

Glenthorne National Park

Master Plan Report



Government of South Australia

Department for Environment
and Water

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ASPECT Studios

URPS



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1. Ministerial Introduction

It's not often you get the opportunity to create a new national park from scratch. And it's even rarer to see one unfold within the bounds of a major city. Yet that's what is happening at Glenthorne and the project is one of the most exciting environmental initiatives Adelaide has ever seen!

Creating Glenthorne National Park is a once-in-a-lifetime opportunity to weave together a series of protected places and add the former Glenthorne Farm to the heart of the precinct. The outcome will be around 1,500 hectares of precious open space, planned and preserved for people and wildlife to thrive within.

Glenthorne will be a green oasis which cools our city, improves our wellbeing and creates connected habitat from the hills to the sea. It's potential is tremendous and probably won't be fully grasped for generations to come.

I want to thank the amazing Friends of Glenthorne who have kept this dream alive for the past two decades, fighting against numerous threats to the Glenthorne Farm property, and continuing to labour on the ground, planting, weeding and caring throughout the uncertain years.

I also want to highlight my gratitude to the Glenthorne Partnership, a group of connected, creative and committed local people who are now working alongside me to develop and drive the vision for our newest national park, encapsulated in this brilliant masterplan.

It's going to be great!



David Speirs MP
Minister for Environment
and Water



Acknowledgement of Country

We acknowledge and respect the Kaurna Nation as Traditional Custodians whose ancestral lands we live and work upon and we pay our respects to their Elders past, present and emerging. We acknowledge and respect the deep spiritual connection and the relationship that Aboriginal and Torres Strait Islander people have to Country.

We also pay our respects to the cultural authority of Aboriginal and Torres Strait Islander people and their nations in South Australia, as well as those across Australia.

Project credits

This master plan was developed by ASPECT Studios, in collaboration with URPS, and in partnership with the Department for Environment and Water. Other key members of the consultant team include Trailscapes and Rider Levett Bucknall.

The project team would like to thank the organisations, groups, and individuals who generously contributed to the development of this Master Plan Report.

2. Introduction

Glenthorne National Park will make a significant contribution to Adelaide's green open space and will provide opportunities for recreation, environmental and cultural protection, restoration and interpretation.

The Glenthorne property, the focal point of a locally driven and long-term campaign to protect 208 hectares of farmland in Adelaide's southern suburbs, will become the central 'Hub' of the proposed national park.

The vision is to create an environmental precinct of national and international significance on Adelaide's doorstep.

2.1. Regional context

Located in the heart of the southern suburbs approximately 18km from Adelaide's CBD, Glenthorne National Park will incorporate existing well established parks managed by the Department for Environment and Water (DEW) including Marino Conservation Park, Hallett Cove Conservation Park, O'Halloran Hill Recreation Park as well as Happy Valley Reservoir (managed by SA Water), and the Glenthorne property.

Areas of open space adjoining and identified as strategically important to the connection between existing state managed parks are integral to establishing the national park.

Other areas of land important to the establishment of the national park include council land, state government land and privately-owned land such as Linwood Quarry (currently leased to Boral) and areas of the Field River Valley.

The new Glenthorne National Park with Glenthorne property as its 'Hub' will become a world-class destination that will benefit the environment, protect our shared heritage and become a vitally important asset to surrounding communities.



Figure 1: Regional context

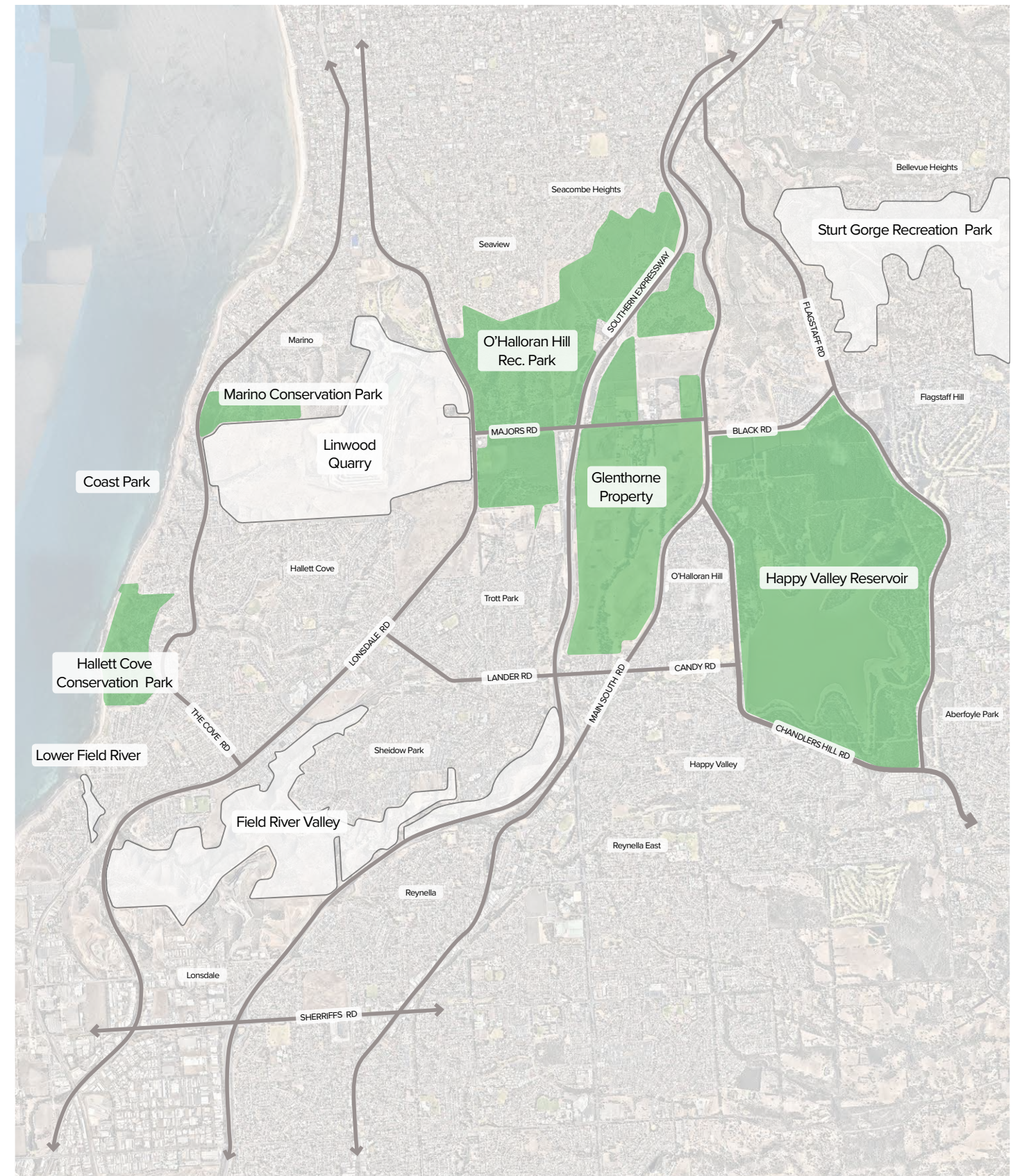


Figure 2: Regional context



2.2. A celebration of history, a park for the future

The timeline below outlines key moments in the history of the Glenthorne property. The site’s history, and that of the wider national park, is an important element of the cultural and educational values of the park.



2.3. Approach

Critical to the success of establishing Glenthorne National Park is ensuring that the wider community helps shape its future. Empowering the community to participate in the planning process and creating ongoing opportunities to participate in the development of the park was a key objective of this project.

This ambitious project needs to be sustainable in the true sense of the word. That is, it needs to reflect exemplary environmental, economic, and social sustainability.

Given its vast size and suburban location, many individuals, groups, and organisations are interested in its development. The genuine process of engagement undertaken by the Department for Environment and Water encouraged participation from a large section of the community.

The consultation process was designed employing a ‘co-design’ methodology. This proved effective in order to promote and enable a true spirit of collaboration between the broader community, a diverse range of stakeholders, the Department for Environment and Water and the planning team.

Co-design is a well-established approach to the development of new or improved assets, services, programs and products. At its heart, co-design acknowledges the experience and knowledge of the people who will be the end-users and the people who will be involved in delivering the project. Co-design is particularly effective when tackling complex issues and can empower end-users to make a strong contribution in the formulation of plans and solutions.

Co-design is a cyclical process that goes beyond consultation and often involves repeated testing and refinement of the design. This ultimately leads to social improvements and innovation.

The co-design process for this master plan involved:

- An ongoing consultation forum which brought together the Glenthorne Partnership group (including Kurna Nation), the Department for Environment and Water and the planning team for a series of planning workshops over the course of a year. This led, among other things, to the development of the vision and the guiding principles for Glenthorne National Park.
- A series of community open days which gave over 3,500 broader community members the opportunity to learn about and provide detailed feedback on the proposed Glenthorne National Park project.
- A series of planning workshops with representatives of the Kurna Nation and a broad group of stakeholders from local and state government, peak bodies, education, industry, interest and community groups. This gave the planning team the opportunity to test, challenge, review and refine the ideas and concepts that underpin the master plan.
- Presentations of a draft plan to all stakeholders at the end of the process to confirm alignment with community needs and aspirations, and to further refine the end product where needed.



Figure 3: Master plan development

2.3.1 The Glenthorne Partnership

The Glenthorne Partnership was created to provide important community insight, ideas and perspectives, and help make decisions to ensure the park meets community needs and expectations.

The group includes community members with connections to surrounding 'Friends of Parks' volunteer groups, the Kaurna community, the City of Marion, the local business association and a local R-12 school.

The Glenthorne Partnership have met regularly, participated in workshops, and have played an important role in shaping this master plan.

2.3.2 Community engagement

Open days in April saw 3,500 people tour the site and take part in a huge engagement process to help shape the master plan for the site.

The open days were incredibly successful in establishing support for the Glenthorne National Park, particularly from people that live around the area.

An overarching appetite of 'connection' with and through nature deserved careful attention. This was summarised in the following statements:

Nature is the 'canvas' on which connections are drawn.

and:

The 'power' of nature brings people and community together (taking care of nature and being taken care of by nature).

This includes connecting with nature (spiritually and physically) and community connections that can come from that (volunteering, school engagement etc).

Additional community open days were undertaken in October 2019 with the release of the draft master plan, with 2,700 people in attendance.

The draft plan was then made available on the DEW website for a period of two weeks.

Key findings from the second round of community engagement include:

- Wide support for the vision and guiding principles as well as key recommendations of the master plan
- More information sought on the level of accessibility in the park for dogs and horses
- More potential for everyday public access to camping sites
- More detail regarding the strategies to develop areas of environmental restoration and protection



The community were invited to undertake tours of the Glenthorne property for the first time in its history



Children of all ages were asked to share their vision for the new park

2.3.3 Stakeholder engagement

Nineteen stakeholders attended the round table held at The Cove Civic Centre, Hallett Cove on 29 May 2019.

This stakeholder group was also asked for feedback on the draft master plan in October 2019.

Other consultations were undertaken internally with specialist staff from the Department of Planning, Transport and Infrastructure and the Department for Environment and Water.

Ongoing stakeholder engagement will be undertaken with the release of this master plan and through the process of developing the national park management plan.

2.3.4 Kurna engagement

The Kurna Nation are recognised as the Traditional Owners of the lands and waters of the greater Adelaide region, including the new Glenthorne National Park.

A group of Kurna representatives were consulted on the 22 May and 17 October 2019 to inform the development of the vision & guiding principles as well as to provide feedback on the draft master plan.

Additionally, Kurna community were represented in the Glenthorne Partnership and attended regular meetings and workshops through the planning process.

Engagement with Kurna Nation will be ongoing through implementation with narratives and land uses further explored in the development of the management plan that interpret and respect their connection to this place.



Kurna representatives assisted with the site tours during the open days and shared stories about their culture



“Community looking after nature and reaping the benefits of being connected with it”

Summary Vision from the engagement process

3. Vision and Guiding Principles

3.1. Vision

Glenthorne National Park is a **connected landscape** providing space for biodiversity to survive and thrive, and for local people to connect with nature, culture and heritage.

Repairing remaining habitats and complementing this with the creation of new habitat in developed areas, to **improve the value of the area for wildlife and enhance the visitor experience.**

The community is at the heart of Glenthorne National Park. Saved by their sustained activism, the Glenthorne property becomes a centerpiece of well loved, natural spaces that bring joy, health and well-being to all who visit for conservation, recreation, social connection and personal reconnection.

The many stories of these places are expressed through **engaging signage and interpretation**, the use of varied technologies, public art and sculpture installations and the creation of a safe and accessible heritage precinct.

The **Kaurna people** are the Traditional Owners of the land and the creation of the park provides us with the opportunity to celebrate and showcase Kaurna Nation's connection to the land, **building a greater understanding of Kaurna culture among local residents and visitors.**

Nature provides the context for:

- Healthy lifestyles for positive mental health and holistic well-being
- Creative play that builds children's resilience and capability
- Active recreation including walking and cycling
- Research and education
- Activities that support strong social connections including picnics, events and camping

Research and learning continue to be important activities across the park drawing on the geological, natural and cultural attributes of these diverse places. **Connections with schools and universities** will be important.

Built structures rest lightly on the land reflecting their landscape context.

Commercial activities demonstrate positive contributions to connecting people with nature.

Governance structures will reflect the strong contribution made by the communities through Friends Groups and other avenues by **establishing co-management models for collaborative planning, delivery of initiatives and maintenance of the park.**

Formal and informal structures and **partnerships** provide opportunities that support the goal of **life-long learning.**

The park will be built and made by the people who engage with its natural, cultural and built heritage. Their ongoing involvement will be supported to ensure the **Glenthorne National Park is a cherished community place for generations to come.**

3.2. Guiding Principles

The following guiding principles have been established for Glenthorne National Park.

- Protect and restore the natural environment
- Stimulate social and economic sustainability
- World-class recreation and accessibility
- Respect cultural and natural heritage
- Activate and engage community
- Holistic education and research

These guiding principles fit into three main themes or ‘lenses’ through which the master planning process has interrogated and summarised engagement material, analysed site conditions, and identified opportunities.

These three themes are:

- Biodiversity and conservation
- Heritage and education
- Recreation and lifestyle

The success of delivering the master plan will be determined by how each of the main themes and guiding principles are satisfied.

Ultimately, the master plan has been prepared based on how each action addresses the guiding principles and delivers benefits to the environment and the community.

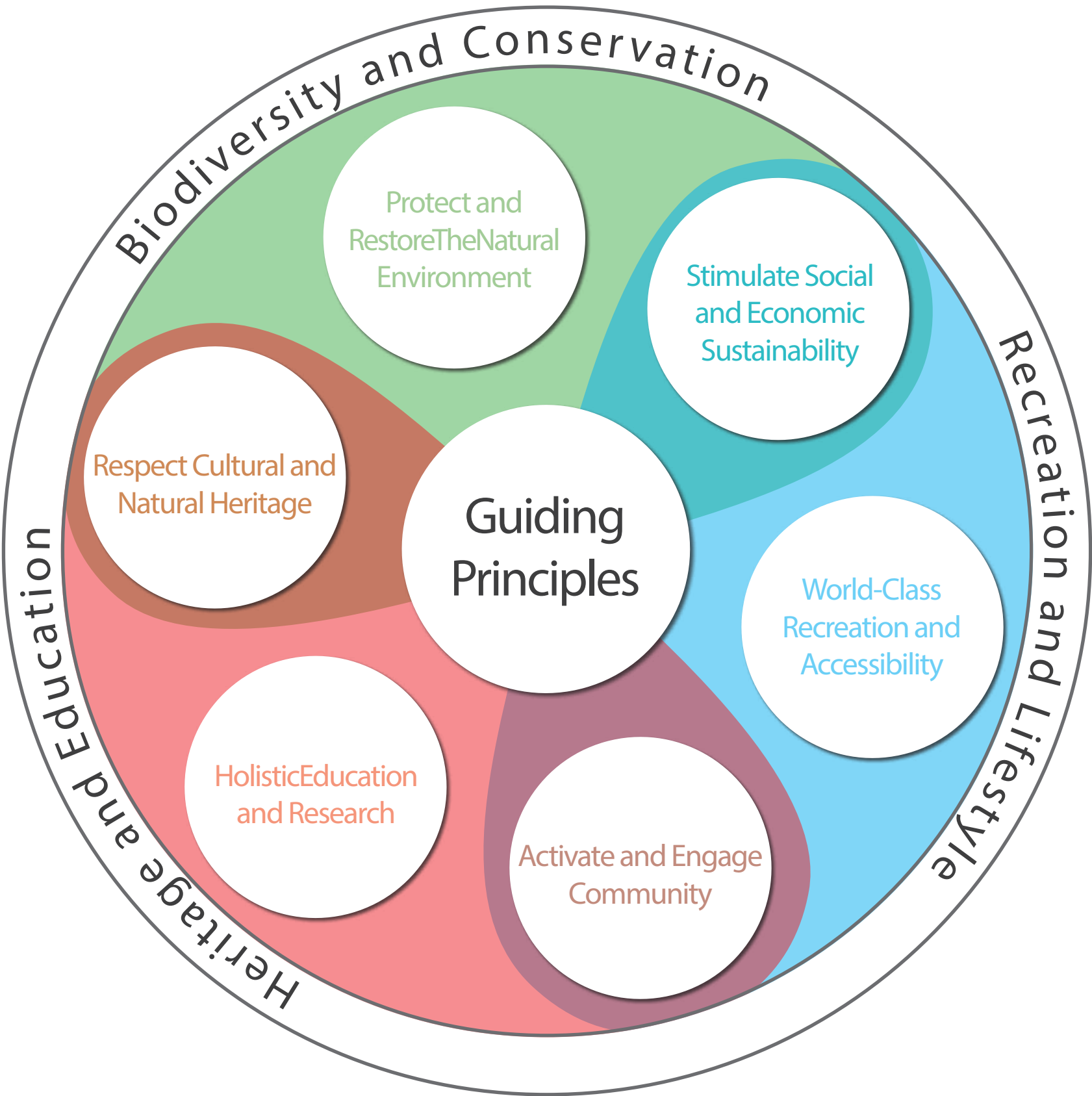


Figure 4: Guiding Principles

1. Protect and Restore The Natural Environment

- **Conservation** of the natural environment, **habitat restoration** and **re-vegetation** is informed by the best available **science**.
- **Adaptive management** practices support **climate resilience**.
- Co-ordinated land management across all tenures contributes to high quality **biodiversity outcomes**.

2. Respect Cultural and Natural Heritage

- The role of the **Kaurna** community as the **Traditional Owners** of the land is reflected in **collaborative** planning, design and management.
- Geological features are protected and interpreted.
- **Post-settlement cultural heritage** is appropriately **conserved** and **interpreted**.

3. World-Class Recreation and Accessibility

- A 'must visit' **recreational destination** provides **innovative** opportunities to **engage with nature**.
- **Facilities** to support recreation are **sympathetic** to the natural environment, safe, comfortable and of a high quality, robust design for **cost effective maintenance**.
- **Easy access** for people of all ages and abilities informs the location and design of access points, parking, pathways and facilities.

4. Holistic Education and Research

- **Formal and informal structures** and **partnerships** provide opportunities that support the goal of **life-long learning**.
- **Schools** are able to **connect** easily to **creative** educational opportunities and participation in conservation **projects**.
- Schools, **universities** and other **research institutions** are encouraged to work **collaboratively with park managers** to increase **knowledge** and share their learnings.

5. Stimulate Social and Economic Sustainability

- The park supports **appropriate small-scale commercial activities** that enhance people's connection with the natural environment.
- Large scale infrastructure and landscape modifications **are not envisaged**. **Activities** and **events** that **add value** to local businesses and the wider community are encouraged.
- Sites for activities that make a **positive economic contribution** to the park could be considered.
- Minimise negative impacts on neighbouring properties and residents, and optimise protection from risk of fire.

6. Activate and Engage Community

- **Ongoing community involvement** is reflected in an **evolving** landscape.
- Partnerships are **established** and **maintained** to deliver additional value for **nature and the community**.

4. Glenthorne National Park Precinct Master Plan

Glenthorne National Park will represent a coordinated approach to park planning and management that covers several important parcels of land including the Glenthorne property, O'Halloran Hill Recreation Park, the Marino Conservation Park, Hallett Cove Conservation Park, Happy Valley Reservoir and areas of the Field River Valley.

This precinct master plan identifies the need to retain the distinct natural characters and functions of each park, while enhancing the interconnectedness between them, utilising existing and new infrastructure, to create an accessible and inclusive network of open space rich in environmental and cultural value and authentically connected to surrounding communities.

The new national park can be understood as a mosaic of open space, each part unique but together forming an environmental tapestry.

The Glenthorne property is envisioned to be a 'Hub' for the new national park, and park operations will be based out of the property, with the park ranger station located there and the potential for a newly-established volunteer ranger program.

It recognises its unique context between coast and hills, integrated within the southern suburbs and proximity to Adelaide city.

The precinct master plan identifies the value in cohesive and integrated management to deliver enhanced benefits for the environment and the broader community.

LEGEND

Glenthorne National Park

Supporting open space

Strategic path network

Proposed path links

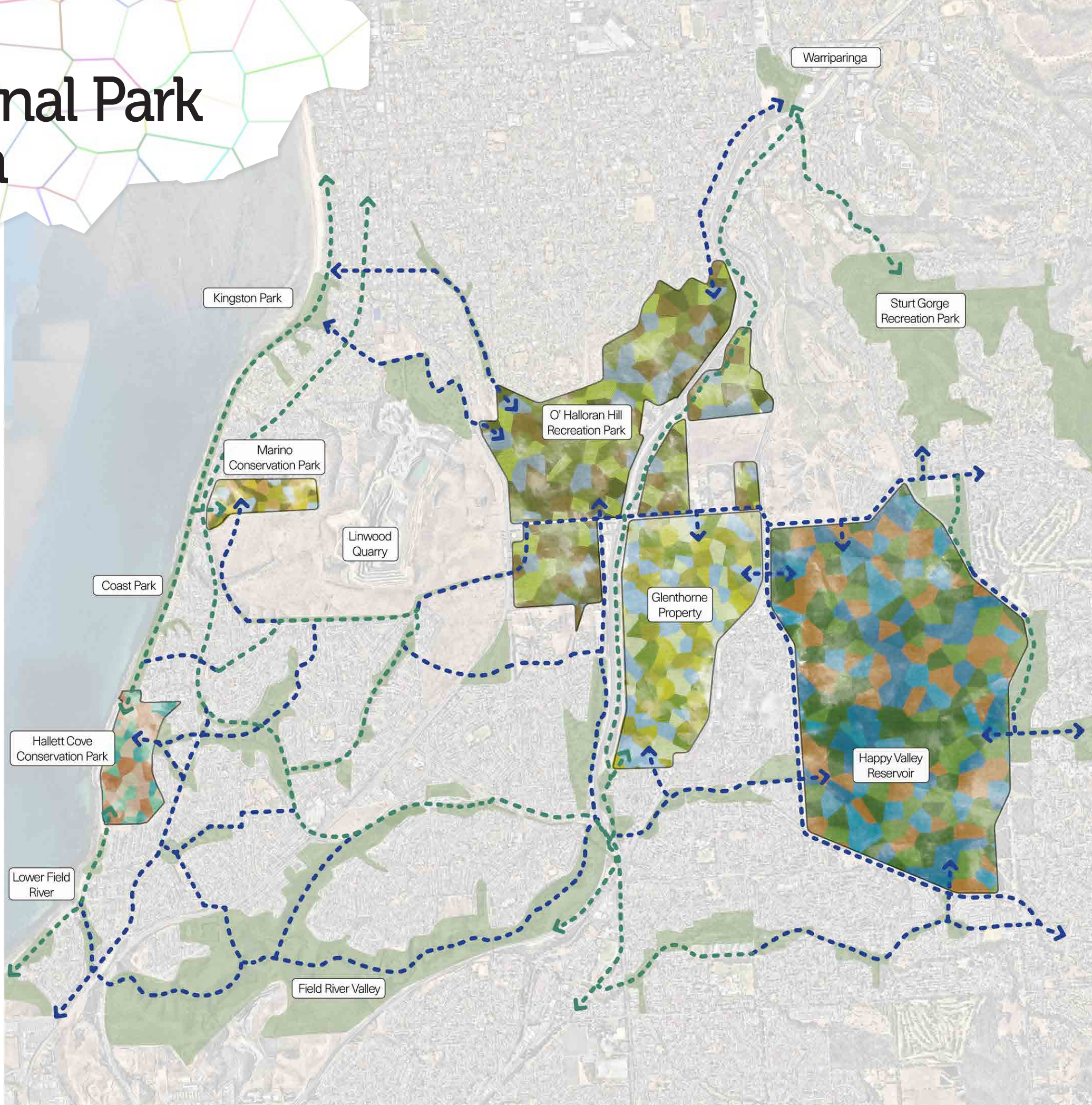


Figure 5: Glenthorne National Park precinct master plan

4.1. An overarching management and governance plan

Glenthorne National Park will be an amalgamation of state-managed parks connected to a network of open space predominantly maintained by local government, or with agreements with private landholders.

The Department for Environment and Water will undertake consultation to develop an integrated management and operations plan that will consider:

- Protection of important cultural heritage and archeological sites
- Weed management and pest control
- Fire management
- Water resource management
- A governance model
- Revegetation, biodiversity and habitat objectives
- Walking and cycling connectivity
- Ranger employment, training and volunteering
- Acceptable levels of access for dogs and horses

The park management plan will be a strategic document that sets a long term vision for Glenthorne National Park and will contain concise background information about the park and outline the objectives and strategies developed to meet that vision.

The City of Marion, City of Onkaparinga and the National Trust of South Australia will be important contributors to the development of the management plan which will need to integrate with existing open space, trail and recreation strategies.

Community involvement is strongly supported in the development of the management plan and ongoing governance, as are existing landholders and service providers important both in terms of strategic planning and operational requirements.

Other organisations and government departments with interests in factors such as access, inclusivity, recreation and biodiversity shall also be consulted.

4.1.1 Community governance model

The intent is for the park management plan to adopt a community governance model to ensure community participation, engagement and decision-making in the development and management of the Glenthorne National Park.

Examples of community governance models have shown to importantly address community needs and build community capacity and well-being.

Council representation in the governance model will be important given the master plan's integration with local government managed land.

4.1.2 Indigenous engagement

Glenthorne National Park will play an important role in advancing the reconciliation process and resolving issues relating to traditional land ownership. The involvement of Aboriginal people in the management of their traditional lands contributes to improved cultural site protection, maintenance of traditional practices that may have otherwise been excluded, and improved management of parks through the combination of traditional knowledge and contemporary science.

Indigenous engagement will reflect specific natural and cultural aspects of the park and the Aboriginal community, and will include four fundamental principles:

- Continued cultural, spiritual and traditional use of the park by Kurna Nation
- Continued enjoyment of the park by members of the public
- Preservation and protection of Aboriginal sites, features, objects and structures of spiritual or cultural significance
- Protection of natural resources, wildlife, vegetation and environmental features of the park.

The Kurna Nation are recognised as having a continuing relationship with the lands that comprise Glenthorne National Park and have stated a commitment to investing in its establishment through planning, design, development and management. Through access, equity and parity, a partnership of co-governance can be established that recognises and respects cultural heritage.

This includes opportunities in:

- Social enterprise
- Landscape regeneration
- Cultural interpretation
- Education and learning, particularly nature play

Glenthorne National Park will involve:

- Representation of Kurna people
- Clear decision-making powers
- Adequate resources for Kurna participation

4.1.3 Dual name

Community and stakeholder engagement identified strong support for the adoption of a dual Kurna name for the new national park.

Assigning Aboriginal and dual names is an important way to progress reconciliation between Aboriginal and non-Aboriginal South Australians. Dual naming is regarded as an effective contribution to the broader community's understanding of Aboriginal history and culture in South Australia.

The inclusion of Aboriginal names in the South Australian landscape assists in preserving the language and culture of the first people, and recognises their continued connection to the land.

The nominated Kurna name for Glenthorne National Park is:

Ityamiitpinna Yarta (pronounced: It yam mat pinna Yerta).

This name has been endorsed in principle by Kurna Elders, although agreed spelling and pronunciation is yet to be finalised.

This name is based on the Kurna apical ancestor of the area Ityamiitpinna, also known as King Rodney. Ityamiitpinna is believed to be buried in Old Reynella Cemetery.

4.1.4 Privately-owned land

The land adjacent Linwood Quarry (leased to Boral for the long-term), is identified as providing an important physical link between Majors Road and the grassy woodland and gullies of south-western Mt Lofty Ranges (O'Halloran Hill Recreation Park, the Glenthorne property and Happy Valley Reservoir) and the coastal heath and cliffs (Marino and Hallett Cove Conservation Parks).

Similarly, privately-owned land within the Field River Valley will play a crucial role in connecting the hills with the coast.

Both areas of land can provide biodiversity links, particularly tree canopy and bird habitat.

Improvements including biodiversity outcomes and recreational links are proposed in these areas of land subject to ongoing negotiations with landholders.

The South Australian Government have demonstrated an ambition for Adelaide to become a National Park City. This follows Adelaide hosting the second international forum on National Park Cities, and Minister for the Environment David Speirs MP speaking at the National Park City Summit.

Key to this objective is the Department for Environment and Water working with all private land owners in the precinct to deliver better environmental, conservation and 'greening' outcomes.



Marino Conservation Park



Hallett Cove Conservation Park

4.2. Retain and enhance distinct park character

The precinct master plan recognises that each existing park has a unique natural character determined by its own geographical, climatic, and historical context.

Retaining and enhancing those unique qualities will be vital to the success of Glenthorne National Park, providing a rich variety of experiences for visitors to choose from, including world-class environmental, cultural and recreational experiences.

4.2.1 Coastal heath and cliffs character

Hallett Cove Conservation Park and Marino Conservation Park are characterised as coastal heaths and cliff environments. Both parks provide important coastal connections with significant geological and environmental interest that could be interpreted in a more engaging and compelling way. Telling the stories of these places is multi-layered and needs to be presented in ways that explain to visitors their significance.

4.2.2 Hallett Cove Conservation Park

Hallett Cove Conservation Park was established in 1976 to protect an area of outstanding geological significance from development. Much of the park's 49.6 hectares has been revegetated. The park contains the popular Coast Park Walking Trail as well as a network of walking trails enabling people to explore the park's geological features. The Friends of Hallett Cove Conservation Park play a significant role in the protection of the park.

The park features an interpretive walking trail that describes the park's cultural and geological heritage and contains the extraordinary glacial striations and evidence of extensive Aboriginal occupation and culture, including the Tjilbruke Dreaming Trail.

Proposed enhancements include:

- Upgrade of boardwalk
- Consistent wayfinding & interpretive signage
- Invasive species management

4.2.3 Marino Conservation Park

Marino Conservation Park has exceptional coastal views and was established in 1989 to protect remnant coastal heath and open woodland communities from development. The Friends of Marino Conservation Park continue to play a significant role in the protection of this 29.9 hectare park.

The Marino Rocks Lighthouse is situated within the conservation park. It is a white, square concrete tower with semicircular lantern.

This operational lighthouse was established in 1962 and is managed by the Australian Maritime Safety Authority.

Proposed enhancements include:

- Consistent wayfinding and interpretive signage
- Invasive species management
- Establish a viewing platform
- Upgrade existing Botanic Trail for better access
- Upgrade carpark
- Water sustainability improvements



O'Halloran Hill Recreation Park



Happy Valley Reservoir

4.2.4 Grassy open woodlands & gullies of south western Mt Lofty Ranges

Inland from the coastal parks are O'Halloran Hill Recreation Park, the Glenthorne property and Happy Valley Reservoir, which are geographically located on the south western spurs of the Mt Lofty Ranges.

4.2.5 O'Halloran Hill Recreation Park

O'Halloran Hill Recreation Park was established 1989 to provide greenspace for the growing southern suburbs. This 290 hectare park has spectacular coastal views and protects remnant Grey Box woodland, and caters for a range of recreational opportunities such as walking, horse riding and cycling trails.

O'Halloran Hill is recognised as a mountain biking destination. Planning for a state level BMX facility and a regional soccer ground is ongoing.

O'Halloran Hill currently provides horse riding opportunities, however it lacks facilities that support riders such as float parking.

Improved horse riding facilities within O'Halloran Hill Recreation Park will further enrich the variety of outdoor experiences available across Glenthorne National Park and provide a new destination for horse riding activities.

Horse riding trails will be designed to be compatible with other uses, including mountain biking, and minimise any potential conflicts.

An increase in on-road cyclists along Blacks and Majors Roads has informed a proposed shared-use trail along the road reserve that will provide improved user experience and connectivity between recreational areas.

Of particular importance is the removal and management of weeds and invasive species within the park, and appropriate revegetation to support improved biodiversity outcomes.

Proposed enhancements include:

- Consistent wayfinding and interpretive signage
- Invasive weed and pest species management
- Revegetation programs
- Protect heritage assets
- Upgrade Davenport Terrace carpark
- Upgrade Majors Road carpark extension
- Improved horse-riding facilities

4.2.6 Happy Valley Reservoir

The 497 hectare Happy Valley Reservoir provides part of Adelaide's domestic water. The reservoir and adjoining bushland areas are managed by SA Water. The reservoir currently provides important habitat for many special plants and animals that will continue to be conserved as part of future management of reservoir reserve access.

The opening of Happy Valley Reservoir offers an incredible opportunity to connect up vast areas of recreational and green space for people to use and enjoy.

Happy Valley Reservoir is seen as providing east-west connectivity for residents living in the City of Onkaparinga to other places within the Glenthorne National Park.

Access to the water will enable aquatic activities, eg kayaking, canoeing, stand-up paddleboarding, and sailing as part of expedition-based programs.

Proposed enhancements include:

- Consistent wayfinding and interpretive signage
- Establish recreation facilities
- Improved east-west trail connectivity to the Glenthorne property and coast



Glenthorne Property, view looking south



The existing pond area

4.2.7 The Glenthorne property

The historic Glenthorne Property continues to occupy almost the same footprint as the land selected from London by Major O'Halloran in 1835-36. The natural and cultural values of this property have been well documented and provide a foundation for community recreation, interpretation and wildlife refuge.

The property will be the new heart of a world-class national park that provides:

- A regenerated Grey Box woodland environment with enhanced biodiversity and habitat outcomes
- Natural recreation spaces that are rich in environmental interpretation, culture, nature and well-being
- Indigenous cultural experiences
- Accessible and inclusive places, spaces and connections
- An active hub that connects landscapes and communities across the whole of the national park and the southern Adelaide region
- Climate resilient native vegetation
- Research opportunities
- New kinds of volunteering and citizen engagement
- Outdoor education that involves students of all ages in authentic learning, biodiversity and cultural stewardship
- An integrated learning hub
- A base for rangers servicing parks across the precinct



Boral Linwood Quarry, view looking north



The old Worthing Mine in Field River Valley

4.3. Supporting open space

An important objective of the precinct master plan is to improve connections to and between existing and future parks. In order to successfully enhance and develop infrastructure to support the master plan objectives a coordinated approach to the ongoing management and improvement of this supporting open space needs to be undertaken with a range of key stakeholders, predominantly the Department of Planning, Transport and Infrastructure, the City of Marion and the City of Onkaparinga, and SA Water.

4.3.1 Local government and state government land

Various land parcels, as indicated on the precinct master plan, will form an important network of open space, providing linkages to the core national park assets.

These land parcels will be identified and scoped in more detail in the management and governance plan that will be developed to guide the implementation of the master plan.

Other parks of note include Sturt Gorge Recreation Park and Coast Park.

Sturt Gorge Recreation Park

The state-managed Sturt Gorge Recreation Park, while not specifically part of Glenthorne National Park, is of great importance to the Kaurna Nation and provides potential for coast to hills linking trails for walking, horse-riding and cycling.

Coast Park

Coast Park provides important native vegetation corridors, a continuous shared use path link along the coast and demonstrates coastal climate change adaptation through interpretation of the restoration of the coastal environment. Accessibility is important as is the potential to continue the trail further to the south. This trail traverses the important Tjilbruke Dreaming Tracks and the lands of Ityamaitpinna (King Rodney).

4.3.2 Field River Valley

The Field River Valley is a very important women's place in Kaurna culture. In addition, the master plan recognises the role of this river valley in stormwater management, biodiversity protection and the importance of managing water quality. The river valley provides an important connection from the hills to the coast, shared by both City of Marion and City of Onkaparinga.

The Field River catchment is an important metropolitan catchment that forms an important link between Hallett Cove Conservation Park and Glenthorne National Park. It is comprised of various land tenures including council and private lands. The site is connected to a sensitive estuarine environment which is home to many waders and other birds and at least one historic Aboriginal campsite. It also features the historic Worthing Mine which offers opportunity for interpretation.

Key opportunities for potential future works may include:

- Public ownership of Field River Valley
- Management of fuel loads and woody weeds
- Revegetation programs
- Protection, restoration and interpretation of the Worthing Mine/Hallett's Mine heritage
- Interpretation of Howchin's Anticline
- Review of water management and harvesting options
- Recreation trails to improve connections from the Glenthorne property to the sea.
- Prevention of illegal access
- Assessment and identification of mine adits and natural caves

4.3.3 Linwood Quarry

The Boral Linwood Quarry comprises of privately-owned land located between Marino and Hallett Cove, not far from the shore of the Gulf of St Vincent in Adelaide's southern suburbs. The quarry and surrounding land could provide an important link between Marino Conservation Park. This area is privately owned and will continue to be used as a quarry into the foreseeable future.

4.3.4 Backyards, local parks and streetscapes

The development of Glenthorne National Park and the momentum around it creates an opportunity to bring many local residents into the process.

The concept of a National Park City sees a community's connection with nature move far beyond traditional parks, into gardens and streetscapes, and there exists a unique opportunity to 'spill' the excitement and environmental benefit of Glenthorne further than the park's formal boundaries.

Through community education and the provision of resources, local people will have the opportunity to undertake conservation and greening activities to spread the impact of this new park.

4.4. Improve physical connections between parks and open space

The Glenthorne National Park precinct is dissected by a number of north-south running arterial roads, and is serviced by the Seaford rail line and a number of local bus routes.

While this is considered beneficial to the overall accessibility of the park, numerous issues are evident as follows:

- Major arterials (eg. Main South Road, Southern Expressway & Lonsdale Road) inhibit east-west pedestrian & cycle movement
- Roads present a negative visual and physical appearance in the context of a national park setting
- Currently there are no bus stops along Majors Road in front of the Glenthorne property

4.4.1 Integrated planning & development

The master plan proposes to improve physical connections between important open space areas including between existing state government-owned land, potential future state and local government-owned land and select privately-owned land (subject to negotiations) to enhance the regional network of open space.

A focus is also given to establishing better physical connections to local schools and community infrastructure.

Key recommendations include:

- Building on the multiple council trail network strategies, identify new important strategic trail connections to existing and potential future parks
- Upgrade the road reserve along Majors Road, including a new shared-use path between Lonsdale Road and Black Road (on southern side), with new tree and understory plantings, signage and upgraded entries (turning lanes) into the Glenthorne property

4.4.2 Public transport

Further consultation with transport providers, particularly bus service operators, need to be undertaken to potentially provide improved services to and between the parks.

As stated above, better public transport infrastructure to the Glenthorne property, such as providing a service along Majors Road with new bus stops/shelters or providing bus stops closer to the park entry is an important priority.

Public transport connections to other parks, such as Happy Valley Reservoir shall be considered.

There is also an opportunity to link local free community buses between parks, including the relocation of the TINDO bus.

4.4.3 Traffic planning and car parking

A thorough traffic and parking study for all parks within Glenthorne National Park should be undertaken to ensure adequate parking is provided including disability parking, bus and trailer parking.

Consideration shall also be given to:

- Traffic management related to the proposed BMX and soccer facilities
- Future road works, particularly relating to DPTI owned Majors Road
- Anticipated increases in traffic quantities
- Access to Happy Valley Reservoir

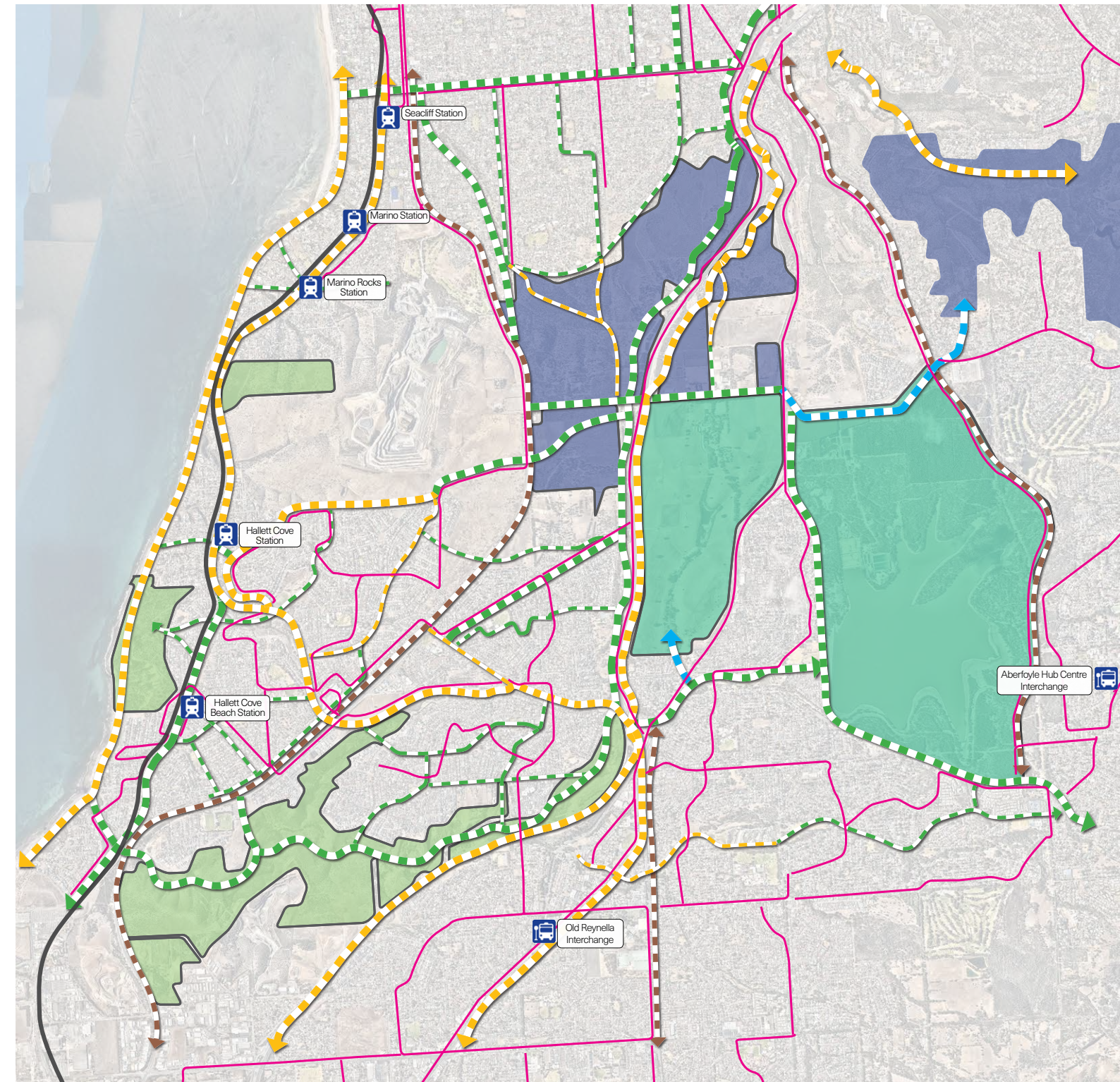


Figure 6: Transport analysis diagram

4.5. A share-use path network

The master plan proposes to establish a series of trail experiences across the national park that provide educational, interpretive and recreational links to the broader region.

Consideration will be given to the City of Marion's Walking and Cycling Guidelines 2018-2022 in the establishment of trails across the precinct. This document identifies recreational opportunities within the areas of the precinct.

Consistency in service standards and style should be sought over the whole precinct including between council-managed and state-managed trails. Agreements around these standards across land tenures will be established in the management plan.

An indicative plan of potential trail experiences is provided in Figure 7.

4.5.1 Environmental trail

An environmental trail may link with remnant vegetation, significant trees, vegetation of cultural or biological significance, demonstration sites, existing botanical trails, and various native vegetation typologies/communities across the region.

4.5.2 Cultural heritage trail

A cultural heritage trail could link to landscapes of significance to Kurna culture, areas of important natural heritage, and post-settlement heritage sites.

4.5.3 Recreational links

Together, the O'Halloran Hill Recreation Park, Happy Valley Reservoir and the Glenthorne property are developing into a significant recreational precinct. Improving connectivity between parks including for pedestrians and cyclists is a valuable opportunity.

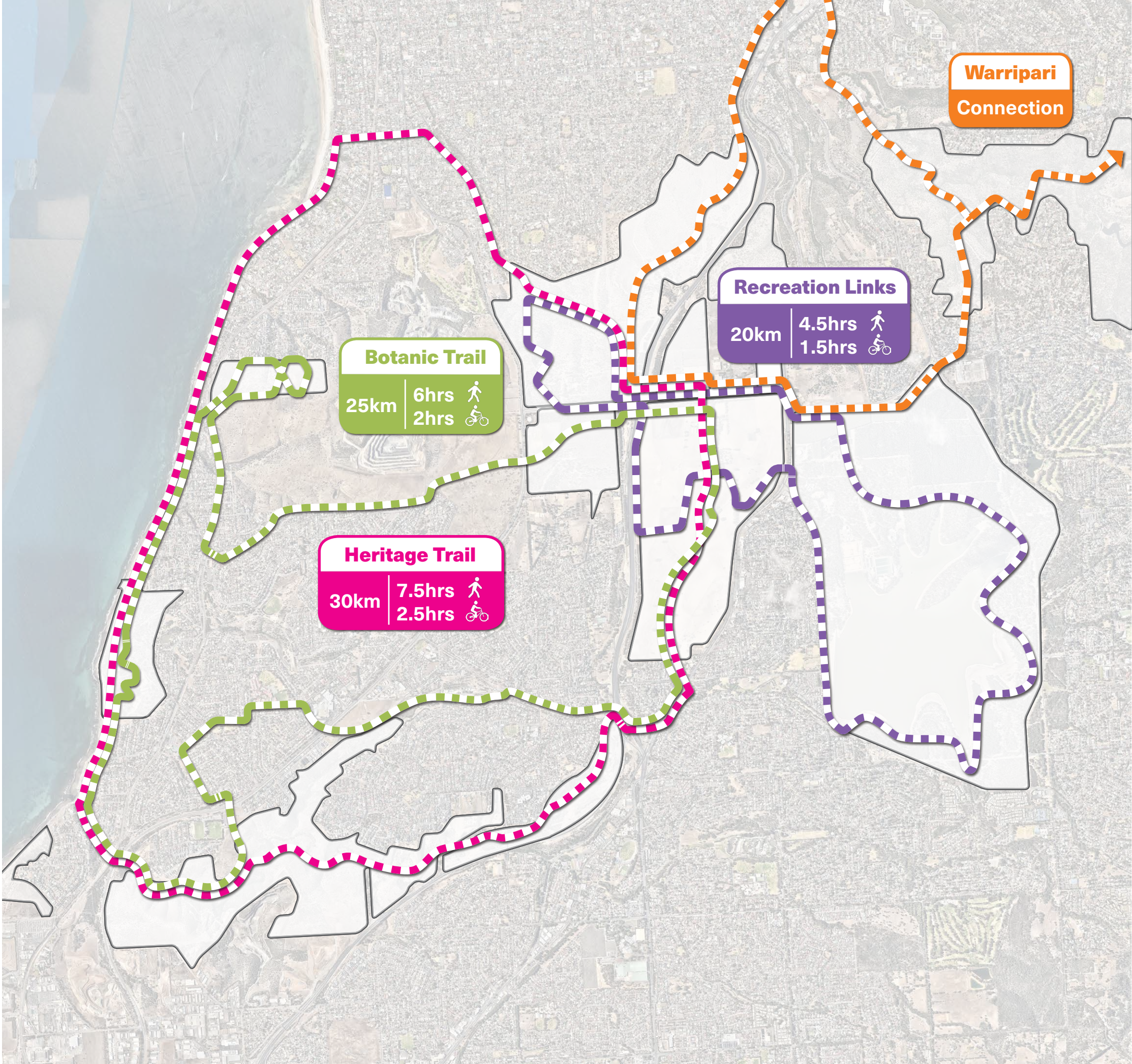


Figure 7: Indicative trail network plan

4.5.4 Signage and wayfinding

Branding of the Glenthorne National Park precinct will assist with establishing the park's identity and wayfinding of users.

A suite of signage shall be developed based on the DEW's standard signage suite.

Co-naming will be adopted for all parks including:

- Current park name. Eg O'Halloran Hill Recreation Park
- Glenthorne National Park brand name
- Kurna name

Coordination of signage style with local government and other state departments will ensure the signage strategy fits with existing signage.

Construction and maintenance of signs within supporting open space will need consideration in the management plan.

4.5.5 Interpretation

The history of these places and their cultural, natural and built heritage needs to be protected, restored where appropriate and interpreted in multiple formats, including accessible signage, applications for devices including augmented reality (AR) and virtual Reality (VR) and other emerging digital technologies and educational programs that enable life-long learning.

An interpretation strategy and plan shall be developed for the national park to enable a strategic implementation of stories and themes across the precinct.

New interpretive elements, whether physical or digital technology, shall seek to be innovative both in terms of their construction, functionality and usability.

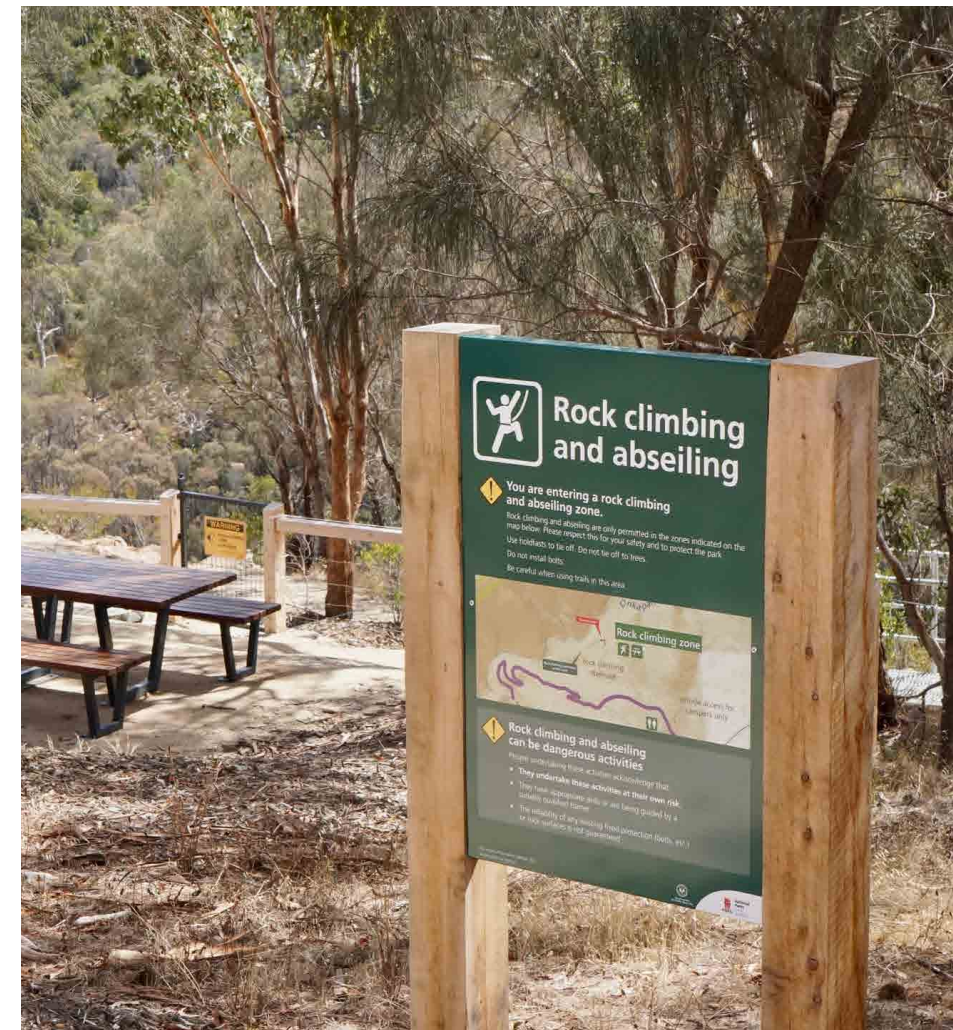
An example of a digital platform is PikaPark SA which is a social network encouraging activity in national parks, and the Mt Lofty 'Lofty 360' augmented reality app.

Opportunities exist to partner with The City of Marion, and others, to establish Glenthorne National Park as a 'smart' national park with the incorporation of exciting and engaging digital technologies.

Digital interpretation may include 3D modelling of historic buildings for an immersive and engaging AR or VR digital experience.



D.E.W. standard interpretation signage (Onkaparinga River National Park)



The DEW standard wayfinding signage (Onkaparinga River National Park)



4.6. Accessibility and inclusivity

The future developments in the park need to be consistent with the principles of universal design and enable inclusive experiences for all people.

Opportunities exist to develop partnerships in the design of recreational facilities, interpretation materials and accessibility in general.

Councils and government departments are required to have Disability Access and Inclusion Plans completed by 2020.

Future development within the new national park shall consider existing and future mobility devices and technologies, such as electric wheelchairs & accessible bikes.

4.6.1 Universal access and design

Universal access means that regardless of ability a person can approach, enter, pass to or from and make use of an area and its facilities without assistance.

Universal design is a way of thinking about environments that meet the needs of all members of the community. It also considers changing needs over the life course.

Glenthorne National Park strives to utilise best-practice universal design for accessibility and inclusion.

4.6.2 Trailrider and sherpa program

A Trailrider is an all-terrain wheelchair that allows visitors with limited mobility to explore the natural beauty of park areas.

Interstate, sherpa volunteer programs enable trained chair operators to provide vistors with assistance by pushing/ pulling the Trailrider chair on many park trails.

The additional physical assistance provided by volunteers makes it possible for park visitors to access park trails that would not be possible without the help of several chair operators.

The Conservation Council and DEW have access to Trailrider equipment to support those with physical mobility impairment and a sherpa volunteer program should be established at Glenthorne National Park.



Trailrider in action demonstrated by volunteers of the sherpa program



The Grampions accessible trail identification



Consideration must be given for all user's needs

4.7. Integrated programs and community infrastructure links

Establishing environmental, educational and recreational programs with existing community infrastructure will ensure ongoing engagement with the national park and empower communities to take ownership and participate in its development.

4.7.1 Community infrastructure

Numerous community-based organisations and facilities operate in vicinity of Glenthorne National Park.

Key types include:

- Community centres
- Schools/Universities
- Retirement villages
- Health care facilities

The creation of Glenthorne National Park will establish opportunities to link community facilities and operators to activities within the park.

Opportunities will be outlined in the following sections of this document.

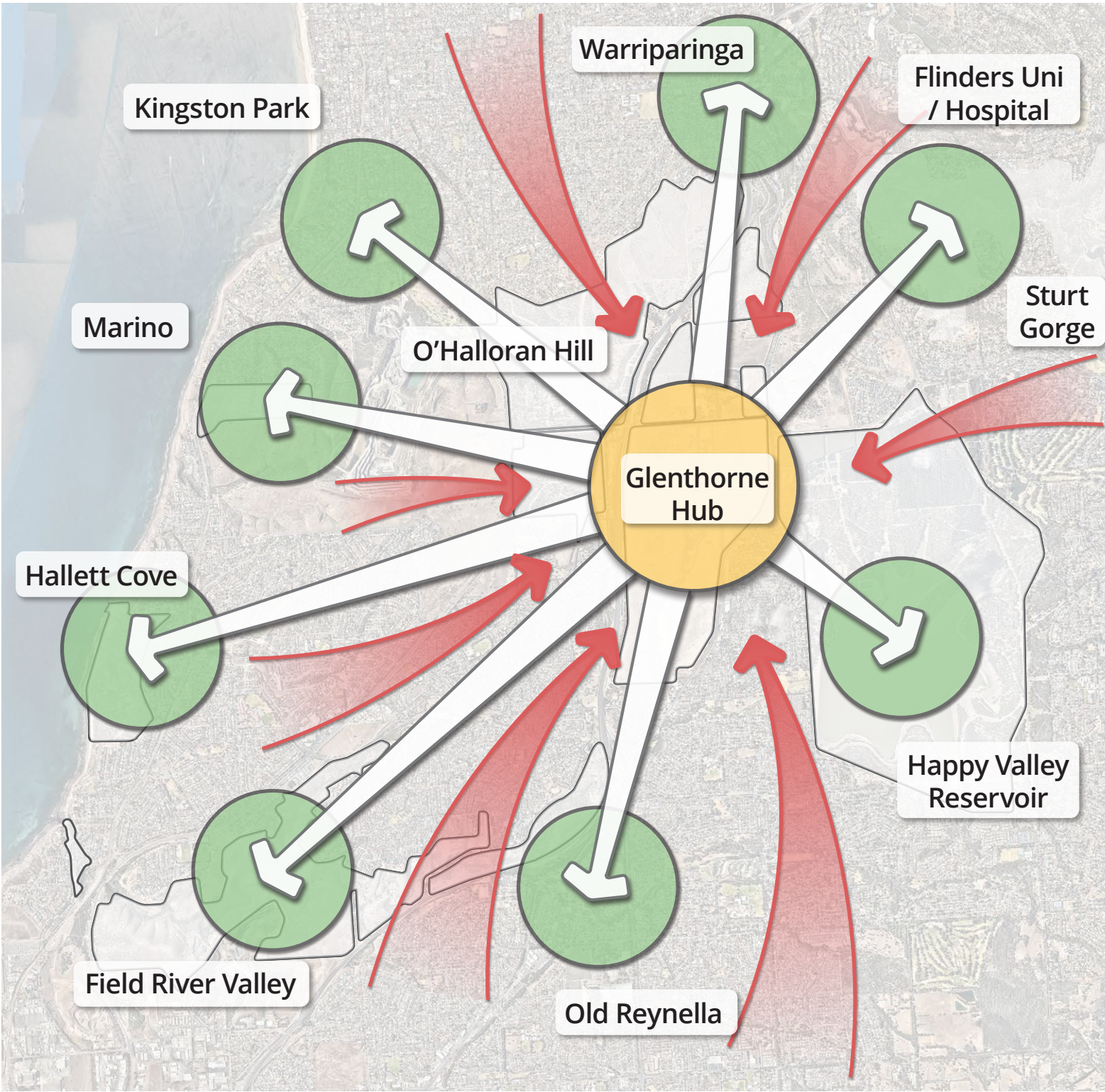


Figure 8: Precinct linkages diagram

4.7.2 Environmental links and programs

Develop and implement a coordinated biodiversity strategy to retain, protect and enhance existing ecological systems and deliver biodiversity outcomes.

Restoration shall occur in partnership with non-government organisations (NGOs) and community organisations, and in partnerships with researchers, to ensure that the restoration is adaptive and learning outcomes are achieved. This knowledge can both inform site management in the future, but can also be communicated to the broader community and applied elsewhere.

Management measures that address problematic issues such as changing habitat structure, fuel loads and weeds will need to be resilient and persistent. Maintaining seasonal sheep grazing on the Glenthorne property is suggested to manage some of these issues.

Key initiatives include:

- Extensive revegetation and habitat restoration across the national park and supporting open space based on scientific evidence and climate adaptation methodology
- Adequate buffering for remnant vegetation communities and effective management of invasive species
- Citizen science to provide meaningful opportunities for people of all ages and abilities to connect with nature and each other
- Long term rehabilitation of industrial sites (Eg. Linwood Quarry)

Other initiatives include:

- Woodland recovery
- Green Australia
- Training volunteer site stewards linked to vocational education requirements
- Sustainable park management partnerships. Local government has an important role to play given its commitment to the Resilient South Climate Change adaptation processes, Council's Business Plans and specific plans such as the City of Marion's Remnant Vegetation Management Plan 2018-22.
- Connect with local schools and educational institutions to engage students in the establishment of the national park's environmental objectives

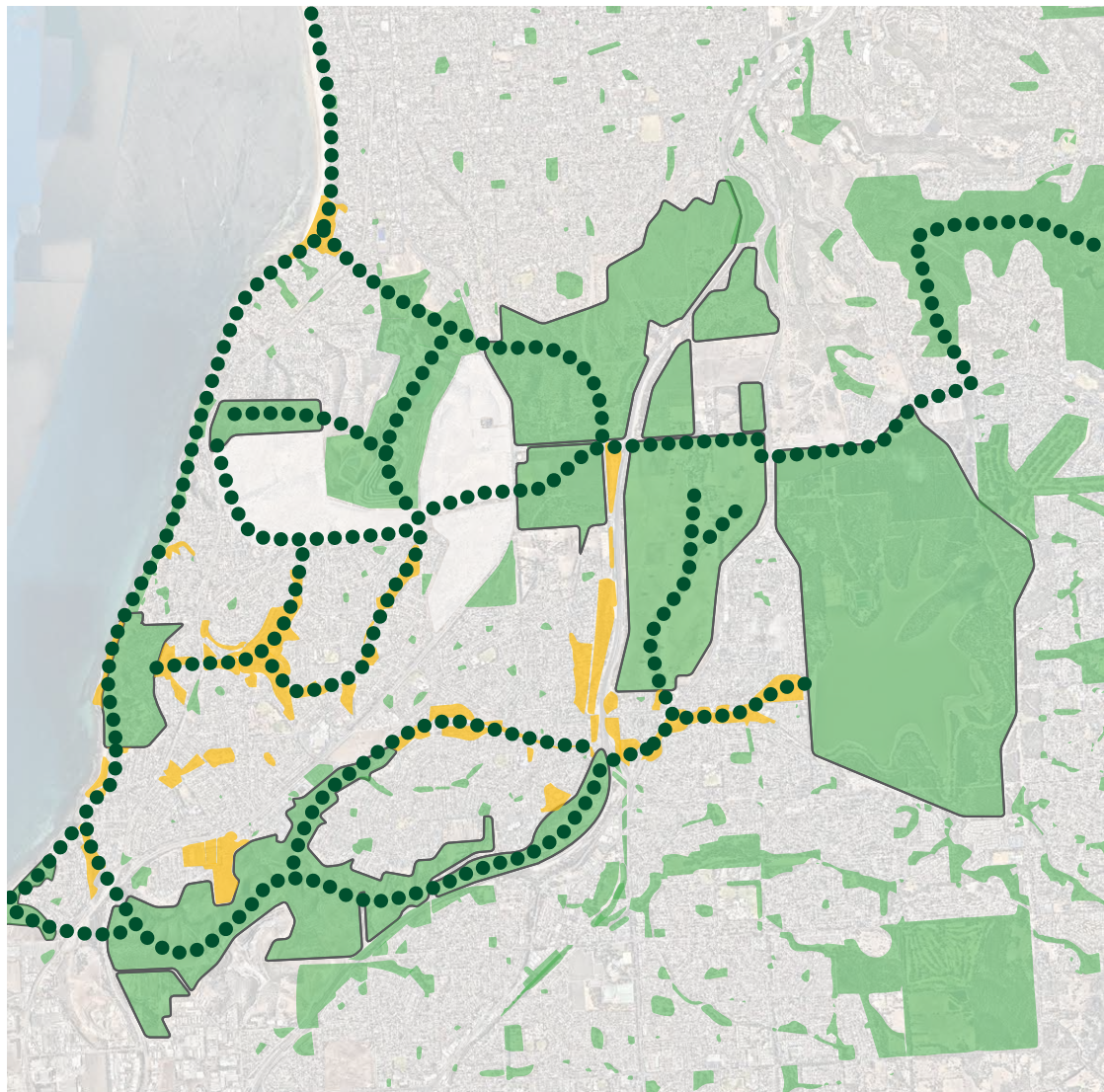


Figure 9: Environmental connections diagram



An example of Grey Box grassy woodland (Custon Parklands)

4.7.3 Cultural heritage links

The Glenthorne National Park precinct is rich in natural and cultural heritage. Expressing the multi-layered stories of the historic significance of the area while showcasing Kurna culture will educate and inspire the community and is a valuable opportunity.

Kurna cultural heritage

The Kurna Nation are the Traditional Owners of the lands and waters of the greater Adelaide region, including the new Glenthorne National Park. They maintain a deep relationship with Country, and have done so for tens of thousands of years through their customs and Tjukurpa. Tjukurpa, which includes cultural stories and lore, is vital to understanding the cultural significance of southern Adelaide, and will profoundly influence the way the new Glenthorne National Park is managed.

An Aboriginal Cultural Heritage Survey for the entire Glenthorne National Park precinct has been undertaken. This survey outlines the rich layers of Indigenous cultural significance and has informed the development of the master plan.

Key themes for consideration include:

- The significance of the Tjibruke Dreaming story and its track accross the coast as Tjibruke travelled from Warriparinga to Deep Creek
- The north-south Aboriginal track stet surveyed by settlers, later becoming known as Main South Road
- The east-west seasonal movement of Kurna people along the creeks and waterways. Field River as an important 'women's site', and Sturt Gorge as an important food source and passage between the coast and the foothills of the Adelaide Plains
- Other significant Kurna sites particularly around Old Reynella

Key master plan initiatives include:

- Continuing engagement with Kurna Nation to embed Kurna Aboriginal heritage and culture in the implementation of the master plan

Post-settlement heritage

There are numerous post-settlement heritage sites scattered across the precinct within the southern suburbs. Recognising and protecting the post-settlement cultural heritage is fundamental to this master plan.

Key initiatives include:

- Where possible protect and restore post-settlement heritage
- Link to sites of significance outside of the parks
- Collaborate with interested individuals and groups

- Recognise the communities, Friend's Groups and individuals who have helped to save conservation areas and heritage sites to enable their long-term protection
- Consider grants available to protect built heritage

Cultural survey and protection

It has been recognised that a full inventory of cultural and natural heritage elements be compiled prior to detailed design and planning. Regular site monitoring shall occur during construction works, as per statutory requirements.



The Tjilbruke Dreaming story is essential to understanding Kurna culture

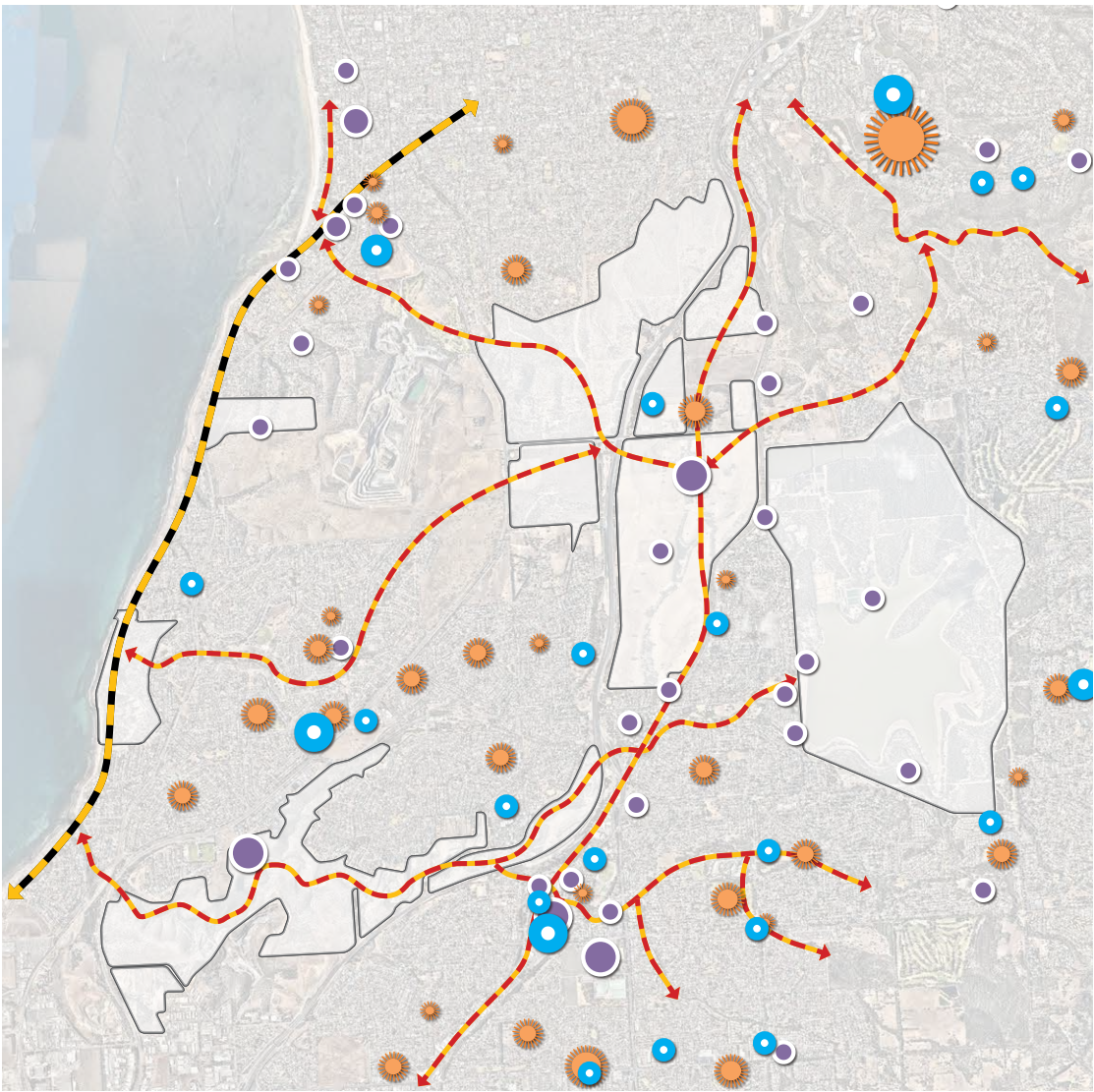


Figure 10: Cultural heritage & community infrastructure analysis diagram

4.7.4 Holistic education and research programs

Numerous education and research institutions and facilities are located around Glenthorne National Park that offer potential programmatic links.

These include:

- Suburban schools
- Early learning centres
- Primary schools
- High schools
- Colleges
- Tertiary education including Flinders University
- Scientific institutions including those associated with Flinders Hospital
- Adult education centres
- Libraries

Key initiatives include:

- Developing and implementing education and research programs and partnerships with education centres and community infrastructure
Programs shall support students of all-ages in authentic life-long learning, and outdoor education and ongoing research
Programs may be in partnership with other community, NGO and government programs that encourage learning and participation in Glenthorne National Park
- Develop formal and informal structures and partnerships that provide opportunities that support the goal of life-long learning

Programs may relate to:

- Kaurua culture and history
- Post-settlement history
- The natural environment
- Nature pedagogy and nature play
- Landscape regeneration practice
- Outdoor classrooms
- Biodiversity and cultural stewardship
- Natural science
- Agricultural education
- Creative educational opportunities
- Conservation projects
- Encourage collaborations
- Citizen science
- Age-friendly grants to support participation
- Reef-watching activities
- Greening Marion
- NRM engagement activities
- Duke of Edinburgh Award
- Youth Environment Council (NRM)
- Outdoor and physical education and lifestyle



There are many opportunities to engage school children in educational programs linked to the national park



The Cove Civic Centre, Hallett Cove, is a great piece of community infrastructure that can connect to Glenthorne National Park

4.7.5 Recreational links and programs

There are a variety of recreation activities that are currently well serviced within the Glenthorne National Park precinct.

New recreational activities will complement existing facilities, have a low impact on the environment, and be suited to the natural character of the park in which it is located.

An integrated approach to connecting with existing recreation programs and establishing new programs shall be undertaken.

Existing plans and programs to be considered include:

- City of Onkaparinga – Sport and Active Recreation Plan
- Walking SA – Adelaide 100 Plan
- Regional public health plans

Key initiatives include:

- Researching and developing a ‘Community Well Being Economic Tool’
- Programs to enable older people to age well through activity, learning, volunteering and social connections
- A Nature Play destination that provides a hub for educators
- Encouraging multi-day expeditions with camping and programmed activities
- Volunteering initiatives including through Friends groups and Council facilities and programs
- Accredited volunteer program for young people
- Supporting the proposed BMX facility in O’Halloran Hill Recreation Park
- Enhancing ‘Riding for the Disabled’ facilities
- Promoting safe aquatic recreation at Happy Valley Reservoir



O’Halloran Hill Recreation Park is an emerging destination for bike sports, amongst other activities



An early proposition for aquatic recreation within the Happy Valley Reservoir

4.8. Commercial partnerships

Commercial partnerships may be considered and will be determined based on the value that they can add to both the environment and the community.

Any development proposal shall be reviewed against how successfully the proposal aligns with the master plan's vision and guiding principles.

4.8.1 Tourism opportunities

Nature-based tourism shall be a focus for generating activity within the new national park.

The sharing of Kurna cultural heritage is a potential opportunity for tourism activities and the economic participation of Kurna people in tourism related hospitality.

Recreation facilities associated with O'Halloran Hill Recreation Park have the opportunity to generate a sustainable market for coffee and food vendors.

4.8.2 Natural earth burials

There is increasing interest in the concept of natural earth burials and some in the community have suggested that the Glenthorne property could potentially accommodate the practice in partnership with a commercial provider.

At the time of writing this master plan, there is insufficient information about the physical requirements for natural earth burials, and no specific potential locations have been identified.



A range of camping opportunities are proposed in Glenthorne National Park

5. Glenthorne Property Master Plan

Key

- 1 Glenthorne 'Hub'**
New visitor information centre, Kurna culture and history interpretive and education hub, adaptive reuse of existing sheds, group accommodation and community facilities, events lawn.
- 2 Property access**
Upgrade existing driveway off Majors Road as the main visitor entry with new low impact, water sensitive car parking. Establish road connection to ranger station and to internal car parks.
- 3 Heritage precincts**
Protect and restore heritage assets incorporating interpretive and educational elements.
- 4 Nature play and picnic areas**
An open parkland setting with passive recreation and picnic areas, shelters and toilet facilities, large open nature play area along creek corridor and embankment, enhanced pond with viewing decks/birdhides; productive orchard and potential community garden/nursery.
- 5 Wetland**
Naturalise dams to create a thriving wetland for improved biodiversity and habitat with passive recreational opportunities such as picnic and viewing areas, boardwalks and pontoon.
- 6 Camping**
Small short-stay bush camping site. Incorporate flat areas for tents with shelter, fire pit and toilets.
- 7 Creek rehabilitation and nature play**
A mix of creek revegetation and restoration for erosion control with areas for low impact nature play, seating areas, interpretation.
- 8 Trail network**
Trail network with a diverse range of experiences, suitable for walking and cycling.
- 9 Revegetation**
Creekline riparian, grassy woodland, and buffer planting. To be informed by the biodiversity and revegetation management plan.
- 10 Stormwater swales**
Establish natural swales to reduce erosion, provide habitat and improve downstream water quality.
- 11 Kurna ceremonial space**
A unique space for immersive cultural performance, ceremony and cultural practices.
- 12 Grey Box open grassy woodland regeneration site**
An ecosystem restoration site located in proximity to well established revegetation & heritage listed remnant Grey Box.



5.1. Glenthorne 'Hub'

The Glenthorne 'Hub' represents the heart of the Glenthorne property and a gateway to the broader national park precinct, with operations happening out of the new park ranger station located there.

The 'Hub' is both a destination for education and learning, but also a social place with community events and enterprises activating the new visitor centre and re-imagined sheds, with a high quality public realm area.

5.1.1 An integrated multi-functional visitor centre

A new visitor centre building will provide information services that cover environmental, educational and recreational activities.

Integrated cultural interpretation shall take a holistic view of Kaurua cultural heritage and post-colonial settlement, highlighting the ways we can all work together to shape a sustainable future.

The new building can provide community facilities such as multi-functional rooms for training.

There is potential to relocate ranger operations to the new building in the future.

5.1.2 Existing buildings and 'adaptive reuse'

The Glenthorne property has numerous built and natural assets that add to the rural character of the setting, many of which are foundations upon which the park can be created.

There is an opportunity to adaptively reuse existing sheds for creative purposes, such as accommodation, hospitality, community markets, education and a whole variety of potential uses and activities.

There will be an Expression of Interest (EOI) process seeking proposals from organisations or businesses looking to establish ventures using the upgraded buildings, including the steel sheds and the Physiology Lab, the latter of which will be challenging given its specific original function.

Buildings deemed not fit for purpose will be demolished.

5.1.3 Landscaped public realm

At the centre of the Glenthorne Hub is a large multi-use landscaped park suitable for community events and public use.



Artist's impression: Glenthorne 'Hub' and visitor information centre

Irrigated turf areas and large shade trees will provide a comfortable place for picnics, markets, events and performance, outdoor learning, and recreation.

In addition, paved areas around the re-used buildings and new visitor centre will provide hardscaped seating areas to activate the edges of the 'Hub' and provide passive surveillance of the area.

In addition, infrastructure services including new lighting will improve community safety and allow for activation of the 'Hub' at night time.

Glenthorne 'Hub' Plan

Key

- 1 Ranger station**
Potential to integrate with future visitor centre.
- 2 Low-impact car parking**
Integrated with Water Sensitive Urban Design (WSUD).
- 3 Buffer planting**
Retain existing woodland with new revegetation to provide buffer and screening along Majors Rd.
- 4 New visitor centre**
Integrated, sustainable, multi-functional building.
- 5 Event lawn and outdoor learning hub**
High quality public realm precinct with irrigated lawn, gardens, advanced trees, hardscaped areas, outdoor public furniture, lighting and services infrastructure.
- 6 Repurposed buildings**
Explore options for 'adaptive reuse'.
- 7 Heritage precinct**
Protect & restore heritage assets. Provide interpretive & educational elements.
- 8 Creek rehabilitation and nature play**
A mix of creek revegetation with areas for low impact nature play incorporating art, interpretive elements and seating. Retain historic orchard trees.
- 9 Productive orchard and community garden**
Supplement historic orchard trees with new productive trees. Potential for this area to become a community garden / food forest in the future.
- 10 The pond**
New viewing areas / bird hides.
- 11 Picnic area**
An open parkland-setting with passive recreation and picnic facilities.
- 12 Heritage tree and interpretive signage**
Protect and interpret 500 year old Gum tree.



Glenthorne 'Hub' Character



'Adaptive re-use': Potential for cafe & dining



Potential for school camps



Potential for creative industries / startup enterprises



An activated landscaped public realm for community events and use



Social enterprise should be encouraged to create community buy-in of the development



Community gardening for education & fun

5.2. Vehicle access

Vehicle movement has been designed to allow for universal access to a range of destinations within the property.

5.2.1 Upgrade Majors Road intersection

Entry into and out of the property will require upgrades to Majors Road, including turning lanes, and with park entry signage.

The road reserve will be upgraded to provide for a continuous off-road shared-use path between Lonsdale Road and Blacks Road.

Future development of the intersection design will need to consider any future road works requiring consultation with DPTI.

Consideration should also be given to reducing the Majors Road speed limit to 60km/h.

5.2.2 Retain and restore existing driveway

The existing driveway is recognised as providing an attractive and historically appropriate entrance to the new park. Improvements shall be made to create an 'entry statement' into the GNP at the Glenthorne property. This driveway shall be maintained as one-way in only due to its narrow width.

5.2.3 Parking incorporating WSUD

There are a number of new carparks proposed that will provide universal access to the proposed destinations within the park.

New car parking shall be low-impact, sensitive and incorporate WSUD initiatives such as swales and rain gardens.

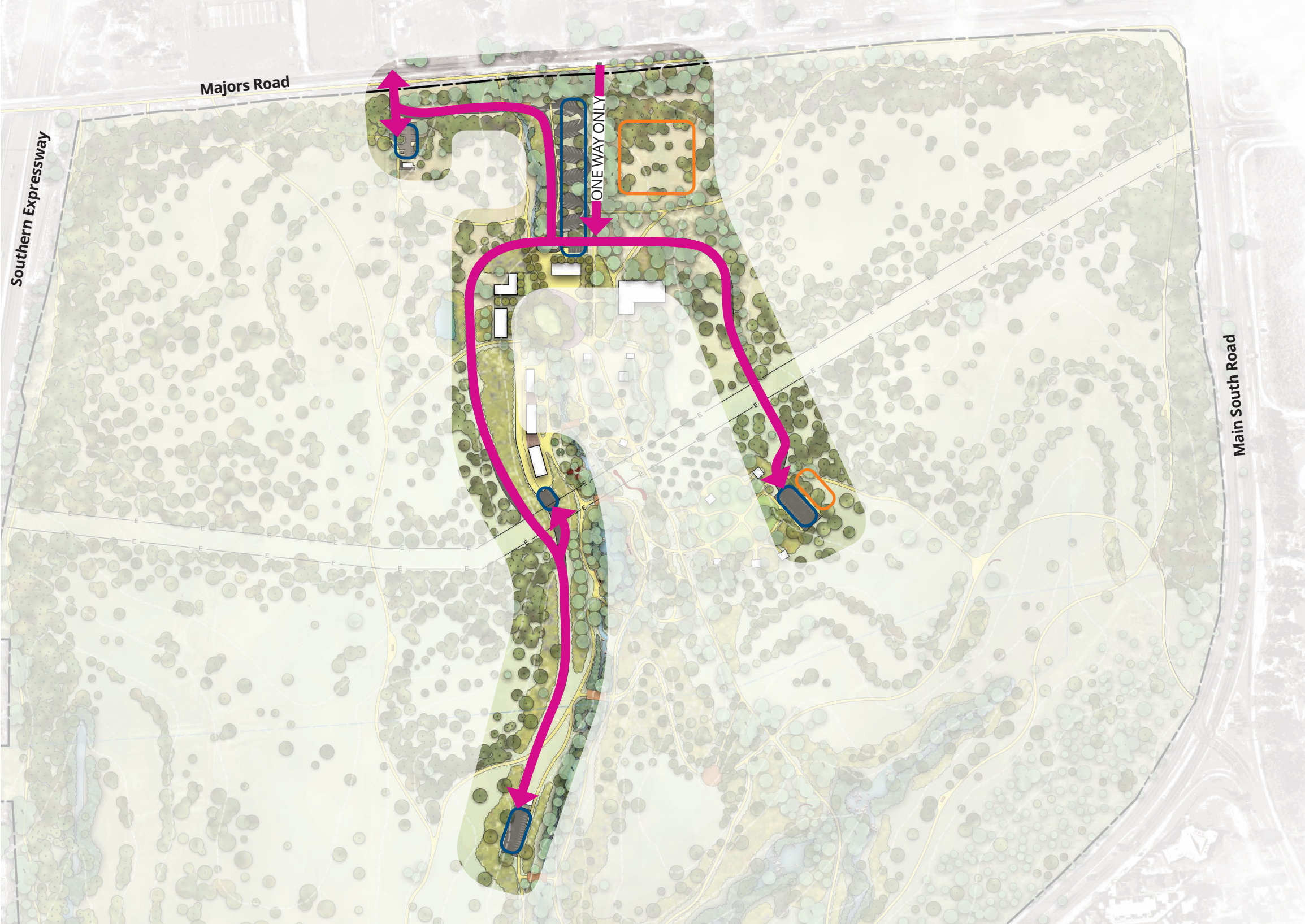
Provision shall be provided for bus drop-off areas and parking.

Potential overflow parking or parking expansion have been nominated on the plan opposite subject to detailed design.

5.2.4 Sealed roads

New roads will also be low-impact however some will require earthworks including cutting and filling into the existing natural contours.

Some retaining and/or planted batters may be required and will be designed in a way that is sympathetic with the natural surroundings.



LEGEND



Proposed vehicle access



Proposed car parking



Potential overflow parking / expansion

5.3. Heritage precincts

The property contains a number of state heritage-listed structures from the nineteenth century including the stone barn, the carriage house, the cool room or cellar, the underground tank, the stone-lined well, the site of Lizard Lodge and Glenthorne House, the area known as Glenthorne Flat, several nineteenth century trees identified as significant and the site of the original fruit orchard. Other features included the CSIRO-era glasshouse.

The master plan proposes interpretation of this heritage along with protection of and where appropriate, restoration for adaptive re-use.

Additional interpretive nodes shall be created at the munitions buildings site, the 500 year old Gum Tree, and other areas for natural/cultural interpretation.

5.3.1 Kaurna culture and natural heritage

Interpretation shall recognise the importance of Kaurna east-west and north-south links across the broader landscape.

Interpretive nodes shall highlight the significance of water, plants, animals etc. to Kaurna culture and interpret their connection to Country.

5.3.2 Lizard Lodge and Glenthorne House

Nineteenth century heritage shall be protected and restored as well as interpreted. An outdoor 'museum/gallery' with high-quality sculptural, or digital interpretive elements will be developed across the site.

In addition to the structures, there are a number of existing orchard trees that contribute to the site's heritage. The master plan proposes to supplement these trees with new productive trees and a potential community garden to establish strong sustainable connections with the community.

5.3.3 Military legacy

The master plan proposes to protect, restore and interpret the munition buildings. There is an opportunity to use exterior building roofs as potential graphic wayfinding element.

There is also an opportunity to establish a memorial to recognise Glenthorne's role in the war efforts, particularly with respect to the importance of the Remount Depot.



Artist's impression: Restored munitions buildings

5.3.4 CSIRO legacy

The 1950's glasshouse is the only structure of this era worthy of retention. Although damaged, this glass house is considered worthy of inclusion in the heritage precinct in recognition of the achievements of Dr Riceman. There is potential for the glasshouse be restored and used for plant propagation.

5.3.5 Agricultural farming practices

The property has a long history as a pastoral farm and as a site for agricultural innovation and research which should be acknowledged and interpreted.

The theme of agricultural innovation can link with other educational themes around landscape regenerative practices and Kaurna cultural productive landscapes.

5.3.6 Recognising individuals and groups

There have been individuals and groups who have advocated for many years for the protection of the Glenthorne property and those people will be recognised through interpretation and exhibition.

5.4. Nature play, the pond and picnic areas

Nature play forms an important part of the master plan providing a space for multi-generational environmental & cultural interpretation, and a place for people to connect with family, friends and nature.

Scientific evidence has demonstrated the importance of outdoor activity and its contribution to the psychological and physiological development of children into healthy, resilient, empathetic and capable adults.

Play in nature reduces stress, enhances mood, improves cognitive skills and academic performance and even supports moderating the effects of ADHD, autism and other childhood illnesses.

A new nature playspace shall provide a range of diverse and inclusive play experiences, allowing for kids of all abilities and ages to explore, discover, interact and play in a safe yet challenging manner. It shall incorporate a rich variety of play experiences, consider parent and supervisor needs and provide appropriate amenities.

Picnic facilities shall be provided to satisfy community needs including enjoying peaceful surroundings, socialising and relaxing.

5.4.1 Passive nature play

Passive nature play is experienced through access to the creek corridor and incidental opportunities for play within areas of revegetated open grassy woodland.

5.4.2 Destination nature play

A destination nature playspace adopting state of the art play challenges for people of all ages and abilities shall be established. It shall be an integrated play environment which supports inter-generational play and builds in different levels of difficulty and mobility while providing materials which can be manipulated by children and adults.

5.4.3 Integrated art

Art shall be integrated into play elements and provide a fun, whimsical, interactive and educational experience with rich layering of environmental and cultural meaning.

5.4.4 Picnic facilities including BBQs

A picturesque and accessible recreation area will be developed in the heart of the property with picnic and bbq facilities and amenities such as toilets, shelter, drinking



fountains and furniture.

5.4.5 The pond

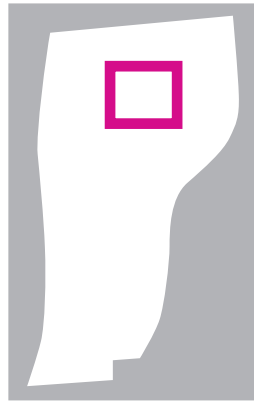
The existing pond which has been revegetated by the Friends Group, shall be enhanced with supplementary revegetation to improve its biodiversity and habitat value. Viewing areas and/or birdhides shall be established for low-impact recreation, education and research.

Key

- 1 Creek restoration**
Native revegetation and passive nature play.
- 2 Enhanced pond**
Enhanced revegetation and viewing areas/birdhides.
- 3 Protect and enhance orchard**
Retain historic trees and supplement with new productive trees and potential community garden.
- 4 Picnic and BBQ areas**
Shelters, BBQs and picnic settings.

- 5 Toilets**
Accessible, sustainable toilet facilities.
- 6 Integrated art**
Engage local artists to design interactive art/ sculpture.
- 7 Passive nature play**
Incidental opportunities for play.
- 8 Destination nature play area**
Custom designed play area for all ages and abilities.

Key Plan



Nature Play, Pond and Picnic Areas



Artist's impression: Nature play, pond and picnic areas

Nature Play and Picnic Area Character



Open woodland setting with grassed areas, shelters and picnic facilities



Passive nature play along the creek



Built play structures offer more challenging elements



Unstructured play is encouraged



Integrated art shall be part of the nature play planning and design



Play opportunities for all ages and abilities

5.5. Kurna cultural sites and interpretation

Recognition and celebration of Kurna cultural heritage and Connection to Country is a very important element of this master plan, and has been strongly supported by community and stakeholder feedback.

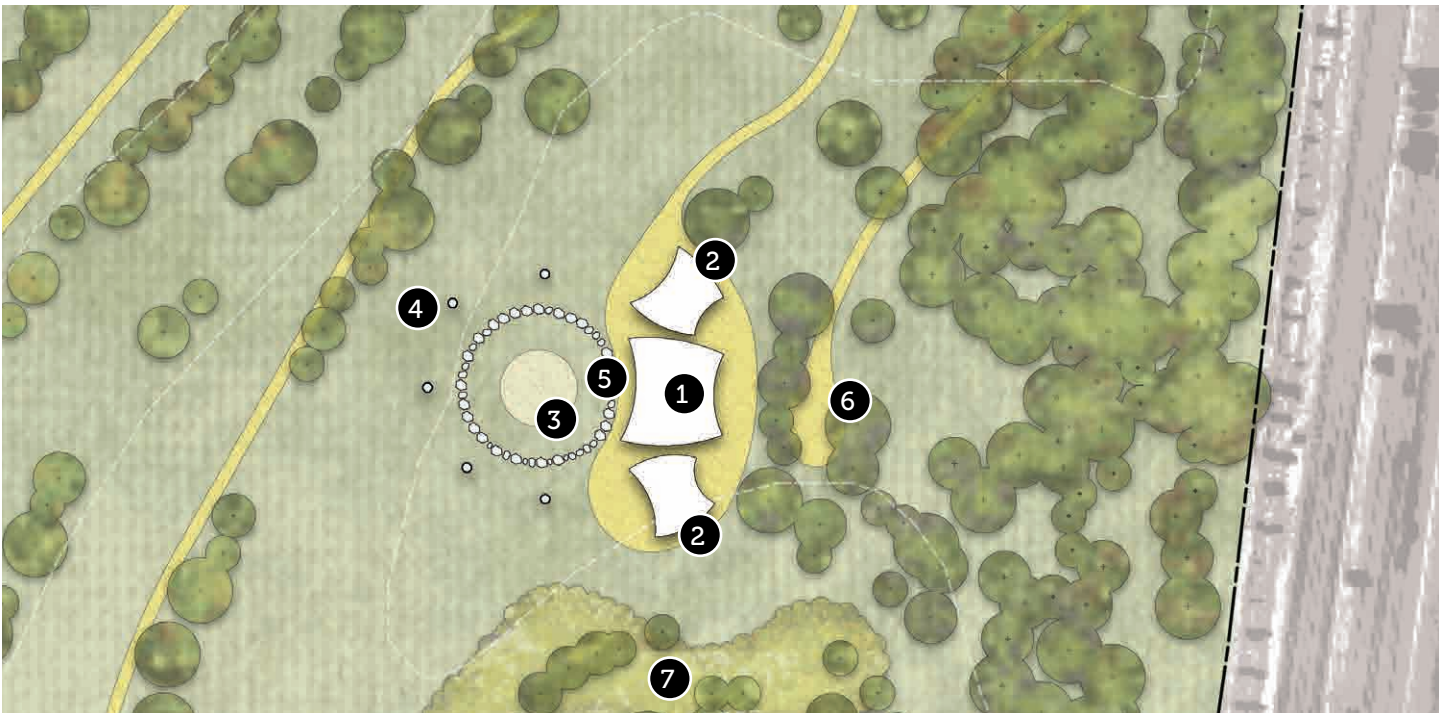
There are many interpretative and educational opportunities relating to Kurna culture and heritage. Additionally, there is huge potential to create sustainable economic & training opportunities for Kurna people, which may relate to cultural tourism, nature play artistic elements, traditional practices and food production, and management and operations of the Glenthorne National Park. Where appropriate, sustainable partnerships should be considered.

In addition to the shared facilities of the visitor centre, a Kurna ceremonial space will provide a platform for more immersive cultural tourism experiences and cultural ceremonies.

5.5.1 Wayfinding and interpretation

Kurna Nation will play a key role in the development of wayfinding and interpretive elements such as physical signage and digital applications relating to their cultural heritage and intellectual property.

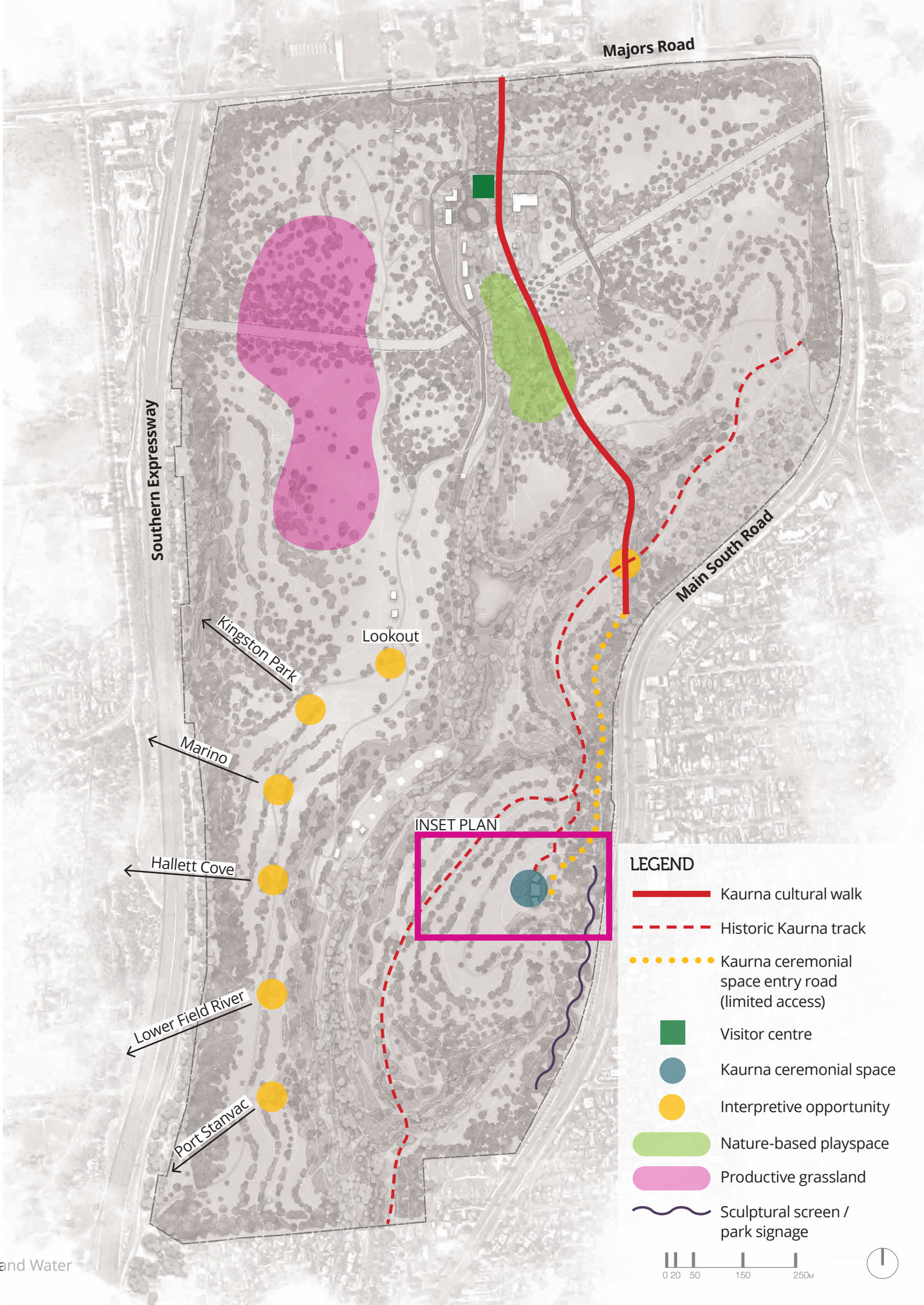
Inset Plan



Detail plan of proposed Kurna ceremonial space (N.T.S)

Key

- 1 Large 'wodli' canopy**
A large open air shelter structure for gathering.
- 2 Amenity facilities**
Enclosed building structures for toilet & changeroom facilities, and overnight occasional accommodation for Kurna Nation.
- 3 Dancing sand circle**
For cultural performances & ceremonies.
- 4 Cultural markers**
Vertical elements which align with wayfinding trees on western hillface.
- 5 Viewing area**
A gathering space to watch performances with potential deck and integrated seating.
- 6 Entry road and carpark**
Rubble road and car parking for Kurna Nation with drop-off area.
- 7 Buffer planting**
Screen planting to reduce effect of southerly winds.



5.5.2 Nature play

Kaurna artists have experience in developing culturally appropriate art for nature play spaces and will be engaged in the development of integrated art elements.

5.5.3 Cultural tourism

Exciting and engaging opportunities for sustainable cultural tourism exist across the Glenthorne National Park precinct.

Opportunities within the Glenthorne property may include but are not limited to the following:

- Cultural tours
- Small group short-stay camping
- Performance art at the Kaurna ceremonial space
- Programs relating to sharing of traditional knowledge, practices and food production

5.5.4 Kaurna ceremonial space

A new ceremonial and performance space will provide opportunities for unique, world-class cultural tourism experiences, while also providing a platform for Kaurna to conduct cultural ceremonies on Country.

The site nominated for this space is located at a traditional Kaurna crossroad, at the junction of the major north-south track, and the east-west movements along the creek corridor, and has spectacular views to the west and south. From this location, large existing gum trees dotted on the western hillface indicate the direction to places along the coast with significant cultural meaning.

The proposed Kaurna ceremonial space will consist of a large canopy that provides a gathering space around a dancing circle, smaller buildings with amenity facilities and flexible occasional accommodation for Kaurna people when required.

It is envisioned that the space will be used by Kaurna groups such as performing arts organisations, and as an immersive space for the sharing of traditional knowledge and practices.

The space will link with and complement other infrastructure supportive of cultural activities, including the visitor centre, campsites, and productive grassland.

5.5.5 Culturally sensitive areas

Numerous culturally sensitive areas have been identified as a result of the cultural survey undertaken of the site. Future works must consider these sensitive areas in design development, with ongoing Kaurna engagement.



Artist's impression: Kaurna ceremonial space

5.5.6 Productive grassland

Recent innovative activities to revive the practice of Indigenous agriculture has captured national interest supported by recent publications.

Indigenous grains and tubers, such as kangaroos grass and wild yams are sustainable, healthy and tasty alternatives to current popular foods.

Production of native edible plants on this site will provide Kaurna with employment opportunities as well as educational opportunities for the general public.

Sustainable partnerships may be considered when developing a business plan for the productive grassland, and harvested food & products could be sold at the Glenthorne 'Hub'.

5.5.7 Sculptural screen/park signage

There is an opportunity for a sculptural element within the park boundary that identifies the property from Main South Road, while providing partial visual screening and noise attenuation to the Kaurna ceremonial space.

5.6. The wetland

The existing dams provide a permanent body of water for most of the year, enriched by a nearby natural spring. Improvements aim to enhance biodiversity and habitat value, improve the natural aesthetic and provide low-impact passive recreation opportunities.

5.6.1 Naturalise dams

Bulk earthworks and shaping will be required to create a functional wetland environment. Additional planting, rocks, and salvaged logs for habitat shall be installed.

5.6.2 Improve biodiversity and habitat

The enhanced wetland will provide a thriving habitat for native animals.

Boardwalks and other recreational infrastructure shall be design and located to support animal habitat.

5.6.3 Passive recreation

Passive recreation facilities such as boardwalks, viewing areas and a possible pontoon for water access are proposed at the wetland. Providing this infrastructure will encourage sensitive and appropriate public use of the area to ensure minimal impact on the natural system.

5.6.4 Aquatic recreation

Aquatic recreation eg. kayaking, canoeing, SUP, etc. is not recommended as it was determined habitat restoration took precedence at this site and these types of activities are encouraged at Hallett Cove Conservation Park marine area and are likely to be provided at Happy Valley Reservoir in the future.



Artist's impression: Rehabilitated wetland

The Wetland and Central Area



Key

1

Carpark with toilet
Internal carpark provides universal access to the wetland and viewing areas.

2

Hill lookout
Expansive southern views with potential interpretive node.

3

Possible interpretive node
Potential to interpret nature education, Kurna culture, and themes around landscape regeneration and water quality.

4

Boardwalks
Structures to provide access around the wetland, seating, shelter and viewing areas.

5

Pontoon
Possible pontoon to provide access to the water.

6

Munitions buildings interpretive node
Protect, restore and interpret heritage buildings.

7

Viewing areas
With possible interpretive node and picnic areas.

8

Naturalise wetland
Re-engineer dams to create an effective and efficient wetland ecosystem.

9

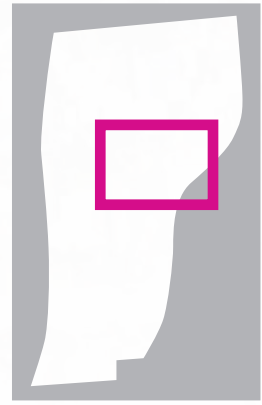
Stormwater swale / WSUD
Naturalise stormwater swales to reduce erosion and improve downstream water quality.

Potential leaky weirs based on landscape regenerative principles to slow down water velocity and improve soil biome.

10

Contour swale tree plantings
Retain and enhance existing contour swales and establish tree planting for habitat, windbreak and buffer screening to roads.

Key Plan



Interpretive Nodes and Viewing Areas



Artist's impression: Interpretive nodes and viewing areas

5.7. Camping

Camping will be permitted in the lower reaches of the property in an area of relatively flat ground, providing a unique camping area managed by the National Parks and Wildlife Service South Australia within close proximity to the city.

It is envisioned that the small-group camping facilities could be utilised for schools or organisations with a focus on youth care or outdoor education and provide a unique experience for children and adults to camp in and engage with nature in a way that they may not have had opportunity to do so close to Adelaide.

There is an opportunity to integrate camping into multi-day expeditions that spans the wider Glenthorne National Park precinct and provides a range of outdoor educational experiences.

Low-impact, sustainable infrastructure shall be provided to support environmentally sensitive camping, including sustainable toilet & food preparation facilities, shelter, solar power and fire pit.

Consideration will be given in the park management plan as to how camping will be managed.

5.7.1 Events

Camping may be organised for special events, such as ceremonial occasions for Kurna Nation, night sky stargazing, etc.

5.7.2 Commercial operation

Commercial operators may be considered for small-group organised camping.

5.7.3 Multi-day expeditions

The proposed campsite may form part of an educational program which includes a potential multi-day expedition spanning the whole or parts of the Glenthorne National Park precinct.

The rich variety of outdoor experiences available in the various parks of the national park lends itself to exciting and engaging physical and educational opportunities linked to school, institutional or organisational courses and programs.



Artist's impression: Creek restoration, nature play and organised camping

5.8. Creek rehabilitation and nature play

Rehabilitation of the creekline is proposed including understory and tree revegetation and naturalisation of the creek aesthetic. This aims to provide enhanced biodiversity and habitat for native wildlife.

In addition, incidental and passive nature play is also encouraged within the park and along the creek.

It should be noted that finding a balance between the creek restoration and revegetation works and providing opportunities for nature play is an important priority.

This may include 'no-go' habitat areas. These areas shall be clearly defined based on outcomes of the park management plan.

5.9. Trail network

A new trail network will include walking-only trails, as well as shared-use trails around the perimeter of the park.

A sealed Class 1 DDA compliant trail that loops around the creek corridor will be provided.

Natural surface trails will use low impact materials that reflect the local environmental context.

A hierarchy of trails will be established that will vary in width and finish.

Careful consideration of new habitat and landscape regeneration must be given to final trail alignments so that new biodiversity areas are established successfully.

5.9.1 Class 1 loop trail

A class 1 DDA compliant trail loop along creek will be provided.

5.9.2 Perimeter shared-use trail

A shared-use trail (pedestrians and cyclists) will be provided around the perimeter of the site and connect to the surrounding shared-use-path network. In addition, cyclists may be permitted along the ridgeline that connects to the munitions building node.

Signage will instruct users which paths are permitted for cyclists.

5.9.3 Class 2, 3 & 4 trails

Due to the steep grades of the site, trails will vary in difficulty.

5.9.4 Lookouts, viewing areas and seating

Lookouts and viewing areas will be provided to take advantage of expansive views and vistas. These shall be low-impact structures that touch the earth lightly and fit with the natural character of the park.

Opportunities for seating along the trails will be provided at regular intervals.

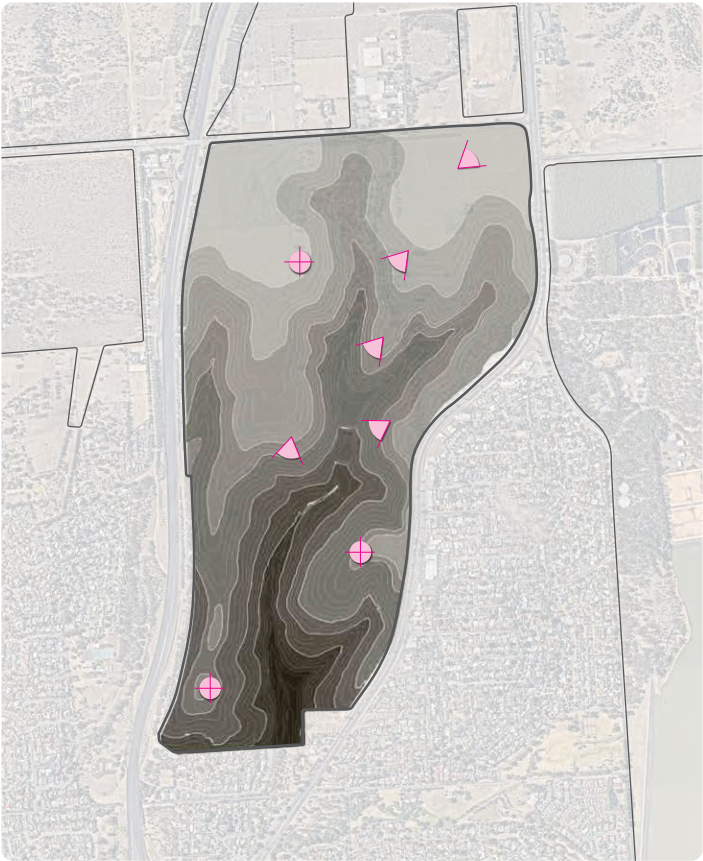
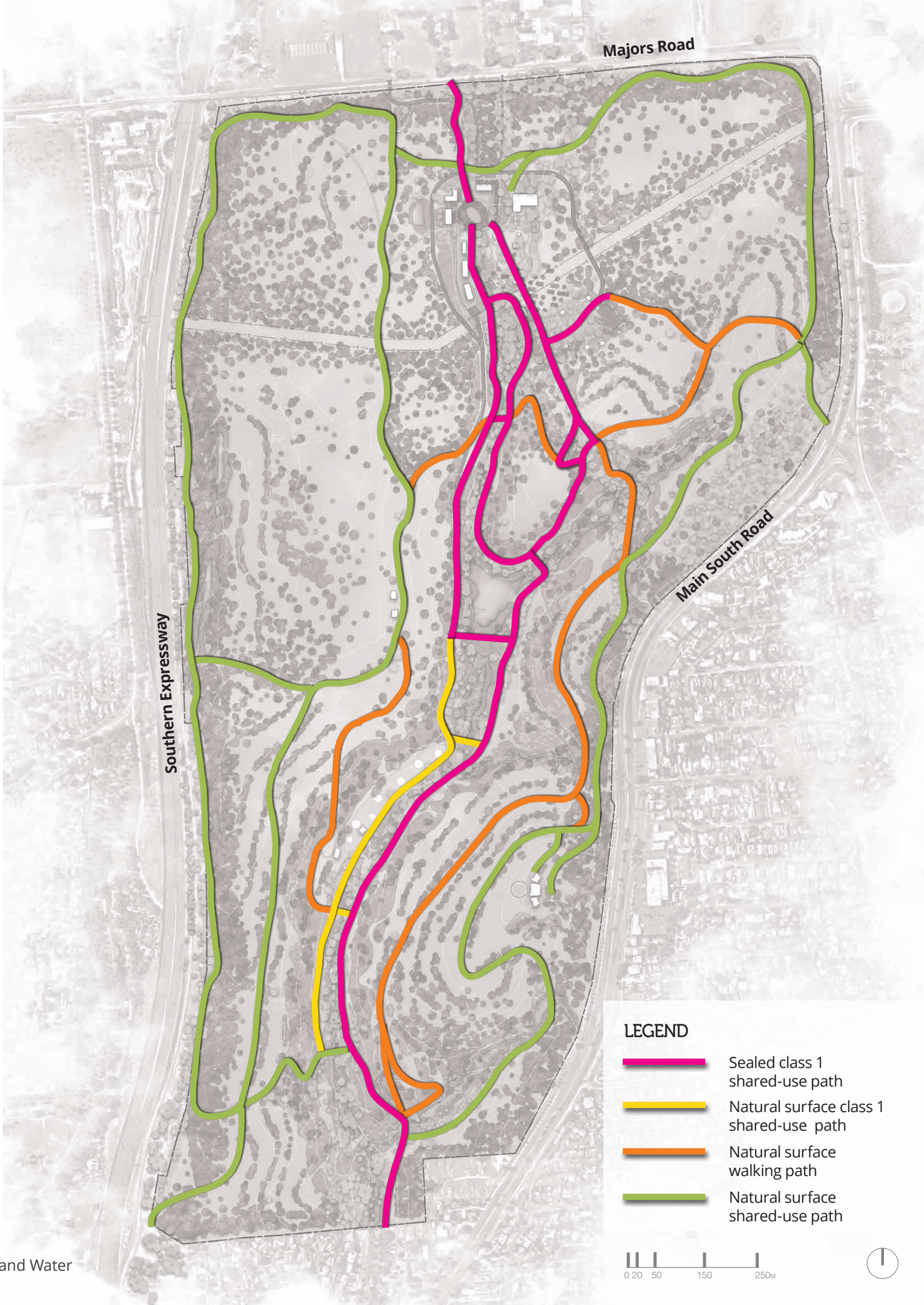


Diagram illustrating existing contours and viewing areas



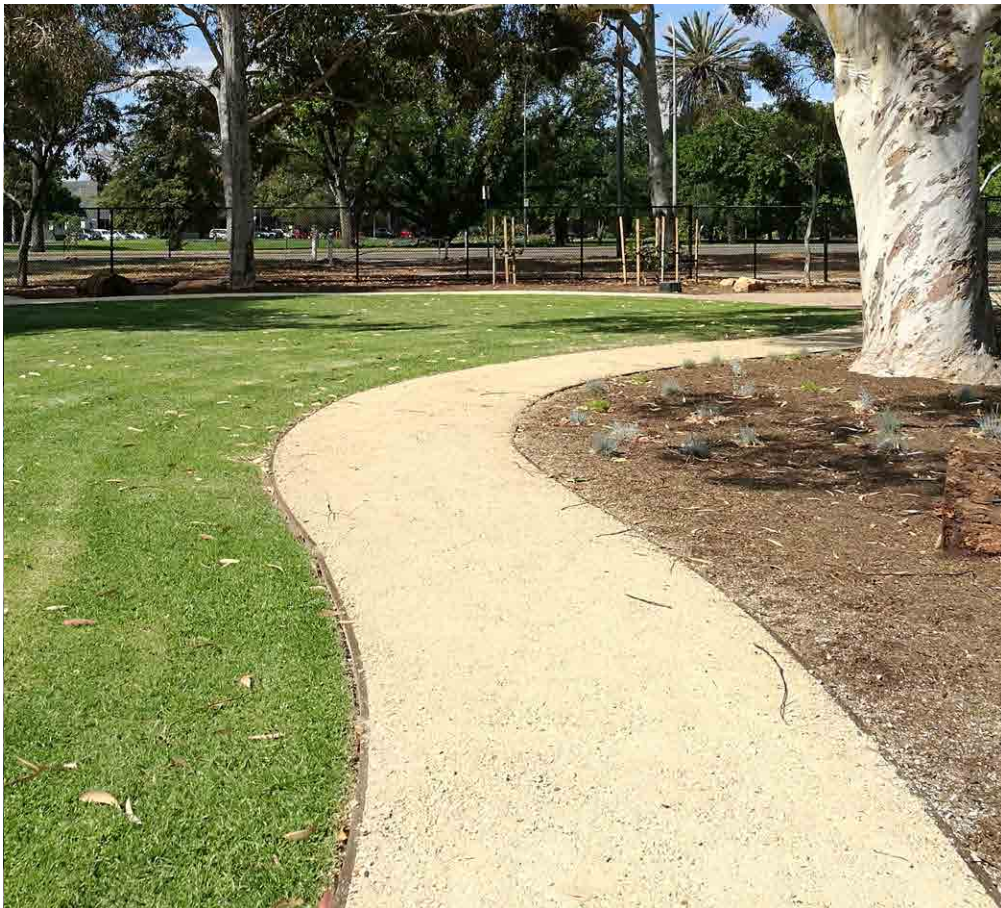
Trail Network Character



Asphalt shared-use trail. Consider red coloured, or 'green' asphalt



Natural surface, meandering trail



Rubble path with timber edging



Informal rubble path with no edging



Natural stone used as edging and steps where required



Exposed aggregate concrete path

5.10. Revegetation, biodiversity and habitat

Revegetation efforts will be focussed on the quality and quantity provided through the precinct, and its ability to be maintained through time, both in the face of climate change and of shorter-term vegetation dynamics and response to risks such as drought and fire.

Restoration of the creekline within the Glenthorne property will provide increased habitat while improving downstream water quality,

The establishment of Grey Box grassy open woodlands will additionally improve fauna habitat with a strong focus on attracting native birds.

A perimeter fence shall be maintained to deter pests entering the park.

Seasonal grazing may be considered as an appropriate way to manage habitat structure maintenance as well as invasive weeds and high grasses with their associated fire risks.

A revegetation staging plan will be developed in conjunction with the development of the park management plan to guide revegetation works across the site and the Glenthorne National Park precinct, and will be informed by environmental science and biodiversity experts. The management plan will define all maintenance and operational strategies to achieve the vision of Glenthorne National Park.

Existing revegetation will be maintained and supplemented with additional provenance plant species where appropriate.

5.10.1 Creekline riparian planting

Restore the creekline with a relatively dense understory and tree plantings along the creekline

5.10.2 Grassy open woodland planting

Open grassy woodlands with minimal understory will dominate much of the site.

5.10.3 Buffer planting

Buffer trees only with no understory to the boundary of the site will be developed in accordance with fire management operations to be covered in the park management plan.

5.10.4 Hub public realm landscape

New garden beds and shade trees located within the 'Hub' adjacent to and surrounding new/repurposed buildings shall be robust, low maintenance species suited to the climatic conditions. Both indigenous and exotic plant and tree species may be considered in detailed design to compliment the natural and cultural heritage of the site.

5.10.5 Contour drain planting

Retain and enhance contour swale planting with new trees to utilise passive irrigation and provide windbreak and visual screening of surrounding roads.

5.10.6 Easements

Consider low, spreading wildflower species and banksia heathland beneath powerlines and along desalination pipeline easements.

5.10.7 Productive grassland

An area has been nominated for the potential establishment of a productive grassland which provides opportunities for Kurna people to cultivate the landscape in traditional practices.

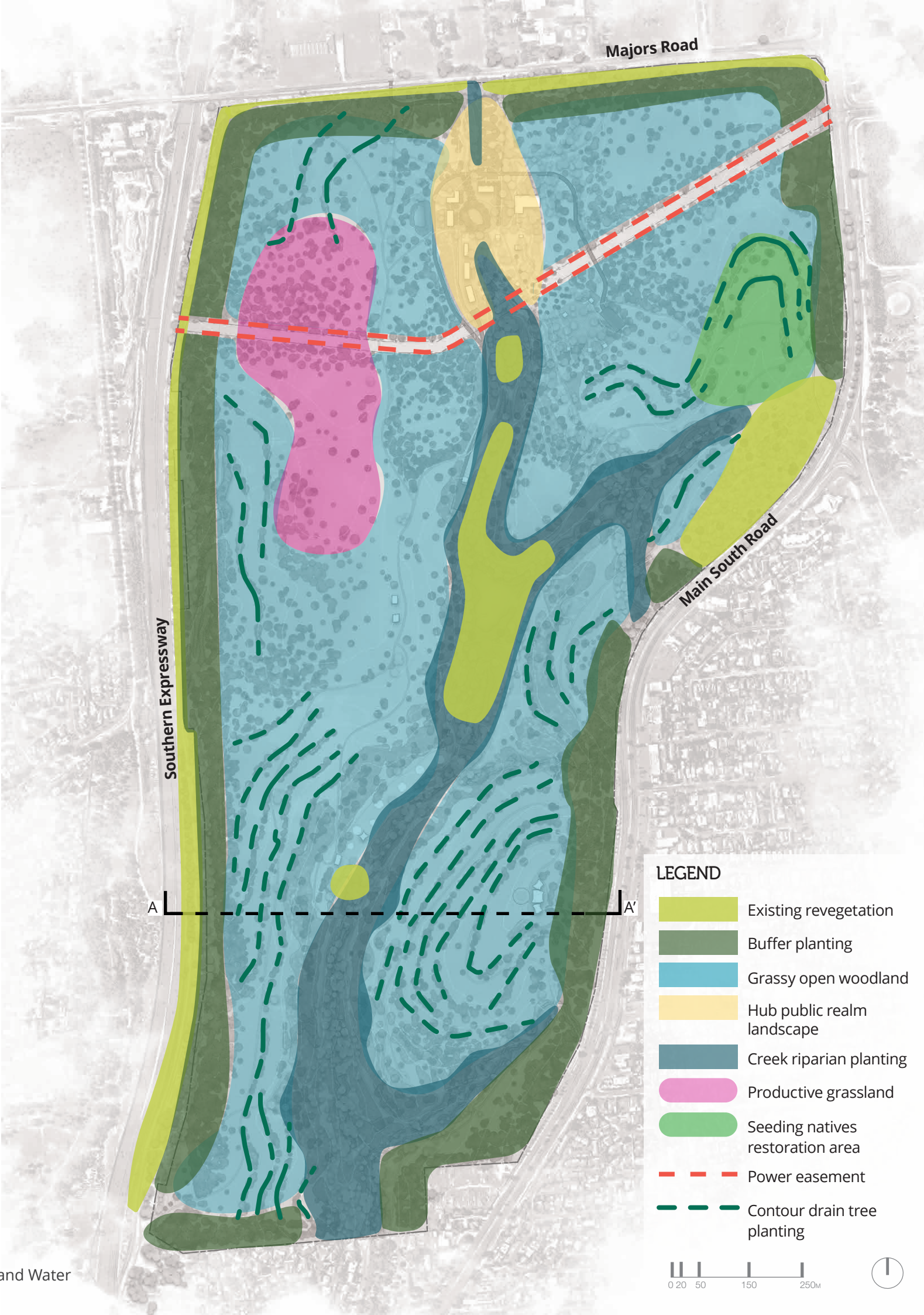
5.10.8 Demonstration areas and interpretation

There are opportunities to establish environmental 'demonstration areas' for educational purposes. This may include landscape areas nominated for pre-european plant species communities, specific habitat zones, native bee and butterfly attracting plants, or landscape regenerative techniques, etc.

The master plan acknowledges the many opportunities for interpretive elements relating to environmental restoration of the Glenthorne property.

5.10.9 Seeding natives ecosystem restoration area

The potential exists to establish a dedicated restricted access area for the regeneration of native Grey Box grassy open woodland seeding to allow for long term seed collection and restoration of the broader landscape with local provenance stock.



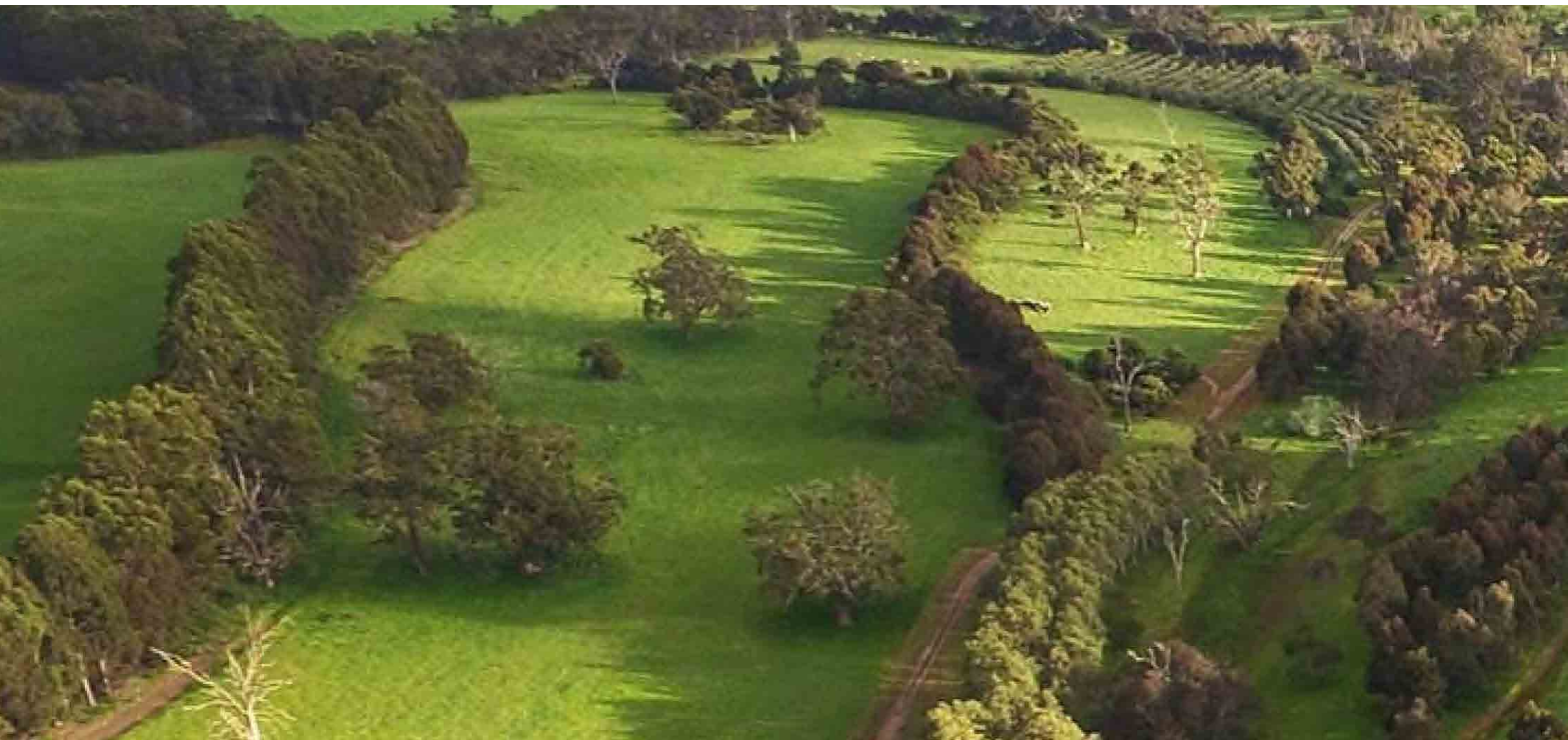
Revegetation Character



Grey Box grassy open woodland



Riparian planting along the creek corridor

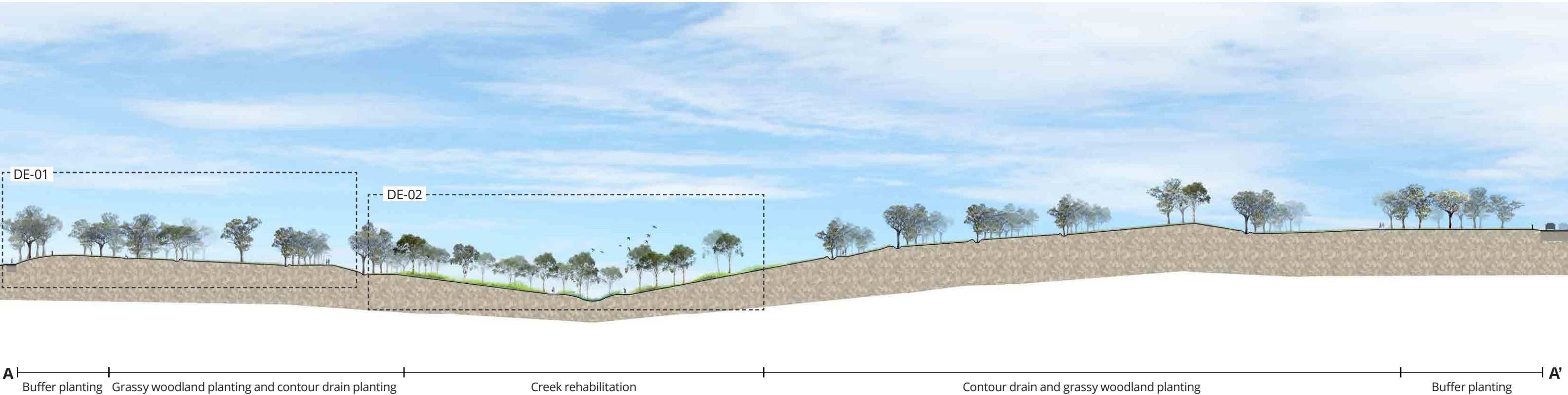


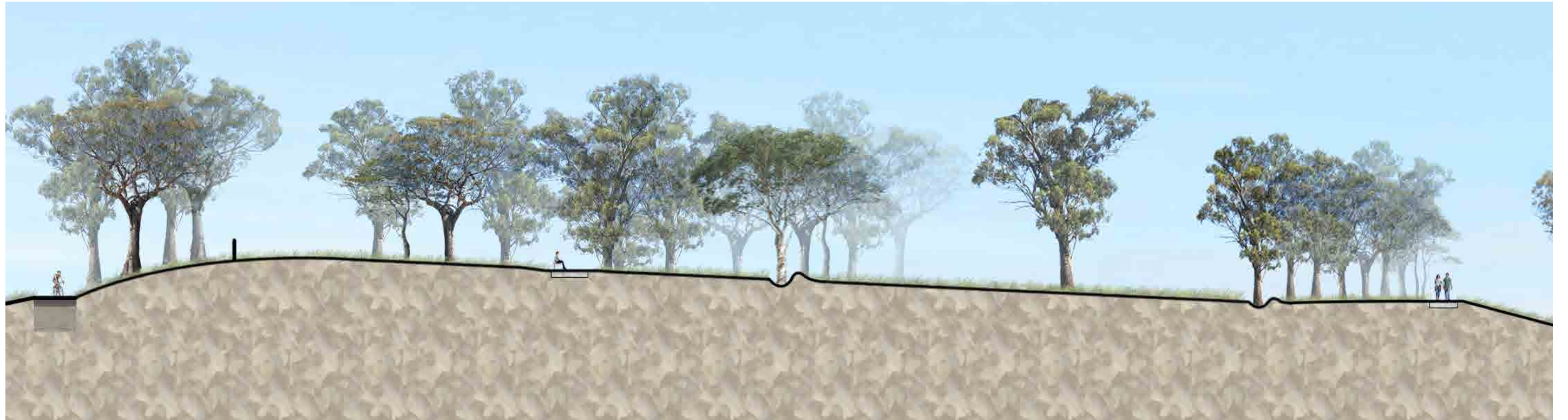
Tree planting along contour lines utilise passive irrigation and provide habitat



Potential for productive native grasslands

Typical Revegetation Landscape Section





DE01 ——— | Veloway | Existing revegetation | Buffer planting | Path | Grassy woodland planting and contour drain planting | Path | **DE01**



DE02 ——— | Tree and understory revegetation | Path | Riparian planting | Path | Tree and understory revegetation | **DE02**

0 3 5 10 25M

5.11. Water Sensitive Urban Design (WSUD) and improved water quality

There are a number of existing stormwater culverts from adjacent roads providing runoff into the property.

Some of these stormwater swales are creating erosion and the water is considered to be polluted and contribute to downstream deteriorated water quality.

These swales shall be converted into natural swales with native revegetation, and a series of leaky weirs based on principles of landscape regeneration to slow water velocity and improve soil biome.

Possible educational features highlighting water pollution management in the environment and downstream impacts - i.e. sea grass degradation, can be provided.

Investigations into the potential for aquifer storage and reuse shall be undertaken.

5.11.1 Stormwater swales

Majors Road stormwater runoff shall be captured in a vegetated swale adjacent to the new car park.

This vegetated swale shall capture sediment and heavy pollutants before water then continues beneath the 'Hub' through existing pipe infrastructure to the top of the creekline and nature play areas.

Main South Road stormwater shall be captured in new naturalised swales consisting of potential leaky weirs. These are soft engineered 'natural' eco-structures designed to raise the water level of the creek, rehydrate the floodplain and rebuild vital aquatic and riparian habitat.

5.11.2 Water quality

Glenthorne National Park straddles two major urban catchments: The Sturt River catchment to the north, and the Field River Catchment to the south.

Water from the property's creek runs into the Field River Catchment, where sea grass degradation at the mouth of the river has been noted due to nutrient pollution.

Improving the water quality through the process of plant sorption will be achieved through the WSUD initiatives and riparian revegetation program.



Water Sensitive Urban Design (WSUD) Typical Landscape Section



Landscape Regeneration and Management



Landscape regenerative practices have the potential to restore soil biome



Leaky weirs are soft engineered 'natural' eco-structures



Seasonal sheep grazing can provide effective weed management while revegetation establishes



Rotational grazing can also provide opportunities for agricultural education



Rehabilitated wetland

5.12. Materials and architectural character

New architectural elements are proposed in the Glenthorne National Park Master Plan.

This includes but not limited to:

- A new integrated, multi-functional visitor centre
- Potential adaptive reuse of existing structures
- New lookout decks
- Footbridges, boardwalks and pontoon
- Shelters
- Toilet facilities
- Camping facilities
- Interpretive and wayfinding elements

The master plan recommends new architectural elements are sustainable, enduring, and have an architectural character and aesthetic fitting to the natural surroundings. They shall touch the earth lightly, while demonstrating best-practice in accessibility and inclusivity.

New buildings may adopt a contemporary design language and form while complementing and responding to the site's vernacular heritage.

5.12.1 Civil works

New civil works, including but not limited to new road and carparking, WSUD and drainage infrastructure etc. shall generally adopt a strategy of 'soft-engineering' and low-impact, sensitive interventions on the landscape.

Engineering structures shall be visually concealed or have an aesthetic fitting of the natural surroundings.

5.12.2 Materials

The materials used in the development of new landscape and architectural works shall be of an aesthetic fitting of the natural surroundings.

Local, robust, enduring and low maintenance materials are recommended.

New materials should be sustainable and natural where possible.

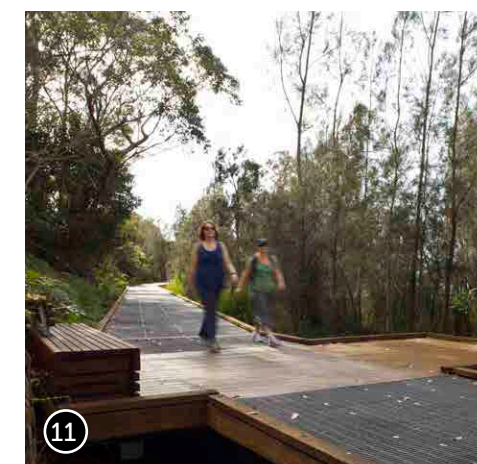
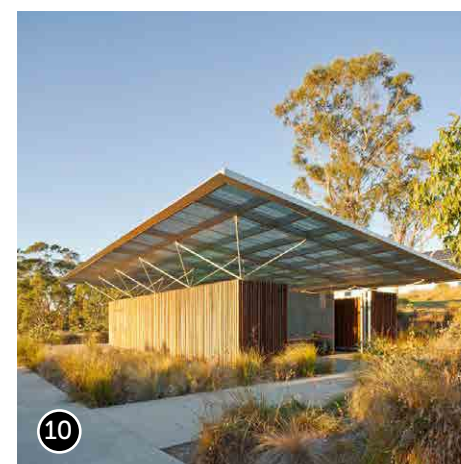
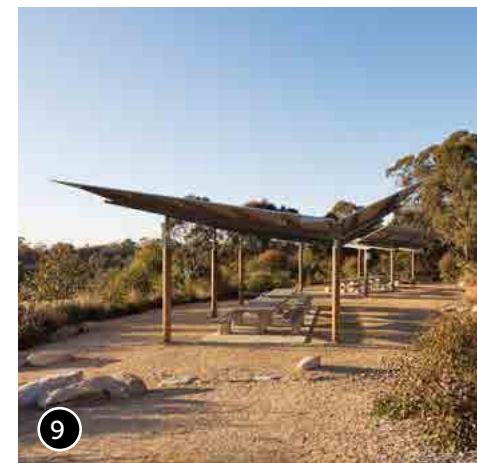
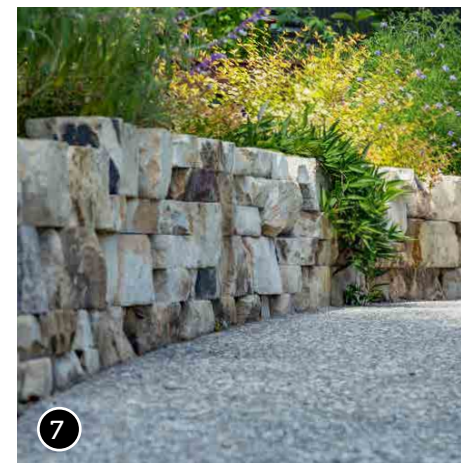
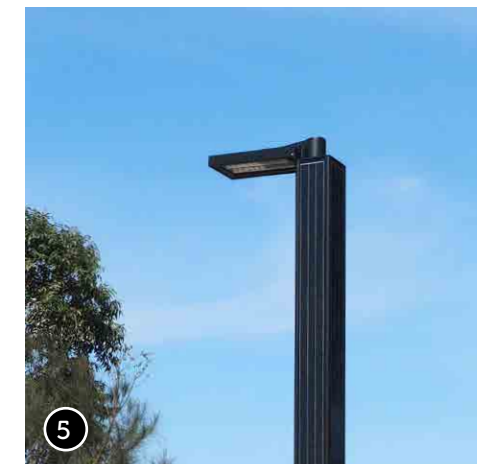
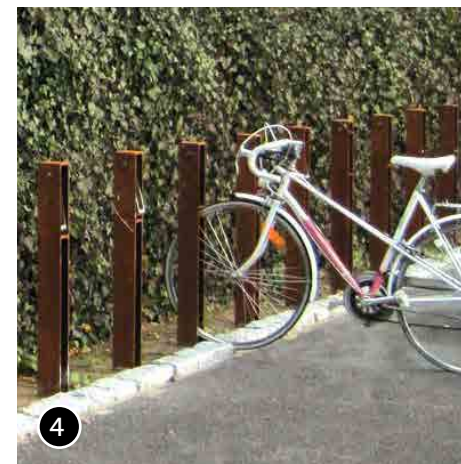
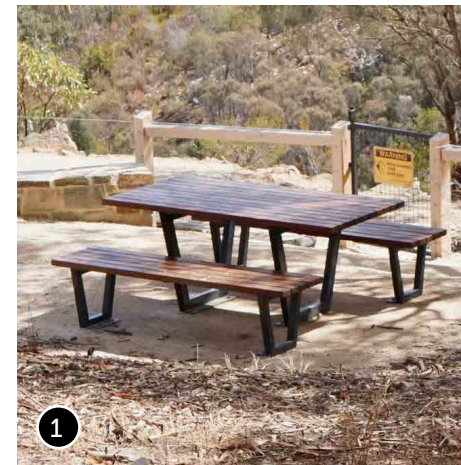
5.12.3 Landscape architectural character

Furniture and fixings

- 1 Picnic setting**
Hardwood timber slats and powdercoated steel or weathered steel frame, with a contemporary aesthetic.
- 2 Bench seat**
Similar natural & robust materials to picnic settings, with arm rests for accessibility & comfort.
- 3 Drinking fountain**
Drinking fountain stations shall be provided at the Glenthorne Hub & can provide interpretive information.
- 4 Bike rack**
Stainless steel or weathered steel bike rack station, with a contemporary aesthetic.
- 5 External lighting**
Robust pedestrian grade lighting with an elegant contemporary aesthetic and integrated solar power.
- 6 Timber bollards and internal fencing**
Seasoned Australian hardwood timber, with galvanised wire or galvanised steel tube where required.
- 7 Retaining walls**
Stone retaining walls minimised where possible. Carey Gully quarry or similar, sawn or random wallers.
- 8 Rocks and boulders**
Carey Gully quarry or similar, suitable rock for creek corridor, nature play & WSUD.

Structures

- 9 Shelter**
Elegant structure made of robust materials that sit lightly within the landscape and provide decent shade.
- 10 Toilet block**
A contemporary, sustainable and innovative building of robust materiality providing accessible amenities.
- 11 Boardwalk, footbridges and lookouts**
A combination of seasoned hardwood timber and fibre composite product, with handrails where required.
- 12 Birdhide**
Form that responds to site specific context. Potential laser-cut steel screening and use of hardwood timber.



6. Implementation

6.1. Introduction

The establishment of Glenthorne National Park will first require the development of a park management plan as discussed in section 4.1 of this report.

The development of Glenthorne National Park's new infrastructure and assets will begin immediately and in a staged process that will ensure the best outcomes for the environment and the community within the current budget allocations.

Although the focus of early stage development works will be on opening up the Glenthorne property to the public and the establishment of the 'Hub' as the new centre of the national park, upgrade and enhancement works within the other parks will continue to progress as outlined in section 4.2 of this report.

In addition, through the integrated development of the management plan and ongoing consultation with all stakeholders, including local government and the community, other works which assist in the establishment of the national park may be regarded as priority works. This may include works to improve connectivity and movement between parks and supporting open space, improvements to native vegetation across the landscape, and a coordinated approach to interpretive and wayfinding elements.

6.2. Glenthorne property: areas of potential early investment

Building on the momentum of public support for the new national park and the significant interest in the Glenthorne property as demonstrated at the highly successful community open day events it is proposed that a detailed implementation plan be developed, with input from the Glenthorne Partnership, that directs early investment into sites and works focussed on achieving safe and satisfying community access to the Glenthorne property.

Works should be selected on the basis of 'easy wins' where access to parts of the site can easily be achieved to showcase the unique qualities of the site and its potential.

These works include: site preparation and demolition, Majors Road upgrade, vehicle access and parking, revegetation, Glenthorne 'Hub', heritage precincts, picnic and nature play, pond area, interpretation and wayfinding, trail network and lookouts, wetland and boardwalks, WSUD and the Kaurna ceremonial space.

Key

- 1 Site preparation and demolition
- 2 Majors Road upgrade
- 3 Vehicle access and parking
- 4 Revegetation works
- 5 Glenthorne 'Hub'
- 6 Heritage precinct
- 7 Picnic and nature play
- 8 Pond area
- 9 Interpretation and wayfinding
- 10 Trail network and lookouts
- 11 Wetland and boardwalks
- 12 WSUD
- 13 Kaurna ceremonial space



ASPECT Studios

URPS