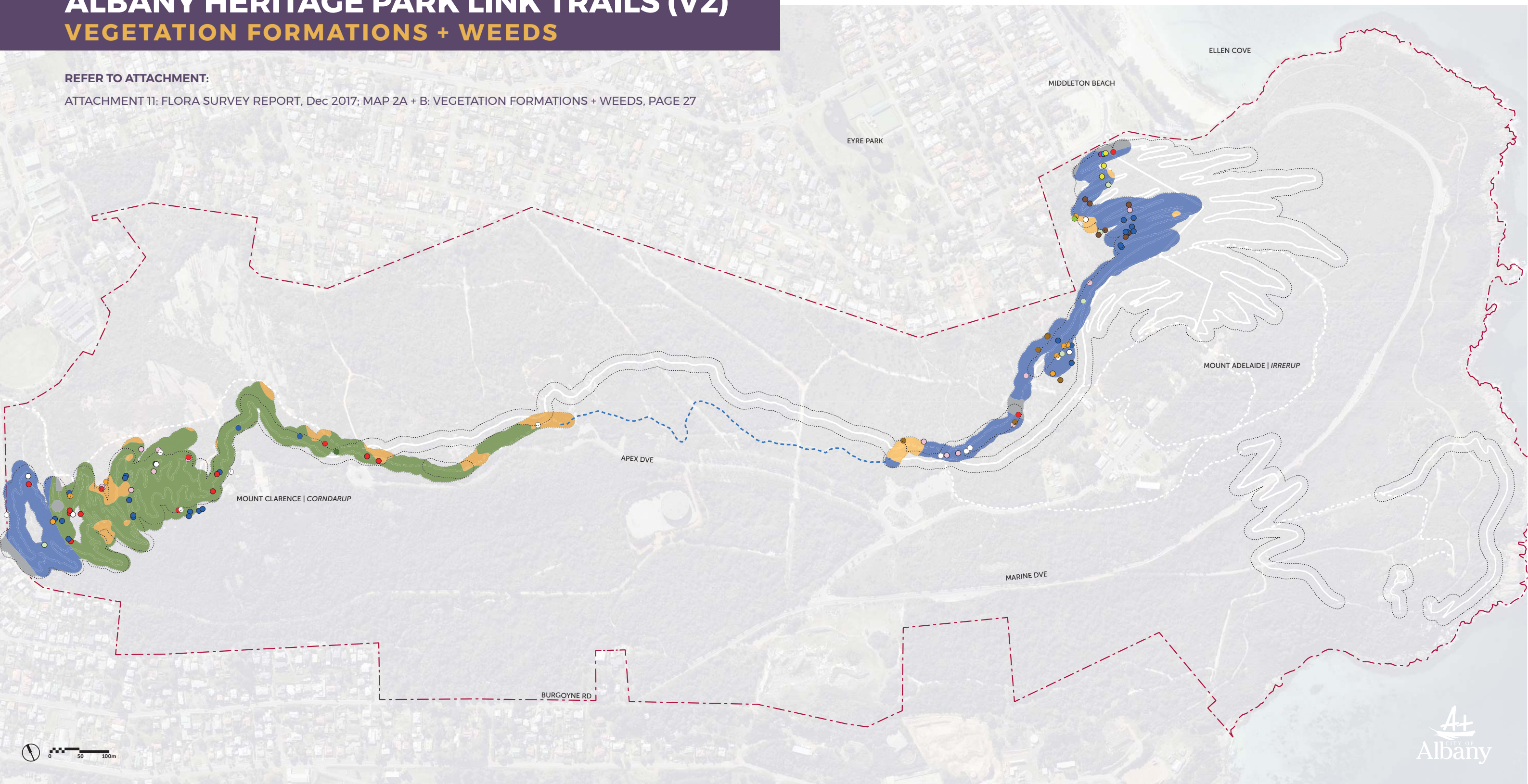


# ALBANY HERITAGE PARK LINK TRAILS (V2)

## VEGETATION FORMATIONS + WEEDS

REFER TO ATTACHMENT:

ATTACHMENT 11: FLORA SURVEY REPORT, Dec 2017; MAP 2A + B: VEGETATION FORMATIONS + WEEDS, PAGE 27



### GENERAL LEGEND

- - - - - Existing Trail - Mountain Bike Pilot Trail
- Original Buffer (30m)
- Revised Buffer (30m)

### VEGETATION FORMATIONS

- Gastrolobium/Hakea Shrubland
- Granite Shrubland + Herbland
- Eucalyptus/Corymbia Forest
- Cleared

### WEEDS

- Agapanthus
- Blue Periwinkle
- Bridal Creeper
- Bugle Lily
- Dolicos
- Japanese Honeysuckle
- Kangaroo Thorn
- Milkwort
- Pampas Grass
- Pink Ragwort
- Sweet Pittosporum
- Sydney Wattle
- Victorian Teatree

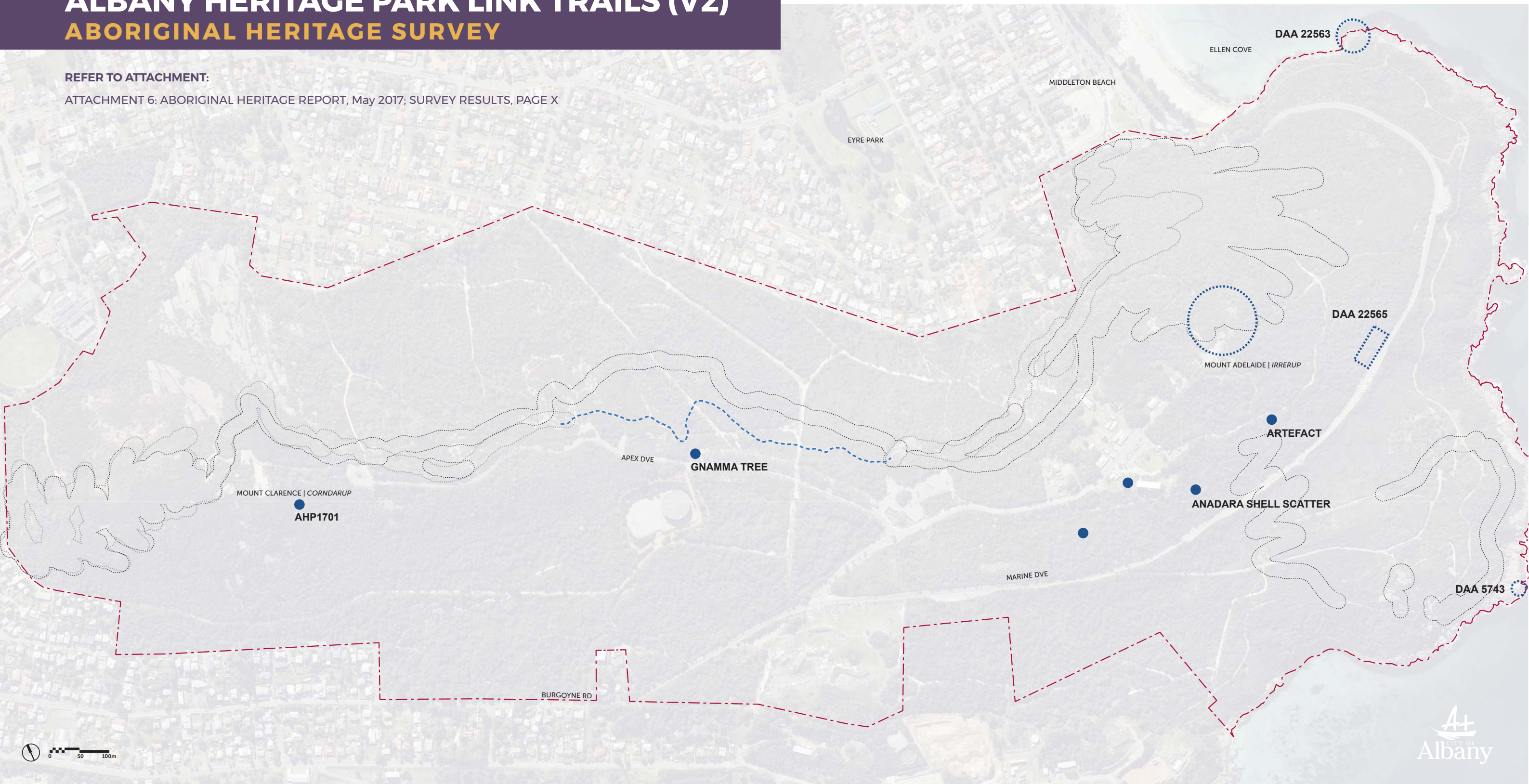


# ALBANY HERITAGE PARK LINK TRAILS (V2)

## ABORIGINAL HERITAGE SURVEY

**REFER TO ATTACHMENT:**

ATTACHMENT 6: ABORIGINAL HERITAGE REPORT, May 2017; SURVEY RESULTS, PAGE X



**GENERAL LEGEND**

- - - Existing Trail - Mountain Bike Pilot Trail
- Original Buffer (30m)
- Revised Buffer (30m)

**HERITAGE FEATURES**

- Features Found
- Aboriginal Heritage Registered Site
- DAA 5743: King Point, Food Source, refer page 6
- DAA 22563: Middleton Point Camp, Historical Camp/Hunting place, refer page 7
- DAA 22565: Mt Clarence Salmon Camp, Historical Camp/Hunting place, refer page 7
- AHP1701



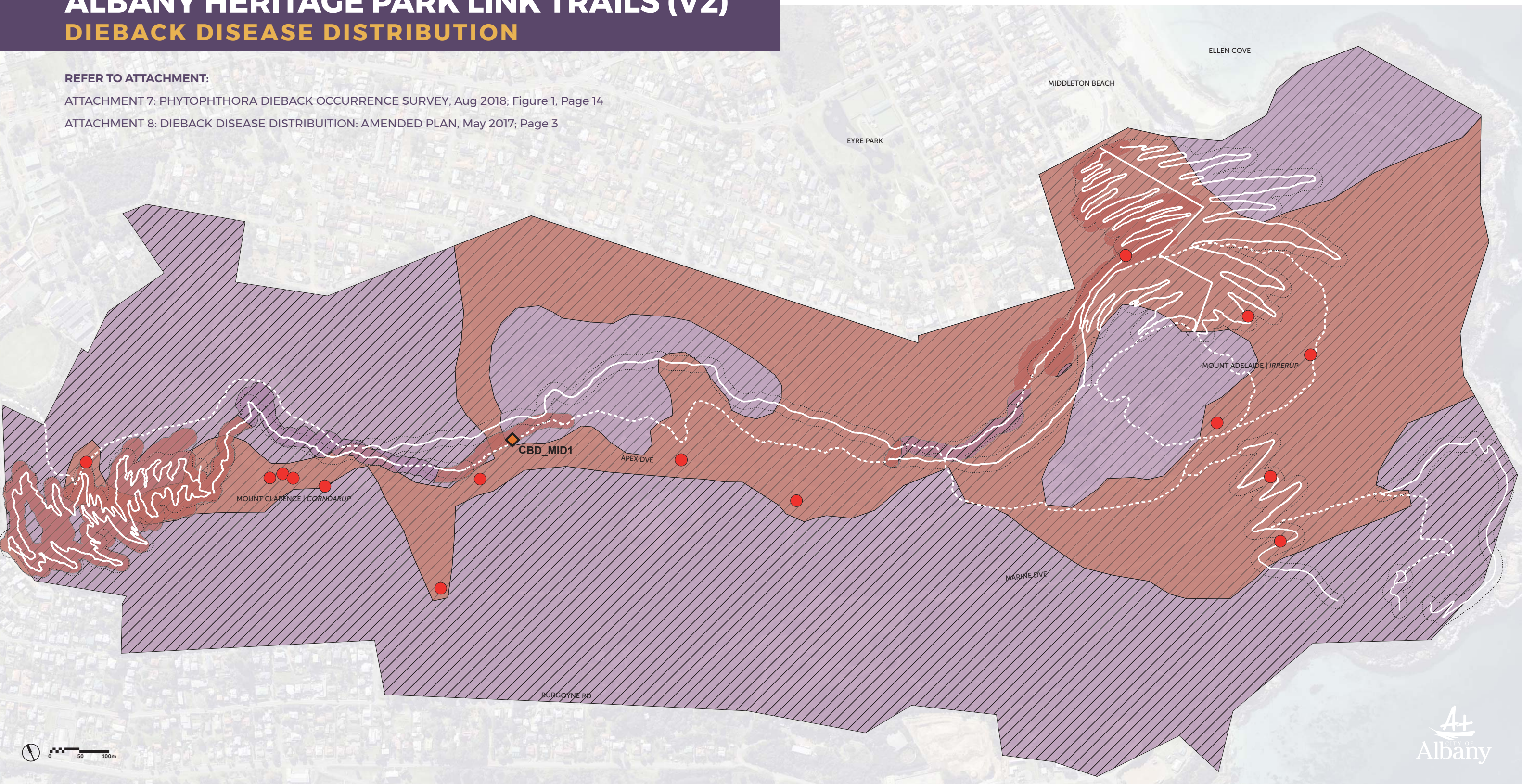
# ALBANY HERITAGE PARK LINK TRAILS (V2)

## DIEBACK DISEASE DISTRIBUTION

**REFER TO ATTACHMENT:**

ATTACHMENT 7: PHYTOPHTHORA DIEBACK OCCURRENCE SURVEY, Aug 2018; Figure 1, Page 14

ATTACHMENT 8: DIEBACK DISEASE DISTRIBUTION: AMENDED PLAN, May 2017; Page 3



**GENERAL LEGEND**

- Existing Trail
- Proposed Trail
- Original Buffer (30m)
- Revised Buffer (30m)

**DIEBACK ASSESSMENT**

- Infested
- Uninterpretable
- Unprotectable
- Phytophthora multivora
- Historic *P. cinnamomi*



# ALBANY HERITAGE PARK LINK TRAILS (V2)

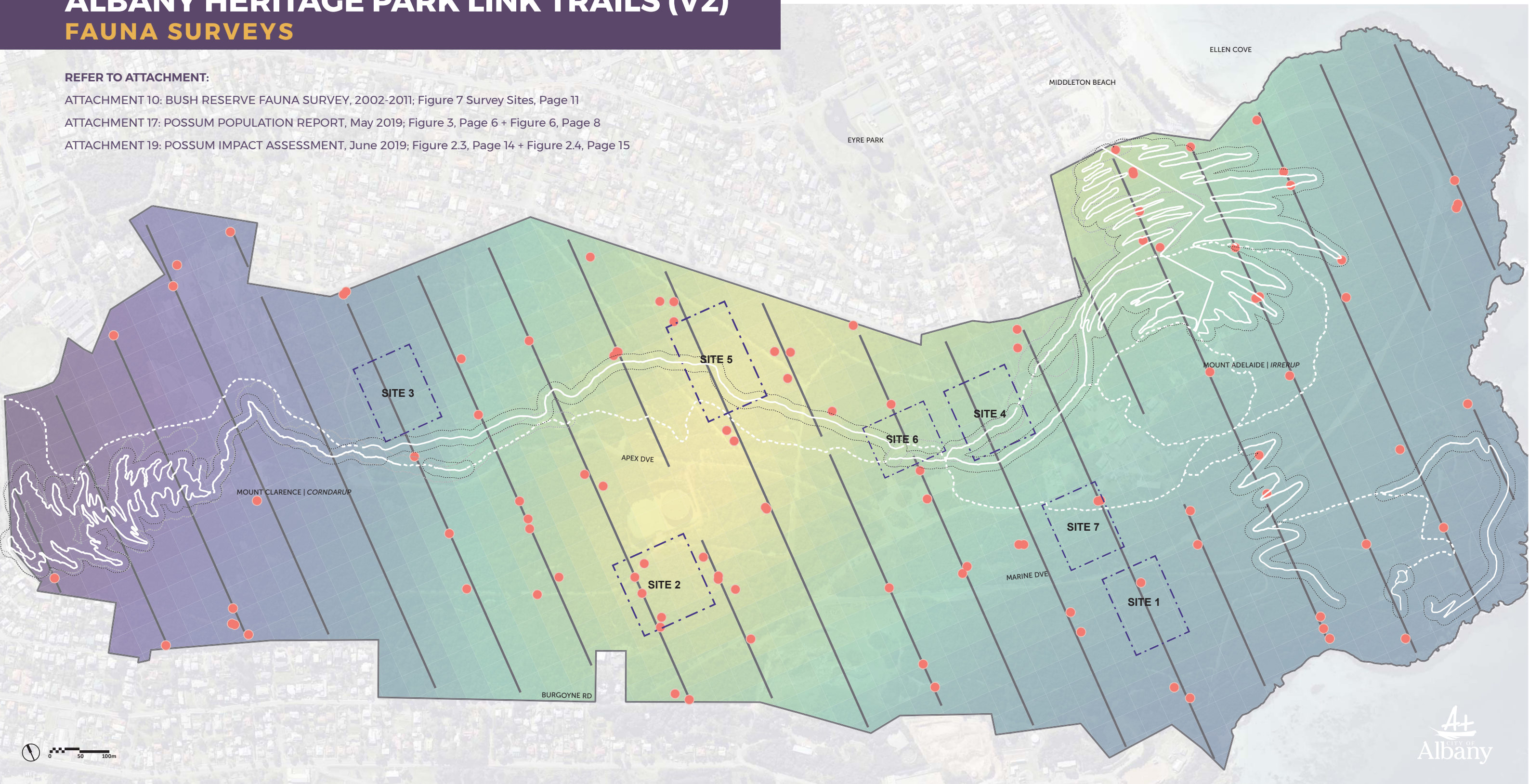
## FAUNA SURVEYS

### REFER TO ATTACHMENT:

ATTACHMENT 10: BUSH RESERVE FAUNA SURVEY, 2002-2011; Figure 7 Survey Sites, Page 11

ATTACHMENT 17: POSSUM POPULATION REPORT, May 2019; Figure 3, Page 6 + Figure 6, Page 8

ATTACHMENT 19: POSSUM IMPACT ASSESSMENT, June 2019; Figure 2.3, Page 14 + Figure 2.4, Page 15

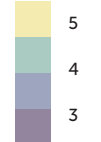


### GENERAL LEGEND

- Existing Trail
- Proposed Trail
- Original Buffer (30m)
- Revised Buffer (30m)

### FAUNA SURVEY

Western Ringtail Possum Population Density (ind./ha)



- Survey Transect
- Western Ringtail Possum Observed

- Fauna Survey Site
- Refer to Attachment: Bush Reserve Fauna Survey Report 2002 - 2011 for survey results