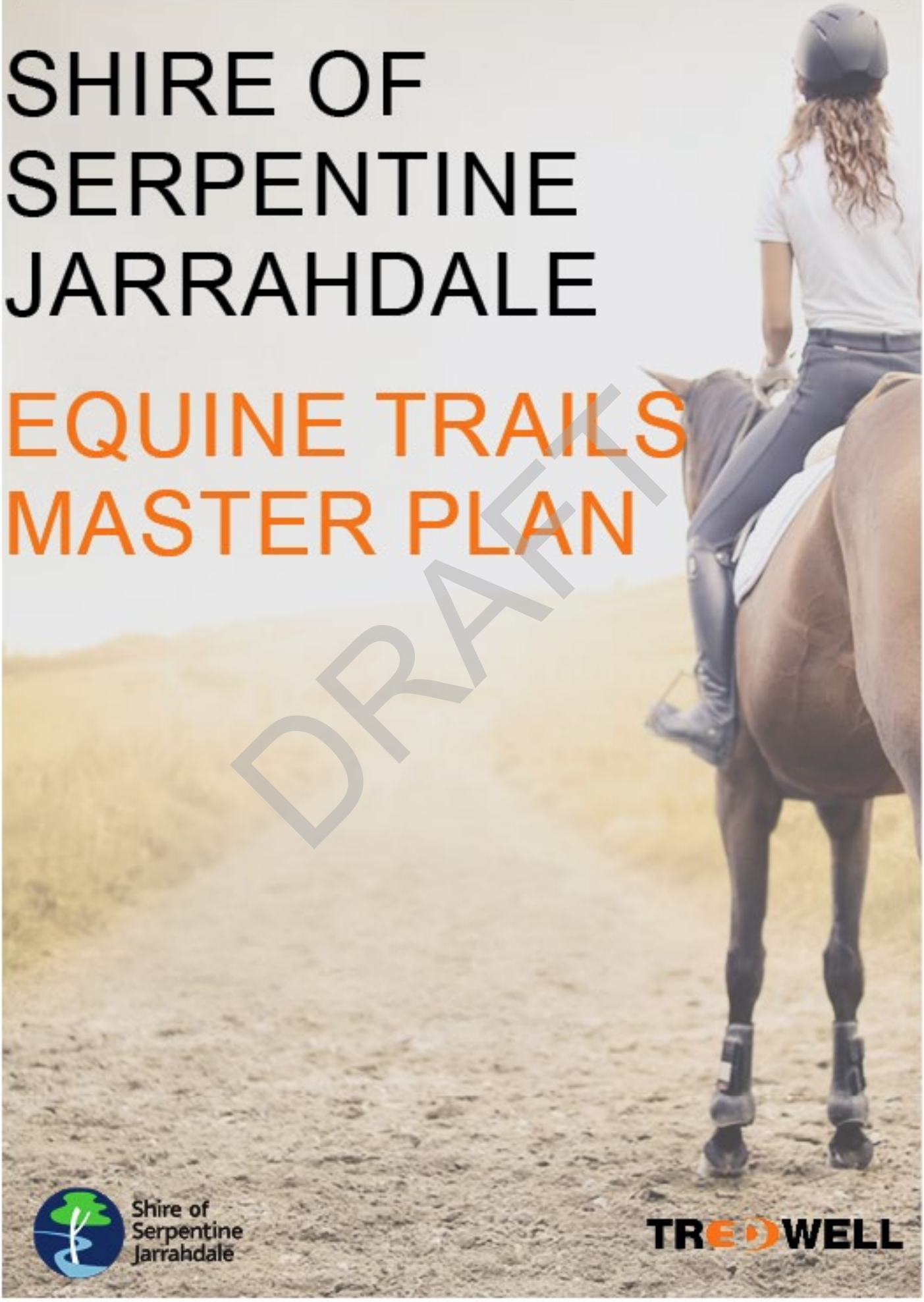
DRAFT REPORT - V1 DECEMBER 2021

SHIRE OF SERPENTINE JARRAHDALE

EQUINE TRAILS MASTER PLAN



Acknowledgements

Tredwell and the Council acknowledge that the Shire of Serpentine Jarrahdale is on the traditional country of the Noongar people. We recognise their cultural heritage, beliefs, and continuing relationship with the land, and pay our respects to elders both past and present.

We thank those who contributed their experiences, knowledge, and thoughts to the development of this document.

Version No.	Date	Title	Editor
V0	17/08/2021	Equine Trails Master Plan Draft Report	Tredwell
V1	13/12/2021	Equine Trails Master Plan Draft Report for Public Exhibition	Tredwell

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00 Executive Summary

The Shire of Serpentine Jarrahdale (SJ) has developed the Equine Trails Master Plan, with the aim to map existing equine trails and ensure adequate planning for the expansion of strategic equine trail networks throughout the Shire.

The key project objectives include the following:

- Establish where people are currently riding horses on trails
- Identify areas where people would like to ride horses on trails
- Integrate consultation findings from key stakeholders
- Identify strategic constraints relating to riding on bridle trails in the Shire
- Review environmental constraints relating to bridle trails and means of managing potential impacts
- Identify broad strategies to establish and promote horse riding in the area
- Develop an 'aspirational' bridle trail network
- Identify support infrastructure and establish preliminary constructed requirements for bridle trails
- Formulate an implementation plan to deliver an integrated network of bridle trails in the Shire

The Shire is one of the fastest growing local governments in Australia and has experienced significant population growth, which is predicted to continue into the future. This growth has placed pressure on the existing trail network through both the development of residential and commercial infrastructure and the increased use of the road networks.

As residential developments in surrounding local government areas (LGA's) expand and consume equine land use, an increasing number of people are relocating to the Shire with their horses or agisting their horses in the Shire. This is resulting in a high demand for horse trail riding and driving the need for an improved equine trails network and better forward planning to minimise the impact of development on the Shire's equine trail networks.

The community survey that was undertaken as part of the *Shire of Serpentine Jarrahdale Equine Strategy (2018)* found that the majority of survey respondents were involved in either horse trail riding or recreational riding. This demonstrates very high levels of interest and demand for equine trails.

The development of the Equine Trails Master Plan included a comprehensive review of background information to align with the wider strategic objectives at state, regional, and local levels. This also included reviewing important planning and management documents and guidelines such as the *Trail Development Series (2019)*, which sets out the 8 stage Trail Planning Process, the Australian Trail Horse Riders Association (ATHRA) Horse Trail Classifications (Grade 1-3) and the *Horse Trail Infrastructure Guidelines (2019)*.

An on-ground audit was undertaken to produce on-ground, geo-referenced data and photographs relating to the equine trails and associated infrastructure. This process was supported by an extensive desktop audit of existing equine trails and consultation with key stakeholders and community members to provide input and feedback on trail alignments. The audit process identified 11 initial equine trails/trail networks, with nine of these included in this Master Plan:

- Oakford Bridle Trails
- Darling Downs Bridle Trails
- Byford Trotting Estate Bridle Trails
- Jarrahdale Bridle Trail
- Serpentine Bridle Trail
- Cardup Bridle Trail
- Wungong Valley Gorge Bridle Trail
- Jandakot Regional Park Bridle Trail Regional Park Bridle Trail
- Keysbrook Bridle Trail

The Master Plan has been informed by community and stakeholder consultation. This involved key stakeholder engagement with the Shire as well as relevant external stakeholders including state government departments.

A community workshop was held at the Shire Administration Centre and involved community members and interested stakeholder groups such as the Equine

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00 Executive Summary

Advisory Group and SJ Trails Incorporated. An online community survey was also developed which included a series of project related questions and a mapping tool. Overall, the top issues relating to equine trails in the Shire that were identified include lack of trail related information and poor horse trail infrastructure, amenities, float parking and signage across the Shire.

Opportunities were also identified, for example, developing the Jarrahdale Oval into a key trailhead as per the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)* and investigating options for trail centre locations. A key focus is consolidating the Shire as Western Australia's (WA) main equine trail's destination.

Following stakeholder and community consultation, numerous informal linkages were identified and mapped out in addition to the nine initial equine trails. These linkages offer important connections for the existing equine trails network.

The following vision has been developed, based on the findings of the background research, on-ground audits, and consultation. The vision for the equine Trails Master Plan is:

"A diverse, interconnected, and sustainable network of equine trails, which is supported by reliable information and high-quality equine trail infrastructure, amenities, and signage, providing benefits for the thriving local community and equine industry while also protecting environmental values."

To deliver the vision, the following series of strategic outcomes have been developed to provide a framework for the Implementation Plan.

- Integrated Planning & Management
- Clearly Defined, Safe, Sustainable & Accessible Equine Trails
- Information, Promotion and Marketing
- Management and Maintenance
- Community, Tourism & Economic Development

The Implementation Plan is underpinned by the following principles which have been developed to guide the planning and management of equine trials within the Shire.

- Environment and Sustainability
- Access and Safety
- High Quality and Interconnected Network
- Local and Visitor Economy
- Collaboration, Management and Governance
- Clear Communication and Education
- Recognition and Advocacy
- Support Infrastructure and Amenities

The Implementation Plan outlines the prioritisation of strategies and indicates the costs and timeframes for specific actions. The regional level trail networks Darling Downs, Oakford, Byford, Cardup, and Jarrahdale will be a focal point during implementation. Project funding is available from multiple funding sources such as federal, state, and local government as well as foundations, the private sector, and developer's contributions where appropriate to assist with implementing the Master Plan.

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01 Introduction

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01 Introduction

Project Background

The Shire of SJ has been identified as the most horse populated local government in Western Australia, with registered horse ownership numbers reaching just under 4,000. The Shire has an extensive trail network totalling more than 150km across a variety of different land tenures.

The Shire is one of the fastest growing local governments in Australia and has experienced significant population growth, which is predicted to continue into the future. This growth has placed pressure on the existing trail network through both the development of residential and commercial infrastructure and the increased use of the road networks.

Project Objectives

The aim of this project is to develop a Master Plan for the expansion of strategic equine trail networks throughout the Shire, including to:

- Establish where people are currently riding horses.
- Identify areas where people would like to ride horses.
- Integrate consultation findings from key stakeholders.
- Identify strategic constraints relating to horse riding in the Shire.
- Review environmental constraints relating to bridle trails and means of managing potential impacts.
- Identify broad strategies to establish and promote horse riding in the area.
- Develop an 'aspirational' bridle trail network.
- Identify support infrastructure and establish preliminary constructed requirements for bridle trails.
- Formulate an implementation plan to deliver an integrated network of bridle trails in the Shire.

Project Scope

Tredwell has been engaged to deliver the Equine Trails Master Plan for the Shire, to include the following:

- Accurately mapping existing trails and conditions, including multiple use trails, emergency access tracks and firebreaks via localities.
- Identifying viable linkages between the two identified equestrian hubs within the Shire, existing trails and identifying potential new trails, float parking areas, general opportunities, and connections across the landscape.
- Listing and detailing those parcels of land that require tenure and access negotiations.
- Identifying any barriers to development and access.
- Estimating the cost of implementation following the Trail Development Process for new trail development including maintenance requirements (on-ground works).
- Detailing trail standards for construction of trails and maintenance of this infrastructure.
- Public consultation – Two workshops, one online survey.

Project Methodology

The methodology utilised for the project incorporates the following six stages:

1. Project Start-up, Background Review
2. Consultation
3. Trail Assessments and Mapping
4. Discussion Paper
5. Draft Equine Trails Master Plan
6. Final Equine Trails Master Plan

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01 Introduction

Regional Overview

The traditional owners of the Serpentine Jarrahdale area are the Noongar Aboriginal people. European settlement of Serpentine Jarrahdale dates back to 1840 when Thomas Peel established the Serpentine Farm on his land grant on the banks of the Serpentine River.

In July 1961, the Serpentine Jarrahdale Road Board became the Shire of Serpentine Jarrahdale when seven Road Board members were sworn in as the very first Shire Councillors. The Shire is named after the Serpentine River, which describes the 'serpentine' nature of the river in both its lower reaches, and in the jarrah forest.

As shown in Figure 1, the Shire is located in the outer south-eastern metropolitan area of Perth, approximately 45 kilometres from the Perth CBD. Set against the picturesque backdrop of the Darling Scarp, the Shire is bounded by the City of Armadale in the north, the Shire of Wandering in the east, the Shire of Murray in the south, and the Cities of Rockingham and Kwinana in the west.

The Shire's unique landscape delivers an enviable rural setting in close proximity to a major metropolitan area, with forested hills and wetlands complemented by areas of pristine wilderness with an abundance of wildflowers and wildlife.

The Swan Coastal plains that stretch across the Shire are dominated by rural residential properties with a mix of remnant natural vegetation and cleared grazing land. These attributes are vital in supporting a vibrant equine industry.

A steady growth in the value of rural production, together with recognition of the food production capacity, the need for protection of good agricultural land, and the necessity for value added enterprises, have all added to the Shire's reputation as a 'food bowl'.

Small to medium sized landholdings and a rural lifestyle have seen the development of many equestrian establishments across the Shire. These include training facilities, racecourses, riding schools, equine suppliers, vets/health professionals, farriers, breeders, agistment centres and equine tourism/rides.

The Shire of Serpentine Jarrahdale has been recognised as a LGA with one of the fastest growing populations in WA, therefore it is important to balance the natural beauty of Serpentine Jarrahdale with the need for environmentally, socially, and economically sustainable growth.

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01 Introduction

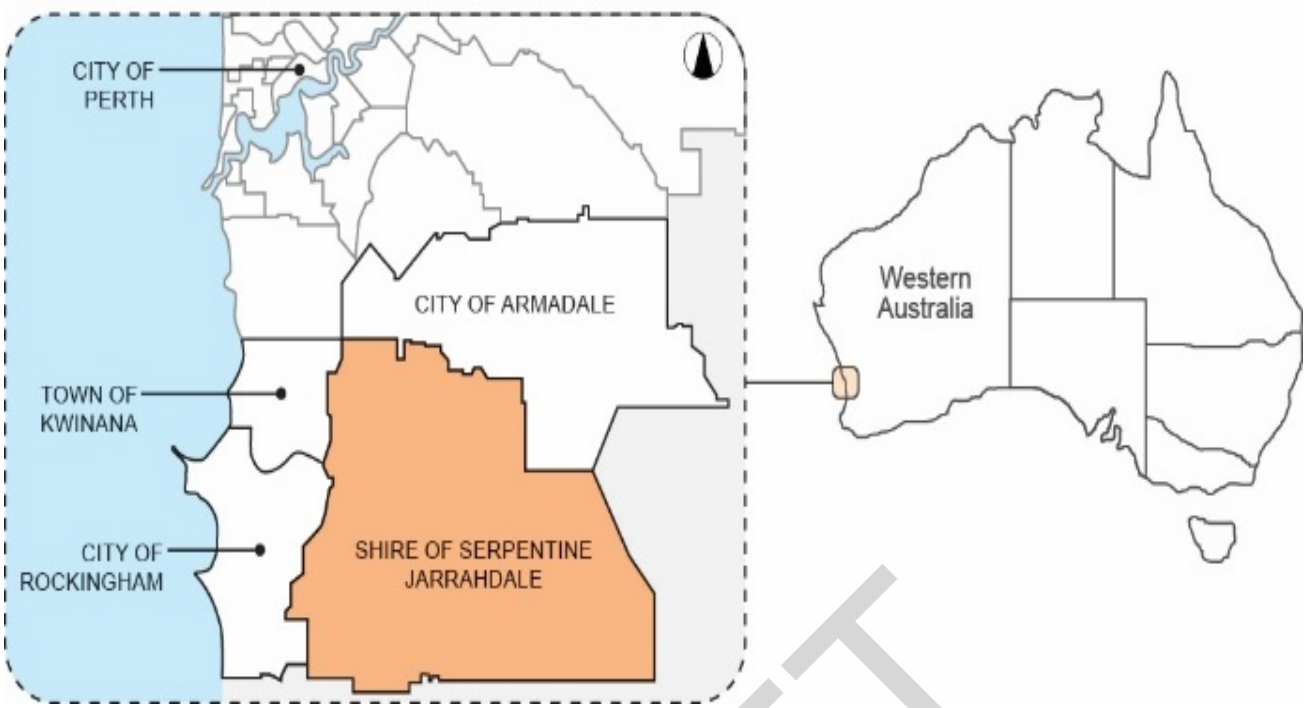

Figure 1: Location Map

Community Profile

In order to strategically plan for the network of equine trails, an understanding is required of the Shire's defining characteristics. The key indicators to consider in planning for equine trails are the Shire's high population growth rates which are predicted to continue well into the future, and the Shire's relatively youthful demographic (average age of only 32 years).

Table 1 provides a summary of the Shire's key relevant demographic indicators and their implications on equine trails.

Table 1: Demographics

Key Demographic Indicator	Implications on Equine Trails
Population Growth The Shire of SJ is one of the fastest growing communities in the country. The population is predicted to grow exponentially from 36,403 in 2021 to 68,335 in 2036 (average increase of 5.85% per annum). From 2019-2020, the population in the Shire has grown by 4.13%, compared to Greater Perth at 1.80%. The Shire's population density is currently 0.37 persons per hectare and is expected to increase to 0.75 persons per hectare by 2036.	Significant growth in population numbers will likely bring higher demand in number, capacity, and diversity of trails as well as increased road use and impacts on land development. It is important to ensure that trail development and improvement areas are serviced with access to opportunities for all users.

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Key Demographic Indicator	Implications on Equine Trails
Population Age Structure The Shire boasts a relatively youthful age demographic, with the average age of residents being 32 years. The highest growth age cohort in the next five years is predicted to be in the 20-29 age group (increase of 2,289 people). The age brackets which are most represented in the Shire's population are: 35-49 (21%); 25-34 (15.8%); 50-59 (12.2%); and 5-11 (9%). According to the 2016 Census, the Shire had a higher proportion of children (under 18) and a lower proportion of persons aged 60 or older than Greater Perth.	Trends and preferences vary across age groups and life stages, and it is important that trail provision is relevant to the region's population. Provision of adaptable trails which cater to a wide range of ages will support horse riding interests from all age groups. The *Peel Regional Trails Strategy (2019)* trail user survey found that the majority of horse riders in the region are female and aged 44-54, while the *Peel Equine Strategy (2017)* found that participation in equestrian activities is most popular among people aged 15–24 years followed by adults aged between 35–44 years.
Cultural Diversity According to the 2016 census, Indigenous Australians comprise a higher percentage of the Shire's population (2%) than the average across Greater Perth (1.6%). According to the 2016 Census, 25.3% of people in the Shire are born overseas, compared with 36.1% in Greater Perth. Similar to the ancestry of residents of Greater Perth, the three largest ancestries in the Shire of SJ are English (45%), Australian (37.5%) and Scottish (8.4%).	With projected population growth across the region, it is anticipated that the proportion of people born overseas will increase and this will bring different trail needs and preferences. It is important to create/promote opportunities for people from diverse cultural backgrounds to participate in equine trail riding.
Relative Socio-Economic Disadvantage The Shire has a Socio-Economic Indexes for Areas (SEIFA) disadvantage score of 1040, which is higher than the average across WA (1015) and Greater Perth (1026), indicating a lower level of relative socio-economic disadvantage. Within the Shire, levels of relative socio-economic disadvantage vary between affluent areas such as Cardup (index score of 1077) and Darling Downs (index score of 1074.7) to relatively disadvantaged areas such as Mundijong (index score of 1012.9).	It is important that trail opportunities are affordable and accessible to all people, regardless of their level of affluence. Investment in trails should be strategically planned to ensure that resources are targeted, maximising community participation, encouraging active lifestyles and maximising community benefit.
Disability According to the 2016 Census, 775 people (2.9% of the population) in the Shire reported needing assistance in their day-to-day activities due to disability, compared to 3.9% in Greater Perth. This indicator for the Shire increased by 0.2% between the 2011 and 2016 Census periods.	Accessibility and safety are important parts of trail development and improvement, because they are pivotal in ensuring that trails are available to all groups. It is important to ensure that trails adhere to minimum universal design and infrastructure standards.

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Equine Data

The Shire is renowned for its extensive equine trail network that supports trail riding and tourism and attracts people to the region for events. As outlined in the *Shire of Serpentine Jarrahdale Equine Strategy (2018)* the Shire's equine industry has over 190 employees and volunteers, with equine customers reaching 2,800 per week. Annual equine expenditure retained in the Shire equates to $168 million. The local community have a long-standing and rich history of equine culture. Currently, there are over 8,000 horses and 80 equine businesses within the Shire.

According to a survey conducted as part of the *Shire of Serpentine Jarrahdale Equine Strategy (2018),* irrespective of whether the activity is registered or unregistered, horse trail riding is the most popular of all equine activities (62%), followed by recreational riding (54%) and dressage (35%). This survey also found that the Darling Downs Trail Network is the most frequently used equine trail (56%), followed by the Jarrahdale Trail and Oakford Trails Network North (24% respectively). The preferred riding distance is between 6-10km. The main barriers to using equine facilities includes lack of information, poor quality trails, lack of parking and the quality of facilities.

Table 2 outlines the key equine statistics sourced from the *Shire of Serpentine Jarrahdale Equine Strategy (2018)*.

Table 2: Shire of Serpentine Jarrahdale – Key Equine Statistics

Topic	Statistics
Equine activity – unregistered disciplines	Trail riding: 34%; Casual: 18%; Club Training 18%; Racing: 5%; Other: 25%
Number of horses	8,375
Local equine businesses	80+
Barriers to using facilities	Lack of information 33%; Poor quality trails 23%; Lack of parking 21%; Quality of facilities 15%
Involvement in equine activities over last 12 months	Trail Riding 62%; Recreational riding 54%; Dressage 49%; Show jumping 36%; Cross Country 35%; Pony and Horse Club 33%
Annual equine turnover	$21 million
Employees/volunteers	190+
Customers per week	2,800 (60% from outside LGA)
Most frequently used trail networks	Darling Downs Trail Network 56% Jarrahdale Trails 24% Oakford Trails Network (North) 24% Cardup Trail Network 18% Other Forrest Trails 16% Oakford Trail Network (South) 15% Other trails 14%
Preferred equine trail distance	6-10km (36%) 10-20km (21%) 5km (18%) 1-4km (17%) 20km+ (18%)
Annual equine expenditure retained locally	$168 million

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01 Introduction

Horse Riding in the Shire

The Shire has an extensive equine trail network on Shire owned/managed land, exceeding 150 km. There are also several other trails and trail opportunities on land parcels owned by DBCA. The Shire's bridle trails are geographically categorised into the following two hubs:

- Northern Equine Hub, which includes the existing and future equine communities in the Darling Downs, Oakford and Cardup localities, and the Byford Trotting Complex area in central Byford (approximately 25-35 minutes from Perth City).
- Southern Equine Hub, which includes the existing and future equine communities in Serpentine, Mundijong, and Jarrahdale (approximately 35 – 50 minutes from Perth City).

Equine trail localities within the Shire are illustrated in Figure 2, along with the approximate length of their existing bridle trail network.

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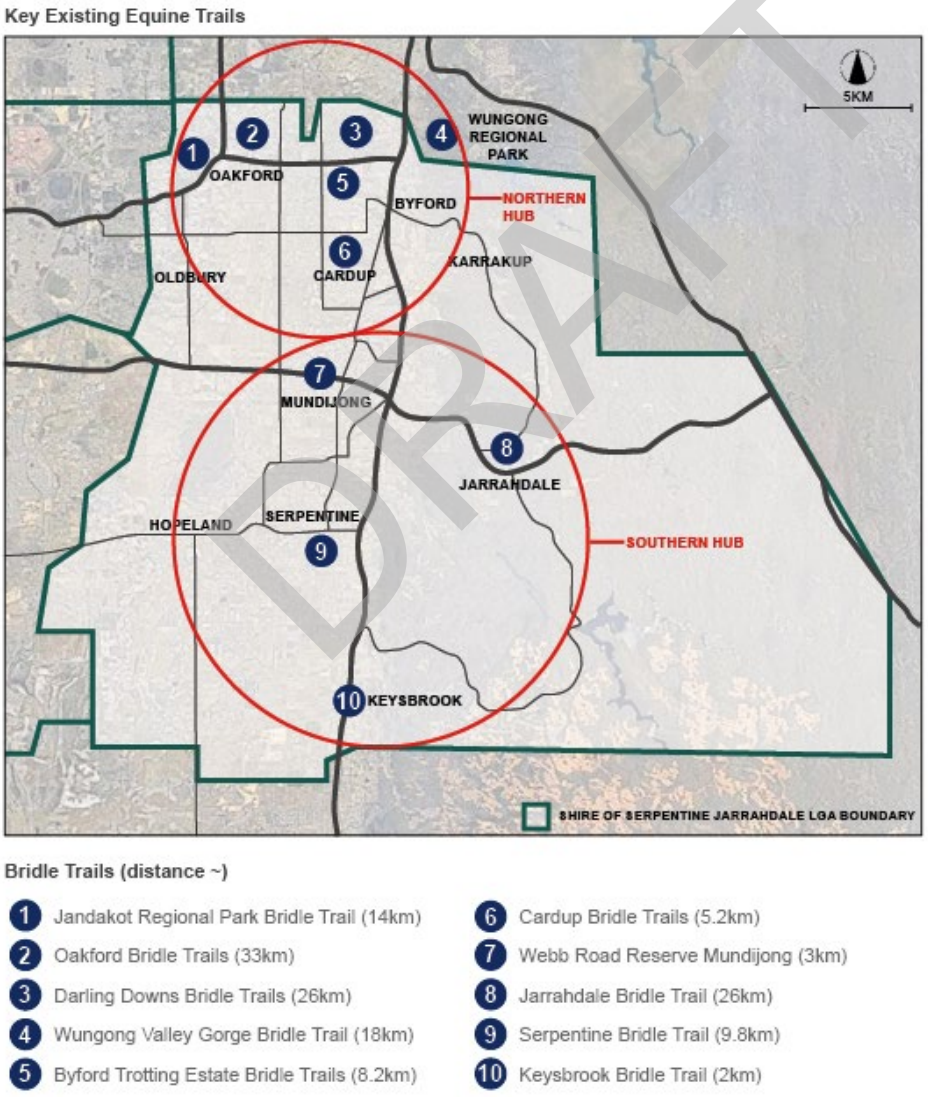

Figure 2: Locations of Shire Bridle Trail

02 Strategic Context

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02 Strategic Context

Strategic Review

A key component in the development of the Serpentine Jarrahdale Equine Trails Project is the review of a wide range of background information to ensure that the Master Plan is developed in alignment with the wider objectives across the state, region, and local areas.

The following key national, state and regional-level strategic documents have been reviewed and considered in the Project:

State Level Documents

- *Western Australian Strategic Trails Blueprint 2017-2021*
- *Western Australian Recreational Horse Trail Strategy (2015)*
- *Western Australian Trails Development Series (2019)*

Regional Level Documents

- *Peel Equine Strategy (2017)*
- *Peel Regional Trails Strategy (2019)*

Local Level Documents

- *Shire of Serpentine Jarrahdale Equine Strategy (2018)*
- *Shire of Serpentine Jarrahdale Tourism Strategy 2018-2023*
- *Shire of Serpentine Jarrahdale Local Trail Plan (2019)*
- *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)*
- *Jarrahdale Trail Town Business Case and Implementation Plan (2021)*
- *Shire of Serpentine Jarrahdale Multiple Use Trails Policy (2018)*
- *Shire of Serpentine Jarrahdale Economic Development Strategy 2018 - 2023*

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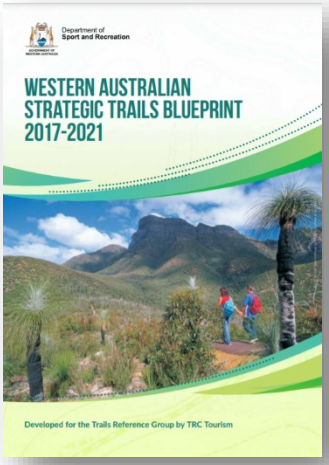
State Level Documents

Western Australian Strategic Trails Blueprint 2017-2021



The *Western Australian Strategic Trails Blueprint 2017-2021* (WA Trails Blueprint) provides the overarching framework for consistent and coordinated planning, development and management of quality trails and trail experiences across Western Australia. It is noted that this document is currently under review.

The vision of the Blueprint is: *by 2021 more people will be using Western Australia's trail network resulting in greater community, social, cultural, economic, environmental, health and wellbeing outcomes for Western Australia.*

The Blueprint expresses the aspirations of the Western Australian trails community to achieve improved and sustainable outcomes for trail supply, experiences, community development, health and wellbeing and the local, regional, and state visitor economies.

The Blueprint also mentions relevant trends relating to trails. It is widely recognised that there has been a global increase in the development, use and demand for trails to service growth and change in participation in outdoor activities in communities and by visitors.

The popularity of individual fitness and recreation activities is increasing while that of organised team sports is static or declining. This is accompanied by a growing diversity in recreation activities aided by developments in technology and the affordability of equipment.

Walking, bushwalking and horse-riding as ways of experiencing natural environments have been joined by mountain biking and trail running and the emerging trend of riding electric assist bikes. The provision of well-constructed trails is vital to ensure that these activities are undertaken in a way that protects natural and cultural values and is environmentally and socially sustainable as well as offering excellent experiences for participants.

Consumers are increasingly seeking trails that facilitate their enjoyment and appreciation of an area or trail activities through supporting services, visitor products, interpretation, and accessible information.

The growth in the range of people seeking support to explore natural areas (including growth in the retiree generation) has resulted in trail development of soft adventure trails and guided or self-guided experience packages that provide information, accommodation, transport, and equipment. People are also using digital technologies (such as smartphones and apps) and social media to access information about trails and record their trail activities. There are increasing expectations for delivery of trail interpretation through digital sources.

International adventure tourism, valued at $263 billion, is one of the fastest growing tourism categories, attracting high value customers, supporting local economies, and encouraging sustainable practices.

An estimated 2.7 million overnight visitors to WA participated in a nature-based activity in 2015-2016 — 27% of all the State's overnight visitors and an increase of 15% a year from 2012–2016.

Australia has 4.2 million international nature-based visitors, an increase of 4% a year from 2010–2014. 2.4 million international visitors considered Australia's diverse coast or natural environment to be their most memorable experience.

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02 Strategic Context

Western Australian Recreational Horse Trail Strategy 2015

The focus of the *Western Australian Recreational Horse Trail Strategy (2015)* is to provide clear guidance for decision makers, land managers, trail planners and the horse trail community. It is a coordinated and structured approach to horse trail development and management.

The vision of this strategy is for Western Australians to have the opportunity to enjoy diverse, quality horse trail experiences.

The five strategic priorities in this strategy are:

- Trails Inventory - A state-wide network of diverse, well located, sustainable, managed, maintained, and connected trails that meets the demand and range of experiences
- Trails Access - Easily located trails, with current and accurate trail information, which are safely accessed
- Infrastructure and Facilities - Facilities and infrastructure, suitable for horse use and appropriately maintained
- Education and Advocacy - Enhance a mutual understanding of horse trail riding and other trail activities to maximise safety, enjoyment and trail harmony and minimise impacts
- Management and Governance - Establish a strong, sustainable, and coordinated approach to the management and governance of horse trails and horse riding

Western Australian Trails Development Series 2019

The purpose of the *Western Australian Trails Development Series (2019)* is to assist groups developing a trail project to follow a standardised process, consider all issues and approvals and develop an approach to gather support from the local community and relevant government agencies.

The Trails Development Series is presented in sections A to D.

- Part A: A Guide to the Trail Development Process – Outlines the eight stages of the Trail Development Process from initial proposal through to planning, construction, and management
- Part B: A Guide to Community Consultation - Outlines various approaches to community consultation and identifies where consultation fits within each stage of the Trail Development Process
- Part C: A Guide to using Multi-Criteria Decision Analysis (MCDA) - Provides a step-by-step guide to developing a participatory approach to discussion and decision making at various stages of the Trail Development Process
- Part D: Checklists and Templates - Provides examples of checklists, templates, and explanatory notes to assist with completing the Trail Development Process

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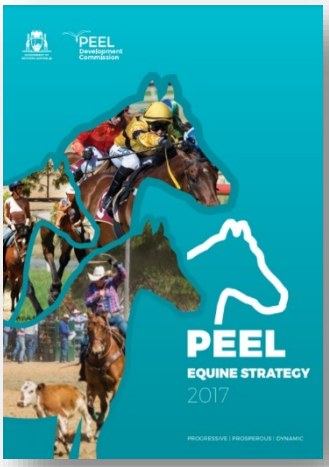
Regional Level Documents

Peel Equine Strategy 2017

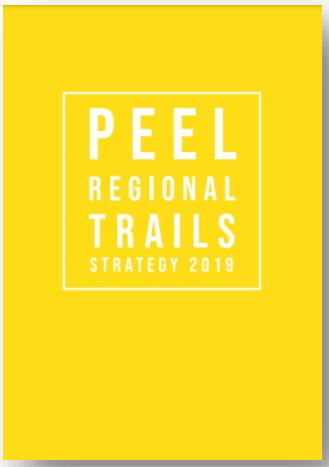


The *Peel Equine Strategy (2017)* provides an economic analysis of the equine industry and identifies initiatives for future investment and policy development, to support the future growth of the industry. Peel is positioned as the premier region for the expansion of the equine industry in regional WA.

There are six goals identified as being essential to strengthening Peel's position as a premier equine destination in WA. These include:

- Develop the industry's regional and local influence
- Improve facilities and stimulate industry through infrastructure investment
- Improve quantity and quality of breeding stock
- Enhance linkages between industry and education
- Increase participation in sporting and recreational equine activities
- Enhance the equine-tourism potential of the region

Peel Regional Trails Strategy 2019



The vision of the *Peel Regional Trails Strategy (2019)* is for the Peel Region to offer locals and visitors immersive and accessible trail experiences, supported by services offered within trail towns, centres and networks.

The Strategy identifies four different equestrian user types:

- Horse trail riding: Riding outside of enclosed areas for pleasure, challenge, experience, and educational outcomes
- Endurance riding: A more active and intense form of recreational or competitive horse riding Typically involves riding in organised events generally on loop trails with distances of approximately 80km
- Horse trekking: Long distance point to point riding involving either the use of pack horses or support vehicles to carry overnight camping equipment and supplies, or base camp style which involves self-catering and overnight camping
- Hitching the horse to a 2 or 4 wheel vehicle and driving on the trails

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Local Level Documents

Shire of Serpentine Jarrahdale Equine Strategy 2018

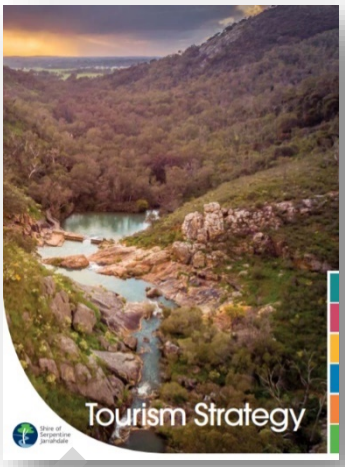
The *Shire of Serpentine Jarrahdale Equine Strategy (2018)* seeks to understand the nature of the equine sector in the Shire, its position in relation to the Peel Region and the State, and to establish goals and strategic actions to achieve to ensure there is continued support and development of the sector into the future.

The Strategy has uncovered that the strength of the equine sector in the Shire lies within the diversity of the sector, the location and accessibility of strategic facilities, available land and a genuine commitment from horse owners, enthusiasts, and businesses across the sector.

The main strategic goals of the *Shire of Serpentine Jarrahdale Equine Strategy (2018)* are:

- Develop and strengthen the Shire's identity and reputation as the leading Equine Region in WA
- Support and enhance the diversity of equine activities within the Shire
- Continued planning and protection of key equine assets and improving the built environment
- Support and enhance the diversity of equine activities within the Shire

Shire of Serpentine Jarrahdale Tourism Strategy 2018-2023



The key aim of the *Shire of Serpentine Jarrahdale Tourism Strategy 2018-2023* is to become a destination of first choice by surprising and delighting all visitors.

There are five core objectives, and these include:

- To transform Serpentine Jarrahdale into a top-ranked daytrip and holiday destination for residents of the greater Perth region and inbound tourists to WA
- To retain the unique features of our lifestyle and environment by sharing our values with visitors
- To satisfy those who work, invest in, and enjoy our tourism industry
- To increase growth in tourist visitation by focusing on strengthening the attractiveness and diversity of tourism products through sustainable investment and improving the quality of our tourism services
- To improve the social and economic capacity of our community through the growth of tourism

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02 Strategic Context

The *Shire of Serpentine Jarrahdale Tourism Strategy 2018-2023* promotes Serpentine as a Centre of Equine Excellence. The concept of an Equine Centre of Excellence seeks to compliment other equine facilities in the Peel Region, boost the profile and economic development of existing equine-based activities and take advantage of the proximity to the major user market of the Perth Metropolitan area.

The Strategy also aims to reinforce Serpentine Jarrahdale's position as the leader in equine tourism in WA though a variety of other equine activities including equestrian retail, trail tours, servicing, training, and event facilities.

With proposed extensions of the Tonkin Highway and Armadale rail line to Byford, there is the opportunity for Serpentine Jarrahdale to develop equine facilities that are localised to the largest horse population in the Peel region.

Shire of Serpentine Jarrahdale Local Trail Plan 2019

The *Shire of Serpentine Jarrahdale Local Trail Plan (2019)* provides recommendations for existing trails based on a broad trails audit included in the *Peel Regional Trails Strategy (2019)*. The most significant opportunities for trail development in the Shire are within Wungong Regional Park, Serpentine National Park, and Jarrahdale State Forest.

Wungong has the potential to become the Peel Region's prominent trail destination. The area has high demand for equine trails and development will provide a chance to capture all segments of the trail tourism market.

To ensure sustainable management long term, a trail centre and/or commercial development opportunity is required. The trail centre should promote a high level of accessibility with international level event facilities and a wide range of visitor services.

The following existing bridle trails have undergone an audit and the priorities are:

- Jarrahdale Bridle Trail (medium)
- Wungong Valley Bridle Trail (medium)
- Byford Trotting Estate (low)
- Cardup Bridle Trail (low)
- Darling Downs Bridle Trails Regional (low)
- Jandakot Bridle Trail (low)
- Oakford Bridle Trails (low)
- Serpentine Bridle Trail (low)

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Shire of Serpentine Jarrahdale Trail Development Business Case 2020

The *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)* identifies three key trail projects that will provide the Shire of SJ with increased economic, employment and health benefits.

These three projects include the Byford Trail Centre, Mundijong to Jarrahdale Rail Trail, and the Jarrahdale Oval Trail Head.

Byford Trail Centre

There are existing parking areas off Linton Street North which are already cleared that provide a suitable area for amenities including trailhead signage, shade, picnic areas, drink fountains, bins, and seating.

The proposed plan identifies new formalised parking along Linton Street North, and future parking has been proposed on the eastern side of Linton Street East in front of the existing Scout Club.

The Byford Trail Centre will provide strong connections to both the Scout Hall and Country Club. The site contains a number of existing informal trails which will be further developed and enhanced to form a small loop trail with a lookout point including an iconic lookout structure and a key connection to the wider Wungong Regional Park.

A horse tie up area has been included and horses are directed to use the existing access track to make their way to and from the tie up area and associated amenities to access the trails within the Wungong Regional Park.

Mundijong to Jarrahdale Rail Trail

The major requirements for this Trail are to ensure there is a continuous connection from Mundijong to Jarrahdale and to provide a high-quality surface for all trail users.

Two trail heads have been proposed: one based at the existing Jarrahdale Information Bay, and one new development at the trails' intersection with the South Western Highway, near Mundijong. The Jarrahdale Information Bay redevelopment will include formalised parking, new trail head signage, amenities, and shade. The Mundijong Trail Head will include parking for standard vehicles and vehicles with horse floats, a horse tie up area, new amenities, and trail head signage.

It is not proposed that horse riders would be encouraged to travel into the Mundijong township, due to the lack of equine amenity, instead, designated horse facilities are to be provided at the Mundijong Trail Head.

Jarrahdale Oval Trail Head

A Master Plan for the site is being developed by the Shire and will include an event space and updated facilities. The Master Plan will consider the appropriate location on the site for the trail head development. This area will provide parking for horse floats and a warm-up track for horses.

The proposed trail head will provide basic amenities such as shade, picnic facilities, bike racks and repair station, drinking fountain and trail head signage. The trail head concept plan and existing Master Plan will work seamlessly with one another to provide a trails events space providing shade, bins, BBQ facilities, horse float and car parking. This space also has the benefit of the sports oval to provide overflow or further events space if necessary.

Overall, it has been identified that the development of the three trails will attract approximately 46,745 visitors yearly who are estimated to spend approximately $5.6 million per annum within the Shire. This is supported by approximately 36,000 local visits to the trails by locals per year and a total economic output of $8.3 million per annum.

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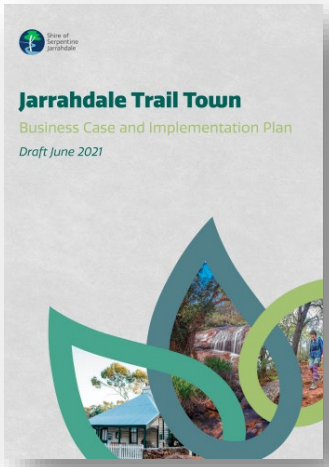
02 Strategic Context

Jarrahdale Trail Town Business Case and Implementation Plan 2021



The *Jarrahdale Trail Town Business Case and Implementation Plan (2021)* provides strategic guidance to assist the Shire of SJ to support Jarrahdale in becoming one of WA's primary trails destinations and Perth's most popular trail town.

Realignment of the Jarrahdale Bridle Trial and investigation of the creation of a network of bridle trails within Jarrahdale State Forrest, starting and ending at the future Jarrahdale Oval Trailhead, are considered high priority recommendations of this business case.

Recommendation 3.3: Develop the Jarrahdale Oval Trailhead with a linkage into the Jarrahdale Trail Centre. This should be in line with the concept plans developed as part of the *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)* and complement, not duplicate, the functions of the Trail Centre to be established at Lot 814, Jarrahdale. The trailhead should focus as a site for commencing trail activity in the area.

Community consultation identified that there is support in the community for establishing Jarrahdale Oval as a trailhead, provided it does not compete with local businesses and does not duplicate facilities within the township itself.

Shire of Serpentine Jarrahdale Multiple Use Trails Policy 2018

The purpose of the *Shire of Serpentine Jarrahdale Multiple Use Trails Policy (2018)* is to:

- Guide the Council, other stakeholders, and local volunteer groups in their recreation trail development activities
- Develop an integrated network
- Focus on development of several strategic trail projects which will give greater prominence to the area and its trails network
- Provide guidelines on issues when assessing rezoning proposals
- Outline specifications for the construction of trails within the Shire
- Identify existing and potential trails within the Shire
- Develop and promote natural recreational opportunities including walking, cycling and equestrian trail networks

The Shire promotes the development of trails within multiple use corridors. Multiple use corridors aim to integrate water quality and quantity management, conservation and ecology and recreation and education. Multi-use trails are to be between 6-10m wide, with a 4m wide constructed trail and a 4m vertical clearance, unless otherwise specified.

Permitted user groups of multi-use trails include walkers, cyclists, wheelchairs, horse riders and fire and emergency services. Motor vehicles (e.g., motorcycles) are not permitted. The Strategy notes that entrances to trails should have signs displaying the permitted users of the trail. The Shire requires signage to be located along the trail at certain locations. The convention now exists where walkers give way to horse riders, and cyclists give way to both horse riders and walkers.

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The Shire stipulates that a 1.5m accessway will need to be provided on either side of a gate to allow access for horses and pedestrians. Gates are not to be constructed at the beginning of a trail, unless deemed essential. The multi-use trail is required to have uniform fencing on either side, in the form of post and rail/wire.

Multi-use trails can be constructed using several different surface types. The use of trotting fines offers a relatively cost-effective option compared to other surfaces, while serving to reduce impacts such as erosion of the trail tread. The Shire utilises trotting fines to develop a trail tread suitable for walkers, cyclists, and horse riders. Trotting fines are a natural by-product of mining operations, comprised of 2mm sized particles.

Other trails utilise granitic sand to form sections of the trail tread where space is limited. The material does 'mark' more easily than a gravel (or gravel/clay mixture) but is considered easier to repair. Other surface types include gravel or limestone. Trails with a gravel surface will only require the cutting of the trail and clearing of the area and these trails are ideal for passive recreation.

The trail surface should be maintained in a safe condition, with the removal of any sharp objects (e.g., glass, loose wire), with the timely repair of deep potholes. To prevent erosion, deep rooted native grasses and trees are to be planted along the edges of the trail.

Table 3 illustrates the construction requirements for each type of existing terrain.

Table 3: Trail Construction Requirements

Existing Terrain	Construction Requirements
Firm sand	100mm of trotting fines.
Loose sand	100mm of 19mm limestone base with 100mm of trotting fines.
Gravel surfaces	No works required. Trails with gravel surface will only require the cutting of the trail and clearing of the area. These trails are likely to only be used on a passive recreation basis i.e., walking of horses, use by mountain bikes or walkers.

Shire of Serpentine Jarrahdale Economic Development Strategy 2018 - 2023

The *Shire of Serpentine Jarrahdale Economic Development Strategy 2018 – 2023* provides the overall direction and a tactical action plan to achieve the community's aspirations of: "an innovative, commercially diverse and prosperous economy".

The Shire encourages responsible and ongoing economic development and growth by maximising the capacity of existing resources, and introducing new business, community and tourism investment and infrastructure. This will assist in meeting the economic, social, cultural, and environmental needs, expectations, and aspirations of the community.

A key strategy relating to the Equine Trails Project is to proactively develop trails for mountain biking, motorcycling, horseback riding and hiking to promote tourism.

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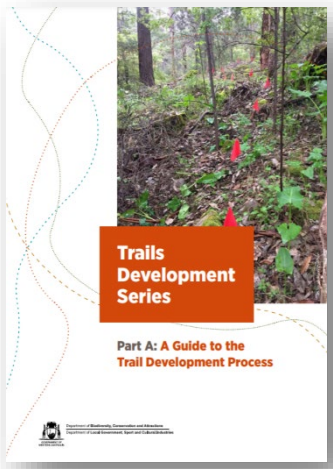
03 Planning and Management

Trail Development Process



A robust trail development process moves trail development away from a purely design and construction approach to a more considered and planned approach. The Trail Development Process involves 8 stages and encompasses a constant evaluation, review and improvement process as trails are being developed, maintained, extended, or renewed. Where possible, each stage should be completed before moving on to the next stage, although some overlaps may occur.

The 8 Stage Trail Development Process is a scalable process, suitable for the development of a local trail for a small community, through to the development of a large national trail centre or a long-distance trail, and the level of detail for each stage determined where appropriate.

The 8 Stage Trail Development Process recommends engaging expert knowledge at various stages. Building rigour into the Trail Development Process will ensure trail proposals are transformed into high-quality, low-maintenance assets. Working within this standardised methodology is the expectation for all trails across WA and is particularly important in high conservation areas where trail planning, design and construction needs to be completed effectively.

The following figure (refer Figure 3) displays the 8 Stage Trail Development Process.

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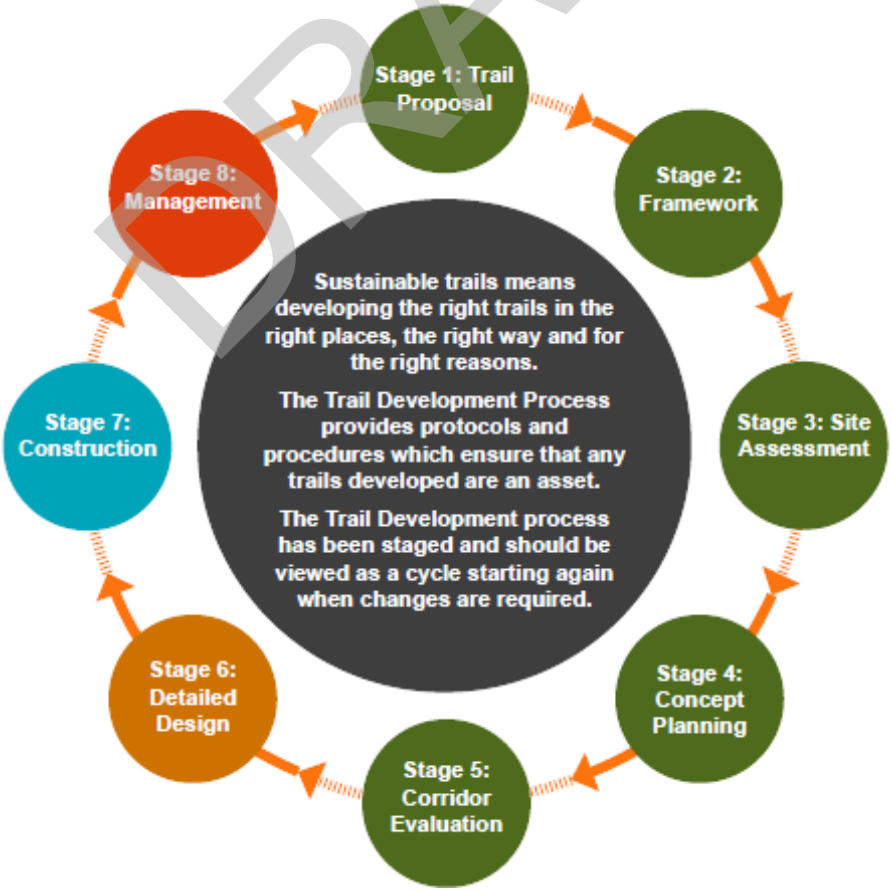

Figure 3: 8 Stage Trail Development Process Model

Horse Trail Classifications

The Horse Trail Classifications have been developed by the Australian Trail Horse Riders Association (ATHRA) and included in the *WA Recreational Horse Trail Strategy (2015)*. They have been reviewed by the WA Trail Strategy Reference Group and endorsed by the WA Trail Strategy Steering Committee.

The Horse Trail Classifications are used across Australia to provide guidelines for users and assist them to make an informed decision before setting out on a trail. This information can:

- Encourage users to choose and make use of trails that match their ability level
- Help ensure that trail users have an experience that meets their expectations
- Manage risk and assist to minimise discomfort or injury to trail users
- Assist in trail promotion

This system classifies horse trails into the following categories: easy (green), intermediate (blue) and advanced (black). A summary and description of the key attributes of these classifications are provided in Table 4 Tables 4 and Table 5.

The Department of Local Government, Sport and Cultural Industries (DLGSC) are currently working with the WA horse riding community to develop the WA Horse Riding Trail Management Guidelines. The Guidelines will review and provide additional detail on the Horse Trail Classification system. While it is expected that the easy, intermediate, and advanced classifications will remain in the classification system, there is consideration for inclusion of additional classes to reflect the diversity of horse trails, including very easy and very difficult trails. The WA Horse Riding Trail Management Guidelines are expected to be published by DLGSC in 2022.

Table 4: Summary of Horse Trail Classifications

	Class 1 **Easy - Green**	Wide, consistent surface and width of trail, gentle slope. For riders and horses with basic skills and fitness.
	Class 2 **Intermediate - Blue**	Variable trail with narrow sections and uneven surfaces, moderate slope, some obstacles. For riders and horses with moderate skills and fitness.
	Class 3 **Advanced - Black**	Challenging trail, with extended sections of narrow and uneven surfaces, reduced corridor height, many obstacles, and steep sections. For riders and horses with high skill and fitness level.

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Table 5: Description of Horse Trail Classifications

	Easy (Class 1)	Intermediate (Class 2)	Advanced (Class 3)
Description	Most suitable for novices, social groups and others seeking a relatively short distance trail requiring a basic level of skill and horse and rider fitness. Most likely to be fire roads or wide single tracks (bridle paths) with a gentle grade (not exceeding 10%) and a relatively obstacle free, hardened natural surface. Likely to be shared use and frequent encounters with other users including cyclists, walkers and runners can be expected.	Most suitable for individuals and smaller social groups seeking a short to medium distance trail requiring a moderate level of skill and fitness. Most likely to be a combination single trail and/or fire road with obstacles, variable surfaces, and a moderate slope. Likely to be shared-use so encounters with other users including cyclists, walkers, runners, and horse riders should be expected.	Suitable for individuals and small social groups seeking a very challenging trail requiring a high level of skill, fitness, and basic navigation skills. Most likely to consist of challenging single trail and/or fire road with many obstacles, variable surface, and steep sections. Some trail routes may not be marked at all. May be shared use so encounters with other users including cyclists, walkers, vehicles, and other stock is expected, however, many of these trails may be located in remote areas and encounters with others is expected to be minimal.
Trail Surface	Generally a natural surface (topped with dolomite or compacted surface). Hardened surfaces such as concrete or asphalt to be avoided due to concussion on horse legs and poor traction with metal horseshoes. Hardened surfaces may be utilised on rail trails or other tracks where horses would generally only walk.	Generally a natural surface is desired and may include sections of rocky ground, sand, clay, or gravel. Obstacles such as rocks, logs and gates that require dismounting are likely. Shallow ford crossings are acceptable (note: rainfall conditions vary widely, and seasonal conditions may alter water depths significantly).	Usually a variable surface with sections of rock, sand, clay gravel, etc. Obstacles may include challenging rocks, logs, fording creeks.
Trail Width	Minimum tread: 1500mm Note – Short sections of narrower tread (.60m to 1.2m) are acceptable at ground level, 1.5m is required at the height of the riders' stirrups. Minimum corridor width: 3000mm Minimum height: 3700mm	Minimum tread: 1500mm Minimum clearing: 1500mm Minimum height: 3700mm	Minimum tread: 300mm (1500mm recommended at the height of the riders' stirrups) Minimum clearing: 1500mm Minimum height: 2500mm
Trail Gradient	Desired gradient: 0 – 10% (maximum 10%) Maximum sustained pitch: 5% Maximum out slope: 4%	Maximum gradient: 15% Maximum sustained pitch: 10% Maximum out slope: 4%	Maximum gradient: 20% Maximum sustained pitch: 10%

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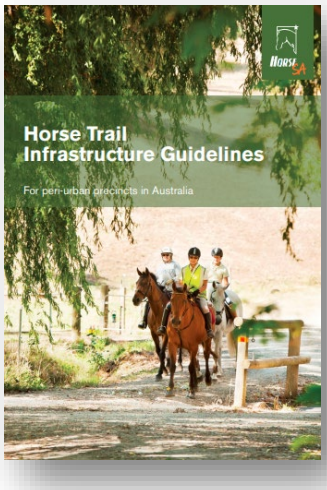
03 Planning and Management

Peri-urban Bridle Trail Infrastructure Requirements



The document *Horse Trail Infrastructure Guidelines (2019)* was produced by Horse South Australia and provides useful information in relation to horse trail infrastructure requirements in Australian peri-urban precincts.

It is acknowledged that there are no standards for horse trail surface or infrastructure design in Australia and the *Horse Trail Infrastructure Guidelines (2019)* provides guidance only. Ideally, horse trail riders are involved in the consultation and planning phases along with planners and if required, engineers. Table 6 outlines the different horse trail infrastructure that should be considered for this project.

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Table 6: Peri-urban Bridle Trail Infrastructure Requirements

Topic	Details
Barriers/Control Points	Controlling access onto a trail, modifying speed or direction of users, often providing a barrier to unauthorised vehicular access. Suitable barriers may include the use of bollards, posts, or rocks. A cavaletti (step-over) allows safe access for horse and rider and should preferably be 3m wide.
Bridges	The single most expensive item to include on a trail and may need to service recreational trail users and other users, such as emergency service vehicles. Careful consideration of construction materials is required, avoiding noisy materials, and providing anti-slip surfacing. The colour and consistency of the trail surface should continue from the trail tread approaching the bridge, and over the bridge itself. Preferred widths are greater than 3.5m wide, with parapets.

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Topic	Details
Hitching Posts, Rails and Rings	Most likely to be required at trail heads, watering points and rest stops, including horse float parking areas. A hitching ring is a heavy-duty ring anchored firmly into another solid fixture, such as a wall. A hitching post is a single upright post, strong enough to at least withstand a 750kg horse pulling back. A hitching rail accommodates 2-4 horses and should be placed at least 6m away from any other trail infrastructure, including the trail itself, installed on a hardened surface.
Mounting Blocks	Installed at trail heads, rest stops and gates where horse riders are required to dismount to open and close. Riders normally mount the horse on the left-hand side (head facing forward) and require a clear area around the mounting block. Wheelchair accessible mounting ramps might be considered at trail heads. One, two, or three step designs might be considered, dependent on budget, siting and materials selected.
Watering Points	Trail heads require an identified source for stock water. Troughs require regular inspection (preferably daily) cleaning and maintenance. Taps fitted with self-turning-off handles can be supplied by mains water. If access to mains water is unavailable it may be necessary to provide rainwater tanks that collect runoff from shelters or other structures. Such facilities would require on-going maintenance to ensure reliable water supply and for the supply meets all relevant health regulations. Maintenance would most likely be undertaken by the relevant land manager.
Traffic Separation	Under the *WA Road Traffic Act (1974)*, horses ridden on roads, nature strips, paths and footpaths are treated the same as vehicles. They have the same rights and responsibilities as other vehicles. Horses are legally allowed to ride on the road; however, care must be taken when doing so. The provision of a natural or artificial barrier between the horse rider and vehicles on the carriageway should be considered. Provision of sufficient space between carriageway and trail would be considered a natural barrier, as would vegetation and earth mounding. Loss of roadside verges (at bridges or on the crest of hills and bends) creates ‘crush points’, which need to be carefully considered in terms of trail user safety.

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Topic	Details
Road Crossings 	Crossing points should be minimised as far as possible, and safety for all trail users can be improved by careful selection of crossing points. If room permits, the installation of a horse holding bay is preferable, creating an area where horses can be held at holt, prior to crossing a road. A pegasus crossing could be installed where regular crossings over busy roads are anticipated. Crossing points need to be well signed, with holding bays/bump rails (approx.1.4m high) located on a firm, natural surface. Crossing points require maximum sightlines for oncoming traffic and need to be free of hazards (street furniture, poorly placed signage, obtrusive landscaping).
Signage 	Signage requirements vary from trail to trail and specific requirements may be imposed by various land managers (signage plans/policies). Signage hierarchy: • Primary signage – trailheads • Secondary signage – directional markers • Tertiary signage – location specific (e.g., 'close the gate') • Regulatory signage (e.g., road signs) Each land manager will have policies, specifications, application requirements and approval processes that must be complied with. All stakeholders (land managers, funding agencies, community groups) should review and approve all information contained on all signage.
Horse Yards 	Yards often hold horses for overnight stays or short-term safety and need to be well constructed. Design considerations include: • 4 m x 4 m is ideal, may be larger. • Solid well-drained base, e.g., dolomite over crushed rock or geocell. • Solid rails of timber, metal or there may be a suitable recycled plastic product. • Gateways wide enough to lead a horse through easily, a minimum of 1.5m. • Shelter to reduce the effect of wind and sun.

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03 Planning and Management

Topic	Details
Trailheads 	Provide an entry point onto a trail network, and include signage (with key trail information), horse float parking, tie up rails, horse yards (potentially), stock water source, rider, and other trail user facilities. If possible, perimeter fencing with gates is preferred to provide an extra level of security. Key considerations include trailhead entry and exit points, vehicle turning circles, sightlines, and provision of sufficient parking numbers (including horse float parking). Consideration is also required for power availability, water (stock and human consumption), facilities for camping and BBQ areas and any resultant implications for neighbouring land uses/properties and conservation/heritage areas.
Trail Surface Requirements 	A natural trail surface is preferred, and the use of long sections of asphalt or concrete should be avoided as these sections may become slippery in wet weather and this type of surface does not absorb impact well. Unstable, loose surfaces and loose debris (stones larger than 10mm across) are not suitable. Steep slippery surfaces such as rocky outcrops can be dangerous, although the degree to which certain surfaces/obstacles are acceptable is dependent on the experience and technical ability of the rider, and the level challenge intended for the specific bridle trail. Heavily used sections of a trail may require prioritisation for additional surface maintenance checks, as the material will break down at a faster rate.

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Trail Models

As detailed in the *Western Australian Strategic Trails Blueprint 2017-2021*, trail opportunities for local people and visitors are enhanced by the development of clustered link trails in localities. The different categories of trail models are described below.

Trail Town

A population centre which has been assessed and accredited as a destination for its trails offering, through the provision of high quality:

- Trails (single or mixed use)
- Outdoor experiences that encourage extended visitation
- Trail-user related facilities and services (including accommodation)
- Trail-related businesses
- Trail branding and signage

Trail Centre

A managed multiple trail facility with dedicated visitor services supported by high quality:

- Trails (single or mixed use)
- Outdoor experiences that encourage single day visitation
- Trail-user related services
- Trail branding and signage

A Trail Centre can stand alone in an individual location or may be positioned within a Trail Town.

Trail Network

A multiple trail facility with limited or no visitor services, supported by high quality:

- Trails (single or mixed use)
- Outdoor experiences that encourage single or part day visitation
- Trail branding and signage

A Trail Network may be a stand-alone facility or form part of a Trail Town or Trail Centre.

Trail Hierarchy

A successful equine trails network requires trails with varying levels of significance in order to meet the needs of different user group and market segments. The trail hierarchy provides a guide for the level of infrastructure required for trails to meet the needs of their intended users and to ensure that an appropriate standard of facilities is provided.

A trail's level on the hierarchy indicates the partnerships required to successfully manage the trail, the level of promotion likely to be appropriate and the infrastructure which can be expected by users.

As outlined in the *Western Australian Strategic Trails Blueprint 2017-2021,* trails are categorised according to their significance as state, regional or local trails.

State Trails

An extended trail or trail network that is of sufficient quality and with appropriate facilities, products, and services to be recognised beyond the State and to attract visitors to WA.

Regional Trails

A major trail or trail network that services a population centre or large regional community, with facilities and services of a standard and appeal that could attract visitors from outside the region.

Local Trails

A trail that services the local community and provides facilities suited to local use. Some local trails may have potential for development to regional status.

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Permitted Horse Riding Areas

Horse riding in natural areas is part of the cultural heritage of Australia and a source of pleasure and enjoyment for many people in the community. Horse riding is accepted as a suitable means of appreciating and enjoying natural areas so long it does not detract from the overall values of such areas. The use of natural areas for active recreation, however, always carries some risk of overuse and disturbance.

DBCA Managed Lands

Horse-riding activities are only allowed on DBCA managed lands in locations where the impacts are considered manageable and is permitted only with consent. Consent is given by way of a management plan, signage or in specific incidences by authorised park staff.

In general, riding in parks is permitted only on designated roads and trails. Riding is only permitted off-trail in broad clear areas. Depending on how much horse traffic a park or area receives, horse-riding areas may or may not be signposted, but it is the responsibility of riders to ensure they are riding in the correct locations.

Horse riding is not permitted in Class A reserves and areas of high conservation value or environmental sensitivity, however, may be allowed in some nature reserves. Horse riding may also not be allowed in areas of special scientific or cultural value such as Indigenous heritage areas or other areas requiring special protection.

Horse riding may be permitted in some national parks and conservation parks. Evaluation of proposals to ride horses on national parks, conservation parks and nature reserves will consider any previous history of horse riding, if the impacts of the activity can be minimised and controlled and may also recognise a prior 'right of access' to cross through lands managed by DBCA. Horse riding is permitted in state forests and timber reserves, providing it does not put natural values at risk.

Consideration of horse riding on lands managed by the DBCA may cover a range of opportunities, including day-use trails, designated areas, and free-range riding. For all DBCA managed lands where horse riding is permitted, horse riding is allowed along defined tracks, firebreaks, and roads except where accommodated elsewhere in a management plan or in accordance with accepted previous arrangements.

DWER and Water Corporation

Recreation or commercial horse riding is prohibited in public drinking water source areas (PDWSA) including protection zones and outer catchments but excluding public roads and designated trails. The DWER's *Operational Policy 13: Recreation within public drinking water source areas on Crown land (2019)* applies to formalisation or Shire approval of equine trails on Crown land (including Shire vested land).

There are several legally protected PDWSA's in the Shire. These include the Jandakot underground water pollution control area, Wungong Brook Catchment Area, Serpentine Dam Catchment Area, Serpentine Pipehead Dam Catchment Area, and a small portion of Canning River Catchment Area. Existing trails within the Shire are outside of catchment areas, though some are in close proximity to catchment boundaries.

By-laws exist to prevent horse access in these protected areas and Minister review is required for any new recreational facilities and events in these areas. It is noted that within reservoir protection zones public access is not supported.

Under policy and legislation, any designation of existing firebreaks, roads or informal trails as a formal approved equine trail would be considered as a new recreation facility and require assessment. Existing approved trails will be considered a new facility if they are designated a new use (i.e., dual use).

Shire of Serpentine Jarrahdale

On Shire owned/managed land, horse riding is generally permitted on designated trails and in appropriate areas. There are some areas on Shire owned/managed land where horse riding is not appropriate, for example, some public open spaces and active areas such as playing fields.

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04 Existing Bridle Trails

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04 Existing Bridle Trails

Audit Process

Desktop Trails Inventory

Site visits and on-ground trail audits provide a detailed understanding of the existing bridle trails across the Shire including their condition and key infrastructure.

Prior to undertaking site visits and on-ground audits the first step of the process was to identify existing bridle trails (desktop), for inclusion in the Trails Inventory. This initial process was undertaken using Geographic Information Systems (GIS) to collate a wide range of information, such as endorsed trail alignments from Trails WA and AllTrails. The inventory was developed utilising a range of sources including:

- Background document review
- Consultation findings
- Review of existing trail information
- Comprehensive online research including user-generated content/websites

The development of the trails inventory considers all trails across the Shire, with subsequent site visits and on-ground audits conducted to verify the key issues and opportunities.

Site Visits and On-ground Audits

Tredwell spent approximately one week visiting sites across the key trails within the Shire. This involved collecting relevant data including equine trail alignments, photographs of key areas, information on surface types etc. This process allowed verification of the opportunities and constraints identified during Stages 1 and 2 of the project.

The ESRI ArcGIS Collector mobile application software was utilised for the trail assessment process, which allowed efficient data collection from the field, as well as desktop refinements and visualisation of maps.

Mapping and Spatial Analysis

The trail network data has been processed and spatially analysed using ArcGIS online and Google Maps. The development of maps included overlaying the existing trails network onto other spatial information layers which helped to identify gaps and new trail opportunities.

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04 Existing Bridle Trails

Identified Bridle Trails

During the audit process, multiple formal and informal bridle trails were identified across the Shire. The following equine trails are listed by ATHRA and included in the *Shire of Serpentine Jarrahdale Equine Strategy (2018)*. These trails have either been formally mapped or have relevant information universally available. Official maps are available from Trails WA and AllTrails.

The 9 initial bridle trails identified during the audit process and consultation are presented in Figure 4 and a summary of each trail is provided over the following pages. It is noted that the bridle trail in Webb Road Reserve, Mundijong was identified during the initial audit process, however, will not be included in the Master Plan due to the future Tonkin Highway development, the Mundijong Freight Rail Realignment, and other potential developments on the site.

Following consultation with the DBCA, it has also been determined that the section of Cardup Bridle Trail that runs along the perimeter of Cardup Nature Reserve is no longer viable due to classification of the Reserve as Class A. Through the development of the *Jarrahdale Bridle Trail Development Concept Plan* (DBCA) it has also been determined that sections of the existing Jarrahdale Bridle Trail is no longer suitable for horse riding due to major constraints. As a result, a Concept Plan is being developed for new alignments.

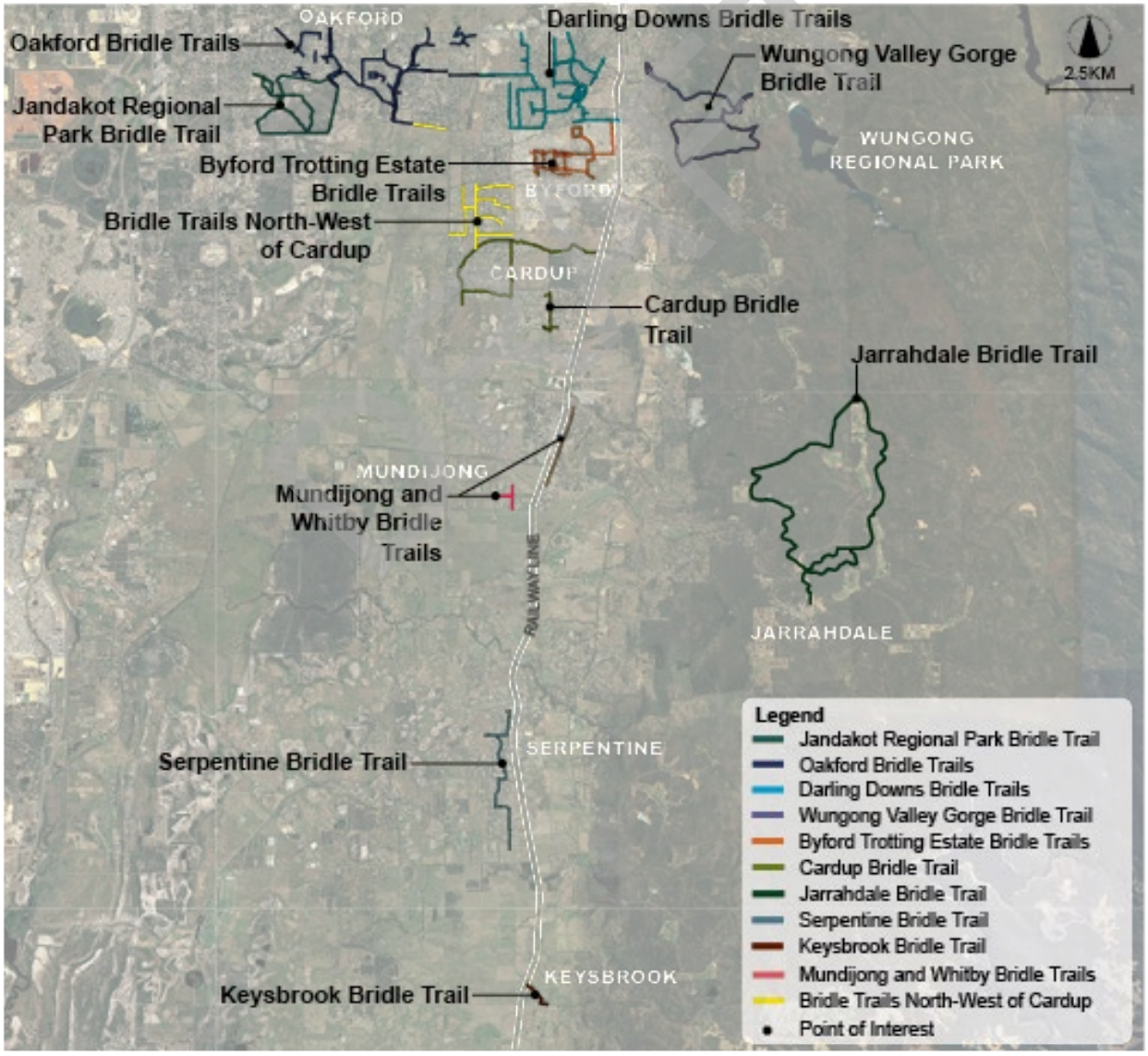

Figure 4: Initial Bridle Trails Identified During Audit Process

04 Existing Bridle Trails

Jandakot Regional Park Bridle Trail

Jandakot Regional Park is a collection of nature reserves that cover a total area of 3,000 hectares. The main 370-hectare area accommodates equestrian riders. There are around 14km of fenced, sand-based trails linking to the 26km trail network in Oakford (refer Figure 4). A summary of the Trail is provided in Table 7.

Table 7: Jandakot Regional Park Bridle Trail Summary

Suburb	Oakford/Wandi
Distance	14km
Time	1-3 hours
Trail Classification	Intermediate
Trail Condition	Average
Management	DBCA and City of Kwinana
Nearby Open Spaces	Modong Nature Reserve, Wandi Nature Reserve and Jandakot Regional Park
Float Parking	Magenup Equestrian Centre (large parking area)
Key Infrastructure	The Magenup Equestrian Centre features clubrooms which provide water and toilets (these amenities can only be accessed if the clubroom is left unlocked). The Jandakot Regional Park Bridle Trail features stepovers and signage.
Additional Information	The Magenup Equestrian Centre and float parking area are located in close proximity to the Jandakot Regional Park Bridle Trail (in Wandi, City of Kwinana) and are managed by the City of Kwinana.

Oakford Bridle Trails

The Oakford Bridle Trails consist of predominantly natural surfaces including sand, limestone, and clay, although there are some formalised trails towards the east. The main entry point to the trail network is off Pony Place. There are several unofficial float parking locations through the network. The trail network links to the Darling Downs Bridle Trails to the east (via the existing Tonkin Highway Underpass) and the Jandakot Regional Park Bridle Trail to the west (refer Figure 4) which can be accessed at the corner of Wolfe Road or at Pony Place. A summary of this Trail is provided in Table 8.

Table 8: Oakford Bridle Trails Summary

Suburb	Oakford
Distance	33km
Time	3-4 hours
Trail Classification	Easy
Trail Condition	Average
Management	Shire of SJ
Nearby Open Spaces	Jandakot Regional Park (DBCA)
Float Parking	Country Drive near the bridge (4 floats), northern section of Cunningham Drive (2 floats) and corner of Craghill Way and Peters Way (2 floats).
Key Infrastructure	Stepovers exist at entry points to Jandakot Regional Park.
Additional Information	The Oakford Community Centre is located at the west end of the trail network and provides future potential as a trailhead and to provide equine based facilities. Currently the site is restricted in its ability to provide equine friendly amenity.

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04 Existing Bridle Trails

Darling Downs Bridle Trails

The Darling Downs Equine Park (also known as the 70 acres) is a 21-hectare open space reserve which is free and accessible for users from the wider community. The Reserve is central to the existing horse ownership areas of Cardup, Darling Downs and Oakford and is mainly used for training and leisure. The Reserve is also linked to an immediate 26 km of trail network in Darling Downs which allows residents to ride to/from the area. This trail network also connects to the Oakford Bridle Trails in the west (refer Figure 4). A summary of the Darling Downs Bridle Trail is provided in Table 9.

Table 9: Darling Downs Bridle Trails Summary

Suburb	Darling Downs
Distance	26km
Associated Trail Circuits	Comic Court Circuit ~5.5km, Birrega Drain Circuit ~2.6km, Link to the Oakford Trails ~3km
Time	3-4hrs
Trail Classification	Easy
Trail Condition	Average
Management	Partnership between Darling Downs Residents Association and the Shire of SJ
Nearby Open Spaces	Darling Downs Equine Park
Float Parking	Evening Peal Court (main parking area) and Rain Lover Court (small parking area)
Key Infrastructure	Picnic tables and signage.
Additional Information	The Darling Downs Equine Park is free to the public and opportunities to book the Reserve for events could be considered to further activate the area in the future. There is no toilet or camping facilities available throughout the trail network.

Wungong Valley Gorge Bridle Trail

The Wungong Valley Gorge Bridle Trail (refer Figure 4) is an 18km return loop through the picturesque Wungong Regional Park. The Trail traverses through land owned by both the Shire of Serpentine Jarrahdale (Admiral Road and Byford access points) and City of Armadale (access points north of Byford). A summary of this Trail is provided in Table 10.

Table 10: Wungong Valley Gorge Bridle Trail Summary

Suburb	Wungong, Bedfordale and Byford
Distance	18km return
Time	5hrs
Trail Classification	Advanced
Trail Condition	Poor to Average
Management	Shire of Serpentine Jarrahdale, City of Armadale and DBCA
Nearby Open Spaces	Wungong Regional Park and Bungendore Park.
Float Parking	Admiral Road South
Key Infrastructure	The Trail is fenced in sections.
Additional Information	There are no facilities and signage available throughout the Trail, therefore it is encouraged to carry a map. In addition, the majority of trails in this Reserve are informal and some sections become quite rocky and steep.

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04 Existing Bridle Trails

Byford Trotting Estate Bridle Trails

The Byford Trotting Estate Bridle Trails (refer Figure 4) are a network of official bridle trails within the estate and are predominantly used to access the Byford Trotting Training Complex. The Trails were originally constructed to provide trainers access from the Byford Trotting Training Complex to their properties. A summary of these trails is provided in Table 11.

Table 11: Byford Trotting Estate Bridle Trails Summary

Suburb	Byford
Distance	8.2km
Time	1hr 30min
Trail Classification	Easy
Trail Condition	Average
Management	Shire of SJ
Nearby Open Spaces	Beenyup Brook Reserve and the Byford Trotting Training Complex
Key Infrastructure	Clubrooms, kitchen, toilet, signage, and carpark are all located at the Byford Trotting Training Complex and are managed by Racing and Wagering WA (RWWA), which is a private organisation and currently only available to members.
Additional Information	As the surrounding areas become built-up, there will be a need for improved traffic management to minimise the conflict between cars and riders. These bridle trails were mainly created to service the users and trainers of the Byford Trotting Training Complex and the trail network has no defined start and finish points.

Cardup Bridle Trail

The DBCA have advised that the section of the Cardup Bridle Trail that moves around the boundary of the 74-hectare Cardup Nature Reserve will no longer be permitted for horse riding due to Class A Reserve status. There is a section of trail which traverses between properties and horse riders are still permitted to ride on this section (refer Figure 4). A summary of the Trail is provided in Table 12.

Table 12: Cardup Bridle Trail Summary

Suburb	Cardup
Distance	2km
Time	30 minutes
Trail Classification	Easy
Trail Condition	Poor to Average
Management	DBCA and the Shire of SJ
Nearby Open Spaces	Cardup Nature Reserve and Cardup Brook Foreshore
Key Infrastructure	Signage at Cardup Nature Reserve.
Additional Information	The Cardup Bridle Trail was originally identified as a 5.2km trail, however following consultation with the DBCA, the Trail has decreased to 2km. The portion of trail located in the Class A Reserve (along the boundary of the Cardup Nature Reserve) has been removed from this Master Plan.

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04 Existing Bridle Trails

Jarrahdale Bridle Trail

The Jarrahdale Bridle Trail (refer Figure 4) forms a 26km loop through Langford Park and the Jarrahdale State Forest. This Trail requires a high level of experience as there are areas of gravel tracks that are rocky and steep. The existing Jarrahdale Bridle Trail is currently under review (via the development of the *Jarrahdale Bridle Trail Development Concept Plan*) and new trails are being proposed that will address the constraints on the existing Jarrahdale Bridle Trail (e.g., mining lease) and expand the current network of trails. A summary of the existing Jarrahdale Bridle Trail is provided in Table 13.

Table 13: Jarrahdale Bridle Trail Summary

Suburb	Jarrahdale and Karrakup
Distance	26km return
Time	Full day
Trail Classification	Intermediate to Advanced
Trail Condition	Poor to Average
Management	DBCA
Nearby Open Spaces	Jarrahdale Oval (Shire of Serpentine Jarrahdale), Langford Park (DBCA) and Jarrahdale Heritage Park (Shire of SJ and National Trust)
Float Parking	Jarrahdale Oval (main parking) or start of Buckland Road (small parking area).
Key Infrastructure	Toilets and informal camping area exist at Jarrahdale Oval.
Additional Information	There are future opportunities to promote trails for tourism/leisure in Jarrahdale State Forest and Langford Park. Jarrahdale Oval has been identified as a potential trailhead, with ample space for formal float parking, camping and equine events.

Serpentine Bridle Trail

The Serpentine Bridle Trail (refer Figure 4) is situated near the Serpentine Sports Reserve to the north (home of the Serpentine Horse and Pony Club and the Serpentine Foothills Polocrosse Club). The Reserve offers facilities such as toilets and water and can be booked for events. The Trail is also situated near Coffey Road Reserve (also known as Tallagandra Reserve) to the south. This six-hectare natural area has the potential to be activated as an equestrian reserve. A summary of this Trail is provided in Table 14.

Table 14: Serpentine Bridle Trail Summary

Suburb	Serpentine
Distance	9.8km
Time	2hrs 45mins
Trail Classification	Easy
Trail Condition	Poor
Management	Shire of Serpentine Jarrahdale
Nearby Open Spaces	Paul Robinson Park, Coffey Road Reserve, Serpentine Sports Reserve
Float Parking	Serpentine Sports Reserve
Key Infrastructure	The clubrooms at the Sports Reserve provide toilets, water, and a carpark, however these are not open unless the facility is booked.
Additional Information	There is vehicle traffic to be wary of where the Trail traverses around properties.

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04 Existing Bridle Trails

Keysbrook Bridle Trail

The Keysbrook Bridle Trail (refer Figure 4) is a short bushland trail located in Myara Brook Reserve. The Trail utilises existing firebreaks and runs adjacent to properties. A summary of this Trail is provided in Table 15.

Table 15: Keysbrook Bridle Trail Summary

Suburb	Keysbrook
Distance	2km
Time	30 minutes
Trail Classification	Easy
Trail Condition	Poor to Average
Management	Shire of Serpentine Jarrahdale
Nearby Open Spaces	Myara Brook Reserve
Float Parking	Keysbrook Fire Station Hall (some parking available)
Key Infrastructure	Signage at Myara Brook Reserve

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04 Existing Bridle Trails

Additional Trails and Linkages

Figure 5 shows the above-mentioned existing bridle trails that were identified prior to consultation, as well as the additional linkages and trails (in red) that have been identified during and after consultation via community workshops, interviews, and stakeholder consultation. The new links and trails are generally either existing informal trails, firebreaks or drains that are either already being used or have the potential to become formalised and usable trails. The additional trails and linkages shown help facilitate travel to, from and between the existing formal trails, residential properties, and key points of interest to create a more connected and integrated equine trail network.

The most significant additional trails and strategic linkages identified include:

- The northern strategic link from the Darling Downs Bridle Trails to the Wungong Valley Gorge Bridle Trails.
- The trails in the subdivision north of Cardup connects the bridle trails in Cardup to the bridle trails located to the north, including the Oakford Bridle Trails.
- Wungong Valley Gorge Bridle Trail Link provides a key connection to the proposed Byford Trail Centre.
- The Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link and the potential future Cardup Brook Loop Trail in Jarrahdale.
- The Water Corporation Drains Link provides a connection to the bridle trails in the north and east.
- The strategic links in Serpentine create trail opportunities for residents.

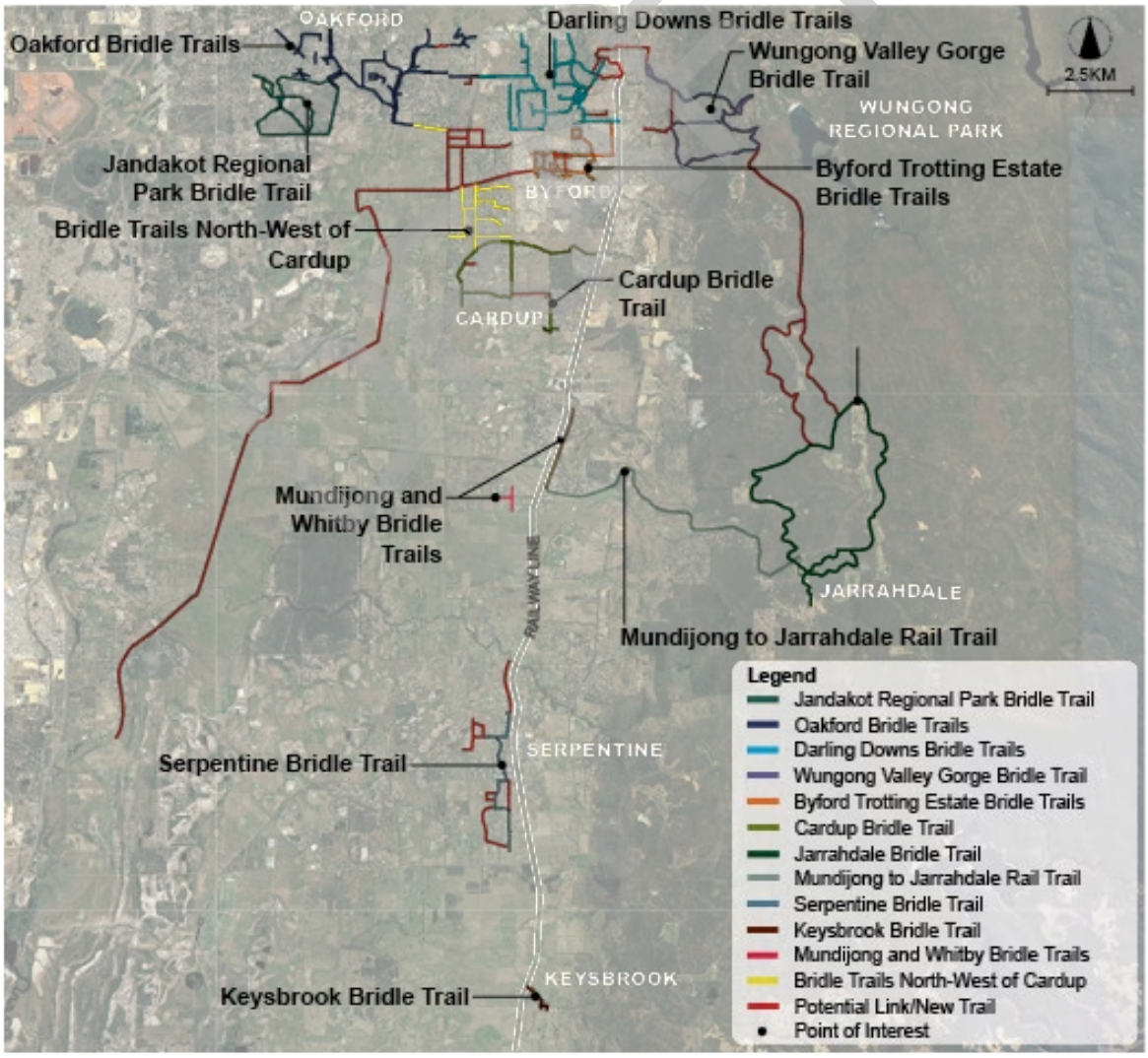

Figure 5: Overall Map Including Additional Trails and Linkages

05 Consultation

Consultation Process

A wide range of stakeholders and community members have been engaged to inform the Equine Trails Project. This process was guided by the project's Engagement Plan.

Project Overview Flyer

To communicate the objectives and scope of the project clearly and concisely to the community and key stakeholders, a Project Information Flyer was distributed, as shown in Figure 6.

Figure 6: Project Flyer

Workshops

Two workshops were held; one was with interested members of the community and Shire Councillors and the other was with staff from DBCA. These workshops provided the opportunity for issues and opportunities to be raised and stories to be shared, in an interactive group format.

The interactive community workshop was facilitated in-person. The workshop had a solution-based focus addressing the challenges and opportunities (SWOT) of bridle trails across the Shire, with reference to a PowerPoint presentation and Google Map of existing trails.

Key Stakeholder Input

Government agencies such as DWER and the Water Corporation were contacted to provide technical input into the project. Stakeholder meetings were conducted with community members, businesses and organisations including the SJ Equine Advisory Group, SJ Trails Inc, ATHRA and Crispin Racing. Moreover, the Draft Implementation Plan was presented to members of the SJ Equine Advisory Group for feedback. This process ensured that all relevant stakeholders were engaged, considering that not all stakeholders could attend the workshops.

Community Survey and Mapping Tool

A survey of the general community and bridle trail users was conducted and has assisted in determining the usage and demand of the existing trail network, and the issues and opportunities for consideration.

The information collected through this survey relates to:

- Existing trails used
- Popularity and frequency of use
- Perception of trail quality, user friendliness and the experience
- Future trail development opportunities
- Issues (e.g., signage, conflict of users, access, safety).

The survey was created and promoted through the Shire's Your Say SJ online platform. An interactive mapping tool was also prepared using ArcGIS Online, providing the opportunity for community input relating to specific geographic locations

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Summary of Key Findings

Community Workshop

The community workshop took place at the Shire of Serpentine Jarrahdale Administration Centre in Mundijong on Thursday the 25th of February, 2021. The workshop presented an opportunity for key local stakeholders to have an input into the Master Plan and share their equine knowledge. Workshop participants included staff and councillors from the Shire, members from the Serpentine Jarrahdale Trails Inc, Serpentine Jarrahdale Residents & Ratepayers Association, Equine Advisory Group, Whitby Residents Association, Jarrahdale Heritage Society and Crispin Racing.

A round table discussion took place on each initial trail location and its strengths, weaknesses, opportunities, and threats (SWOT). Table 16 provides a summary of the findings from the community workshop.

Table 16: Community Workshop Key Findings

Trail	Findings
Oakford Bridle Trail	Strengths: • Connected via underpass from Tonkin Highway to Darling Downs. • Provides links to Jandakot Regional Park. • High number of horses on surrounding properties. Weaknesses: • Unsafe road crossing across Nicholson Road. • Locked gates into Jandakot Regional Park. • Limited parking in the area. • No water points along the Trail. • The Trail requires improved signage. Opportunities: • Connection of trail to Wandi Magenup Equine Park. Threats: • Potential change in zoning of the nearby area. • Motorised vehicles (i.e., dirt bikes) utilising the bridle trail.
Darling Downs Bridle Trail	Strengths: • Connected to the bridle trail in Oakford. • Reasonable amount of parking available in the area. • Signposted trails available. • Arena's nearby (e.g., Equine Park, Darling Downs). Weaknesses: • Disconnected to the south of Thomas Road. • Not connected to equine properties between Kargotich Road and Hopkinson Road. • Poorly signposted road crossings. Opportunities: • Accommodation for long distance riders (i.e., cabins).
Jandakot Regional Park Bridle Trail	Weaknesses: • Lack of signage throughout the Trail. • Limited shade available. Opportunities: • Connection to the bridle trail in Oakford. • Future potential for accommodation including camping. Threats: • Native animals in Jandakot Regional Park (emu's, kangaroos) may scare horses. • Potential spread of non-native plant species.

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Trail	Findings
Wungong Valley Gorge Bridle Trail	Weaknesses: • Lack of parking available in the surrounding area. • Access to the Trail parking for floats is limited. • Landscape is steep for inexperienced riders. Opportunities: • Potential future access to Jarrahdale Road. • Potential future trailhead at Byford Country Club. • Possible connection/link to the bridle trail in Darling Downs. Threats: • Environmental conditions such as high winds and fire.
Byford Trotting Estate Bridle Trails	Strengths: • Large, wide pathways throughout the Trail. Weaknesses: • Trail users who do not own horses or have horse awareness. • Trotters reluctant to share with other path users. Opportunities: • Potential connection to the bridle trail in Darling Downs. • Potential for horse yards and a café for riders. Threats: • Dogs on private property becoming aggressive and unsettling horses. • Motorised vehicles (i.e., dirt bikes) which utilise the Trail.
Cardup Bridle Trail	Strengths: • Central location and within close proximity to other trails in the Shire. • The area around Cardup Nature Reserve is very safe. • Fairly quiet roads also surround the Reserve. Weaknesses: • There are no linkages to other trails in the Shire. • The Trail requires maintenance works (trees and surface), particularly near Soldiers Road. • High amount of traffic and unsafe at Hopkinson's Road and Soldier's Road. • Unfavourable location of the future Tonkin Highway underpass. Opportunities: • Potential future connection to the Serpentine Horse and Pony Club.
Jarrahdale Bridle Trail	Strengths: • Parking is available at Jarrahdale Oval. • Native flows can be seen along the Trail. Weaknesses: • No connection to western side of South Western Highway. • Surface is gravelly and hard on the horses' feet. • No water station is available. Opportunities: • Possibility of extension and connection to other existing trails in the area. • Potential for future overnight accommodation (cabins and yards). • Connection to a new micro-brewery in the area. Threats: • The climate is dry, which poses an increased risk of fire. • Motorcyclists using the Trail.

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Trail	Findings
Webb Road Reserve Bridle Trail	Strengths: • Large, open area for horses. • Surrounded by a large number of equine properties. Weaknesses: • The Reserve is heavily underutilised by equine riders. Opportunities: • Potential for accommodation (i.e., cabins) for long distance riders. • Potential future connection to the Shanley Road subdivision. • Potential for an equestrian park/centre on the Reserve. Threats: • Possibly earmarked for a future WA State Government facility. • The future Tonkin Highway and freight re-alignment.
Serpentine Bridle Trail Loop	Strengths: • Centrally located in relation to the other bridle trails. • Well maintained firebreaks that double as bridle trails. • Coffey Road Reserve has ideal footing in winter and summer. • Tree plantings create separate, useful riding areas. • The sandy firebreaks are good tracks for pace work. Weaknesses: • Road access is only available between the firebreak tracks. • The riding area is narrow. Opportunities: • Potential for the Trail to be extended north, south, and west. • Potential for the Trail to connect to the Serpentine Pony Club. • Potential future linkage/connection to Coffey Road Reserve.
Keysbrook Bridle Trail	Weaknesses: • Railway line passes through the west side of the Trail. Opportunities: • The Trail provides a potential for pony rides. • Potential to connect to a café/mobile café. • Potential to extend the Trail north and south.
Potential Future Bridle Trail Linkages	Potential future trail linkages from North to South of the Shire include: • Potential for an underpass/tunnel to be constructed under Thomas Road. • Potential for long distance rider cabins or other accommodation in Darling Downs and Webb Road Reserve. • The Serpentine Bridle Trail has the potential to link up with the Oakford Bridle Trail via Water Corporation and Shire owned drains and access easements. • Oakford Bridle trail has the potential to link between Abernethy Road to Gossage Road and Kargotich Road to Hopkinson Road. • Possibility of linking Wungong Bridle Trail to Serpentine Bridle Trail utilising Alcoa Haul Roads (Scarp Road). • The Cardup Bridle Trail has the potential to link from Cardup Siding Road to Bett Road, to Norman Road, to Kiln Road, through the Cardup Nature Reserve and then to Nettleton Road. • Potential for an underpass at Cardup Siding Road to ensure safe road crossing and for a culvert to be installed at Cavanagh Road to prevent waterlog in winter.

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Trail	Findings
Potential Future Bridle Trail Opportunities	Potential future bridle trail opportunities include: • Potential for future trails to incorporate riders, jumpers, and polo. Multi-use trails for riders, cyclists, runners could also be considered. • Signage and code of conduct for non-riders to understand how to behave around horses would be beneficial along a trail. • Celebrate and promote horses within the Shire and attract visitors via well-lit road crossing points and attractive signage.

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Community Online Survey

The community online survey was available for comment between the 25th of February, 2021 and the 5th of April, 2021. The survey was advertised via the Shire of SJ website and Facebook page. The survey was completed by 174 participants, and of these, 167 owned a horse and 165 had been horse riding within the past 12 months. Majority of the survey respondents resided in Darling Downs (20.7%), followed by Cardup (12.6%), Serpentine (12.1%), Byford (10.3%) and Oakford (9.8%). There were also a portion of survey respondents who resided outside of the Shire, including suburbs such as Baldivis (3.4%) and Seville Grove and Success (1.1% respectively), which indicates that people from the broader region have an interest in the Shire's equine trails. The majority of respondents owned two horses (55). An overwhelming number or respondents were individual riders and not members of an organised club (124).

Survey responses relating to each trail are summarised in Table 17.

Table 17: Online Survey Key Findings

Trail	Summary
Oakford Bridle Trails	• 102 out of the 174 survey respondents had used the Oakford Bridle Trails within the past 12 months. The most common mode of transport used to access this trail is car and float (71) followed by horseback (27). • The survey results also showed that people most commonly travel 5-20km to access the Oakford Bridle Trails (58) compared with less than 5km (35) and more than 20km (9). • 68 survey respondents believe that these trails are suitable for their riding needs compared to 17 who find this trail unsuitable. The majority of respondents rate the trail experience good (39) followed by average (34) followed by very good (24). • The results also show that trail information (brochures, maps etc.), horse float parking, horse trail infrastructure and amenities are rated as poor, with trail signage rated as below average. These are the key issues that were identified for the Oakford Bridle Trails.
Darling Downs Bridle Trails	• During the past 12 months, 149 of the 174 survey respondents had used the Darling Downs Bridle Trails. The most common mode of transport used to access this trail is car and float (104) followed by horseback (45). • 80 survey respondents travel 5-20km to access this trail, followed by less than 5km (51) and more than 20km (18). A resounding 132 of the survey respondents believe Darling Downs Bridle Trails are suitable for their riding needs and only 6 believe otherwise. • The survey results show that 71 people rate the trail experience in Darling Downs as good, followed by 55 that rate the experience very good and 23 that rate it average. • The majority of respondents believe that there is good horse float parking as well as good quality and well-maintained trails. However, the majority also believe that there are poor amenities on the trail (e.g., toilets, drinking fountains, shelters). This is the key issue that was identified for the Darling Downs Bridle Trails.

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Trail	Summary
Jandakot Regional Park Bridle Trail	• 157 of the 174 survey respondents had not used the Jandakot Regional Park Bridle Trail within the past 12 months (only 17 had utilised the Trail). The majority of people accessed this trail via horse and float (15) compared to 2 on horseback. • Most respondents rated the trail experience as good (7), followed by average (5), very good (3) and poor (2). 12 out of the 17 riders of this trail believe the Trail is suitable for their needs (only 3 believe that it does not suit their needs). • Trail information, trail signage, horse infrastructure and amenities are all rated as poor. These are the key issues that were identified for the Jandakot Regional Park Bridle Trail. Trail user communication and horse float parking were both rated as good.
Wungong Valley Gorge Bridle Trail	• 160 out of the 174 people surveyed have not used the Wungong Valley Gorge Bridle Trail over the past 12 months (only 14 had utilised the Trail). 13 of the survey respondents use car and float to access the Trail and only 1 person used horseback. • Most of the survey respondents travel 5-20km to access this trail (7), followed by 5km (5) and more than 20km (2). • The majority of respondents believe that the current bridle trail experience is good (6) and average (6). In addition to this, of the 14 survey participants that utilise this trail, 8 believe that the Trail is suitable for their riding needs compared with 2 that believe this Trail does not suit their riding needs. • Trail information, trail signage, horse float parking, horse trail infrastructure and amenities are all rated as poor. These are the key issues that were identified for the Wungong Valley Gorge Bridle Trail. Most people believe this trail is best for its numerous diverse formal trails.
Byford Trotting Estate Bridle Trails	• 151 out of the 174 people surveyed had not utilised the Byford Trotting Estate Bridle Trails within the past 12 months (only 23 had used this trail). Out of the 23 survey participants that ride this trail, 13 access it via horseback and only 7 access it via car and float. • Most of the survey respondents travel under 5km to access this trail (16), followed by 5-20km (7). • The majority of survey respondents believe this trail experience is either good (8) or average (8), and some believe its poor (4). An overwhelming 13 of the respondents believe this trail is not suitable for their riding needs, compared to 7 who believe it is suitable. • This trail requires significant upgrades; trail information, trail signage, horse float parking, horse trail infrastructure, amenities and trail safety and security are all rated as poor. There is also an insufficient amount of diverse formal trails. These are the key issues that were identified for the Byford Trotting Estate Bridle Trails.

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Trail	Summary
Cardup Bridle Trail	• 34 of the 174 survey respondents had used the Cardup Bridle Trail within the past 12 months (140 had not used the Trail within the past 12 months). This trail is most commonly accessed via horseback (18) compared to car and float (16). • The majority of respondents travel under 5km to access this trail (21), compared to 13 who travel 5-20km to access the Trail. • 18 of the survey participants believe the trail experience is average, followed by 7 who believe it is very poor and 6 who believe it's good. Most people (14) also believe the Trail is not suitable for their riding needs, compared to 12 who believe the Trail is suitable for their riding needs. • This trail requires significant upgrades; trail information, trail signage, horse float parking, horse trail infrastructure, amenities, trail safety and security and trail user communication are all rated as poor. The Trails are also poorly maintained. These are the key issues that were identified for the Cardup Bridle Trail.
Jarrahdale Bridle Trail	• 35 of the 174 survey participants had used the Jarrahdale Bridle Trail within the past 12 months (139 had not used this trail within the past 12 months). The overwhelming majority of respondents (32) access this trail via car and float compared to 3 who access this trail via horseback. • The vast majority of respondents travel 5-20km to access this trail (25), followed by over 25km (8) and under 5km (2). • Most survey respondents rate the current bridle trail experience as good (15), followed by very good (11), average (5), poor (2) and very poor (2). 27 out of the 35 riders of this trail believe that the Trail suits their riding needs (5 believe that the Trail does not suit their riding needs). • Horse float parking is rated as good for this trail. The key issues/areas of improvement include horse trail infrastructure and amenities which are both rated as poor.
Serpentine Bridle Trail	• 17 out of the 174 survey respondents had used the Serpentine Bridle Trail Loop within the past 12 months (157 had not utilised the Trail within the past 12 months). Most respondents access the Trail via horseback (11), followed by car and float (6). • The vast majority of survey participants travel under 5km to access this bridle trail (15), followed by 5-20km (1) and more than 20km (1). • 6 of the respondents believe the bridle trail experience is average, followed by 4 who believe its poor, 4 who believe it is very good, 2 who believe its poor and 1 who believes its good. In addition, 8 of the respondents believe the Trail is not suitable for their riding needs (6 believe it is suitable for their riding needs). • This Trail requires significant upgrades; trail information, trail signage, horse float parking, horse trail infrastructure, amenities, trail safety and security and trail user communication are all rated as poor. The Trails are also poorly maintained and there is a lack of diverse formal trails. These are the key issues that were identified for the Serpentine Bridle Trail.
Keysbrook Bridle Trail	• Only 1 survey respondent had used the Keysbrook Bridle Trail over the past 12 months. They travel 5-20km to use the Trail and access it via a car and float. • The survey respondent rates the trail experience as average and believes it is suitable for their bridle trail needs. • The key issues/areas of improvement for this trail are amenities (rated poor) and trail signage, horse float parking and trail safety and security (rated as somewhat poor).

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06 Challenges & Opportunities

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06 Challenges and Opportunities

Challenges

The key challenges that have been identified for equine trails throughout the Shire of SJ are outlined in Table 18.

Table 18: Key Equine Trail Challenges

Challenge	Description
Active Lifestyles	It is important that a wide range of equine trail opportunities are accessible to encourage active lifestyles and ensure community members stay active throughout all stages of life.
New Development Areas	As the Shire's population grows and increases in density, it is important to ensure that opportunities are available for equine trail development, including connectivity for active transport and recreation purposes, particularly in semi-rural and special rural areas. It is also important to retain the current equine trail connections across the Shire. It is noted that new urban developments do not generally cater for equine trails.
Population Growth	Equine trails in the Shire require careful planning to prepare for the projected increase in population number and diversity. The Shire's population is projected to grow by 87.72% over the next 15 years, with increased cultural diversity. It is important that a variety of equine trail opportunities caters for a larger and more diverse population into the future.
Environmental Management	Numerous horses pass through equine trails each day, which over time has an impact on vegetation, wildlife, and soil. There is also the risk of spreading Phytophthora dieback and other diseases. Bushfires are a major concern for local horse owners. This will need to be carefully planned and managed for in the future.
Trail Usability	Trail systems should be easy to navigate and intuitive, but the majority of equine trails surveyed by Tredwell have average or below signage and average or below trail information. In addition, 86% of survey respondents in the *Peel Regional Trails Strategy 2019* indicated that signage was below average and 55% indicated availability of trail related information was poor. Improved signage and wayfinding will need to be a high priority initiative to enhance useability.
Trail Classification	The majority of trails in the Shire are classed as easy, however according to a survey in the *Peel Regional Trails Strategy 2019,* 94% of respondents indicated that their technical ability is intermediate or advanced. It is important to improve diversity of classifications to achieve a suitable mix.
Trail Uniqueness, Quality and Experience	There are similar equine trail experiences duplicated across multiple trails within close proximity across the Shire. As per the survey conducted by Tredwell, trail user experience varies across each trail. Trail users are seeking a high-quality trail experience, but most existing equine trails within the Shire are considered average or below quality. It is important to improve the quality of existing trails, provide world class trails and ensure outcomes are sustainable.
Infrastructure and Facilities	The community survey undertaken by Tredwell identified that horse trail infrastructure and amenities are poor across the Shire's equine trails. Few trails also meet requirements for trailhead signage, trail markers and float parking. Trail centres, trail hubs and visitor services make horse riding more accessible. Although there are currently no locations that meet the criteria for a trail centre/hub, the Shire is currently working on future development opportunities, including the Byford Trail Centre and the Jarrahdale Trail Town. It is important to ensure that equine trail developments have adequate infrastructure relevant to the scale of development proposed and trail opportunities are focussed on trail centres and visitor servicing.

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06 Challenges and Opportunities

Challenge	Description
Effective Communication and Information Provision	Effective communication is a key component of equine trail planning and maximising community participation. There is currently a lack of equine trail communication within the Shire. It is important to ensure that equine trail stakeholders, and the wider community, are provided reliable information (e.g., trail maps) in a timely manner. Trail information is now primarily accessed online.
Trail Safety	Horse riding signage on roads is minimal and requires addressing. In addition, much of the equine trail signage is dated and weathered. As per the survey conducted by Tredwell, the majority of equine trails have average or below trail safety. The Shire's equine trails will benefit from new trail head signs, directional signs, safety, and emergency signage.
Equine Trail Accommodation and Events	Lack of tourist accommodation (with stabling provision) means that the Shire is losing out on hosting equestrian competitions to other areas that can satisfy demand both within WA and nationally. There is also a shortage of signature equine trail events within the Shire, however it is noted that the Shire is currently working on developing such equine events. These events would attract greater community awareness, participation, and investment in the equine industry. There is potential for these aspects to be addressed in the development of the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)*.
Equine Monitoring	There is a lack of robust information on the number and geographic distribution of horses within the Shire. This means that monitoring the equine sector, for example, in terms of its importance or impacts, is difficult. As the Shire grows in population, the quantity of horse ownership will change. The Shire will need to understand these changes and respond to the needs of the community. Relationships between the Shire and the community will need to continue, which will assist in addressing issues.

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06 Challenges and Opportunities

Opportunities

The key opportunities that have been identified for equine trails throughout the Shire of SJ are outlined below in Table 19.

Table 19: Key Equine Trail Opportunities

Opportunity	Description
Consolidate the Shire as a Key Equine Trails Destination	The Shire can solidify and capitalise on its position as the major hub for equine trails in WA by planning and developing further high quality, safe, sustainable, and user-friendly trails, as well as finding ways to improve and connect the existing trails networks in the North and South of the Shire.
Create Trail Centres and Facilitate Events	Potential upgrade/development of the Darling Downs Equine Park, Serpentine Sports Reserve, Byford Trotting Training Complex, Byford Trail Centre, and Coffey Road Reserve to provide facilities and amenity. This will assist in facilitating future, organised equine trails activities and events. These improved facilities will also assist in increasing general participation in equine trail riding. The possibility of long-distance rider accommodation and horse tie-up areas should be considered.
Implement Equine Trail Development in Jarrahdale	The Shire and DBCA are currently working towards a realigned and enhanced Jarrahdale Bridle Trail within the Jarrahdale State Forest and areas of Langford Park. Strategic linkages are also being investigated through to Jarrahdale Town Centre, Wungong Regional Park and Mundijong.
Develop Jarrahdale Trailhead	Jarrahdale Oval has the potential to provide a key equine trailhead. The oval itself is currently identified as an events space and multiple opportunities exist for equine based activities facilities and amenity to capitalise on the use of this area as a trailhead. Ample space for float parking is also available. The oval is also a key access point for the Jarrahdale Bridle Trail.
Develop Jarrahdale Trail Town	A strategic high priority of the Shire is for Jarrahdale to be accredited as a formal Trails Town by Trails WA. A major focus and point of difference will be the strong equine trail focus of Jarrahdale and the planned upgrading and enhancements of existing equine trails as well as new equine trail developments.
Equine Trail User Accommodation	Create new and accessible accommodation options for equine trail users. The need for equine trail user accommodation was identified in the *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)* and the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)*. These documents promote the Jarrahdale RV Park and Jarrahdale Oval as potential sites for accommodation options, including bed and breakfast accommodation, tourist villages and campgrounds.
Promote and Celebrate Equine Trails	Opportunity to market and promote equine trails and services across the region via social media, websites, signage etc. The shire should be celebrated and promoted as a unique and world class equine trails hub which will attract visitors and tourists.
Capitalise on Geographic Location	Rural charm, suitable topography, and a long-standing history of equine industry in the Shire provides an opportunity to further facilitate equine trail development. Being within close proximity to the Perth metropolitan area allows the Shire to capitalise on its geographic location and become an attractive equine destination for tourists and visitors.

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06 Challenges and Opportunities

Opportunity	Description
Maintain and Improve Accessibility	The Shire currently has a well-established road network with north/south and east/west connections. These provide good accessibility to equine trails around the region and a strong link from the Perth metropolitan area into the region. The new Tonkin Highway and Metronet developments will further improve this network and increase equine trail patronage. These developments will also provide key infrastructure such as underpasses and bridges which will help to improve safety and accessibility for equine trail users. Pegasus crossings are another effective approach to improve safety and accessibility (particularly across roads).
Increase Market Interest and Demand	High forecasted population growth and high levels of horse ownership will necessitate increased equine trail usage and opportunities. The continued growth of the equine sector in the Shire will provide the necessary basis for further equine employment and business opportunities. Increased interest and demand will help to facilitate the development of new sustainable purpose-built equine trails in strategic locations.
Improve Distribution of Equine Trail Information	The development and provision of up-to-date equine trail maps and other information. This will help improve user experience, confidence, and distribution of information.
Provide Inclusive Equine Trails	Inclusivity is an important aspect of trail planning and development within a community. The benefits of active lifestyles are obtainable by all community members if opportunities are inclusive and accessible, for example, providing suitable equine trail infrastructure for people with disabilities. Where possible, it is important to provide opportunities for other equine trail users such as harness riders and carriage drivers. Equine trails that are classified as 'easy' generally provide opportunities for these users.
Plan for Connecting Infrastructure	Early consideration should be given towards equine connection (including underpasses and overpasses) when planning new equine trail projects within the Shire, particularly on Thomas Road, South Western Highway and Tonkin Highway.
Improve Equine Trail Signage	A significant opportunity for the improvement of equine trails infrastructure in the Shire is to develop and implement high quality and up to date signage, including trail head signage, directional signage, and safety and emergency signage.
Provide Adaptable Trails	As equine trails across the shire are progressively developed/improved, a key opportunity is to ensure that they are resilient to potential future changes, such as climate change, technology advancements and changing trail preferences, to remain fit-for-purpose into the future. To remain adaptable, it is also important to provide trail opportunities for various equine trail user groups (e.g., harness riders and carriage drivers) and adapting trails to suit these user groups.

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07 Vision and Principles

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07 Vision and Principles

Planning Pyramid

The establishment of a common vision for the Master Plan will provide a strategic direction for the Shire of SJ, the DBCA, other relevant organisations and the wider community to coordinate initiatives towards developing a sustainable equine trails network across the Shire.

As illustrated below in Figure 7, the vision facilitates the development of associated strategic outcomes, which in turn provide the framework for the development of strategies (specific approaches to achieve the strategic outcomes and fulfill the vision).

Individual actions are then identified to deliver on each of the strategies and address the relevant issues and opportunities identified through the background research, on-ground audits, and stakeholder/community consultation.

Utilising this approach produces a clear and actionable implementation plan to deliver the overall vision.

Figure 7: Strategic Planning Pyramid

Vision

The following vision is reflective of the community's aspirations and has been developed based on the findings of the background research, on-ground audits, and community/stakeholder consultation, to reflect the ultimate goal for the Master Plan.

The vision for the SJ Equine Trails Master Plan is:

A diverse, interconnected, and sustainable network of equine trails, which is supported by reliable information and high quality equine trail infrastructure, amenities, and signage, providing benefits for the thriving local community and equine industry while also protecting environmental values.

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07 Vision and Principles

Strategic Outcomes

To deliver the vision, the following series of strategic outcomes have been developed.

A: Integrated Planning & Management

Underpinning a sustainable, integrated, and accessible network of equine trails is a strategic framework and coordinated approach through collaboration with key stakeholders, prioritised investment, and appropriate levels of resources.

B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

Initial focus on enhancing existing equine trails to provide clearly defined, safe, sustainable, and accessible opportunities for horse riders in natural environments.

C: Information, Promotion and Marketing

Provision of up-to-date, consistent, and reliable information relating to equine trails to enable horse riders to confidently explore the equine trails, and for use in marketing and promotion of the experiences offered across the Shire.

D: Management and Maintenance

The ongoing success and sustainability of equine trails is dependent on effective management and regular maintenance coordinated by the Shire.

E: Community, Tourism & Economic Development

Significant community, tourism, and economic development opportunities are available through having a clearly defined and well managed network of equine trails across the Shire.

Principles

The following principles will ensure that equine trail developments are guided to be sustainable and best practice. The following principles (refer Table 20) will underpin achievement of the vision

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07 Vision and Principles

Table 20: Principles

Principle	Description
Environment and Sustainability	A network of equine trails which minimises and mitigates environmental impact. Land managers to balance recreation and conservation and to define 'acceptable limits'. Protect the future of equine trail riding through short and long term planning, with consideration of environmental, social, organisational, and economic sustainability as well as the sustainability of equine trails and facilities.
Access and Safety	The Shire's equine trails are high quality, easily located, and clearly defined, with current and accurate trail information, providing a safe and accessible experience for all residents and visitors.
High Quality and Interconnected Network	Integrated planning, effective management, regular maintenance, and support will result in diverse, fit-for purpose, sustainable and high-quality equine trails.
Local and Visitor Economy	The Shire's equine trails are planned and developed to match current community and market needs and respond to future change, realising opportunities to support growth in tourism and the health and wellbeing of local residents.
Collaboration, Management and Governance	A strategic framework and a coordinated approach to planning for the continuous improvement of equine trails to an agreed standard through collaboration and partnerships with key stakeholders, prioritised investment, and appropriate levels of resources.
Clear Communication and Education	Provision of up-to-date, consistent, and reliable information relating to the Shire's equine trails to enable users to confidently explore the network, and to use in marketing and promotion. Mutual understanding of, and respect for, equine trail riding across the Shire through education, which will assist in maximising safety and trail harmony and minimising impacts.
Recognition and Advocacy	Recognise the Shire's equine trail potential as well as other factors such as riders' needs, diversity, sector size, and value. In turn, promoting and advocating this potential is important to gain recognition from policy makers, regulators, urban planners, land managers and trails planners.
Support Infrastructure and Amenities	Equine trails are well supported with infrastructure and amenities (including signage) to provide a high quality equine trail riding experience and to cater for increased demand and future population growth.

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08 Implementation Plan

08 Implementation Plan

Prioritisation

A prioritised implementation plan has been prepared to enable a staged approach to the enhancement and development of the Shire's equine trails. Strategies have been prioritised as 'high', 'medium', or 'low', based on:

- Benefit: overall benefit to the region and community (social, environmental, economic)
- Need/demand: field observations, community consultation, input from relevant stakeholders and contribution to broader Shire objectives
- Feasibility: project size, resource requirements/cost, social, economic, or environmental constraints, likelihood of successful implementation
- Location: proximity and connectivity to residential populations, existing equine trails, and significant visitor/tourist attractions

It is expected that the implementation of several actions will include further consultation with stakeholders and the wider community. It is important to acknowledge that project implementation and delivery will be subject to financial limitations and positions of relevant land managers.

Indicative Timeframes

Actions have been identified with indicative timeframes acknowledging that it is not feasible to deliver all the identified actions simultaneously. Timeframes are indicated as follows:

- Immediate: 2022/23
- Short: 2023 – 2027
- Medium: 2027 – 2031
- Long: 2032 onwards
- Ongoing

These timeframes should be reviewed periodically recognising that the schedule of implementation will be influenced by funding priorities. Significant strategies requiring initial feasibility studies, design development and/or cross-agency collaboration will likely take numerous years. Some actions will be reliant on the successful completion of other actions.

Cost Estimates

An estimate of the resources required to implement each action has been identified to inform budget processes. These are indicative cost estimates and should be reviewed and re-evaluated during the detailed design phase prior to implementation or as part of annual business and budget planning.

The following indicative cost estimates have been used:

- Low: <$50,000
- Medium: $50,000 – $200,000
- High: $200,000 – $500,000
- Major: >$500,000

All costs identified are based on a preliminary assessment only. Costings are identified in broad value ranges. Where feasible, identified strategies that propose longer trails could be implemented in stages, thereby spreading the cost over several financial years.

Concept Maps

Each trail strategy features an accompanying concept map which illustrates the proposed equine trail. Each trail is colour-coded, with identification of trail name, relevant points of interest and proposed infrastructure.

Partners

Partnerships will be required for the implementation of the strategies and ongoing equine trail management and maintenance. These will be especially crucial where complexities surround the planning and development of equine trails.

Key partners are likely to include: the Shire, DBCA, DWER, Department of Planning, Lands and Heritage (DPLH), Water Corporation, Traditional Owners, Landcare groups, equine groups, neighbouring local governments, community groups, private landowners, and developers.

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Strategic Overview

To deliver the vision, a series of five strategic outcomes and their relevant prioritised strategies (refer Table 21) have been developed and are outlined below, with their associated detailed rationale and action plan provided over the following pages.

Table 21: Strategic Outcomes and Strategies

STRATEGIES		PRIORITY	COST
STRATEGIC OUTCOME A: Integrated Planning & Management			
A1	**Integrated Framework:** Implement an integrated framework for planning, implementation, and management of the Equine Trails Master Plan, including working with existing equine trail user groups and organisations to ensure effective collaboration with relevant stakeholders.	High	High
STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails			
B1	**Regional Level Trail Priorities:** Focus on the enhancement of existing and potential regional level equine trails that contribute to the Shire's continued reputation as a renowned destination for equine trail users.	High	Major
B2	**Oakford Bridle Trails:** Upgrade and enhance the Oakford Bridle Trails, formalise the northern linkage from Country Drive to Kargotich Road and ensure the proposed bridle trails within the subdivision between Kargotich Road in the west and Thomas Road in the north are implemented.	High	Major
B3	**Darling Downs Bridle Trails:** Upgrade and enhance the Darling Downs Bridle Trails and formalise the link to Wungong Valley Gorge Bridle Trail.	High	Major
B4	**Byford Trotting Training Complex:** Enhance the Byford Trotting Estate Bridle Trails, ensuring safe access.	High	Major
B5	**Bridle Trails North-West of Cardup:** Formalise the network of bridle trails north-west of Cardup, providing suburban connections and linking to the bridle trails in Byford and Oakford.	High	Major
B6	**Jarrahdale Bridle Trail Network:** Enhance and upgrade the network of bridle trail loops in Jarrahdale, realign the current Jarrahdale Bridle Trail and provide a future trailhead at Jarrahdale Oval.	High	Major
B7	**Serpentine Bridle Trail:** Formalise the Serpentine Bridle Trail, provide a connecting link from Salmon Bark Road to Utley Road and Wattle Road to Salmon Bark Road and upgrade Coffey Road Reserve.	High	Major
B8	**Tonkin Highway Expansion:** Liaise with Main Roads to ensure that the proposed associated intersections, bridges, and underpasses are implemented.	High	Low
B9	**Cardup Bridle Trail:** Upgrade the section of Cardup Bridle Trail that is outside the Cardup Nature Reserve and formalise the trail links to the west.	Medium	Major

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STRATEGIES		PRIORITY	COST
B10	**Wungong Valley Gorge Bridle Trail:** Upgrade and enhance the Wungong Valley Gorge Bridle Trail and formalise western linkage to the Byford Country Club as well as the trail loop south of the Wungong Valley Gorge Bridle Trail.	Medium	Major
B11	**Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link and Cardup Brook Loop Trail:** Formalise the connecting trail from Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail via Old Haul Road and consider formalising Cardup Brook Loop Trail.	Medium	Medium
B12	**Jarrahdale Strategic Links:** Formalise the strategic link from Jarrahdale Oval through to Mundijong utilising the Mundijong to Jarrahdale Rail Trail.	Medium	Major
B13	**Jandakot Regional Park Bridle Trail:** Work with DBCA to upgrade and enhance the Jandakot Regional Park Bridle Trail.	Low	High
B14	**Mundijong and Whitby Bridle Trails:** Upgrade the existing Mundijong and Whitby Bridle Trails.	Low	Medium
B15	**Serpentine Subdivision:** Ensure the new subdivision opposite the Serpentine Golf Course implements the proposed multi-purpose trail.	Low	High
B16	**Water Corporation Drains**: In consultation with Water Corporation, consider formalising the trail from Karnup Road to Thomas Road and Kargotich Road utilising Water Corporation Drains.	Low	High
B17	**Keysbrook Bridle Trail:** Maintain and enhance the existing Keysbrook Bridle Trail.	Low	Medium
STRATEGIC OUTCOME C: Information, Promotion & Marketing			
C1	**Signage, Maps and Supporting information:** Provide consistent and reliable signage, maps and supporting information for the Shire's equine trails network.	High	High
C2	**Marketing and Promotion Strategy:** Develop and implement a Marketing and Promotion Strategy for the Shire's equine trails.	High	Medium
STRATEGIC OUTCOME D: Management & Maintenance			
D1	**Trails Management and Maintenance Program:** Develop and implement a Trails Management and Maintenance Program detailing equine trail requirements.	High	High
D2	**Trail Monitoring Strategies:** Clearly define appropriate monitoring strategies for equine trails as part of the Trails Management and Maintenance Program.	High	Medium

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STRATEGIES		PRIORITY	COST
D3	**Code of Conduct and Risk Management:** Develop and implement a general trail user Code of Conduct, promote, and adopt the existing ATHRA Code of Conduct and develop and implement an overarching management plan to manage risk on the Shire's Bridle Trails.	Low	Medium

STRATEGIC OUTCOME E: Community, Tourism & Economic Development			
E1	**Equine Tourism:** Enhance the tourism potential of equine trails within the Shire, including investigating locations for key trailheads and trail centres and establishing Jarrahdale as a Trail Town with an Equine focus.	High	Major
E2	**Economic and Community Development:** Use equine trail development and provision as a tool for economic and community development.	Medium	Major

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Strategy and Action Plan

STRATEGIC OUTCOME A: Integrated Planning & Management

STRATEGY A1: Integrated Framework

Implement an integrated framework for planning, implementation, and management of the Equine Trails Master Plan, including working with existing equine trail user groups and organisations to ensure effective collaboration with relevant stakeholders.

RATIONALE

The SJ Equine Trails Master Plan provides a framework for the identification and ongoing planning and enhancement of the Shire's equine trails (formal and informal). It is important that an integrated approach is implemented to allow for coordinated efforts between various government agencies (e.g., the Shire of Serpentine Jarrahdale, DBCA, Water Corporation), community groups (e.g., environmental, and equine groups), individual trail users and Traditional Owners. Integrated equine trail networks offer synergies to achieve positive outcomes across various areas such as health, recreation, transport, and conservation. The community will also benefit from broader strategic planning of equine trails.

There were several user groups and organisations who assisted in the development of this Master Plan, and it is important to work with these groups to build upon the existing engagement. These user groups and organisations include Serpentine Jarrahdale Trails Inc, Equine Advisory Group, Jarrahdale Heritage Society, Serpentine Jarrahdale Residents & Ratepayers Association, Whitby Residents Association and ATHRA.

Working with existing equine trails user groups and organisations will ensure effective planning, design, construction, and maintenance of the Equine Trails Master Plan. These groups will also assist in promoting the increased use of the Shire's comprehensive and unique network of equine trails. The groups vast equine knowledge and skills will allow for accurate and reliable dissemination of information on the equine trails network for local residents and visitors alike. The groups will be a central source of equine trail information, including aspects such as upcoming events, industry news and planning will help to promote and market the Shire as a key equine trail's destination. The groups will be a key mechanism for raising funds and providing resources to continue to support and improve the equine trails network. This includes lobbying and advocating for federal and state government funding for equine based trail projects within the Shire. Other funding options should also be considered including Developer Contributions and Cash-in-Lieu of Public Open Space.

ACTIONS

Table 22: Integrated Framework Actions

	ACTION	TIMEFRAME	COST
A1.1	**Equine Trails User Groups and Organisations:** Work with existing equine trails user groups and organisations to ensure voices of the local equine community are heard and to manage the implementation of the Equine Trails Master Plan with representation from key relevant stakeholders (e.g., Equine Advisory Group members, ATHRA members, equine trail user groups).	Immediate	Low

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	ACTION	TIMEFRAME	COST
A1.2	**Equine Trail Stewardship Program:** Establish an Equine Trail Stewardship Program which builds capacity and encourages volunteers to contribute to equine trail management and maintenance activities meaningfully and continually across the Shire, while managing risks of such activities.	Immediate	Low
A1.3	**Funding and Advocacy:** Encourage, advocate, lobby and seek external funding (e.g., federal and state governments) to support the implementation of the Equine Trails Master Plan.	Ongoing	Low
A1.4	**Developer Contributions:** Ensure developer contribution policies include opportunities to utilise funding for multi-purpose trails.	Ongoing	Low
A1.5	**Cash-in-Lieu of Public Open Space:** Consider sourcing capital funds through Public Open Space Cash-in-Lieu Contributions (i.e., cash payments can be made by a landowner to a local government in lieu of all or part of a public open space contribution).	Ongoing	Low
A1.6	**Broader Community Planning:** Incorporate initiatives for the development and enhancement of equine trails into broader community planning (e.g., strategic plans, development plans, open space plans) and budgeting processes.	Ongoing	Low
A1.7	**Trail Planning Process:** Ensure that equine trails are planned for and developed using the 8-stage trail planning process outlined in the *Trail Development Series (2019)* published by the WA Government.	Ongoing	Low
A1.8	**Existing Stakeholders:** Continue to engage with the existing stakeholder groups who provided input into this Master Plan.	Ongoing	Low

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B1: Regional Level Trail Priorities

Focus on the enhancement of existing and potential regional level equine trails that contribute to the Shire's continued reputation as a renowned destination for equine trail users.

RATIONALE

The Shire already has an established reputation for equine trail networks that support trail riding and tourism, and facilities that attract people from the local community. The Shire can solidify and continue its reputation as the leading region for equine trails in WA by planning and developing clearly defined, high quality, safe, sustainable, accessible, and user-friendly trails, as well as finding ways to retain, enhance and connect the existing equine trails North and South of the Shire.

It is important to strategically prioritise regional level trails to solidify and continue the Shire's reputation as the leading region for equine trails in WA. The existing and future equine communities in the Darling Downs, Oakford, Cardup and Serpentine localities have an established reputation for horse riding, having the highest density of horse ownership in the Shire and benefit from being within close proximity to Perth City (25-35 minutes). Byford's urban population will continue to grow exponentially in the next several years, which will increase the demand for recreational trails. These regional level trails are within close proximity to one another and feature a diverse network of equine trails. There is also scope to extend and better connect the network. These trails are Shire owned, which allows future planning and development to be effectively implemented and managed.

The Jarrahdale area is also a key area for equine trail planning and development and is well placed to become the hub of the Shire's trail activities. There are currently two major trail projects occurring in Jarrahdale which will have a significant impact on equine trails in the area. These are the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)* and the *Jarrahdale Bridle Trail Development Concept Plan*. There is a plethora of trail linkages and loops in Jarrahdale which provide unique experiences for riders and Jarrahdale Oval will provide a key future trailhead attracting locals and tourists. Jarrahdale is strategically located to create a link from the southern equine hub through to Wungong and the northern equine hub.

ACTIONS

Table 23: Regional Level Trail Priorities Actions

	ACTION	TIMEFRAME	COST
B.1.1	**Darling Downs:** Ensure Darling Downs is nationally recognised as an equine community and continues its reputation to attract visitors through promotion and marking and infrastructure upgrades.	Ongoing	Medium
B1.2	**Oakford:** Enhance the Oakford Bridle Trails through trail and infrastructure upgrades, as well as provision of promotional material.	Ongoing	Medium
B1.3	**Byford:** As the population increases, ensure effective planning is undertaken to protect and enhance the network of bridle trails in Byford and establish the area as a key attraction for visitors through trail infrastructure upgrades.	Ongoing	High
B1.4	**Cardup:** Formalise the important trail linkages in Cardup to connect to the other horse populated areas of Byford, Oakford, and Darling Downs.	Ongoing	High

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	ACTION	TIMEFRAME	COST
B1.5	**Jarrahdale:** Develop equine trails which support Jarrahdale in becoming a Trail Town as per the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)*, formalise the network of linkages and loops in Jarrahdale connecting to the northern equine hub, and develop Jarrahdale Oval into a trailhead, providing potential short stay accommodation and facilities for visitors.	Ongoing	High

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08 Implementation Plan

STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B2: Oakford Bridle Trails

Upgrade and enhance the Oakford Bridle Trails, formalise the northern linkage from Country Drive to Kargotich Road and ensure the proposed bridle trails within the subdivision between Kargotich Road in the west and Thomas Road in the north are implemented.

RATIONALE

The Oakford Bridle Trails (refer Figure 8) are Shire managed trails that are well-situated close to the Perth Metropolitan Area and connect to the Darling Downs Bridle Trails and the Jandakot Regional Park Bridle Trail. Surrounding properties contain a high population of horses. It was identified through the community workshop and onsite trail audits that an underpass across the busy Nicholson Road (refer Figure 8) would be desirable to offer improved connection and safety for horse riders.

The Trails will benefit from improved stepovers and fencing in some sections to prevent unauthorised access. There is a lack of official float parking areas on this trail and car and float transport was identified as the most popular mode of transport to access these trails. Therefore, the existing float parking areas require formalisation and extension to cater for the increasing number of equine trail riders. It is important to upgrade and install new horse trail infrastructure, amenities, and signage. The community survey identified that horse trail infrastructure and amenities (e.g., toilets, drinking fountains, shelters) at this location were poor.

It is important to plan for the new Tonkin Highway extension as this will impact on the ability to connect these trails to other trail networks. Consultation was undertaken with the Armadale Access Alliance (a group consisting of Main Roads, Laing O'Rourke, and BG&E) and the Equine Advisory Group to determine the most appropriate locations for underpasses across Thomas Road. The general consensus was that the most ideal underpass location is in an area that is not a built-up urban area, therefore an underpass is proposed to be constructed at the intersection of Thomas Road and Kargotich Road and another underpass is recommended near Peverett Lane (refer Figure 8).

ACTIONS

Table 24: Oakford Bridle Trails Actions

	ACTION	TIMEFRAME	COST
B2.1	**Signage:** Install/upgrade wayfinding, management, and interpretation signage as well as emergency and safety signage to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B2.2	**Infrastructure:** Improve horse trail infrastructure, including provision of tie-up rails, water stations and mounting blocks at key points along the Trail and in float parking areas.	Medium	Medium
B2.3	**Float Parking:** Provide additional formalised float parking at the end of Rustic Place and formalise float parking areas at Craghill Way, Country Drive and Cunningham Drive.	Medium	High
B2.4	**Management Plan:** Develop and implement a Trail Management Plan for the Oakford Bridle Trails, including relevant inspections and maintenance with a focus on trail safety.	Short	Low

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	ACTION	TIMEFRAME	COST
B2.5	**Oakford Community Centre:** Investigate the viability of extending the Oakford Community Centre (refer action E1.3) to provide designated amenities and facilities for horse riders (e.g., toilets, water troughs).	Medium	High
B2.6	**Northern Trail Link:** Formalise the northern trail link from Country Drive to Kargotich Road.	Short	Low
B2.7	**Subdivision Plans:** Liaise with relevant land managers and developers to ensure that the proposed bridle trails within the subdivision between Kargotich Road in the west and Thomas Road in the north are included in the final subdivision plans.	Ongoing	Low
B2.8	**Tonkin Highway Underpasses:** Work with the Main Roads to ensure that the future Tonkin Highway extension includes the following underpasses to allow for equine trail connectivity. • At the intersection of Thomas Road and Kargotich Road to link the Oakford Bridle Trails to the trails in the south • Near Peverett Lane where the Water Corporation Drains Linkage meets the Oakford Bridle Trails	Long	High

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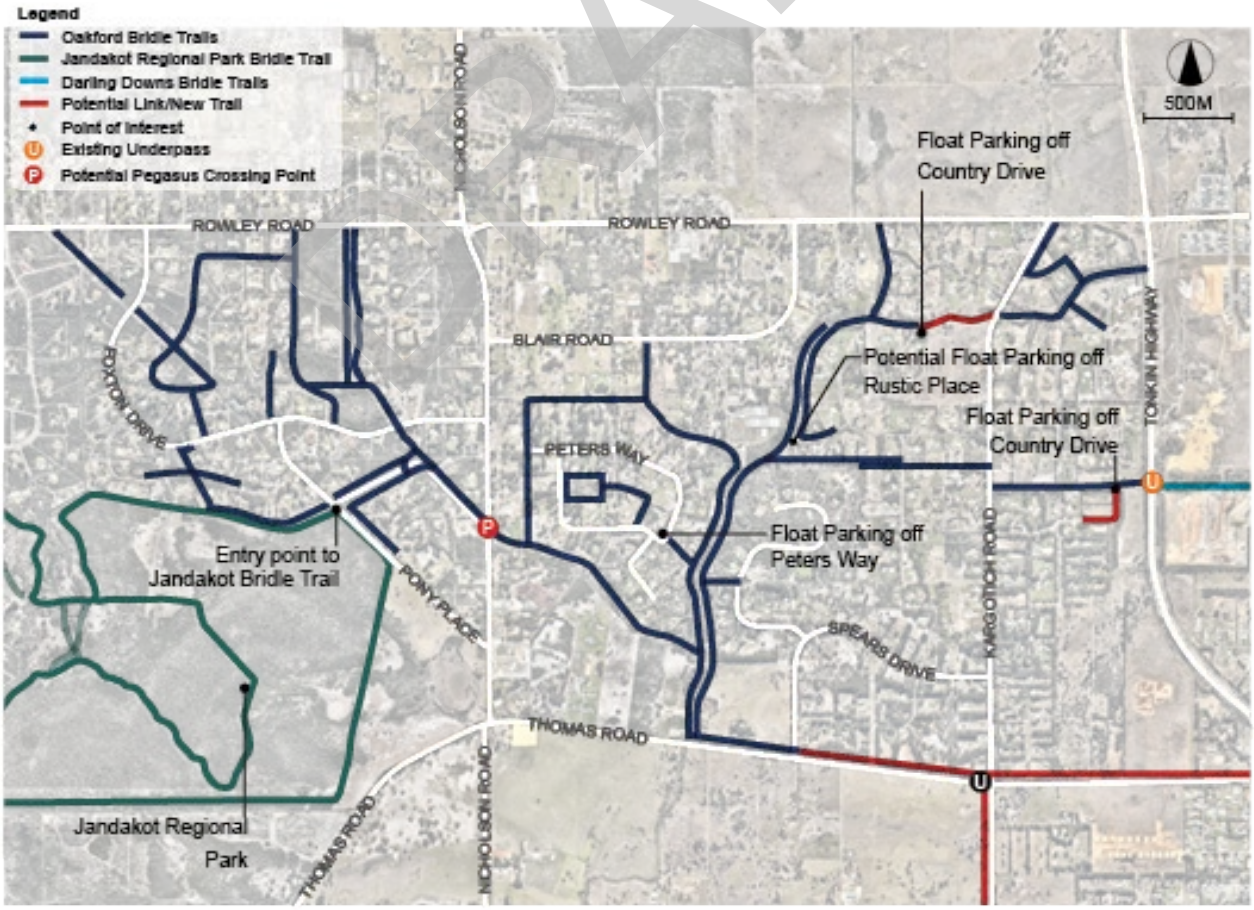

Figure 8: Oakford Bridle Trails

STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B3: Darling Downs Bridle Trails

Upgrade and enhance the Darling Downs Bridle Trails and formalise the link to Wungong Valley Gorge Bridle Trail.

RATIONALE

The Darling Downs Bridle Trails (refer Figure 9) are Shire managed trails that are unique and iconic to the Shire and WA. The Trails provide an accessible and pleasant place for local and visiting horse riders. These trails are well connected to the Oakford Bridle Trails and a strategic link can be provided through to the Wungong Valley Gorge Bridle Trail (refer Figure 9). The Trails are popular and well utilised from both locals and visitors and the modes of transport which are most commonly used to access the Trails is a mixture of car and float and horseback. The Trails link back to what is locally known as the '70 acres' or the Darling Downs Equine Park (refer Figure 9), constructed during the development of the subdivision in 1978. The Equine Park provides a free, open public space available to all Perth equestrian riders. It contains a surfaced trotting track with a circuit of 1600 m, two fenced exercise arenas, plus open riding space and cross-country course.

According to the community survey, amenities (e.g., toilets, drinking fountains, shelters) were rated as poor. It is important for the Equine Park to be activated as a key trailhead, providing enhanced community amenities. Horse trail infrastructure was also rated as below average, indicating that an upgrade of existing infrastructure (including signage) and provision of new infrastructure in key areas is required. The trail audits and community survey both identified that fencing and stepovers require upgrading in certain areas of the Trails. These trails cross over some busy roads, particularly Masters Road and to ensure safety, it will be beneficial to install pegasus crossings at these points (refer Figure 9).

The Trails have the potential to connect to the Wungong Valley Gorge Bridle Trails, which will create new and diverse trail opportunities. To ensure the safety of this trail connection, two underpasses are to be installed; one across the existing railway and one across the busy South Western Highway (refer Figure 9). Through consultation with the Armadale Access Alliance and Equine Advisory Group, it was identified that the most suitable location for these underpasses is at Eleventh Road.

The Thomas Road Bridge Over Rail project will be delivered by Main Roads on behalf of the WA State Government. A new bridge will be delivered to support the proposed Metronet Byford Rail Extension. The bridge will feature a new underpass which will also accommodate horse riding. The underpass connects to the southeast section of the Darling Downs Bridle Trails will provide greater access for surrounding residents.

ACTIONS

Table 25: Darling Downs Bridle Trails Actions

	ACTION	TIMEFRAME	COST
B3.1	**Signage:** Upgrade/install trailhead, wayfinding, management, and interpretation signage as well as emergency and safety signage to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B3.2	**Infrastructure:** Improve horse trail infrastructure, including provision of tie-up rails and mounting blocks at key points along the Trail and particularly at float parking locations (Rain Lover Court and Evening Peal Court).	Medium	Medium

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	ACTION	TIMEFRAME	COST
B3.3	**Darling Downs Equine Park:** Upgrade Darling Downs Equine Park to provide amenities such as water troughs and drinking fountains as well as horse infrastructure including yards and formalise as a key trailhead (refer action E1.3)	Long	High
B3.4	**Management Plan:** Develop and implement a Trail Management Plan for the Daring Downs Bridle Trails, including relevant inspections and maintenance with a focus on trail safety.	Short	Low
B3.5	**Eastern Link:** Formalise the key eastern link to Wungong Valley Gorge Bridle Trail via Eleventh Road.	Medium	Medium
B3.6	**Wungong Valley Gorge Bridle Trail Underpasses:** Construct two underpasses in order to provide safe access for the new link to Wungong Valley Gorge Bridle Trail; one underpass to be installed across the railway and one to be installed across South Western Highway.	Long	High
B3.7	**Thomas Road Bridge Over Rail Underpass:** Continue to liaise with Main Roads to ensure that the new Thomas Road Bridge Over Rail Underpass is constructed to accommodate horse riders.	Short	Low
B3.8	**Trail Safety:** Consider upgrading fencing for sections of trail near busy roads (e.g., Thomas Road) and stepovers at key trail entry points to prevent motorbike access.	Short	Medium
B3.9	**Road Crossings:** Install pegasus crossings at key points of the Trail which cross busy roads, such as the crossing point at Masters Road.	Medium	High

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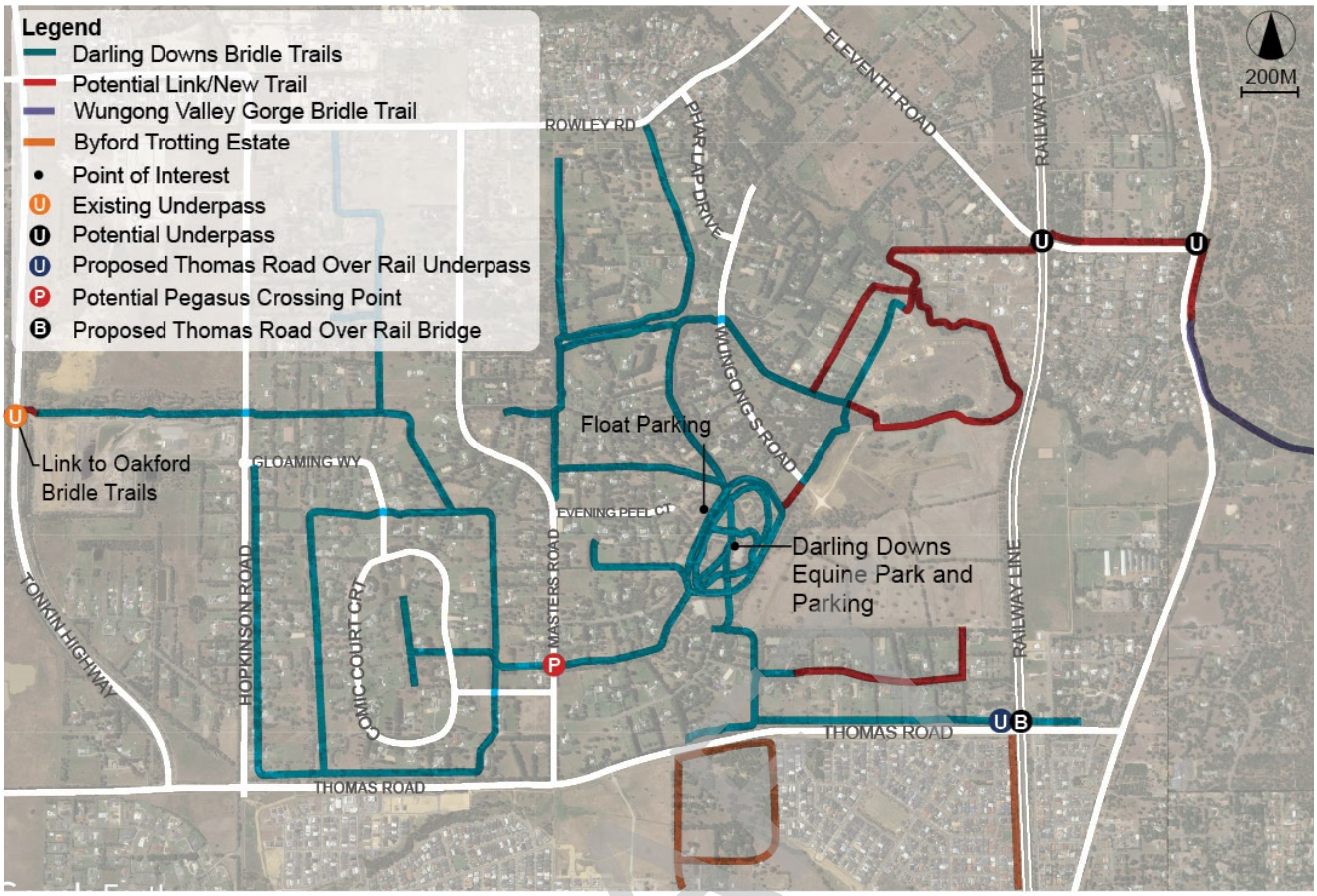

Figure 9: Darling Downs Bridle Trails

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B4: Byford Trotting Estate Bridle Trails

Enhance the Byford Trotting Estate Bridle Trails, ensuring safe access.

RATIONALE

The Byford Trotting Estate Bridle Trails (refer Figure 10) are managed by the Shire and are situated in an urbanised and developing area within the Trotting Estate. These trails were originally developed to allow safe passage for horse trainers to access the Byford Trotting Training Complex, however, these are now utilised by a variety of other users such as horse riders and dog walkers. The Trails are large and wide and are an effective bridle trail network. The roads surrounding the bridle trails (particularly around Briggs Road) are generally very busy and require effective traffic management to ensure the safety of interaction between horses and vehicles (refer Figure 10).

Based on the community survey, the majority of respondents travel under 5km to access these trails, and most also access the Trails via horseback, indicating that trail is mainly used by locals. The Trails require significant upgrading to suit the needs of the local community. Trail signage requires upgrading, including educational signage to guide interaction with other trail users as well as key horse trail infrastructure and amenities. These aspects were all rated as poor on the community survey. Trail safety and security is also a key issue highlighted on the community survey and the area would benefit from greater surveillance.

The Byford Trotting Training Complex (refer Figure 10) has been identified as a potential area to provide key infrastructure and amenities for users of the Trails. This site is privately managed by Racing and Wagering Western Australia. The Complex is an integral part of the heritage of Byford and covers an area of 52 acres. The Complex has hospitality facilities which can accommodate functions. The area consists of an 800m training track as well as a 1000m sand jogging track. There are 200 properties surrounding the Complex that are protected through the Shire's Local Planning Scheme, and the facility has become a super hub for harness horses.

ACTIONS

Table 26: Byford Trotting Estate Bridle Trails Actions

	ACTION	TIMEFRAME	COST
B4.1	**Signage:** Upgrade/install trailhead, wayfinding, management, and interpretation signage as well as emergency and safety signage to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B4.2	**Trail Interaction:** Install educational signage at the start of each trail to highlight the trail user code of conduct and guide positive interactions between horses and other trail users (particularly dog walkers).	Short	Low
B4.3	**Byford Trotting Training Complex:** Consider working with the Byford Trotting Training Complex to formalise this precinct into a key trailhead (refer action E1.3), providing amenities such as toilets for equine trail users, and horse infrastructure (i.e., yards, tie-up rails, mounting blocks and water troughs).	Medium	High

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	ACTION	TIMEFRAME	COST
B4.4	**Float Parking:** Work with the Byford Trotting Training Complex to provide additional float parking for equine trail users.	Medium	Medium
B4.5	**Management Plans:** • Develop and implement a Trail Management Plan for the Byford Trotting Estate Bridle Trails, including relevant inspections and maintenance with a focus on trail safety and surface quality. • Develop and implement a Traffic Management Plan for these bridle trails to increase safety of interaction between horses and vehicles.	Ongoing	Low
B4.6	**Road Crossings:** Provide two pegasus crossings (specialised equestrian crossing using a push button controlled system), one where the Trail crosses over the northern side of Briggs Road and one at the southern side of Briggs Road.	Medium	High
B4.7	**Trail Safety:** Install new fencing around the boundary of the Trail and upgrade stepovers at key trail entry points to restrict unauthorised access in the appropriate locations across the network.	Medium	High

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Figure 10: Byford Trotting Estate Bridle Trails

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B5: Bridle Trails Northwest of Cardup

Formalise the network of bridle trails north-west of Cardup, providing suburban connections and linking to the bridle trails in Byford and Oakford.

RATIONALE

There is an abundance of Shire owned equine trails northwest of Cardup which weave around rural properties. This network of trails includes two bridle trails that run north-south between Abernethy Road and Gossage Road and trail links which run east-west between Hopkinson Road and Kargotich Road (refer Figure 11). These linkages provide an important connection from Cardup to the trails in Byford and Oakford. Formalising these trails will increase the diversity of the Shire's equine trail network. As identified in the community survey, these equine trails are mainly accessed by local residents via horseback and have great potential to provide safe connection for local residents to access the bridle trails in Byford and Oakford. One underpass is required across the future Tonkin Highway to connect these trails to the Byford Trotting Estate Bridle Trails (refer Figure 11). It is important to note that many of these trail linkages are adjacent to Water Corporation drains.

These equine trails require significant enhancement to become formalised. Horse trail infrastructure and amenities were both rated poor in the community survey. The provision of horse trail infrastructure (e.g., tie-up rails, mounting blocks etc.) and amenities along these trails is the key to providing a high-quality trail experience. In addition, signage was also rated as poor in the community survey. The installation of signage at key points on the Trail will also create an improved trail experience.

ACTIONS

Table 27: Bridle Trails Northwest of Cardup Actions

	ACTION	TIMEFRAME	COST
B5.1	**Signage:** Install wayfinding, management, and interpretation signage as well as emergency and safety signage for the north-west bridle trail network to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B5.2	**Infrastructure:** Provide horse trail infrastructure, including provision of tie-up rails and mounting blocks and upgrading of stepovers and access gates at entry points to prevent unauthorised access.	Medium	Medium
B5.3	**Management Plan:** Develop and implement a Trail Management Plan for the Bridle Trails Northwest of Cardup including relevant inspections and maintenance with a focus on trail safety and surface quality.	Short	Low
B5.4	**North-West Bridle Trails:** Formalise the network of bridle trails north-west of Cardup, including the two bridle trails which run north-south between Abernethy Road and Gossage Road and the trail links which run east-west between Hopkinson Road and Kargotich Road to connect Cardup to the trails in Byford and Oakford.	Medium	High

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	ACTION	TIMEFRAME	COST
B5.5	**Underpasses:** Construct two underpasses across Hopkinson Road (future Tonkin Highway) to connect these trails to the Byford Trotting Estate Bridle Trails and residential areas.	Medium	High

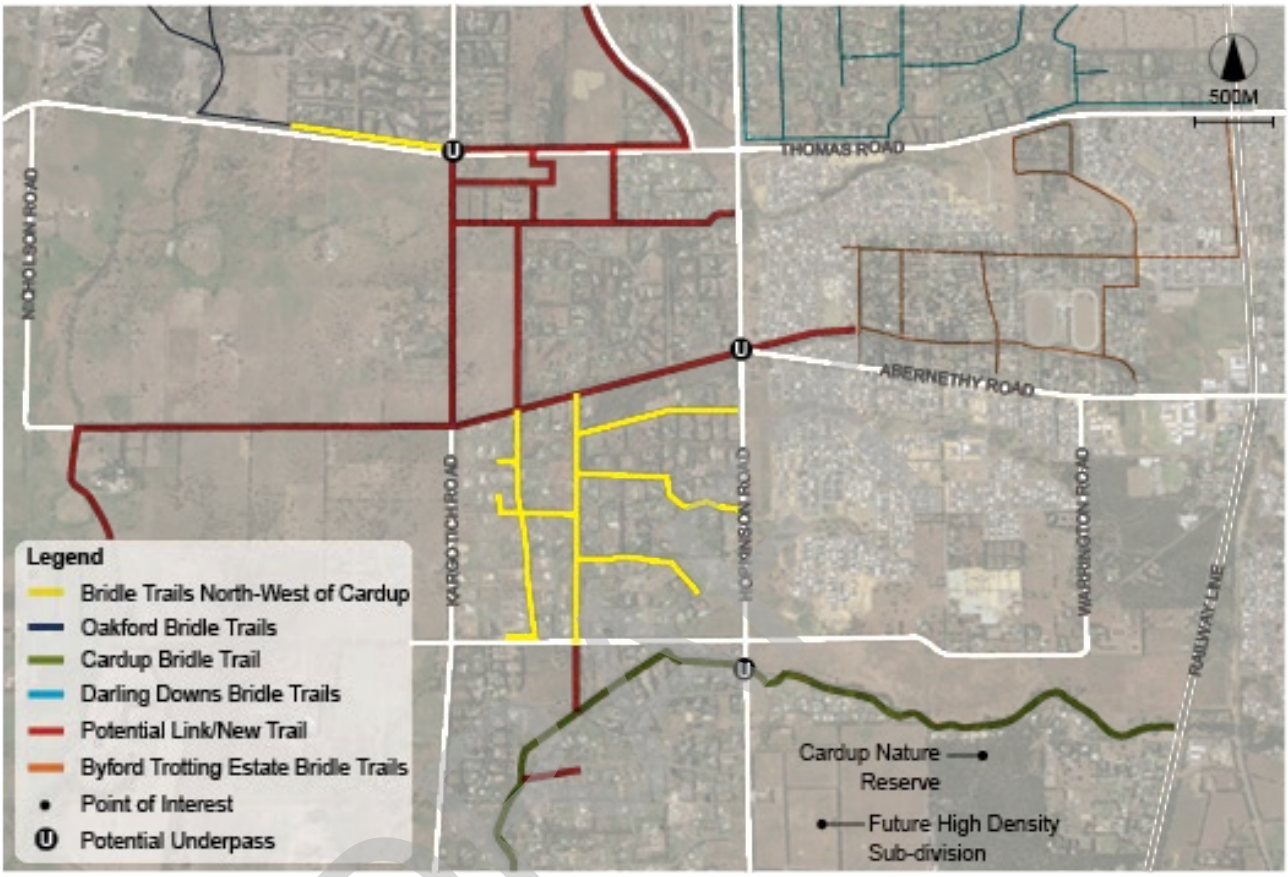

Figure 11: Bridle Trails Northwest of Cardup

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B6: Jarrahdale Bridle Trail Network

Enhance and upgrade the network of bridle trail loops in Jarrahdale, realign the current Jarrahdale Bridle Trail and provide a future trailhead at Jarrahdale Oval.

RATIONALE

The main existing alignment of the Jarrahdale Bridle Trail forms a 28km loop through the forest (refer Figure 12) and is managed by the DBCA. It was also identified in the community workshop that there are several informal trail loops in close proximity to the Jarrahdale Bridle Trail (refer Figure 12). Formalising these trails will increase the diversity of the equine trails network. An opportunity exists for these trails to be promoted to a broad audience, particularly for tourism and trail riding.

According to the community survey, the majority of respondents access the Jarrahdale Bridle Trail via car and float, therefore indicating that this bridle trail mainly attracts visitors and has a high potential for tourism. These results also represent the need for additional float parking, and potential for horse yards and other key infrastructure. Amenities (e.g., toilets, drinking fountains, shelters) were rated as poor via the community survey, therefore a key focus should be to install and upgrade amenities. Jarrahdale Oval (refer Figure 12) has been identified as the ideal area for a key equine trailhead. The Oval has the potential to facilitate equine based infrastructure and amenities and large areas for float parking. The Oval is situated in a viable location and can service the current Jarrahdale Bridle Trail and future trail linkages and loops. Upgrading of the Oval and the development of new trails within the Jarrahdale area will assist Jarrahdale in becoming accredited as a formal Trails Town.

The *Jarrahdale Bridle Trail Development Concept Plan* is currently being developed by the Department of Biodiversity Conservation and Attractions (DBCA) for the creation of new trails within the Jarrahdale State Forest. This plan will incorporate one long loop of approximately 20km classified as blue (intermediate) and one short loop of approximately 5km classified as green (easy). Important aspects of the Plan include recommending trail signage, areas for parking (Jarrahdale Oval), emergency access and associated infrastructure. It has been determined throughout the development of the Plan that portions of the existing Jarrahdale Bridle Trail are no longer suitable for horse riding due to major constraints impacting on the trail.

The development of a Memorandum of Understanding (MoU) between the Shire of SJ and DBCA will assist in providing common objectives and relevant expectations with regards to management and maintenance of the Jarrahdale Bridle Trail Network. It is important to protect the native flora and flora of the surrounding areas through management plans and inspections. The climate is also hot and dry in summer, therefore it is also important to manage risk and ensure equine trail users are aware of risks, such as bushfire.

ACTIONS

Table 28: Jarrahdale Bridle Trail Network Actions

	ACTION	TIMEFRAME	COST
B6.1	**Signage:** Work with the DBCA to upgrade and install trailhead, wayfinding, management, and interpretation signage as well as emergency and safety signage for the new Jarrahdale trail loops and the existing Jarrahdale Bridle Trail to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low

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	ACTION	TIMEFRAME	COST
B6.2	**Trail Interaction:** Install educational signage (i.e., code of conduct) at the start of each trail to guide interaction with horses from other trail users (particularly mountain bike riders).	Short	Low
B6.3	**Infrastructure:** Work with the DBCA to install horse trail infrastructure, including provision of tie-up rails and mounting blocks.	Medium	Medium
B6.4	**Management Plan:** Work with the DBCA to develop and implement a Trail Management Plan for the new Jarrahdale Bridle Trail, including relevant inspections and maintenance with a focus on trail user safety and environmental management.	Short	Low
B6.5	**Jarrahdale Oval Trailhead:** Formalise Jarrahdale Oval as a key trailhead (refer action E1.3), providing ample float parking, seating, and toilets as well as equine infrastructure such as water troughs, yards, and tie-up rails.	Short	High
B6.6	**Trail Re-alignments:** Liaise with DBCA to re-route the Jarrahdale Bridle Trail to start and finish at the Jarrahdale Oval and re-route the section of trail which has been blocked off by the quarry land on the east side.	Short	Medium
B6.7	**Jarrahdale Bridle Trail Development Concept Plan:** Develop and implement the *Jarrahdale Bridle Trail Development Concept Plan*, in conjunction with DBCA and other relevant stakeholders, ensuring potential alignments for trails classified as easy (green) and intermediate (blue) are identified, opportunities for link and loop trails to cater to local and potentially regional users are explored, high quality horse trail riding experiences with minimal road crossings through bushland and points of interest are prioritised, signage and infrastructure are implemented and long term maintenance is reduced through development of sustainable trails while minimising impact on natural and cultural assets.	Medium	High
B6.8	**MoU:** Develop a MoU between the Shire and DBCA for the management and maintenance of the Jarrahdale Bridle Trail Network.	Immediate	Low

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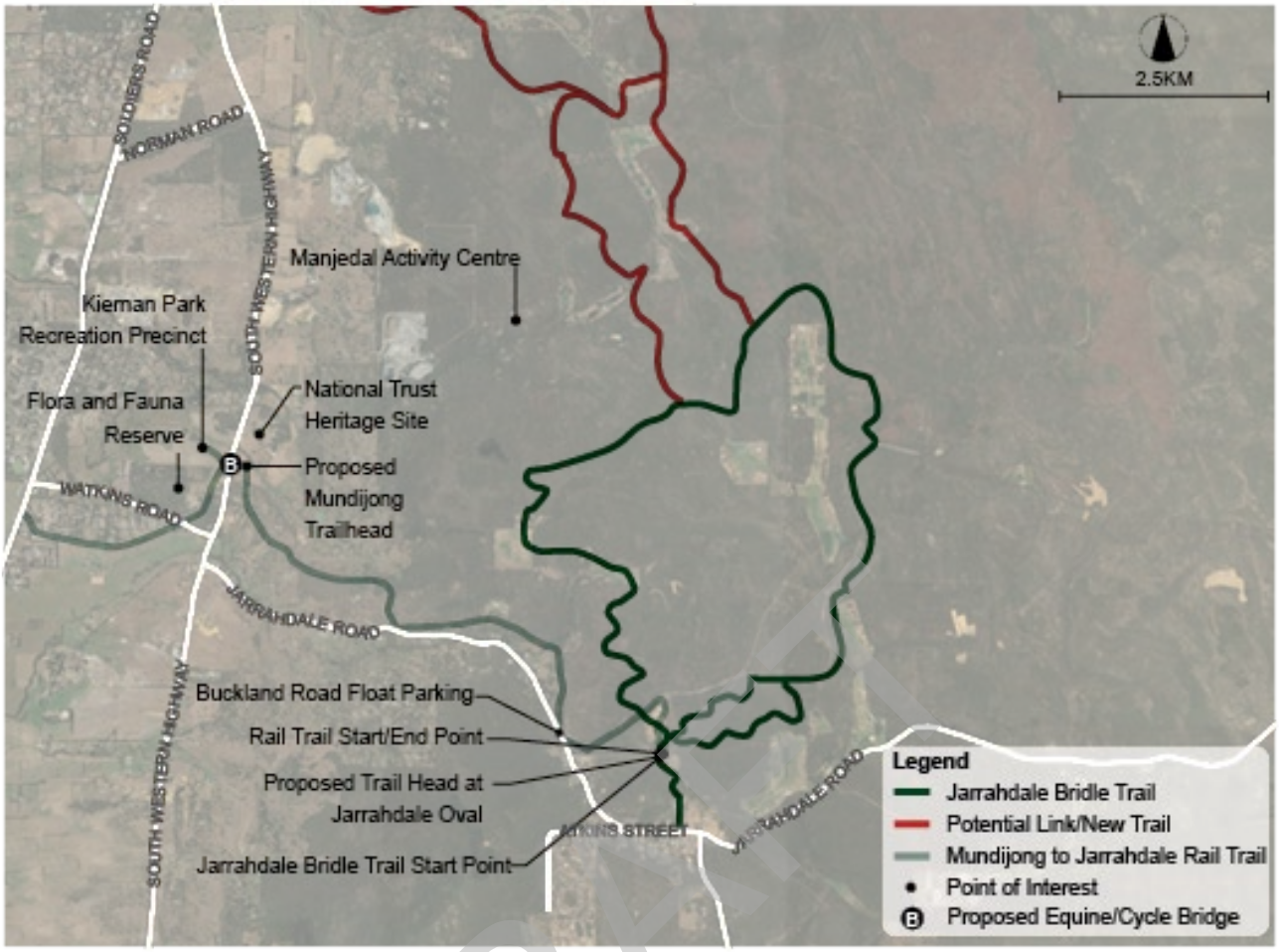

Figure 12: Jarrahdale Bridle Trail Network

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B7: Serpentine Bridle Trail

Formalise the Serpentine Bridle Trail, provide a connecting link from Salmon Bark Road to Utley Road and Wattle Road to Salmon Bark Road and upgrade Coffey Road (Tallagandra) Reserve.

RATIONALE

The Serpentine Bridle Trail is managed by the Shire and is one of the key trail networks of the southern hub. It is heavily utilised by local residents (the majority of users only travel 5km and on horseback to access the Trail) and has the potential to become a highly accessible trail network.

The Serpentine Bridle Trail requires significant upgrades to become a high quality and safe trail. Trail signage was rated as poor via the community survey and requires major upgrades. Installation of new signage should be installed at key points along the Trail, including safety and educational signage to guide interaction with other trail users. In addition, horse trail infrastructure was also rated poor in the community survey. Therefore, key horse trail infrastructure should be installed including stepovers to prevent unauthorised access. Trail user safety should be prioritised (this was rated as poor via the community survey), and management plans are recommended to ensure safety. It is important to ensure that the trail surface is upgraded in areas of degradation to provide a safe trail experience.

As part of this trail network, Coffey Road Reserve (refer Figure 13) has the potential to provide an area for float parking, as well as key trailhead amenities and infrastructure. The site is 6 hectares and features an existing firebreak around the perimeter, which is utilised by horse riders. There is a key connecting trail from Salmon Bark Road through to Utley Road (refer Figure 13) which requires formalisation to provide a southern trail loop and increase diversity of the trail network. There is also an existing trail that runs from Wattle Road to Salmon Bark Road (refer Figure 13) which offers another trail loop option. It is important to continue to investigate the expansion of bridle trail networks through new semi-rural subdivisions and ensuring that connections to these subdivisions continue into the future.

ACTIONS

Table 29: Serpentine Bridle Trail Actions

	ACTION	TIMEFRAME	COST
B7.1	**Signage:** Install trailhead, wayfinding, management, and interpretation signage as well as emergency and safety signage for the new Serpentine Bridle Trail to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B7.2	**Trail Interaction:** Install educational signage (i.e., code of conduct) at the start of each trail to guide positive interactions between horses and other trail users (particularly dog walkers).	Short	Low
B7.3	**Infrastructure:** Install horse trail infrastructure, including provision of tie-up rails and mounting blocks and upgrading of stepovers at entry points to prevent unauthorised access.	Medium	Medium

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	ACTION	TIMEFRAME	COST
B7.4	**Management Plan:** Develop and implement a Trail Management Plan for the Serpentine Bridle Trail and implement relevant trail inspections and maintenance with a focus on trail user safety and surface quality	Short	Low
B7.5	**Coffey Road Reserve:** Develop Coffey Road Reserve into a key trailhead, providing float parking, amenities (e.g., toilets) and key horse trail infrastructure (e.g., water troughs, tie-up rails, yards) and formalise a trail around the perimeter of the Reserve.	Long	High
B7.6	**Formalise Linkages:** Formalise the connecting trail from Salmon Bark Road through to Utley Road and the existing trail that runs from Wattle Road to Salmon Bark Road.	Medium	Medium
B7.7	**Surface Quality:** Provision of surface upgrades in areas which have become degraded (i.e., provide natural compacted aggregate in these areas).	Medium	Medium

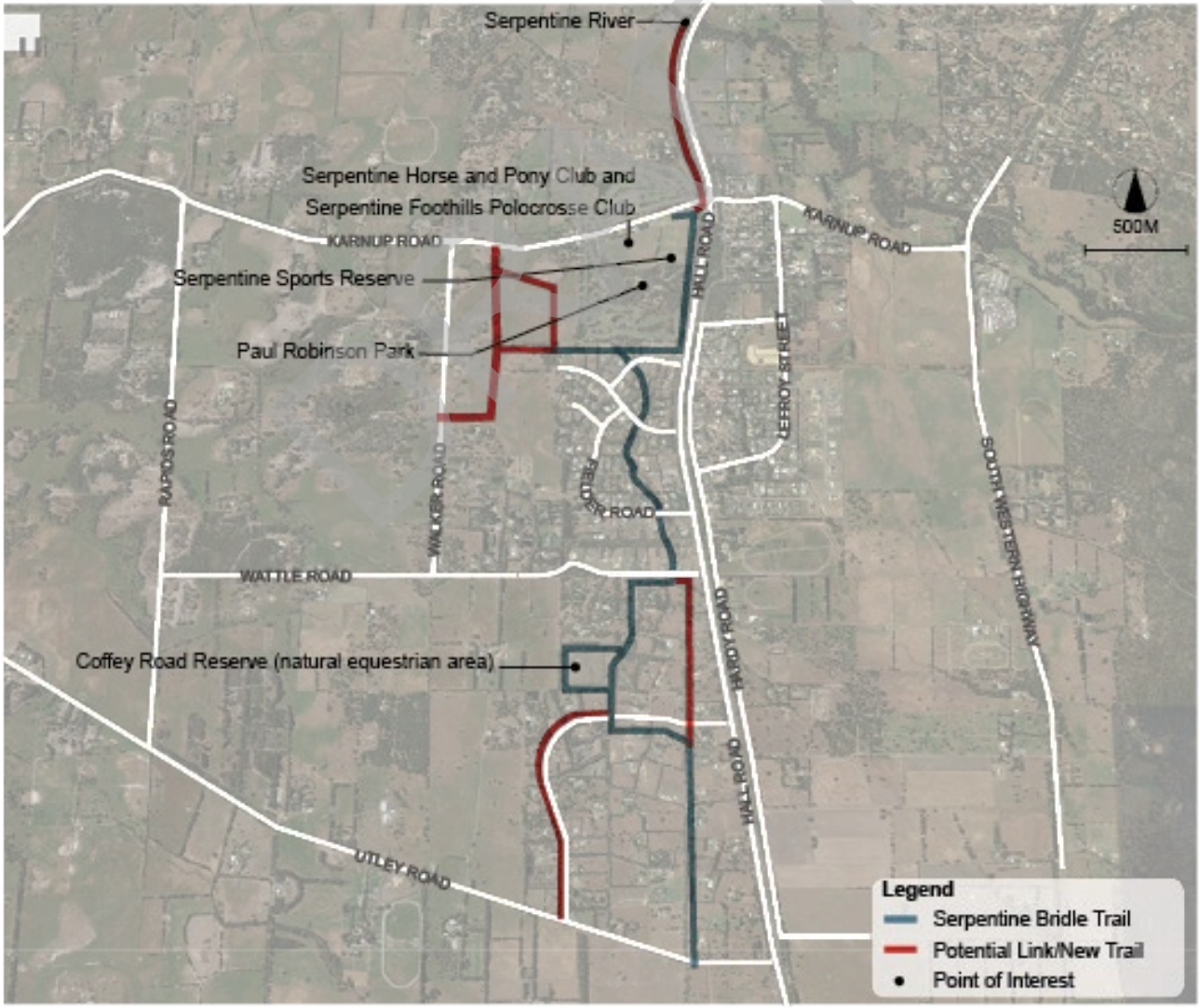

Figure 13: Serpentine Bridle Trail

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B8: Tonkin Highway Expansion

Liaise with Main Roads to ensure that the proposed associated intersections, bridges, and underpasses are implemented.

RATIONALE

Main Roads are planning to expand Tonkin Highway by an additional 14km. The project proposes to extend the highway from Thomas Road in Oakford to South Western Highway, south-east of Mundijong. This will create a high-quality north-south transport link in Perth's south eastern corridor.

As part of the project, new intersections are proposed at Orton Road, Mundijong Road and South Western Highway, as well as a new grade separated interchange at Bishop Road (refer Figure 14). In addition, bridges are proposed over the existing freight rail line, Perth to Bunbury passenger rail line and Wright Road (refer Figure 14). The new bridge over Wright Road and the freight rail line will allow equine trails users greater accessibility and provide an important east-west link. An equine, pedestrian and cyclist underpass is also planned to be constructed under Tonkin Highway at Abernethy Road (refer Figure 14), which will provide equine trail users ease of access into the Byford Trotting Estate Bridle Trails.

A new principle shared use path along the eastern side of the Tonkin Highway corridor has also been proposed (refer Figure 14), with planned connections to local path networks, however, it is noted that the new principle shared use path will not be suitable for horse riding. Main Roads are engaging with the Shire and other stakeholders to determine plans for additional paths on the adjacent road networks. Construction of the project is expected to be completed by 2024.

Table 30: Tonkin Highway Expansion Actions

	ACTION	TIMEFRAME	COST
B8.1	**Intersections:** Liaise with Main Roads to ensure implementation of the proposed intersections at Orton Road, Mundijong Road and South Western Highway, as well as the new grade separated interchange at Bishop Road.	Short	Low
B8.2	**Bridges and Underpasses:** Liaise with Main Roads to ensure that the proposed bridges over the existing freight rail line, Perth to Bunbury passenger rail line and Wright Road, as well as the equine, pedestrian and cyclist underpass under Tonkin Highway at Abernethy Road are implemented.	Short	Low
B8.3	**Signage:** Liaise with Main Roads to ensure that wayfinding, management, and interpretation signage as well as emergency and safety signage is installed along the proposed shared use path.	Short	Low

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Figure 14: Tonkin Highway Principal Shared Path

08 Implementation Plan

STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B9: Cardup Bridle Trail

Upgrade the section of Cardup Bridle Trail that is outside the Cardup Nature Reserve, formalise the trail loop to the west and consider upgrading Oakford Riding for the Disabled into a key strategic site.

RATIONALE

Horse riding will no longer be permitted on the main section of the Cardup Bridle Trail that is located around the perimeter of the Cardup Nature Reserve (refer Figure 15). This section of the Trail is managed by the DBCA, and the Reserve is classified as Class A meaning the reserve and the vegetation within it has the highest degree of environmental protection, which limits other community uses. The southern end of the Cardup Bridle Trail is on Shire managed land and will be retained.

The western side of the Cardup Bridle Trail (refer Figure 15), located west of Hopkinson Road/ Tonkin Highway, features a semi-loop. The southern end of this loop links up with the existing Cardup Bridle Trail. Two underpasses are required across Hopkinson Road/ Tonkin Highway to enhance connectivity (refer Figure 15). The installation of signage at key points on the above-mentioned trails will create an improved trail experience. It was identified via the community survey and community workshop that interactions between horses and dogs are an issue on this trail, therefore providing educational signage will assist in informing trail users with a clear trail user code of conduct.

The Oakford Riding for the Disabled Association (refer Figure 15) was identified in the *Shire of Serpentine Jarrahdale Equine Strategy (2018)* and has the potential to provide horse trail infrastructure including yards, water troughs and shelters. The Riding for the Disabled Association currently has a lease with the Shire of Serpentine Jarrahdale around the use of the facility. There is an opportunity for the Shire to work with the Association to consider allowing external equine trail users access to these facilities. It is important to note that any amendment to the Association's current lease agreement will need to be negotiated by both parties.

ACTIONS

Table 31: Cardup Bridle Trail Actions

	ACTION	TIMEFRAME	COST
B9.1	**Signage:** Install and upgrade trailhead, wayfinding, management, and interpretation signage as well as emergency and safety signage on the Cardup Bridle Trail and western trail linkages to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B9.2	**Trail Interaction:** Install educational signage (i.e., code of conduct) at intervals along each trail to guide positive interactions between horses and other trail users (particularly dog walkers).	Medium	Low
B9.3	**Infrastructure:** Improve horse trail infrastructure, including provision of tie-up rails and mounting blocks and upgrading	Medium	Medium

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	of stepovers at entry points at the Cardup Bridle Trail and the western trail linkages to prevent unauthorised access.		
B9.4	**Management Plan:** Develop and implement a Trail Management Plan for the Cardup Bridle Trail and western trail linkages.	Short	Low
B9.5	**Underpasses:** Construct two underpasses across the future Tonkin Highway.	Medium	Major
B9.6	**Oakford Riding for the Disabled:** Consult with Oakford Riding for the Disabled Association to consider upgrading the Oakford Riding for the Disabled facility (refer action E1.3) to provide float parking for users of the bridle trails, amenities (e.g., toilets), and horse infrastructure (e.g., yards, shelters, tie-up rails, mounting blocks and water troughs).	Medium	High
B9.7	**Lease Agreement:** Liaise with Oakford Riding for the Disabled Association to negotiate an amendment to their lease agreement in order to lease out their facilities (including the arena) to equine trail users.	Short	Low
B9.8	**Western Trail Linkages**: Consult with the Water Corporation to formalise the western bridle trail linkages.	Medium	Medium

Figure 15: Cardup Bridle Trail

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B10: Wungong Valley Gorge Bridle Trail

Upgrade and enhance the Wungong Valley Gorge Bridle Trail and formalise western linkage to the Byford Country Club as well as the trail loop south of the Wungong Valley Gorge Bridle Trail.

RATIONALE

The spectacular Wungong Regional Park contains the Wungong Valley Gorge Bridle Trail (refer Figure 16), situated within the Darling Range and picturesque forest. The Trail is managed by the DBCA and is known for its steep terrain and diverse landscapes. Environmental conditions can be harsh in some sections of the Trail; therefore, it is imperative to ensure management plans are in place to mitigate risk. It is also important to ensure flora and fauna are protected.

Lack of accessible float parking is one of the key issues with this trail. Horse float parking was rated as poor in the community survey and was raised as an issue at the community workshop. The majority of trail users access this trail via car and float, so it is imperative to extend and formalise the current parking area at Admiral Road South (refer Figure 16). It is also important to formalise the southern trail loop which follows Admiral Road South and then links back up to the Wungong Valley Gorge Bridle Trail to increase trail diversity in the area.

Liaising with the DBCA to upgrade trail signage, provision of appropriate amenities (e.g., toilets, drinking fountains, shelters) and horse trail infrastructure is essential to encourage further use of this trail. These aspects were rated as poor in the community survey. It is recommended to further assess the viability of providing a key trailhead at the Byford Country Club to support horse trail infrastructure and amenities (refer Figure 16). This site was identified in the *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)* as a key strategic location. It is easily accessible and within a high growth population area and is also located in close proximity to the proposed Byford Trail Head.

The development of a MoU between the Shire of Serpentine Jarrahdale and DBCA will assist in providing common objectives and relevant expectations with regards to management and maintenance of the portion of the Wungong Valley Gorge Bridle Trail that traverse the Shire.

ACTIONS

Table 32: Wungong Valley Gorge Bridle Trail Actions

	ACTION	TIMEFRAME	COST
B10.1	**Signage:** Focus on installing/upgrading trailhead, wayfinding, management, and interpretation signage as well as emergency and safety signage to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B10.2	**Infrastructure:** Liaise with the DBCA to improve horse trail infrastructure, including provision of tie-up rails and mounting blocks at key points along the Trail and particularly at Admiral Road South float parking area.	Medium	Medium
B10.3	**Byford Country Club:** Work with the Byford Country Club and Byford Scouts to develop a key trailhead (refer action E1.3), providing amenities such as toilets, and horse infrastructure (e.g., yards, water troughs).	Medium	High

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	ACTION	TIMEFRAME	COST
B10.4	**Management Plan:** Work with the DBCA to ensure a Trail Management Plan is in place for the Wungong Valley Gorge Bridle Trail, including relevant inspections and maintenance with a focus on environmental management.	Short	Low
B10.5	**Float Parking:** Formalise and extend the float parking at Admiral Road South.	Medium	High
B10.6	**Trail Start Point:** Offer a formalised trail start point at either Admiral Road South or Byford Country Club.	Short	Low
B10.7	**Strategic Link:** Formalise a strategic link from the Byford Country Club to the east and then up to the north to connect with the existing trail.	Medium	Medium
B10.8	**Southern Trail Loop:** Formalise the southern trail loop which follows Admiral Road South and then links back up to the Wungong Valley Gorge Bridle Trail.	Medium	Medium
B10.9	**MoU:** Develop a MoU between the Shire and DBCA for the management and maintenance of the Wungong Valley Gorge Bridle Trail.	Immediate	Low

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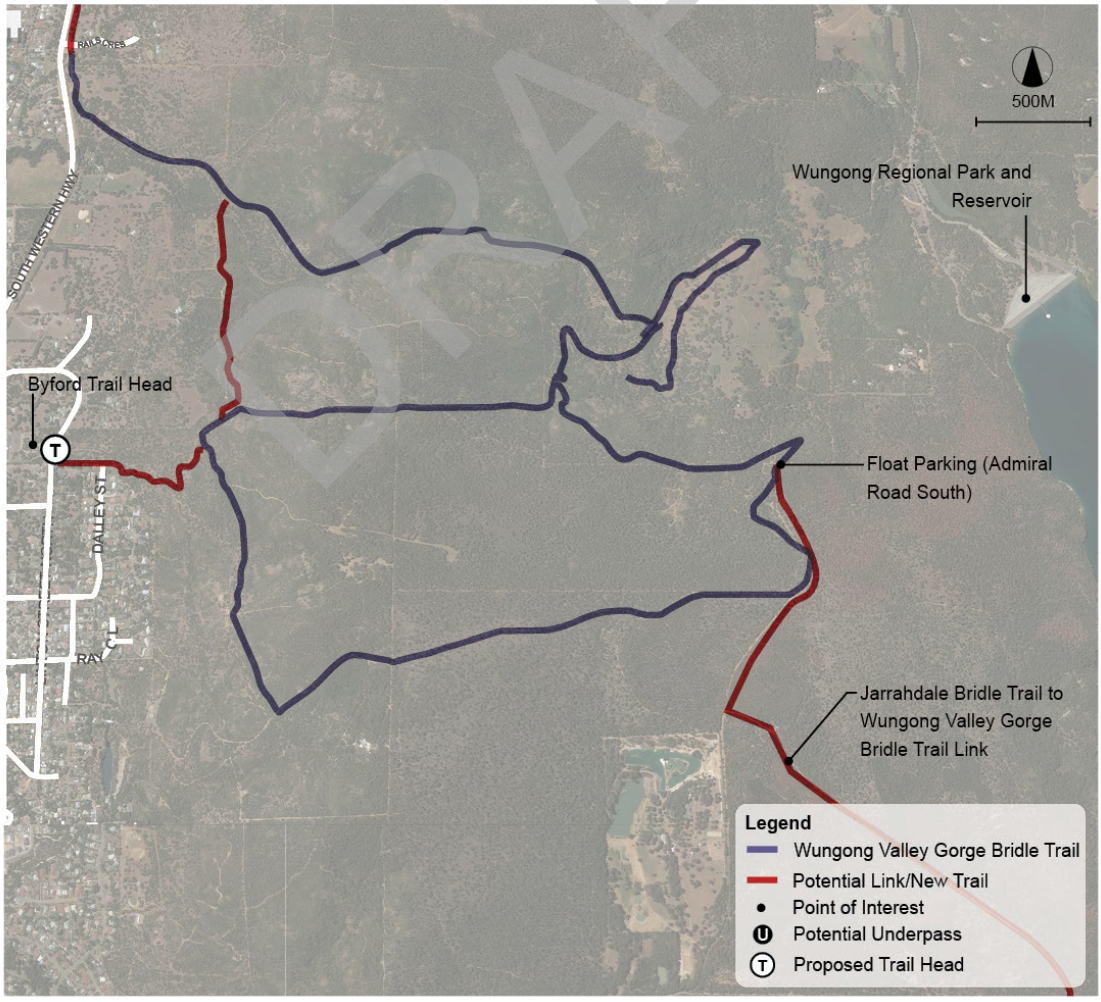

Figure 16: Wungong Valley Gorge Bridle Trail

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B11: Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link and Cardup Brook Loop Trail

Formalise the connecting trail from Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail via Old Haul Road and consider formalising Cardup Brook Loop Trail.

RATIONALE

The Old Haul Road (refer Figure 17) was historically utilised as a strategic road for transportation to the Alcoa bauxite mine. This route provides a strategic trail link from Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail. As these areas become increasingly popular due to increased investment (including the development of the Jarrahdale Oval Trailhead and the Jarrahdale Bridle Trail Concept Plan), this link will provide greater accessibility for residents and visitors to efficiently move between the Shire's northern equine hub and southern equine hub and will increase the tourism potential of the area. Currently, this connection relies upon a link along Old Haul Road, which traverses through the PDWSA and is not deemed suitable for horse riding. A new trail corridor link is proposed which provides connection between sections of the Old Haul Road without traversing into the PDWSA. The Trail has been identified in the *Jarrahdale Bridle Trail Development Concept Plan* project as a strategic link.

This route will benefit from the provision of key horse trail infrastructure, as well as signage (including educational signage for mountain bikes) to enhance the trail user experience. Educational signage and awareness campaigns are required as this route is known to be utilised by off-road vehicles. The Trail is surrounded by dense vegetation, so it is important to implement management plans to protect trail users as well as native flora and fauna. The development of a MoU between the Shire of SJ and DBCA will assist in providing common objectives and relevant expectations with regards to management and maintenance of the Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link.

With the establishment of the Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail, a key opportunity may arise to develop an additional loop trail for the Jarrahdale Bridle Trail Network (the Cardup Brook Loop Trail). This proposed loop incorporates existing corridors to the east of the Mandejal Activity Centre (avoiding the lease), and a new corridor which passes the upper reaches of the Cardup Brook (a registered Aboriginal Heritage Site), crosses Nettleton Road (requiring a formalised crossing point) and forms a loop with the Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail.

ACTIONS

Table 33: Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link Actions

	ACTION	TIMEFRAME	COST
B11.1	**Signage:** Work with the DBCA to install wayfinding, management, and interpretation signage as well as emergency and safety signage on the Old Haul Road strategic link to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B11.2	**Trail Interaction:** Work with the DBCA to develop awareness campaigns and install educational signage (i.e., code of conduct) at the start of the Trail to guide interaction between horses and other trail users (particularly mountain bike riders and off-road vehicles).	Short	Low

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	ACTION	TIMEFRAME	COST
B11.3	**Infrastructure:** Work with the DBCA to install horse trail infrastructure, including provision of tie-up rails and mounting blocks and stepovers at entry points where required, to prevent unauthorised access.	Medium	Medium
B11.4	**Management Plan:** Work with the DBCA to incorporate the Old Haul Road strategic link into the Jarrahdale Bridle Trail Management Plan and implement relevant trail inspections and maintenance with a focus on environmental management and trail safety.	Ongoing	Low
B11.5	**MoU:** Develop a MoU between the Shire and DBCA for the management and maintenance of the Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link.	Immediate	Low
11.6	**Cardup Brook Trail Loop:** Work with the DBCA to consider developing the Cardup Brook Trail Loop, as per the *Jarrahdale Bridle Trail Development Concept Plan*.	Short	Low

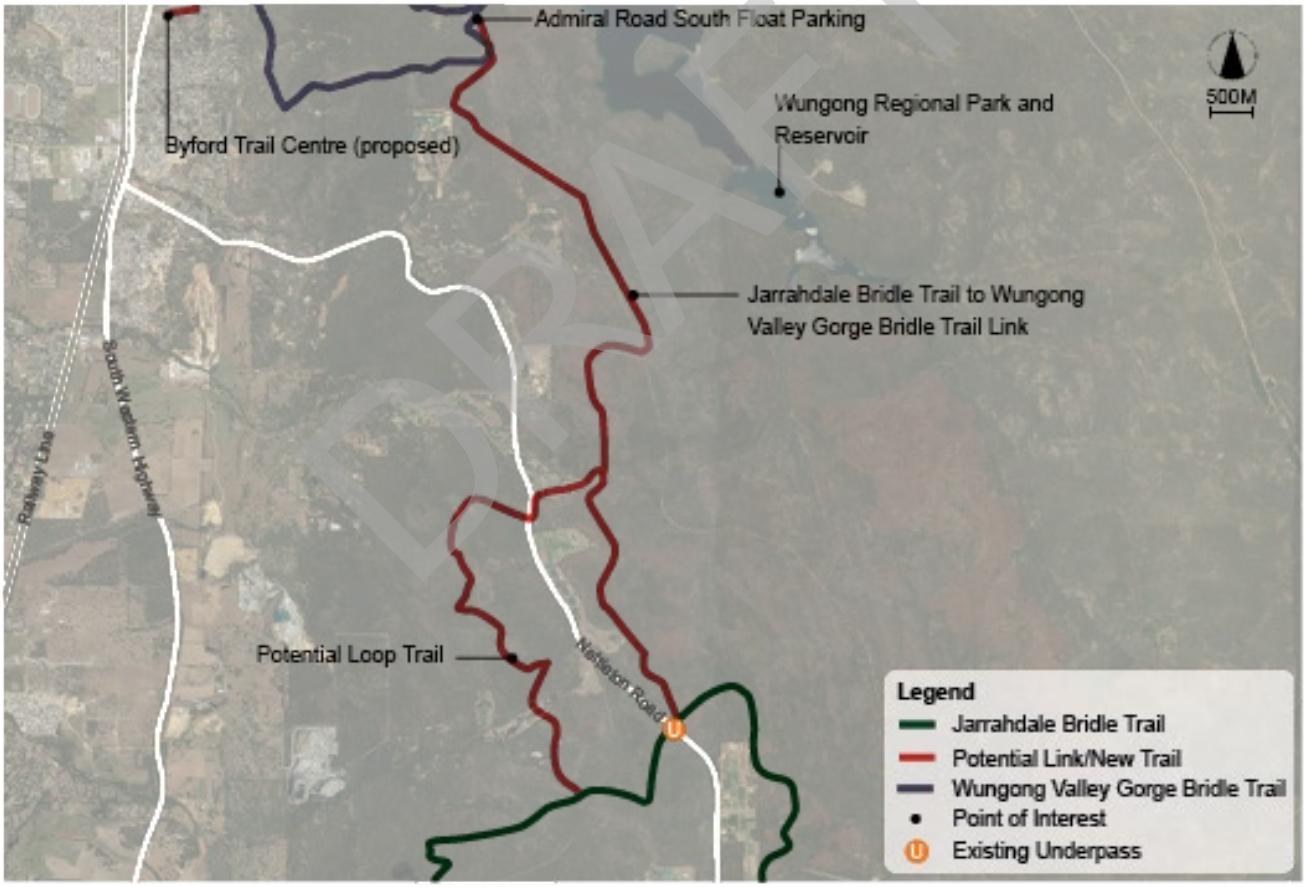

Figure 17: Jarrahdale Bridle Trail to Wungong Valley Gorge Bridle Trail Link

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B12: Jarrahdale Strategic Links

Formalise the strategic link from Jarrahdale Oval through to Mundijong utilising the Mundijong to Jarrahdale Rail Trail.

RATIONALE

As identified in the *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)*, the Mundijong to Jarrahdale Rail Trail (refer Figure 18) is a trail development concept that would link Jarrahdale and Mundijong along an unused rail line/corridor. Over the long term, development of the proposed Mundijong to Jarrahdale Rail Trail would allow for access to the Jarrahdale Bridle trail network from the west. The proposed 9.2km trail follows the maintenance/access track along the old railway corridor and would cater for walkers, bike riders and horse riders.

An extension of this Trail is recommended to provide a link through to the Mundijong Town, therefore requiring an underpass across South Western Highway. The creation of this Rail Trail has the potential to create a highly accessible and safe equine trail experience, connecting two of the region's major towns. The development of a continuous link from Mundijong through to Jarrahdale will benefit local businesses through the increase in visitors to the area through trail tourism. It is recommended that this trail undergoes a surface upgrade, and that signage is installed at key points on the Trail. The Trail will also connect to the Jarrahdale Oval Trailhead (refer Figure 18), which will provide key equine infrastructure and amenities. Two trail heads are proposed for this project, with one being located at the Jarrahdale Oval and the secondary trailhead being established at the opposite end of the Trail in Mundijong. The Rail Trail runs alongside the future Keirnan Park Recreation Precinct development and will provide an access point for users of this facility. The Trail has been identified in the *Jarrahdale Bridle Trail Development Concept Plan* as a strategic link.

As part of the development of this trail, there will be areas that will require track surface upgrades as well as the installation of signage at key points throughout the Trail. The Trail runs through dense bushland; therefore, management plans are to be implemented to mitigate risk and reduce environmental harm. Where appropriate, horse trail infrastructure and educational signage is also recommended to prevent unauthorised access.

The development of a MoU between the Shire and DBCA will assist in providing common objectives and relevant expectations with regards to management and maintenance of the strategic bridle trail links in Jarrahdale.

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ACTIONS

Table 34: Jarrahdale Strategic Links Actions

	ACTION	TIMEFRAME	COST
B12.1	**Signage:** Install wayfinding, management, and interpretation signage as well as emergency and safety signage for the new Rail Trail to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B12.2	**Trail Interaction:** Install educational signage (i.e., code of conduct) at the start of each trail to guide interaction with horses from other trail users (particularly mountain bike riders).	Medium	Low

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	ACTION	TIMEFRAME	COST
B12.3	**Trail History:** Install interpretation signage at key points along the Rail Trail to provide information relating to the history of the rail corridor.	Medium	Low
B12.4	**Infrastructure:** Work with the DBCA to install horse trail infrastructure, including provision of tie-up rails and mounting blocks.	Medium	Medium
B12.5	**Management Plan:** Incorporate the Rail Trail into the Jarrahdale Bridle Trail Management Plan and implement relevant trail inspections and maintenance.	Short	Low
B12.6	**Trail Re-alignments:** Re-route Rail Trail to start at the new Jarrahdale Oval trailhead (refer action E1.3).	Medium	Medium
B12.7	**Mundijong Trailhead:** Develop a secondary trailhead at the Mundijong end of the Rail Trail (before South Western Highway).	Medium	High
B12.8	**Surface Quality:** Where required, upgrade sections of the Rail Trail surface which have become degraded (i.e., provide appropriate surfaces.	Medium	Medium
B12.9	**MoU:** Develop a MoU between the Shire and DBCA for the management and maintenance of Jarrahdale Strategic Links.	Immediate	Low

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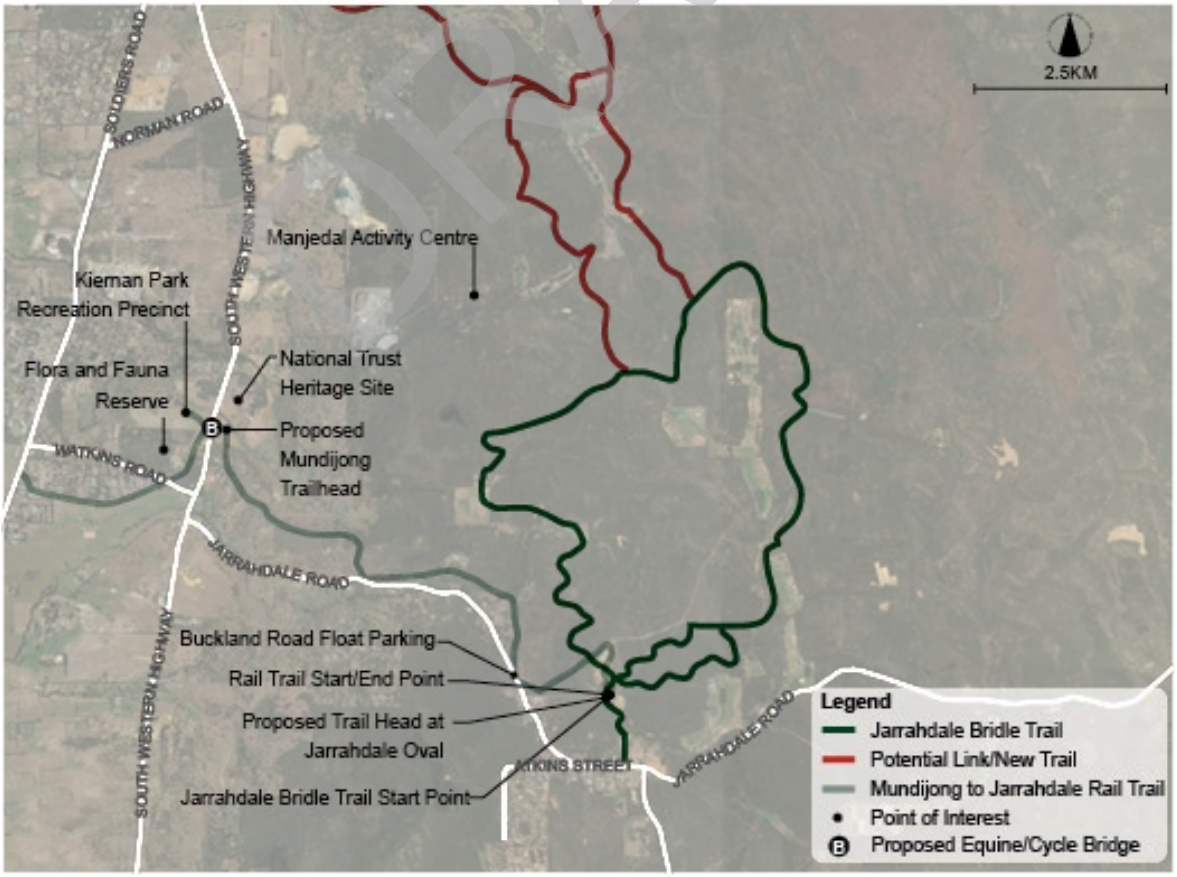

Figure 18: Jarrahdale Strategic Links

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B13: Jandakot Regional Park Bridle Trail

Work with DBCA to upgrade and enhance the Jandakot Regional Park Bridle Trail.

RATIONALE

The Jandakot Regional Park Bridle Trail (refer Figure 19) is a DBCA managed trail that offers a range of intriguing landscapes including banksia woodland, wetlands, and remnant vegetation. It is important that the existing DBCA Jandakot Regional Park Management Plan is implemented to ensure native flora and fauna are protected. It is also important to provide education around the possible interaction between horses and other animals and how to prevent the spread of invasive plant species/diseases. Fencing and stepovers require upgrades to prevent illegal motorbike access. The Trail will benefit from a surface upgrade in degraded areas as these areas become significantly dusty during summer and waterlogged in the winter, impacting on the horse and rider experience.

Community consultation identified that the Trail has a lack of signage, and that the existing signage is in poor condition and in need of upgrade. Horse infrastructure and amenities were also rated as poor in the community survey and therefore it is recommended that new infrastructure is installed, and existing infrastructure/amenities are upgraded. The clubrooms at the Magenup Equestrian Centre (refer Figure 19) located within the City of Kwinana, are currently only available to member clubs and people who have booked to use the facility (i.e., no general public use). Moreover, the large float parking area adjacent to the Equestrian Centre (refer Figure 19) is only available when the gates are unlocked. The clubrooms have the potential to provide much needed amenities for the Jandakot Regional Park Bridle Trail users and the large float parking area has the potential to expand and become formalised. The Shire of Serpentine Jarrahdale will need to liaise with the City of Kwinana regarding the potential of including this area as part of this trail network.

ACTIONS

Table 35: Jandakot Regional Park Bridle Trail Actions

	ACTION	TIMEFRAME	COST
B13.1	**Signage:** Work with the DBCA to install/upgrade wayfinding, management, and interpretation signage as well as emergency and safety signage to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B13.2	**Infrastructure:** Work with DBCA to improve horse trail infrastructure at Jandakot Regional Park including provision of tie-up rails and mounting blocks at entry points.	Medium	Medium
B13.3	**Surface Quality:** Where required, upgrade sections of trail surface which have become degraded (i.e., provide natural compacted aggregate in these areas).	Short	Low
B13.4	**Manage Unauthorised Access:** Upgrade cavaletti stepovers at entry points to Jandakot Regional Park to prevent unauthorised access.	Short	Low
B13.5	**Magenup Equestrian Centre:** Liaise with the City of Kwinana and Magenup Equestrian Centre to consider extending clubroom access and float parking to the Jandakot Regional Park Bridle Trail users.	Short	Medium

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	ACTION	TIMEFRAME	COST
B13.6	**Management Plan:** Advocate to DBCA to review and implement the existing Trail Management Plan for the Jandakot Regional Park Bridle Trail as well as relevant programs for environmental management and trail inspections and maintenance.	Short	Low

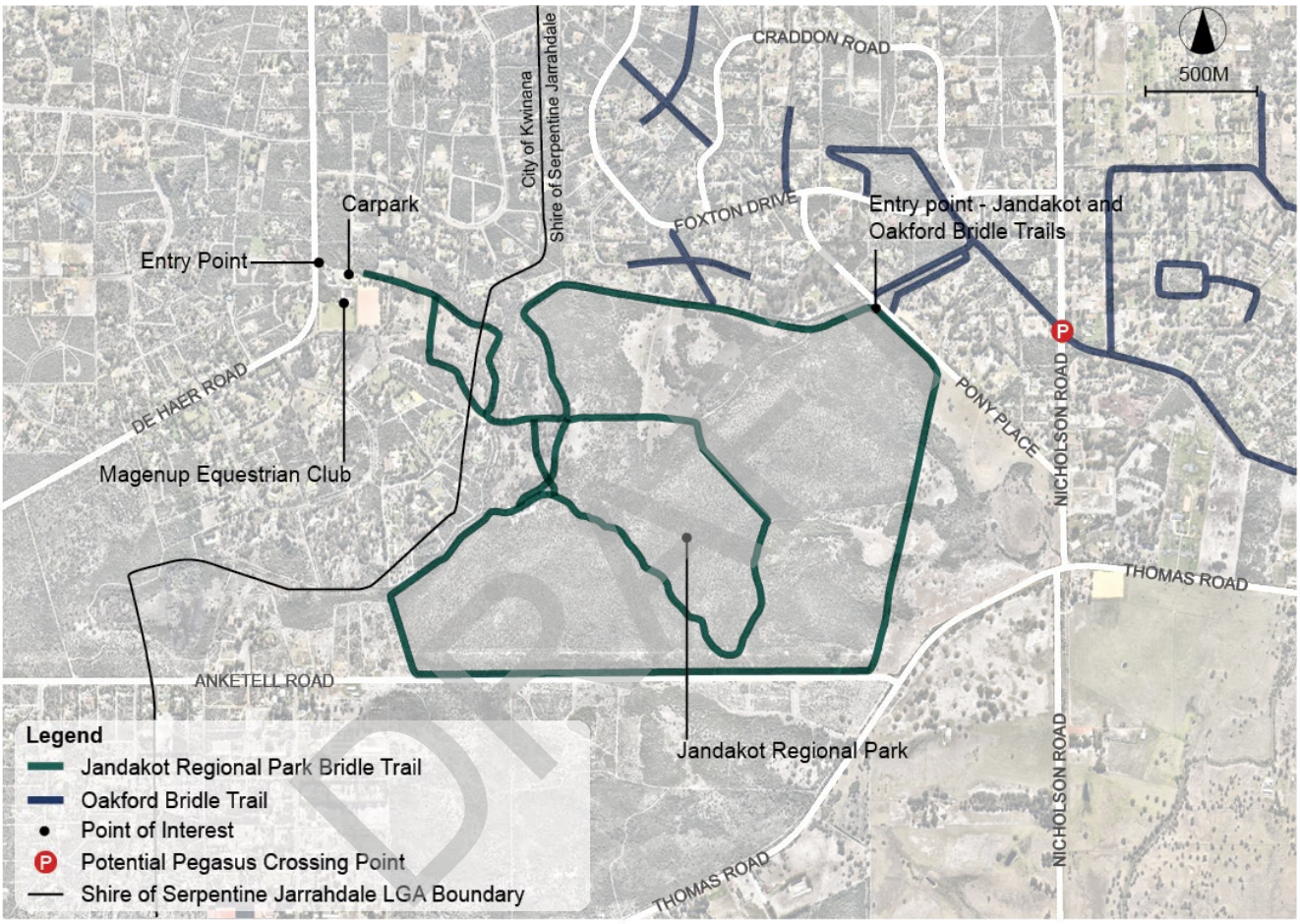

Figure 19: Jandakot Regional Park Bridle Trail

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B14: Mundijong and Whitby Bridle Trails

Upgrade the existing Mundijong and Whitby Bridle Trails.

RATIONALE

The Mundijong and Whitby Bridle Trails (refer Figure 20) are informal trails on Shire-managed land. The Mundijong section is situated at the border of Mardella and is a short trail that runs north-south between Dairy Lane and Randell Road and east-west between Dairy Lane and Ironguard Road. This section was identified via correspondence with the Shire following consultation. This bridle trail provides easy access for nearby properties and provides a link to the current open space bridle trail at Webb Road Reserve. It has been noted that Webb Road Reserve will not be included in this Master Plan due to the future Tonkin Highway and Mundijong Freight Rail Realignment developments which will occupy this area. The population of the Mundijong area is forecast to grow significantly by 470% from 2021 to 2036 (Profile id Population Forecasts, 2017). It is therefore recommended that the Shire investigates further links in Mundijong, Whitby, and Mardella to facilitate demand and provide diverse trail experiences for residents.

The Whitby section of the trail runs from the end of the Mundijong to Jarrahdale Rail Trail north to Keirnan Street (refer Figure 20). The new Tonkin Highway bridge will allow horse riders to cross Wright Road and the existing railway line to enter the Mundijong Town Centre. This section of trail is important as it connects to the Whitby Town Centre. Signage is recommended to be installed at key points along both the Mundijong section and the Whitby section of trail.

ACTIONS

Table 36: Mundijong and Whitby Bridle Trails Actions

	ACTION	TIMEFRAME	COST
B14.1	**Signage:** Install wayfinding, management, and interpretation signage as well as emergency and safety signage for the new Mundijong and Whitby Bridle Trails to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B14.2	**New Recreational Trails:** Investigate opportunities to further develop the recreational trail network in Mundijong, Whitby, and Mardella, including linkages for bridle trails.	Ongoing	Low
B14.3	**Formalise Trails:** Formalise the Mundijong and Whitby Bridle Trails.	Medium	Medium

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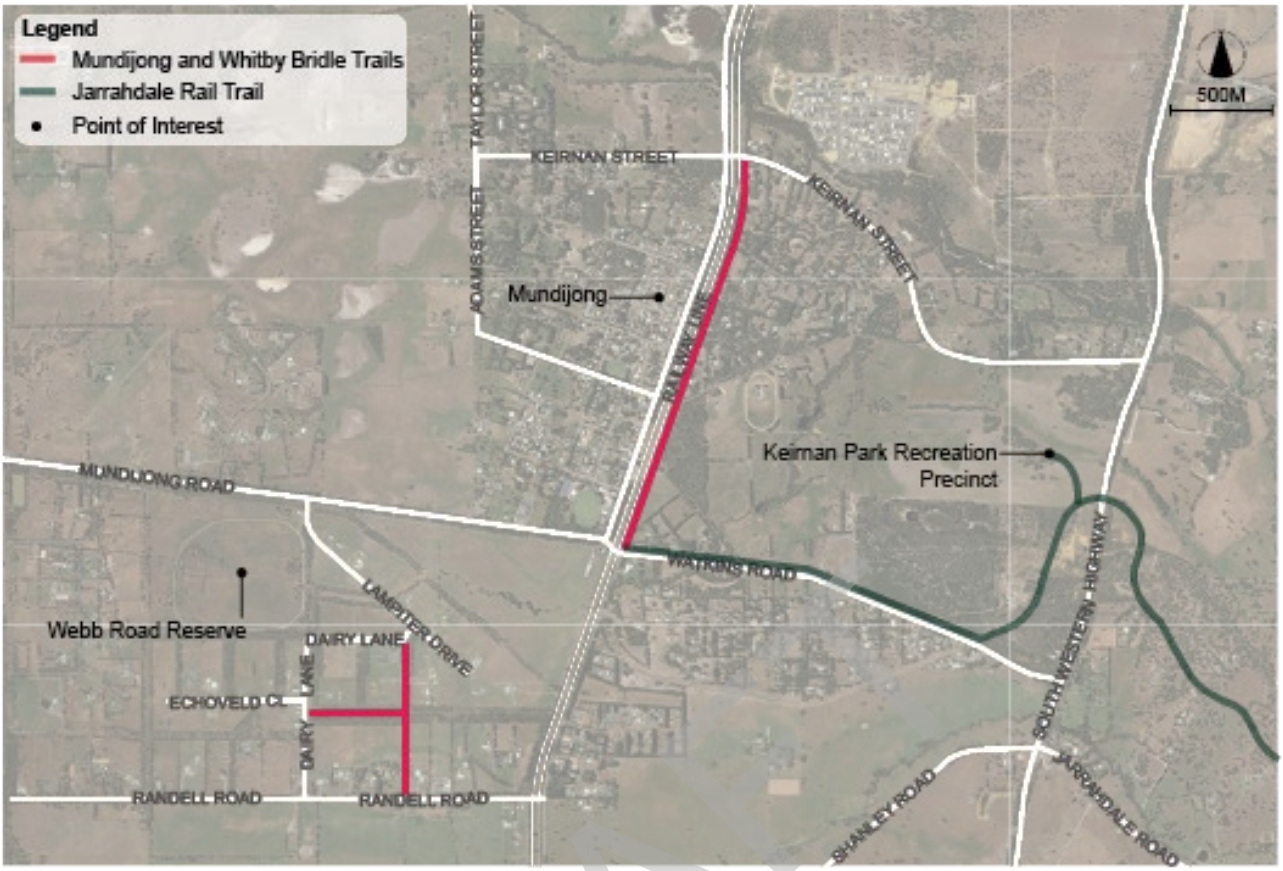

Figure 20: Mundijong and Whitby Bridle Trails

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B15: Serpentine Subdivision

Ensure the new subdivision opposite the Serpentine Golf Course implements the proposed multi-use trail.

RATIONALE

A new multi-use trail is proposed for the northern section of the Serpentine trail network (refer Figure 21). The multi-use trail will be situated within a new subdivision. To ensure horse riding is facilitated along this multi-use trail, it is important for the Shire to liaise with the land managers/developers to include the new trail in the final subdivision plans and to construct the trail as per the designs.

The new multi-use trail will provide a key link to the Serpentine Horse and Pony Club, Serpentine Polocrosse Club, and the Serpentine Sports Reserve, which has the potential to provide a trailhead with equine amenities, infrastructure, and float parking. The grounds and clubhouse at the Serpentine Sports Reserve are commonly referred to as the best facilities in WA and attract a wide range of equine related bookings. The area is public open space and is available for the general public to use for their riding requirements, when the facility has not been booked for events.

The multi-use trail will require a variety of signage at key points along the trail. Educational signage will be a focus of this trail to guide positive interactions between trail users, including dog walkers and cyclists. It will be important to work with land managers (e.g., developers) and relevant stakeholders to maintain the trail to a high standard.

ACTIONS

Table 37: Serpentine Subdivision Actions

	ACTION	TIMEFRAME	COST
B15.1	**Signage:** Work with land managers/developers to install trailhead wayfinding, management, and interpretation signage as well as emergency and safety signage for the new Serpentine Subdivision to align with requirements set out in this Master Plan. Remove obsolete signage where required.	Medium	Low
B15.2	**Trail Interaction:** Work with land managers/developers to Install educational signage (i.e., code of conduct) at intervals along the trail to guide positive interaction between horses and other trail users (e.g., dog walkers, cyclists).	Medium	Low
B15.3	**Management Plan:** Incorporate the Serpentine Subdivision into the Serpentine Bridle Trail Management Plan and implement relevant trail inspections and maintenance with a focus on trail user safety and surface quality.	Short	Low
B15.4	**Planning and Collaboration:** Liaise with relevant land managers and developers to ensure that the new multi-purpose trail within the Serpentine Subdivision opposite the Serpentine Golf Course is included in the final subdivision plans and is constructed as per the designs.	Ongoing	Low

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	ACTION	TIMEFRAME	COST
B15.5	**Serpentine Sports Reserve:** Investigate the viability of Serpentine Sports Reserve becoming a key trailhead, providing amenities, infrastructure, and float parking (refer action E1.3).	Short	Low

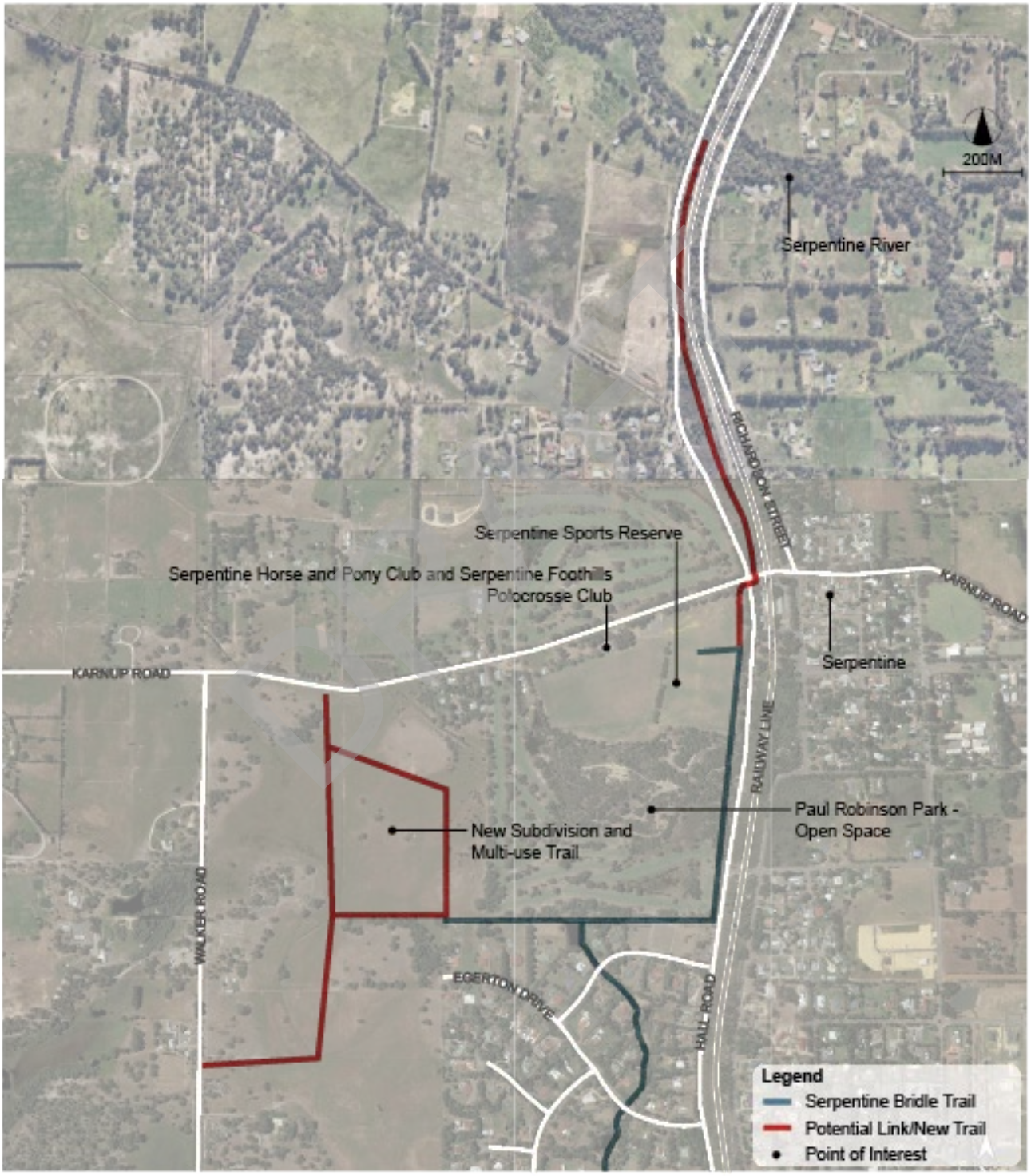

Figure 21: Serpentine Subdivision

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B16: Water Corporation Drains

Consider formalising the trail from Karnup Road to Thomas Road and Kargotich Road utilising Water Corporation Drains.

RATIONALE

The Water Corporation has a network of drains with adjacent parcels of land that include maintenance tracks within the Shire which have the potential to be developed into bridle trails (refer Figure 22). In line with the 8 stage Trail Development Process, corridor evaluation will require consideration of environmental values and risk mitigation for the drains, and a proposal for the development of a bridle trail along sections of Water Corporation drains. Extensive consultation with the Water Corporation and adjoining landowners will need to be undertaken to determine the viability of the Karnup Road to Thomas Road Trail and the Kargotich Road Trail.

This trail will provide a long distance link from Karnup Road in the south to Thomas Road in the north, connecting to the Oakford Bridle Trails in the north and Byford Trotting Estate Bridle Trails in the east (refer Figure 22).

ACTIONS

Table 38: Water Corporation Drains Actions

	ACTION	TIMEFRAME	COST
B16.1	**Preliminary Assessments:** Embark on the 8 stage Trail Development Process by formulating a proposal for the development of a bridle trail along sections of the drainage network, including assessment of environmental values for consideration by the Water Corporation.	Short	Medium
B16.2	**Consultation:** Engage with the Water Corporation and adjoining landowners to determine the feasibility of the Karnup Road to Thomas Road Trail and the Kargotich Road Trail.	Short	Low
B16.3	**Signage:** Work with the Water Corporation to install wayfinding, management, and interpretation signage as well as emergency and safety signage for the new Karnup Road to Thomas Road and Kargotich Road trail to align with requirements set out in this Master Plan.	Medium	Low
B16.4	**Infrastructure:** Work with the Water Corporation to install horse trail infrastructure, including provision of tie-up rails and mounting blocks to prevent unauthorised access.	Medium	Medium

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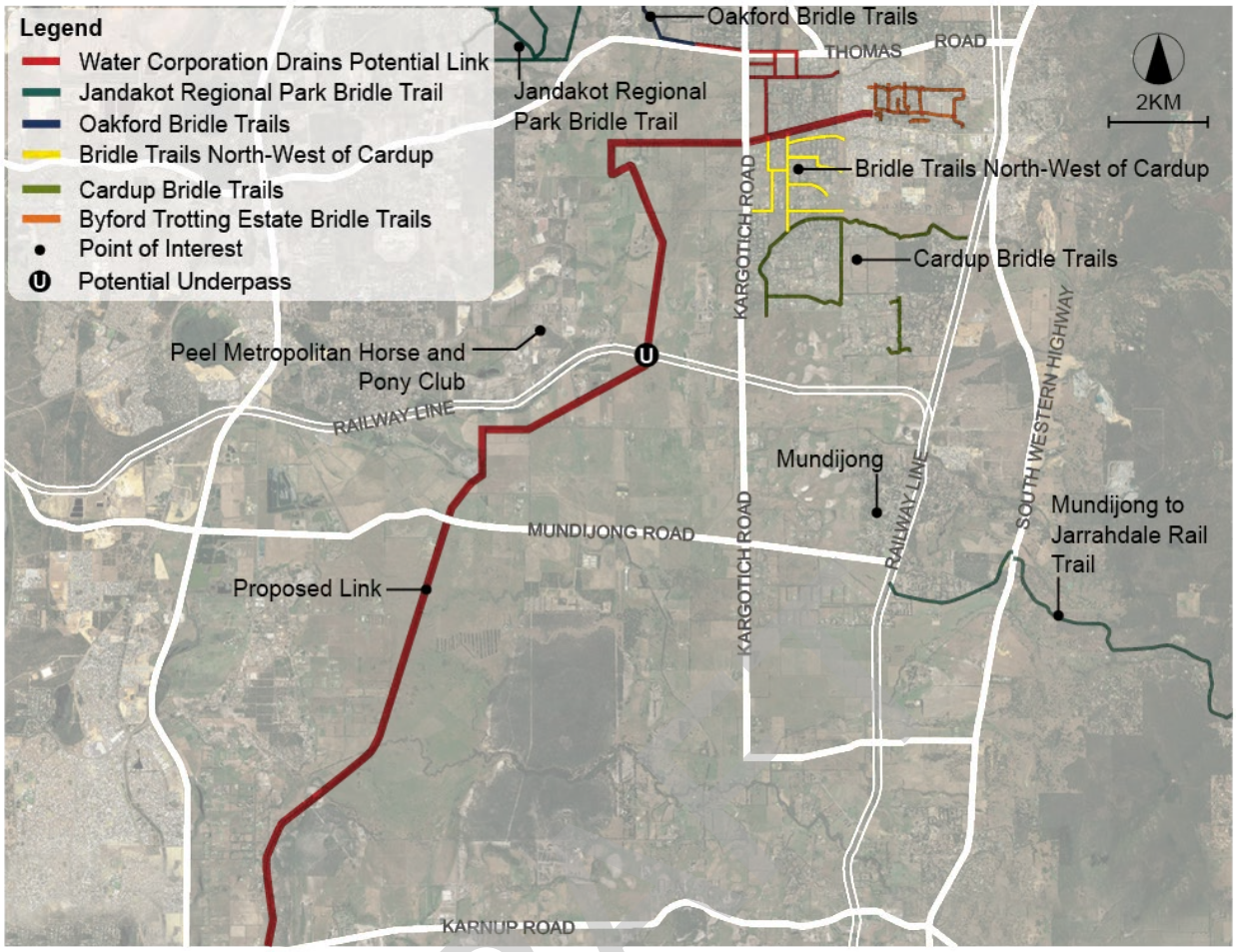

Figure 22: Water Corporation Drains

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STRATEGIC OUTCOME B: Clearly Defined, Safe, Sustainable & Accessible Equine Trails

STRATEGY B17: Keysbrook Bridle Trail

Maintain and enhance the existing Keysbrook Bridle Trail.

RATIONALE

The Keysbrook Bridle Trail (refer Figure 23) is the southernmost bridle trail within the Shire, located south of the Serpentine Bridle Trail and west of South Western Highway. Due to the isolated location, opportunities to integrate with the broader equine trail network to the north are limited. The trail is located on the existing fire break that surrounds the reserve and it is suggested that new signage be installed to promote and formalise the trail. It is noted that any works conducted on the trail will need to adhere to the relevant firebreak standards and guidelines.

The Hopeland/Keysbrook population is the smallest in the Shire, and the use of this trail is low, with local horse riders being the main users of the area. However, the population is projected to grow by 16.48% from 2021 to 2036 (Profile id Population Forecasts, 2017). Maintaining and enhancing this trail will provide an equine trail experience for the area's growing population.

ACTIONS

Table 39: Keysbrook Bridle Trail Actions

	ACTION	TIMEFRAME	COST
B17.1	**Signage:** Install wayfinding, management, and interpretation signage as well as emergency and safety signage for the Keysbrook Bridle Trail to align with requirements set out in this Master Plan.	Short	Low
B17.2	**Surface Quality:** Where required, upgrade sections of trail surface which have become degraded (i.e., provide natural compacted aggregate in these areas).	Short	Medium
B17.3	**Identify New Bridle Trails:** As the population increases, investigate opportunities to expand the network of bridle trails and linkages in the Keysbrook area.	Ongoing	Low

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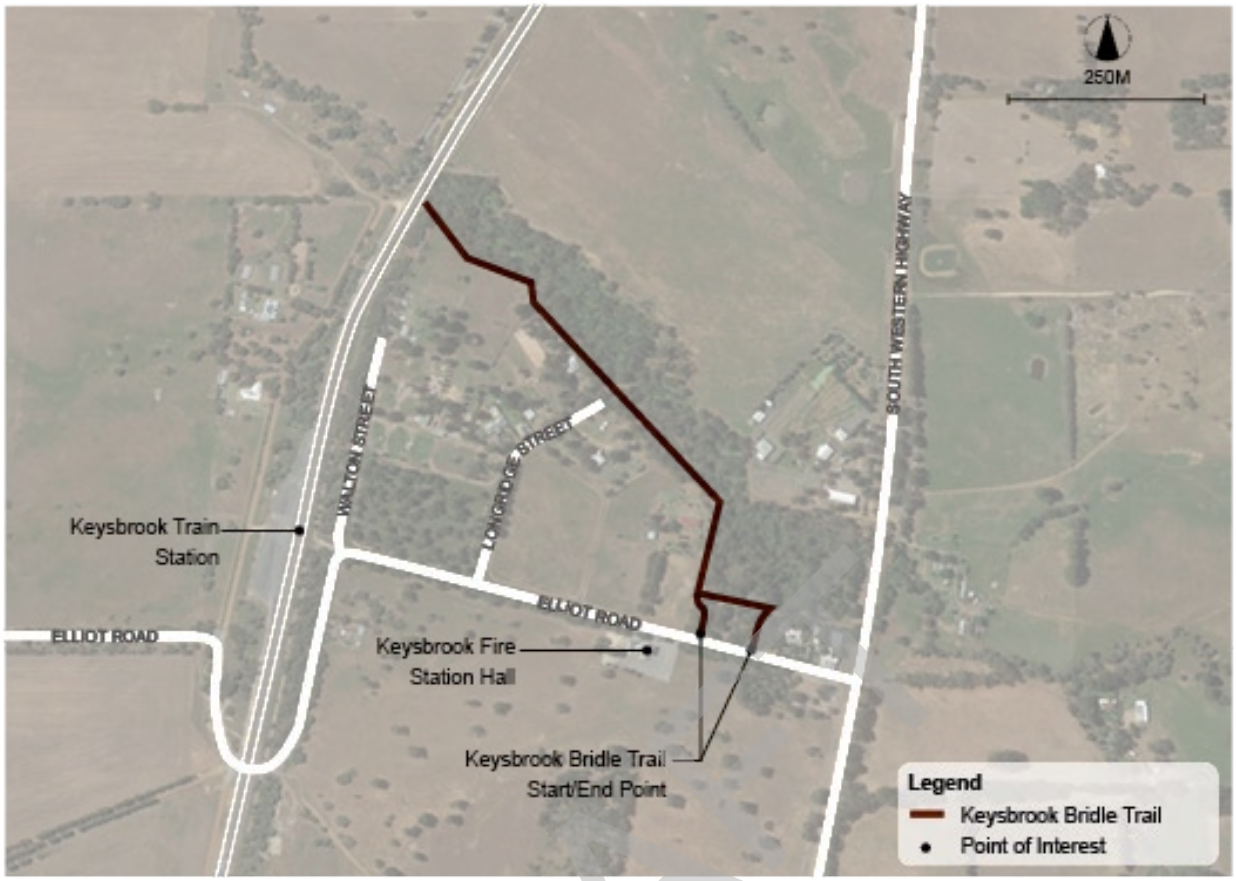

Figure 23: Keysbrook Bridle Trail

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STRATEGIC OUTCOME C: Information, Promotion & Marketing

STRATEGY C1: Signage, Maps and Supporting Information

Provide consistent and reliable signage, maps & supporting information for equine trails within the Shire.

RATIONALE

Horse trail signage has been identified as a key issue on the majority of the existing equine trails through community consultation and on-ground site visits. Installing contemporary trail signage is a key component to upgrading each of the equine trails to enhance trails for both enjoyment and safety. Existing signage on the equine trails is generally worn/dated and information requires significant upgrade. It is important that equine trails have effective signage which aligns with the requirements for their level of difficulty (refer WA Horse Trail Classifications).

The availability and dissemination of horse trail related information is also important as this was rated as poor for multiple equine trails in the community survey. Trails WA and the Shire website both provide information and maps for the Shire's equine trails, and it is important that these websites are continually updated to align with the new information and trails identified in this Master Plan. The existing information relating to equine trails across the Shire is generally inconsistent, outdated, limited and unreliable. Information relating to equine trails is also available on a range of third-party online sources with user-generated content, such as AllTrails, which varies in accuracy and consistency.

As part of the development of this Master Plan, existing equine trails were audited and mapped. This information should now be used to update current maps and develop reliable equine trail maps and supporting information for the newly identified trails. The maps and information can be in printed form, online and/or integrated into interactive online applications. It is important that equine trail maps and information are presented in a range of formats to cater for all levels of technological ability. It is also important that outdated equine trail information is removed from circulation.

ACTIONS

Table 40: Signage, Maps and Supporting Information Actions

	ACTION	TIMEFRAME	COST
C1.1	**Revision and Expansion of Maps:** Review and expand on the maps available on Trails WA and the Shire webpage to ensure that all equine trails are promoted with clear distinction of their alignment, trail grade/difficulty and other features.	Immediate	Low
C1.2	**Central Online Platform:** Support Trails WA to become the central platform with publicly available, high quality and reliable bridle trail information, including maps (potentially interactive) and trail manager access to manage and update trail related information.	Short	Low
C1.3	**Quick Response (QR) Codes:** Utilise QR Codes on signage, maps, and other marketing material to provide links with further information relating to the equine trails network, for users to download on their personal device.	Medium	Low

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	ACTION	TIMEFRAME	COST
C1.4	**Signage and Infrastructure Guide:** Ensure that the Shire's current and future equine trail signage and infrastructure (including maintenance) adheres to the Shire's Signage Standards and Brand Style Guide.	Ongoing	Low
C1.5	**Revision and Updates:** Ensure that sufficient resources are budgeted for periodic reviews and updates of on-ground signage, maps, and information (online and printed).	Ongoing	Low

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08 Implementation Plan

STRATEGIC OUTCOME C: Information, Promotion & Marketing

STRATEGY C2: Marketing and Promotion Strategy

Develop and implement a Marketing and Promotion Strategy for the Shire's equine trails.

RATIONALE

The Shire should be widely celebrated and promoted as a unique and world class equine trails hub which will attract visitors and tourists into the future. An opportunity exists to implement an all-encompassing marketing and promotion approach across aspects such as equine trails and services, trail events, product development, Council collaboration and investment.

Once the equine trails are enhanced and developed to a level suitable for promotion, the development of marketing and informational materials such as brochures (printed and online) and maps and signage (refer strategy C1) will enable the Shire to confidently capitalise on this opportunity. These materials can be promoted via the Shire's website or social media page. A Marking and Promotion Strategy for the Shire's equine trails should be developed and implemented to capture all aspects and ensure the trails are effectively marketed. It is also important to work with neighbouring Council's and horse riding communities to explore opportunities and be involved in regional equine trail related projects.

ACTIONS

Table 41: Marketing and Promotion Strategy Actions

	ACTION	TIMEFRAME	COST
C2.1	**Marketing and Promotion Strategy:** Develop a coordinated approach to the marketing of equine trails and integrate this approach into a Marketing and Promotion Strategy.	Short	Low
C2.2	**Brochures:** Develop a series of promotional equine trail user brochures that are consistent in terms of design and levels of information provided, available as printed copies at the Shire and online for download.	Short	Low
C2.3	**Webpage:** Develop a dedicated webpage on the Shire's website that provides information relating to equine activities (specifically including trails) across the Shire.	Immediate	Low
C2.4	**Collaboration:** Develop relationships with neighbouring Councils and horse riding communities and seek opportunities to be involved in initiatives which contribute to the development and activation of the broader region's equine trails network, including the ongoing participation in regional trails committees and forums (e.g., Peel Trails Technical Group (PTTG)).	Ongoing	Low

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STRATEGIC OUTCOME D: Management & Maintenance

STRATEGY D1: Trails Management and Maintenance Program

Develop and implement a Shire Trails Management and Maintenance Program detailing equine trail requirements.

RATIONALE

To ensure that all Shire equine trails are managed effectively, management responsibilities must be clearly identified, alongside the development of maintenance and inspection schedules. Where equine trails cross multiple land tenures, it is essential that equine trail management and maintenance responsibilities are clear and assigned to a designated body, with the necessary resources and expertise.

A Management and Maintenance Program will assist in guiding key stakeholders to manage equine trails effectively. Engaging existing equine trail user groups and trail organisations in the development and implementation of the Program will help develop a sense of ownership and assist with ongoing maintenance. It is important to note that the responsibility of trail management ultimately lies with the relevant land manager, unless otherwise formally agreed to. The development of a MoU between the Shire of Serpentine Jarrahdale and DBCA will assist in providing common objectives and relevant expectations with regards to management and maintenance of equine trails on land managed by the Shire of Serpentine Jarrahdale and DBCA (within the Shire boundary).

ACTIONS

Table 42: Trails Management and Maintenance Program Actions

	ACTION	TIMEFRAME	COST
D1.1	**Development and Implementation:** Engage the existing equine trail user groups and trail organisations (refer to action A1.1) to assist in developing and implementing the equine trails component of the Trails Management and Maintenance Program in collaboration with the relevant managing authority.	Short	Low
D1.2	**Responsibilities and Schedules:** Ensure the Trails Management and Maintenance Program includes clear management responsibilities and regular inspection and maintenance schedules.	Immediate	Low
D1.3	**Trail Development Series:** Utilise the *Trail Development Series (2019)* as a guide for equine trail managers, the community and volunteer groups to maintain and manage equine trails.	Ongoing	Low
D1.4	**Resourcing:** Ensure that sufficient resources are planned and budgeted in order to implement periodic trail inspections and maintenance including trail surfaces, infrastructure, amenities, and signage.	Ongoing	Low
D1.5	**MoU:** Develop a MoU between the Shire and DBCA for the management and maintenance of equine trails in the Shire.	Immediate	Low

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STRATEGIC OUTCOME D: Management & Maintenance

STRATEGY D2: Trail Monitoring Strategies

Clearly define appropriate monitoring strategies as part of the Trails Management and Maintenance Program.

RATIONALE

It is important to identify the sustainable/appropriate level of use for equine trails across the Shire, and in turn monitor important social (e.g., visitor numbers, level of use, behaviours, attitudes, motivations) and environmental impacts of equine trail riding. The collection of key equine trail data is required to successfully monitor and manage equine trails. As outlined in the *Trail Development Series (2019)*, it is important to understand how the trails are being used and how often. This assists trail owners and operators with evaluating the success of a project, prioritising and planning maintenance works, guiding future trail development and improvements, and supporting funding applications for further works. There are a number of ways to collect information, and data collection methods will be dependent on project purpose.

The existing equine trail user groups and organisations (refer action A1.1) will perform a key role in driving the implementation of priority equine trail projects and should be involved in monitoring of project implementation and periodic reassessment. The *Shire of Serpentine Jarrahdale Equine Strategy (2018)* provides important baseline data when assessing and monitoring impacts and changes in community perceptions.

ACTIONS

Table 43: Trail Monitoring Strategies Actions

	ACTION	TIMEFRAME	COST
D2.1	**Central Database:** Establish a central reporting system/database to facilitate the capture and analysis of trail monitoring data.	Ongoing	Low
D2.2	**On-ground Data:** Work in collaboration with existing equine trail user groups and organisations as well as relevant land managers to collect on-ground equine trail data (including trail usage and market visitation), in accordance with agreed monitoring techniques.	Short	Low
D2.3	**Assess Impacts**: Engage the existing equine trail user groups and organisations to monitor project implementation and periodic reassessment of appropriate monitoring strategies, in partnership with relevant land managers.	Short	Low

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STRATEGIC OUTCOME D: Management & Maintenance

STRATEGY D3: Code of Conduct and Risk Management

Develop and implement a general trail user Code of Conduct, promote, and adopt the existing ATHRA Code of Conduct and develop and implement management plans to manage risk.

RATIONALE

Risks associated with diverse trail users (e.g., horse riders, dog walkers, mountain bikers) requires effective management. Developing a clear trail user Code of Conduct and integrating this onto trail signage will educate trail users and help to manage conflict between trail users, creating a safer equine trail network and facilitating positive on-trail experiences for all users. The existing ATHRA Code of Conduct should also be promoted and adopted for all horse riding on equine trails.

An integral aspect of equine trail management is risk management, which needs to be adequately resourced to ensure effectiveness. Risk management is an essential component of trail management, and it is important that this is integrated into Shire's trail management systems. Risks associated with equine trails (e.g., environmental, personal safety) can be managed through planning and mitigation measures such as implementing risk management plans. Clear communication to the community of risks associated with the Shire's equine trails is also important.

ACTIONS

Table 44: Code of Conduct and Risk Management Actions

	ACTION	TIMEFRAME	COST
D3.1	**DBCA Management Plans:** Implement the DBCA *Fire Management Strategy* and the *Phytophthora Dieback Management Manual* for equine trails that are on DBCA managed land.	Ongoing	Low
D3.2	**Shire Management Plans:** Implement the *Shire of Serpentine Jarrahdale Bushfire Risk Management Plan* as well as the *Shire of Serpentine Jarrahdale Council Policy 3.3.3 Risk Management* for equine trails that are on Shire managed land, integrating trail, risk and environmental management and monitoring.	Ongoing	Low
D3.3	**Code of Conduct:** Promote and adopt the existing ATHRA Code of Conduct for recognised equine trails across the Shire and integrate these onto equine trail signage to assist in managing trail user conflict.	Short	Low

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STRATEGIC OUTCOME E: Community, Tourism & Economic Development

STRATEGY E1: Equine Tourism

Enhance the tourism potential of equine trails within the Shire, including investigating locations for key trailheads and trail centres and establishing Jarrahdale as a Trail Town with an Equine focus.

RATIONALE

Equine tourism (i.e., equine trails) stimulates the local equine economy through direct expenditure on the experience, as well as associated equine support services and other local equine businesses. Equine trail experiences will provide a substantial economic injection for the Shire, not only for equine based businesses, but also for the hospitality industry (e.g., local accommodation and food providers). The Shire of Serpentine Jarrahdale Trail Development Business Case (2020) identified the Jarrahdale Oval Trailhead, Byford Trail Centre, and the Mundijong to Jarrahdale Rail Trail as potential locations to value add investments in bed and breakfast accommodation, campgrounds, and tourist villages in the local area.

Equine tourism can be promoted and marketed as tourism experiences and new or enhanced infrastructure can increase the number and diversity of events held, and visitors attracted into the local area. Furthermore, increasing accessibility and management of dedicated equine trails maintained by local or state government can attract more horse riding enthusiasts to the Shire. It is important to maintain a continual understanding of the demand for equine trail tourism and adapt the Shire's strategies accordingly. When visitor numbers increase, this has the potential to negatively impact on the natural environment. Therefore, it is important to develop visitor experiences which provide a connection between the community and natural areas through education and other mechanisms.

There is a significant opportunity for Jarrahdale to become a fully accredited Trail Town as sanctioned by Trails WA. The Jarrahdale Trail Town Business Case and Implementation Plan (2021) provides strategic guidance to assist the Shire to support Jarrahdale to become one of WA's primary trail destinations and Perth's most popular Trail Town for visitors seeking equine, bushwalking and heritage trail experiences. The proposed Jarrahdale Oval Trailhead will provide basic amenities such as shade, picnic facilities, bike racks and repair station, a drinking fountain, toilets and trail head signage, in addition to new and improved equine facilities.

As identified in the Shire of Serpentine Jarrahdale Trail Development Business Case (2020), the Byford Trail Head is located close to Wungong Regional Park, with proximity to the modern Byford Country Club in a rapidly growing population area. The Business Case proposes trail head signage, shade, picnic areas, drinking fountains, bins, seating, and parking. With these proposed developments Byford Trail Centre can become one of the gateways to Wungong Regional Park and the Shire will experience an increase in trail users. Other strategic locations such as the Oakford Community Centre, Oakford Riding for the Disabled, Darling Downs Equine Park, Byford Trotting Training Complex were also identified in the *Shire of Serpentine Jarrahdale Equine Strategy 2018*.

ACTIONS

Table 45: Equine Tourism Actions

	ACTION	TIMEFRAME	COST
E1.1	**Accommodation:** Expand equine friendly accommodation options within the Shire, particularly at key locations such as the new Jarrahdale Oval Trailhead and the future Jarrahdale Trail Centre to facilitate the increase in visitor numbers and attract further tourism.	Long	High

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	ACTION	TIMEFRAME	COST
E1.2	**Planning and Management:** Work with the Water Corporation and DBCA to advocate for appropriate equine trail uses in water catchment areas including planning for trail development and management.	Ongoing	Low
E1.3	**Investigate Trailheads:** Further investigate the development of key trailhead and trail centre locations and their associated infrastructure and amenities to increase visitation and tourism, including Oakford Community Centre, Oakford Riding for the Disabled, 70 Acres Darling Downs, Byford Trotting Training Complex, Serpentine Sports Reserve and Coffey Road Reserve.	Ongoing	Medium
E1.4	**Jarrahdale Oval Trailhead and Byford Trail Head:** Develop the Jarrahdale Oval Trailhead and the Byford Trail Head at the Byford Country Club which will enhance the tourism potential of the Shire.	Long	High
E1.5	**Jarrahdale Trail Town:** Implement the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)*, with a focus on the following high priority areas relevant to tourism: • Trails Development and Management • Attractions and Activities • Amenities • Accommodation • Engagement of Supporting Businesses • Marketing	Long	High
E1.6	**Tourism Planning and Promotion:** Continue to explore opportunities to plan for, identify, promote, and market the tourism potential and uniqueness of equine trails within the Shire to increase visitation.	Ongoing	Low
E1.7	**Environmental Management:** Protect natural reserves and areas from detrimental impacts of increased equine tourism through providing a formalised network of sustainable trails, education (e.g., signage, code of conduct) and monitoring trail use.	Ongoing	Low
E1.8	**Appropriate Infrastructure:** Ensure equine trail tourism infrastructure and amenities are safe and appropriate and are maintained accordingly to meet demand and minimise conflict.	Ongoing	Medium
E1.9	**Equine Trail Town:** Develop an Equine Trail Town within the Shire that encourages visitors to stay in the local area (this will require a minimum 3 days of equine trail riding/45km of equine trails).	Long	High

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STRATEGIC OUTCOME E: Community, Tourism & Economic Development

STRATEGY E2: Community and Economic Development

Use equine trail development and provision as a tool for economic and community development.

RATIONALE

Sustainable and accessible equine trails have the potential to generate significant benefits for the region, particularly from health, economic and tourism perspectives. Increased diversity and provision of different trail experiences within the Shire, which suit varying levels of ability, will provide experiences for a wide range of people, encouraging active and healthy lifestyles and recreational pursuits.

The development of unique equine events in the region that utilise the equine trails should be supported to assist in boosting the profile of the Shire's equine trails network. These events may include horse riding competitions and nature-based education programs. Participants at equine trail events spend much more money per visit compared to regular visitors due to the costs of looking after their horse. Visitors often spend locally to meet their needs as well as the needs of their horse. Investment in catering for this segment of the visitor market will provide significant economic benefits to Shire's community.

The development of trailhead and trail centre locations that have the potential to host events and programs of varying scales is important. This includes locations such as the Jarrahdale Oval Trailhead, as identified in the *Jarrahdale Trail Town Business Case and Implementation Plan (2021)* and the Byford Trail Centre as identified in the *Shire of Serpentine Jarrahdale Trail Development Business Case (2020)*.

ACTIONS

Table 46: Community and Economic Development Actions

	ACTION	TIMEFRAME	COST
E2.1	**Programs and Events:** Support the establishment of regular programs and special events using the Shire's equine trails to boost economic growth.	Ongoing	Low
E2.2	**Equine Festivals:** Support the delivery of events and activities to celebrate equine culture in the Shire.	Ongoing	Medium
E2.3	**Trailhead and Trail Centres:** Further investigate the development of key potential trailhead and trail centre locations their ability to host equine trail events (refer action E1.3).	Ongoing	High
E2.4	**Jarrahdale Oval Trailhead and Byford Trail Head:** Utilise the future Jarrahdale Oval Trailhead and the Byford Trail Head at the Byford Country Club for equine trail festivals and events.	Long	High
E2.5	**Promotion:** Promote local equine trail events and programs via the Shire's website.	Ongoing	Low
E2.6	**Directional Signage:** Encourage equine trail users to visit towns across the Shire through installation of directional signage in close proximity to economic centres.	Medium	Medium

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	ACTION	TIMEFRAME	COST
E2.7	**Business Operators:** Encourage local equine business providers and other businesses (e.g., tour operators, associated retail outlets, hospitality venues, accommodation providers) to promote and utilise equine trails, with opportunities to deliver 'tourism packages' targeted at equine trail tourism markets.	Ongoing	Low

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Maintenance Plan

Equine trails, like any other facility, require ongoing management and maintenance. An equine trail maintenance plan provides a framework to plan, prioritise, schedule, and track maintenance work. It is important that equine trail maintenance activities are recorded for monitoring purposes. The below Maintenance Plan will inform aspects of the Trails Management and Maintenance Program (refer Strategy D2).

Activities that can be classified as part of the maintenance of trails, include- grading and re-sheeting of tracks, pruning of vegetation back from the track, weed control, slashing, drainage, erosion control, mulching and signage.

Trail Maintenance Schedule

The frequency of equine trail maintenance depends on factors such as the amount and type of use, soil type, vegetation type and trail condition. Extreme weather events may necessitate unscheduled maintenance and hazard checks. Table 47 will assist the relevant land manager with their equine trail maintenance responsibilities.

Table 47: Trail Maintenance Schedule

Trail Class	Inspection Interval	Risk Management Recommendation	Relevant Existing Trail
Class 1/Easy	1-6 months	Trails and built elements to be inspected every 1-3 months and after major natural events such as significant storms or fires. Trail and built elements to be maintained regularly. Built facilities to be managed for public risk.	Oakford Bridle Trails Darling Downs Bridle Trails Byford Trotting Trails Estate Bridle Trails Cardup Bridle Trails Serpentine Bridle Trail Keysbrook Bridle Trail
Class 2/Intermediate	6-12 months	Tracks to be inspected every 6-12 months and after major natural events such as significant storms or fires. Built facilities to be managed for public risk.	Jandakot Regional Park Bridle Trail Jarrahdale Bridle Trail
Class 3/Advanced	12-18 months	Tracks to be inspected every 12-18 months and after major natural events such as significant storms or fires. Built facilities to be managed for public risk.	Wungong Valley Gorge Bridle Trail Jarrahdale Bridle Trail
Note: Newly formalised or developed equine trails are to be maintained in line with this framework.			

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Maintenance Responsibilities

Table 48 clearly outlines the land manager who is responsible for maintenance activities in relation to each relevant existing equine trail.

Table 48: Maintenance Responsibilities

Maintenance Responsibility	Relevant Existing Trail
Shire of Serpentine Jarrahdale	Oakford Bridle Trails Darling Downs Bridle Trails Wungong Valley Gorge Bridle Trail Byford Trotting Trails Estate Bridle Trails Cardup Bridle Trails Serpentine Bridle Trail Keysbrook Bridle Trail
DBCA	Jandakot Regional Park Bridle Trail Wungong Valley Gorge Bridle Trail Jarrahdale Bridle Trail
Darling Downs Residents Association	Darling Downs Bridle Trails
Note: Equine trail user groups may perform minor preventative and reactive maintenance works.	

General Trail Maintenance Activities

Table 49 describes the general activities for the maintenance of equine trails within the Shire. The relevant land manager should be familiar with the following requirements.

Table 49: General Trail Maintenance Activities

Trail Feature	Activity	Required Action
Signage	Check all equine trail signage (e.g., directional signs, trailhead signs etc.), including road crossing signs, verifying the presence, condition, and visibility of the signs.	Assess the need to replace, repair or relocate any missing or damaged signs.
Fencing	Check the stability and function of fences and check for damage/erosion.	Assess the need to replace or repair any missing or damaged pieces of fencing. Stakes or loose fencing should be removed to prevent injury.
Cavalletti Stepovers	Check that the cavalletti stepover is intact and has not become damaged.	Assess the need to replace or repair any damaged stepovers.
Trailhead Infrastructure	Check trailhead infrastructure such as tie-up rails, shelters, picnic tables and float parking areas for vandalism, functionality, and stability. Check water levels/quality of water troughs, drink fountains etc.	Assess the need to replace or repair any damaged trailhead infrastructure, including infrastructure that has reached its end of life. Assess the need to top up water supplies at the trailhead.
Pegasus Crossing Points	Check infrastructure, sightlines, and markings.	Inspections may be completed in conjunction with routine road maintenance. This may include

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		assessing the condition of infrastructure such as traffic light signals and warning signs as well as assessing the condition of pavement markings on Pegasus crossings. Also assess the need to clear vegetation and remove signage to improve sightlines.
Vegetation	Check overhanging or fallen vegetation.	Assess the need to cut back vegetation in overgrown areas and remove fallen branches and debris. Vertical clearance should be 3.7m. The minimum trail corridor width varies depending on the class of the trail (easy trail 3m, intermediate trail 1.5m, advanced trail 1.5m).
Trail Surface	Check condition of bridle trail surface to ensure it is maintained to a high standard.	Assess the need for controlling encroaching vegetation, mulching, slashing, or resurfacing. Improve bridle trail safety by removing any sharp objects (e.g., glass, loose wire) and repairing any deep potholes.

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Funding

A range of external funding sources are available to support the development and implementation of the Master Plan as outlined below. Funding can be procured from a variety of sources locally and at state and federal levels. These programs change regularly, and it is important to contact the funding agency/organisation to obtain up to date details on funding programme guidelines and determine funding eligibility.

Federal: Department of Infrastructure, Transport, Regional Development and Communications – Building Better Regions Fund

The $1.29 billion Building Better Regions Fund (BBRF) supports the Australian Government's commitment to create jobs, drive economic growth and build stronger regional communities into the future.

The fund invests in projects located in or benefiting eligible areas outside the major capital cities of Sydney, Melbourne, Brisbane, Perth, Adelaide, and Canberra.

Grant funding is available through two funding streams:

- The Infrastructure Projects Stream. Supports projects that involve construction of new infrastructure, or the upgrade or extension of existing infrastructure
- The Community Investments Stream. Funds community development activities including, but not limited to, new or expanded local events, strategic regional plans, leadership, and capability building activities

For further information refer: https://www.regional.gov.au/regional/programs/building-better-regions-fund.aspx

Federal: Business Australia – Stronger Communities Programme

The Stronger Communities Programme provides each of the 151 federal electorates with $150,000 to fund small capital projects. These projects aim to improve local community participation and contribute to vibrant and viable communities. Federal Members of Parliament (MPs) identify potential projects and invite applications from their electorate.

The grant amount for small capital projects is up to 100% of eligible project costs except for local governing bodies where grant funding will be up to 50% of eligible projects costs. Grant requests must be between $2500 and $20,000.

For further information refer: https://business.gov.au/grants-and-programs/stronger-communities-programme

State: Tourism Western Australia – Regional Events Scheme

The Regional Events Scheme (RES) is an annual funding round for smaller and developing regional events across WA.

The RES supports events that:

- Bring more people to the region, which means more tourism dollars for the community
- Attract media coverage which helps promote the region as an exciting destination
- Involve and inspire the local community
- Encourage people to come to the region outside of the typical tourist season
- Add vibrancy and excitement to the region
- Support jobs in regional WA
- Showcase a strong point of difference and/or profile the unique features of the town and/or region

In the 2021-22 RES, 62 events have been awarded funding, including five through the Regional Aboriginal Events Scheme. Applications for the 2022-23 round have closed. Applications for the next round will open online in August 2022 for events held between 1st of July, 2023 and 30th of June,

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2024. Applicants can apply for funding of between $5,000 and $40,000 per year. The total funding available is up to $1 million,

For further information refer: https://www.tourism.wa.gov.au/industry-support-and-events/resources-for-event-holders/Funding-for-regional-events/Pages/Regional-Events-Program-funding.aspx#/

State: Department of Local Government, Sport and Cultural Industries – Community Sporting and Recreation Facilities Fund

The Community Sporting and Recreation Facilities Fund (CSRFF) exemplifies the WA Government's commitment to the development of sustainable infrastructure for sport and recreation across WA.

The purpose of the program is to provide WA Government financial assistance to community groups and local government authorities to develop basic infrastructure for sport and recreation.

The program aims to increase participation in sport and recreation, with an emphasis on physical activity, through rational development of sustainable, high quality, well-designed and well utilised facilities.

Through CSRFF, the state government will invest annually in the development of high-quality physical environments in which people can enjoy sport and recreation. There is $12 million available for allocation in the 2021/22 funding round.

For further information refer: https://www.dlgsc.wa.gov.au/funding/sportand-recreation-funding/community-sportingandrecreation-facilities-fund

State: Department of Local Government, Sport and Cultural Industries – Active Regional Communities Grants

The Active Regional Communities (ARC) Grants program aims to increase the opportunities for regional people to participate in sport and active recreation activities in regional WA and is tailored to meet the ever-changing demands and challenges of sport and active recreation groups within the nine diverse regions of WA. The ARC Grants cater for both sport and active recreation groups.

Grants up to $5000 are available, with applicants needing to demonstrate a significant contribution (up to 25%) towards the cost of the project or event, and/or in-kind contribution.

For further information refer: https://www.dlgsc.wa.gov.au/funding/sport-and-recreation-funding/active-regional-communities-grants/active-regional-communities-grants-guidelines

State: Lotterywest – Grassroots Community Led Grants

Grassroots Community Led Grants help non-for-profit organisations and local governments deliver great outcomes for communities across WA. Applications are open year-round, and the following key project areas can be supported:

- The grant must clearly result in community benefit
- There must be a clear link between the activity or item to be purchased with the grant, the grant purpose and one of the outcomes in the Community Investment Framework.
- The benefit of the grant must be realised in WA
- Grants can be used to support income generating activities if they are clearly intended to lead to a charitable or benevolent outcome. All profits must be directed towards a charitable purpose

For further information refer: https://www.lotterywest.wa.gov.au/grants/grant-opportunities/grassroots-community-led

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Local Government Funding

Local governments make significant investments in facilities, programs, and services. Where funding objectives align with Council's objectives, funding is often allocated to support the development of successful trails, recreation, and community facilities in the local area. This may be through a capital works program, grant, or loan (sometimes low interest). There is also a provision within the *Local Government Act (1995)* to raise a levy to fund specific projects.

Trusts and Foundations

There are many trusts and foundations established in Australia with a number providing funding for a range of projects. Often, they are established by large corporations. For further information refer: www.philanthropy.org.au.

Commercial and Private Sector Funding

Commercial and private sector funding is often used to assist with a variety of projects and their ongoing operations. Opportunities such as naming rights and in-kind donations are available.

Developers Contributions

Development contributions are a mechanism for the sharing of infrastructure costs for district level infrastructure from owners of land within a defined Development Contribution Area (DCA). Land within a DCA often has multiple owners, and it is necessary to ensure that all landowners equitably contribute to the cost of providing common infrastructure within the area.

A Development Contribution Plan (DCP) identifies capital infrastructure required to support actual or anticipated growth in a specific area and shares the cost across the developments driving the growth. The DCP details what infrastructure will be needed to support new development, why it is needed, how much it will cost and when it is likely to be built.

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Appendix 1 – Trailhead Maps

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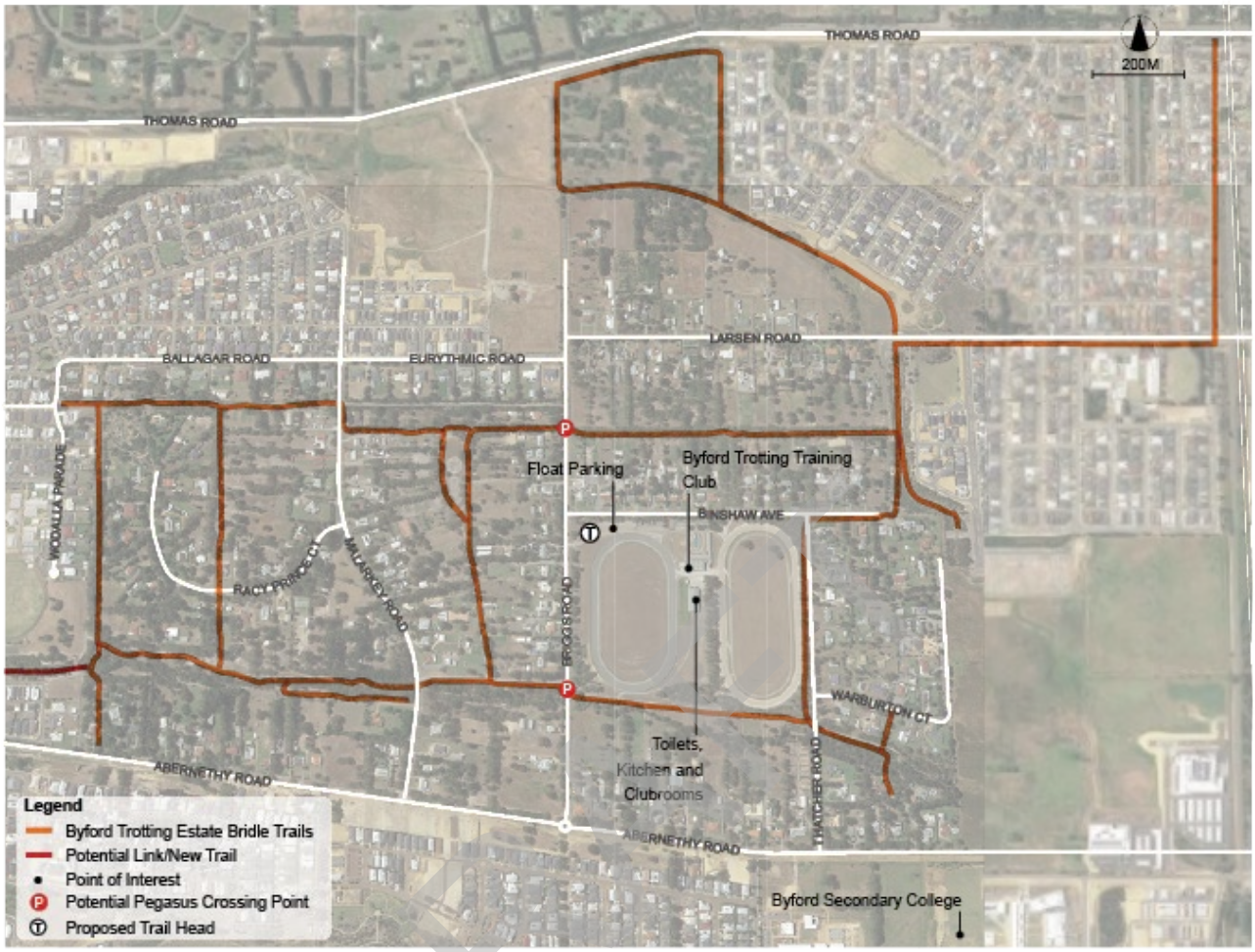
Byford Trotting Training Complex Trailhead



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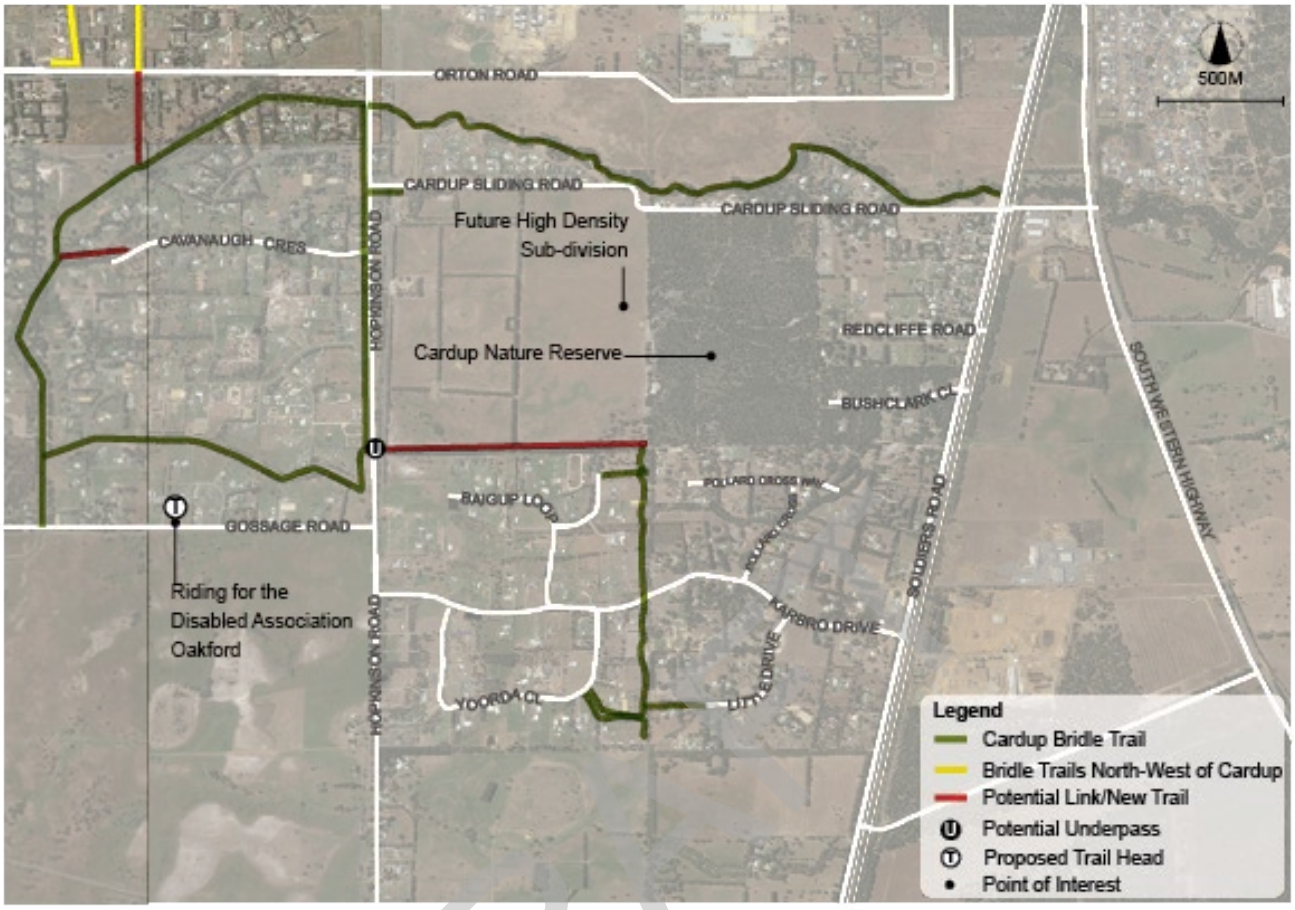
Appendices

Riding for the Disabled Association Trailhead



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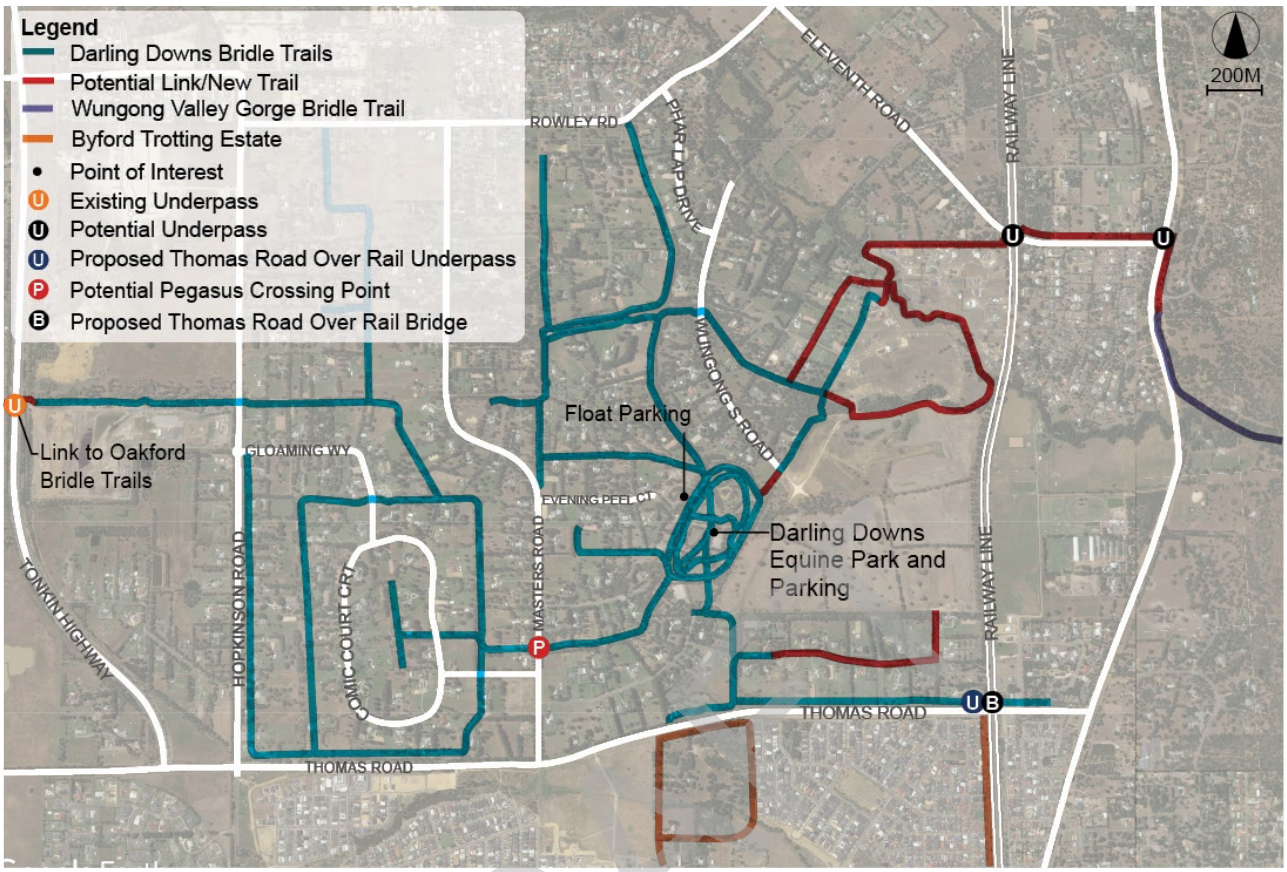
Darling Downs Equine Park Trailhead



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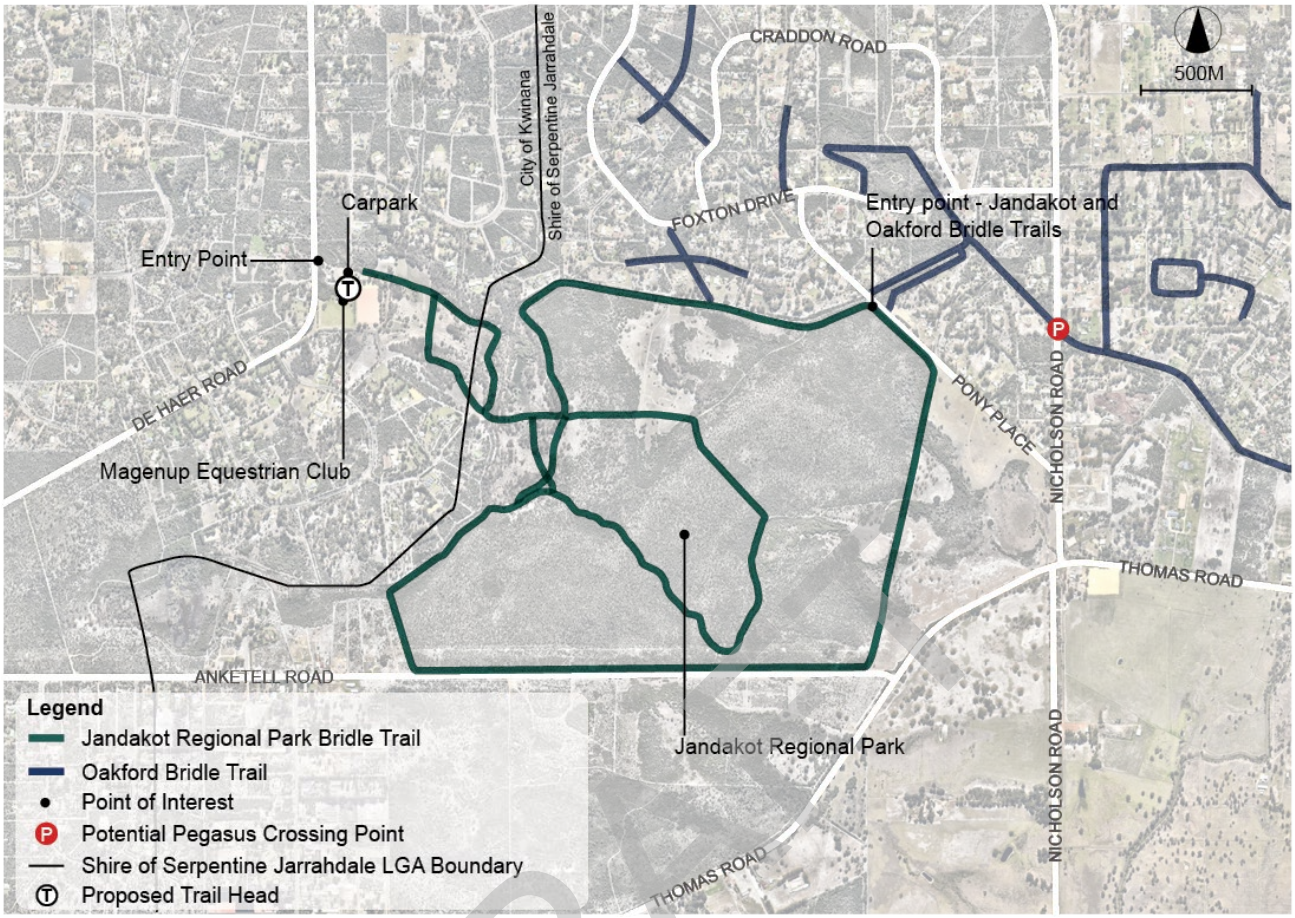
Magenup Equestrian Centre Trailhead



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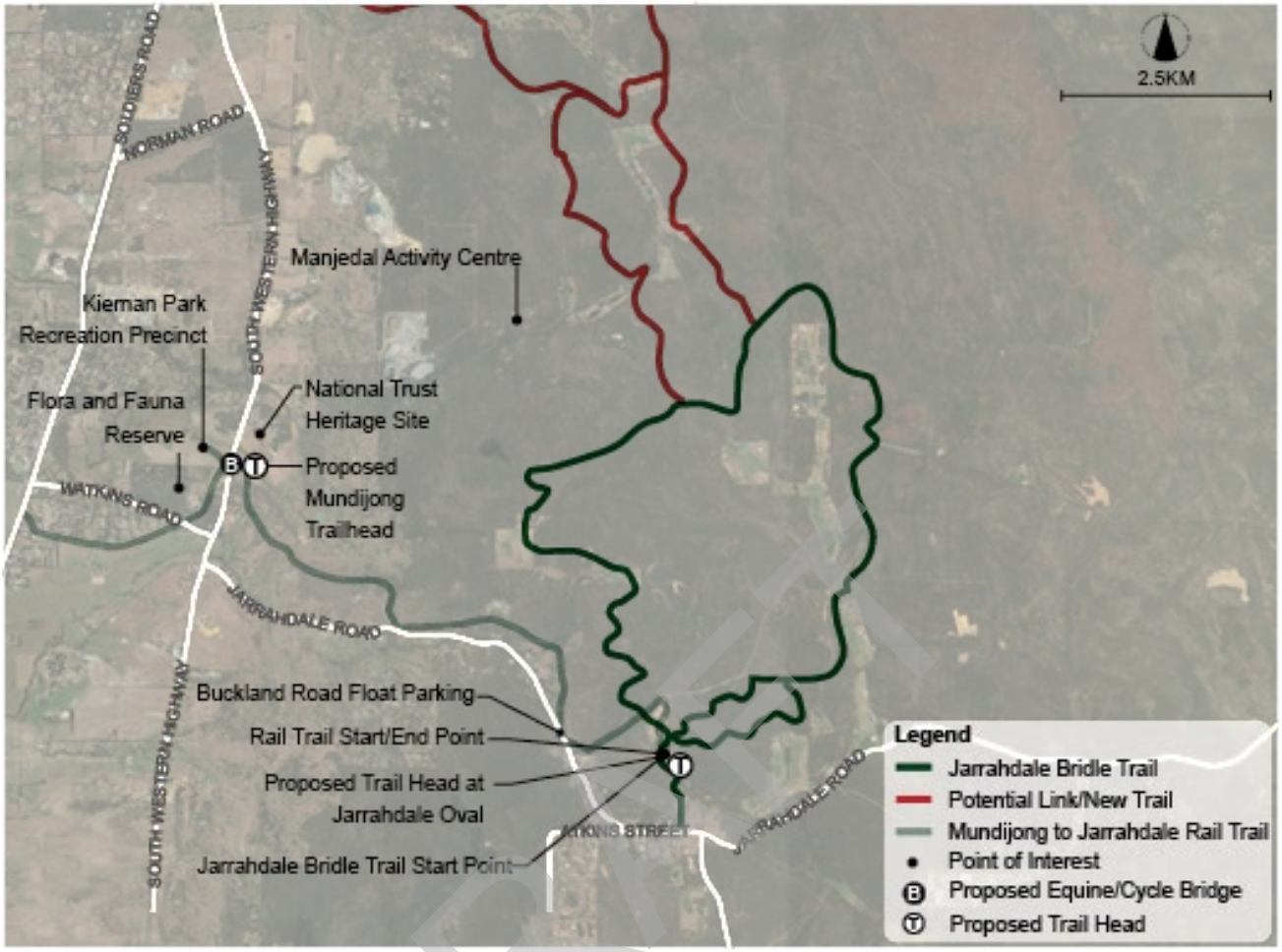
Jarrahdale Oval Trailhead



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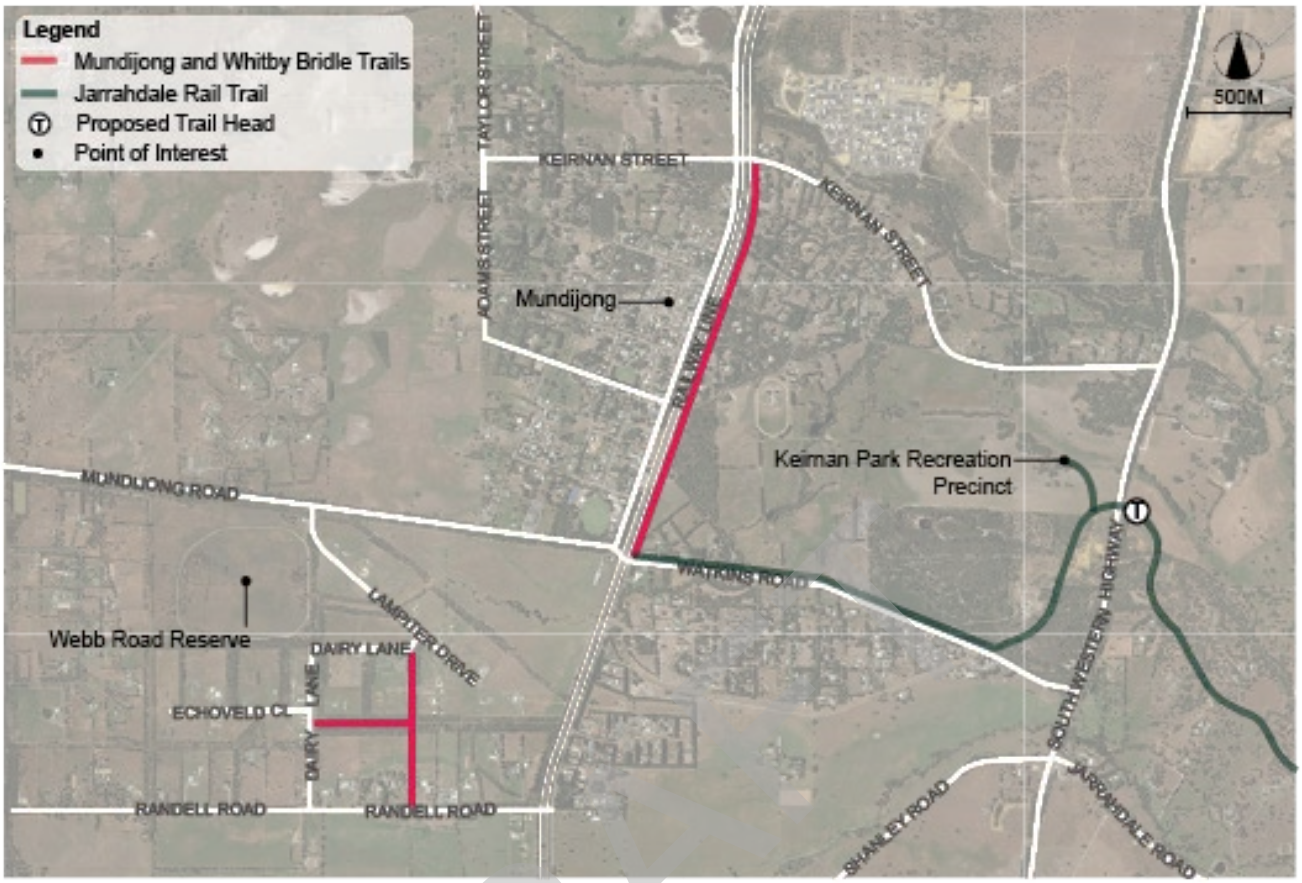
Mundijong Trailhead



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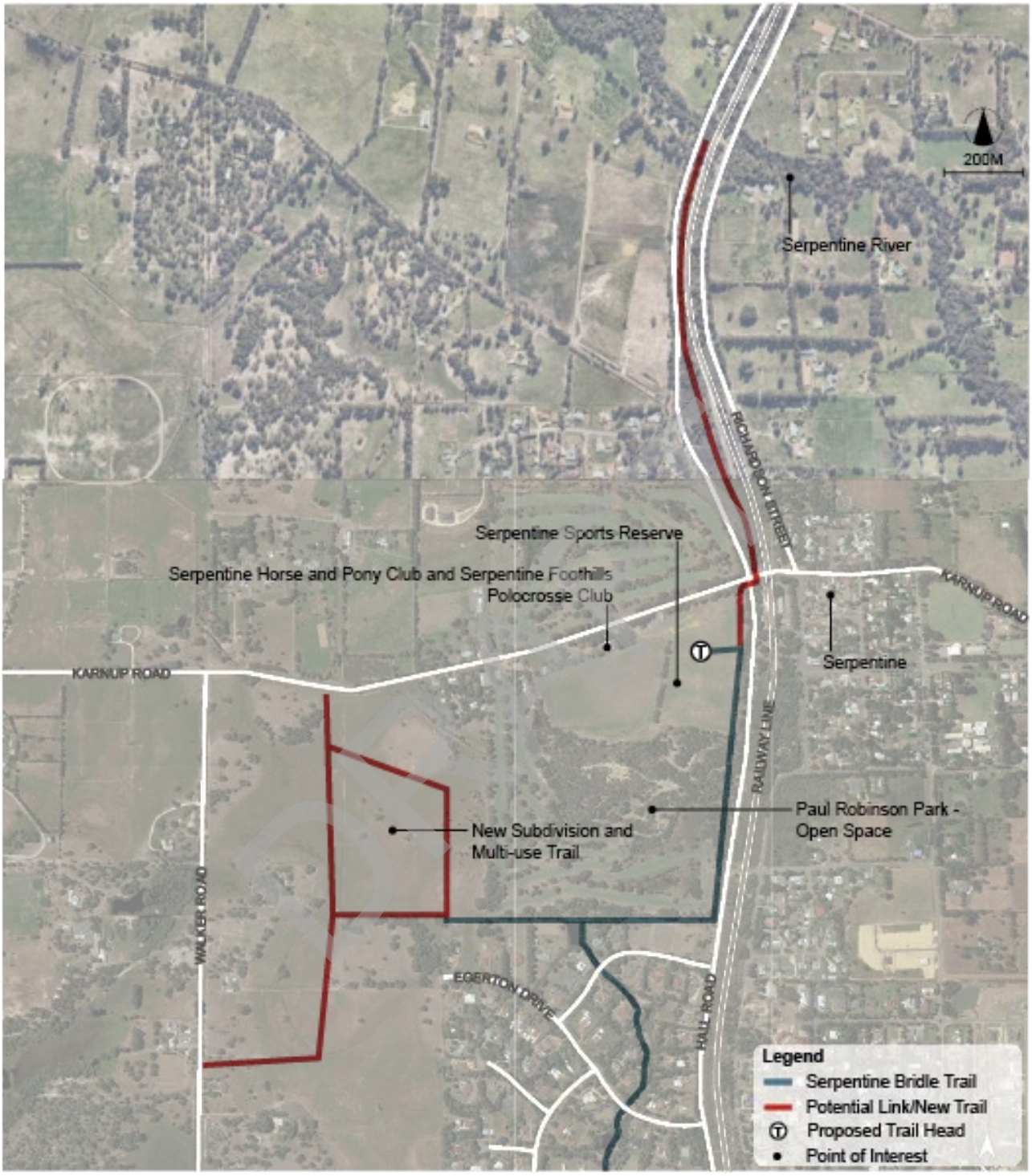
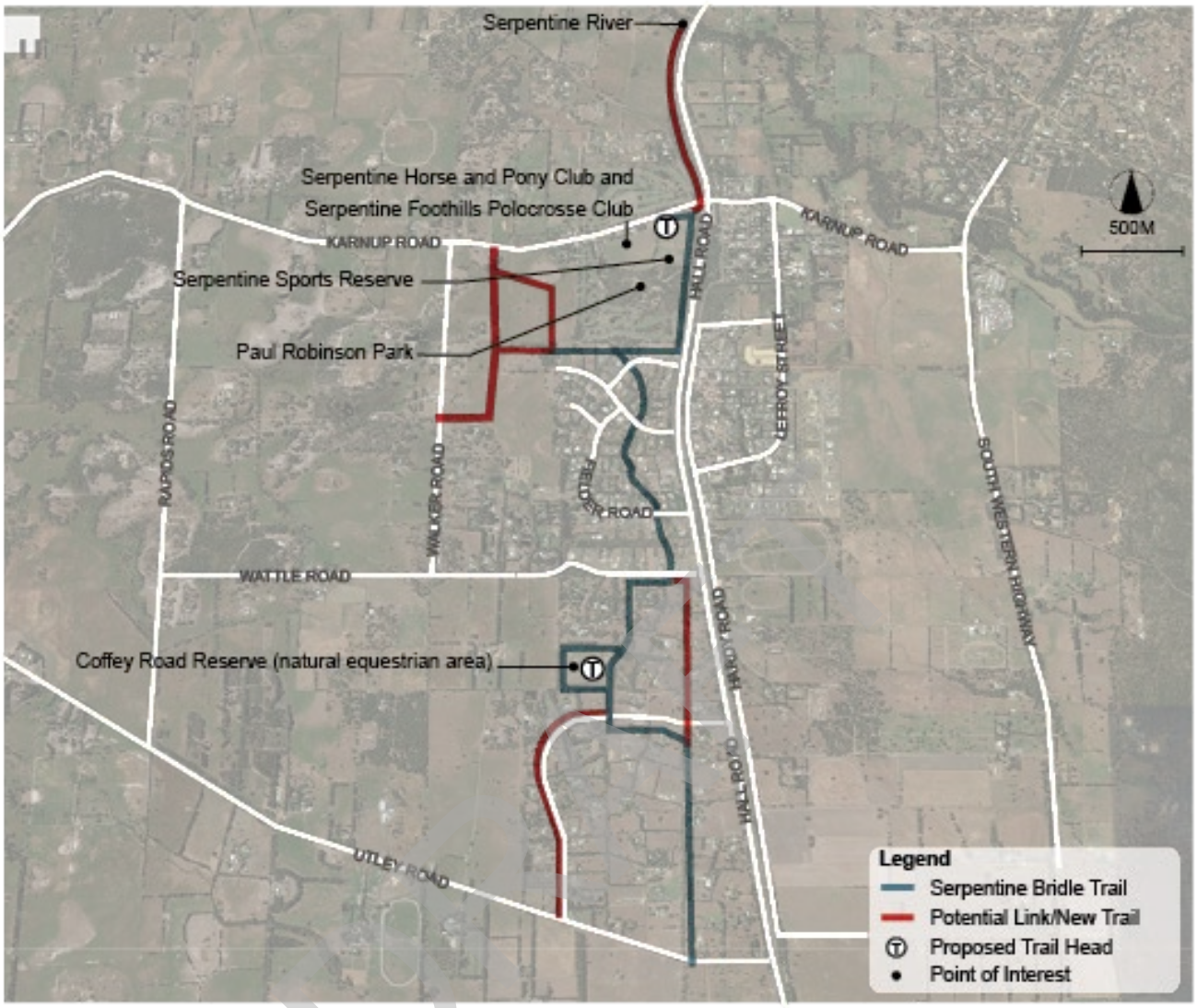
Serpentine Sports Reserve Trailhead



Coffey Road (Tallagandra) Reserve Trailhead



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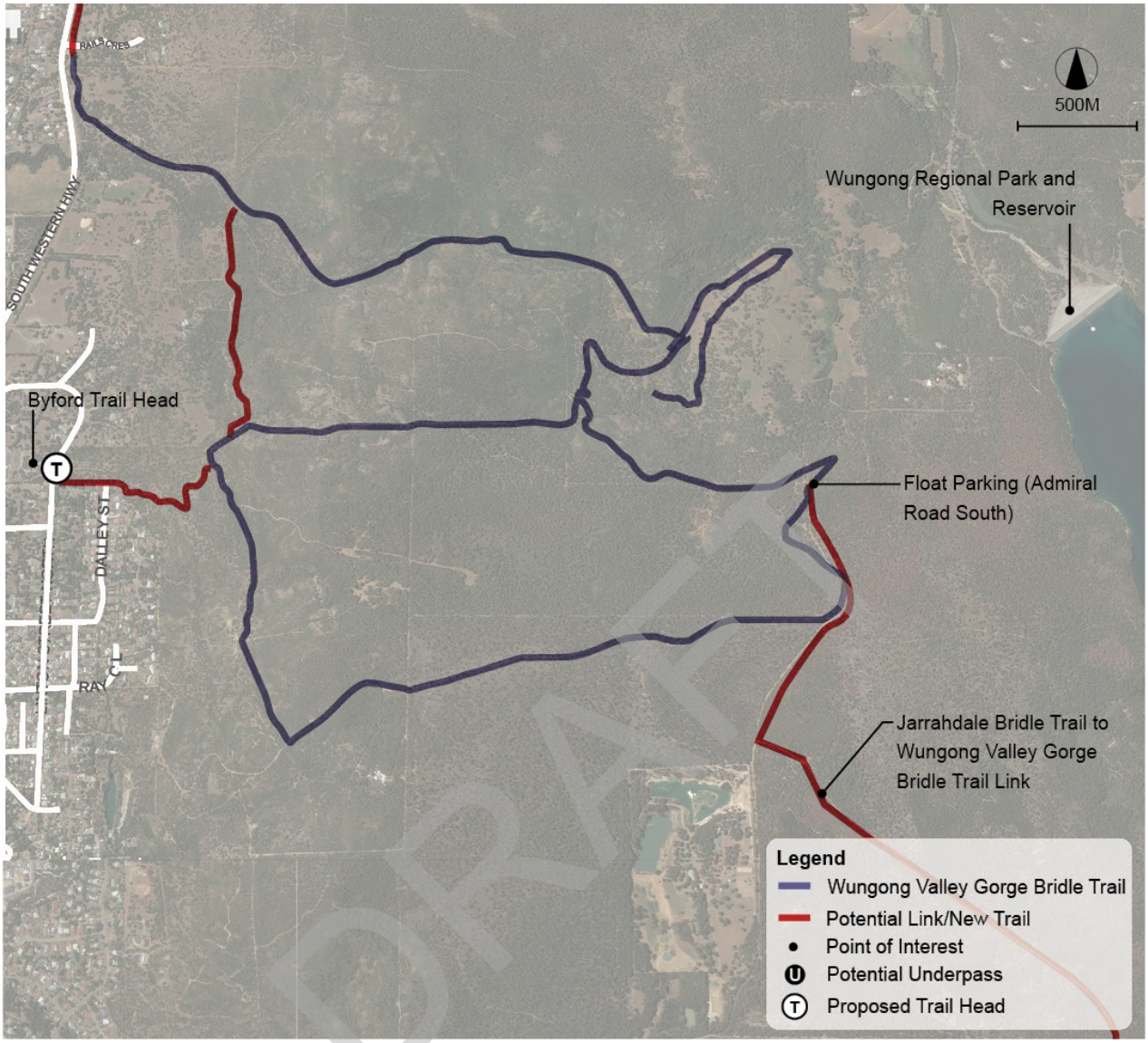
Byford Trail Head



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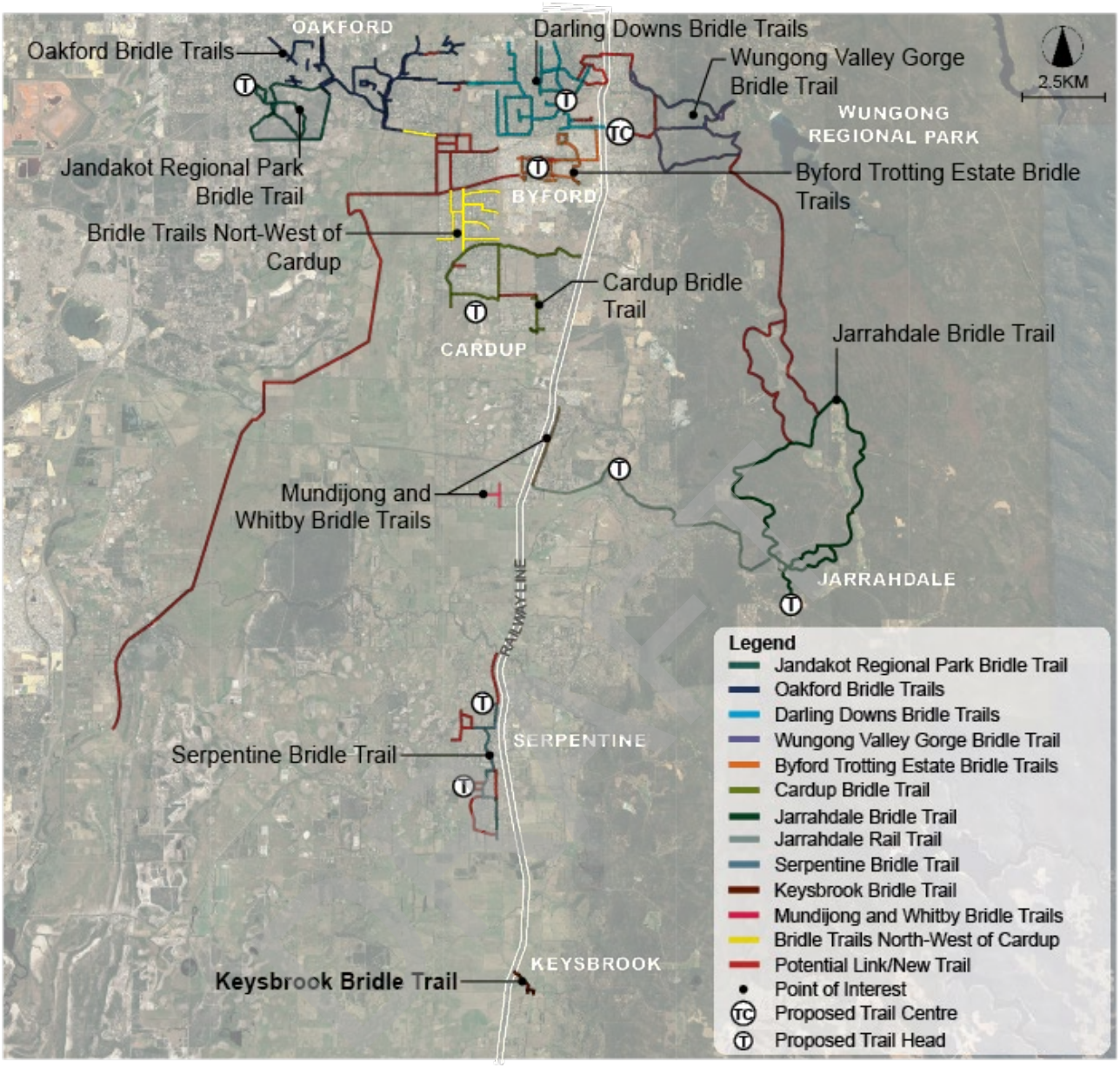
Appendices

Overall Trailhead Map



Appendix 2 – Subdivision Plans

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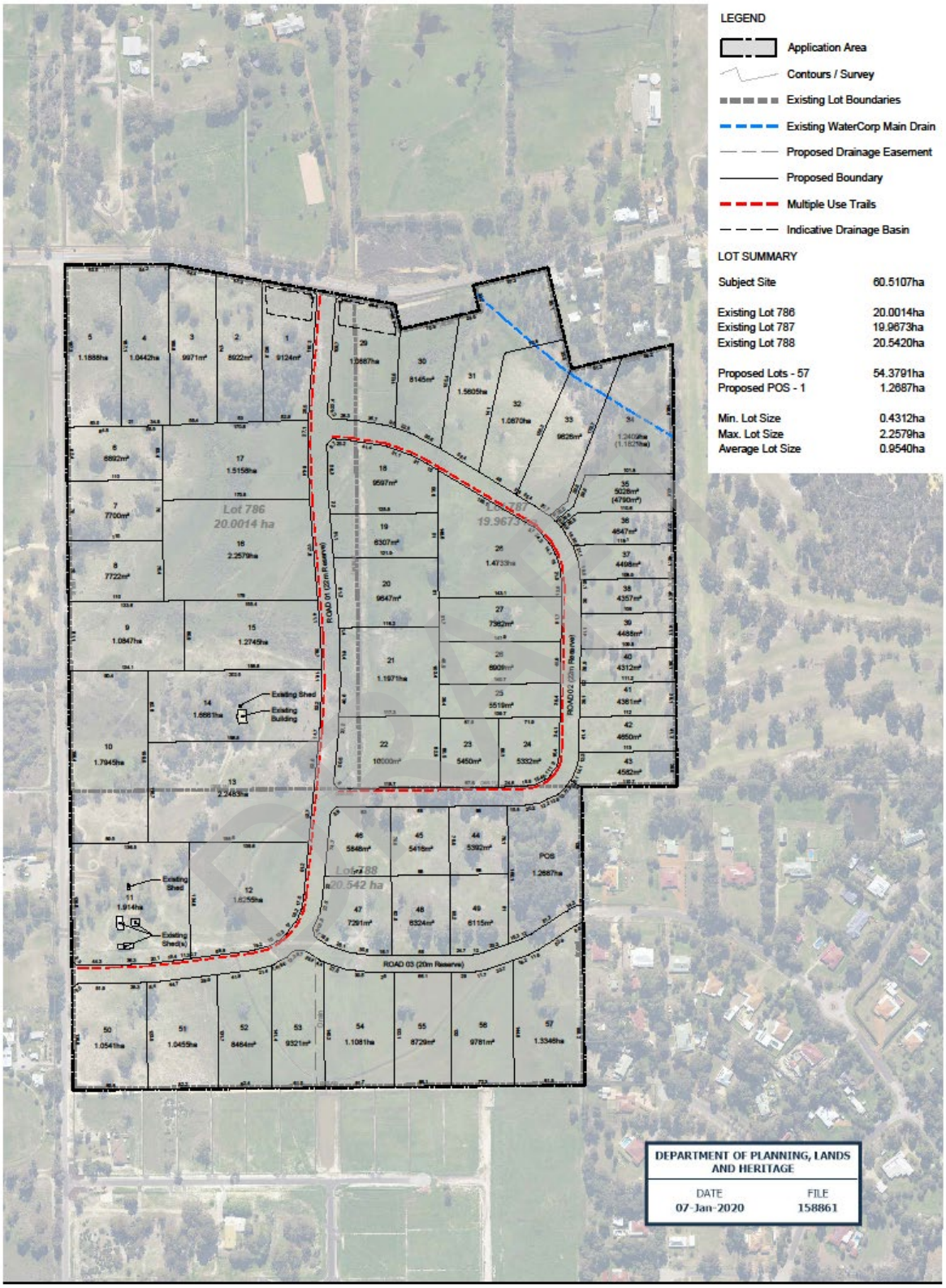
Appendices

Serpentine Subdivision Plan



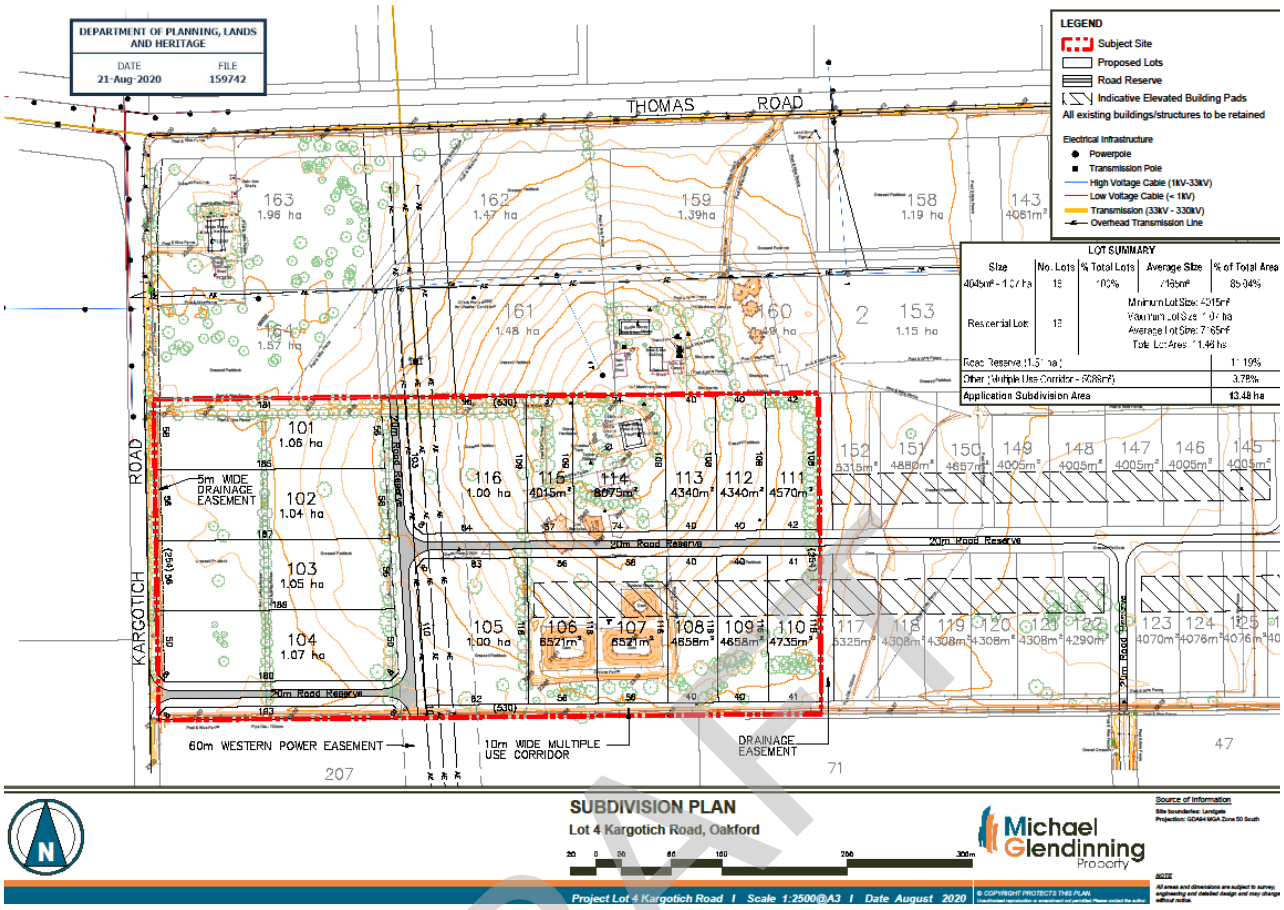
Subdivision Plan

Lots 786-788 Walker Road, Serpentine

element.

Appendices

Kargotich Road Subdivision Plan



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