



**WHITEHORSE
CITY COUNCIL**

DRAFT V2

Whitehorse Open Space Strategy 2024

Technical Report

Prepared by

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Acknowledgement of Country

Whitehorse City Council acknowledges the Wurundjeri Woi-wurrung people of the Kulin Nation as the Traditional Owners of the land. We pay respect to their Elders past, present and emerging

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ATTACHMENTS - A3 SIZE DRAWINGS

Dwg WOSS-01

Existing open space, Whitehorse Open Space Strategy 2024

Dwg WOSS-02

Open space hierarchy, Whitehorse Open Space Strategy 2024

Dwg WOSS-03

Ped Shed Analysis, Whitehorse Open Space Strategy 2024

A

APPENDIX A

Report on the outcomes from the Community Survey

Prepared by City of Whitehorse

1. Introduction

1.1 Project scope and purpose

1.1.1 Project scope

The City of Whitehorse has prepared a 2024 Open Space Strategy for its municipality. This will replace the 2007 Open Space Strategy currently used by the Council.

The project brief for the 2024 Strategy includes the following project Mission Statement:

'The Whitehorse Open Space Strategy will be a comprehensive, innovative and forward thinking while pragmatic policy document that provides guidance on how to protect, optimise and grow the municipality's open space and public realm network to support a healthy and prosperous community in the face of social, environmental and economic challenges in the next 15 years. It will be reflective of national and metropolitan wide aspirations to help achieves the objectives set out in the Whitehorse Community Vision 2040.'

The project brief identifies the need for the Strategy to have an implementation plan to guide planning, acquiring, designing and managing the open space network.

The 2024 Strategy provides strategic direction for the future planning, provision, design and management of open space in the City of Whitehorse over a 15 year planning period. It includes analysis of the open space needs of the existing community and planning ahead to address the open space needs of the forecast community.

The 2024 Strategy comprises two documents:

- **Technical Report** which provides the research, detailed analysis, conclusions and recommendations including the Action Plan for the 16 precincts and the funding and monitoring framework.
- **Summary Report** which provides a summary of the key issues and recommendations from the Strategy and is the main document that the community and Council outside of the open space planning area will refer to.

This Technical Report refers to the 'Strategy' to indicate the 2024 Strategy and specifically the full Strategy as contained in this document. The term '2024 Strategy' is used where it is needed to distinguish this Strategy from the current 2007 Strategy.

1.1.2 Method used in preparing this Strategy

The Victorian Government published Open Space Strategies Planning Practice Note 70 in 2015 to guide Councils when preparing an open space strategy. The document covers the topics of documenting the existing open space assets; data collection and consultation at the early stages of the process; confirming an agreed open space

classification; determining future open space needs; and recommendations to address the needs. The methodology used to prepare the Strategy as well as its content and recommendations are consistent with the guidance in the practice note.

1.1.3 Summary of key issues for the Strategy

The following is a brief summary list of the key issues arising from the research and analysis in preparing this 2024 Strategy compared with the 2007 Strategy:

- **Increased urban densities** and significant population growth that exceeded the forecasts for the 2007 Strategy
- **Forecast population growth** through to 2036 with increased levels of need for open space due to higher density development with a corresponding reduction in private open space and increased use of open space reserves by the new population
- **Changing community values** and expectations for open space, which may have been influenced by the COVID 19 pandemic with increased levels of use and community expectations to socialise, exercise, enjoy nature and relax and unwind outdoors in the open space within walking distance of their home and workplace
- **Urban heat island effect**, particularly in the context of climate change and increased urban densities including canopy vegetation loss in parts of the City of Whitehorse
- **Lack of diversity of existing facilities and infrastructure** which limits the appeal and accessibility of the open space network to everyone in the City of Whitehorse
- **Increase of conflicts between users of open space**, particularly between those exercising dogs and others who prefer to not have dogs in open space; and between club-based structured sporting use and informal active recreation
- **Increased demand for a greater diversity of facilities** in open space leading to increased costs associated with installation and ongoing maintenance and replacement of assets
- **Climate change** including the impacts of severe weather events on the sustainability and quality of the open space network
- **Difficulty in acquiring new land area as public open space that meets the criteria for new open space**, particularly land that is unencumbered and is both visually and physically accessible to everyone
- **The current schedule of public open space contribution rates** will not provide sufficient funds for the future population whose open space needs are to be met through this Strategy, including the purchase of land and capital works expenditure.

1.2 Definition of public open space

1.2.1 2007 Strategy

The following definition is included in the 2007 Strategy.

The primary focus of this Open Space Strategy is on the publicly owned land that currently or in the future has potential to be set aside primarily for recreation and/or nature conservation purposes. There are a range of categories for this land including:

- *public land owned and managed by Council;*
- *public land owned by other government agencies and managed by Council;*
- *public land owned and managed by other State government agencies which is currently zoned open space; and*
- *public land owned and managed by Melbourne Water which is reserved for water supply, drainage and flood management purposes and is therefore unlikely to be sold for other purposes.*

Since preparing this Strategy other aspects of the definition have become important to clarify, particularly as land values increase and the pressure to use other types of land as open space are more contested. It is also important to be mindful of the legal framework behind the funding mechanism for the provision of new open space and upgrades to existing open space on behalf of new populations.

1.2.2 2024 Strategy

Public open space

The definition for public open space in this Strategy is:

Public open space is all the publicly owned land that is set aside primarily for outdoor recreation, passive outdoor enjoyment and nature conservation and generally zoned for this purpose. It includes reserves, parks, gardens, waterways and civic squares/plazas that are outdoors and open to the sky. Access may be restricted at certain times or at all times on a fee-paying basis.

Public open space includes:

- Public land owned and managed by Council.
- Crown Land managed by Council.
- Crown Land managed by other government agencies and their delegates as public open space.
- Public land owned and managed by Melbourne Water which is reserved for water supply, drainage and flood management purposes and has some recreational access and/or nature conservation value.

Public open space has a dedicated funding mechanism being open space contributions that are collected from development on behalf of the forecast community for the purposes of public open space as defined by the *Subdivision Act 1988*:

'public open space means land set aside in a plan or land in a plan zoned or reserved under the planning scheme -

- (a) for public recreation or public resort; or*
- (b) as parklands; or*
- (c) for similar purposes'*

Part of the scope of the Strategy is to form the strategic basis for calculating a new open space contribution rate. The Strategy identifies improvements and actions required to upgrade public open space to better meet the open space needs of the existing population. It also plans ahead for improvements to public open space to meet the needs of the forecast population. This is the reason the Strategy is focussed on actions for the public open space network rather than the broader public realm.

Public realm

As urban densities increase across metropolitan Melbourne there has been a greater focus on the value of public open space and the broader public realm. For clarity in this Strategy, we propose to use the term 'public realm' rather than 'public space' to easily differentiate between public realm and open space.

The public realm comprises:

- Public open space, referred to throughout this Strategy as 'open space'
- Ancillary open space
- Publicly accessible private open space.

A simple test for distinguishing public open space from other parts of the public realm is whether the land is primarily for recreation or nature conservation purposes and is suitable to be zoned Public Park and Recreation Zone (PPRZ) or the Public Conservation and Resource Zone (PCRZ).

It is important that this Open Space Strategy focuses on the adequate provision of open space for future generations. The Strategy will acknowledge and reference other parts of the public realm as they are complementary and critical to access and connectivity.

Ancillary open space

This Strategy will use the term ancillary open space to describe other publicly owned parts of the public realm. This includes:

- streetscapes
- schools and educational facility grounds
- transport corridors
- community facility grounds.

Streetscapes

Streets are used by people to socialise and exercise including walking and cycling, and while these are common to activities that are also undertaken in open space, the streets are primarily set aside for the transport function and purpose, as distinct from recreational purposes as is the case for public open space.

Streets contribute to the use and value of the open space network, particularly for exercise and access to open space. Streetscapes will be recognised as providing this complementary role in the Strategy however, their role, function, classification and use is determined by other principles and factors.

Schools and education facilities

The Strategy recognises the contribution that schools can make including when opportunities arise for schools to partner with Council. While this can assist with meeting the open space and recreational needs of the community, school land is not owned by Council and can be sold for other purposes or converted through building construction. The lack of certainty over this land being available to supplement the open space system in the longer term is the reason the use of school grounds is acknowledged, however it does not replace the need for public open space. Also, in relation to community safety, schools are increasingly securing their grounds in order to improve safety for school students, making them less accessible to the public after hours.

Transport corridors

The major transport corridors include railway and road reserves which are owned and managed by the Victorian Government. While off-road shared trails may be included along these corridors and are beneficial, they are not the primary reason the transport corridor is provided and they are impacted by existing and future transport infrastructure. The current Victoria's Big Build Projects involving major rail and road upgrade projects on Victorian Government's land including the recent Level Crossing Removal Project and the North East Link/Eastern Freeway Upgrade project demonstrates that the transport function over-rides the other ancillary regional ecological and recreational values and benefits that these corridors provide. This 2024 Strategy continues to support Council advocating for excellent outcomes for shared user path access along the major transport corridors in recognition of their importance to the regional connectivity between municipalities and commuter cycle/active transport connections.

Community facility grounds

The community facilities referred to as ancillary open space are stand-alone community centres, neighbourhood houses, libraries and government owned carpark. As with schools, while the land around them and the roof top may be developed to provide open space benefits and publicly accessible, it can change over time with expansion of the facility and built form to meet the needs of its primary purpose, which is not public open space. In some cases, community facilities are built and located in public open space, and if these facilities are fenced with their access restricted, they are referred to as restricted open space.

The future provision, design and funding for ancillary open space is guided by a range of other plans and strategies prepared by Council and Victorian Government agencies and will not form part of the open space capital works program in the Strategy.

Publicly accessible private open space

These spaces are the privately owned public spaces around buildings including forecourts, roof top gardens and are incidentally available for the public to use. Given they remain in private ownership, access to them can be restricted or changed, and therefore they do not replace the need for open space but can complement the open space or public realm. They can include forecourts, roof top gardens and the spaces around commercial, retail, residential and religious buildings.

Other privately owned land that contributes to the open space network include private golf courses, which are available to members on a fee-paying basis only. These areas contribute to the natural and unbuilt quality of the landscape, have some benefits in mitigation of the urban heat island effect associated with climate change, and can contribute to the environmental values and landscape character of an area. Being privately owned there is the potential the land could be converted to a different land use. In the City of Whitehorse, this includes the Box Hill Private Golf Club

1.3 Vision and principles

1.3.1 Background

Below is the existing Vision from the 2007 Strategy. It was developed based on the consultation and research undertaken during the development of the 2007 Strategy:

'Continue to provide a diverse linked network of open space with people of all ages recreating, socialising and enjoying the outdoor space, and bushland reserves brimming with indigenous flora and fauna.'

Given there has been a recent process undertaken by Council to develop the Whitehorse Community Vision as part of the Council Plan 2021 - 2025 and the Whitehorse Health and Wellbeing Strategy 2021 - 2025, this has been adopted as the Vision for this 2024 Strategy with Principles that are applicable to open space within the context of delivering the Whitehorse Community Vision.

The Whitehorse Community Vision is as follows:

Whitehorse Community Vision 2040

Whitehorse is a resilient community where everyone belongs.

We are active citizens who value our natural environment, history and diversity.

We embrace sustainability and innovation.

We are dynamic. We learn, grow and thrive

A robust, quality open space will contribute to the priorities identified in the Health and Wellbeing Plan 2021–2025. These priorities are extracted and included below, and are the same as the priorities in the Council Plan, however the illustrated version from the Health and Wellbeing Plan provides a quick summary reference, and has therefore been included:



Mental wellbeing



Physical activity



Social and neighbourhood connection



Social inclusion, including digital inclusion



Climate change mitigation

Source: Extract from the Whitehorse Health and Wellbeing Plan 2021–2025

1.3.2 Strategy Principles and objectives

The following principles are based on the 2007 Strategy and have been updated to address contemporary issues including COVID-19, climate change and urban heat island effect, the importance of green open space to community health and wellbeing, and increased urban densities and population growth.

These principles are of equal priority and are listed in alphabetical order.

Principle	Objective
Accessible	To provide an open space network that is easily physically and visually accessible, free and welcoming to everyone in the Whitehorse community, including people of all ages and abilities.
Adaptable	To design and manage open space to accommodate climate change and changing community needs including in the context of the COVID-19 pandemic.
Cultural	To recognise, protect and support the Wurundjeri Woi-wurrung people of the Kulin Nation as the Traditional Owners of the land and their culture, history and connection to place, along with historical and contemporary values of open space to the Whitehorse community.
Connected	To improve links between open space to enhance recreational and habitat values.
Diverse	To provide a wide variety of open space types, sizes and character to reflect the natural, social, urban, cultural and religious diversity of the City of Whitehorse and meet the diverse range of structured and unstructured recreational needs in open space.
Ecological	To protect and enhance the biodiversity values in the open space network including the ecologically viable remnants and urban bushlands.
Social	To create spaces that are welcoming and inclusive for communities to meet and spend time outdoors to contribute to their health and wellbeing.
Sustainable	To design and manage open space to support ecological diversity; meet community health and wellbeing needs; sustainable water use; contribute to urban greening; mitigate urban heat island effect; support large canopy trees; promote sustainable transport options; and contribute to the liveability of the City of Whitehorse.

1.4 Importance of open space

1.4.1 Overview

Since the preparation of the 2007 Strategy, there has been extensive additional local and international research into the positive influence of open space on community health and wellbeing, and liveability. Research has identified there are measurable improvements to both people's physical and mental health if they live near green open space. Green open space also assists with urban cooling, making our urban communities more sustainable and liveable, and protects the natural biodiversity values that are particularly important in the City of Whitehorse where many open spaces include native bushland that provides habitat for native plants and animals. More recently during COVID 19, open space played an essential role in providing safe outdoor spaces for people to exercise and socialise particularly where they were close to home and easily accessible during the lockdown restrictions. While the lockdowns have passed, COVID 19 demonstrated how important it is for urban communities to have access to open space close to where they live.

Locally, the importance of open space is recognised in the Whitehorse Community Vision where the community has identified that the natural environment is a core part of the vision. This is reinforced in the community survey outcomes undertaken for this Strategy. The top five values for open space based on 2,250 surveys are:

1. A place to relax and unwind
2. Trees
3. Connecting with nature
4. Walking and cycling
5. Just being outside.

When asked about the types of features and facilities the community value in open space, the top six that over 50 per cent of respondents nominated are:

- Walking paths
- Trees
- Additional greening for environmental, health and wellbeing benefits
- Seats
- Toilets
- Picnic tables and seats.

This highlights the importance of natural features and greening for the community in open space, along with inclusion of informal facilities that encourage people to spend time and socialise in open space.

1.4.2 Physical and mental health and wellbeing

We have reviewed a range of broader research into this subject, with some key recent documents including:

- Urban Green Spaces and Health, A review of evidence, by the World Health Organization (WHO) in 2016
- Healthy Parks Healthy People: the state of evidence, by Townsend, Mardie et al from Deakin University for Parks Victoria in 2015
- Beyond Blue to Green : The benefits of contact with nature for mental health and well-being, by Mardie Townsend and Rona Weerasuriya in 2010
- The Victorian Parliamentary Legislative Council Inquiry into Environmental Design and Public Health in 2012
- The Victorian Parliamentary Legislative Assembly Environment and Planning Committee Inquiry into environmental infrastructure for growing populations in 2022.
- The Victorian Public Health and Wellbeing Plan 2023 - 2027

The purpose of the *Inquiry into Environmental Design and Public Health* was to inform the Victorian Government's preparation of Plan Melbourne. The Inquiry found there is compelling evidence linking the rise in the rates of serious chronic diseases with the key risk factors of physical inactivity, and the planning and design of urban environments. The evidence links improvement in the provision, design and accessibility of open space with increased participation in physical activity. Green open spaces provide opportunities for physical activity, which also benefits mental health, and can lead to multiple positive physical, mental and social health benefits for people living close to green open space. In the *Healthy Parks Healthy People: the state of the evidence (2015)*, the contribution of open space to community health and wellbeing has been strengthened by more research. Overall the report concludes that the evidence in relation to the health benefits of parks and natural spaces is comprehensive. The evidence is very strong in relation to the importance of parks for physical health in all ages including for young children, adolescents and adults. The Victorian Government has recently published the *Victorian Public Health and Wellbeing Plan 2023-2027*. This Plan includes healthy design principles within land use planning for new greenfield and urban renewal areas. This includes integrating active transport modes such as walking and cycling into the urban layout and supports the provision of public open space.

A number of psychological conditions are attributed to living and working in urban environments. The research in *Healthy Parks Healthy People: the state of the evidence (2015)*, notes that green open space is recognised to have restorative effects and allows people to better cope with life and stress. Living near open space (within 300 metres as distinct from more than 1 kilometre) provides a greater chance for reducing stress. For children, outdoor play promotes their physical and cognitive development, and research indicates children should have at least 60 minutes of physical activity a day to provide them with important physical, mental and social health benefits. Despite this, recent evidence suggests that children are spending significantly less time outdoors because of the increasing preoccupation with the use of technology and associated sedentary behaviours. Living near attractive and accessible green open space increases the likelihood that children will visit open space and play outdoors.

The WHO Report, *Urban Green Spaces and Health A Review of Evidence (2016)*, concludes that there is evidence to support the premise that green open space contributes to people's mental health and wellbeing if they live within 300 metres of open space, the open space is at least 0.5 hectares in size, and if 0.5 hectares is not available they live closer than 300 metres closer to smaller areas of open space. The report's final summary conclusion is:

'A city of well-connected, attractive green spaces that offer safe opportunities for urban residents for active mobility and sports as well as for stress recovery, recreation and social contact is likely to be more resilient to extreme environmental events, such as heat waves and extreme rainfall. Such a city is also likely to have healthier citizens, reducing demands on health services and contributing to a stronger economy.'

Studies, including those listed at the start of this Section, have also shown that people who live and work with access to green open space and trees have reduced levels of anxiety and stress. This correspondingly leads to lower incidents of chronic disease including heart disease and sleeping disorders (WHO, 2016 and Townsend et al, 2010). Research shows that people are able to relax more easily if they are in a natural green open space when compared to the absence of greening (Townsend, M et al, 2010). Public open space that is appealing to use encourages people outdoors, particularly during winter when the days are shorter and cooler, and people tend to spend more time indoors.

Based on the wide range of published research and the consultation undertaken for a range of open space strategies, public open space contributes to community health and wellbeing, the natural and the urban character of the municipality. The community health and wellbeing benefits include:

- A place to relax and unwind
- Physical fitness and exercise
- Access to natural sunlight and fresh air, particularly during the winter to retain adequate levels of Vitamin D
- Social connection for the local community, friends and family which benefits everyone, and particularly those living in lone households or dwellings without any private open space
- Protection of biodiversity values including native flora and fauna
- Children's play including their physical, social and cognitive development
- Restorative influence of being in a natural space as a contrast to built form
- Mitigation of urban heat island effect, particularly in high density precincts where heat exhaustion can be particularly serious for the vulnerable including the frail and the elderly.

With the increased evidence supporting the link between green open space and measurable health benefits to the community, there has also been work undertaken into measuring the economic benefits of continuing to invest in improving the open space network. The main reason for measuring the economic benefit is to change the perception that investment in grey infrastructure (pits, pipes, roads) is prioritised over green infrastructure and assist to highlight the need to improve open space. The available literature regarding this also highlights the risks associated with placing too

much emphasis on health benefits, as it could result in trading off environmental benefits versus human benefits for open space improvements.

The open space survey results undertaken for this Strategy support this broader research that people highly value the green and natural features in open space, along with a place to relax and unwind as well as physical fitness. They emphasise the importance many people place on the native character and natural bushland qualities of the City of Whitehorse, and the ongoing protection and improvement to these values.

1.4.3 Nature conservation and urban greening

Open space is important for the protection of biodiversity and our natural systems and landforms. While much of the City of Whitehorse has been highly modified during urbanisation, remnants of the original landform, waterways and vegetation remain in the open space network primarily along the waterway corridors and also in Wattle Park. Open space makes an important contribution to the natural and urban landscape character of the City of Whitehorse including to:

- Protect and improve biodiversity values, particularly along the waterway corridors. This includes protection of areas of remnant indigenous vegetation and original landform that is likely to be of significance to the Wurundjeri Woi-wurrung people of the Kulin Nation as the Traditional Owners of the land
- Distinctive neighbourhood character changes across the municipality and a unique sense of place that people identify with
- Cultural values in both a contemporary and historical context
- Provides a break in the built form and character with the opportunity for urban greening with natural features that contrast to built form, particularly in some of the higher density neighbourhoods
- Space for large broad spreading canopy trees that contribute to mitigating urban heat island effect.

1.4.4 Importance of winter sunlight access in open space

While evidence suggests that living near open space makes an important contribution to people's health and wellbeing, it also needs to be attractive and accessible to encourage people outdoors to use it. This is particularly important for the older people, people with a disability or mobility issues and younger people. As noted earlier, children are spending much more time indoors with technology and need encouragement to be outdoors in open space to support their physical, social and cognitive development. Open space that is attractive, appealing and inviting to use all year round is key to encouraging our community to visit it.

Sunlight brightens the colours and contrast in open space that makes it more attractive and appealing to use. The sunlight moving through the open space at different times of the day can change the mood, function and character of the space which encourages people to visit it at different times of the day. During winter in Melbourne, being outdoors in open space can be cold and it is tempting to stay indoors given this. Direct sunlight during winter warms the microclimate of the open space, making it more comfortable to

visit and stay outdoors for longer. Spending more time in open space during the winter means that people benefit from the sun exposure including receiving adequate levels to sunlight for improving absorption of Vitamin D along with other benefits provided by visiting open space, including being outdoors in the fresh air, fitness and taking a break from work which can lower people's stress levels during the day and improve their mood and overall mental health.

1.4.5 Use of open space during the COVID-19 pandemic

The need for green public open space increased during the recent COVID-19 pandemic. Recent research which was undertaken and reported on in the Victorian Government's *Parliamentary Inquiry into Environmental Infrastructure for Growing Populations 2022*, has confirmed that people used open space more during the pandemic. A key important outcome of that research that is relevant for this 2024 Strategy was the need for people to be able to easily access public open space close to home, including having a range of different sized open space within walking distance due to the travel restrictions that were imposed on the community.

Some of the factors contributing to increased levels of use open space during the lockdowns in Victoria and Greater Melbourne include:

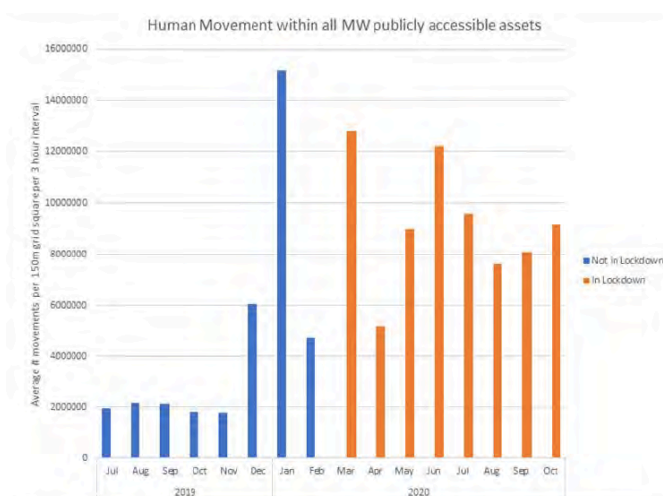
- Temporary closure of indoor recreation, leisure and entertainment facilities
- Temporary closure of non-essential retail
- Temporary closure of non-essential workplaces
- Closure of international, interstate and at times intrastate borders meaning people could not travel
- Stay at home orders meaning one of the only reasons you could leave home was to exercise. With all recreation facilities closed, the public realm and public open space were the only places people could exercise
- Working from home and remote school learning
- 5 kilometre travel limit imposed during some of the lockdowns.

The lockdowns caused major disruption to many people's normal routines due to the changes noted above. One of only five reasons to leave home was to exercise outdoors in open space and therefore the levels of this type of use increased noticeably during the lockdowns. Significant increases in the numbers of people using open space were observed, however what is unknown is how many of these changes and disruptions to the normal routine will result in lasting ongoing changes to the way people exercise, recreate and socialise in open space. The survey work, media reports and observations during the lockdowns in 2020 and 2021 indicate that people visited public open space more during the COVID-19 pandemic both before and during the lockdowns. The open space survey results from the community engagement undertaken for this 2024 Strategy has supported the high level of importance the community place on access to open space following the lockdowns of 2020 and 2021.

While overall the reports and articles suggest an increased level of use, there are also reports of decreased levels of use where parks or facilities in the parks were closed. Figure 1-1 shows a selection of research in relation to visitation levels to open space

during the COVID-19 pandemic, particularly during the four month lockdown in 2020 compared to pre-pandemic levels.

Figure 1-1 represents Melbourne Water sites in Melbourne, the blue columns represent the 2019 use levels, which between July and November hover around the 2,000,000 movements per month. Use levels substantially increase through the summer months of December to February in the pre pandemic year of 2019 most likely due to the summer holidays over the December to January period. The orange coloured columns illustrate the human movement during the COVID-19 pandemic year of 2020. The comparable months of July to October in both years illustrate movement levels above 6,000,000 in most months and up to 12,000,000 in July 2020. This is between 3 and 6 times higher in the COVID-19 pandemic year of 2020 compared to pre-pandemic levels in 2019.



Graph One: human movements on Melbourne Water publically accessible sites during Covid-19 lockdown

Figure 1-1 Extract from Melbourne Water's presentation to the Parliamentary Inquiry into Environmental Infrastructure for Growing Populations

Parks Victoria's submission to the Inquiry into Environmental Infrastructure for Growing Populations (February 2022), recorded increased levels of visitation in parks they are responsible for managing as shown in Figure 1-2 below.

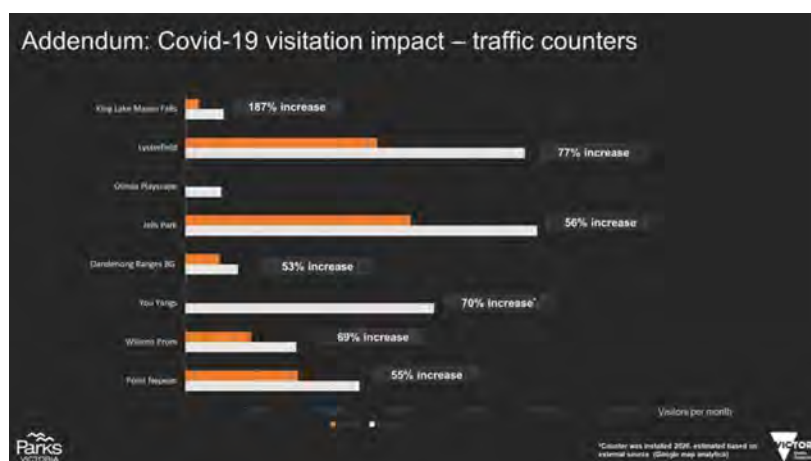


Figure 1-2 Extract from Parks Victoria's Submission to the Parliamentary Inquiry into Environmental Infrastructure for Growing Populations, September 2020

While most of the parks listed in Figure 1-2 are regional parks on the outskirts of the greater Melbourne area, there was a 56 per cent increase in visitation levels to Jells Park, which is located in Wheelers Hill. Parks Victoria also noted that some parks received visitation levels beyond the capacity of the facilities provided at them, which resulted in the need for Parks Victoria to close them. This included the penguin viewing boardwalk at St Kilda Pier, the 1,000 Steps at Ferntree Gully and the Redwood Forest at Warburton.

Parks Victoria in their submission to the Inquiry quote the National Recreation and Park Association from the USA stating that *'eighty three per cent of U.S. adults agree that visiting their local parks, trails and open spaces have been essential for their mental and physical well-being during the COVID-19 pandemic'*.

The COVID-19 pandemic highlighted key issues that will assist with future open space planning and increasing rather than decreasing its provision. They include:

- Importance of having adequate areas of open space within an easy walk for everyone, which preferably means a diversity of different sized spaces with a range of different facilities and characters
- The need to have an adequate supply and not just the bare minimum in order to accommodate unexpected incidents and events such as the pandemic and the impacts of climate change. This means that when, for example a new Small Local open space is provided, that it meets the criteria for new open space and its size is not the minimum, but at least the mid-point in its size range
- Retaining flexibility to accommodate unexpected events such as the COVID-19 pandemic, for example the temporary adaptability of open space like the opening up of golf courses to informal community use during these times. This was a popular initiative and is a reason to reconsider the current trend in planning to repurpose land to higher density uses in our established areas, being balanced with the back-up of some areas with lower intensity of use such as golf courses interspersed in the urban areas.
- The importance of informal open grassed areas in open space to retain flexibility and adaptability to different types of use - for example the open grassed areas were the most useable, given that constructed facilities were closed and unable to be used.

2. Policy context

2.1 Strategic context

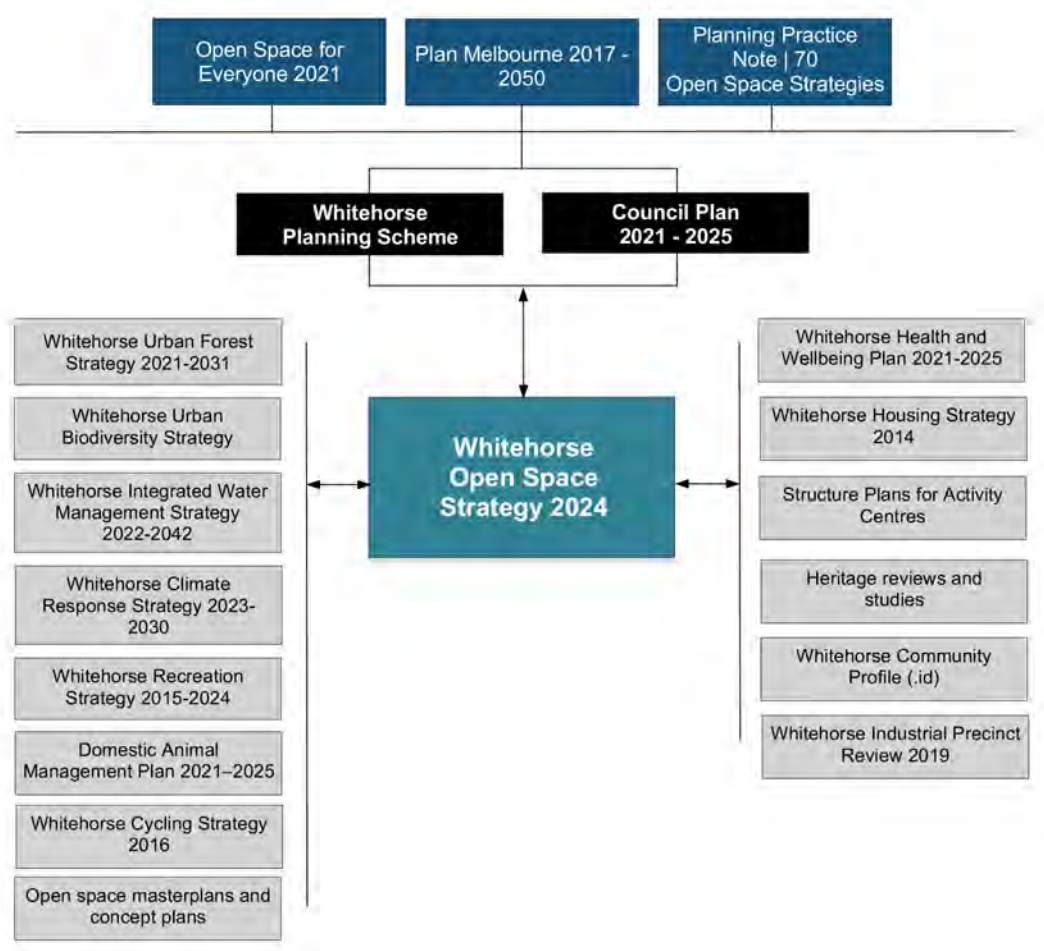


Figure 2-1 Relationship of Victorian Government and Council Strategies to the Whitehorse Open Space Strategy

2.2 Policy framework for the provision of open space

2.2.1 Overview and context

The use of standards in the provision of open space has a long history dating back to the 1800s. In Britain, the Fields in Trust (formerly the National Playing Fields Association) standard of 2.43 hectares of open space per 1000 population or 24 square metres (sqm) of open space per person was developed in the 1920s. In the USA, the National Recreation and Parks Association (formerly the National Recreation Association) standard of 4 hectares of open space per 1000 population or 40 sqm of open space per person dated from the early 1900s. The standard of 2.83 hectares per 1000 population or 28 sqm of open space per person was widely used in New South Wales and Australia.

In more recent times there has been a move towards a needs-based approach to open space planning rather than a single quantitative standard. This is the preferred approach and the one used in this Strategy. It requires a more nuanced approach, which includes assessment of the open space network from different perspectives including:

- Quantity of open space as a percentage of the total land area
- Quantity of open space relative to population density
- Accessibility to open space referred to as the travel catchments
- The diversity of the size and type of open space in the network.

2.2.2 Plan Melbourne 2017 – 2050

Plan Melbourne has brief overall policy directions for open space, which have some relevance to public open space in established areas including:

- Create more great public places across Melbourne (Direction 4.1)
- Create a city of 20-minute neighbourhoods (Direction 5.1)
- Create neighbourhoods that support safe communities and healthy lifestyles (Direction 5.2)
- Deliver social infrastructure to support strong communities (Direction 5.3)
- Deliver local parks and green neighbourhoods in collaboration with communities (Direction 5.4)
- Make Melbourne cooler and greener (Direction 6.4)
- Protect and restore natural habitats (Direction 6.5).

2.2.3 Open Space for Everyone | Open space strategy for Metropolitan Melbourne 2021

Open Space for Everyone is the open space strategy for Metropolitan Melbourne. The strategy was prepared in line with Plan Melbourne Policy 6.4.2 Strengthen the integrated metropolitan open space network (under Outcome 6 – Melbourne is a sustainable and resilient city). The recommendations includes preparation of a metropolitan open space

strategy that enhances recreation, amenity, health and wellbeing, species diversity, sustainable water management and urban cooling. The strategy also helps achieve other key outcomes in Plan Melbourne and is the successor to Parks Victoria's 2002 *Linking People and Spaces*.

Key goals relevant to the open space planning framework in the City of Whitehorse include:

- Improved community health and wellbeing including access to a diversity of high-quality, safe and connected spaces.
- Healthier biodiversity including protecting diverse ecosystems and high quality connected open spaces along waterway corridors.
- Enhance climate change resilience including planning for impacts of extreme weather events and become cooler, greener and more water sensitive.

Public open space in Open Space for Everyone means public land and waters that provide for outdoor recreation, leisure, environmental and cultural benefits, visual amenity and off-road active transport.

2.2.4 Whitehorse Planning Scheme

The Whitehorse Planning Scheme specifies open space provision in Clause 56.05. This is a state-wide provision included in all Victorian planning schemes.

Public open space Standards C13 (Clause 56.05 of planning schemes)

'The provision of public open space should:

- *Implement any relevant objective, policy, strategy or plan (including any growth area precinct structure plan) for open space set out in this scheme.*
- *Provide a network of well-distributed neighbourhood public open space that includes:*
 - *Local parks within 400 metres safe walking distance of at least 95 per cent of all dwellings. Where not designed to include active open space, local parks should be generally 1 hectare in area and suitably dimensioned and designed to provide for their intended use and to allow easy adaptation in response to changing community preferences.*
 - *Additional small local parks or public squares in activity centres and higher density residential areas.*
 - *Active open space of a least 8 hectares in area within 1 kilometre of 95 per cent of all dwellings that is:*
 - *Suitably dimensioned and designed to provide for the intended use, buffer areas around sporting fields and passive open space*
 - *Sufficient to incorporate two football/cricket ovals*
 - *Appropriate for the intended use in terms of quality and orientation*
 - *Located on flat land (which can be cost effectively graded)*
 - *Located with access to, or making provision for, a recycled or sustainable water supply*
 - *Adjoin schools and other community facilities where practical*
 - *Designed to achieve sharing of space between sports.*
 - *Linear parks and trails along waterways, vegetation corridors and road reserves within 1 kilometre of 95 per cent of all dwellings.*

Public open space should:

- *Be provided along foreshores, streams and permanent water bodies.*
- *Be linked to existing or proposed future public open spaces where appropriate.*
- *Be integrated with floodways and encumbered land that is accessible for public recreation.*
- *Be suitable for the intended use.*
- *Be of an area and dimensions to allow easy adaptation to different uses in response to changing community active and passive recreational preferences.*
- *Maximise passive surveillance.*
- *Be integrated with urban water management systems, waterways and other water bodies.*
- *Incorporate natural and cultural features where appropriate.'*

Table 2a *Summary of Clause 56.06, Standard C13 in the Whitehorse Planning Scheme.*

Open Space type	Size	Distance from home/work
Active open space	8 hectare minimum	Within 1 kilometre of 95 per cent of all dwellings
Local Parks	1 hectare	Within 400 metres of at least 95 per cent of all dwellings
Additional small local parks or public squares	Not specified	In activity centres and high density areas
Linear parks and trails along waterways, vegetation corridors and roads	Not specified	Within 1 kilometre of 95 per cent of all dwellings

2.2.5 International examples of open space frameworks

Open Space Strategies Best Practice Guidance

Prepared for the Mayor of London in 2009 by the Centre for Architecture and the Built Environment (CABE) Space, this document is subsequently also referred to in the 2015 City of London Open Space Strategy and the London Plan prepared March 2016. The CABE Space guidance for the provision of open space is shown in Table 2b.

Table 2b *London public open space hierarchy*

Open space type	Size	Distance from home/work
Regional parks	400 hectares	3.2 to 8 kilometres
Metropolitan parks	60 hectares	3.2 kilometres
District Parks	20 hectares	1.2 kilometres
Local parks and open spaces	2 hectares	400 metres
Small open spaces	Under 2 hectares	Less than 400 metres
Pocket parks	Under 0.4 hectares	Less than 400 metres
Linear open space	Variable	Wherever feasible

Urban green spaces and health – A review of evidence

In 2016, the World Health Organization (WHO) Europe published its review of the evidence of the importance of green space in supporting healthy living in urban areas. The report concluded that the evidence suggests that open space is effective for having positive effects on mental relaxation if it is at least 0.5 hectares in size and people live within 300 metres of it. There is also available evidence to support a need for small, local green spaces very close to where people live and spend their day, as well as large green spaces with sports fields and opportunities to experience contact with nature and relative solitude. The WHO guidance for open space provision is shown in Table 2c.

Table 2c *WHO aims for the provision of urban green space*

Open Space type	Size	Distance from home/work
For physical activity	1.0 hectare minimum	300 metres
For mental relaxation	0.5 hectare minimum	300 metres
Additional small local green open spaces	Not specified	Very close to home (no distance specified, but less than 300 metres)

3. The Whitehorse open space network

3.1 Overview

This Strategy acknowledges that:

'The Wurundjeri Woi-wurrung's relationship with the land extends back thousands of years where 'Bunjil', their creator spirit, formed their people, the land, and all living things. The Wurundjeri Woi-wurrung people take their name from the word 'wurun' meaning the Manna Gum (Eucalyptus viminalis) which is common along 'Birrarung' (Yarra River), and 'djeri', the grub which is found in or near the tree. "Country", when used by Aboriginal people including the Wurundjeri Woi-wurrung people, describes the lands, landscapes, waterways and seas. The term "Country" also contains complex ideas about law, place, custom, language, spiritual belief, cultural practice, material, sustenance, family and identity. Therefore, the Wurundjeri Woi-wurrung people have a special interest in preserving not just their cultural objects, but the natural landscapes of cultural importance. The acknowledgement of broader attributes of the landscape as being culturally valuable which requires protection (encompassing, among other things, a variety of landforms, ecological niches and habitats as well as continuing cultural practices and archaeological material) is essential to the identity and wellbeing of the Wurundjeri Woi-wurrung people.

*The arrival of Europeans brought significant and brutal changes to the lives of First Peoples. Their population was decimated and the natural balance of the country changed forever due to frontier wars, disease, introduced animal and plant species and the dispossession of land and culture.**

** Source, Whitehorse City Council Website - <https://www.whitehorse.vic.gov.au/about-council/facts-maps/aboriginal-heritage-whitehorse>*

The City of Whitehorse is located approximately 15 kilometres east of Melbourne and extends from the early twentieth century suburbs of Mont Albert, Surrey Hills and Box Hill to the mid twentieth century suburbs of Burwood, Blackburn and Nunawading and the late twentieth century established suburbs of Mitcham, Vermont and Vermont South. The open space character changes across the municipality from a more formal exotic landscape character in the west to a predominance of native and informal bushland character in the east. The numerous waterway corridors and their tributaries significantly contribute to the connectedness and character of the open space within the city and extending beyond into the adjoining municipalities. Key waterways include Mullum Mullum Creek and Koonung Creek in the north, KooyongKoot / Gardiners Creek in the southwest and Dandenong Creek in the southeast.

The City of Whitehorse has approximately 349 open space reserves covering a total area of approximately 609.95 hectares of land area, which equates to 9.5 per cent of the total land area of the municipality. If restricted open space is included, there are approximately

721.91 hectares of open space, which equates to 11.2 per cent of the total land area of the municipality.

The City of Whitehorse is well known for its large sporting reserves including East Burwood Reserve, Box Hill City Oval, Surrey Park and Elgar Park. This is complemented by the unique native bushland reserves of Blackburn Lake Sanctuary, Yarran Dheran, Wurundjeri Walk, Bellbird Dell and Wandinong Sanctuary. Wattle Park, Old Strathdon Orchard and Schwerkolt Cottage have unique heritage characters representing different eras of development. The City of Whitehorse has two public golf courses which make up a large proportion of the restricted open space, with Wattle Park Public Golf Course in the western part of the municipality and Morack Public Golf Course adjoining Dandenong Creek in the east. One privately owned golf course, Box Hill Golf Club, is relatively central to the municipality adjoining KooyongKoot / Gardiners Creek. It is noted that the private golf course is not recognised as public open space because of its ownership and management by a private entity and is not included in the total quantity of open space in this Strategy. The linear open space reserves along the waterways through the City of Whitehorse provide corridors of linked open space. This includes along KooyongKoot / Gardiners Creek, Koonung Creek, Bushy Creek, Mullum Mullum Creek and Dandenong Creek.

Of the 349 open spaces, 217 or approximately 62 per cent are less than 1 hectare in size, and they form an extensive system of well distributed open spaces across the municipality. These smaller open spaces are well used, particularly on a regular basis where they are close to home or work as confirmed in the community survey. The 34 medium sized reserves have a greater diversity of facilities in them and serve broader neighbourhood catchments. Combined with the larger reserves described above, this diverse open space network supports a range of uses and the landscape character types with the majority being either indigenous or native in character and a smaller number having a predominantly exotic character. Supporting diverse vegetation types, particularly large mature trees, is an important role of the open space network into the future including for habitat, urban cooling, landscape character, shade, improving air quality, carbon sequestration and assisting to mitigate the impacts of climate change.

The topography of the City of Whitehorse is gently undulating, ranging from approximately 60 metres to 120 metres above sea level. This undulating topography provides visual interest, opens up vistas and views into and from open space and contributes to the diversity of open space characters. For example, Wattle Park and Simpson Park are elevated and provide long vistas and views, compared to the protected valley character of Lundgren Chain Reserve and Cootamundra Walk. The steeply undulating topography also influences the ease in which people can reach open space, for example the steeply undulating topography in the north-eastern parts of Mitcham compared to the more gently graded areas of Mont Albert and Box Hill.

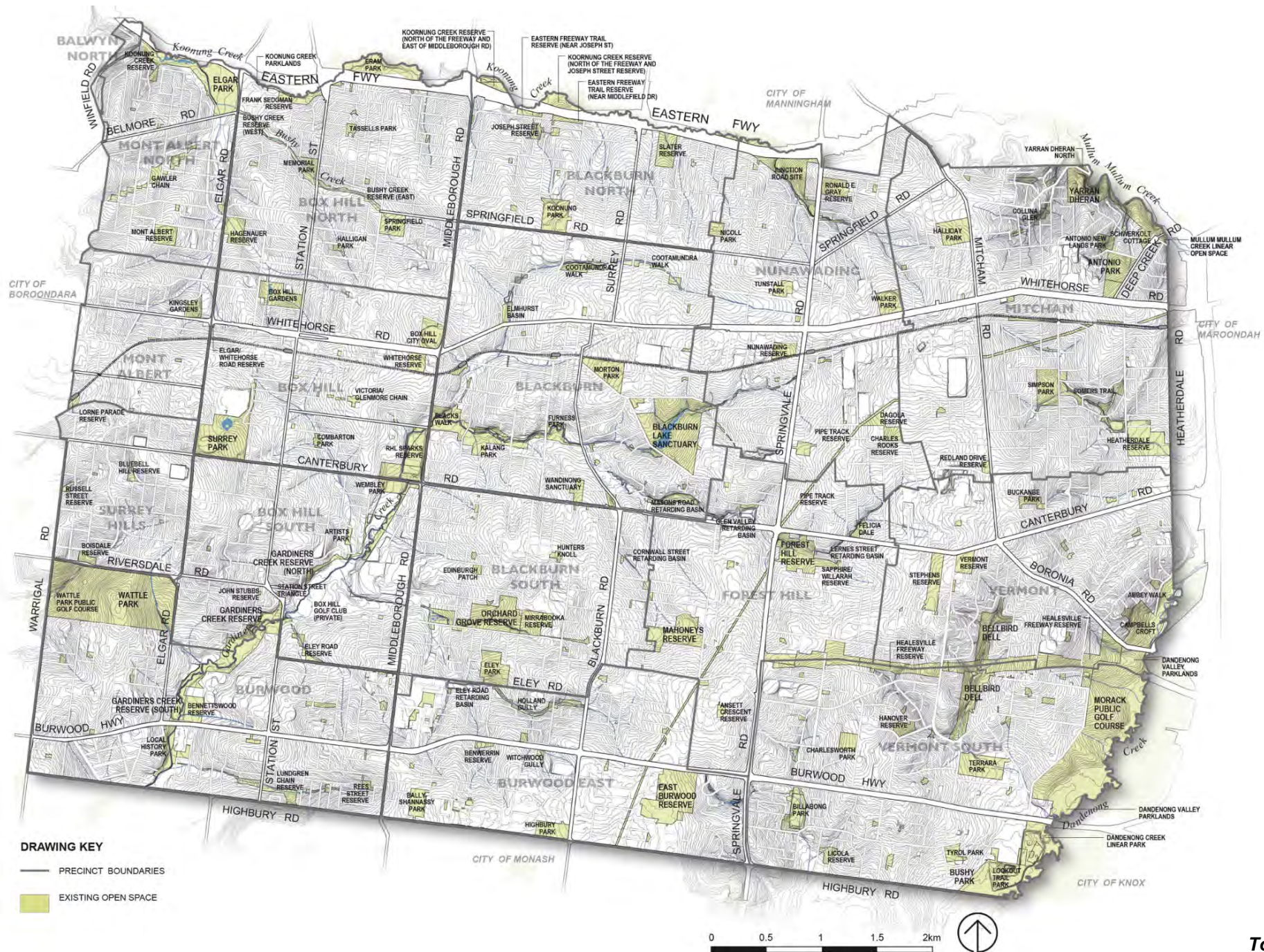
The northern and western areas of the City of Whitehorse drain to the Birrarung / Yarra River catchment via KooyongKoot / Gardiners Creek, Koonung Creek and Mullum Mullum Creek while the south and eastern area drains to the Dandenong Creek catchment. The waterways and their tributaries largely define the location of many of the open space reserves, particularly the system of linear reserves that provide excellent connectivity out to the extensive regional open space networks along the Yarra and Dandenong Creek corridors. Koonung Creek flows east to west on both the north and south sides of the Eastern Freeway and forms part of the northern boundary of the

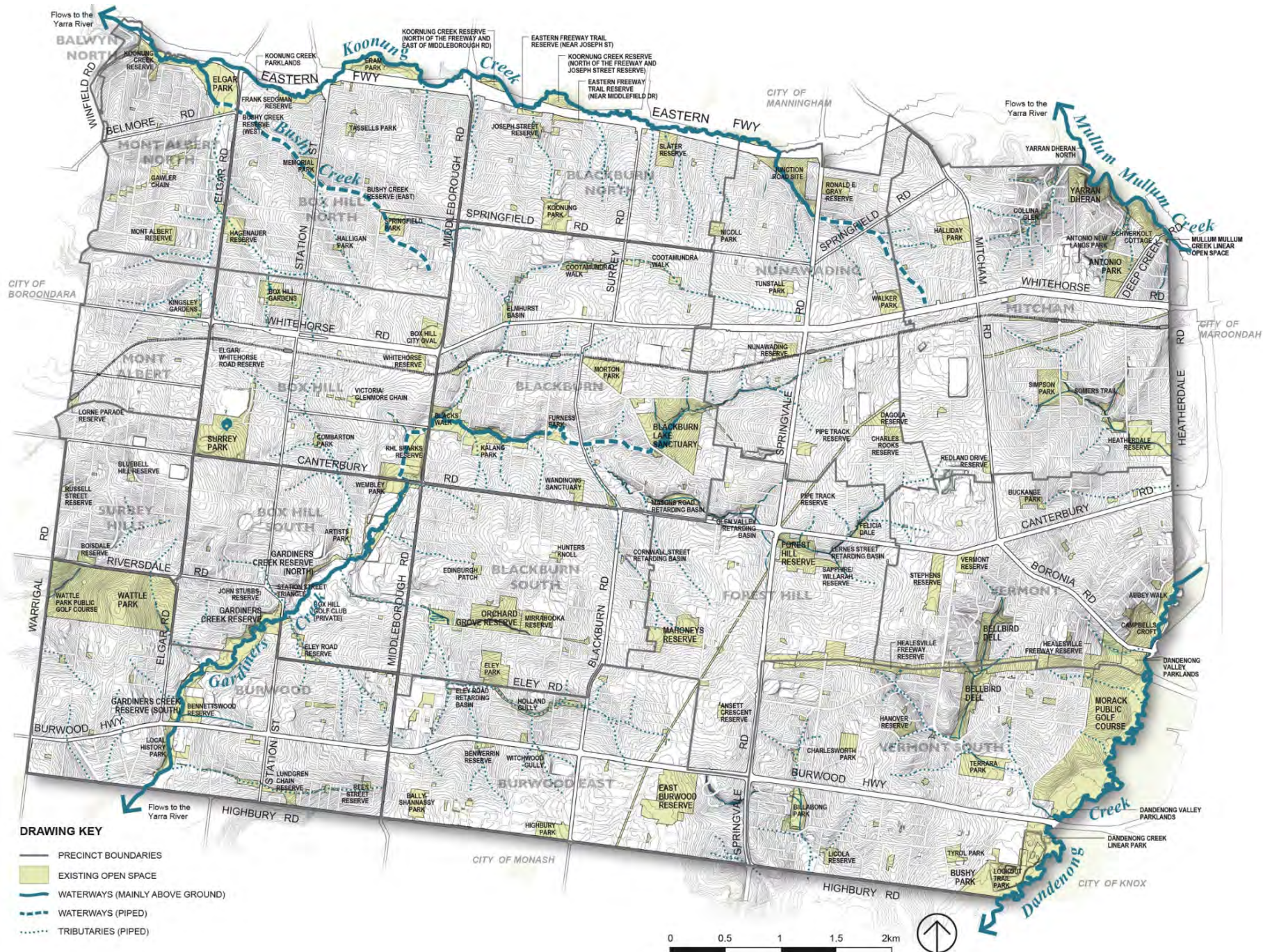
municipality with the City of Manningham. Bushy Creek is a major tributary with its confluence at Elgar Park being the connection between the Koonung Creek trail and the popular linked open space network along the valley line of Bushy Creek shared trail. Mullum Mullum Creek flows along a small section of the municipal boundary to the north-east in Mitcham, with Yarran Dheran Reserve and Schwerkolt Cottage being key regional open spaces adjoining it. Heatherdale Parklands includes Simpson Park, Somers Trail and Heatherdale Reserve as a linked of open space network along the valley line of a major tributary to Dandenong Creek. Dandenong Valley Parklands, Morack Public Golf Course and Campbells Croft are all major regional open spaces adjoining Dandenong Creek, which forms the south-eastern boundary of the Municipality.

The central part of the City of Whitehorse forms the headwaters to KooyongKoot / Gardiners Creek with Blackburn Lake Sanctuary being a key regional open space in the headwaters that connects down through what is referred to as Blackburn Creeklands and joins the main stem of Gardiners Creek at RL Sparks Reserve in Box Hill. This flows in a south westerly direction through Box Hill South and Burwood with major linear open spaces along it, providing regional connectivity downstream into the City of Monash. There are numerous linked networks of open space along valley lines of various tributaries to the waterways including Gawler Chain in Mont Albert North, Bushy Creek in Box Hill North, Cootamundra Walk in Blackburn, Holland Gully in Burwood East and Lundgren Chain in Burwood. The waterways provide extensive habitat and bushland spines that define the character of much of the City of Whitehorse open space network.

Please refer to the series of diagrams to assist with understanding the existing open space network:

- Figure 3-1 Existing open space network
- Figure 3-2 Existing topography
- Figure 3-3 Waterways





3.2 Changes to the open space network since the 2007 Strategy

3.2.1 Overview

The 2007 Strategy has guided the open space planning, design and works program for the City of Whitehorse open space network over the past 15 years. The key changes as part of the implementation have included expanding the open space network and providing guidance to upgrades to existing open space. What has substantially changed is the scale of urban development in parts of the municipality and increased levels of use of open space. This is particularly noticeable in Box Hill and in parts of Blackburn, Burwood East and Nunawading. While some of the growth and change was planned for, it has been more substantial than forecast in the 2007 Strategy. Refer to Section 4.2 of this Strategy for further information on population growth and urban development.

3.2.2 Purchase of additional open space

Seven new open space reserves have been acquired by Council as part of implementing the 2007 Strategy.

1. **Rowland Street Park, Mont Albert** - Small Local open space, 1,390sqm - play space. This addressed an existing gap area between the railway and Mont Albert Road.
2. **Oak Street Park, Surrey Hills** - Small Local open space, 1,042sqm - play space. This addressed an existing gap area between Canterbury Road and Station Street.
3. **Scott Grove Park, Burwood** - Small Local open space, 1,722sqm - play space completed June 2023. This addressed an existing gap area between Burwood Highway and Highbury Road, west of the Burwood Cemetery.
4. **Chaucer Street Park, Box Hill South** - Small Local open space, 1,395sqm – play space.
5. **Graham Bend, Box Hill** - Small Local open space, 1,268sqm, Play space.
6. **Wattle Valley Park** - Local open space, 4,742sqm, identified as an Action in the 2007 Strategy to provide an open space link between Antonio New Lands Park, Wattle Valley Triangle and Yarran Dheran Reserve. This was Action 4.1.16, and identified as a Long Term priority, however it is important to progress these opportunities when they arise.
7. **Land at 33 Nara Road Mitcham** - Regional open space - incorporated into Yarran Dheran Reserve. The 2007 Strategy showed this as existing open space so this may not have been added since that time. It is noted that it is not technically appropriate to use municipal public open space contributions for expansion of the regional open space network.

3.2.3 Public open space land contributions

New open space has either been provided as a public open space land contribution as part of a subdivision of private land, or is in the process of being handed over as a land contribution as open space. Land contributions include:

1. **St Johns Avenue Park**, Mont Albert – Small Local open space, currently has a seat and path, primarily protecting a large mature Oak Tree. The original intent was to convert part of the road reserve via a full or partial road closure to increase the size and enlarging this open space is included as an Action in this Strategy.
2. **Burwood Brickworks Plaza**, identified as a new Urban Civic open space. The plaza is located in the heart of the new retail / commercial precinct of this new residential community and provides an important informal space with play, open grassed areas, picnic and barbecue facilities and potential to use this as an event space.
3. **Village Green** at the Burwood Brickworks site is to be rezoned as public open space and categorised as a new Neighbourhood open space. Part of the reserve is encumbered with a water quality treatment facility, however the remainder of the reserve includes picnic and barbecue facilities, graded walking paths to the perimeter, an open grassed area and play space.
4. **Auburn Walk** is a new Small Local open space that is to be rezoned as public open space in the Burwood Brickworks Site.
5. **Elmington Avenue Reserve** in Forest Hill has been established and is classified as Neighbourhood open space.
6. **Future Local open space** on the corner of Station Street and Norcal Road on the former Daniel Robertson Brickworks Site.

3.2.4 Victorian Government changes to the open space network

Additional open space provided by the Victorian Government

The Victorian Government has rezoned the undeveloped Healesville Freeway Reserve to a combination of the Public Conservation and Resource Zone and the Public Park and Recreation Zone (Whitehorse Planning Scheme Amendment C236). This is an approximately 35 hectare reserve that extends for 3.5 kilometres from Springvale Road to Burwood Road in Vermont South. The reserve has been transferred to Parks Victoria to manage and establish it as a new linear park. Parks Victoria has recently prepared the Healesville Freeway Reserve Park Layout Plan and Concept Plan. The plan acknowledges the *Managing Country Together Framework* (Parks Victoria, 2019), which recognises and enables Traditional Owner cultural objectives, knowledge and practice in the management of public land. Whitehorse City Council was appointed Committee of Management for Davy Lane Reserve, Bellbird Dell Reserve and 18th Tee of Morack Public Golf Course in 2022. 'The Farm' run by Nadrasca (NDIS Registered Disability Support Organisation) will continue to operate in the site west of Morack Road. Two active Friends Groups operate in the reserve, the Friends of Healesville Freeway Reserve, and Friends of Bellbird Dell. As per the previously established management arrangements, Whitehorse City Council also manages the Old Strathdon Orchard.

Changes to the existing open space network proposed by the Victorian Government

As part of Victoria's Big Build transport projects, there will be changes to the existing open space network in the suburbs of Mont Albert, Burwood and Box Hill. In summary the changes are:

- **Box Hill Gardens**

Approximately one third of Box Hill Gardens will be occupied by the Suburban Rail Loop project during construction for at least 7 years during stage one of the project and potentially more than 10 years if the second stage proceeds. As an offset for the loss of access to part of Box Hill Gardens, the Victorian Government is to provide a new 1 hectare open space within 1.6 kilometres of Box Hill Gardens. The requirement does not specify whether it is a single or multiple sites that make up the 1 hectare of land.

This Strategy recommends that new open space is provided in the catchment north of Whitehorse Road and east of Box Hill Gardens. The location will preferably improve east-west pedestrian connectivity in a sub-precinct. This area has predominantly north-south street orientation with long street block lengths of greater than 250 metres and a new open that spans between these streets will assist to address this issue. Refer to the Box Hill precinct analysis and recommendations in Section 7.5 of this Strategy.

- **Sinnott Street Reserve and Gardiners Creek**

Council confirmed that Sinnott Street Reserve in Burwood has been compulsorily acquired by the Victorian Government for construction of the new station as part of the Suburban Rail Loop project. An offset for the loss of this open space is the temporary provision of additional land to extend the Lundgren Chain Reserve between Cumming and Gillard Street. A pedestrian overpass bridge is proposed over Burwood Highway along with upgrades to the tram stop and at grade pedestrian and cycle access across Burwood Highway as part of the station upgrade to provide safe access between the proposed station and Deakin University.

The Suburban Rail Loop Urban Design Strategy (September 2022) notes that the new station at Burwood *'..... will transform largely industrial landholdings south of Burwood Highway into a new mixed-use centre that is a thriving place to live, work and study.'* This proposed change in land use and intensity of use will require additional open space for the proposed population that will be living and working the catchment of the proposed future Suburban Rail Loop station.

Recommendations for the location of new open space is not included in this Strategy as the forecast new population is anticipated to arrive after the 15 year time frame of this Strategy. Refer to Section 7.8 of this Strategy for additional information.

Gardiners Creek Reserve will be modified as part of the Suburban Rail Loop project design with the reconfiguration of the Alinta National Power Service on the east side of the creek north of Sinnott Street Reserve. It is anticipated that delivery of any improvements to this site will occur following construction of the new station.

- **Lorne Parade Reserve**

The Level Crossing Removal Project that has recently been completed by the Victorian Government in Mont Albert and Surrey Hills. This project lowered the

railway line into an open trench to remove two level crossings and constructed a single combined new Union railway station to replace the previous two stations. Lorne Parade Reserve in Mont Albert was temporarily impacted while the Level Crossing Removal Project was in construction and has now been returned as public open space. The changes made as a result of the Level Crossing Removal Project include a new retarding basin in the open space, entry paths to the new Union Station, a new play space and reinstatement of a smaller open grassed area. Whitehorse City Council have also advocated for and secured a new ancillary open space referred to as Mont Albert Plaza which is a deck over the rail corridor at the former Mont Albert Station location. It provides at grade east-west pedestrian connectivity over the open trench railway between Breresford Street and the Mont Albert shopping centre. The design and use of this space will be influenced by the future community use of the former station building, which is yet to be confirmed.

- **North East Link/Eastern Freeway upgrade**

The North East Link/Eastern Freeway upgrade will impact on open space along the freeway alignment. This includes temporarily occupying the North-West Oval in Elgar Park, part of Eram Park and part of the Junction Road Reserve site. At the time this 2024 Strategy was being prepared the Urban Design Landscape Plan (UDLP) was released by the Department of Transport and Planning (DOTP). Council have advised that:

'after careful consideration of the DOTP UDLP, Council resolved that it could not support the DOTP UDLP in its current form on the basis that the significant impacts from the widening of the Eastern Freeway have not been appropriately mitigated within the City of Whitehorse. Council prepared an alternative vision for the UDLP and is advocating strongly for the DOTP to integrate the features of that alternative vision and this work is ongoing'.

3.2.5 Strategic redevelopment sites

The 2007 Strategy anticipated redevelopment of a number of key strategic development sites and nominated the open space needs for each of these. Negotiation for the provision of open space on these sites has occurred since the 2007 Strategy and land contributions have been described for these in Section 3.2.3 of this Strategy. These sites are still being developed and additional public open space will be provided as per the existing development plans during the course of this Strategy. These include:

- The former Nubrick Quarry Site in Burwood East, now referred to as Burwood Brickworks
- The Daniel Robertson Brickworks Site on Norcal Road, Nunawading
- The Global Television Site on Hawthorn Road in Burwood East
- The Seventh Day Adventist Site on Central Road in Blackburn.

3.2.6 Improvements to linear open space links

We have reviewed the implementation of the actions from the 2007 Strategy to improve linear links and connections and approximately half of them have been successfully implemented.

Those that are still required are incorporated in this 2024 Strategy. Refer to Section 5.4.2.

3.3 Hierarchy and classification of open space including walkability

3.3.1 Existing hierarchy in the 2007 Strategy

The 2007 Strategy uses the following hierarchy:

- Regional
- Municipal
- Neighbourhood
- Local
- Small Local

This hierarchy is well established and has been successfully used over the past 15 years. The 2024 Strategy proposes some changes to the hierarchy as follows:

- Addition of a Local Link - for open spaces that provide connectivity between one street and an open space and are not a destination open space in themselves. Local Links do not have walking catchments applied to them given they are not a destination.
- Increase the minimum size of Small Local open space from 300 sqm to 500 sqm.
- Add a new hierarchy referred to as Urban Civic to identify small iconic open spaces in activity centres and transport hubs that will have a broader role than a Small Local open space. This will assist Council to allocate higher levels of resources to the design and management of these spaces.

3.3.2 2024 Strategy hierarchy and walking catchments

The proposed hierarchy for the 2024 Strategy is shown in Table 3a. It is based on the existing framework from the 2007 Strategy and updated to meet current best practice. This hierarchy is based on both the intended catchment of users and the relative size of the reserve to adequately cater to its catchment. It is a guide for analysing the spatial distribution of open space and is a useful management tool to direct appropriate facility development and maintenance levels in different types of open space reserves.

We have proposed some changes to travel and walking catchments from those in the 2007 Strategy given the changes in the policy framework. This includes:

- **Regional open space** has a 400 metre walking catchment applied where the open space provides informal unstructured recreational use and facilities for the local community. This is reduced from the 500 metre walking catchment applied in the 2007 Strategy.
- **Municipal open space** has a 1 kilometre travel catchment to 95 per cent of all dwellings, reduced from a 2 kilometre travel catchment in the 2007 Strategy. It also has a 400 metre walking catchment rather than 500 metre catchment applied in the 2007 Strategy where the open space provides neighbourhood level recreational use and facilities.
- **Neighbourhood open space** has a 400 metre walking catchment, reduced from the 500 metre catchment applied in the 2007 Strategy.

- **Urban Civic open space** has a 400 metre walking catchment applied where the open space provides neighbourhood level recreational use and facilities in addition to its role as the iconic space in the transport and commercial hubs. This hierarchy of open space was not included in the previous 2007 Strategy.
- **Local open space** - no change, continues to have a 300 metre walking catchment applied.
- **Small Local open space** has a 200 metre walking catchment, increased from the 150 metre catchment applied in the 2007 Strategy.
- **Local Link** has no walking catchment applied.

Table 3a *Open space hierarchy, size and walking catchments for the City of Whitehorse*

Size	Catchment	Role in the open space network
Regional open space		
Unlimited	• No specific distance as this open space is provided for the Melbourne-wide population as well as the Whitehorse community. • 400 metre walking catchment where there are neighbourhood level facilities.	Caters primarily to the regional population, including the Whitehorse community, providing regional recreational facilities and/or protection and enhancement of regional cultural and environmental values. For example, the linear open space along the waterways with habitat connectivity in the riparian zone, and/or regional trails that extend beyond Council boundaries. Examples include the Dandenong Creek corridor, KooyongKoot / Gardiners Creek corridor and Wattle Park.
Municipal open space		
Varies, typically a minimum of 8 hectares, with the exception of specialised stand-alone facilities such as public tennis clubs or bowling clubs which are a minimum of 3 hectares.	• Located within 1 kilometre of 95% of all dwellings. • 400 metre walking catchment where there are neighbourhood level facilities.	Primarily caters to the Whitehorse community and will also provide facilities that are used by residents from other municipalities. Generally these areas of open space provide facilities that appeal to residents from across the municipality, rather than in the local suburb or neighbourhood. They include sporting facilities, historical gardens and nature conservation reserves. Examples include Surrey Park in Box Hill and Halliday Park in Mitcham.

Size	Catchment	Role in the open space network
Neighbourhood open space		
Minimum 1 hectare	Located within 400 metre walking catchment from all dwellings and workplaces.	Caters primarily to the local neighbourhood and is of a size that allows for a diverse range of facilities that encourage longer stays in the open space. This can include play space, multi-use courts, BBQs, public toilets, large open grassed areas, feature gardens and/or protection of environmental values. Examples include Kingsley Gardens Mont Albert, Lundgren Chain Reserve in Burwood and Tyrol Park in Vermont South.
Urban Civic open space		
Less than 1 hectare in size	- No specific distance as located in proximity to key transport hubs and commercial precincts. - A safe walking catchment of 400 metres is applied where the design includes neighbourhood level facilities for the community.	Primary role is as an iconic open space that provides character and identity to the Activity Centres. This includes providing social meeting places, hosting events, being close to transport hubs and commercial precincts. Examples include the new Burwood Brickworks Plaza and Box Hill Mall.
Local open space		
0.99 to 0.26 hectares in size	Located within 300 metres safe and easy walking catchment from all dwellings and workplaces.	Caters primarily to the local community within an easy safe walk and large enough to provide for two activities in the one open space reserve - for example, a multi-use half court and open grassed area with seats. Examples include Artists Park in Box Hill South and Thatcher Reserve in Vermont.
Small Local open space		
From 0.25 to 0.05 hectares, generally a minimum width of 20 metres	Located within 200 metres safe walking distance from all dwellings and workplaces	Caters to the local community within an easy safe walk and accommodates a single use, for example fitness equipment or a small play facility with seating and urban greening. Examples include Linsley Park, Box Hill and Rowland Street Park, Mont Albert.
Local Link		
Usually less than 0.05 hectares and a minimum width of 10 metres.	Not applicable	Provides improved connectivity between streets and open space reserves and is not an open space destination.

The hierarchy has been applied to all open space in the 2024 Strategy as shown in Figure 3-4 on the following page.



Figure 3-4
Open space
hierarchy

3.3.3 Summary of the quantity and distribution of the hierarchy of open space

The hierarchy has been applied to all open space in the municipality and Tables 3b and 3c below summarises the quantity of the different hierarchy types in Whitehorse. Table 3b is a summary by land area, and Table 3c is a summary by the number of individual reserves.

Table 3b *Summary of the quantity of open space hierarchy types by land area in Whitehorse*

Hierarchy	Area (Ha)	Percentage of total
Regional	233.30	38%
Municipal	246.74	40%
Urban Civic	4.35	1%
Neighbourhood	71.36	12%
Local	36.35	6%
Small Local	15.93	3%
Local Link	1.93	0%
Total	609.95	100%

Table 3c *Summary of the quantity of open space hierarchy types by number in Whitehorse*

Hierarchy	No.	Percentage of total
Regional	46	13%
Municipal	44	12%
Urban Civic	8	2%
Neighbourhood	34	10%
Local	69	20%
Small Local	109	31%
Local Link	39	11%
Total	349	100%

The hierarchy is spatially mapped and shown on a series of diagrams.

Regional open space

The Regional open spaces are primarily located along the waterways which provide linear connectivity to adjoining municipalities. These include:

- Koonung Creek along part of the northern municipal boundary with the shared trail extending southwest to join the Main Yarra Trail in Ivanhoe.
- Mullum Creek to the northeast of the municipality with the shared trail linking both to the Koonung Creek Trail to the west and beyond the municipal boundary to the northeast through Donvale.
- Dandenong Creek on the south-eastern municipal boundary with the waterway and shared trail extending beyond the municipality to the east through Heathmont and Bayswater towards the Dandenongs and south towards Wantirna and Wheelers Hill.

- KooyongKoot / Gardiners Creek which flows south of Canterbury Road and extends into adjoining municipalities through Malvern East and Glen Iris, flowing into the Yarra River at Hawthorn.

The other three Regional open spaces in the City of Whitehorse are Blackburn Lake Sanctuary, managed by Council, Wattle Park which is managed by Parks Victoria and the former Healesville Freeway Reserve which will include Regional open space managed by Parks Victoria.

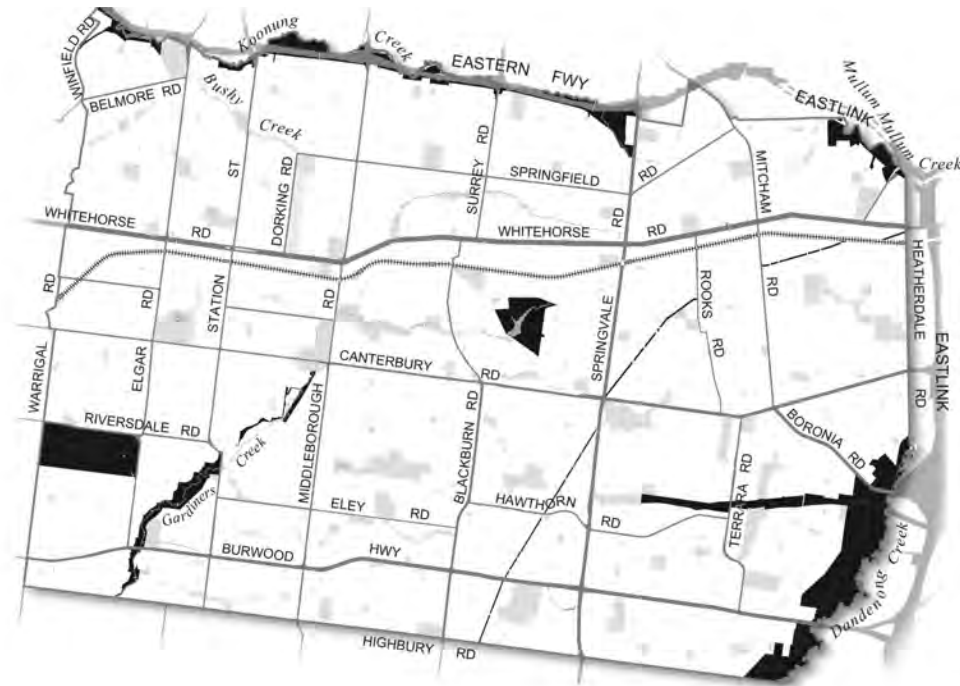


Figure 3-5 Regional open space in the City of Whitehorse in 2024

Municipal open space

The majority of the Municipal open space reserves in the City of Whitehorse have either structured sporting uses or bushland and environmental values. They contribute to and are primarily designed to be used by people from across the municipality, or protecting environmental values that are of local significance. The exceptions to these are Halliday Park in Mitcham and Box Hill Gardens, which have a public parkland character that provide unstructured and informal facilities for people from across the municipality. Many of the Municipal open spaces also include facilities that are used informally by the local community.

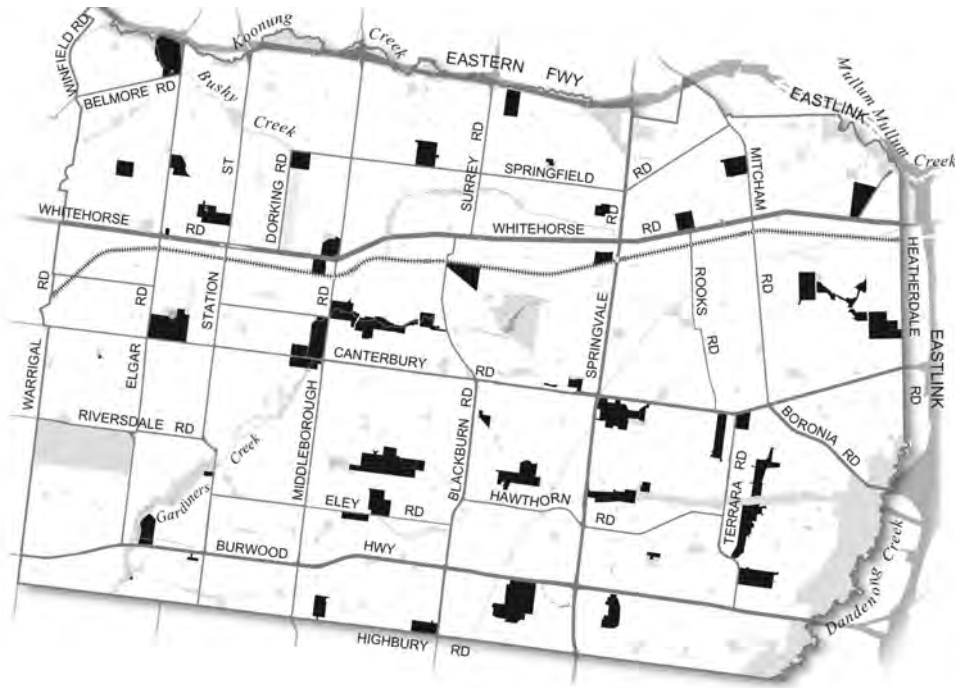


Figure 3-6 Municipal open space in the City of Whitehorse in 2024

Neighbourhood open space

Overall there is a good distribution of Neighbourhood open spaces across the municipality, however there are 'gaps' in the provision of Neighbourhood open space in the western parts of the municipality including Mont Albert, Box Hill, Box Hill South, Surrey Hills and Burwood. The precinct assessments in Section 7 of the Strategy provide detailed analysis regarding the adequacy of the open space network and whether changes are required to the quality and or provision of open space.

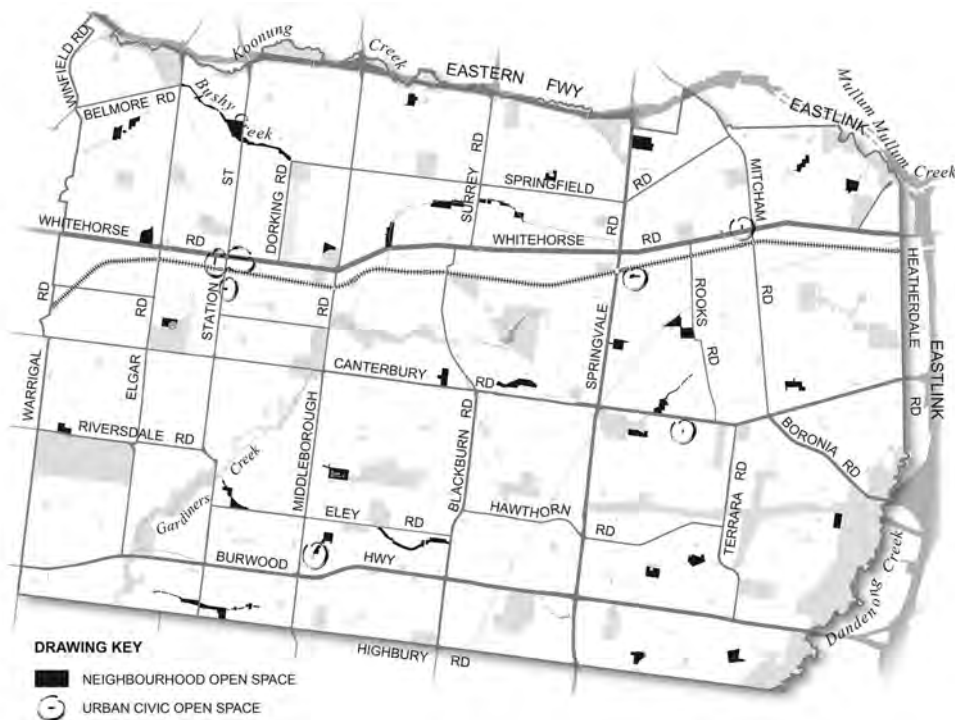


Figure 3-7 Neighbourhood and Urban Civic open space in the City of Whitehorse in 2024

Urban Civic open space

These generally small spaces (that would typically of a size that equates to a Small Local open space) are located within high density precincts and activity centres and reflect the character of the activity centre in which they are located. They have higher levels of use and therefore require a higher level of articulation and attention to design to provide a diversity of spaces within a small area. They also typically require higher levels of maintenance due to higher levels of use. While they are named Urban Civic, this does not mean they all need to be predominantly paved spaces. Being located in the heart of activity centres and higher density precincts, it is important that these spaces are green and support large canopy trees that offer shade and cooling, along with garden beds designed to retain moisture and contribute to urban cooling. Examples include Box Hill Mall, Britannia Mall in Mitcham, Burwood Brickworks Plaza and Wood Street Park in Nunawading. It is anticipated that this hierarchy of open space will likely increase over time as higher density precincts and activity centres expand in the future, particularly around the future Suburban Rail Loop stations.

Local and Small Local open space

Overall there is a good distribution of the smaller open spaces across the municipality, however there are 'gaps' in the provision of open space in the western parts of the municipality including Mont Albert, Box Hill, Box Hill South, Surrey Hills and Burwood. The precinct assessments in Section 7 of the Strategy provide detailed analysis regarding the adequacy of the open space network and whether changes are required to the quality and or provision of open space.

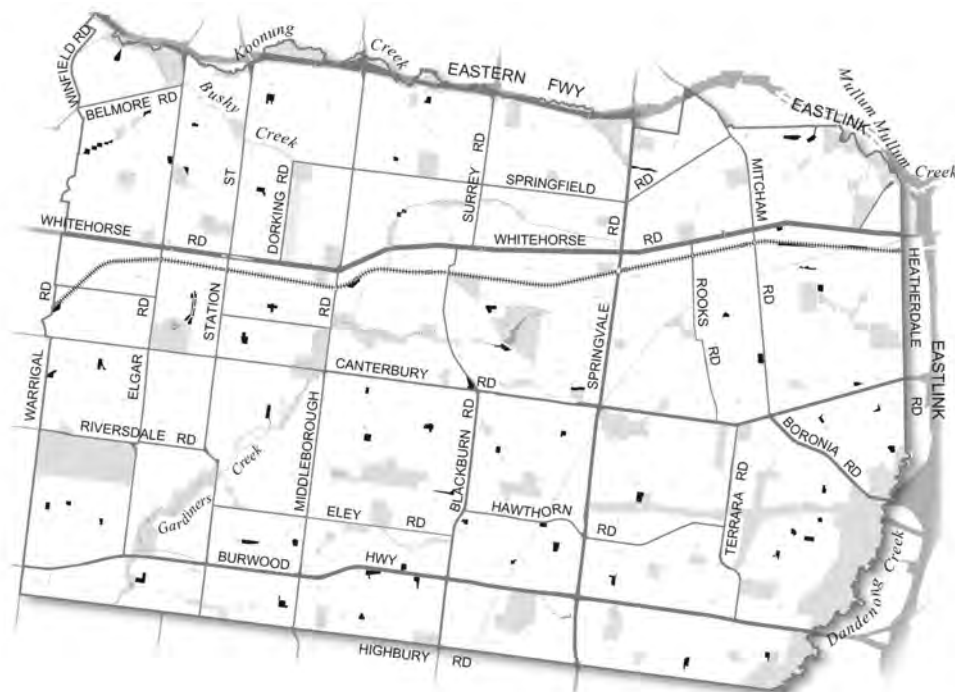


Figure 3-8 Local open space in the City of Whitehorse in 2024

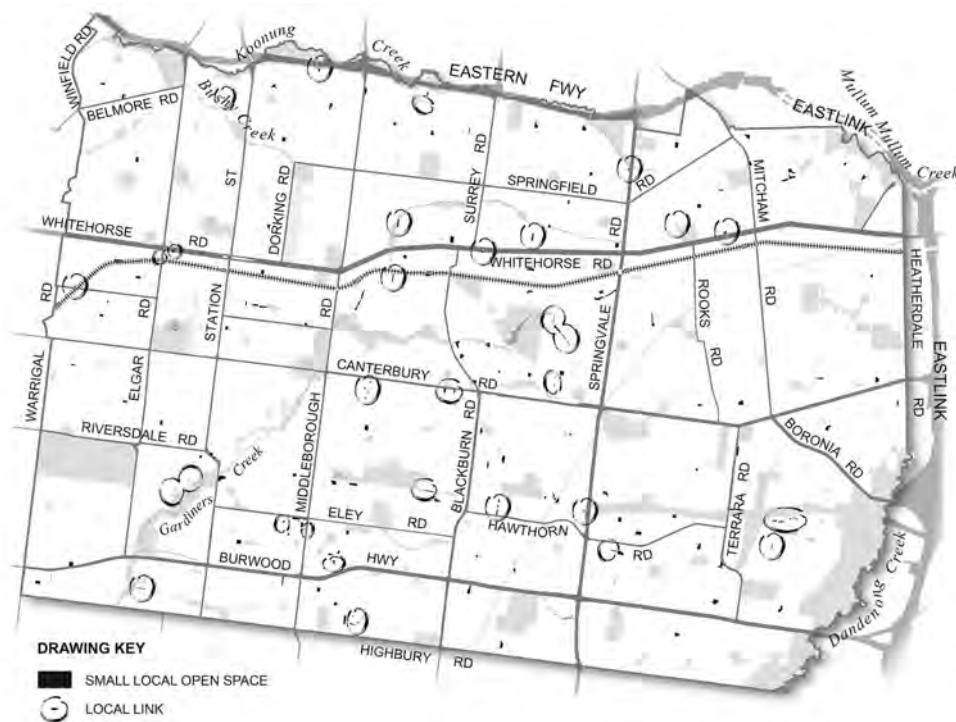


Figure 3-9 Small Local open space and Local Links in the City of Whitehorse in 2024

3.3.4 Character classification of open space

Overview

Within an open space hierarchy, there are different character types of open space influenced by the inherent natural and physical character of the open space, the facilities in them, the urban context in which they are located, and the design and layout of the open space. Open space character in the City of Whitehorse is diverse, ranging from natural bushland along the waterway corridors, formal gardens, large sporting reserves, local suburban parks with play spaces and an emerging character of urban parks located in the higher density precincts. These different characters appeal to different parts of the community including diverse cultural backgrounds, genders and age groups. Diversity in character generally assists in meeting diverse needs that maximises the accessibility of the open space network to the community. They are also important in identifying, protecting and improving biodiversity and environmental values of open space.

Character classification of open space assists with identifying the overall management direction and intent for each open space. For example, if the open space has 'Nature conservation' as its primary classification, future decisions regarding the expansion of recreational use and facilities will be guided by whether that is consistent with its primary purpose of nature conservation. Conversely, if its primary character is 'sporting' then these uses will be prioritised when other uses and facilities are proposed in them. This provides a transparent framework for the community and Council when upgrades and changes are proposed in open space reserves.

Character Classification

The following character classification has been used to assess the provision and distribution of different types of reserves within the municipality. A primary character classification has been assigned to all open space along with one or more secondary character classifications where they apply. The character classification will assist with both the ongoing management of the open space, particularly where there are competing uses, and also identify where there are gaps in the provision of different character types of open space. Council will be able to undertake future analysis of the character when undertaking future Masterplans and Concept Plans for open space, to understand the relationship to the surrounding catchment of the open space and where they may be gaps and opportunities to change or improve existing open space character types to better meet the community needs.

The Character Classifications are listed in alphabetical order in Table 3d below.

Table 3d *Character classification for open space in the City of Whitehorse*

Character classification	Description
Botanical	Where there are significant trees with botanical interest or are of a significant size and age, including both indigenous and non-indigenous vegetation. For example, Lithgow Avenue Reserve in Blackburn and St Johns Avenue Reserve in Mont Albert.
Community garden	Where members of the community participate in horticultural activities such as growing vegetables, flowers, and/or fruit, where they are assigned 'garden' plots on public open space to grow their own plants. These areas are fenced and available for use by those who have been assigned garden plots, and in these instances form a restricted open space use. For example, Combarton Street Reserve in Box Hill and Sinnott Street Community Garden in Burwood.
Events	Where events are regularly scheduled and held contributing to the character, design and function of the space. For example, Tunstall Park in Nunawading and Brickworks Plaza in Burwood.
Heritage	Where the Wurundjeri Woi-wurrung people of the Kulin Nation as the Traditional Owners of the land have identified culture, history and connection to place; or other historical values that make a significant contribution to the open space character and use. This classification will be applied to open space that is identified to have heritage values in existing studies. For example, Combarton Park in Box Hill and Wattle Park in Burwood.
Linear	Where the open space is part of a linear network of open spaces or continuous reserve that is used primarily for travelling through or along and/or provides habitat connectivity. For example, Gawler Chain in Mont Albert North and Bushy Creek Reserve in Box Hill North.

Character classification	Description
Linking space	Where open space provides a local link or connection between streets, individual open spaces or to a key destination and is <u>not</u> part of a linear network. For example, Box Hill Mall and Britannia Mall.
Native character	Where native vegetation significantly contributes to the character of the open space, and is not indigenous or primarily for nature conservation purposes. For example Dagola Reserve in Nunawading and Fulton Road Reserves in Blackburn South.
Nature conservation	Where the intent of the open space is to protect and/or improve the biodiversity and habitat values. This may include reserves with existing value or those identified to have potential to provide for this in the future. For example Wandinong Sanctuary in Blackburn and Blackburn Lake Sanctuary.
Passive	Primarily designed for a range of non-active uses such as strolling, seating, picnic, social gatherings and play. For example, Boisdale Park in Surrey Hills and Buckanbe Park in Vermont.
Play	Where the character of the open space is dominated by a play facility and is the primary purpose of the reserve. For example, Scott Grove Park in Burwood and Oak Street Park in Surrey Hills.
Public garden	A planned open space set aside for the display, cultivation and enjoyment of plants and used for recreation. For example Box Hill Gardens and Halliday Park in Mitcham.
Railway easement/siding	Open space (other than linear) where the railway use significantly influences the open space's ongoing use and design. For example South Parade Reserve in Blackburn and Lorne Parade Reserve in Mont Albert.
Restricted sporting/recreation	Available on a club membership or fee-paying basis only and is not available for general public use at any time. This includes public golf course, tennis courts, bowling clubs and community gardens (refer Community Garden classification). For example Morack Public Golf Course in Vermont South.
Viewing	Where the character and major use of the open space is for enjoying the views from an elevated location. For example, Hatfield Court Reserve and Spark Rise in Vermont South.
Service easement	Open space where the level of use, design and management is influenced / encumbered by the presence of services in the reserve. For example, Pipe Track Reserve and Masons Road Retarding Basin in Blackburn.

Character classification	Description
Significant road reservation	Road reserves of a significant size or width to contribute to the open space network for nature conservation, visual landscape or recreational use. This classification is for land either reserved as open space or with the potential for this, while recognising vehicle transport has a major influence on the open space. For example Whitehorse Road Reserves in Box Hill and Roslyn Street Reserve in Burwood.
Sporting	Primarily provides for organised club-based sporting use and the outdoor grounds and facilities are available for general public use when organised sporting events and training are not in progress. For example RHL Sparks Reserve in Box Hill and East Burwood Reserve.
Undeveloped	Open space which has not been developed and contains few or no facilities. For example, Adrian Danaher Reserve in Vermont and Ashted Road Reserve in Box Hill.
Waterway	The presence of a waterway makes a significant contribution to the character, value and use of the open space including the riparian zone. For example, Koonung Creek Reserve and Gardiners Creek Reserve.
Wetland/WSUD	The presence of a wetland or other WSUD feature contributes and influences, and can encumber, the character and use of the open space. For example Fulton Reserve/Wurundjeri Wetlands in Blackburn South.

3.4 Quantity and provision of open space

3.4.1 Overview

An assessment and analysis of existing open space has been undertaken using the original database prepared for the 2007 Strategy which has been updated with additional data supplied by Council regarding the new open spaces added to the network. The assessment and refinement of the existing open space network has been updated following the precinct-based analysis.

Based on the research undertaken for this Strategy, there are a total of 349 open space reserves, with a total area of 609.95 hectares of open space, excluding restricted open space, which is 9.5 per cent of the land area of the municipality. If restricted open space is included in the totals there is 721.91 hectares of open space, which is 11.2 per cent of the land area of the municipality.

3.4.2 Quantity of open space by precinct

Provision of open space quantity has been assessed in the following ways:

- Quantity of open space area as a proportion of the total land area of the municipality at both a municipality-wide level and a precinct level.
- Quantity of open space area per person, both at the municipality-wide level and the precinct level.

The rationale for assessing the quantity in these two ways is to measure how changes in the number of people can impact the quantity of people using the open space. The first method of assessing the quantity of open space as a proportion of the total land area is a straight forward calculation. This measure does not take into account the different urban densities across the municipality. Typically in high density precincts the community do not have access to much private open space. They will therefore rely on public open space for all their needs which traditionally would be undertaken in their private gardens, such as having a barbecue with friends and family, reading a book outdoors in the shade and just being outdoors as a place to relax and unwind. If the open space is busy, then it may impact on the community's ability to enjoy the sense of space and outdoors, particularly their ability to relax and unwind.

In addition to considering the quantity of open space, the design and distribution of open space is also assessed to determine whether there is an adequate provision of open space. This includes assessing whether everyone in the community has safe and easy walking access to open space from their workplace and home and whether the quality of that open space meets the needs of the community who live and work around it.

For the purposes of this comparison, restricted open space has been removed from the calculation, as restricted open space is not available for the everyone to use at all times, as entry can be restricted to a club-based or fee-paying basis.

Quantity of open space as a proportion of land area

Table 3e highlights the variation in quantity of open space across the different precincts.

Table 3e *Quantity of open space as a proportion of land area in the City of Whitehorse in 2024*

Suburb Name	No. of open spaces excl. restricted os	Total open space Ha (excl restricted o/sp)	Proportion of o/space of total suburb area (excl. restricted o/sp)
Blackburn	32	56.84	9.6%
Blackburn North	19	25.96	9.6%
Blackburn South	21	30.14	8.4%
Box Hill	22	42.86	12.2%
Box Hill North	21	28.45	7.2%
Box Hill South	11	17.59	5.1%
Burwood	22	72.89	14.4%
Burwood East	28	36.58	8.3%
Forest Hill	27	37.62	9.7%
Mitcham	35	61.61	9.3%
Mont Albert	8	3.51	2.1%
Mont Albert North	10	29.70	13.3%
Nunawading	30	34.91	7.0%
Surrey Hills	5	2.69	1.6%
Vermont	22	48.58	11.1%
Vermont South	36	80.00	12.9%
MUNICIPALITY TOTALS	349	609.95	9.5%

The quantity of open space relative to total land area is 9.5 per cent. As shown in Table 3e, this varies significantly across the different precincts. Surrey Hills has the least amount of open space with less than three hectares, which means that only 1.6 per cent of the total suburb is set aside as publicly owned open space, compared to the 9.5 per cent as an average across the municipality. Mont Albert is the next lowest with 2.1 per cent of the suburb followed by Box Hill South at 5.1 per cent.

Burwood has the largest amount of open space in proportion to the suburb area with 14.4 per cent as open space. In Burwood, this includes the Regional open space along KooyongKoot / Gardiners Creek and Wattle Park. Mont Albert North is the next highest with 13.3 per cent of total precinct as open space, mainly due to the large areas of land along Koonung Creek. Vermont South is third with 12.9 per cent of the total precinct area as open space mainly due to a large proportion of the Regional open space is along Dandenong Creek and the former Healesville Freeway Reserve.

Quantity of open space relative to population density

The following table illustrates the provision of open space relative to Estimated Resident Population (ERP) density in 2021, and compares it to the ERP in 2006, which was at the time the 2007 Strategy was prepared. Total population numbers shown in Table 3f.

Table 3f *Quantity of open space relative to the ERP population in 2021 and the 2006 population shown in the 2007 Whitehorse Open Space Strategy*

Suburb Name	No. of open spaces incl. restricted os	No. of open spaces excl. restricted os	Total open space Ha (excl restricted o/sp)	Estimated Residential population 2021* ID Comm Profile	Open space sqm per person for ERP 2021	Open Space sqm per person in 2006
Blackburn	33	32	56.84	14,636	39	45
Blackburn North	19	19	25.96	7,724	34	36
Blackburn South	22	21	30.14	11,022	27	28
Box Hill	23	22	42.86	14,603	29	49
Box Hill North	21	21	28.45	12,467	23	26
Box Hill South	11	11	17.59	8,629	20	23
Burwood	25	22	72.89	12,543	58	72
Burwood East	29	28	36.58	10,778	34	36
Forest Hill	29	27	37.62	10,866	35	37
Mitcham	35	35	61.61	16,935	36	42
Mont Albert	8	8	3.51	4,879	7	7
Mont Albert North	10	10	29.70	5,805	51	56
Nunawading	30	30	34.91	12,203	29	33
Surrey Hills	5	5	2.69	5,415	5	5
Vermont	22	22	48.58	10,618	46	53
Vermont South	38	36	80.00	12,044	66	69
MUNICIPALITY TOTALS	360	349	609.95	171,167	36	41

Source: 2021 population, Estimated Resident Population, Community Profile, .id Consulting, accessed 10 July 2023. 2006 population, Whitehorse Open Space Strategy 2007, pp 44-45.

Looking at the change between 2006 and 2021, the total amount of open space relative to population has decreased from 41 sqm per person to 36 sqm per person. The largest change is in Box Hill, followed by Burwood and Vermont. In the areas with the least open space, there has been no change given that the population change in Mont Albert and Surrey Hills has been low.

The following table illustrates the provision of open space relative to population density, comparing the total ERP in 2021 and the forecast population in 2036.

1

Quantity of open space relative to ERP in 2021 and the forecast 2036 population in the City of Whitehorse

Suburb Name	No. of open spaces excl. restricted os	Total open space Ha (excl restricted o/sp)	Estimated Residential population 2021* ID Comm Profile	Open space sqm per person for ERP 2021	Forecast population to 2036	Open space sqm per person for ERP 2036
Blackburn	32	56.84	14,636	39	18,497	31
Blackburn North	19	25.96	7,724	34	8,156	32
Blackburn South	21	30.14	11,022	27	11,957	25
Box Hill	22	42.86	14,603	29	24,499	17
Box Hill North	21	28.45	12,467	23	14,053	20
Box Hill South	11	17.59	8,629	20	9,323	19
Burwood	22	72.89	12,543	58	14,863	49
Burwood East	28	36.58	10,778	34	16,835	22
Forest Hill	27	37.62	10,866	35	12,397	30
Mitcham	35	61.61	16,935	36	19,263	32
Mont Albert	8	3.51	4,879	7	5,692	6
Mont Albert North	10	29.70	5,805	51	6,074	49
Nunawading	30	34.91	12,203	29	15,074	23
Surrey Hills	5	2.69	5,415	5	5,574	5
Vermont	22	48.58	10,618	46	11,484	42
Vermont South	36	80.00	12,044	66	14,296	56
MUNICIPALITY TOTALS	349	609.95	171,167	36	208,037	29

Source: Estimated Resident Population 2021 and the forecast population 2036, Community Profile, .id Consulting, accessed 10 July 2023. Please note that this excludes the Suburban Rail Loop population projections prepared by the Victorian Government.

On a municipal-wide basis, the City of Whitehorse has 36 square metres per person. This has reduced from 41 square metres per person when the 2007 Strategy was prepared, which is shown in Table 3f. There are significant variations across the different precincts in 2021. Vermont South has the highest proportion of open space at 66 sqm per person compared with 5 sqm per person in Surrey Hills and 7 sqm per person in Mont Albert. As noted, this is based on historical patterns of urban development combined with the presence of natural features such as waterways that typically have more regional open space located along them compared to areas without any of the open space that forms part of the regional open space network.

Table 3g shows that going forward, if no additional open space is added to the network, the quantity of open space per person will continue to decrease to a municipal wide total of 29 square metres per person. This reflects the forecast residential population growth over 15 year planning period for this Strategy of 36,870. Precincts with higher levels of residential population growth will be impacted more than those with lower levels of growth. There is no accepted standard measure for the preferred square metre per person ratio of open space, however it is one of a number of factors that is considered in determining where new open space will be needed over the next 15 years.

In conclusion, this analysis shows there is a diversity in open space provision across each of the different suburbs in the City of Whitehorse, particularly the change between the western areas of the city where there is less open space compared to the eastern areas. The analysis demonstrates that as the population grows there is a need to plan ahead to improve the quality of existing open space to meet the higher levels of use that accompany population growth, along with identifying where new open space is required.

In established areas, the percentage varies based on a combination of factors including the presence of natural features such as waterways, the historical patterns of urban development including the type of land use and the topography. For comparative purposes we have included the quantity of open space in adjoining municipalities based on the Victorian Environmental Assessment Council (VEAC) Metropolitan Melbourne Investigation Final Report, August 2011 and shown in Table 3h below. This table shows that the figure of open space as a percentage of the total land area of the municipality varies, with Boroondara, Maroondah and Monash being very similar to Whitehorse. Banyule, Knox and Manningham all have higher percentages which is mainly due to the large areas of open space along major waterways including the Yarra River and the Dandenong Creek.

Table 3h *Quantity of open space as a proportion of land area in the adjoining municipalities*

Please note that the total quantities nominated for open space in each municipality in the table below is taken from the VEAC Report, as this is the only directly comparable data between the adjoining municipalities. The total open space for Whitehorse is different from the detailed assessment in this 2024 Strategy.

Municipality	Open space area (Ha)*	Total Municipal Area (Ha)**	Open space as a % of total Municipal area
Banyule	905.0	6,251	14.5%
Boroondara	578.2	6,017	9.6%
Knox	2,193.2	11,380	19.3%
Manningham	2,020.5	11,330	17.8%
Maroondah	616.3	6,136	10.0%
Monash	777.0	8,144	9.5%
Whitehorse	639.7	6,424	10.0%

* Source: VEAC Metropolitan Melbourne Investigation Final Report 2011

** Source: Total Municipal Area from .id Community Profile for each municipality

Accessibility to open space is a key influence on the use and benefit to the community that surrounds it, so this measure of open space needs to be considered in the context of other assessments including the gap analysis, availability of open space relative to population density and the quality and diversity of open space. This is consistent with the reference to the quantity of open space on page 18 of the *Open Space for Everyone – Open Space Strategy for Metropolitan Melbourne 2021, (DELWP)*.

3.5 Gap analysis

3.5.1 Overview

The gap analysis is an assessment of the spatial distribution of existing open space across the City of Whitehorse. It identifies whether there are locations in the municipality where residents and workers are not within a safe and easy walk of open space. This is determined by applying the walking catchments for each type of open space in the hierarchy. Refer to Section 3.3.3, Table 3a and Figure 3-4.

The ped shed catchment method of open space distribution analysis measures the walking distance along the street network, rather than a radial catchment distance. This more accurately reflects the actual walking distances to open space, particularly where the access point into open space reserve is quite limited as is the case for many open spaces in the City of Whitehorse. While this shows a degree of accuracy, it is also important to note that the ped sheds are generated by a GIS program, and the entry point from which it generates the walking distance is not always accurately on the edge of the title boundary. Therefore, a discrepancy of up to 40 metres or two to three house block frontages can be found in the mapping.

The walking catchments recognise barriers to safe and easy access. Safe and easy walking access is defined as walking along sealed footpaths with gradients less steep than 1 in 20 on predominantly local access streets where the traffic volumes and speeds are low. As noted in the community survey outcomes, walking in the local street network is the most popular form of daily exercise and is the most sustainable way for people to visit their local open spaces within walking distance.

Barriers to the access include crossing busy roads, railways and waterways. While a pedestrian overpass bridges or traffic lights may be present, they still form a barrier as it is not as straight forward, easy and safe to reach it. This can be a disincentive for someone to visit open space, and as noted earlier in Section 1.4 of this Strategy our communities are healthier and more sustainable if everyone is within a safe and easy walk of open space.

The distance that people will travel to reach an open space varies depending on their level of mobility, fitness and accessibility of the path network. This is the reason that the walking distances set for the smaller sized open space are shorter than for the larger open spaces, and overall the maximum distances used are 400 metres. While people who are active and fit can easily walk further than the distances nominated in the Table 3i below, the shorter distances are designed to address the core principles of equity and access for everyone.

The open space hierarchy is designed on the basis that people will walk further to reach open spaces where there are a range of activities, and they are likely to spend a longer time. Walking distances for the different types of open space in the hierarchy are described in Table 3i on the following page.

Table 3i **Open space hierarchy and walking catchments used in the ped shed analysis**

Hierarchy	Travel and walking catchments to open space
Regional	No specific travel catchment is included as this is provided for the Melbourne-wide population. This open space has a 400 metre walking catchment applied in recognition of the local informal, and/or incidental use of these reserves by the local community. Where there is an at-grade signalised crossing directly opposite the open space or a footbridge, then the walking catchment will extend across the arterial road to reach it.
Municipal	Municipal open space located within 1 kilometre travel catchment of dwellings and workplaces. Additionally, a 400 metre safe walking catchment applied to all Municipal open space in recognition they also provide for local and neighbourhood open space needs without crossing railways and arterial roads. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial road to reach it.
Neighbourhood	Neighbourhood open space within 400 metre safe walking catchment of dwellings and workplaces without crossing railways, major and arterial roads. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial or major road to reach it.
Urban Civic	Urban Civic open space within 400 metre safe walking catchment of dwellings and workplaces without crossing railways, major and arterial roads. Where there is an at-grade signalised crossing directly opposite the open space, then the walking catchment will extend across the arterial or major road to reach it.
Local	Local open space located within 300 metres safe walking distance from dwellings and workplaces, without crossing railways, collector roads, major roads and arterial roads. These catchments do not extend across these major roads when there is a signalised crossing.
Small Local	Small Local open space located within 200 metres safe walking distance from dwellings and workplaces, without crossing railways, collector roads, major roads and arterial roads.
Local Link	Local Links do not have a safe walking catchment applied to them as they are not destination open spaces

The ped shed has been applied across the open space network in the City of Whitehorse and this is illustrated spatially in Figure 3-5 on the following page.



3.5.2 Summary of the gap analysis

Regional and Municipal open space

In addition to walking catchments shown in Figure 3-4, travel catchments are applicable to the Regional and Municipal open space as shown in Table 3i. These broader travel catchments are not illustrated on Figure 3-4, however they have been applied and it confirms there are no spatial gaps in the provision of these spaces, meaning that everyone in the City of Whitehorse is within a one kilometre travel catchment of Regional or Municipal open space.

More specifically, this Strategy has looked at the distribution of Municipal and Regional open space with sporting fields. This was investigated specifically in response to the outcomes of the *City of Whitehorse Recreation Strategy 2015-2024*, which identified that 30 per cent of sports clubs in Whitehorse identified the need for additional playing fields. There are minor gaps in the spatial distribution of sporting fields in the following locations:

- In the northern part of Nunawading and Blackburn North near to Junction Road Reserve
- In the northern area of Mitcham near Yarran Dheran Reserve and Antonio Park
- Southeast area of Vermont near Dandenong Valley Parklands
- Western municipal boundary in Surrey Hills and Mont Albert in the vicinity of Lorne Parade Reserve.

To address these spatial gaps, and as part of implementing the Recreation Strategy, Council is currently undertaking further work to investigate provision of new sporting fields at Davy Lane Reserve, the western end of the Healesville Freeway Reserve and at Junction Road Reserve in Nunawading. Provision of additional sporting fields in these locations will address some of spatial gaps in the provision of sporting fields across the City of Whitehorse. In addition to this, the Recreation Strategy has identified other ways of increasing access to sporting fields including improving the quality of existing sporting fields to accommodate higher levels of use. Additionally, the Recreation Strategy identified the opportunity to investigate the provision of synthetic surfaces which are more durable and can accommodate higher levels of use, and actively seeking partnerships with the Department of Education to develop Joint Use Agreements. These opportunities will be addressed by the ongoing implementation of the Recreation Strategy. Refer to Recommendations in Section 5.4.3 of this Strategy.

Additionally, if opportunities arise for large areas of new open space to be made available through future redevelopments that are not currently anticipated by Council, then investigation of whether additional land should be sought for new Municipal open space is recommended. Refer to Overall Recommendation in Section 5, Recommendation No. 5.2-2.

Urban Civic, Neighbourhood, Local and Small Local open space

The ped shed analysis illustrates a diversity of open space hierarchy types across the Municipality with various sized gap areas. Broadly there are three categories of open space provision across the municipality: (a) suburbs that mainly have good coverage with only minimal gap areas, (b) suburbs that have good coverage with specific gap areas, and (c) suburbs that have a number of significant gap areas. These gaps are discussed

in more detail in the precinct assessments along with recommendations on how to the address them in Section 7 of this Strategy.

(a) Precincts (suburbs) without significant gap areas:

- Burwood East
- Mont Albert North
- Vermont
- Vermont South

(b) Precincts with some gap areas:

- Blackburn
- Blackburn North
- Blackburn South
- Box Hill
- Box Hill North
- Burwood
- Forest Hill
- Mitcham
- Nunawading
- Surrey

(c) Precincts with many gap areas:

- Mont Albert
- Box Hill South

The spatial distribution of open space is one of the factors that influences the precinct analyses of open space needs and the potential need for additional open space. Other factors that influence the open space needs assessment include:

- The diversity of size and quality of the existing open space
- The existing and proposed urban densities
- The scale of forecast population change
- The urban design and layout including the permeability of the local access street network
- Land use
- The presence of barriers to safe and easy walking access to open space
- The presence of ancillary open space
- The level of community satisfaction with the existing open space network.

In some locations additional open space may be proposed outside the gap areas where the forecast increase in urban densities will result in the existing open space being inadequate to cater for the increased numbers of people living and working around the open space.

Other options to address gap areas include:

- Expanding the size of existing open spaces to enlarge the walking catchments.
- Adding more entry points into existing open spaces to make them more accessible and address existing gaps.
- Improving the quality of the existing open space that is closest to the gap area.

- Improving pedestrian amenity in the local access streets to encourage people to walk further in the local street network to reach existing open space, where there are no major barriers to cross to reach the open space.
- Installing signalised pedestrian crossings over collector/major/arterial roads to assist addressing barriers to access.

Gaps in linear open space

The gap analysis specifically identifies gaps in the linear open space network. These have been identified in the following locations:

- Blackburn - Cootamundra Walk, between Station Street and Cootamundra Crescent.
- Burwood - Lundgren Chain between Sinnott Street and Cumming Street.
- Forest Hill - along Forest Hill Creek upstream of Masons Road Retarding Basin.

Recommendations to address these gaps are included in the precinct assessments in Section 7 of the Strategy.

3.6 Quality of open space

3.6.1 Overview

The quality of open space is important as it influences whether the open space makes a valuable contribution to the open space network.

The quality and character of each open space is influenced and formed by a range of factors including its inherent physical and natural qualities, the urban context, its size, form, use, position, design and history. These factors are measured against the outcomes of the community survey and other research including the biodiversity and nature conservation values.

3.6.2 Quality assessment and recommendations

The three main methods used to gather data on the quality of open space are the site assessments; the community and City of Whitehorse stakeholder engagement outcomes; and the background document research.

During the site assessments each open space is evaluated against the same set of criteria in relation to the following:

- Location
- Existing landscape character and overall condition
- Topography and views
- Adjoining land use
- The urban context and influences including built form, public access points and interface treatments
- Forecast change
- Existing infrastructure and facilities

- Vegetation character and values.

Following the site assessment work, the background research and consultation outcomes then inform the quality and context of each individual open space.

The quality of each open space is also assessed in the context of the network as a whole, both in relation to the existing conditions and also in the context of the forecast change that is planned over the next 15 years. If the quality of the open space is assessed as being adequate, then no specific action or upgrade works are noted and the action will say 'continue to maintain'. Where the quality of the open space is assessed as being inadequate, recommendations are developed to provide guidance on the extent of change proposed. This may include a minor upgrade to existing facilities or a major change to the facilities and/or the landscape character and function of the open space, and in some locations expansion to its size.

Action Plans by precinct for all the existing open spaces in the municipality are included in Section 7 of this Strategy.

3.7 Influences on open space character and quality

A number of Council policies influence the open space character and quality including the *Whitehorse Urban Forest Strategy*, the *Whitehorse Climate Response Strategy 2023-2030*, the *Integrated Water Management Strategy 2022-2042 (IWMS)*, the *Biodiversity Strategy* and the *Environmentally Sustainable Design Policy for Council Buildings and Infrastructure*. In terms of open space planning, there is some overlap of strategy actions and desired outcomes. These strategies will influence the ongoing decisions about the future character, quality and design of open space.

The Whitehorse Urban Forest Strategy (UFS) sets a vision for '*A diverse, healthy and resilient urban forest*'. The City of Whitehorse has experienced a decline in canopy cover with urban densification, growing population and climate change placing pressure on the health and extent of the urban forest. Key objectives of the UFS include to grow more vegetation on private and public land; protect and extend native bushland to improve habitat connectivity; maximise the health, vigour and condition of the Council managed vegetation; and strengthen the requirements to protect and renew canopy cover on private land.

The UFS has a target to increase canopy cover from 18 per cent in 2018 to 27 per cent by 2031 and to 30 per cent by 2050. The distribution of canopy cover varies across the municipality. Generally the areas with lower percentage of canopy cover correlate with areas of higher density development and also the non-residential areas including the commercial and industrial precincts. Additional public open space in these areas, along with a focus on the urban greening across the private and public realm, will increase canopy cover, decrease urban heat, and improve liveability and sustainability. The future design of public open space will prioritise the inclusion of large canopy trees and the

minimise the removal trees to support the objectives of the UFS. Inclusion of vegetation and greening is most important in existing and new open space in medium and high density areas, making the Urban Civic open space a high priority for a focus on integration of vegetation and urban greening. The distribution of canopy cover is illustrated in Figure 3-4 below.

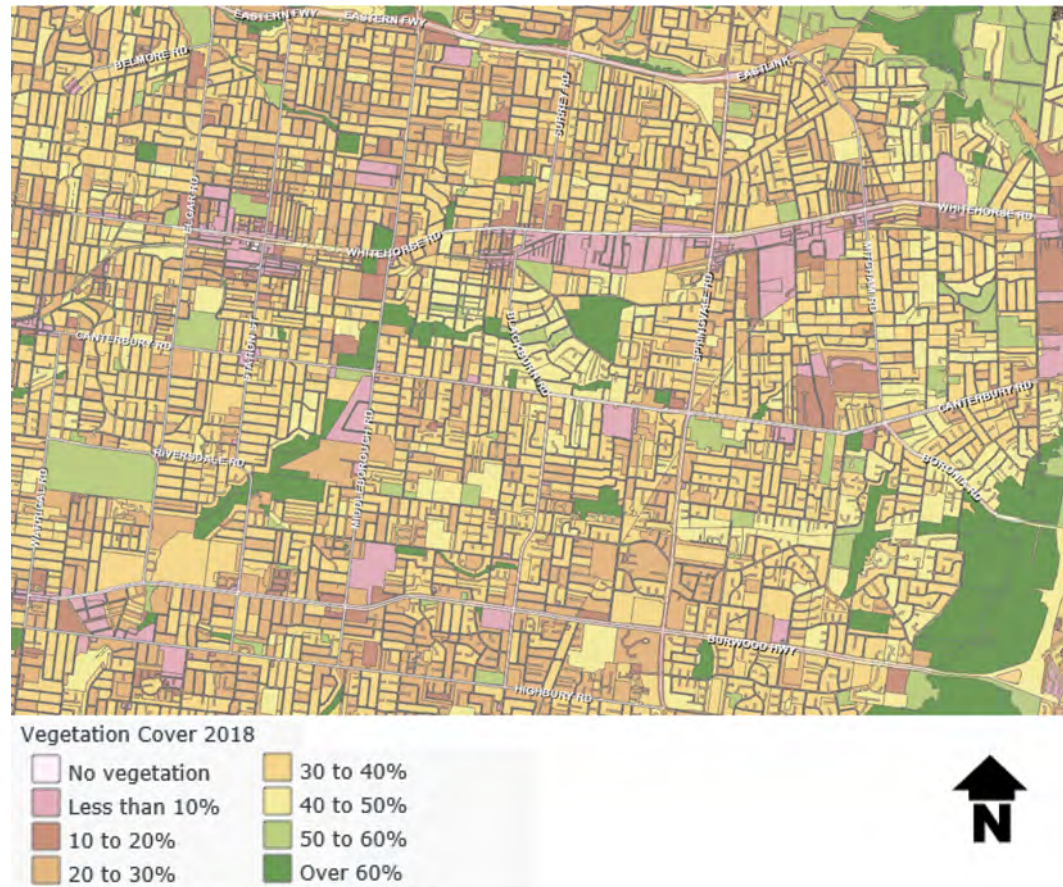


Figure 3-4 Distribution of tree canopy cover (over 3 metres) in the City of Whitehorse

Source: Whitehorse Urban Forest Strategy 2021-2031

Open space will have a key role in mitigating urban heat, which ties in well with the UFS, the *Whitehorse Integrated Water Management Strategy 2022-2042* (IWMS) and the *Whitehorse Climate Response Strategy 2023-2030* (CRS). The IWMS addresses all elements of the water cycle including the waterways, wastewater, groundwater, rainwater, stormwater drainage and drinking water. Water is critical to the health of the open space network including the waterway corridors. With the aim to increase the provision of open space, especially in locations with higher urban densities, integrating sustainable water reuse into the open space will assist in supporting cooler and greener spaces in the higher density precincts. The IWMS includes UHI mapping and this has been extracted and included in Figure 3-5 on the following page. The dark red areas on the mapping indicate the hottest areas and the lighter orange and yellow areas are cooler. The cooler areas generally correlate with the presence of the waterways and areas of greater tree canopy cover, particularly areas with greater than 30 per cent tree canopy cover, compared to those areas with less as shown in Figure 3-4 above.

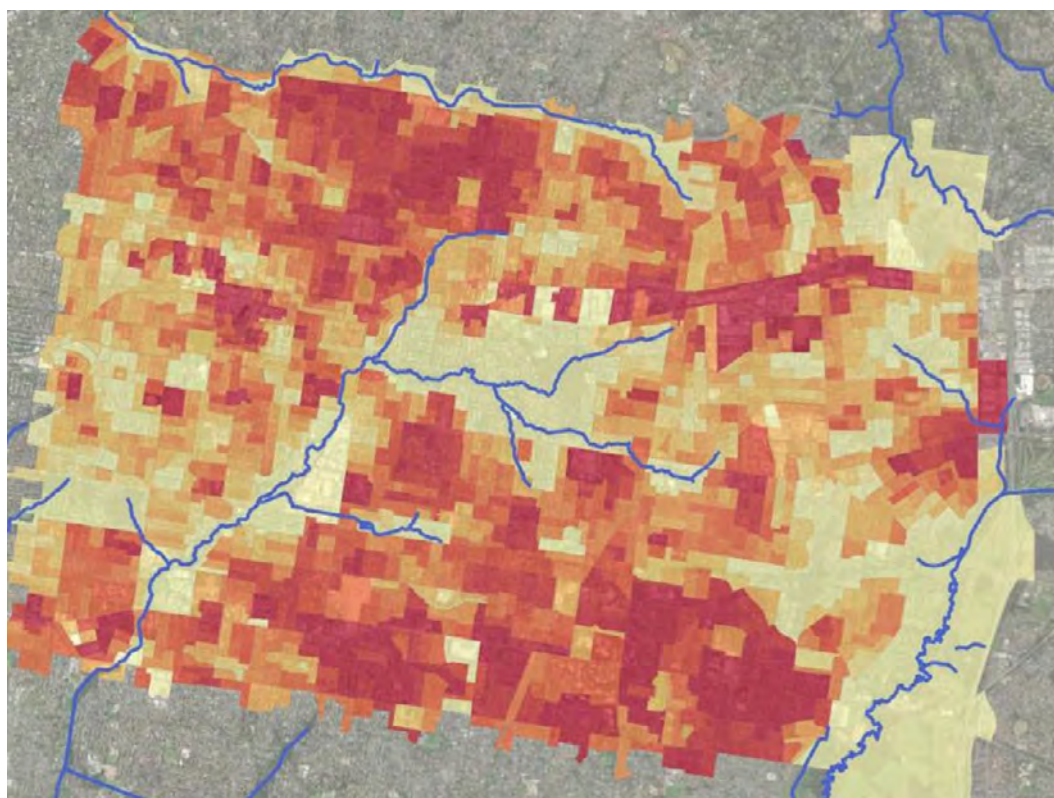


Figure 3-5 Mean Urban Heat Islands (UHI) 2015 to 2016 summer, where UHI is the difference in Land Surface Temperature from a non-urban baseline (DELWP, 2018b),
 Source: *Whitehorse Integrated Water Management Strategy 2022-2042*, page 20

The CRS highlights the importance of reducing carbon emissions to limit temperature rise to 1.5 degrees Celsius above pre-industrial levels and achieve the Whitehorse 2040 Community Vision. This can be achieved with collective action by everyone and acting locally is a good place to start. Open space plays a key role in the many of the initiatives including:

- Encouraging walking and cycling through and within public open space
- Planting additional trees in open space to assist with carbon sequestration
- Providing more public open space as forecast population growth and change occurs
- Integrating sustainable water re-use in future open space projects to maximise urban cooling and support health and growth of large canopy trees
- Provide cool spaces for the community to retreat to during periods of extreme heat
- When infrastructure and buildings require upgrade or replacement in open space ensure future designs are consistent with the *Whitehorse Environmentally Sustainable Design Policy for Council Buildings and Infrastructure* and more broadly best practice principles to minimise their contribution to climate change
- Improving the local microclimate and sustainability to protect and expand biodiversity and natural values

The Whitehorse Urban Biodiversity Strategy for Council Managed Open Space, Streetscapes and Community Facilities was prepared by the Whitehorse Urban Biodiversity Steering Group in consultation with Practical Ecology. Biodiversity is defined to include all existing indigenous flora and fauna (including animals, insects and other invertebrates) and fungi that are indigenous to the municipality as well as modified urban habitats and landscapes that these species rely on. The strategy has been helpful in updating descriptions of the natural and biodiversity values in the City of Whitehorse.

These are referenced where required in the precinct assessments and recommendations in Section 7.

The Biodiversity Strategy has determined that undertaking strategic vegetation management works that conserve and enhance biodiversity assets and urban habitat across the open space will provide the greatest single benefit to biodiversity in the City of Whitehorse. The strategy focuses on protecting the existing biodiversity values in the Council owned and managed open space. This includes identifying and mapping the biodiversity values in the open space network and identifying appropriate actions to manage biodiversity into the future. The management actions focus on vegetation management as fauna management is more difficult in the urban context.

The City of Whitehorse is an undulating landscape that is characterised by two dominant vegetation communities and a series of creek lines and waterways. There is very little of the original vegetation left with the core areas being located around Mullum Mullum Creek nearer the Eastlink Tunnel, Blackburn Lake Sanctuary, Bellbird Dell, Campbells Croft and Wattle Park. The IWMS highlights the importance of supporting green infrastructure that will reduce our impact on the local waterways. This will help protect and improve the ecological and social values of the waterways by helping naturalise stream flows, reduce pollution and mitigate erosion. A priority action is to work with the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation and Traditional Owners to identify opportunities for genuine engagement and outcomes for the waterways.

In summary, the ongoing implementation of Council's current UFS, IWMS and CRS will play a key role in shaping and influencing the future quality and character of the Whitehorse open space network. Successful implementation of this Strategy combined with the others will strengthen the open space network to have a greater role in supporting biodiversity, urban greening and cooling and making a meaningful contribution to the liveability and community health and wellbeing.

4. Changes in the City of Whitehorse and implications for open space planning

4.1 Overview

This population and development changes that are taking place in the City of Whitehorse, or that will take place in the future, influence planning for open space in multiple ways. Trends in population growth and population characteristics, and in land use and development, will inform how much open space will be needed in the future. Increasing development densities and climate change will influence the location, design and management of that open space. Changes include:

- Urban planning documents that respond to population growth, guide locations for more intensive development and attract investment in new projects.
- Increasing development densities along with demographic changes that will increase the need for additional open space and Council expenditure on capital works to upgrade reserves, and respond to increased levels of use.
- Major transport projects constructed by the Victorian Government that will influence population and development decisions in future and current open space reserves.
- Construction of taller buildings overshadowing open space and the need to maintain sunlight access during Winter months.
- Climate change increasing the urban heat island effect and affecting water use, vegetation selection and management including large canopy trees, more sustainable use of materials and costs of maintaining open space.

4.2 Changes in population and urban development

4.2.1 Overview

The Victorian Government published a summary overview of ongoing changes in the Melbourne Eastern Metro region, which includes the City of Whitehorse. This provides a high level overview of the government's perspective on future population growth and development, and it mirrors Council policies to a large degree. As the influence of the Suburban Rail Loop (SRL) project increases, differences in the approaches to planning for Box Hill and Burwood have emerged, along with the long-term retention of open space reserves in Box Hill and Burwood due to construction of major transport projects.

Referring to both Victorian Government and Council planning documents and on-ground research, a number of population and development changes have been identified for consideration in open space planning for the 15 year Strategy time period.

Victoria's Housing Statement sets a goal of 800,000 new homes over a decade, with a high proportion of dwellings, including high and medium density projects, to be constructed in established suburbs such as those located in Whitehorse. It is noted that the major east-west arterial roads and development corridors, SRL precincts and large strategic sites already do or are able to accommodate higher dwelling densities. These areas are likely to be a focus of the Housing Statement's implementation in Whitehorse.

- Construction of the SRL stations, will significantly increase future housing, employment and development densities in the Box Hill Metropolitan Activity Centre and Burwood Major Activity Centre. Precinct planning for the Box Hill and Burwood SRL locations is currently being undertaken by the SRL Authority for land within approximately one kilometre of the new rail stations.
- Significant residential and commercial medium and high density development is encouraged along the major east-west arterial roads and development corridors, including Whitehorse Road and Burwood Highway and to a lesser extent Canterbury Road. Some locations are already experiencing this more intensive development, particularly in Blackburn.
- Construction of both residential and commercial buildings is occurring in activity centres such as the Nunawading Megamile precinct and Mitcham Station precinct.
- Major residential development is located on strategic development sites across the municipality. Currently these include the former Burwood Brickworks in Burwood East, the former Daniel Robertson Brickworks in Nunawading and the former Global Studios Site in Burwood East.
- As a result of the extensive residential development, there is greater diversity and choice in the housing stock compared to when the 2007 Strategy was being prepared.

Local components of Victorian Government transport projects are impacting Council's open space network directly.

- SRL construction will result in the loss or reduced area of some of Council's current open spaces. The full extent and duration of the impact on open space is not yet clear.

- Construction of the North East Link/Eastern Freeway Upgrade is leading to potential loss of Council open space. The extent of Council land needed for the freeway and consequent loss of vegetation is still to be confirmed. Council is continuing to advocate on the community's behalf regarding the impacts as noted earlier in Section 3.2.4.
- Mont Albert and Surrey Hills railway stations have been replaced with the new Union railway station to serve this location. There have been effects on Council's current open space with the construction of this project. This includes a significant loss of canopy tree cover along the railway corridor without the potential to reinstate trees in most locations due to the need to protect essential rail infrastructure.
- The Victorian Government has a goal of achieving 30 per cent canopy tree cover for the Eastern Metro region. Victorian Government transport projects are resulting in a large number of mature tree removals. The Whitehorse Urban Forest Strategy will primarily address canopy cover, however it is acknowledged that open space has a key role in providing space for healthy large canopy trees to grow, and this is a key criteria for new open space.

4.2.2 City of Whitehorse population

The ABS Census and subsequent population analysis by Council's demographers (.id Consulting) provide a picture of who lives in the City of Whitehorse and their characteristics. Population data includes residential forecasts for the City of Whitehorse as a whole and for the open space planning precincts of the Strategy.

There is less information about the workers in the City of Whitehorse. Some data is available from .id Consulting and some from other Council research. This Strategy uses information about economic activity and employment where it is available.

Population information is important in planning for the open space needs of Whitehorse municipality. In considering population data, the 2007 Strategy used 2006 as the base year and the 2006-2021 forecast period. This Strategy uses 2021 as the base year and the 2021-2036 forecast period as a basis for open space planning over a 15 year period that will commence with the adoption of the Strategy.

Resident population in the City of Whitehorse

Based on the ABS Census, the Estimated Resident Population (ERP) of the City of Whitehorse in 2021 was 171,167. This is an increase of 25,529 residents since 2006 when the 2006 census population of 149,638 was used in the 2007 Strategy. The increase of 25,529 residents is over twice the original growth of 11,788 people that had been forecast for the 2006-2021 period.

The distribution of the residential population across the City of Whitehorse precincts in 2006, 2021 and the 2036 forecast for each precinct are shown in Table 4a. The total residential population increase of 24,529 people between 2006 and 2021 represents a 17 per cent increase. The increase between 2021 and the 2036 population forecast is 36,870 people, or 22 per cent.

Table 4a Resident population in the City of Whitehorse: 2006, 2021 and 2036.

Area	2006 (2007 Strategy)	2021 population	2036 forecast	Increase 2006- 2021	Increase 2021- 2036
Blackburn	12,680	14,636	18,467	1,956	3,831
Blackburn North	7,134	7,724	8,156	590	432
Blackburn South	10,621	11,022	11,957	401	935
Box Hill	8,737	14,603	24,499	5,866	9,896
Box Hill North	10,966	12,467	14,053	1,501	1,586
Box Hill South	7,751	8,629	9,323	878	694
Burwood	10,082	12,543	14,863	2,461	2,320
Burwood East	10,115	10,778	16,835	663	6,057
Forest Hill	10,064	10,866	12,397	802	1,531
Mitcham	14,783	16,935	19,263	2,152	2,328
Mont Albert	1,731	4,879	5,692	3,148	813
Mont Albert North	5,346	5,805	6,074	459	269
Nunawading	10,597	12,203	15,074	1,606	2,871
Surrey Hills	5,199	5,415	5,574	216	159
Vermont	9,218	10,618	11,484	1,400	866
Vermont South	11,614	12,044	14,296	430	2,252
City of Whitehorse	146,638	171,167	208,038	24,529	36,870

Source: 2021 population and 2036 forecast, .id Consulting, June 2023. 2006 population, Whitehorse Open Space Strategy 2007, pp 44-45.

Figure 4-1 shows how the residential population is forecast to be distributed in 2036.

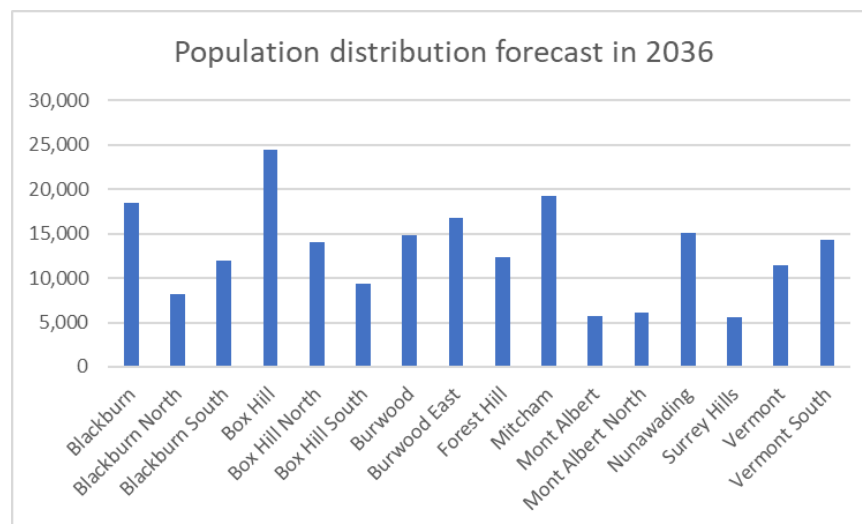


Figure 4-1 Forecast locational distribution of residential population in 2036

Source: 2036 population forecast, .id Consulting, June 2023.

Whitehorse Community Profile

The 2021 ABS Census has updated important data about the people who live in the City of Whitehorse. Highlights from the Community Profile include the following:

- The median age is 39. There is no significant change from the previous census. This age is consistent with the median age of 38 in Victoria and Australia.
- Couples with children make up 33 per cent of all households. This is slightly higher than the rest of Victoria (31 per cent) and Australia (30 per cent).
- About 11 per cent of households include older couples without children. This is similar to the rest of Victoria and Australia (both 10 per cent).
- Lone person households make up 24 per cent of households. This is an increase of 1.3 per cent compared to the last census. This number is similar to the rest of Victoria (25 per cent) and Australia (24 per cent).
- There has been a 2.2 per cent increase in the number of renters to 28 per cent of households. This is the same number of renter households as Victoria and slightly below Australia (30 per cent).
- There has been a 4.8 per cent increase in the number of dwellings classified as medium and high density to 38 per cent of all dwellings. (Note: this may include units, apartment buildings and high rise towers.) This compares to 28 per cent across Victoria and Australia.
- There has been a 3.1 per cent increase in the number of people born overseas to 42 per cent of the population. This is higher than Victoria (30 per cent) and Australia (28 per cent).

Employment population in the City of Whitehorse

The National Institute of Economic and Industry Research (NIEIR) provides municipal level data on employment. It estimates that there were approximately 84,000 jobs in the City of Whitehorse in 2021. This number compares to 73,000 jobs in 2006.

More detailed municipal information is available by employment sectors for the years 2011 to 2031 only.

- Health and education continue to be the major drivers of job growth with over 30,000 people expected to be employed in these sectors by 2031 compared to 25,000 in 2021.
- Personal services industries are also forecast to grow with 30,000 jobs in 2031 compared to between 25,000 and 30,000 jobs in 2011.
- Knowledge intensive industries are forecast to grow to over 25,000 jobs compared to between 20,000 and 25,000 jobs in 2011.
- The industry sector is the only jobs generator in decline, however there are still anticipated to be around 10,000 jobs in this sector by 2031, with a similar number estimated for 2021.

In addition to commercial and mixed use areas, the Tally Ho Business Park and the eight industrially zoned precincts are significant generators of employment in the City of Whitehorse.

4.2.3 City of Whitehorse development framework

The overall development framework for the City of Whitehorse is the Strategic Framework Plan as shown in Figure 4-2.



Figure 4-2 Strategic Framework Plan, Proposed Whitehorse Planning Scheme Clause 02-04

The Council's Strategic Framework Plan (Figure 4-2) is implemented in greater detail through a mix of Council policies, strategies, structure plans and planning scheme zones.

Residential land is included in the Residential Growth Zone (RGZ), General Residential Zone (GRZ) and Neighbourhood Residential Zone (NRZ) depending on the level of development allowed. Commercial mixed use areas are included in the Commercial 1 Zone (C1Z). Industrial areas are included in the Industrial 1 and 3 Zones (IN1Z, IN3Z). Design and Development Overlays (DDO) and Development Plan Overlays (DPO) apply to activity centres and specific sites.

Residential development in the City of Whitehorse

Based on the last ABS Census, there were 71,522 private dwellings in the City of Whitehorse in 2021. This is an increase of 11,167 dwellings since 2006, close to twice the dwelling forecast of 6,163 used in the 2007 Strategy. It is noted that these are private dwellings as defined by the ABS.

In addition to private dwellings, approximately 3,900 people live in non-private accommodation with a level of shared facilities (e.g. kitchens, bathrooms). This includes accommodation such as an aged care facility, rooming house or form of student or staff accommodation.

The distribution of the dwellings across Whitehorse precincts in 2006, 2021 and the 2036 forecast for each precinct are shown in Table 4b. The forecast to 2036 does not factor in the SRL precincts as no detail has been released to support forecasting for the interim years to 2051.

As indicated by the 2036 forecast, substantial development of residential dwellings is anticipated in the Box Hill Metropolitan Activity Centre, other large activity centres, major strategic development sites, and the Whitehorse Road and Burwood Road corridors.

Table 4b Dwellings in the City of Whitehorse: 2006, 2021 and 2036

Area	2006 (2007 Strategy)	2021 dwellings	2036 forecast	Increase 2006-2021	Increase 2021-2036
Blackburn	5,200	6,205	7,731	1,005	1,526
Blackburn North	2,766	2,928	3,099	162	171
Blackburn South	4,189	4,457	4,703	268	246
Box Hill	3,885	7,777	12,772	3,892	4,995
Box Hill North	4,535	5,101	5,788	566	687
Box Hill South	3,230	3,540	3,820	310	280
Burwood	4,103	5,505	6,256	1,402	751
Burwood East	3,938	4,468	6,592	530	2,124
Forest Hill	4,062	4,533	5,058	471	525
Mitcham	6,144	7,033	8,272	889	1,239
Mont Albert	1,907	2,139	2,544	232	405
Mont Albert North	2,114	2,370	2,545	256	175
Nunawading	4,501	4,953	6,225	452	1,272
Surrey Hills	2,050	2,140	2,245	90	105
Vermont	3,683	3,930	4,300	247	370
Vermont South	4,052	4,443	5,076	391	633
City of Whitehorse	60,355	71,522	87,026	11,167	15,504

Source: 2021 dwellings and 2036 forecast, .id Consulting, June 2023. 2006 dwellings, Whitehorse Open Space Strategy 2007, pp 44-45.

Whitehorse Housing Strategy 2014

The Housing Strategy provides an understanding of where the City of Whitehorse population is housed now and in the future. This is essential to the analysis and planning for future open space and has informed the precinct analysis and recommendations in Section 7 of this Strategy.

The Housing Strategy was prepared with 2013 population data and used a forecast increase of 28,230 people to be accommodated in Whitehorse between 2011 and 2036 resulting in a total 2036 population of 187,222. This number has increased with the forecast of 208,038 people in 2036 (refer to Table 4a) which is 20,816 more than the 2036 forecast population in the Housing Strategy. The forecast for 12,997 additional dwellings for the same period has increased with the forecast of 87,026 dwellings in 2036 (refer to Table 4b).

Despite some changes in the actual population numbers, the Housing Strategy provides a policy framework to encourage and support housing in the City of Whitehorse that meets resident needs by adopting policies about the location, diversity, sustainability, affordability and good design of housing. Policy for development locations, quality of the built environment and neighbourhood character have been integrated into the Whitehorse Planning Scheme, Housing Framework Plan (refer to Figure 4-4), structure planning for activity centres and strategic development sites, and built form controls for medium to high density precincts.

The Housing Strategy also identifies key issues around diversity and affordability. Households are changing. There are barriers for some migrant residents in accessing housing. There is high demand for rental housing that puts pressure on affordability. Student housing is an issue for the Deakin University Burwood Campus and Box Hill Institute of TAFE. A focused review of student accommodation (SGS Economic and Planning, June 2018) indicates that students live in on-campus residential colleges, purpose-built accommodation, rooming or boarding houses, open market housing and informal housing arrangements. Housing diversity, development intensity and household ability to pay are all considerations when planning for this Strategy.

In terms of residential growth, the Housing Strategy identifies three housing change areas within the City of Whitehorse. These are shown in Figure 4-3:

- Limited Change areas (shown in green) where the neighbourhood, environment or landscape character is protected and have the lowest degree of residential growth.
- Natural Change areas (shown in pale blue) allow moderate housing growth and medium density housing but not apartments.
- Substantial Change areas (shown in brown) provide for housing growth with increased densities and are generally within designated structure plan areas, around most train stations, adjoining tram routes and larger activity centres.

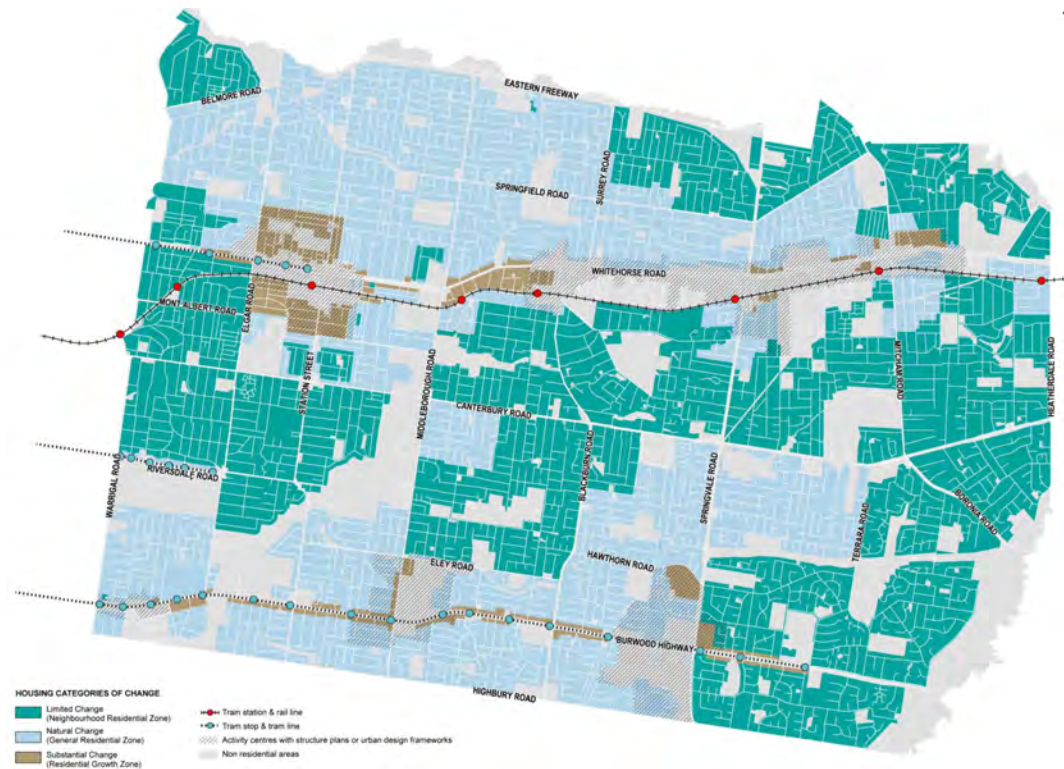


Figure 4-3 Housing Framework Plan, Whitehorse Housing Strategy, 2014

The different densities in Figure 4-4 reflect the overall policy approach shown in Figure 4-3. Most of the new housing and more diverse housing types are to be constructed in locations along Whitehorse Road and Burwood Highway (including activity centres) and on individual strategic development sites. These are designated as Substantial Change areas (shown in dark blue). Natural Change areas (shown in lighter blue) are in established residential neighbourhoods. The Limited Changes areas (shown in pale blue) represent locations with identified garden or bush characters that are to be protected.

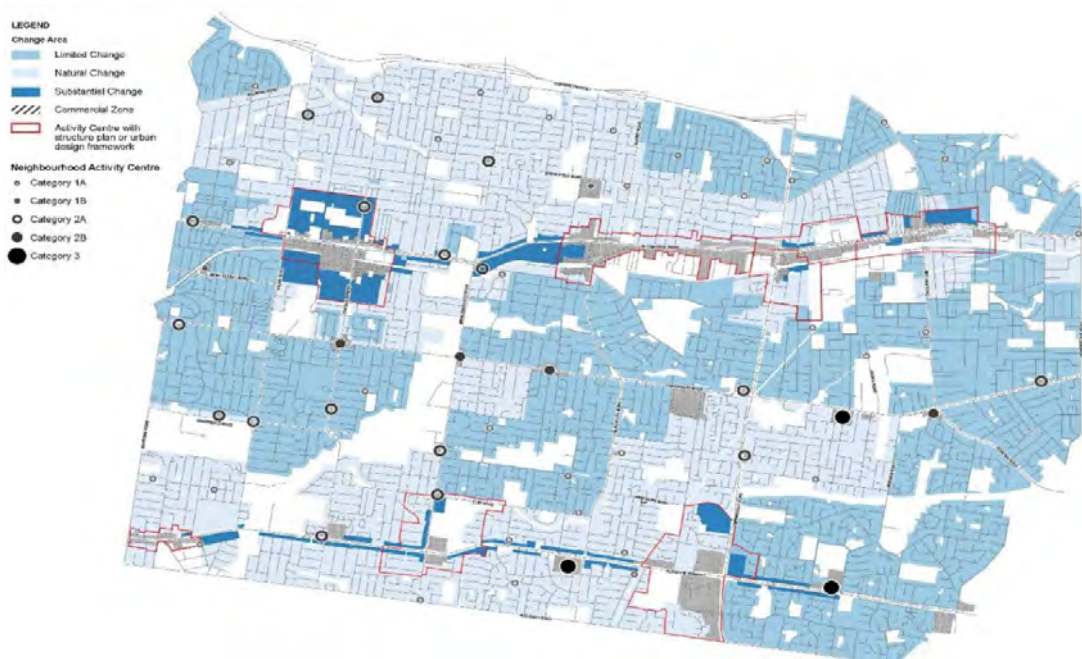


Figure 4-4 Housing Framework Plan, Proposed Whitehorse Planning Scheme Clause 02-04

At the end of this Strategy's planning period, taking account of the Housing Strategy and its implementation through the Whitehorse Planning Scheme, the forecast distribution of dwellings across the different precincts is forecast to be as shown in Figure 4-5.

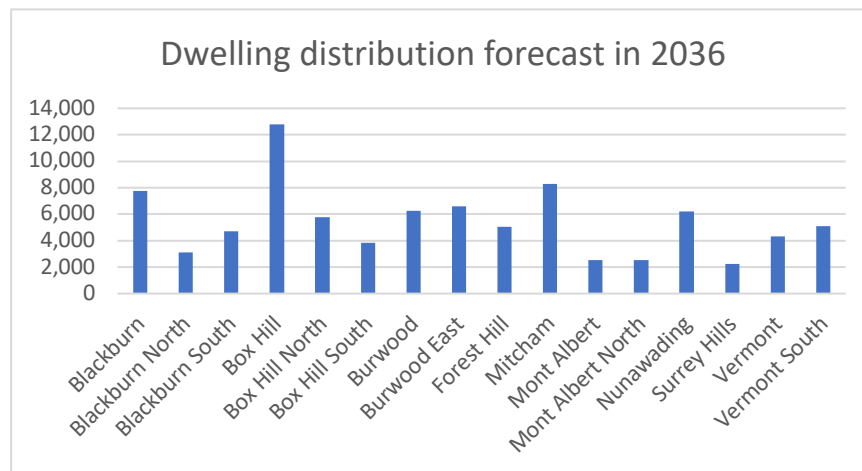


Figure 4-5 Forecast locational distribution of dwellings in 2036.

Source: 2036 dwelling forecast, .id Consulting, June 2023.

Whitehorse Residential Corridors Built Form Study 2019 (Amendment C220)

Amendment C220 introduced built form controls in the Residential Growth Zone (RGZ) where there is a sensitive interface to less intensively developed residential areas. A Design and Development Overlay Schedule 11 (DDO11) is designed to work with Clause 55 (ResCode) for buildings 4 storeys or less and Clause 58 (Apartment Guidelines) for buildings taller than this (5 and 6 storeys). New design elements include greater building setbacks, over-shadowing and interface provisions, and landscaping.

Industrial development in the City of Whitehorse

The City of Whitehorse has eight precincts that are set aside as industrial land:

- Joseph Street in Blackburn North
- Lexton Road in Box Hill North
- Blackburn south of Whitehorse Road
- Cook Road in Mitcham
- Rooks Road in Nunawading and Mitcham
- Middleborough/Clarice Roads in Box Hill South
- Redland Estate in Vermont and Mitcham
- Evans/Ireland Street in Burwood.

Council's policy is to protect the industrial precincts for continued non-residential uses. For the spatial locations of the industrial precincts, refer to Figure 4-6 from the Whitehorse Industrial Precinct Review.

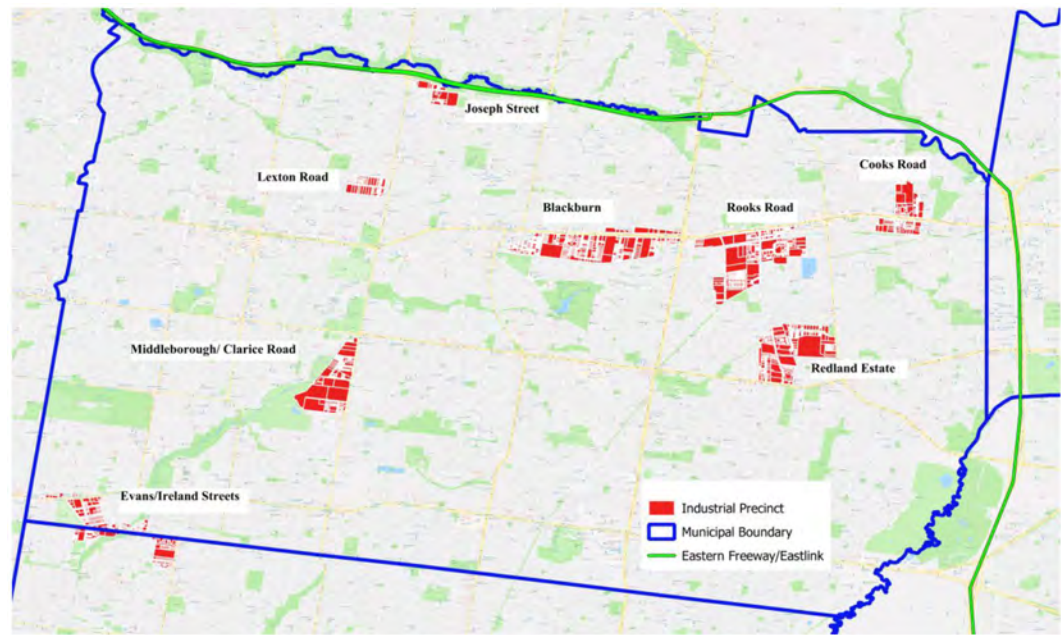


Figure 4-6 City of Whitehorse Industrial Precincts

Source: Whitehorse Industrial Precinct Review 2019 Blair Warman Economics

Based on ABS Census data in 2019 (Blair Warman Economics, 2019), around 20 per cent of workers in the industrial precincts lived in the City of Whitehorse. Travel to work data for these employees indicated that they travel more than 2 km to work, so outside of their immediate neighbourhood. Across all industrial precincts, only 16.2 per cent of workers travel to their employment from within 5 km.

Where the industrial precincts are changing to incorporate office developments, the Strategy includes consideration of the open space needs of workers given the change to indoor based work rather than the physical work associated with manufacturing.

Commercial and retail development in the City of Whitehorse

Commercial and retail development the City of Whitehorse is generally located in the activity centres. These range from the largest and most significant centre, the Box Hill Metropolitan Activity Centre, to the small neighbourhood shopping centres distributed throughout the municipality. Refer to Figure 4-2.

The activity centres encourage walkable access to homes, jobs, commercial / retail and community services, and public transport within the activity centre. A focus of this Strategy is to ensure that the people who live and work in these centres have walkable access to public open space.

Activity centres in the City of Whitehorse

The descriptions of the City of Whitehorse activity centres are from proposed Clause 02.03-1 of the Whitehorse Planning Scheme.

Box Hill Metropolitan Activity Centre (MAC)

The Box Hill MAC (the MAC) provides retail, commercial, educational, health, community, civic, entertainment and recreational facilities for the regional population, as well as a hub for local community activities and public transport. Plan Melbourne also designates a Health and Education Precinct within the MAC. Box Hill provides significant opportunities for investment in retail, public transport, health, justice, education, entertainment, higher density residential development and public realm improvements to support growth.

Burwood East-Tally Ho Major Activity Centre

The vision for the Burwood East-Tally Ho Major Activity Centre is to maintain and enhance its primary role as a key eastern suburban office and technology hub and meet the needs of the local resident and worker population. It has good transport linkages and provides a large-scale office environment with high quality built form set in extensive landscaped gardens. There is an opportunity to support and complement the office precincts with convenience retail, housing, hospitality and associated infrastructure.

Burwood Heights Major Activity Centre

The Burwood Heights Major Activity Centre includes the Burwood Heights Shopping Centre, a 20-hectare former brickworks site, the RSPCA, commercial uses, a Melbourne Water retarding basin and surrounding residential areas.

The former brickworks site is a new mixed use development, providing residential, retail, entertainment, commercial, community services and leisure opportunities.

Forest Hill Chase Major Activity Centre

The Forest Hill Chase Major Activity Centre is a preferred location for convenience and comparison retail, commercial, cinema and entertainment activities.

Nunawading Major Activity Centre

The Nunawading Major Activity Centre (which encompasses MegaMile) is one of Melbourne's largest shopping districts with a focus for restricted retail and motor vehicle sales. The centre is identified as one of the City of Whitehorse's main retail strengths, as a regional restricted retail destination.

The centre comprises MegaMile (East and West precincts) and the Nunawading station precinct. In addition to restricted retail, MegaMile West will accommodate a broader range of uses, including commercial activities and a consolidated residential area along the north side of Whitehorse Road in Blackburn. The centre also has strong links with the adjoining Blackburn and Mitcham Neighbourhood Activity Centres which provide a supporting role.

Blackburn Neighbourhood Activity Centre

The Blackburn Neighbourhood Activity Centre will strengthen its role as an urban village focused around the Blackburn Railway Station and Blackburn Station Shopping Centre, having a strong identity as a local shopping village and community meeting place. A suitable mix of retail, office, community and higher density residential uses will add to its vibrancy and activity, as will the provision of adequate parking along with improved connections between the north and south sides of the railway line and surrounding areas. Residential and commercial growth is directed to the northern part of the activity centre in order to preserve the village feel of areas to the south.

The Queen and Albert Streets Area within the centre has been identified as an appropriate location for office development, being surrounded by commercial uses and in proximity to the railway station. However, it is important that this area integrates with the shopping centre to the south and is of a scale that is compatible with the role of the activity centre.

Neighbourhood activity centres

There are 60 neighbourhood activity centres within the municipality. They fulfil an important social and community role, contribute to local service provision, vibrant local economies and provide opportunities for a greater diversity of housing choices. Some of the centres may function more fully as mixed use centres with improved amenity that could include meeting places such as cafes, community facilities, small scale residential development in the form of shop-top housing and public realm improvements.

Strategic development sites

Former Burwood Brickworks site

The former Burwood Brickworks site at 78 Middleborough Road, Burwood East is a major strategic development site.

The most recent Development Plan for this site was approved on 27 December 2018. The plan includes a list of outcomes to be delivered.

- Rehabilitation and regeneration of a local long term undeveloped site.
- Diverse mix of housing to cater for a variety of household types – between 850 and 950 homes comprising apartments, terrace housing and detached and semi- detached homes.
- Low rise apartments concentrated around the retail hub with a maximum height of 6 storeys.
- Retail and social hub fostering social interaction and engagement – 10,500 square metres of retail with food and beverage activating an urban plaza
- Usable high value open spaces for the whole community.
- Cycle connections and pedestrian prioritisation encouraging healthy lifestyles
- Sensitive interfaces and transitions with compatible development forms and scales.
- New infrastructure and amenities that service the broader community
- Commitment to achieving a 5 star Greenstar Communities certification.

Open space inclusions are addressed in the Development Plan and included as follows:
The proposed open space concept has been guided by the requirements of the City of Whitehorse Open Space Strategy. The strategy clearly defines the open space requirement and hierarchy for this redevelopment site. The development proposal has interpreted the requirements as follows:

- *A central urban plaza that is a civic space.*
- *A central Local Open Space Reserve - containing a waterbody, retarding basin and formally planned and laid out park facilities.*
- *Local Open Space areas - formal open space areas that are neighbourhood parks.*
- *Small Local Open Space areas - that are informal bushland areas or neighbourhood parks.*
- *Linking spaces that provide local connections.*

The total proposed open space provision is approximately 2 Ha and is to be at least 10% of the total site area. Open space provision is subject to further detailed design and Council approval.

It noted that Melbourne Water has deleted the requirement for the water body retarding basin.

Former Daniel Robertson Brickworks site

The former Daniel Robertson Brickworks site at 56-74 Station Street, Nunawading is a major strategic development site.

The approved Stage 1 plan is dated 11 July 2017. Construction is just beginning on this site. According to the property sales information it provides:

- Approx 210 apartments in 6 to 10 storey buildings.
- 173 townhouses.
- 10, 530 sq m of retail & commercial centre.
- 3,000 sq m of public open space.
- 2,400 sq m of communal open space.
- Childcare centre.
- Convenience retail / shops.
- Café.
- Gymnasium.
- Community park.
- Cycling & pedestrian access.
- Landscaping.

The Stage 2 plan is in draft form. It proposes development of:

- Mixed use development comprising up to 210 dwellings, 1,900 sqm of retail floor space and 2,300 sqm of commercial floor space.
- Buildings constructed up to ten (10) storeys.
- Two levels of basement carparking to contain up to 330 vehicles.
- Internal pedestrian and bicycle links.
- Landscaping, including a covered piazza area.

Former Global Film Studio site - Forest Ridge

The former Global Film Studio site at 104-168 Hawthorn Road, Forest Hill is a major strategic development site. The approved Development Plan is dated February 2018 and Stage 1 is complete, with Stages 2 and 3 being the subject of this Development Plan and Stage 2 is currently in construction. According to the Development Plan it provides:

- Stage 1 contains 47 two storey dwellings and 27 town houses.
- Stage 2 contains a 13 Lot subdivision that is currently in construction.
- Two stormwater retarding basins have been established on site with one at the intersection of Hawthorn and Mahoneys Road and the second in the southeast corner of the site near Bulkara Avenue and Springvale Road. These regulate water discharge from the site and contribute to the passive open space network.
- Stage 3 proposes 600 to 700 new dwellings with an overall population of 1,500 to 1,800 people. The built form heights range for 2 storeys to 6 storeys.
- Proposed subdivision of land surrounding the studio complex (heritage buildings) will be in a series of super lots.
- A 4 per cent public open space contribution in the form of the park extension that will form a Village Green.
- More intense development of land with a Springvale Road frontage.
- Consideration of retention of significant vegetation where possible.
- Active frontage to Springvale Road potentially including a convenience store, restaurant or food and drink premises.

Box Hill and Burwood SRL precincts

The most significant future growth will be located in the Box Hill Metropolitan Activity Centre. The Draft Box Hill Metropolitan Activity Centre to 2036, Draft Urban Design Framework published in 2021 was intended to support a planning scheme amendment to update the structure planning for this location. Table 12 of the draft plan (Figure 4-7) indicates the order of magnitude of anticipated development contained in the Draft Urban Design Framework to fulfill the long term planning for the centre.

Table 12 Required approvals to achieve projected growth — how much development is required to deliver the floorspace needed to accommodate the projected growth in employment and dwellings?

	Overall Growth in GFA (net)	Gross GFA required to account for growth and displaced uses
Box Hill MAC	731,000	895,000
Health and Education	294,000	301,000
Prospect	78,000	117,000
Garden	59,000	74,000
Central	223,000	281,000
Civic & Cultural	16,000	30,000
Enterprise	29,000	48,000
Residential Transition	30,000	45,000

Figure 4-7 Table 12, Draft Box Hill Metropolitan Activity Centre to 2036, DRAFT Urban Design Framework, 14 October 2021

The SRL Authority is responsible for structure planning for the Box Hill and Burwood precincts. This includes a vision, key directions, an urban redevelopment framework and planning provisions for each precinct. Planning for these precincts is to deliver capacity for significant housing and job growth to 2056 as shown in Figure 4-8.

Table 6-1: SRL East Precinct activity

Precinct	Population 2018	Population 2056 with SRL East	Jobs 2018	Jobs 2056 with SRL East	Activity* Increase (2018-2056) with SRL East	Comparable Precinct activity* (in 2056) with SRL East
Cheltenham	20,500	52,500	16,500	36,500	147 per cent	Cremona Hawkeburn
Clayton	23,000	55,000	21,000	57,500	155 per cent	Collingwood
Monash	14,000	30,500	36,500	162,000	285 per cent	East Melbourne South Melbourne
Glen Waverley	22,500	46,500	11,500	25,000	112 per cent	Balaclava
Burwood	22,000	44,500	11,500	24,000	102 per cent	Carlton North
Box Hill	29,000	77,500	23,500	48,500	142 per cent	South Yarra

* Activity represents total of population and employment combined
Source: CityPlan

Figure 4-8 Table 6-1. SRL East Precinct Activity

In the Box Hill precinct, which extends slightly into the City of Boroondara, the forecast is for 77,500 people and 48,500 jobs. The vision statement for Box Hill includes:

Box Hill will be an exciting, culturally diverse destination, and a connection for Melbourne's east to the rest of our city and state. Its exceptional transport accessibility will elevate its strategic importance as one of Melbourne's economic and lifestyle centres, building on its established strengths in health, education, cultural and recreational services as well as the vibrant local business community. The centre of Box Hill is already the generous heart of the community – a cultural melting pot that celebrates Victoria's diversity. The wider precinct will be a place of many neighbourhoods, each with its own character, identity and sense of place. Whitehorse Road will be more people-focused, with better access for pedestrians and cyclists – a complement to the well-loved leafy neighbourhood streets and local walking and cycling routes.

The Burwood precinct extends into the City of Monash, however, the greatest increase in development could be expected to cluster near Deakin University and the new SRL station. Some 44,500 people and 24,000 jobs are forecast in this precinct. The vision statement for Burwood includes:

Burwood will be a thriving urban centre, as Deakin University builds on its success. The renewal of established neighbourhoods will create new residential diversity and amenity, leveraging the natural landscape to create a nature-based, and sustainable suburb. A vibrant urban centre will emerge around the new SRL transport hub to create a lively social centre for the community. As both an important biodiversity corridor and a treasured community amenity, an enhanced Gardiners Creek will be the focal point of this vibrant precinct along with access to a network of open spaces and cycling trails.

4.3 Urban densities and open space

4.3.1 Overview

As discussed in Section 2.4, best practice research into open space provision for high density precincts has identified that there is not an accepted international standard. What is common amongst the different research studies and reports is that everyone should be within a safe and easy walking distance of open space so that people of all abilities, ages and gender can visit and use open space. The studies recognise the link between people's health and wellbeing and access to public open space, particularly green open space, so this is identified as a priority to achieve in this Strategy.

Therefore, a key criteria for determining where and what type of new public open space is required is meeting the minimum requirement of at least some public open space within a safe and easy walk of everyone. The definition of safe and easy walk is the travel catchment to open space described in Table 3f.

4.3.2 High density development and overshadowing open space

As summarised in Sections 4.1 and 4.2, there are emerging trends and forecast changes in the City of Whitehorse including expanding and additional high density precincts. This will increase the number of people who will live and work in high density environments with little or no private open space and place greater demand on public open space to meet the majority of their open space needs. This includes the day to day needs such as just spending time outdoors relaxing, reading and socialising with family and friends in addition to the more active pursuits of walking, exercising, dog walking etc. The increased densities and taller buildings will increase the potential for buildings to overshadow existing and proposed new open space, which is already an issue in the centre of Box Hill.

With the change towards higher density living in parts of the City of Whitehorse, this Strategy recommends that Council introduce more specific controls to prevent undue overshadowing of public open space, particularly during winter to support and promote sustainable high density living.

For example, Amendment C220 includes the following requirement:

Overshadowing

- *Developments should not result in additional shadowing to adjacent public open space between 12pm and 2pm on 22 September.*

We have reviewed the latest research about winter sunlight access to open space as well as recent work undertaken in other municipalities in relation to this issue, particularly in higher density precincts. This Strategy proposes an update to the planning controls across the City of Whitehorse to require protection of winter sunlight access to open space in line with contemporary research. Refer to Section 5.4.1 for recommendations regarding sunlight access to open space.

4.4 Climate change and open space

4.4.1 Overview

Open space is influenced by the changing climate and has a role in mitigating and adapting to its effects. It has become increasingly important to focus on sustainability in all aspects of open space design, management and maintenance. More frequent and extreme droughts have seen greater emphasis placed on sustainable water sources to adequately maintain open space in the future. At the same time, the role of open space in mitigating urban heat island effect in the higher density precincts has been measured and is better understood.

4.4.2 Mitigating urban heat island effect

Dr. Nigel Tapper of Monash University provided advice as part of the City of Melbourne Open Space Strategy 2012 in relation to optimising opportunities to mitigate urban heat build-up in the future. This included the provision of regularly distributed green open spaces across built up areas that are designed with appropriate green infrastructure and permeable surfaces to hold moisture, which then allows effective evapotranspiration to cool the local microclimate. This is particularly important during extended periods of heat. Deciduous trees with a larger leaf surface area are more effective at evapotranspiration. In the Melbourne climate, they also have the benefit of allowing winter sunlight to penetrate and deliver warmth to the open space during the colder months while providing much needed shade during summer.

Designing greener and cooler open space with sustainable water sources has the added benefit of providing cooler public places for the community to use during hot weather. This is particularly important for the vulnerable in our community including the frail, the elderly, the homeless and those without cooling in their homes, or those who choose not to use air conditioning for other reasons.

In higher density urban areas, open space provides a visual and physical break in the built form to allow some radiant passive cooling at night. Designing these open spaces with a combination of large canopy shade trees, garden beds and surfaces that retain moisture (such as grass and garden beds instead of large, paved surfaces) is essential for passive cooling. For open space to effectively contribute to mitigating urban heat in higher density urban areas it needs to be regularly spaced across the compact urban form to counteract the heat trapping characteristics of sealed built surfaces.

Sustainable water sources will need to be integrated into the future design of open space in higher density precincts. This is to sustain broad canopy shade trees, garden beds and grass and will increase the capital costs of providing the open space. Having increased moisture levels in the green open space is not always consistent with the indigenous landscape character and values, however opportunities for this will be a priority in the medium and higher density precincts for effective cooling.

Additional features that contribute to passive cooling in open space include water features and green walls on adjoining built form. For green walls, the ongoing

maintenance costs and technology required to ensure longevity requires further research to identify if these are feasible and cost effective in open space.

Please refer to Section 6 of this Strategy for further information regarding design guidelines for open space.

4.4.3 Sustainable water use and management of open space in the context of climate change

The forecast increase in severe weather events including extended droughts and storms impacts on open space. Extended droughts mean that open space may be impacted by water restrictions again in future. Severe storm events may result in a greater number of flood events, winds, damage to mature vegetation and impact on the viability of new plantings to establish.

Severe weather events impact on the viability and use of open space. The impact of extended droughts can include a significant reduction in capacity of open space to accommodate high levels of use, particularly sports fields. While it is important that Council investigates options to better drought proof reserves, it is important to maximise opportunities to retain moisture in open space to be effective in mitigating urban heat and proactively plan for this in the future.

It is a priority to investigate sustainable water reuse of all aspects of the urban water cycle and achieve multiple benefits in open space design. Some of these projects have the potential to deliver improvements to biodiversity, urban heat island effect mitigation, landscape character diversity and visual interest in open space, along with delivering sustainable water reuse for irrigating and maintaining open space. These opportunities will increase the capital works costs of providing open space in the future and has been considered in the preparation of the Strategy costings that form the basis for calculating the public open space contribution rate.

The future implementation of sustainable water re-use in open space will be implemented through the *Whitehorse Integrated Water Management Strategy 2022-2042*.

4.4.4 Vegetation management

The changing climate, including the forecast increase in severe weather events, impacts plant health and survival. The inclusion of sustainable water harvesting and reuse will assist with managing vegetation. Other major impacts will be the forecast increase in storm events with increased wind velocities and changing patterns of rainfall that will potentially damage existing mature trees.

Balancing the need to retain existing large canopy trees for habitat, shade and evapotranspiration will mean that a focus on the ongoing management of tree health, including adaptive management, will be required in the future. The changing climate will likely impact on the health of remnant indigenous vegetation as well as planted vegetation.

The future management of large canopy trees and vegetation will be implemented through the *Whitehorse Urban Forest Strategy 2021-2031*.

4.4.5 Sustainable material use

The Strategy recognises that in recommending improvements and upgrades to open space, it is preferable to maximise opportunities to utilise appropriate materials. This includes recycled materials, those from sustainable sources, and materials with longevity and durability to minimise ongoing maintenance and replacement costs as well as material use.

Future building and infrastructure design in open space is to consider and minimise energy use, including consideration of appropriate siting and orientation to maximise passive cooling and heating.

Refer to Section 6 of the Strategy for the Design and Management Guidelines.

4.5 Increased levels of use of open space

4.5.1 Overview

With the forecast increase in urban densities and population growth, the existing open space network will need to cater to increased numbers of people using open space. While additional open space is also proposed, the intensity and levels of use in the existing and new open space is anticipated to continue to increase, particularly in and around the medium and high-density precincts, which are associated with the activity centres, main road corridors and the strategic development sites identified earlier in this section of the Strategy. At the same time, the important role open space plays in the health and wellbeing of the community, particularly in high density precincts, is also now better understood. One of the key factors in open space continuing to make an important contribution to liveability is the inclusion of natural features including large mature canopy trees, garden beds and grassed areas. The natural features require more ongoing maintenance as they are not as robust as built features and paving. This has implications for the design, management and maintenance of open space.

4.5.2 Diversity of facilities balanced with the natural character

Providing additional facilities in open space to cater to more people using it will be required. As noted in Section 7, Precinct Analysis and Recommendations, the open spaces need additional facilities beyond play spaces to better meet the demographics of the whole community and encourage not only physical activity, but also social connectedness in open space with seating areas, picnic facilities and attractive spaces to spend time outdoors. The facilities will include seats, paths, fitness stations, multi-use courts, picnic shelters and barbecues along with an ongoing program of upgrading play

spaces. Balanced with these facilities is the need to retain a sense of space and naturalness so that people can relax, unwind and have a break from built form. The need to achieve this balance is the reason why in the high density precincts, additional open space is required. This is based on the need to increase the total amount of open space in the high density precincts that is available to accommodate the thousands of additional residents and workers benefiting from it and using it. This is why in some locations additional new open space is recommended, even though it may not actually be a gap area.

4.5.3 Increased costs associated with managing natural features in open space in the context of climate change and forecast growth

Managing and maintaining natural features in the context of higher levels of use and in this changing climate is challenging. For example, open grassed areas are increasingly being used for informal and casual ball sports as per the changing trends in the way people participate in exercise. This increases wear and tear and creates the need to potentially irrigate grassed areas during summer so they can cope with the additional levels of use. In the current context of climate change, water is an increasingly valuable resource. Therefore, the preference is for future irrigation to be sourced from sustainable water harvesting and reuse. The cost of investigation and infrastructure to achieve this outcome increases the capital cost of providing open space that can more sustainably accommodate higher levels of use throughout the year.

As part of the future planning for open space, the capital works budgets will allow for the inclusion of the additional infrastructure for sustainable water harvesting and reuse.

It is also noted that the impacts of increased numbers of people using existing open space also impacts on its quality of the space and need to upgrade open spaces to cater to these increased levels of use.

Section 6 of this Strategy provides guidance regarding the design and management of existing and new open space. Section 7 of this Strategy includes the action plans to upgrade existing open space and the provision of new open space to meet the open space needs of the existing and forecast population.

5. Open space framework recommendations

5.1 Role and purpose of different types of open space

5.1.1 Open space hierarchy

The open space hierarchy is shown in Section 3.3, Table 3a and illustrated on Figure 3-4. This hierarchy is based on both the existing or intended catchment of users and the relative size of the open space to adequately cater to its intended use. The purpose of the hierarchy is to provide the following:

- Guide the analysis of the spatial distribution of open space in the City of Whitehorse. The hierarchy has been applied to all open space in the municipality to inform the assessment for this Strategy and is illustrated in Figure 3-4.
- Direct appropriate facility development and maintenance levels in different types of open space. For example, if a new tennis club and courts are being considered, by preference they will be located in Municipal open space as the level of other facilities will usually support this type of facility including adequate car parking and lighting, and assuming that the surrounding residential neighbourhood will already be used to the higher levels of activity associated with structured recreation facilities. The hierarchy provides a transparent and clear process for the community and Council regarding appropriate levels of development in the different types of open space.
- Guidance for appropriate levels of funding to open space, including external funding. For example, Regional open space is defined as being for a broader catchment than the City of Whitehorse, both in relation to biodiversity values and the catchment of users. It is therefore reasonable that upgrades and improvements to areas of Regional open space are funded at least in part from regional funding sources. In contrast, the Small Local open space where the facilities and upgrades are for the local community who live or work nearby the open space. The funding is therefore more likely to be from Council funds and ideally supplemented with external grants.

5.1.2 Facility provision in open space

Table 5a below provides an overall guide for the typical facilities and features that are appropriate for the different types of open space as set out in the open space hierarchy in Table 3a. Table 5a is to guide design decisions by Council and developers when undertaking future upgrades for existing open space and the establishment of new open space.

The typical facilities and features are listed in alphabetical order. The table is to be used as a guide only for what is appropriate for different types of open space, and is not intended to replace the need for a more detailed investigation into the individual design of each open space. It is intended to provide a useful guide as to what type of facilities are appropriate in the different types of open space. For example, public toilets are not proposed for open space that is primarily designed for people from the surrounding local streets, and with shorter lengths of stay as described in Table 3a in the Strategy, as it is assumed they can walk home to use these facilities. The actual facilities and features in existing and new open space will vary depending on its location, design, character, recreation needs, community input, environmental values and urban context. Not every facility listed as appropriate will necessarily be provided in each open space of that type.

Table 5a Overall guide for appropriate facility and feature provision of existing and new open space by hierarchy

- ✓ = Appropriate facility/feature for the hierarchy of open space
 * = Appropriate facility/feature for medium and high density settings only
 () = Appropriate where the shared path forms part of the broader shared path network

Facility and feature	Regional	Municipal	Neighbourhood	Urban Civic	Local	Small Local	Local Link
Barbecue	✓	✓	✓	✓	✓*		
Car parking	✓	✓	✓				
Community garden plots (unfenced plots without support facilities)	✓	✓	✓*	✓*			
Community gardens (fenced plots that are run by an community group with support facilities)	✓	✓					
Dogs - fenced dedicated dog park	✓	✓					
Dogs - off-lead areas	✓	✓					
Drinking fountains	✓	✓	✓	✓			
Events - major	✓	✓		✓			
Events - minor	✓	✓	✓	✓			
Fitness equipment (single unit)	✓	✓	✓	✓	✓	✓	
Fitness station/suite (a number of pieces of equipment grouped together)	✓	✓	✓	✓	✓		
Garden bed - feature/decorative	✓	✓	✓	✓	✓	✓	✓

Facility and feature	Regional	Municipal	Neighbourhood	Urban Civic	Local	Small Local	Local Link
Garden bed - to mitigate urban heat	✓	✓	✓	✓	✓	✓	✓*
Large open grassed areas for unstructured recreational use	✓	✓	✓	✓	✓		
Lighting (key linking paths and sports facilities only)	✓	✓	✓	✓	✓	✓	✓
Path - pedestrian	✓	✓	✓	✓	✓	✓	✓
Path - shared	✓	✓	✓	✓	(✓)	(✓)	(✓)
Play space - major (where visitors can spend at least a few hours at the facility and appeals to all age groups with universal access)	✓	✓					
Play space - medium (where visitors can spend up to an hour and appeals to most age groups and abilities)		✓	✓	✓	✓		
Play space - minor (where visitors spend up to 30 mins and may only appeal to selected age groups and abilities)				✓	✓	✓	
Public Art	✓	✓	✓	✓			
Public Toilets	✓	✓	✓*	✓			
Rubbish bins	✓	✓	✓	✓	✓*		
Seating	✓	✓	✓	✓	✓	✓	✓
Shelter - picnic/shade/rain	✓	✓	✓	✓	✓*		
Structured indoor sport and recreation facilities	✓	✓					
Structured outdoor sport and recreation facilities	✓	✓	✓				
Trees - large canopy shade	✓	✓	✓	✓	✓	✓	✓
Unstructured recreation facilities - major (a combination of a number facilities to form an urban sports park)	✓	✓	✓				
Unstructured recreation facilities - minor (single facility such as a pump track, or a skate facility, half court, tennis wall)		✓	✓	✓	✓		
Water feature (fountain, water play, lake, pond)	✓	✓	✓	✓			
WSUD feature and infrastructure, including sustainable water supply	✓	✓	✓	✓	✓	✓	

The character classification system for open space is shown in Table 3d. Character classification assists with the following:

- Assessing the diversity of open space character types across the municipality and within each precinct. This will identify if there are gaps in the open space character types or an oversupply of the same type.
- Assisting with the future design and management direction for each open space. For example, if the open space has 'Nature conservation' as its primary classification, future decisions regarding the planting style will be guided by whether that is consistent with the nature conservation character and style

The character classification has been used to assess the provision and distribution of different types of open space across the municipality. Each open space is assigned a 'primary' classification and many also have 'secondary' classifications as well to assist defining the diverse character of open space. This is also a useful quick reference point for the community and Council officers. These are included in Section 7 Precinct Analysis and Recommendations.

5.2 Provision of new open space

5.2.1 Overview

This Strategy has identified where additional open space is required over a 15 year period for both the existing and forecast community. Some of the additional open space is to be provided primarily for the forecast population, while others are proposed to meet both the needs of the existing and forecast population or to meet the needs of the existing population where there is little forecast population growth.

The method to secure additional land area as open space can be a combination of different mechanisms including:

- contribution of land area by larger redevelopment sites
- the purchase of undeveloped land
- the purchase of developed sites
- conversion of public land to open space.

A priority for all sub-precincts in which new open space is proposed is to first undertake an open space sub-precinct assessment. This is to identify and investigate all potential opportunity sites where new open space could be provided in accordance with the precinct analysis and recommendations in Section 7 of this Strategy. The purpose is to investigate a range of opportunity sites that Council can pursue and consider at the sub-precinct level, including:

- Identify existing public land parcels that are currently used for other purposes and investigate if they meet the criteria for new open space listed in Table 5b.
- Identify all known strategies and projects underway or planned in the sub-precinct that may deliver new open space opportunities.
- Identify privately owned land that best meets the criteria for new open space listed in Table 5b and would be feasible to acquire as new open space, including new stand-alone reserves or expansion to existing open spaces.

The three broad steps in the process of providing new open space are described below.

5.2.2 Step 1 – open space sub-precinct assessments

The Strategy has identified the need for 27 new open spaces to be provided within the Strategy timeframe of 15 years, along with one new Neighbourhood open space in the longer term and associated with the forecast growth and change associated with the Suburban Rail Loop project and the new station in Burwood. The precinct recommendation diagrams for each of the 16 precincts define the 27 sub-precincts and the type of new open space required in each. Refer to Section 7 of the Strategy. Figure 5-1 indicatively illustrates the location and hierarchy for each of the 27 new open spaces at a municipality-wide level to provide an overall snapshot view of where they are spatially distributed across the municipality.

As part of implementing the Strategy, the open space planning team in Council will identify a range of suitable sites for future open space in each of the sub-precincts based

on applying the criteria in Table 5b and the design guidelines included in Section 6 of this Strategy. The open space planning team will carefully assess a range of sites including Council owned land, public land owned by other agencies, future development sites and individual privately owned sites that could potentially be suitable as future open space. This may require consultation with other Council officers in the areas of planning, transport, property and community facilities.

For future development sites, Council is to assess and identify what part of the site would be most appropriate as open space, assessing the land parcels against the criteria included in Table 5b.

No.	Recommendation	Responsibility	Priority
5.2-1	The open space planning team at Council is to undertake a sub-precinct open space analysis for each of the 27 sub-precincts with proposed new open spaces, in the priority order identified in Section 7 of the Strategy. This analysis will identify potential opportunities to secure additional land that meets the criteria outlined in Table 5b and allow Council to negotiate appropriately with landholders and other agencies where required to acquire / secure the new open spaces. The analysis will require consultation with other areas of Council including planning, transport, property and community facilities. Refer to Step 1 in Section 5.2.2.	WCC	Very High

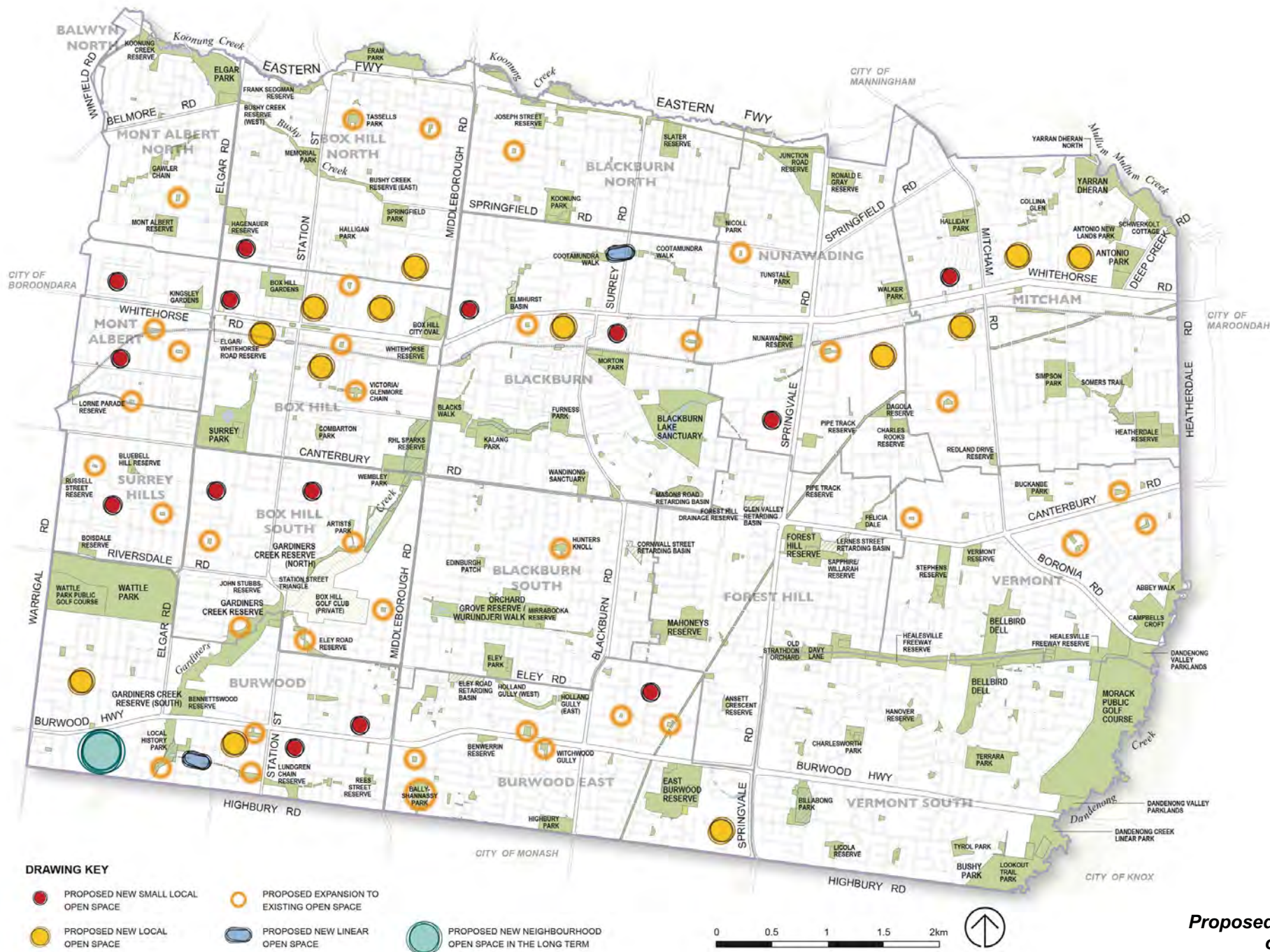


Figure 5-1
Proposed additional open space

5.2.3 Step 2 – Methods to acquire/secure additional open space

It is anticipated that the additional open space in the City of Whitehorse will be acquired using a range of methods including:

- As a land contribution as part of future subdivision of land for large development sites
- Conversion of land owned by the City of Whitehorse from its existing use to open space (for example a road, car park or community facility)
- Conversion of land owned by another government agency to open space
- Purchase of undeveloped land, particularly where this may be negotiated with a land developer to add to an area of land being contributed on the same development site, or on an adjoining site so that a contiguous open space is created
- Purchase of developed sites where no other opportunities are available.

There are likely to be situations where an additional open space may require a combination of the above methods to achieve a suitable land area for use as open space, as described in the open space hierarchy in Table 3a and the criteria in Table 5b.

It is noted that:

Waterways are required to maintain a drainage reserve / riparian buffer zone by imposing a minimum 30 metre development setback from the waterway (Whitehorse Planning Scheme Clause 12.03-1S). The buffer zone is encumbered land and is not to be accepted as part of a public open space land contribution. A contribution of land may be levied and accepted adjoining the buffer zone if it is unencumbered land and meets the other criteria in Table 5b of this Strategy.

Private land acquired for the City of Whitehorse open space network must be transferred to the City of Whitehorse. Land in public ownership should ideally be transferred to the Council, but otherwise must be secured for ongoing, long term use as open space under the management of the Council. In all cases, the zoning of open space reserves must reflect their use by inclusion in the Public Conservation and Resource Zone or the Public Park and Recreation Zone.

5.2.4 Step 3 – Design and delivery of new open space

The design of the new open space is to address any specific issues noted in the Strategy precinct recommendations in Section 7 and the Design Guidelines in Section 6.

New open space may be designed and delivered directly by the City of Whitehorse as a capital works project. Alternatively, the developer may be responsible for design and delivery in accordance with the recommendations in the Strategy, relevant design and management guidelines, and approved plans through the subdivision permit approval process.

5.2.5 Changes to the forecast population growth over the Strategy timeframe

The Strategy recommendations and priorities for new open space and upgrades to existing open space are based on the current growth framework for the City of Whitehorse as described in Section 4 of the Strategy.

If there is a substantive increase in the intensity of new development over the 15 year implementation timeframe of the Strategy, then projects in proximity to those locations can be implemented as a higher priority taking into consideration the timing of the public open space contributions that are collected. Alternatively, if change occurs at a slower pace or at a lower intensity than anticipated, then project priorities and implementation timetables may need to be revised.

If additional change and development occurs in a location where it was not anticipated at the time this Strategy was prepared, or at an increased density, then additional open space may be required beyond that outlined and included in this Strategy. If this occurs, an analysis of the impacts of the changes in the forecast population and development in that location will need to be assessed with confirmation of whether additional open space or upgrades to open space is required as a result of the change.

No.	Recommendation	Responsibility	Priority
5.2-2	Additional change and development that was not forecast in the Strategy timeframe Where additional development is either proposed outside of the areas that are forecast to change and develop in this Strategy or at an increased density, an open space needs analysis will be required. This will determine whether additional open space or upgrades to existing open space are required as a result of the proposed new development. This includes reference to whether new Municipal open space is required as identified in Section 3.5.2 of this Strategy. This analysis is to be undertaken consistent with the method used in the open space needs assessments in this Strategy for the relevant precinct in Section 7 of the Strategy.	WCC Developer	Ongoing

5.2.6 Potential disposal of open space in established areas

New open space replacing the need for areas of existing open space

Some individual open spaces have been identified as significantly encumbered and potentially unsuitable as open space in the longer term. For these locations, there is a more detailed process required to determine this including public consultation on this Strategy. Refer to Section 7 of this Strategy for specific Actions relating to the selected areas of open space that are considered potentially unsuitable as open space in the longer term. In addition to these, new major projects or developments constructed during the 15 year Strategy implementation period may create encumbrances that impact the

purpose and role of an existing open space reserve. Where this occurs, it may result in open space that is significantly encumbered and no longer meets the criteria for open space.

If in the future, if Council identifies any existing open space for potential disposal, or decides to proceed with the disposal of a site identified in this Strategy, the following process would be followed as a minimum:

- a) Assess the subject open space within a precinct context. This analysis will need to assess all other existing and proposed open space within the walking catchment of the subject site to clearly understand each open space size and level of existing and proposed use (which may include an environmental role as well as community use) to determine the subject site's existing or future role in the local open space network.
- b) Assess the site in relation to the criteria listed in Table 5b.
- c) Consult with the community who would potentially be affected by any disposal of the subject open space in accordance with the walking and travel catchments nominated in Table 3a.
- d) If after steps (a), (b) and (c) the open space is still considered excess to requirements and the City of Whitehorse intends to dispose of open space, land is to be *'sold only if the Council has provided for replacement public open space'*. Refer to Section 20 of the *Subdivision Act 1988* for details.

5.3 Criteria to assess suitability of land as open space

All sites being considered as new open space will first be assessed against a list of criteria as shown in Table 5b to confirm if the land and its location is suitable. This will assist Council in assessing and prioritising sites that may be suitable for open space, particularly where Council is considering conversion of public land to open space or acquisition of sites for open space. The criteria are also intended to guide Council's assessment of future land contributions that are proposed on large development sites, other public land that may be suitable as future open space and land purchase for open space.

Council should proactively identify larger parcels of developable land that are likely to redevelop in locations where new open space is needed, the specific type (hierarchy) of open space required and the location on each site that would be suitable as a public open space land contribution. Council will be prepared to levy a land contribution when subdivision occurs and to alert the land owner / developer before the development proposal is fixed. Alternatively, it will be at the Council's discretion whether an area of land offered by a developer as open space is accepted and adequately meets the criteria in the Strategy.

Council will apply these criteria to any future land that they convert or acquire for open space. The criteria can also be used to assess existing open spaces where review of their status and condition is required.

Table 5b *Criteria to assess suitability of land as open space*

Criteria	Description
1. All new open space must meet the following criteria as a minimum:	
Accessibility	The inherent topography allows for universal access to the majority of the site and is located on natural ground (not an elevated part of a building or podium), and has excellent passive surveillance and is highly visible with minimum of local access streets to two sides. Refer also to the safety criteria below.
Adjoining land use	The influence of adjoining land use preferably complements and as a minimum does not encumber the recreational, ecological, social and cultural value of the open space. This includes consideration of existing and future planned land use, community facilities, urban context, personal safety (passive surveillance), built form and height.

Criteria	Description
Climate change mitigation	• Ability for the site to have long-lived broad spreading canopy trees planted, and space for the trees to fully establish without encroachment into their root zone or canopy. • Ability for the site to incorporate sustainable water supply and reuse and maximise moisture retention to allow passive cooling of the local microclimate including areas for long-wave radiant cooling at night. • Located within existing or future medium to high density precincts where it will be effective in mitigating urban heat island effect. • Ability for the site to remain as useable and functional open space in the context of major storm events and sea level rise.
Condition	The existing physical condition of the land is suitable for use as public open space including no inherent issues such as contamination and significant financial or safety implications for Council if the land becomes public open space and is open to the sky with no overhanging balconies or structures.
Hierarchy	The site meets the intended hierarchy as described in Table 3a in this Strategy.
Ongoing maintenance and management	The ability for Council to rezone the land for open space purposes, and to effectively maintain and manage the land as public open space.
Ownership and zoning	• Where the land is already in public ownership, the potential for conversion to open space should be considered where it can successfully be rezoned for this purpose. This may include existing Council assets or land owned by other authorities. • Where the land is privately owned, land can be acquired through public open space contributions, generally at the time a site is redeveloped. Private land purchase may be needed in some locations to create a functional open space of the size and configuration required for its intended role.
Safety	Urban context and layout is to maximise passive surveillance and access to open space in order to minimise risk to users of the open space. The site's visual prominence is to maximise its use, safety and contribution to the broader community and has at least two access points and local access streets to at least two sides.
Services/easements/encumbrances	Extent of other services and easements that affects the development and use of the land as open space. This includes roadways, overhead structures, underground structures (e.g. underground car parking), water supply, power supply, flood mitigation and drainage.

Criteria	Description
Size	The minimum size for the site to meet its intended purpose, on its own or in combination with adjoining land. Refer to minimum size parcels for each type of open space as follows: • Regional, unlimited. • Municipal open space, generally a minimum of 8 ha is preferred, subject to the proposed municipal recreation facility located in the open space. • Neighbourhood open space, minimum of 1 ha. • Urban Civic, varies and generally between 3 hectares and 0.25 hectares and minimum length and width of 20 metres. • Local open space, between 0.99 and 0.26 hectares with a minimum length and width of 20 metres. • Small Local open space, varies from 0.25 hectares to 0.05 hectares with a minimum length and width of 20 metres • Local Link, with a minimum width of 10 metres.
State and local government policies	The land is not subject to other planning processes and policies that may be consistent or inconsistent with all or part of the site becoming public open space.
Sunlight access	• The site must have excellent sunlight access in winter for community health and wellbeing. • The site will have no additional overshadowing beyond the modelling of a 9 metre high building on the reserve boundary between 10am and 3pm on 21 June. This includes shadowing created by built form on adjoining sites and in the surrounding precinct.
2. All new open space is to preferably meet the following criteria:	
Amenity	Visual and passive amenity values relate to the contribution the open space makes to liveability of the neighbourhood by providing: • Visual natural relief or change / contrast from built form • A break from noise levels associated with traffic and other urban land use activities • At least some long distance views and vistas from within the open space so it is not entirely surrounded by building/s or overwhelmed by built form • Highly visible from the public realm with excellent passive surveillance • Good winter sunlight access to meet the health and wellbeing needs of the community. Refer to Sunlight access for details.
Ecological	Where the site contains existing biodiversity values, that the open space is able to make a viable contribution to protecting and improving these biodiversity values combined with the required recreational use where the land forms part of the public open space contribution. Where the site is solely for the protection of biodiversity values, an assessment will need to be made as to whether an additional area of open space is also required for recreational use.

Criteria	Description
2. All new open space is to preferably meet the following criteria (continued):	
Financial	The costs to the Council in obtaining and improving the land as open space, along with the costs associated with ongoing maintenance and management will need to be fair and reasonable.
Heritage values	Wurundjeri Woi-wurrung, Aboriginal and Torres Strait Islander community and First Nation peoples cultural heritage values and/or historical values to be enhanced, protected and interpreted in the open space. These values will influence the future use and design and management of the open space.
Landscape character	Makes a positive contribution to the urban context, character, ecological values and attractiveness of the precinct.
Location/linkages	The open space contributes to the connectivity and accessibility of the open space network. This includes consideration of other strategic planning projects including linear open space corridors, and local links to improve accessibility within the local street network and links and connections to improve accessibility into existing or proposed future open space.
Recreation	The potential for the site to accommodate a range of structured sport, unstructured recreation and informal uses consistent with the intended hierarchy. This needs to include adequate space to meet best practice standards for the proposed uses to be undertaken safely in relation to risk management. These can include field sports, play, walking, jogging, cycling, exercising, informal ball games, socialising, picnicking, sitting and dog walking.
Transport	There are a range of transport options for residents and workers to easily access the site. This includes proximity to public transport, linear shared trails, major roads and the street network, relevant to the size and anticipated catchment for the proposed open space.

5.4 Overall recommendations

5.4.1 Requirements for development adjoining and nearby open space

These requirements are to apply to private land adjoining and nearby open space.

The amenity and function of open space is influenced by the land use, design, layout, built form and landscaping treatments on adjoining sites. Guidelines included in this section describe the preferred interface treatments with other land uses for existing open space and siting of new open space. These criteria are relevant for development proposals on sites adjoining open space and they should also be applied as relevant to any site that has potential to influence the function of the open space.

Development adjoining and nearby existing or proposed public open space should positively contribute to open space by providing a degree of passive surveillance without interfering with the enjoyment, function and use of the open space. Adjoining development should not create adverse conditions in open space such as undue shadowing, especially during Winter, increased wind effects, intrusion of unwanted light and noise, use of car parking or traffic access for private uses, interference with vegetation and dispersal of weeds, loss of natural light and loss of open viewsheds to and from within the open space and of the open sky.

No.	Recommendation	Responsibility	Priority
5.4-1	Adjoining development and development that may influence nearby open space Require relevant applicants for development to demonstrate compliance with the Guidelines for development adjoining or nearby open public space contained in Table 5c. These Guidelines are also to be used by Council when assessing development proposals that potentially will have adverse effects on open space.	WCC	Ongoing
5.4-2	Sunlight access to existing and future public open space Public open space must have excellent sunlight access in winter for community health and wellbeing. The public open space will have no additional overshadowing beyond the modelling of a 9 metre high building on the public open space boundary between 10am and 3pm on 21 June. This includes shadowing created by built form on adjoining sites and in the surrounding precinct.	WCC	Very High and Ongoing

Table 5c Guidelines for development adjoining or nearby open space.**(a) Accessibility to the adjoining or nearby public open space**

- Design and layout of the site development should foster good public access to open space, and particularly improve passive surveillance of the public open space from adjoining development. Direct private access gates and paths from private development into open space should be avoided unless they clearly demonstrate they improve the broader public cycle and pedestrian circulation network. Refer also to (f).

(b) Amenity and function of the adjoining or nearby public open space

- Design and layout of the site is to provide passive surveillance of public open space. Buildings are to face public open space and avoid blank walls (especially on lower floors) and high fences at the interface with open space. Passive surveillance should be effective but not intrusive for park users or occupants of adjoining buildings.
- Design of the built form and site use should maintain and improve the amenity, function and use of the public open space. Factors that could degrade open space amenity, function and use include excessive built form, overshadowing, creating a sense of enclosure, noise, light spill, traffic movements, car parking demand or wind effects. In addition, the proximity of built form and building design should not allow undue transfer of noise from the public open space into the development, thereby limiting the recreational function and uses that can reasonably occur in public open space. Applicants may be required to supply studies demonstrating whether there will be positive or adverse effects on public open space.
- The public open space must receive excellent sunlight access including during the winter to maximise community health and wellbeing. Refer to Recommendation 5.4-2 regarding sunlight access.

(c) Characteristics and values of the adjoining or nearby public open space

- The development design is to be compatible with and enhance where possible the recreational, ecological, social and cultural values of the adjoining or nearby public open space. This is to include consideration of light and noise impacts from the development on habitat corridor values.
- Built form and landscape treatments in the development should maintain the ecological processes and biodiversity values of the public open space and allow for opportunities to enhance these values.
- Built form is to demonstrate it will be sufficiently set back so as not to cause the need for lopping or removal of vegetation in public open space.
- Design of built form and landscape treatments should be compatible with heritage values of the public open space.
- Landscape treatments and private open space should be compatible with the landscape character of the public open space and its contribution to the preferred landscape character and amenity of the precinct.

- Where the development adjoins waterway corridors or sites of identified biodiversity values, plant selection on development sites is to complement and improve these values including avoiding the use of any species that will lead to ongoing management issues on public land.

(d) Climate change mitigation in open space in medium to high density precincts and activity centres

- Built form and landscape treatments in the development should be planned to allow for the growth and maturity of vegetation in the public open space, especially long-lived broad spreading canopy trees.
- Consider the proximity of built form to the public open space to encourage sufficient long-wave radiant cooling to occur from the open space overnight.
- The development should allow for the use of sustainable water supply and reuse in the public open space where Council request and agree to it.

(e) Delineation of public open space and private land

- Design and layout of the development, including location of buildings, structures and furniture, are to provide clear physical and visual separation between public open space and private land to preclude appropriation of, and encroachment on, public open space. This includes balconies from adjoining buildings not overhanging or encroaching into the open space reserve.

(f) Ongoing maintenance and management of public open space

- The development will not increase the ongoing cost and responsibility for the management or maintenance of the public open space, including offsite costs such as on adjacent roads.

(g) Open space contribution from development

- A development site adjoining existing or proposed public open space is to be assessed for its suitability for a public open space land contribution to create or add to the area of public open space and, including nearby developments, to create formal public linkages. This will be at the discretion of the Council.
- Development sites adjoining waterway corridors are to potentially provide public open space adjoining the minimum 30 metre wide drainage reserve/riparian buffer zone. The preferred urban interface layout is for public local access streets to adjoin the open space reserve along the waterway and outside of the buffer zone so that adjoining built form is set back from and overlooks the waterway corridor providing excellent passive surveillance and high levels of visual and physical access to the public open space and waterway.

(h) Services/easements to be provided to an adjoining site

- Access and easements for water and power supply, other utilities and drainage should be provided on the development site so that they do not encumber the use or management of the existing or proposed public open space.

(i) Setback from site boundary

- Larger sites should allow for a setback from the public open space boundary, relative to the height of the built form and/or topography so they do not adversely affect the amenity, function and use of the public open space.

(j) Transport and car parking arrangements for the development

- Traffic access, traffic patterns and car parking demand should not decrease the accessibility, use and amenity of the public open space.

(k) Visibility of and views from public open space

- Public view lines are to be maintained and enhanced to and from the public open space.

5.4.2 Linear open space**5.4.2.1 KooyongKoot / Gardiners Creek**

Recognise and continue to strengthen the environmental, cultural and recreational values of the open space corridor adjoining Gardiners Creek.

No.	Recommendation	Responsibility	Priority
5.4-3	Local access points into KooyongKoot / Gardiners Creek Corridor Council to continue to investigate opportunities to improve and widen the access points to Gardiners Creek corridor through Burwood, Box Hill South and Blackburn South.	WCC Developers	Ongoing
5.4-4	Improved development interface to KooyongKoot / Gardiners Creek Corridor When future planning applications are received at Council for properties adjoining the Gardiners Creek open space corridor, opportunities to improve the interface treatment to open space consistent with the guidelines in Section 5.4.1.1 of this Strategy are to be considered and implemented where possible. Ensure that the riparian buffer zone of minimum 30 metre width is secured as a drainage reserve and not the public open space contribution.	WCC Developers	Ongoing
5.4-5	Biodiversity values Continue to support the ongoing revegetation of the Gardiners Creek corridor in consultation with Melbourne Water to continue to improve the biodiversity values and qualities of the linear open space corridor along the Gardiners River. The future revegetation works and vegetation management to allow adequate sightlines on trails and at entry points to meet the relevant standards for off-road shared trails.	WCC MWC WCHAC	Ongoing

No.	Recommendation	Responsibility	Priority
5.4-6	Consultation with the Wurundjeri Woi-wurrung and Aboriginal and Torres Strait Islander community Support ongoing consultation with the Wurundjeri Woi-wurrung and Aboriginal and Torres Strait Islander community regarding future management, design and interpretation of the KooyongKoot / Gardiners Creek corridor.	WCC WCHAC MWC	Ongoing

5.4.2.2 Dandenong Creek

Recognise and continue to strengthen the environmental, cultural and recreational values of the open space corridor along the Dandenong Creek. Refer to the precinct recommendations in Section 7 of the Strategy regarding the specific open space reserves adjoining the creek corridor.

No.	Recommendation	Responsibility	Priority
5.4-7	Biodiversity values Continue to advocate for and support the ongoing revegetation of the Dandenong Creek corridor in consultation with Parks Victoria, Melbourne Water, Knox City Council and the Wurundjeri Woi-wurrung Aboriginal Heritage Council to continue to improve the biodiversity values and qualities of the linear open space corridor along the Dandenong Creek corridor in the context of cultural values and interpretation.	WCC KCC PV MWC WCHAC	Ongoing
5.4-8	Development adjoining the waterway corridor Where sites redevelop along the waterway corridor, identify opportunities to improve public access to the waterway, improve passive surveillance and where feasible provide a public road and/or footpath between the built form and the waterway, with the built form fronting the waterway reserve. Where developments are required to make an open space contribution, ensure the open space is unencumbered and does not form part of the minimum 30 metre setback required for the riparian buffer zone and drainage purposes. Refer also to guidelines in Table 5c.	WCC MWC	Ongoing

5.4.2.3 Koonung Creek

No further capital works other than ongoing maintenance of the shared path and biodiversity values along the waterway corridor. Refer to the proposed upgrades to the open space adjoining the creek corridor in individual precincts in Section 7.

No.	Recommendation	Responsibility	Priority
5.4-9	Biodiversity values Continue to advocate for and support the ongoing weed management and maintenance of the Koonung Creek corridor in consultation with Melbourne Water, Manningham City Council and the Wurundjeri Woi-wurrung Aboriginal Heritage Council to continue to improve the biodiversity values and qualities of the linear open space corridor along the Koonung Creek Corridor in the context of cultural values and interpretation.	WCC MCC MWC WCHAC	Ongoing
5.4-10	Development adjoining the waterway corridor Refer to Recommendation 5.4-8.	WCC MWC	Ongoing

5.4.2.4 Mullum Mullum Creek

Mullum Mullum Creek flows along part of the north-eastern boundary of the municipality with the City of Manningham located to the north. Yarran Dheran Reserve is located along this boundary and the future recommendations for this reserve are included in Section 7.11.

5.4.2.5 Former Healesville Freeway Reserve

The 2007 Strategy highlighted the future opportunity for the east-west connectivity along the former Healesville Freeway Reserve and connecting to the Dandenong Valley Parklands. The Draft Masterplan for this linear open space is currently in preparation by Parks Victoria and the land has recently been rezoned to public open space. As part of this liner network, Council is responsible for Old Strathdon Orchard and Davy Lane Reserve at the western end of the linear open space adjoining Springvale Road. For recommendations regarding adjoining open space and Council managed open space refer to Section 7, Precinct Analysis and Recommendations.

No.	Recommendation	Responsibility	Priority
5.4-11	Former Healesville Freeway Reserve Masterplan Council to continue to liaise with Parks Victoria during the preparation of this Masterplan to advocate for open space needs and uses for the Whitehorse community. Opportunities include: Investigate the potential to provide or allow for the opportunity for additional structured sporting facilities towards the Dandenong Valley Parklands end in the longer term.	WCC MCC MWC WCHAC	Ongoing

No.	Recommendation	Responsibility	Priority
	- Path connections between the shared path and the existing local entry points. - Improve passive surveillance and sense of personal safety in the reserve.		

5.4.2.6 Melbourne Water Pipe Track Reserve

The Melbourne Water Pipe Track Reserve extends north-south through the municipality, commencing in Mitcham, traversing through Nunawading, Forest Hill and Burwood East. The reserve is set aside for the water supply purposes so is a service easement, which is also accessible to the public to use as a linear open space. Due to the service easement requirements, no tree planting, shrub or ground layer planting is permitted. Melbourne Water have permitted the construction of a shared path, which will at times be modified or removed when pipeline infrastructure is replaced. From the site assessment work, pipeline infrastructure replacement is currently underway and therefore sections of the pipe track were inaccessible and recently re-opened sections have had the shared path replaced.

No.	Recommendation	Responsibility	Priority
5.4-12	Shared path along the Melbourne Water Pipe Track Reserve Shared path is being installed by Melbourne Water following pipeline infrastructure replacement. Council to liaise with Melbourne Water and prepare a Masterplan for the Pipe Track Reserve to guide future recreational improvements to the reserve. Sections that provide important entry points and connectivity to adjoining Council Reserves or east-west connectivity in areas with long street block lengths. This includes: - Between Creek Road and Mitcham Road, Mitcham - Between Rooks Road and Lorikeet Street, accessing Dagola Reserve and Charles Rooks Reserve, Nunawading - Between Shady Grove and Canterbury Road, Forest Hill - Between Norma Road and Hawthorn Road, Forest Hill - Between Ballantyne Steet and Burwood Highway, Burwood East.	WCC MWC	Very High

5.4.2.7 Other linear reserves

There are a number of other linear reserves and all recommendations regarding these are included in Section 7 of the Strategy Technical Report. They include (in alphabetical order):

- Bellbird Dell, Vermont and Vermont South
- Blackburn Creek Parklands, Blackburn.
- Bushy Creek Reserve, Box Hill North.
- Collina Glen, Mitcham.
- Cootamundra Walk, Blackburn.
- Gawler Chain, Mont Albert.
- Holland Gully, Burwood East.
- Lundgren Chain Reserve, Burwood.
- Somers Trail, Mitcham.

5.4.3 Additional outdoor sporting fields in Regional and Municipal open space

As noted in Section 3.5.2 of this Strategy, the Whitehorse Recreation Strategy identified the need for increased access to sporting fields, and identified a number of ways this could be achieved including:

- increase access to 20 existing sporting fields via facility upgrades
- investigate provision of synthetic turf on selected sites to facilitate increased levels of use
- investigate joint-use agreements with the Department of Education.

No.	Recommendation	Responsibility	Priority
5.4-13	Investigate option for provision of additional sporting fields in existing open space reserves Council to continue to investigate the feasibility of establishing new outdoor sporting fields, suitable for structured sporting use, the following existing open spaces: • Junction Road Reserve in Nunawading • Davy Lane Reserve in Vermont • Former Healesville Freeway Reserve in Vermont Note that these structured sport and recreation projects do not form part of the open space contribution rate or the Precinct Action Plan included in Section 7 of this Strategy.	WCC (PV), (DOTP)	Very High

No.	Recommendation	Responsibility	Priority
5.4-14	Investigate joint-use agreements with Department of Education As part of implementing the Recreation Strategy, identify locations where access to structured sporting facilities located in public schools is preferred, and liaise with the Department of Education to establish joint-use agreements for this use. Refer to the Whitehorse Recreation Strategy for further information.	WCC DOE	Very High
5.4-15	Investigate future upgrades to the existing sporting fields identified in the Whitehorse Recreation Strategy As part of implementing the Recreation Strategy, Council to continue to investigate future upgrades to existing sporting fields as identified in the Whitehorse Recreation Strategy. Note that these structured sport and recreation projects do not form part of the open space contribution rate or the Precinct Action Plan included in Section 7 of this Strategy.	WCC	Ongoing

6. Open space design and management guidelines

6.1 Overview

These guidelines support the core guiding principles and directions for the design and management of existing and new open space as set out in this Strategy. The core principles include open space being accessible, adaptable, cultural, connected, diverse, ecological and sustainable.

They guide the future design and management of all open space in the City of Whitehorse. This includes:

- Open space that is owned and managed by other agencies located in the municipality.
- Open space that is owned and managed by the Whitehorse City Council.
- Works that other agencies may undertake in open space owned by Whitehorse City Council.
- Future open space that is to be transferred to the Whitehorse City Council.

The guidelines are informed by existing Council policies and best practice standards and address the issues raised during the background research, consultation with Council officers and during the site assessment work. The topics in the guidelines focus on their applicability to the public open space network and it is acknowledged that there are other considerations as they apply more broadly across Council. For example, the guidelines in this Strategy for holding festivals and events focus on open space design and management only and do not provide direction about the process of selecting and holding events. That is covered in Arts and Culture Policy and the Events Planning Guide. In some instances the existing Council policies may have a different emphasis from the guidelines covering the same topic in this Strategy. Council policies are frequently updated, and some policy updates may be informed by these guidelines.

For proposed new open space, Council will first assess the suitability of proposed land areas against the criteria included in this Strategy. Once the suitability of the site as open space has been confirmed, designs for the new open space will be consistent with the guidelines. Council officers will refer to the guidelines when preparing design plans and undertaking proposed upgrades to existing open space. They will also assess proposed designs for new open space by other agencies and developers with reference to these guidelines where appropriate.

The Section include the following:

- 6.1 Overview
- 6.2 Biodiversity values
- 6.3 Sustainable design and management
- 6.4 Climate change and urban greening

- 6.5 Accessibility to open space
- 6.6 Unstructured recreation and informal use and infrastructure
- 6.7 Structured sport and recreation use and infrastructure
- 6.8 Cultural heritage values and public art
- 6.9 Festivals and events
- 6.10 Design and management plans for open space
- 6.11 Open space maintenance
- 6.12 Other agency open space ownership and management

6.2 Biodiversity values

Biodiversity values and the natural bushland character of the open space in Whitehorse significantly contributes to its identity and character. Some reserves contain significant areas of remnant bushland while other reserves have remnant overstorey trees that are often also mixed with planted native and exotic trees. With many of the open space reserves being located along waterway corridors, waterways and wetlands make a significant contribution to the character and connectivity of the space network. The Whitehorse Urban Forest Strategy (UFS), Objective 3 is

Council protects remnant vegetation within Council managed bushland reserves with an ecological restoration program mostly through weeding and planting. Council will extend revegetation areas and improve connectivity between habitat throughout and beyond the municipality.

The *Whitehorse Urban Biodiversity Strategy for Council Managed Open Space, Streetscapes and Community Facilities (Whitehorse Urban Biodiversity Strategy)* states that:

undertaking strategic vegetation management works that conserve and enhance biodiversity assets and urban habitat across community open space will provide the greatest single benefit to biodiversity within Whitehorse.

The Whitehorse Urban Biodiversity Strategy goes on to note the definition of Whitehorse biodiversity is primarily focussed on indigenous flora and fauna species and vegetation communities but it also acknowledges that in a suburban modified landscape urban habitat is critical in maintaining indigenous fauna species. The Strategy also highlights the importance of water to maintaining biodiversity in the municipality.

The *Wildlife Habitat Connectivity across City of Whitehorse (2021)* prepared by University of Melbourne it identifies key wildlife species present in the municipality and identify what improvements are needed to protect and improve their habitat. Overall the recommendations focus on planting additional indigenous vegetation to create stepping

stone or links for the species, and address gaps in the habitat corridors, which are mainly located along waterways and their associated tributaries.

Open space is recognised as a key opportunity for improving biodiversity values including expanding the presence of indigenous vegetation.

6.2.1 Open space with nature conservation values

As noted in Section 3.3, all existing open space has been assigned a primary along with secondary character classifications. Nature conservation is one of the character classifications that recognises this is the primary role and intent of the public open space. The following guidelines apply to all open space with this as either a primary or secondary character classification.

Design guidelines to improve habitat and nature conservation values in open space:

- a) Siting of future recreation facilities or upgrade of existing facilities in open space that directly adjoins the waterways is to allow adequate space for a sustainable width of riparian vegetation and any other consideration of natural process such as erosion and high flow events. Council will seek advice from Melbourne Water to assist with achieving suitable and sustainable setbacks where required.
- b) Protect and improve biodiversity and fauna habitat values including retaining and protecting remnant vegetation by ensuring that future paths and other facilities are located appropriately to avoid the need to remove or regularly modify and trim remnant vegetation.
- c) Where significant and mature remnant trees are present in open space, recreational facilities including paths, seats etc are to be located well outside the mature tree canopy and the tree protection zone.
- d) Where mature remnant trees are present in open space the preference will be to establish a natural mulch surface below with indigenous planting where possible established to protect and improve the ongoing health of the trees.
- e) Where sports lighting and other open space illumination is required, the proposed light is to minimise upward glare so that it has the least impact on native fauna and adjoining residential amenity. Additionally, proposed lighting is to demonstrate energy efficiency and may include smart lighting technology where appropriate. Measures like planting large evergreen trees to minimise light pollution will also be considered.
- f) Future fencing design within open space including vehicle exclusions fences, are to allow for fauna movement where feasible.
- g) Retain, where possible, mature dead trees for habitat purposes considering risk management issues associated with falling limbs.
- h) Dog off-lead areas in open space adjacent to waterways and wetlands are to be designed and managed so that dogs do not impact on the nature conservation and fauna habitat values of the waterway corridor.
- i) In reserves with identified nature conservation values and along the waterway corridors, any future planting is to be locally indigenous and of local provenance

Design guidelines to improve habitat and nature conservation values in open space:

to strengthen the identified Ecological Vegetation Class (EVC). This includes mid-storey and ground layer vegetation with consideration of suitable sight lines at entry points and along shared trails for safety.

6.2.2 Biodiversity values in other areas of open space

There is a range of other open spaces in the City of Whitehorse where biodiversity values are identified as a secondary classification, which as per Table 3d, are referred to as Nature conservation, which is the character classification that recognises and protects biodiversity values. This is mainly identified in open spaces with some remnant indigenous overstorey trees, but where this is not the dominant character. These are generally outside the core waterway corridors and native bushland areas. The following guidelines describe the process for improving biodiversity values in the context of the open space also having other identified values and character classifications identified in the Strategy.

Design guidelines to change and improve the habitat and nature conservation values in open space:

- a) Maximise retention of the mature canopy trees in the open space and potential for some regeneration or recruitment of the indigenous trees.
- b) Integrate additional native and indigenous vegetation including ground cover and/or mid-storey vegetation into the open space, demonstrating that it is consistent or complements the character and values of the open space.
- c) The design and location of additional planting areas is to retain excellent passive surveillance of the open space.
- d) Existing lighting to be reviewed to reduce its impact on identified native fauna values, where they are identified.

6.3 Sustainable design and management

Whitehorse City Council has recently adopted the *Whitehorse Climate Response Strategy 2023-2030* (CRS) which strongly supports emissions reduction, with the following targets agreed to:

- Maintain carbon neutral status for corporate emissions
- Source 100 per cent renewable electricity for Council operations by 2025
- Achieve net zero corporate emissions by 2030
- Aspire for net zero community emissions by 2040.

The CRS identifies three types of actions require which include adaptation actions, mitigation actions and systemic actions. The Open Space Strategy can assist with mitigation actions by adding open space green open space to the network and ensuring future design and management of this open space assists with urban cooling utilising sustainable water and adhering to the environmentally sustainable design principles in the future provision, design and management of open space.

6.3.1 Sustainable water use in open space

Key issues include:

- The *Whitehorse Integrated Water Management Strategy 2022-2042* (IWMS) considers all aspects of the water cycle in the way they plan the city and help to improve the resilience into the future. It recognises that Council and the community must work closely with all other water management stakeholders with our municipality and our waterway catchment to get the best outcomes.
- The focus of stormwater management the City of Whitehorse traditionally was on strategies to remove stormwater from the landscape as quickly as possible with an efficient and effective drainage system to reducing local flooding. Council now acknowledges that retaining water in the landscape can contribute to greening urban open space, improve water quality and protect the urban waterways. Importantly, retaining stormwater in the landscape also contributes to urban cooling.
- The IWMS states that through the delivery of this Strategy, Council will achieve the following outcomes:
 - All water is valued as a resource
 - Healthy landscapes and waterways
 - Flood risk is reduced.
- The IWMS notes that prior to 1750, Whitehorse was completely covered in bushland and today only two per cent of the original landscape remains. As urban development progressed, ecologically important reaches of the waterways across the municipality were piped and channelised to provide an efficient drainage function. This had a significant impact on the natural waterway values. Increased impervious areas as a result of urbanisation resulted in higher levels of urban runoff with increased pollutants and larger flooding and overland flows.
- The impacts of urbanisation are exacerbated by our changing climate. Over the next 10 to 15 years we can expect considerable climate change impacts including heatwaves, droughts, floods, heavy downpours and other extreme events getting worse. This in turn impacts on the water cycle, the landscapes and the community.

- To assist to protect the natural systems and liveability in the face of climate change, and increasing rates of expansion of urbanisation we need to increase green infrastructure, protect waterways and adapt our city to the stresses of a changing climate and further urbanisation.
- Whitehorse acknowledges its reliance on sustainable water supply services. This includes being important for maintaining our recreation and community facilities as well as delivering on canopy and greening objectives in the Urban Forest Strategy. This means embedding integrated water management across Council's operations.
- In order to assist with urban greening and cooling there is a need to investigate options to increase sustainable water use in open space. The scope and need for these projects will deliver multiple benefits and requires a partnership across the different disciplines and teams at Council. They will be prioritised in medium to high density settings.
- High levels of informal use of open grassed areas in the municipality which is forecast to continue to increase over time. There is a need to consider irrigating high use areas so they remain viable and useable in the summer.
- Keeping water in the landscape to support healthy soils, retain baseflows in streams and provide cooler, greener urban spaces.
- Incorporating Water Sensitive Urban Design (WSUD) in open space reserves where applicable to reduce damaging stormwater flows and pollution entering the waterways and retain water in the landscape.
- The high cost of stormwater re-use projects limits their implementation to all sites, however appropriate external funding will be sourced to assist and maximise implementation in priority sites in high density settings. As a complementary strategy, investigate passive irrigation a method of improving urban greening in open space without necessarily meeting water quality improvement objectives.

Guidelines regarding sustainable water use in open space:

- a) Incorporate best practice principles for stormwater re-use in open space using passive irrigation principles. This includes redirecting stormwater and rainwater runoff from buildings and paved surfaces within the open space and the surrounding local catchment to the open space.
- b) For new open space and upgrades to existing open space in medium and high density areas, consider the multiple benefits of mitigating urban heat as part of the evaluation of appropriate stormwater re-use and treatment systems proposed for open space.
- c) Maximise the use of porous paving and permeable surface treatments to reduce concentrations of stormwater runoff and improve the moisture retaining (and passive cooling) qualities of open space. Note porous paving and permeable surfaces need to also achieve universal access, i.e. compacted gravel paths do not achieve this.
- d) Where car parking is provided the stormwater runoff is to be re-used within the open space.
- e) Water features in open space will need to demonstrate they meet the principles of sustainable water use/re-use and that they contribute to the landscape character, amenity and urban cooling qualities of the open space.

Guidelines regarding sustainable water use in open space:

- f) Water tanks/storage devices, where required, are to be co-locate them with other built form and infrastructure in the open space. If they are the only built feature in the reserve, then their siting, size, material selection, colour and design is to complement the character of the open space. Tanks are to minimise impact on major view sheds of the open space from the surrounding area and view lines into the open space from entries and paths/trails.
- g) Consider synthetic surfaces at selected locations to reduce pressure and irrigation requirements for natural turf sports fields. This will require the development of an agreed assessment method for determining suitable locations for synthetic surfaces. Refer to Guidelines for Synthetic Sports Surfaces in Section 6.7.6 of this Strategy.

6.3.2 Sustainable material use in open space infrastructure design

Council has developed the *Environmentally Sustainable Design Policy for Council Buildings and Infrastructure*. This will continue to apply, and the guidelines included below are those specifically for open space.

In selecting materials for use in future open space construction adhere where appropriate to the following guidelines:

- a) Encourage sustainable or ecologically preferable materials, which include materials that are durable, sourced locally, recyclable (including recycled plastics, rubber, glass and concrete), made from post-consumer materials, refurbished or renewable including consideration of whole-of-life costing.
- b) Promote re-use of on-site materials and features where appropriate.
- c) Where timber is used in open space it is to be from sustainable sources, including plantation, recycled and/or harvested efficiently. Species selection and quality is to demonstrate it is appropriate for external use and has a minimum 20 year life span for the proposed use.
- d) Appropriate dimensioning of material to suit the particular use demonstrating the bulk and quantity of material proposed does not result in unnecessary wastage.
- e) Minimise unnecessary material use in infrastructure design for example, the use of suitable kerb barrier or low post and rail/cable fencing to prevent vehicle access into open space in place of bollards where applicable.
- f) Alternative power sources for lighting (refer to lighting Guidelines in 6.6.5).
- g) Siting and design of buildings in open space to consider passive solar orientation and minimise the need for and use of heating and cooling systems.
- h) Appropriate siting and design of facilities to minimise additional structures, particularly regarding shade sails to play spaces. Where shelters are provided, that they provide both rain and shade shelter and design and oriented to located allow winter sunlight access and summer shade.
- i) Integrate stormwater runoff from large-scaled surfaces such as car parks, roofs etc into the open space design where feasible to improve passive cooling and sustainable water use.

In selecting materials for use in future open space construction adhere where appropriate to the following guidelines:

- j) Select and specify materials that are durable and demonstrate minimal ongoing management and maintenance requirements.

6.3.3 Reduce reliance on vehicle use to access open space

Recommendations in this Strategy encourage walking, cycling and use of public transport to reach open space. Similarly the principles of providing open space within safe and easy walking distance of residents and workers is to encourage people outdoors to visit open space. It is acknowledged that people will need to travel further than an easy walk to reach larger types of open space particularly to those with more specialised facilities for longer stays.

The City of Whitehorse has some key existing linear open spaces along the numerous waterways across the municipality. There are also linear open spaces where the waterway is below ground, with a series of open space reserves that are connected via a linear path and have distinct varied functions and use in addition to their linear link function.

Additionally, there is a focus on improving the attractiveness of the streets in the City of Whitehorse for cycling, with the addition of the cycling symbols painted onto key local access streets. The basis for this initiative is identified in the *Whitehorse Cycling Strategy, 2016*. This key directions in that Strategy included building more off-road paths, creating safer ways for cyclists to cross arterial roads, improve connectivity between existing and new paths and promote safe and courteous behaviour by all road and path uses. This includes increasing the consciousness of drivers regarding sharing the road with cyclists.

Adherence to the design guidelines in this Strategy aims to reduce reliance on vehicles and encourage fitness through walking and cycling. This includes the provision of additional facilities that extend the time spent in open space including seating, drinking fountains, shelters and shade trees. Refer to the guidelines in Section 6.5.

6.4 Climate change and urban greening

Open space is influenced by the changing climate and has an important role to play in mitigating and adapting to its effects. This includes supporting a significant tree canopy cover and remnant bushland which provides multiple benefits to the biodiversity values, character and liveability of Whitehorse. The *Whitehorse City Council Urban Forest Strategy 2021-2031* (UFS) identifies the first priority is to halt the decline in canopy cover which when measured between 2014 and 2018 showed that canopy cover declined by 2.28 per cent to 18 per cent. The UFS sets a target to increase canopy cover to 27 per cent by 2031 and 30 per cent by 2050. The improved canopy cover can be achieved by both planting additional trees and improving the care and maintenance of the existing trees to increase their canopy cover and overall tree health.

The UFS also highlights the multiple benefits of trees including the health and wellbeing benefits, environmental benefits and the economic benefits. The health of existing and future trees is forecast to be impacted by the predicted climatic conditions that will continue to become more extreme, creating harsher conditions for trees to survive. By increasing canopy cover through planting additional trees and taking more care to look after existing trees, research shows that we will achieve improved social and environmental benefits when our urban forest tree canopy cover exceeds 30 per cent.

In addition to the importance of canopy trees is the positive effects that open space can have on urban cooling in this time of climate change, particularly during periods of extended extreme heat. For open space to assist with mitigating urban heat, ideally it is well distributed across the urban areas, retains moisture through the inclusion of moisture absorbing surfaces such as grass and garden beds and includes large broad spreading canopy trees that will transpire overnight and effectively cool the higher density urban areas. For this to be effective, the open space needs to be large enough to have large broad spreading canopy trees with space for recreational facilities as well that do not impact on the trees health. Recent research undertaken by Melbourne University has identified that non-native tree species are more effective at evapotranspiration and effective urban cooling than native tree species, including deciduous species. The other key benefit of deciduous species in higher density precincts is they allow more sunlight access during winter which is an important consideration to overall community health and wellbeing in greater Melbourne during winter.

The distributed network of green open spaces across higher density precincts contributes to urban cooling in addition to being within easy and safe walking distance of residents and workers.

In order for these open spaces to be effective in mitigating urban heat they need to have retained moisture, preferably in garden beds and grassed areas, large mature canopy trees combined with some open areas within them so there is room for air circulation and effective evapotranspiration.

6.4.1 Protecting mature canopy trees

Guidelines for protecting mature canopy trees in future open space designs

- a) In future masterplans, concept plans or proposed upgrades to open space, maximise the retention of existing mature large long-lived trees.
- b) As part of future design plans for open space incorporate measures to improve the health and appreciation of the existing large mature trees. This includes demonstrating that the proposed works do not negatively impact on the trees and allow sufficient space for them to grow and mature.
- c) Consideration to be given to the soil profile, available root space, water retention measures and treatment under the tree canopy including alternatives to lawn where appropriate which may include mulch and/or planting.
- d) In the assessment of new land area for open space include land that incorporates existing large mature canopy trees as one of the key selection criteria.

6.4.2 Open space design in medium to high density precincts

Guidelines for incorporating natural elements into the design of open space in medium to high density precincts:

- a) Maximise the use of moisture retaining surfaces/features/green infrastructure including shade trees, garden beds, grassing and permeable paving to effectively passively cool the open space via evapotranspiration. This is to offset the build-up of urban heat in higher density precincts.
- b) Demonstrate that adequate space is provided outside existing and proposed large canopy trees for ongoing tree health. This includes demonstrating there is space for paths and other recreation facilities to be accommodated in the open space without damaging the health of the tree in the longer term or public safety.
- c) Incorporate integrated water management and water re-use principles as an integral part of the open space siting, size and design, to effectively retain moisture and have a positive role in passive cooling as per guidelines in 6.4.1.
- d) Designs are to demonstrate the open space will be easily accessible and comfortable for everyone to use.
- e) Include drinking fountains and a variety of seating opportunities that are in both the shade and the sun to encourage people into open space.
- f) In play space designs, include natural elements and materials into the design, for example trees for shade, natural mulch and planting to provide children living in high density settings with easy access to natural materials.
- g) Incorporate sustainable design principles including the use of recycled materials and products that store carbon.
- h) For existing built form that is retained in open space, or where new built form is proposed in open space, investigate options to include green walls and roof top gardens to assist mitigate urban heat island effect and strengthen urban greening.

6.4.3 Vegetation selection

Currently open space reserves in Whitehorse have predominantly native vegetation in the eastern parts of the municipality changing to a mixed character in the central and western parts. This includes some open space that are dominated by mature exotic trees and others that are combined with indigenous and native vegetation. The large mature native, indigenous and exotic trees contribute significantly to the character and liveability of Whitehorse with public open space providing space for them to grow. As urban densities increase in parts of the municipality over the next 15 years, the large mature canopy trees will become even more important, particularly in the higher density precincts associated with the activity centres and along the main roads.

Future open space designs need to prioritise the retention of mature canopy trees and planting additional large long-lived canopy trees ensuring planning for the health and maximising the canopy of the new trees. This means establishing reliable and sustainable water sources for irrigation and selecting species that are likely to adapt to the climate change. This is consistent with the *City of Whitehorse Urban Forest Strategy 2021-2031* which aims to increase the canopy cover on both private and public land. This is also consistent with the *Whitehorse Climate Response Strategy 2023-2030*.

Selection of trees and vegetation for open space needs to consider a range of factors including:

- Improvement to the microclimate of the open space in all seasons including winter
- Contributes to habitat and biodiversity values
- The trees have sustainable water source for appropriate irrigation
- Increases species diversity and sustainability of the urban forest
- Contribution to the scale and landscape character
- The surrounding urban context
- Cultural heritage values
- Provide the community the opportunity to connect with nature.

In selecting plants for use in public open space consider the following:

- a) For open space in higher density precincts, planting selection to support passive cooling characteristics and adequate winter sunlight access. This includes the use of large broad spreading canopy shade trees, turfing where feasible and garden beds that maximise retention of moisture in the landscape in conjunction with hardscape surfaces. The species selection, location and planting method needs to consider the proximity to existing infrastructure assets and likely protection and preparation measures that may be required to maximise the opportunities for planting.
- b) In reserves with identified nature conservation values and along the waterway corridors, any future planting is to be locally indigenous and of local provenance to strengthen the identified Ecological Vegetation Class (EVC). This includes mid-storey and ground layer vegetation with consideration of suitable sight lines at entry points and along shared trails for safety.
- c) Protect and appropriately manage both existing established mature trees and younger trees that provide shade and character to open space. This may include dead and dying trees to protect habitat values along with arboricultural works to increase their habitat value for example cabling and other stability works. Non-

In selecting plants for use in public open space consider the following:

indigenous vegetation may also be appropriate to retain in the absence of other mature vegetation.

- d) Increase the presence of canopy shade trees in open space, which retain open sightlines into open space while providing shade. Trees are preferably to be long-lived species, complement the established or desired open space character, and consider winter shade and summer sunlight access. This is to achieve an overall increase in tree canopy in the municipality while improving the urban greening, shade and character of the open space which will make it more attractive to use.
- e) Plants at the entries to open space are to be selected to retain clear sightlines from the entry paths and other public areas such as adjoining roads at maturity. This is applicable in all open space that does not have Nature conservation as its primary character classification.
- f) In open space with identified environmental or native landscape character, future planting is to complement these values, and also meet the principles of open sightlines.
- g) In open space with recognised First Nations cultural heritage values and historical values, plants are to be consistent with and complement the cultural heritage and historical character and values.
- h) Garden beds and detailed horticultural plantings are to demonstrate they support the desired function, character and use of the open space. Species selection and garden bed area/size are to demonstrate ease of maintenance consistent with Council's ongoing operational budgets.

6.5 Accessibility to open space

Reviewing the precinct based survey 17 per cent of respondents noted there is open space they do not use. The top 11 reasons cited in priority order are:

- Personal safety concerns (68)
- Too far to walk or cycle (38)
- Park is too busy (36)
- Uninviting (24)
- Lack of car parking (23)
- Busy traffic making it difficult to access and/or use (21)
- Fear dogs off-leash (20)
- Lack of lighting (18)
- Poor maintenance (18)
- Facilities don't appeal (17)
- Lack of accessible paths for people with limited mobility (16).

The current approach that is used by many agencies is to plan for access for all using universal design principles. This means designing accessible environments with a focus on removing environmental barriers to access to ensure there is equal opportunity for access and inclusion.

6.5.1 Access for all using universal design principles

Guidelines to improve access for all to open space:

- a) Demonstrate an inclusive approach in the design and management of open space that maximises access and use by everyone. For example, providing a path to an existing seat in open space will make the seat more accessible and useable by people who may have limited mobility and are unable to walk on uneven surfaces to reach the seat.
- b) When designing or upgrading existing facilities investigate opportunities to improve their adaptability to a range of uses. For example, when replacing an existing basketball half court and ring, integrate other uses such as netball/futsal/hand ball.
- c) New facilities to meet current standards for universal access to paths including grades, widths and surfaces from at least one entry point into the open space in accordance with the current Australian Standards, currently AS 1428.2 or any that supersede these.
- d) Meet current best practice standards for universal access to the major structured sporting, unstructured recreation and informal use facilities in open space in accordance with the current Australian Standards, currently AS 1428.1, 1428.2, 1428.3 and 1428.4 or any that supersede these.
- e) Adequate provision of path types to meet the anticipated range of uses, including walking, strolling, cycling, pram pushing, dog walking and exercise. This includes provision of sealed paths to provide stable and even surfaces for people with limited mobility.
- f) Provide connections to public transport, the surrounding shared trails, footpath networks and car parking.

Guidelines to improve access for all to open space:

- g) Demonstrate that clear lines of sight into the open space from all entry points and within it are achieved to maintain safe access.
- h) Provide a diversity of seating that meet the principles of universal access including seats with back rests, some seats with armrests and bench seats ensuring that a range of seats are DDA compliant.
- i) Future designs for play spaces to include some universal access as an integrated approach to them. Refer to guidelines in 6.6.2 for more about play spaces.
- j) Raised planter beds for improved accessibility for food growing/community gardens in open space.
- a) Undertake Gender Impact Assessments as part of design of open space to incorporate gender equity principles in the design and function of open space.

6.5.2 Personal safety

Guidelines for consideration of personal safety in future open space design and management:

- a) Incorporate Crime Prevention Through Environmental Design (CPTED) Principles in all future open space design and management guidelines.
- b) Demonstrate that passive surveillance of open space from adjoining areas is achieved by appropriate design of the surrounding urban context and development interface, maximising visual and physical accessibility to open space.
- c) Demonstrate that clear lines of sight into the open space from all entry points and within it are achieved to provide safe access.
- d) New open space designs and upgrades are to demonstrate ease of cleaning and maintenance, including access for litter collection, for cleaning picnic and barbecue facilities and cleaning public toilets. Demonstrate the materials and surfaces used for the proposed infrastructure are easily cleaned/replaced when damaged or as part of the future renewal program.
- e) Lighting of major pedestrian links where they provide convenient access to and from key facilities such as between a train station and residential area. Lighting is to meet guidelines in 6.6.5.
- f) In selected Regional and Municipal open spaces, provide energy efficient lighting that allows unstructured recreational use of the key facilities in the early morning and evening during the winter for example, sporting fields and linked circuit paths. This does not include areas where lighting in the evening may disturb habitat. Lighting is to meet the guidelines in 6.6.5.
- g) Educate and enforce appropriate behaviour by dog owners regarding adherence to the on and off-lead areas. Refer to 6.6.1.
- h) Continue regular maintenance inspections and independent audits of all play spaces to ensure they meet the safety requirements consistent with the current play space standards.

6.5.3 Increasing the variety of facilities and improving their quality

This Strategy aims to promote a healthier community both socially and physically by encouraging increased levels of use in open space. Based on the site assessment work it was evident that many open spaces contained a similar type, condition and character of the facilities in the Whitehorse open space network. Many of the open space reserves have play spaces for children 12 years and under, seating overlooking the play space, grass and trees. By increasing the variety of facilities including the type, design and quality of them, will improve their level of appeal to everyone.

Guidelines for increasing the variety of facilities in open space:

- b) Aim for a diversity of unstructured recreation facilities including those that encourage physical fitness in people of all ages, abilities, gender and cultural backgrounds - refer also to guidelines in 6.6. Designs are to demonstrate that they include complementary facilities that encourage use such as seats and drinking fountains so people can rest during exercise and therefore improve their fitness
- c) Demonstrate that designs for proposed upgrades to existing open space and new open space respond to local community needs, reflecting the diversity of the community (including cultures, age, gender and abilities) and changes in demographics.
- d) Minimise the duplication of facilities within a walkable neighbourhood catchment to provide a variety of recreational activities so that combined, the network offers diversity.
- e) Demonstrate that future recreation facility design incorporates principles of its adaptability and multiple-use so that the facility can respond to changing needs over time without needing to be replaced.

6.6 Unstructured recreation and informal use and infrastructure

One of the key aims of this Strategy is to increase the diversity of facilities in open space. While Whitehorse has an excellent program of play facility upgrades, many of the open spaces only have similar play facilities for children 12 years and under and seat/s. The demographics across the municipality are changing with a decreasing proportion of the population being in the 0 to 10 age cohort and an increase in the adult population including all age ranges from young adults through to senior age groups. The growing body of research into health and wellbeing has demonstrated links between improved community health and wellbeing and access to open space. This includes the more tangible physical benefits of being outdoors and participating in exercise on an informal basis, combined with the more intangible benefits from being in fresh air, in contact with the natural environment, social contact and connectedness of meeting neighbours, friends and work colleagues in open space.

In some parts of the municipality, open space is already very well used and there are identified conflicts between different users of open space. However, many of the parks in Whitehorse do not appear to be well used due to the lack of a diverse range of facilities that encourage people of all ages and abilities to spend time in open space. There is an opportunity to reduce conflicts between users in open space by increasing the quality and range of facilities in the more of the existing open spaces to provide a greater number of quality open spaces for people to visit.

Inherent principles that guide the future design and management of open space is the shared use of open space and the adaptability of spaces to accommodate different uses. An excellent example of this in Whitehorse is Box Hill Gardens. The multi-purpose recreational space that replaced the club based tennis courts opened up this area of the gardens to a broader range of users in the community. The tennis courts were a single use facility, whereas the multi-purpose area park a range of different facilities that can be used simultaneously in a very similar footprint. This includes a basketball halfcourt, tennis hit up wall, table tennis, and hardstand area with seating that can be used for skating/bikes and scooters. The community survey outcomes reported for this park demonstrate that in the 2024 Strategy, there are a greater variety of reasons the community are visiting Box Hill Gardens, compared to those reported in the 2007 Strategy.

6.6.1 Management of dogs in open space

The consultation undertaken for this Strategy identified walking/exercising dogs is one of the main reasons people visit open space on a regular basis. This Strategy recognises that dogs provide the reason for getting their owners out into open space and offer important companionship for people, particularly those who live alone. With the growing population, the number of dogs being exercised in open space may potentially increase. While dog walking and exercise is one of the most popular activities, it also raises concerns for other park users, particularly when the dogs are exercised off-lead. The concerns include personal safety particularly for young children and the elderly; dogs

digging holes in the sports ovals and open grassed areas; impacts on native fauna; and dog excrement in the park. People who own dogs express concern about the lack of spaces for them to exercise their dogs off-lead, particularly the lack of fenced dog off-lead areas.

The *Whitehorse City Council Domestic Animal Management Plan 2021-2025 (DAMP)* is the appropriate document to guide the management of dogs in all public areas including in open space. The current DAMP provides clear direction including an action to review the existing dog off-lead areas and options for timed off-lead trials in existing on-lead parks which has been completed and endorsed during 2022-23.

In terms of dog off-lead areas, they are generally well distributed across the municipality. In the next review of the DAMP, this Strategy recommends for the DAMP to identify if there is a need to address what appear to be minor gap areas in off-lead provision including:

- North-eastern extent of Mitcham, north of Whitehorse Road and east of Mitcham Road.
- Central part of Nunawading/Mitcham/Forest Hill, between Canterbury and Whitehorse Roads and between Springvale and Mitcham Roads.
- Eastern extent of Vermont, north-east of Boronia Road and south of Canterbury Road.

No.	Recommendation	Responsibility	Priority
6.6-1	Next review of the Whitehorse DAMP As part of the next review of the Whitehorse DAMP, address the following: • Review the distribution of dog off-lead areas including in the three potential gap areas noted in Section 6.6.1. • Prepare the Dog Park Guidelines. • Design and implement Responsible Dog Owner Behaviour in Open Space campaign program to educate and increase community awareness of responsible dog owner behaviours for dog owners and other park users.	WCC	High

Table 6-1 Open space with dog off-lead areas in the City of Whitehorse

The information in this table is summarised from the City of Whitehorse website. For all parks NOT listed below, dogs are required to be walked on-lead.

Open space	Dog off-lead area	Dog on-lead area	No dog area
Ballyshanassy Park	Yes		
Bennettswood Reserve	Yes		
Billabong Park	Yes		
Boisdale Reserve	Yes		
Box Hill City Oval & Bolton Park, Box Hill		Yes	Yes

Open space	Dog off-lead area	Dog on-lead area	No dog area
Bushy Creek Trail West	Yes		
Davy Lane	Yes		
East Burwood Reserve, Burwood East	Yes	Yes	Yes
Eley Park, Blackburn South	Yes	Yes	
Elgar Park, Mont Albert North	Yes		Yes
Eram Park	Yes		
Forest Hill Reserve	Yes		
Gardiners Creek	Yes		
Glen Valley Reserve	Yes		
Hagenauer Reserve & Willow Street Park, Box Hill North		Yes	Yes
Holland Gully	Yes		
Hunters Knoll	Yes		
Junction Road Reserve, Nunawading	Yes		
Koonung Creek Trail West	Yes		
Koonung Park, Blackburn North	Yes	Yes	
Mahoneys Reserve, Forest Hill	Yes		Yes
Masons Retarding Basin	Yes		
Mont Albert Reserve	Yes		
Morton Park, Blackburn	Yes		Yes
Nicol Park	Yes		
RHL Sparks Reserve, Box Hill	Yes		Yes
Simpsons Park	Yes		
Slater Reserve, Blackburn North	Yes	Yes	
Somers Trail	Yes		
Springfield Park, Box Hill North	Yes	Yes	Yes
Surrey Park, Box Hill	Yes	Yes	Yes
Terrara Park	Yes		
Vermont Recreation Reserve, Vermont		Yes	Yes
Wembley Park, Box Hill South		Yes	Yes
Whitehorse Reserve, Box Hill	Yes	Yes	

Figure 6-1 illustrates the dog off-lead areas as currently shown on Councils website, noting that during the course of the Strategy, this may change.

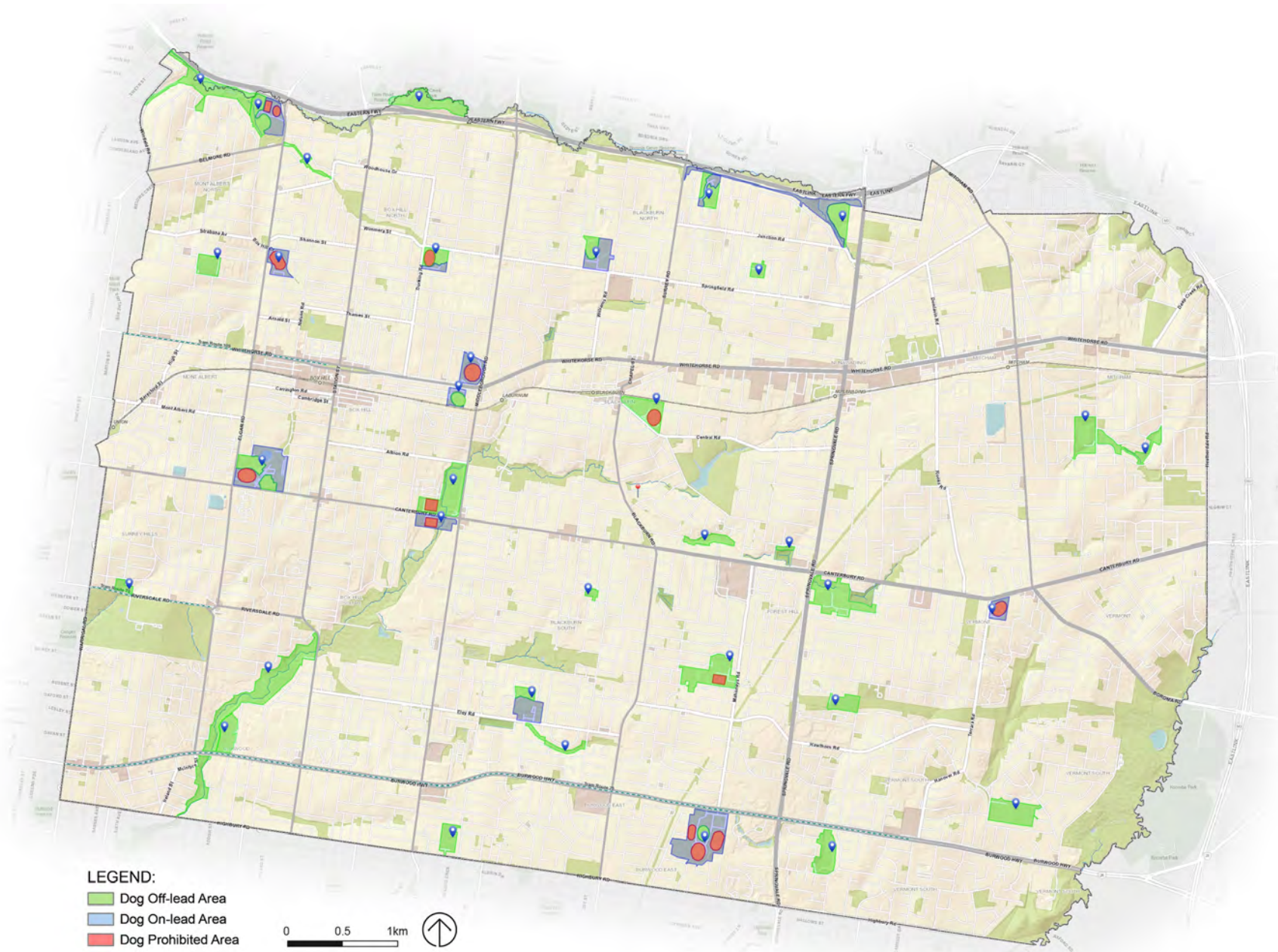


Figure 6-1 Dog off-lead areas in the City of Whitehorse open space network as at 2024

Source: <https://www.whitehorse.vic.gov.au/living-working/pets/dogs/exercising-your-dog/dogs-in-public-spaces> - accessed 09.02.2024

6.6.2 Play spaces

Play spaces can be categorised both as unstructured recreation and informal social facilities. They encourage physical activity in children and are important to their physical development and also assist with the development of cognitive and social skills. Taking children to a play space is a common reason people visit open space. Play spaces encourage social connectedness of parents, carers and children. Taking children to the park to play encourages adults into open space, to meet their neighbours in the park and build social networks. It is also important for children to independently go to the park to play when they are old enough, having open space within a safe and easy walk of residents means this is safe and feasible for them.

The guidelines included in this Strategy provide an overview of the integration between the play space and open space design. They do not replace the need for a more specific plan or strategy to guide the provision, design and management of play spaces in the municipality.

Guidelines for upgrade and integration of existing play space to open space

- a) Demonstrate the play spaces provide a diverse range of activities to meet different age groups and skill development including physical, social and cognitive play, scaled to meet the intended size and hierarchy applicable to the open space catchment in which it is proposed.
- b) Integrate the proposed play space into the open space design to complement and expand the diversity of play opportunities. This could include open grassed areas, bushland areas, unstructured recreation facilities and picnic areas so the play space expands into the park and is not separated and therefore encourages nature play and social connectedness.
- c) In Regional, Municipal, Neighbourhood and Urban Civic open spaces, investigate potential to co-locate unstructured recreational facilities suitable for everyone 12 years and older along with picnic areas to create an intergenerational activity and social hub. This is important so that the adult carers are encouraged to exercise and stay outdoors with their children in the park for longer lengths of time. The picnic areas are to preferably include picnic shelters for shade and rain protection.
- d) In all open space hierarchy types, as a minimum, include seating and sealed graded path access to the play spaces to improve accessibility for everyone.
- e) In all play spaces, use universal design principles to demonstrate that everyone is able to access and participate in play including young people who will informally use the area to meet and socialise as well.
- f) Minimise the use of fencing to play spaces when it can be demonstrated there is no safety or accessibility requirement for it. Alternative treatments to fencing are supported including grade separation, seating walls, steps and planting. This is to meet the accessibility, adaptability, sustainability and safety principles of open space design by encouraging everyone to share, access and use the open space and the play space.
- g) Where possible, locate play spaces so they receive some natural shade during the middle of the day to reduce the need for shade structures. The final proximity of the play space to existing and planted trees will need to demonstrate it is adequately offset from the trees so as not to impact on the ongoing health and

Guidelines for upgrade and integration of existing play space to open space

mature size of the trees. It is also important that the play space is not in total shade during the winter (i.e. receives some sunlight during the day).

- h) Where feasible, major play spaces are to have customised elements or themes that reflect the natural, urban, landscape, cultural, heritage and social character of the open space. The major play spaces are to have associated support facilities including seating, drinking fountains, picnic areas, open grassed areas, trees, shade and preferably complementary unstructured recreation facilities.

6.6.3 Provision of unstructured recreation facilities

The open space survey undertaken for this Strategy identified that people visit open space for a diversity of reasons with the most popular reasons including walking, dog walking, relaxing, play spaces and social reasons. In answer to the question about why people don't visit open space a number of reasons were given including that the open space was unappealing. Therefore, the guidelines in this Strategy encourage the inclusion of a range of different unstructured recreation facilities that encourage people to use them and improve their physical fitness and health. This is balanced with the need to retain the natural qualities and character of the open space as described in Section 6.2. Please note that unstructured recreation facilities do not include other informal park facilities such as picnic facilities, seating, public toilets etc.

Guidelines to promote and increase unstructured recreational use of open space:

- a) Refer to guidelines in 6.5.3 regarding encourage a diversity of facilities in open space.
- b) Location and type of unstructured recreation facilities to complement other identified structured, unstructured and informal uses in the open space and the overall character of the open space.
- c) Include park facilities that support and encourage participation in exercise including seats of different types, drinking fountains, rain shelters and shade. This is so that people of all levels of ability and fitness are able to exercise and improve their fitness by providing the support facilities for people to rest and take a break while exercising.
- d) Placement and design of these facilities are to demonstrate they minimise visual and noise impacts on residents and nature conservation areas.
- e) Placement and design of these facilities are to demonstrate they are balanced with retaining the natural and unbuilt qualities of the open space.

6.6.3.1 Shared user paths in open space

Shared user paths are supported in open space where feasible particularly in encouraging people to exercise outdoors including walking, running, cycling and pram pushing. The following guidelines are intended to assist with the assessment of existing shared user paths and to guide the design of new future shared user paths in open space. The *Whitehorse Cycling Strategy 2016* provides guidelines for on-road and off-road bicycle paths.

Guidelines for review and design of shared user paths in open space:

- a) The shared user path network is to be clearly signed, safe, legible, accessible, direct, linked and attractive.
- b) All gradients and clearances on existing and proposed shared user paths are to meet the relevant standards, currently referred to as the Austroad Standards, *Cycling Aspects of Austroad Guides (2017)* and *Guide to Road Design Part 6A: Walking and Cycling Paths (2021)*
- c) Surface of the shared user path to be meet the required standards as noted in (b) above.
- d) Sightlines to allow clear visibility along paths, particularly near changes in direction without low overhanging vegetation and meet the required standards as noted in (b) above.
- e) Width of shared user paths to be designed for the anticipated level of use, including whether the trails accommodate both recreational and commuter cycling.
- f) Adhere to current best management practice guidelines for shared user paths in relation to waterways and flood management including safety in waterway environments and bridge crossings. Currently these include the Melbourne Water *Shared Pathway Guidelines (2009)*.
- g) Where dog walkers are permitted, clearly sign the shared user paths so that appropriate levels of control are shown and all trail users can adjust their behaviour accordingly. This may also require a promotional campaign and enforcement if signage is ineffective.
- h) Education (via signage, promotional campaign and enforcement) for everyone using the shared user path of appropriate behaviour including cyclists, pedestrians, dog walkers, pram pushers, and personal micromobility devices including skateboards, e-scooters, rollerblades.
- i) On busy or long distance shared user paths, provide seating at regular intervals to assist those who need to stop and rest, with 100 to 200 metre intervals recommended.
- j) Use appropriate lighting including smart technology for shared user paths, and where they are along waterways or high habitat value corridors, lighting should minimise upward glare and impacts on native fauna and adjoining residential properties.

6.6.3.2 Paths in open space (i.e. not designated shared user paths)**Guidelines for review and design of paths in open space:**

- a) Path access into all open space is to be provided so it is accessible for everyone. This includes path connections through open space to facilities including seats and play spaces, along with links into existing linear trails and shared user paths. At least one graded, sealed path at a width that is suitable for the scale and level of use is recommended for all new open space reserves and when upgrades to existing open spaces are undertaken.
- b) Alignment and surface design is to complement and be consistent with the open space location, usage levels and inherent landscape character.

Guidelines for review and design of paths in open space:

- c) Paths to be a width that accommodates the intended levels of use. This includes consideration of walking for different purposes such as strolling and exercise.
- d) Where circuit path networks are provided, install seats at regular intervals (between 100 and 200 metres) along the path as resting points, and where practical provide as a sealed path surface to improve accessibility.
- e) Minimise points where paths cross vehicle entries and access roads within the open space.
- f) The path network within the open space is to clearly visually and physically connect to the footpath network in the adjoining streets to promote and encourage people to walk to open space rather than drive.
- g) Demonstrate that surface runoff from paths is effectively drained either into adjacent garden beds/grass areas or swales to retain water where possible in the open space or where this is not feasible, discharged into underground drainage systems.
- h) In locations where significant conflicts between pedestrians and cyclists are identified on paths investigate modifying them to become either designated shared user paths or mode separated paths.

6.6.3.3 End of trip secure bicycle storage

Safe and secure bicycle parking in open space is to encourage the community to cycle to open space. Bicycle Victoria has prepared *The bicycle parking handbook* that is a useful guideline for appropriate design of secure bicycle parking facilities, that would be appropriate only in some Regional and Municipal open space where participation in activities such as sports training means there is a need for secure storage. Refer to Section 6.6.6.6 for bicycle parking in open space.

Guidelines for end of trip bicycle parking in open space:

- a) To be provided in Regional, Municipal, Neighbourhood and Urban Civic open space where there are end of trip facilities/destination point for visitors, or sports training facilities.
- b) Siting and design to meet the current relevant standards for location, access, quantity and safety.
- c) Number and location to meet the anticipated use levels of the proposed facility.
- d) Integrated into the existing built form in the open space where possible.
- e) Where the facility is independent of existing built form, ensure the facility does not block views or access into the open space, complements its character, is visible and safe and located close to path/shared trail entry to the open space.
- f) Future upgrades and provision of new structured sport and recreation facilities are to include provision for secure bicycle parking.

6.6.3.4 Multi-purpose courts and other unstructured recreation infrastructure

Guidelines for provision of multi-purpose courts, fitness equipment, pump track/skate facility and other unstructured recreation infrastructure in open space:

- a) Generally applicable in Regional, Municipal, Neighbourhood, Urban Civic open space, refer Table 5a for details. They may also apply to smaller scale unstructured recreation facilities in Local and Small Local open space.
- b) Siting and design of multi-purpose courts to minimise impacts on adjoining residential properties, and where possible locate away from roadways while still maximising passive surveillance, and have adequate design features to prevent the risk of balls entering the road. This is also relevant for other unstructured recreation facilities that have balls, e.g. table tennis, tennis hit up walls.
- c) Siting of facilities including fitness equipment is to demonstrate they are easily accessible and visible to maximise their use and appeal to everyone.
- d) Designed to maximise use their appeal to everyone including all genders, age ranges, physical abilities and cultural backgrounds.
- e) Include other complementary facilities such as seating, shelters, shade, drinking fountains and picnic facilities/barbecues where appropriate to facilitate exercise and fitness.
- f) Where feasible, locate facilities including fitness equipment where they receive some natural shade during the middle of the day. The final proximity to trees will need to ensure ongoing health of the tree, and access to some sunlight and ensuring adequate offsets so the tree does not damage the park infrastructure and result in removal of the tree. This is relevant for existing and proposed trees.
- g) Where possible orientate multi-use courts in north south direction in accordance with current sport facility design standards.
- h) Meet best practice design for fencing, surface drainage and surface treatment, etc for multi-use courts.
- i) Ensure the facility location and design retains clear views and access into the open space.
- j) Meet the current best practice guidelines for installation of appropriate under-surfacing and siting of fitness equipment.
- i) Ensure the placement and design of new unstructured recreation facilities in existing open space demonstrates a corresponding improvement to the natural qualities and greening of the reserve. This may mean, for example, there is a need to plant additional large canopy shade trees to offset the presence of additional hardcourt or built surfaces and additional garden beds to passively irrigate the runoff from the infrastructure and contribute to urban greening and cooling. The purpose of this guideline is to retain a balance between unstructured recreational facilities and the natural features and greening qualities of open space.

6.6.3.5 Skate, BMX and pump track facilities

Guidelines for location of skate, BMX and pump track facilities in open space:

- a) Demonstrate the location and design of these facilities will achieve a well-integrated design with other facilities and uses in the open space. This is preferably undertaken as part of an open space masterplan or concept design process. This includes the consideration of supporting facilities, public transport access, shared trail links, visibility, passive surveillance from adjoining streets and buildings and the surrounding urban context.
- b) Demonstrate the needs of the young adult demographic has been addressed in the broader open space design with the inclusion of other complementary unstructured recreation facilities in addition to the skate, BMX and pump track. This is in recognition that not all young adults like to participate in the skate/BMX activities, but will participate in other hard court activities such as outdoor table tennis, hand ball, futsal etc.
- c) Demonstrate the facility design adequately caters to all age groups including spectators and carers and includes associated facilities such as shade, seating and drinking fountains.
- d) Demonstrate the design meets the CPTED principles.
- e) Installation of no smoking signage in proximity to all outdoor skate parks, BMX and pump track facilities.

No.	Recommendation	Responsibility	Priority
6.6-2	Skate / BMX /pump track facility review Undertake a review of the provision and management of skate, BMX and pump track facilities in the City of Whitehorse. This includes consideration of the need, safety, design and provision of these in the context of the future plans/strategies regarding play spaces.	WCC	Very High

6.6.4 Buildings in open space

6.6.4.1 Upgrades to existing buildings

Guidelines to assess proposals to upgrade existing buildings with open space related uses:

- a) Demonstrate the proposed upgrade to the existing building is appropriate in the context of the existing master plan or concept plan in place for the site. If no existing plans are prepared, demonstrate the upgrade is compatible with existing established uses and improves the use and access to the open space.
- b) Demonstrate the proposed upgrade to the building improves or at least retains all prominent public views to the reserve, improves access to and around the building and improves the function and useability of the surrounding open space. The proposed upgrade will need to demonstrate that it does not result in a loss or reduction in publicly accessible areas of open space, for example by expanding

Guidelines to assess proposals to upgrade existing buildings with open space related uses:

- the building footprint then a reduction in another paved or built facility will be required.
- c) Complements and improves the character of the open space. Where the location is in an open space with existing biodiversity values (i.e. that the open space has nature conservation as the primary or secondary character classification), ensure the building upgrade demonstrates no negative impact on the biodiversity values and preferably a net improvement them.
 - d) Demonstrate best practice sustainability principles in the siting and design, particularly in relation to water harvesting and re-use and energy efficiency. This may include investigating use of green walls/roof top gardens to assist strengthen urban greening.
 - e) Demonstrate waste management is adequately provided for including appropriate bin enclosures and recycling initiatives.
 - f) Retain and preferably improve access and circulation to the facility with a focus on achieving universal access in accordance with current Australian Standards.

Guidelines to assess proposals to upgrade existing buildings for non-open space related uses:

- a) Review whether the existing building is suitable to be adapted to an open space related use, prior to consideration of continuing the existing non-open space dependent use.
- b) If determined that non-open space related use is required, ensure the future upgrade to the building is compatible with and as a minimum, improves the use of and access to open space.
- c) Must also meet the guidelines (b) to (f) in 6.6.4.1 above.

6.6.4.2 Proposals for new buildings in existing open space

With the forecast increase in urban densities in the western areas of the municipality and in selected activity centres as described in Section 4 of this Strategy, existing areas of open space will increasingly be valued for their natural bushland, open parkland and unbuilt qualities. At the same time there will be requests to expand and build additional facilities in open space to cater to the increased demand for use. The following guidelines have been prepared to assess the provision of new buildings in open space for open space related uses.

Guidelines for new buildings in existing open space for open space related uses:

- a) The proposed facility accommodates open space related uses only. The facility is to promote and complement the open space and be compatible with the existing open space related uses for which the open space is recognised and valued.
- b) The proposed facility increases use, enjoyment and appreciation of open space.
- c) The proposed facility does not result in any further loss of natural outdoor open space in the reserve.
- d) The facility demonstrates multi-use principles are met including incorporating public toilet access into the single new built form.

Guidelines for new buildings in existing open space for open space related uses:

- e) The construction of the proposed facility will complement any existing cultural, environmental, heritage and natural landscape character values of the open space and allows continued or new preferred patterns of recreational use (where applicable) of the existing open space.
- f) Demonstrate that all sustainability principles are met in the design and construction.
- g) Public transport access is preferably available to support the new facility.
- h) Adequate bicycle parking facilities integrated into the facility design.
- i) Demonstrate how supporting facilities for the building such as car parking will be met with no net loss of outdoor public open space.
- j) Refer to guidelines (b) to (f) in 6.6.4.1 above.

6.6.4.3 Public toilets

Whitehorse has an adopted *Public Toilet Service Policy* (Nov 2022) to guide decisions about when public toilets are open. The policy notes that public toilet renewal and upgrade, along with the provision of new facilities are not guided by that policy due to the range of issues that need to be considered for this. Public toilets were in the top five facilities the community identified as a priority to provide in open space in the community survey undertaken as part of this Strategy. Successful integration of public toilets into the open space network contributes to the useability and accessibility of open space. While the Public Toilet Service Policy notes that decisions about providing new public toilets are to be undertaken in conjunction with open space masterplans, it is useful to have a Public Toilet Strategy/Policy that provides guidance on public toilet provision across the public realm, including public open space.

No.	Recommendation	Responsibility	Priority
6.6-3	Public Toilet Guidelines Prepare a Public Toilet Guidelines for the whole municipality with consideration of all the public realm in addition to public open space. This will assist Council to identify and prioritise new public toilet facilities in open space and assist to inform future open space masterplans.	WCC	Medium

The following guidelines are issues specifically regarding the provision of public toilets in public open space.

Guidelines for review and design of public toilets in open space:

- a) Appropriate to Regional, Municipal, Neighbourhood and Urban Civic open space where other facilities encourage longer stays in open space such as barbecue, picnic facilities and major unstructured recreation facilities and play spaces.
- b) Where possible, integrate with other buildings in the reserve including consideration of how the other building/s may be modified to allow some public access to existing toilet/change facilities, while retaining secure and separate access for the existing clubs and groups already operating in the buildings, i.e.

Guidelines for review and design of public toilets in open space:

built as part of a cafe or sports pavilion. Where the open space is in a commercial precinct, investigate options to provide public access to private toilet facilities prior to confirming they are required in the public open space.

- c) Designs to meet CPTED principles in public toilet design.
- d) Locate near existing utility services where available.
- e) Locate to avoid the need for park visitors to cross roads and car parks to reach them where feasible. If this is not feasible, provide safe and convenient pedestrian connections as a minimum, however this is not preferred.
- f) Locate within clear sight and walking distance of high use facilities such as picnic areas, barbecues and play spaces.
- g) Locate in a position to service the whole reserve thereby minimising need for more than one public toilet in an open space.
- h) Use best practice environmentally sustainable principles in siting and design, particularly in relation to water and energy use.
- i) Demonstrate waste management is adequately provided for.
- j) Location should not block prominent public views to the reserve and not create hidden or unusable areas around them.
- k) Locate with passive surveillance from surrounding area.
- l) Include accessible facilities including changing place and ensure they are accessible for everyone in accordance with current Australian Standards.
- m) Adequate lighting including maximising daylight where possible.
- n) Appropriately sized to meet demands and size of the open space.
- o) Complement the character of the open space, including the heritage values of the open space where appropriate.
- p) A design that is suitable for cleaning and maintenance.

6.6.5 Lighting in open space

Illumination in open space is generally from sports field lighting in many of the Municipal open spaces, and from lights in the streets adjoining open space. Lighting can also facilitate and expand the hours in which an open space can be used during winter to encourage people outdoors to exercise. With advancements in the smart technology it is increasingly easier to be able to customise when an area is lit. Lighting in open space can also present issues including:

- Impact on native fauna
- Impact on adjoining resident amenity including light spill and where after hours park use is encouraged
- Energy use
- Encouraging people to use open space at night when it is not inherently safe, leading to personal safety issues.

For guidelines regarding lighting to paths in open space, please refer to the Sections 6.6.3.1 and 6.6.3.2 in this Strategy.

Guidelines for provision of lighting in open space:

- a) Lighting is generally applicable and suitable in high use open spaces including Regional, Municipal, Neighbourhood and Urban Civic open space.
- b) In these locations lighting is only applicable for specific use or facilities. These are for:
 - structured sport and recreation use
 - unstructured use of outdoor structured sport and recreation facilities
 - circuit paths for access and use before and after work/school during the winter
 - along key connecting paths to train stations, shops or community hubs where no safe and accessible street network exists for walking/cycling
 - along shared user paths.
- c) Where new lighting is required, it is to be consistent with best practice principles regarding sustainability, including the *Whitehorse Climate Response Strategy* and *Flood Lighting Policy and Wildlife Sensitive Lighting Tools*.
- d) As a minimum select lighting that:
 - minimises upward glare (to reduce impact on adjoining residential amenity and native fauna, where applicable)
 - is energy efficient and scaled to meet the specific need identified
 - is easily maintained
 - the design complements the character of the reserve, including consideration of heritage values where applicable.
- e) To minimise impact on native flora and fauna:
 - Protect dark areas in the open space for nocturnal fauna activity
 - Investigate use of LED red spectrum that attracts less invertebrates.
- f) To minimise energy use:
 - Use timers on lights
 - Reduce the lux levels between 10pm and 6am
 - Use solar technology and light emitting diodes.

No.	Recommendation	Responsibility	Priority
6.6-4	Public Lighting Guidelines in open space Council to prepare comprehensive Public Lighting Guidelines for open space that integrates the existing lighting policy documents, with reference to the guidelines included in this Strategy in Section 6.6.5.	WCC	Medium

6.6.6 Minor park infrastructure

6.6.6.1 Seats

Guidelines for review and design of seats in open space:

- a) Appropriate in all hierarchy types of open space, refer to Table 5a.
- b) Include a variety of seat types such as bench seats, seats with back rests and some seats with armrests to meet the Australian Standards 1428.2 to improve access for everyone.

Guidelines for review and design of seats in open space:

- c) Consider inclusion of informal seating arrangements in open space where it can be well integrated with other elements such as retaining walls.
- d) Demonstrate proposed seating is orientated toward activity and paths, takes advantage of views or features within the reserve and is provided in a variety of settings including some in groups and some alone.
- e) Demonstrate proposed seating will be provided in a variety of locations with some in the shade and others in the sun.
- f) Provide at regular intervals along shared user paths as resting points to promote universal access at between 100 and 200 metre intervals.
- g) Avoid locating seats in permanent shade, ensuring they have at least some sunlight access during winter.
- h) Provide some seating in quiet areas of the open space that are potentially suitable for contemplation.

6.6.6.2 Picnic shelters and barbecue facilities**Guidelines for design of picnic shelters and barbecue facilities in open space:**

- a) Picnic shelters are appropriate in Regional, Municipal, Neighbourhood, Urban Civic and Local open spaces as per Table 5a, pending the design of the open space. Barbecues are appropriate in Regional, Municipal, Neighbourhood and Urban Civic open space, as per Table 5a.
- b) Positioned within reasonable access from main entry points and located in proximity to other complementary facilities such as play spaces, unstructured recreation facilities or key landscape features such as wetlands. They are typically preferred within the viewshed of adjoining roads so there is excellent passive surveillance and accessible. Adding these facilities to the existing open space network is supported to encourage more people to use open space as a social meeting place promoting a sense of community.
- c) Demonstrate the facilities complement the open space character and are sized to meet the anticipated regular use levels.
- d) Demonstrate sustainability principles are met including material use, water collection/runoff/re-use, energy efficiency and waste management consistent with the Whitehorse CRS and the IWMS.
- e) Demonstrate the shelters are effective at providing both shade and rain shelter/protection from prevailing winds and during spring/summer/autumn and allow some winter sunlight penetration in winter.
- f) Barbecue design to minimise fire risk or public nuisance.
- g) Designed to allow access for everyone to the facilities in accordance with current Australian Standards.
- h) Adequate waste management facilities to meet the size and needs of the proposed facility consistent with the hierarchy of open space as described in Table 5a in this Strategy. Position waste infrastructure so they are easily accessible for park users and maintenance, but are not located within the

Guidelines for design of picnic shelters and barbecue facilities in open space:

shelters so as not to dominate the character and ambience of the facility. Where feasible consider integrating recycling.

6.6.6.3 Drinking fountains

Guidelines for provision of drinking fountains in open space:

- a) Appropriate in Regional, Municipal, Neighbourhood and Urban Civic open spaces.
- b) Drinking fountains to include bottle refill taps to encourage the community to re-use their drink water bottles. In dog on-lead and off-lead areas, drinking fountains to include a dog water bowl/tap.
- c) Locate drinking fountains at regular intervals on the shared user path network at locations where water supply points are feasible, which is typically at entry/exit points to the shared user path network, and co-located with other facilities. In terms of distance between them, preferably at between 1 and 2 kilometre intervals.
- d) Where feasible, standardise the types to improve effective ongoing maintenance.

6.6.6.4 Waste infrastructure

Guidelines for provision of waste infrastructure in open space:

- a) Refer to Table 5a.
- b) Waste infrastructure is to be located so it is both accessible for maintenance purposes and convenient for park users, close to picnic and barbecue facilities and the entry and exit points.
- c) Where located near picnic facilities and/or seats, they need to be positioned at a reasonable distance from these facilities to avoid unpleasant odours, unsightly rubbish and health issues of rubbish in proximity to where people are preparing and eating food.
- d) Waste infrastructure is to be secured on site and where possible, located within a bin enclosure/surround to reduce the incidents of waste infrastructure being moved and damaged.
- e) Waste infrastructure to meet best design management practice and sustainability principles including recycling, in accordance with Council policies.

Guidelines for provision of waste infrastructure at sports pavilions:

- a) The number and type of waste infrastructure at sports pavilions is to be consistent with the levels of use anticipated for the sports pavilion. During the process of determining this, Council is to identify opportunities for waste minimisation and recycling.
- b) Aim to provide bin enclosures at all sports pavilions that are of a size to adequately accommodate the number of waste infrastructure items appropriate to the existing and proposed use. The enclosures are to be well integrated with

Guidelines for provision of waste infrastructure at sports pavilions:

existing usage patterns, preferably with the built form and easily accessed by maintenance vehicles.

6.6.6.5 Fencing and vehicle barriers in open space**Guidelines for fencing and vehicle barriers in open space:**

- a) As a principle, fencing within open space between facilities is discouraged. Fencing is only to be accepted where it facilitates and improves the function and diversity of uses that can be undertaken in the open space and/or for the function and design of the recreation facility.
- b) Where low fencing to the perimeter of sports fields is provided, include frequent gate openings to ensure they do not form barriers to unstructured and informal access outside of scheduled structured sports training or match play.
- c) Sports field fencing style is to minimise visual intrusion and complement the open space character including historical character where appropriate.
- d) In locations where mesh fencing is required, for example around public tennis courts, baseball diamonds etc, black coated mesh fencing or similar is to be used to minimise visual impact of this on the open space and adjoining properties.
- e) Where open space contains sports fields and facilities that are available for the public to use outside of sports training and match play, cyclone mesh fencing to the perimeter of the public open space is not permitted. Restricted uses within open space, including where the restricted use applies to the whole open space will be permitted to have cyclone mesh fencing where it is demonstrated it is required - consistent with point (d) above.
- f) Suitable barriers to prevent unplanned vehicle access into open space is required. Designs are to demonstrate they prevent vehicle access, minimise visual intrusion on the open space and allow excellent pedestrian and cycle access into the reserve.
- g) Minor infrastructure such as bollards, fencing, vehicle control barriers etc are to reflect diversity in the landscape, environmental, cultural and heritage character and values of the open space.
- h) All fencing and minor infrastructure is to meet best practice guidelines for universal access, safety, quality and sustainability.
- i) Adhere to sustainability principles in the selection of materials, design and placement in the reserve including investigation into the use of recycled materials where appropriate.
- j) Discourage fencing (as differentiated from vehicle exclusion barriers) to facilities and spaces within open space, for example play spaces, skate facilities and multi-use courts and surfaces. Exceptions may occur where the proposal demonstrates that alternative measures such as grade separation, planting, seating, vehicle barriers or any combination of these cannot suitably manage safety concerns. Typically, play spaces and unstructured recreation facilities will be located at least 15 metres from adjoining major roads to minimise the need for fencing.
- k) Encourage the use of planting as an alternative to fencing where this is appropriate. Clear and open sightlines into open space and the facility must be

Guidelines for fencing and vehicle barriers in open space:

retained, for example if it is to provide some physical separation between a play space and the rest of the open space. The planting will need to meet the CPTED principles.

6.6.6.6 Bicycle parking in open space

Please note for end of trip secure bicycle storage, refer to 6.6.3.3

Guidelines for provision of bicycle parking in open space:

- a) Appropriate in Regional, Municipal, Neighbourhood, Urban Civic and Local open space
- b) Locate bicycle parking near the destination facilities that people will use in open space, for example the picnic facilities, structured and unstructured recreation facilities, and directly adjoining the path network that leads to the facilities.
- c) Number of bicycle parking rails/hoops in each location is to be sized to suit the scale of the facility, and set out and installed to maximise accessibility to them and ensure bicycles can be easily locked and unlocked by users.
- d) Waste infrastructure to meet best design management practice and sustainability principles including recycling, in accordance with Council policies.

No.	Recommendation	Responsibility	Priority
6.6-5	Open Space Furniture and Infrastructure Guidelines Council to prepare Open Space Furniture and Infrastructure Guidelines, with reference to the guidelines in Section 6.6.6 of this Strategy.	WCC	High

6.6.7 Community gardens/urban agriculture

Community gardens offer many benefits including:

- providing a place for people to grow fresh food who would otherwise not have the space for this
- increased social interaction, participation and sense of community and belonging
- reconnecting people with nature
- improving people's physical strength and fitness
- promoting interest in fresh food grown locally and in season which supports broader environmental sustainability goals.

There are different models of community gardens ranging from individual plots to more informal shared gardens. In Whitehorse, community gardens in public open space are managed by Community Garden Associations. There is a high level of interest in the four existing community gardens with waiting lists for plots. The four existing community gardens in Whitehorse are:

- Slater Community Garden, Slater Reserve Nunawading, run by the Nunawading Community Gardens Inc
- Jolimont Community Garden, Jolimont Road Reserve Forest Hill, run by the Nunawading Community Gardens Inc
- Box Hill Community Gardens, Combarton Street Box Hill, run by the Box Hill Community Gardens Inc
- Sinnott Street Community Gardens, Burwood run by the Box Hill Community Gardens Inc.

The Strategy supports the potential of adding additional community gardens to address the high demand for them. As noted previously, community gardens can be successfully established on other areas of public land in addition to public open space. Currently, some of the most successful community gardens in other municipalities are located on other public land such as in neighbourhood houses/community centres, schools, railway easements and Department of Housing land.

No.	Recommendation	Responsibility	Priority
6.6-5	Community Gardens Policy Council to prepare a Community Gardens Policy to investigate and confirm the preferred future models and expansion to community gardening in Whitehorse. This includes investigation of opportunity sites to integrate with community facilities on public land in addition to open space.	WCC	High

The following guidelines are applicable for assessing either the expansion of existing community gardens or proposals for new community gardens in public open space. These will only be considered where it is demonstrated that other public land in the catchment of the open space have already been investigated and are confirmed to be unsuitable. These guidelines will be used to inform the future Community Gardens Policy.

Guidelines for existing and future proposals for community gardens in public open space:

- Demonstrate the use of land for a community garden benefits and is supported by local residents in the local catchment of the proposed garden.
- The land area is large enough to sustain a viable community garden including areas for plots, compost, sheds and water storage.
- Meets the multiple-use and sustainability principles, for example is co-located with an existing built facility to share facilities and resources such as rainwater harvesting, water supply and secure storage.
- Preferably co-located with other facilities.
- There is adequate public open space available in the surrounding area or on the remainder of the site to retain adequate access to open space for recreation use.
- The site is suitable for growing food produce such as vegetables, fruit and herbs (i.e. is not contaminated and is safe for people to garden and eat the produce) that typically require adequate sunlight access and water.

Guidelines for existing and future proposals for community gardens in public open space:

- g) The community gardens are run by an incorporated organisation that meets regularly or have a formal auspice agreement with a relevant organisation.
- h) The proposed location does not negatively impact on heritage or identified environmental values of the open space or immediate surrounds.
- i) The assessment criteria for allocation of plots to give priority to applicants without private open space.
- j) Demonstrate adherence to agreed land management practices and access arrangements as stipulated by Council.
- k) Maintain an agreed edge treatment between the community garden and the public open space reserve.
- l) Support communal gardening and organic gardening principles.

6.7 Structured sport and recreation use and infrastructure

6.7.1 Overview of issues

The overview of issues were identified during the research phase including consultation with Council officers and review of background documents, specifically the *City of Whitehorse Recreation Strategy 2014-2024*.

- The City of Whitehorse Recreation Strategy 2014-2024 identifies the need for additional outdoor playing fields in Section 5.3. The Recreation Strategy recommended optimising the use of existing playing fields and identified 9 additional fields that could accommodate increased levels of use without significant works, and 11 may have additional capacity if works are undertaken to upgrade them. The Strategy also identified the action for Council to advocate to access state government land for new facilities. This is currently in progress with Parks Victoria where Council is requesting future use of land in the former Healesville Freeway Reserve as noted in Section 3.2.4 of this Strategy.
- The Recreation Strategy identifies optimising the use of grounds by increasing lighting of the playing fields and the training areas where appropriate. It also identifies the opportunity to investigate provision of synthetic sports fields.
- Damage to sports fields from unstructured recreational use - particularly dog off-lead including holes and dog excrement.
- Competing uses between structured sport and unstructured recreation use of the outdoor facilities, particularly outdoor sports fields.
- Female participation in sport is growing and the existing sports pavilions are inadequate to successfully cater to the growing demand.

- Fencing of sports fields including the pros and cons for the sporting use and unstructured recreational use.
- Existing sports facilities need to be updated and adapted to be more inclusive of everyone including people of all ages, abilities, genders and cultural backgrounds.
- Pavilion upgrades need to consider the broader issues beyond the physical condition including forecast population growth and broader community benefit.
- Waste management infrastructure is consistent with sustainability principles.
- Electronic scoreboards – increased numbers of applications for these and currently Council have no guidelines in place regarding their location, who pays to maintain them and guidelines around content.
- Advertising signage associated with sporting use requires guidelines.
- Car parking is an issue including universal access and the issue of taking up open space with off street car parking.

The process of preparing Masterplans for Municipal open space is the recommended by this Strategy so there is an opportunity to address the site specific design response to address the structured sporting issues and guidelines for the site. The Masterplans clarify the appropriate use levels, expansion and addition of all facilities in open space for both structured and unstructured sport and recreation use. This is also the appropriate method by which to propose upgrades that will increase the capacity of existing structured sporting fields, particularly in relation to the design of facilities such as additional floodlighting and any proposals for synthetic playing surfaces.

There are some non-open space dependent structured leisure and recreation facilities located in open space, for example maternal child and health and child care facilities. Due to increasing demands on open space it is considered appropriate that when an existing facility needs to be replaced or is subject to a major upgrade, it is assessed as to whether it is appropriate to continue to retain this facility in open space. The appropriate method to review this as part of the proposed Masterplans for the Municipal open spaces. Council has recently committed to the preparation of a significant number of Masterplans in the short term to make up for a lack of this work in more recent times.

6.7.2 Upgrade and replacement of existing structured sport and recreation facilities

As part of ongoing upgrades and replacement of structured recreation facilities, opportunities to improve their design, appeal, accessibility and multi-use function are to be investigated as standard procedure.

This Strategy recommends that proposals for future upgrades and replacements be evaluated with the following guidelines to maximise the best use of these facilities in open space. This is ideally undertaken as part of the Masterplan process for Municipal open space. These guidelines focus on the scale and location of the facilities and their integration with the open space character and other facilities and are not technical guidelines for the design of the facility itself.

Guidelines to upgrade existing structured sport and recreation facilities, or for their replacement:

- a) Demonstrate the need and resultant community benefit associated with the proposed upgrade/replacement of the facility.
- b) Demonstrate the proposed upgrade/replacement of the facility is best located within open space for its function and viability.
- c) Demonstrate the proposed facility will increase the range of uses or user groups that will be catered for as a result of the upgrade/replacement.
- d) Facilitates a diversity of uses including unstructured recreation and informal access and use.
- e) Meets universal design and access principles that promotes inclusion for everyone irrespective of age, gender, cultural background and ability.
- f) Consideration of active design/healthy active by design guidelines.
- g) Flexible in design to provide for multiple uses and future adaptability to other uses as needs change over the lifespan of the proposed facility.
- h) Demonstrate that all ESD principles have been addressed in both the design and proposed construction of the facility and it is consistent with current best management practice including Council's recently prepared Whitehorse CRS, IWMS and *Environmentally Sustainable Design Policy for Council Buildings and Infrastructure*.
- i) Demonstrate how waste collection and management is catered for including meeting relevant ESD principles regarding re-use and recycling and the recent Whitehorse Waste Management Strategy and CRS.
- j) Consistent with the CPTED principles or similar to promote safety in facility and open space design.

6.7.3 New structured sport and recreation facilities in existing open space

Proposals for new structured sporting facilities (including buildings) in existing public open space will need to demonstrate how the new facility will integrate with the open space and be accessible for a diverse range of users.

Guidelines for new structured sport and recreation facilities in existing open space:

- a) Demonstrate the need for the proposed new facility.
- b) Demonstrate the proposed facility is dependent on its location in open space for its viability and function.
- c) Meets the criteria listed above in *Guidelines to upgrade and replacement structured sport and recreation facilities* (c) to (g).
- d) The orientation and design of the facility minimises impacts on other structured and unstructured recreational uses, and expands the range or time periods in which unstructured recreation use can be undertaken. As a minimum, the proposal will need to demonstrate that it integrates well.

Guidelines for new structured sport and recreation facilities in existing open space:

- e) Built form including buildings, fencing and other infrastructure to be designed to complement the environmental, landscape and cultural character and values of the open space reserve for its function and viability.
- f) Ensure key view lines into the open space are not blocked or impacted by the facility location.
- g) Where possible, minimise installation of permanent structures that can remain portable to improve adaptability and multiple use of the facility and the open space.
- h) Public transport access is preferably available to support the new facility.
- i) Adequate bicycle parking facilities integrated into the facility design to encourage cycling access in preference to vehicle access and use.
- j) Demonstrate how the car parking demands for the proposed facility will be addressed with minimal impact on the open space and the surrounding neighbourhood.
- k) Car park design to meet the criteria listed specifically for car parking in this Strategy, see Section 6.7.4.
- l) Demonstrate waste management is adequately provided for and meets best practice, including that waste receptacles are appropriately designed for to integrate with other built form in the site.
- m) Construction activity to minimise environmental impact and disruption to open space.

6.7.4 Car parking

In reviewing the need for existing and future car parking designs and requirements for open space, assess them in accordance with the following guidelines:

Guidelines for car parking in open space:

- a) Recognise that for Regional and Municipal open space limited car parking will be required to provide access for those with disabilities and limited mobility and to allow safe use of the facilities, particularly where the facilities are located more than 200 metres from the surrounding street network.
- b) Actively support the provision of sustainable transport options and encouraging fitness and health by improving cycle and pedestrian access to and within open space.
- c) In Regional and Municipal open space, any proposals for new or formalisation of existing car parking are to clearly demonstrate that the car park is required. If it is determined to be required, the car park is to:
 - be sized to meet the minimum requirements including to achieve universal design principles for access
 - minimise impacts on the amenity of the neighbourhood
 - be provided around the open space rather than in the open space
 - minimise the length of road required to access the car park

Guidelines for car parking in open space:

- demonstrate that cycle and pedestrian access and circulation has priority
- that it meets the design criteria listed in (e) to (m).
- d) In proposals to upgrade existing open space, any proposals to change existing car parks will need to demonstrate they meet the criteria listed in (c).
- e) Future car parks are to be of a size that adequately caters to the normal (not event) level of use. Demonstrate how other forms of sustainable transport and access to open space is to be improved including walking and cycling along with public transport for Regional and Municipal open space.
- f) Demonstrate how the parking will be accommodated in the area without undue impact on adjoining land use or undue loss of existing open space area during events where applicable.
- g) Demonstrate integration of safe pedestrian access and circulation to, around and through the car park.
- h) Demonstrate the car park design and construction adhere to best management practice and promote sustainability and safety.
- i) Stormwater runoff is to be captured and re-used or treated where feasible.
- j) Incorporate trees into car parks to increase canopy cover, manage vehicle speeds and mitigate urban heat build-up with consideration of adequate sight lines for safety.
- k) Demonstrate the proposed size, material use (including surface finish, vehicle control barriers etc) and the overall design of car parking complements the desired landscape character of the open space.
- l) Demonstrate that proposed lighting to the car park is provided where the open space facilities are in use outside daylight hours by a large number of park users or where there is insufficient ambient light.
- m) Include priority areas for bicycle parking within car parks or adjacent leisure amenities where applicable.

6.7.5 Natural turf sports fields

The community survey outcomes, site visits and consultation with stakeholders has identified that natural turf sports fields are highly valued and used by the community for structured sport, unstructured recreation and informal use. Some of the natural turf sports fields in Whitehorse are also designated dog off-leash areas when they are not being used by the sports clubs for match play or training.

The majority are unfenced and are used informally for exercise including jogging, running and walking along with informal ball games and informal uses such sitting on the grass reading. With forecast population growth the demand for both structured sport and unstructured recreation use of these spaces is going to increase. As recommended in the *Whitehorse Recreation Strategy 2014-2024*, Council will continue to advocate to the Victorian Government to seek additional natural turf sports fields are provided in the former Healesville Freeway Reserve along with other measures recommended to upgrade the existing sports fields to increase their level of use.

Guidelines to guide the future upgrade and use of natural turf sports fields in open space:

- a) The sports fields are primarily for structured sporting use and secondarily for the unstructured and informal use.
- b) Optimise the turf species mix to minimise water use and maintain a suitable standard of turf cover for winter and summer season use.
- c) Investigate options to utilise water from sustainable sources (e.g. recycled water, stormwater) for irrigation of the sports turf.
- d) Investigate options to include some fencing of the sports fields, particularly where this can demonstrate the ability to optimise unstructured recreation and informal use of the sports fields. For example, fencing to part or all of the sports field, with frequent gate openings to ensure accessibility, may improve the ability to utilising the open space more efficiently. Specifically, this may improve management of dog off-leash use within the broader open space reserves.

6.7.6 Synthetic surfaces for sport and recreation use

Council has recently included proposals to change natural turf sports fields to synthetic surfaces as a potential way to increase the capacity of the existing sports facilities as part of implementing the *Whitehorse Recreation Strategy 2014-2024*. While synthetic turf can accommodate higher levels of use there are a number of issues associated with them including:

- Increasing impervious surfaces and built infrastructure in open space and loss of natural soil and turf, which exacerbates urban heat island effect
- Reduces the adaptability of the playing fields to accommodate a diversity of informal and unstructured recreational use in addition to the structured sporting use. This includes using them for picnics, relaxing on the grass and reading, socialising and dog walking.
- Environmental impacts including the breakdown of the synthetic surface and disbursement into the natural environment
- Extended hours of use due to the ability of the surface to accommodate increased hours of use leading to impacts on the amenity of adjoining residents and biodiversity values with noise and light spill later into the evenings.

This Strategy has not assessed the need for synthetic surfaces, however it recommends that proposals for further synthetic sports field surfaces are assessed with the following guidelines regarding their suitability in existing open space. Refer also to Recommendation 6.7-1 regarding developing suitable criteria to assess the suitability of synthetic sports surfaces in open space.

Guidelines to assess proposals for synthetic surfaces in open space:

- a) Demonstrate the synthetic surface is required including a full analysis of the benefits and negative impacts of the proposal.
- b) Demonstrate the effects of replacing natural soil and turf surfaces with constructed synthetic surfaces can be adequately compensated for in relation to the passive cooling role of the open space.

Guidelines to assess proposals for synthetic surfaces in open space:

- c) Demonstrate the multiple use and adaptability of the proposed facility, particularly in the context that synthetic sports field surfaces are unsuitable for dog walking/dog off-leash.
- d) Demonstrate that the increased intensity of use and programming of the facility will be appropriate to the scale of the open space.

No.	Recommendation	Responsibility	Priority
6.7-1	Assessment criteria for location of synthetic sports surfaces in open space Develop the assessment criteria to guide the location of synthetic sports surfaces in public open space in Whitehorse. A range of implications need to be considered including: • The impact on environmental values including additional impervious surfaces and implications of degradation and pollution from synthetic sports field surface • The change to the character and the types of sport and recreation uses along with the more informal and unstructured uses of the reserve • The impact of increased levels of visitation and associated infrastructure that supports the facility • Access to the reserve.	WCC	High

6.7.7 Advertising signage in open space

The following guidelines are to assist in providing consistent direction for the provision of advertising signs by the sports clubs.

Guidelines for review of advertising signage in open space:

- a) Any proposed signs are preferred to be temporary only and preferably removed at the conclusion of the event or season for which they are being proposed. This will allow the playing fields to be more sensitively integrated into the natural character of reserves without the need for visual impact of advertising signage year-round.
- b) Signs need to be consistent with the scale and the size of the structure on which it is proposed.
- c) Signs are not to obstruct main view lines into the open space reserve from all pedestrian and vehicle entry points.
- d) Minimise the visual prominence of the signage when viewed from the areas outside of the event for which the advertising signage associated with the club-based use is proposed. This includes no visibility of the signage from adjoining and nearby properties.

6.7.8 Electronic scoreboards

The following guidelines are to assist in providing consistent direction for the provision of electronic scoreboards.

Guidelines for review of electronic scoreboards in open space:

- a) Demonstrate the scoreboard matches the scale of the facility and events.
- b) Demonstrate the scoreboard is consistent with the scale and the size of the structure, facility and level use for which it is proposed.
- c) The scoreboard is not to obstruct main view lines into the open space reserve from all pedestrian and vehicle entry points.
- d) Minimise the visual prominence of the electronic scoreboard when viewed from the areas outside of the sports event/field/facility for which the scoreboard is provided. This includes minimising visibility of it from the adjoining and nearby properties.
- e) Demonstrate the scoreboard will only be used during the course of scheduled match play/events.
- f) Advertising is not preferred on electronic scoreboards.

6.7.9 Minor sports related infrastructure

Guidelines for provision of minor sports related infrastructure in open space:

- a) Minor infrastructure including player boxes and equipment storage facilities are preferred to be temporary items where feasible to maximise the adaptability of the use of sports fields and avoid proliferation of infrastructure in the open spaces.
- b) Storage for minor infrastructure is to be within other existing approved built form on the site, or stored off site.

6.8 Cultural heritage values and public art

6.8.1 First Nations cultural heritage values

In relation to Aboriginal Cultural Heritage, The Aboriginal Heritage Council was created in May 2007 as part of the *Aboriginal Heritage Act 2006*. The Council appoints Registered Aboriginal Parties (RAP) to manage and protect cultural heritage on their country. Other responsibilities of the Aboriginal Heritage Council include:

- Overseeing the RAP operation
- Protecting Ancestor's resting places
- Review of the Aboriginal Heritage Act 2006 developing 24 recommendations for reform to the Act.

For the City of Whitehorse, the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation is the appointed RAP. Their main responsibilities include:

- Protection and management of Aboriginal cultural heritage
- Evaluate Cultural Heritage Management Plans
- Provide advice on applications for Cultural Heritage Permits, Cultural Heritage Agreements and Protection Declarations
- Provide Cultural Heritage Awareness Induction for all personnel involved in ground disturbance work at development sites on Wurundjeri land
- Protecting the natural world and a special interest in preserving not only the cultural objects but also landscapes of cultural importance.

Whitehorse City Council undertakes regular cultural consultation with the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation. Through these consultations Council aims to develop our understanding of how Wurrundjeri Woi-wurrung values and culture can be reflected across open space in our community.

This Strategy encourages the implementation of the future Reconciliation Action Plan to include a process to work with the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation to create a continued connection to the land and establish a preferred framework for the future management and interpretation of this connection in the future.

6.8.2 Historical values

The Whitehorse Heritage Framework 2020 is a framework for the ongoing assessment and management of heritage places in the City of Whitehorse. This reviewed the existing studies and recommended updates to the original studies that were undertaken in the 1990s and early 2000s.

Whether a place is of historical significance is determined by Heritage Victoria. The following information is summarised from the websites of Heritage Victoria and the Heritage Council of Victoria.

Heritage Victoria is the Victorian State Government's principal cultural (non-Aboriginal) heritage Agency. Heritage Victoria identify, protect and interpret Victoria's most significant cultural heritage resources and give advice about heritage matters to private owners, local and state government, industry and the general community. Heritage Victoria administer the *Heritage Act 2017*, maintain the Victorian Heritage Register, recommend places and objects to be included on the Victorian Heritage Register and issue permits to make changes to heritage places and objects, protect Victoria's archaeological heritage and help conserve significant objects and collections.

The Heritage Council of Victoria is an independent statutory authority and Victoria's main decision-making authority on historical values and issues. They provide advice to Heritage Victoria. The Heritage Council Victoria notes that *'Respect for our cultural heritage involves protecting places and objects that have importance to us as a community. Identifying and registering places and objects of cultural significance helps us to protect and conserve them. Heritage places and objects in Victoria are considered to be either of:*

- *State significance; or*
- *Local significance.*

Heritage places or objects of State significance are listed on the Victorian Heritage Register and must meet the Heritage Council of Victoria's assessment criteria. Places that are of State-level cultural heritage significance are managed in accordance with the Heritage Act 2017. Anyone can nominate heritage places and objects for addition to the Victorian Heritage Register. Registered heritage places are legally protected and cannot be altered without a permit or permit exception from Heritage Victoria.

Places of Local significance are recorded by local councils and are listed on a schedule to the Heritage Overlay in the local Council's planning scheme. Local government manages the identification and protection of places under the planning scheme. Councils are responsible for issuing planning permits for use and development of heritage places under the *Planning and Environment Act 1987*.

The National Trust is a community organisation that works towards preserving and protecting heritage places. Classification by the National Trust does not entail legal recognition.

Table 6-2 Open spaces identified as Heritage Places on the Victorian Heritage Register

Open space	VHR Number	Significance
Wattle Park	H904	Wattle Park is the only example in Australia of a comprehensively developed pleasure park established, owned and operated by a transport authority with the dual aim of promoting its transport services and providing a recreational facility for the public. HO4 in the Whitehorse Planning Scheme.

Table 6-3 Open spaces on the Victorian Heritage Inventory

Open space	VHR Number	Summary description
Campbell's Croft	H7922-0191	Site of a former country house, original grant to Nelson Polak in 1853, purchased by Council.
Schwerkolt Cottage	H7922-0362	Pioneer Homestead with surrounding orchard. Schwerkolt Cottage is a pioneers stone cottage dating to the 1860s.

In the City of Whitehorse the following open spaces have been identified to have local heritage significance and have existing Heritage Overlays acknowledging this in the Whitehorse Planning Scheme.

Table 6-4 Open spaces with an existing heritage overlay in the Whitehorse Planning Scheme (listed in alphabetical order)

Open space	Heritage Overlay No.	Description *
Blackburn Triangle (Part)	HO245	Horse Trough, 179 Blackburn Road, Blackburn. Heritage place defined as the horse trough and 1 metre surrounding it.
Box Hill Gardens (Memorials only)	HO254	World War 1 and 2 Memorials, Box Hill, Box Hill Gardens. Heritage place is defined as the 2 memorials and 1 metre surrounding them.
Combarton Park	HO101	The park is included in the Combarton Street Precinct, Box Hill.
Combarton Street Reserve	HO101	The reserve is included in the Combarton Street Precinct, Box Hill.
Dandenong Valley Parklands (Part)	HO107	Greenways, 142 Boronia Road Vermont, with no specific controls noted.
East Burwood Reserve (Part)	HO234	East Burwood Hall, 310 Burwood Highway Burwood East. Heritage place defined as East Burwood Hall and land within 2 metres surrounding.
Halliday Park (Memorial only)	HO255	Heritage Place is defined as the memorial and 1 metre surrounding it.
Hatfield Court Reserve	HO118	Vermont Park Precinct, with no specific controls noted.
Moreton Park (Memorial only)	HO253	Heritage Place is defined as the memorial and 1 metre surrounding it.
Old Strathdon Orchard	HO113	Strathdon, 449-465 Springvale Road, Forest Hill, with no specific control noted.
Sinnott Street Reserve	HO281	Burwood Skyline Drive-in Cinema, with no specific controls noted.

Open space	Heritage Overlay No.	Description *
Surrey Dive and surrounds	HO217	Heritage place defined as The Surrey Park Model boat Club building and the water hole and land within 2 metres surrounding.
Surrey Park (Part)	HO257	Box Hill Swimming Pool Precinct. Heritage place defined in accordance with the citation contained in the Whitehorse Heritage Review 2012.
Wattle Park	HO4	Included on the Victorian Heritage Register under the Heritage Act 2017, Ref No. 904.
Wembley Park (Part)	HO216	Former Municipal Incinerator, with no specific controls noted.
Whitehorse Reserve (Part)	HO219	Box Hill Cemetery Gates on Whitehorse Road that are located along the western boundary of Whitehorse Reserve.

* Please note, for all sites noted in Table 6-4, the Solar energy system controls apply.

The open spaces with historical values noted in the Tables 6-2, 6-3 and 6-4 are to be recognised and managed in accordance with the relevant legislation, and their conservation values and management to be documented and integrated into relevant Masterplans for the individual open space reserves. Refer to Section 6.10 for guidelines regarding Design and Management Plans for open space.

6.8.3 Memorials in open space

Memorials and monuments can contribute to the cultural value of the community and the desire and expectations to commemorate people, events and places of significance. A balance needs to be achieved when considering installation of new or upgrade of existing memorials, with all uses and values of existing open space.

The following guidelines are consistent with Council's existing *Plaques and Memorials Policy*.

Guidelines for assessing the appropriateness for proposals for new or retention of existing memorials in open space:

- The request for a memorial is to be reviewed for consistency with the use and character classification for the open space.
- The level of contribution the memorial will have on the cultural and community values of the open space in the municipality.
- The management and maintenance requirements of the proposed memorial.
- Small memorials would need to demonstrate the positive relationship between the community, the person, the organisation or the event to be commemorated and the open space in which it is proposed.

Guidelines for assessing the appropriateness for proposals for new or retention of existing memorials in open space:

- e) If Council accepts a proposal for a memorial, it becomes the property of the Whitehorse City Council and ongoing maintenance and issues regarding its relocation, removal or decommissioning will be at Council's discretion.
- f) For existing minor memorials in open space that need to be removed or relocated due to upgrade works, the following protocols will be applied:
 - Council will undertake reasonable steps to contact the donor to return the memorial to them.
 - If the donor requests to retain the memorial in open space, it will be assessed as to the suitability of it in the context of contemporary guidelines and policies.

6.8.4 Public art

The Strategy supports the role public art has in strengthening and reflecting the local community, cultural heritage, contemporary culture and the inherent landscape character in open space. Public art and cultural activities contribute to the sense of place and community ownership of open space. The guidelines included in this Strategy refer only to the context of public art in open space. The Strategy relies on other Council guidelines and policies regarding the appropriate method for commissioning public art.

Guidelines for locating public art in open space:

- a) Appropriate in Regional, Municipal, Neighbourhood and Urban Civic open space.
- b) Proposals for specific installations are to demonstrate they complement and reflect the intrinsic natural, cultural and community values of the existing or future open space and contribute to the intended use and role of the open space in which it is proposed.
- c) Future Masterplans for Regional, Municipal open space and Landscape Concept Plans for Neighbourhood and Urban Civic open space are to consider the integration of public art as a component of design. The Masterplan does not need to include the design of the artwork, but identify the potential site and design parameters of a future commission.
- d) Consult with the Wurrundjeri Woi-wurrung Cultural Heritage Corporation regarding public art that reflects the First Nations cultural values.
- e) Permanent installations need to demonstrate they meet relevant standards in relation to design in an outdoor public environment. This includes public safety and risk; longevity; acceptable levels of maintenance and vandalism.
- f) Propose an acceptable process for undertaking any future modifications to the artwork, including decommissioning where appropriate, if any significant changes are required to meet updated regulatory design standards.
- g) Appropriate levels and methods for stakeholder and community consultation are to be conducted for any new public art proposal where it is proposed outside a design planning process.

6.9 Festivals and events

The community is made up of people from all walks of life, from many different cultures with a diversity of needs and experiences. Council recognises the value and importance of celebrating these cultures by encouraging festivals and events in open space.

Existing public open spaces where Council currently hold outdoor community festivals and events include:

- Box Hill Gardens
- Box Hill Mall in central Box Hill, however this will be temporarily unavailable due to the construction of the SRL so the events are to be relocated to the Box Hill Town Hall and Bank Street.
- Brickworks Plaza in Burwood East
- Orchard Grove Reserve (Wurundjeri Walk), Blackburn South
- Schwerkolt Cottage
- Old Strathdon Orchard
- Tunstall Park adjoining the Nunawading Community Hub
- Whitehorse Civic Centre in Nunawading

There are no permits required for members of the community having social gatherings and events in the public open space network where there are less than 100 guests. For more than 100 guests, there is a need to apply for a Social Gathering permit on-line.

6.9.1 Community festivals and events open space

The major festival held each year in Whitehorse by Council is the Spring Festival which is held in October. While Council supports and encourages festivals and events in open space, Council officers did raise issues associated with the impacts of events and festivals in open space. This is mainly on the health and quality of vegetation with concerns regarding impact on mature trees, particularly compaction of their root zones and also damage to the trees with inappropriate use during events. The other issues is damage to sites during set up and dismantling the event itself. The repairs are undertaken by Council staff, with no charge system for the organisers of the event.

The following guidelines are specific to the selection of appropriate open spaces and locations within them for holding festivals and events. They also provide guidance regarding management of the events in relation to the ongoing community use and enjoyment of outdoor public open space.

Guidelines for assessing appropriateness of community festivals in open space:

- a) Regional, Municipal and Urban Civic open spaces are generally the most appropriate hierarchy of open space for major community festivals and events.
- b) Neighbourhood open space may be suitable for smaller community events subject to demonstrating the anticipated size and impact on traffic access, noise levels and neighbourhood amenity can be reasonably managed.
- c) Proposals for community festivals and events are assessed and where necessary, prioritised based on the following:
 - Enhances sense of community and neighbourhood spirit
 - Increases community appreciation of the recreational, cultural or natural character and values of the municipality
 - Has relevance to the community and encourages their attendance, participation, and where appropriate, fitness
 - Compatible with community expectations regarding appropriate use of public open space
 - Demonstrates how community access and use of public open space will be achieved and managed for the duration of the festival/event.
- d) Applicants currently apply for a permit for an event being held with more than 100 people attending and/or where temporary hired facilities are provided. If the event has less than 100 people and is a social gathering without hiring facilities then no permit is required. If the event includes installing temporary facilities and has less than 100 people, then Council needs to be notified 2 weeks in advance and it is recommended the applicant has public liability insurance. Where the event has more than 100 people attending, then the applicant needs to provide a site map of the facilities and public liability insurance. Council could also consider requesting the applicant to prepare event management plans appropriate to the scale of the event including measures to proactively prevent damage to the open space for the duration of the festival/event.
- e) The on-line applications and guidelines are to be updated to define more specific requirements for the protection of existing trees in open space, particularly the older established trees to prevent damage.
- f) All festivals/events to demonstrate best practice management including promoting community health and wellbeing and sustainability.
- g) Demonstrate the event will be accessible for everyone attending.
- h) Provision of waste management plan outlining sufficient waste infrastructure arrangements in accordance with waste sustainability principles.

6.9.2 Commercial or private events and functions in open space

Guidelines for assessing appropriateness of commercial or private events and functions in open space:

- a) Appropriate in Regional, Municipal and Urban Civic open spaces.
- b) Demonstrate the event will have a positive contribution to the community and cultural diversity of Whitehorse.

Guidelines for assessing appropriateness of commercial or private events and functions in open space:

- c) Demonstrate how local community access and use of open space will be achieved for the duration of the event.
- d) Demonstrate the event will be accessible for everyone attending.
- e) Whether the applicant is based in the City of Whitehorse.
- f) Demonstrate the event and associated infrastructure will not unduly restrict or impact on the use and enjoyment of the open space by nearby/adjoining residents and workers.
- g) Demonstrate that the event and associated infrastructure will not permanently damage mature trees, open grassed areas, plants, natural or built features. Any remediation works will be required to be undertaken either by the event organisers or at their cost at Council's discretion.
- h) Demonstrates the impact of noise, anticipated participants, temporary facilities/infrastructure, site set up and clean up etc are effectively addressed as part of the application process.
- i) Provision of waste management plan outlining sufficient waste infrastructure arrangements in accordance with waste sustainability principles.

6.9.3 Commercial use of facilities in open space

A range of facilities in open space are used for commercial purposes by different operators including personal trainers and private businesses for product launches and photo shoots. Applications for commercial use of open space are to be submitted for Council assessment and fees are to be payable prior to conducting these activities in open space. Council assesses the applications to avoid or at least minimise impacts on the general community use and access to public open space while the commercial use is in progress.

Applications to conduct commercial activities in open space need to demonstrate the proposed use meets the guidelines and considers public access to open space as noted below.

Guidelines for assessing appropriateness of commercial or private use in open space:

- a) That the proposed use or development complements and enhances the broader community use of the open space.
- b) That the visual and physical access to the open space will not be unduly impacted or reduced.
- c) There is a demonstrated community benefit from the proposal.
- d) All proposed activities and use to have a minimal impact on the environment and in particular can demonstrate they meet contemporary best management practice regarding sustainability.
- e) That the proposed uses as a minimum do not conflict with community health and wellbeing principles, and where feasible promote these principles.

6.10 Design and management plans for open space

6.10.1 Overview

Council has a range of existing plans that guide design and management of existing open space. The Strategy identifies the need for Council to prepare additional plans for selected open spaces to guide future upgrades. Preparation of the plans allows for comment and input to the design from relevant Council officers and the community.

The design process for open space reserves is scaled to match the size and function of the open space. Regional, Municipal and some Neighbourhood and Urban Civic open spaces have a broader catchment of users and frequently a range of community stakeholder groups such as community organisations and sporting clubs. Masterplans are recommended to be prepared when major upgrades are required for these open space reserves. The consultation process is designed to consult with the broader catchment of users and stakeholders. Additional to the Masterplan, there can be a need to prepare management plans for some of these types of open space, particularly where they have environmental and/or cultural heritage values.

Local and Small Local open space have a smaller catchment of users, and these are mainly the local resident and worker community within walking distance of them. Major upgrades or new open space typically requires a Landscape Concept Plan to guide the future upgrade works. A consultation process focussed on the local community within the walking catchment is recommended to be undertaken when preparing the Landscape Concept Plan. Where the upgrades are minor, then preparation of a formal plan is generally not required.

6.10.2 Masterplans

Masterplans will guide the future design for major upgrades to Regional and Municipal open space across the municipality. Where the open space has historical and cultural heritage values, investigate if a conservation management plan is required. If required, prepare the conservation management plan prior to the Masterplan. Landscape Masterplans need to consider the open space hierarchy and character classification; the Strategy precinct / sub-precinct analysis and recommendations; community consultation results; planning and built form context; residential and employment growth occurring or forecast to occur within the Strategy sub-precinct; and the Strategy Design and Management Guidelines/

Table 6-5 lists the existing Masterplans for open space reserves in alphabetical order, noting that many of Masterplans listed are more than 20 years old and when prepared, they are usually intended to have a lifespan of 10 to 15 years.

Table 6-5 Existing Masterplans

Existing Masterplans	Year
Blackburn Creeklands	2002
Blackburn lake Sanctuary	1999
Box Hill City Oval	2001
Box Hill Gardens	2011
Bushy Creek West	1999
Campbells Croft / Abbey Walk	1995
Charles Rooks / Dagola Reserve	2008
Cootamundra Walk East	2000
East Burwood Reserve	2002/2023
Elgar Park	2016
Feiglin Park	2001
Gardiners Creek Trail	1999
Halliday Park	1995
Heatherdale Creek Parklands	2004
Highbury Park	2002
Holland Gully	2010
Kingsley Gardens	2003
Local History Park (Gardiners Creek Burwood)	2007
Morton Park	2000
Orchard Grove Reserve / Wurrundjeri Walk	2001
Slater Reserve	2009
Surrey Park	2000
Vermont Reserve	1999
Winfield Reserve	2002
Wren Close Reserve	2006

This Strategy recommends the preparation of new Masterplans to guide Major upgrades of the following open spaces, listed in alphabetical order:

Table 6-6 Proposed Masterplans included in Section 7 of this Strategy

Refer to the Precinct Analysis and Recommendations in Section 7 for further details and rationale.

Regional & Municipal open space	Suburb	Priority
Antonio Park	Mitcham	Medium
Ballyshanassy Park	Burwood East	Medium
Billabong Park	Vermont South	Very High
Box Hill City Oval / Bolton Park	Box Hill	Very High

Regional & Municipal open space	Suburb	Priority
Bushy Park / Lookout Trail Park	Vermont South	High
Campbells Croft / Abbey Walk	Vermont	Medium
Davy Lane	Forest Hill	Very High
East Burwood Reserve	Burwood East	Very High
Eley Park	Blackburn South	High
Elgar Park	Mont Albert North	Medium
Forest Hill Reserve / Sapphire Willarah Reserve	Forest Hill	Very High
Gardiners Creek Reserve	Box Hill South	High
Junction Road Reserve	Nunawading	Very High
Kalang Park	Blackburn	High
Kingsley Gardens	Mont Albert	High
Koonung Park	Blackburn North	Medium
Mahoneys Reserve	Forest Hill	Very High
Mirrabooka Reserve	Blackburn South	Very High
Morton Park	Blackburn	Very High
Nunawading Reserve (subject to Strategic Property Investigation)	Nunawading	Very High
RHL Sparks Reserve	Box Hill	Medium
Schwerkolt Cottage	Mitcham	High
Slater Reserve	Blackburn North	High
Stephens Reserve	Vermont	Medium
Terrara Park	Vermont South	High
Tunstall Park	Nunawading	High
Wembley Park	Box Hill South	Medium
Whitehorse Reserve	Box Hill	Medium

The following framework guides the future preparation of the Masterplan:

Framework for preparing Masterplans

- a) Provide an overall design and management direction for the open space for approximately 10 years.
- b) Consultation is typically undertaken with the groups and clubs who use the site, community stakeholders who may be involved in the site, relevant Agencies who own or manage land within or adjoining the reserve, regular site users and the local community. Consultation is recommended to occur in two stages: at the research phase, and at the draft design phase. The Open Space Strategy Survey outcomes (Appendix A to this Strategy) can be referred to during the research phase. This may replace the need to undertake consultation with the local community during the research phase, pending the quantity of surveys received in the relevant precinct.

Framework for preparing Masterplans

- c) Outputs of a Masterplan typically include:
- scaled drawing of existing conditions and site analysis
 - scaled drawing of design with explanatory notes, photos, sketches etc.
 - management descriptions where appropriate
 - preliminary estimate of probable cost for all the works
 - staged implementation plan
 - summary masterplan report incorporating all the above.

6.10.3 Landscape Concept Plans

Landscape Concept Plans will guide the future design of Neighbourhood, Urban Civic, Local and some Small Local open space reserves. These plans are prepared primarily to ensure a coordinated approach to facility provision is achieved and to obtain community input to the future open space design. The process to prepare these will vary depending on the level of complexity. All new open space will require concept plans to be prepared.

Framework for preparing Landscape Concept Plans:

- a) Provide an overall design direction for the open space for approximately five years, as works are generally implemented within this timeframe.
- b) The Landscape Concept Plan is to be guided by a working group made up of relevant Council officers as required.
- c) Consultation at the research phase can either rely on the Open Space Survey outcomes in Appendix A of this Strategy, or be undertaken with the community living within the walking catchment of the open space. Consultation at the research phase will vary depending on the individual reserve. Consultation on the Draft Design will normally include at least the display of the plan on site with a description of how to comment.
- d) Outputs of a Landscape Concept Plan for upgrades to **existing** open space is to include:
 - scaled drawing of design with explanatory notes regarding design and management
 - preliminary opinion of probable cost for all the works with priorities for implementation where appropriate.
- e) Outputs of a Landscape Concept Plan for new open space is to include:
 - scaled drawing of existing conditions and site analysis including scaled tree protection zones for all existing mature trees
 - scaled design with explanatory notes regarding design features and management recommendations
 - preliminary opinion of probable cost for all the works.
- f) Review of relevant Council strategies and demonstrate compatibility and where feasible multiple benefits to assist implementation of other strategies.
- g) Consideration of existing drainage requirements on site to ensure the new design allows for existing overland flows. As constructed drawings to be supplied once the new infrastructure is built.

6.10.4 Cultural heritage and nature conservation values

6.10.4.1 Cultural Heritage Management Plans

Cultural Heritage Management Plans (CHMP) may be required for sites where major works are proposed in sites that are identified to have potential cultural heritage significance, including along waterway corridors. This will be determined in consultation with the Registered Aboriginal Party for Whitehorse which is the Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation.

6.10.4.2 Nature conservation values

If the open space has any identified nature conservation values, then the appropriate investigation into these values and appropriate protection measures for them is to be undertaken prior to the preparation of any design plans or major works. This includes reference to the Whitehorse Urban Biodiversity Strategy (undated) and any subsequent strategies and plans that provide further direction and guidance regarding these values.

6.10.4.3 Historical values - Conservation Management Plans

If the open space has any identified historical values (refer to Section 6.8.2) then the appropriate investigation into these values and protection measures for them is to be undertaken prior to the preparation of any design plans or major works. This may include the preparation of a Conservation Management Plan prior to the preparation of the Landscape Masterplan/Landscape Concept Plan.

6.10.5 Detailed design and construction

For all types of open space, once the Masterplans and Landscape Concept Plans are completed and approved by Council, they will be implemented subject to available funding and priorities.

Where the plans include major upgrades for the entire reserve, or significant changes to existing facilities and infrastructure, detailed design would be undertaken to produce a set of detailed documentation drawings to guide the construction. Feedback from internal stakeholders will be sought during the detailed design phase as required for the specific project and may include urban design, streetscapes, natural values, drainage, maintenance etc.

For all new open space being constructed by parties other than Council, detailed documentation drawings are to be prepared and submitted to Council for approval prior to tender and commencement of works.

Where the works to existing open space are minor and straightforward, Council may select to implement the works directly from the Landscape Concept Plan or Masterplan in a staged program pending funding.

6.11 Other agency open space ownership and management

6.11.1 Overview

A number of other agencies own and manage some of the open space in the City of Whitehorse. This mainly occurs along the linear open space corridors and waterways.

Parks Victoria

Parks Victoria is responsible for the design, management and maintenance of the following open space reserves on behalf of the Victorian Government:

- Wattle Park, including Wattle Park Golf Course
- Former Healesville Freeway Reserve linear open space, excluding the areas that have already been confirmed as Council responsibility including Old Strathdon Orchard and Davy Lane
- Dandenong Valley Parklands between Boronia Road and Morack Public Golf Course
- Dandenong Valley Parklands between Morack Public Golf Course and Burwood Highway.

Melbourne Water

Melbourne Water own and manage a number of areas within Whitehorse including retarding basins and selected areas along the waterway corridors. For further details refer to 6.11.3.2 below.

Department of Transport and Planning (DOTP)

DOTP owns parcels of open space in Whitehorse including along the Eastern Freeway and the railway corridor. For further details, refer to Section 6.11.3.3.

Wurrundjeri Wo-wurrung Cultural Heritage Aboriginal Corporation (WCHAC)

WCHAC are the Traditional Custodians of the lands in the City of Whitehorse. WCHAC is a Registered Aboriginal Party (RAP) for the City of Whitehorse. Under the *Victorian Aboriginal Heritage Act 2006*, RAPs have responsibilities for protection and management of Aboriginal cultural heritage. WCHAC evaluate Cultural Heritage Management Plans as well as provide advice on Cultural Heritage Permits, Cultural Heritage Agreements and Protection Declarations. For the WCHAC the natural world is also a cultural space and they have a special interest in preserving not just their cultural objects, but also landscapes of cultural importance.

Adjoining municipalities

The City of Whitehorse adjoins six other municipalities as follows:

- City of Manningham to the north
- City of Boroondara to the west
- Cities of Maroondah and Knox to the east
- City of Monash to the south.

Use of linear open space reserves along waterways is one of the main reason visitors are using open space in adjoining municipalities, along with some other popular open space

destinations. The top five open spaces visited in the adjoining municipalities as nominated in the community survey are:

- Ruffey Lake Park, Doncaster East in City of Manningham (34)
- Jells Park, Wheelers Hill (30)
- Maranoa Gardens, Balwyn in the City of Boroondara (14)
- Ringwood Lake, City of Maroondah (9)
- Damper Creek Reserve, Mount Waverley in City of Monash (9).

6.11.2 Adjoining municipalities

No.	Recommendation	Responsibility	Priority
6.11-1	Liaise with the Manningham City Council regarding Koonung Creek and Mullum Mullum Creek Regularly liaise with Manningham City Council regarding the design and connectivity along the Koonung Creek shared path, including regulatory signage.	WCC Manningham City Council	Ongoing
6.11-2	Liaise with Maroondah City Council regarding Dandenong Creek and Mullum Mullum Creek Liaise as required with Maroondah City Council regarding the shared and path and connectivity along the Dandenong Creek and Mullum Mullum Creek.	WCC Maroondah City Council	Ongoing
6.11-3	Liaise with Knox City Council regarding Dandenong Creek Liaise as required with Knox City Council regarding the shared and path and connectivity along the Dandenong Creek.	WCC Knox City Council PV	Ongoing
6.11-4	Liaise with the Monash City Council regarding Dandenong Creek and KooyongKoot / Gardiners Creek Liaise as required with Monash City Council regarding the shared and path and connectivity along the Dandenong Creek and Gardiners Creek.	WCC Monash City Council PV	Ongoing
6.11-5	Liaise with the Boroondara City Council regarding Koonung Creek and Eastern Freeway Linear Reserve Liaise as required with Boroondara City Council regarding the shared and path and connectivity along the Koonung Creek and the Eastern Freeway Linear Reserve.	WCC Boroondara City Council	Ongoing

6.11.3 Victorian government agencies

6.11.3.1 Parks Victoria

No.	Recommendation	Responsibility	Priority
6.11-6	Liaise with the Parks Victoria regarding Wattle Park Liaise as required with Parks Victoria to encourage consideration of the ongoing use of Wattle Park by the local community in the design and planning of future works and upgrades at Wattle Park. This includes allowing continued use of the sports field.	WCC PV	Ongoing
6.11-7	Liaise with Parks Victoria regarding the former Healesville Freeway Reserve Continue to liaise with Parks Victoria to identify opportunities to consider Whitehorse community needs and priorities as part of the Masterplan and implementation process. Refer also to the precinct actions for this future linear open space in Sections 7.16 and 7.17 of this Strategy.	WCC PV	Very High & Ongoing
6.11-8	Liaise with Parks Victoria regarding the Dandenong Creek corridor Liaise with Parks Victoria to regarding shared path connectivity and continuity, particularly in relation to the closed section of boardwalk upstream of Burwood Highway, and the future use of the Dandenong Valley Parklands downstream of Boronia Road.	WCC PV	Very High & Ongoing

6.11.3.2 Melbourne Water

Melbourne water owns and in some case manages a number of open spaces in Whitehorse including:

- Waterways
- Pipe Track Reserve
- Fenced retarding basins
- Unfenced retarding basins.

No.	Recommendation	Responsibility	Priority
6.11-9	Liaise with Melbourne Water regarding ongoing management of the waterway corridors - Liaise with Melbourne Water regularly to review any specific works they have planned for the bed and banks of the waterways and identify opportunities to undertake complementary works in the waterway corridors. - Regularly liaise with Melbourne Water regarding broader waterway improvement works along the waterways to build on opportunities for complementary works to be undertaken by both agencies to improve water quality, instream habitat and riparian habitat values.	WCC MWC	Ongoing
6.11-10	Pipe Track Reserve Shared path is being installed by Melbourne Water following pipeline infrastructure replacement. Council to liaise with Melbourne Water and prepare a Masterplan for the Pipe Track Reserve to guide future recreational improvements to the reserve.	WCC MWC	Very High
6.11-11	Fenced Retarding Basins Continue to liaise with Melbourne Water regarding the future opportunity to remove the fencing around the retarding basins and potentially include future path links through them to improve connectivity to and between open space reserves. The fenced retarding basins include: - Cornwall Street Retarding Basin, Blackburn South - Eley Road Retarding Basin, Burwood East - Glen Valley Retarding Basin, Forest Hill - Kinkora Road Retarding Basin, Blackburn North - Lernes Street Retarding Basin, Forest Hill Refer also to Section 7, Precinct analysis and recommendations.	WCC MWC	Ongoing
6.11-12	Unfenced Retarding Basins Continue to liaise with Melbourne Water regarding ongoing management and maintenance of unfenced retarding basin land in Whitehorse. This includes: - Masons Road Retarding Basin, Blackburn - Billabong Park, Burwood East, - RHL Parks Reserve, Box Hill.	WCC MWC	Ongoing
6.11-13	Funding applications Continue to apply for future grants to Melbourne Water for future revegetation and water quality improvement projects along the waterway in Whitehorse.	WCC MWC	Ongoing

6.11.3.3 Department of Transport and Planning

No.	Recommendation	Responsibility	Priority
6.11-14	Liaise with DOTP regarding open space along the railway corridors Council to liaise with DOTP as required regarding existing open spaces along the railway corridor when required. Council will continue to advocate for the ongoing protection of the existing open spaces along the railway corridors.	WCC DOTP	Ongoing
6.11-15	Liaise with DOTP regarding the Eastern Freeway Linear Reserve and shared path Council to advocate for the protection of the Eastern Freeway Linear Reserve and shared path in the context of future potential changes as a result of the North East Link Project.	WCC DOTP	Very High & Ongoing

6.11.3.4 Wurundjeri Wo-wurrung Cultural Heritage Aboriginal Corporation (WCHAC)

No.	Recommendation	Responsibility	Priority
6.11-15	Liaise with WCHAC regularly regarding open space design and management Council to establish a regular meeting (for example quarterly or biannually), to gain feedback and input to open space design and management directions. This is to be coordinated in conjunction with all areas of Council.	WCC WCHAC	Very High and Ongoing

7. Precinct analysis and recommendations

7.1 Introduction to the precincts

The City of Whitehorse has 16 different precincts and the analysis and planning for open space has been undertaken at the precinct level. The precincts are consistent with those referred to and defined in the Whitehorse Community Profile (.id Consulting) and shown in Figure 7-1 on the following page.

The precincts are assembled in alphabetical order in this chapter and the recommendations are based on applying the open space framework described in this Strategy.

Each of the precincts includes:

- Existing open space plan and description of the existing open space
- Open Space Hierarchy plan
- Gap analysis plan including a description of how all the gap areas will be addressed
- Summary of the existing community including a summary of the demographics and community survey outcomes
- Analysis of the future change and open space needs for the precinct
- Precinct recommendations including the Action Plan, which lists all the proposed new open spaces and actions for all the existing open space.

Refer to Figure 7-1 on the following page for the spatial layout of the precincts.

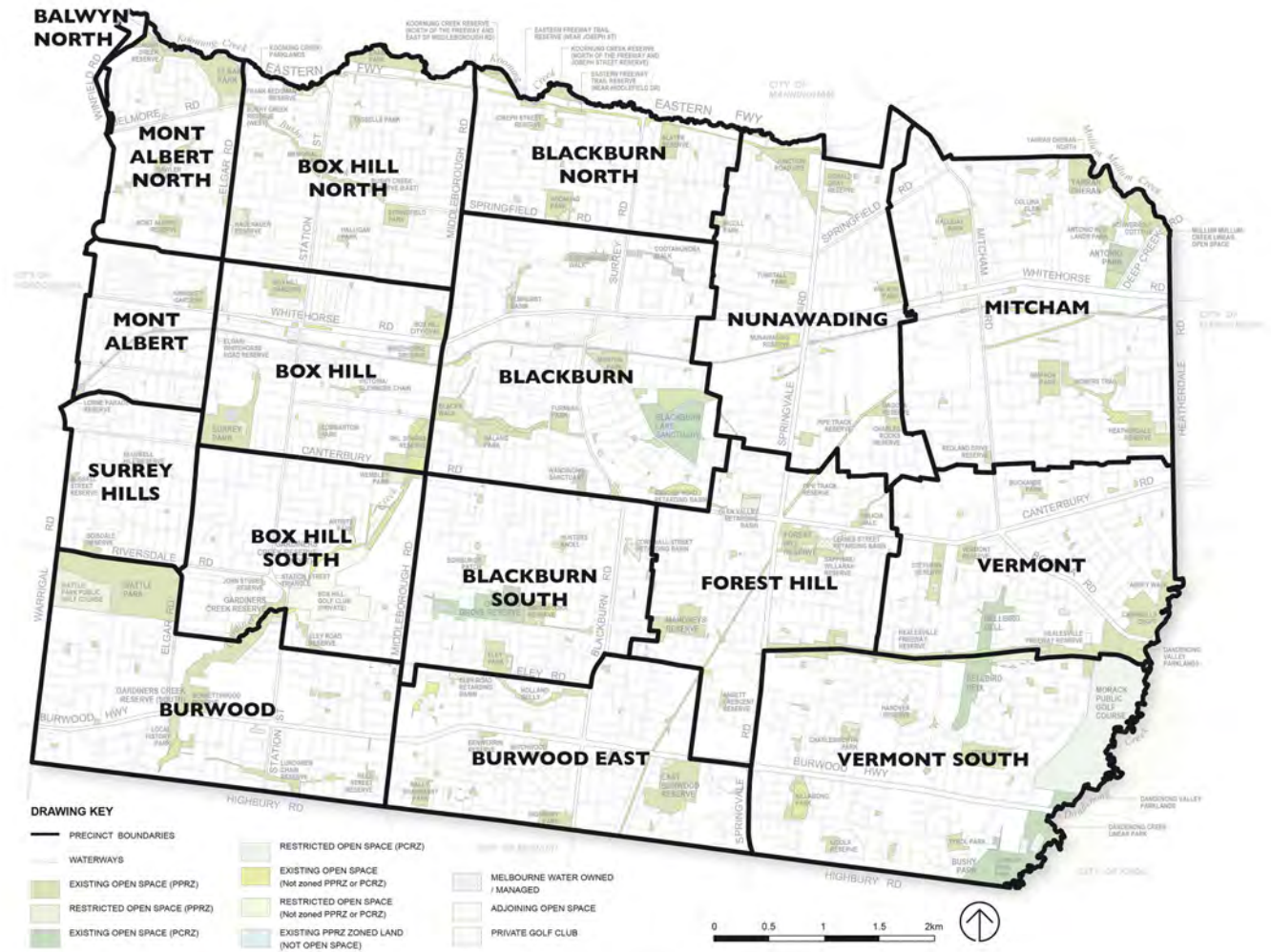


Figure 7-1 City of Whitehorse Open Space Precincts

7.2 Blackburn

7.2.1 Overview

Blackburn is defined to the north by Springfield Road, the south by Canterbury Road, the west by Middleborough Road and the east by a range of local access streets between Blackburn Road and Springvale Road.

Refer to *Figure 7.2-1* on the following page of the existing open space in Blackburn.

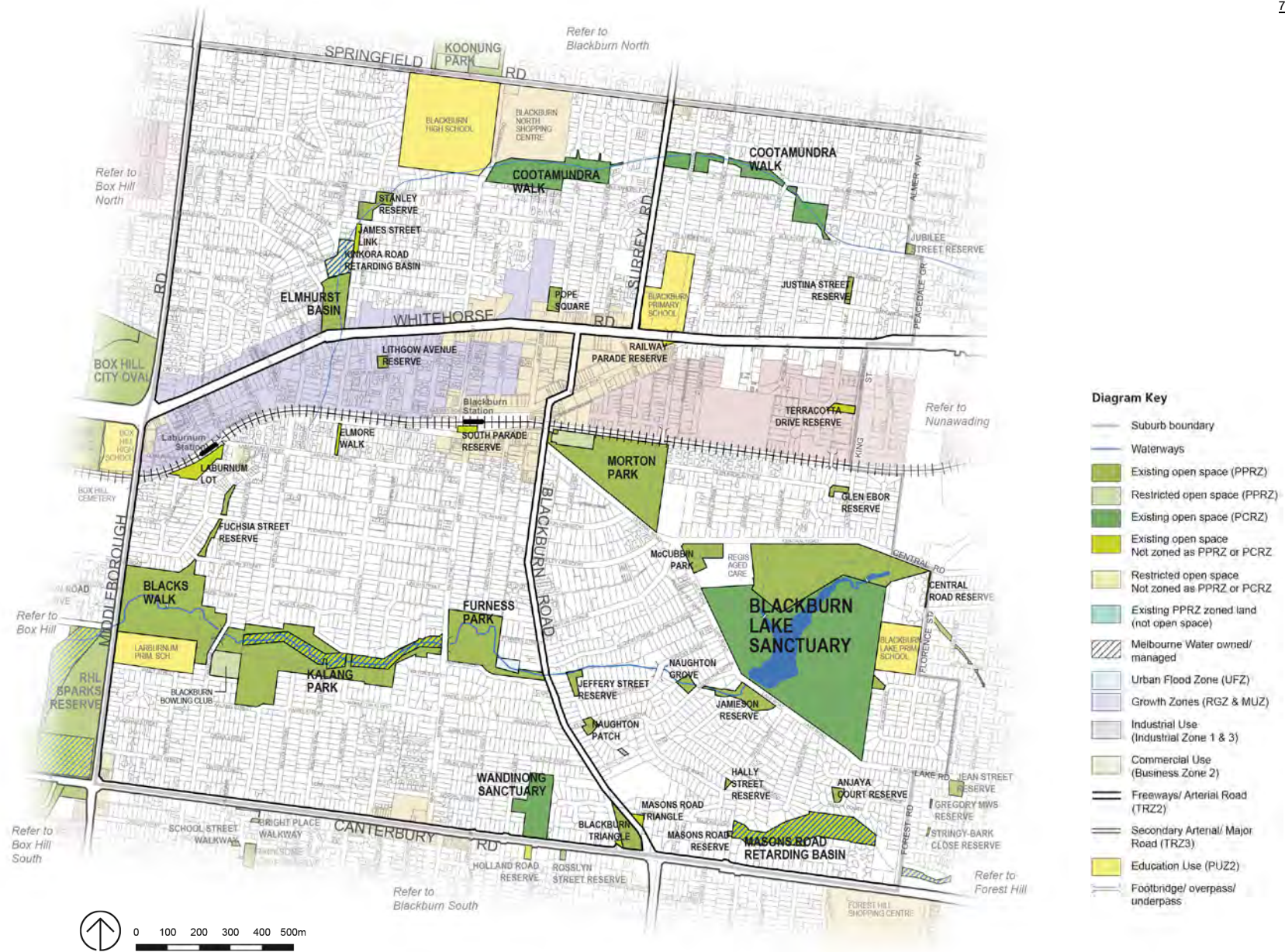


Figure 7.2-1 Existing Open Space Blackburn

7.2.2 Existing open space

Overview

Blackburn Lake Sanctuary is the largest Regional open space in Blackburn. Established as part of the Blackburn Model Town Estate in the late nineteenth century, the lake was originally owned by the Adult Deaf Society and originally cleared and used as a flower farm, with the lake being used for picnics, swimming and carnivals. Today, it is popular for a wide variety of reasons and is nominated as being visited by people from across Whitehorse, particularly for walking, picnics and enjoying the natural ambience.

Blackburn Creeklands, which is the linear system of open space along the waterway corridor that flows downstream from Blackburn Lake into Gardiners Creek, is also very popular for walking, exercising and enjoying nature. The system of open space includes Furness Park, Kalang Park and Blacks Walk, with the southern extent of Kalang Park having structured sporting facilities including sports fields and the Blackburn Bowling Club. Melbourne Water, Council and the community have undertaken ongoing works in the reserves including revegetation, upgrade of unstructured recreation facilities, and riparian revegetation and stabilisation works.

Moreton Park is the major structured sporting reserve in Blackburn and has the potential to be improved to integrate unstructured recreational use within the reserve particularly, in the context of forecast growth in the area between the railway line and Whitehorse Road. Cootamundra Walk is the major Neighbourhood linear open space network to the north of Whitehorse Road, along with Elmhurst Basin. Other Neighbourhood open spaces includes the Wandinong Sanctuary and Masons Road Retarding Basin in the south near Canterbury Road. Wandinong Sanctuary is primarily reserved for nature conservation purposes and Masons Road Retarding Basin is primarily reserved for drainage purposes. The network of Local and Small Local open spaces through the precinct provide important recreational spaces for the community, along with many supporting remnant and indigenous overstorey trees.

Table 7.2a is a list of all the existing open spaces in Blackburn in alphabetical order and Table 7.2b is a summary of the total number of open spaces by hierarchy.

Table 7.2a Existing open space in Blackburn including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Anjaya Court Reserve	0.14	Small Local	Nature conservation	Undeveloped		
Blackburn Bowling Club (as part of Kalang Park, Zoned PPRZ, but exclusive use for Bowling)	0.74	Municipal	Restricted sporting			
Blackburn Lake Sanctuary	23.58	Regional	Nature conservation	Waterway	Passive	Events
Blackburn Triangle	0.68	Local	Nature conservation	Significant road reservation		
Blacks Walk	6.36	Municipal	Waterway	Passive	Linear	Nature conservation
Cootamundra Walk	5.16	Neighbourhood	Linear	Nature conservation	Passive	Service easement
Elmhurst Basin	1.35	Neighbourhood	Passive	Service easement	Parkland	
Elmore Walk	0.09	Local Link	Linking space			
Fuchsia Street Reserve	0.31	Small Local	Linking space			
Furness Park	3.42	Municipal	Waterway	Passive	Nature conservation	

Table 7.2a Existing open space in Blackburn including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Glen Ebor Reserve	0.14	Small Local	Linking space	Nature conservation		
Hally Street Reserve	0.04	Local Link	Linking space	Passive	Nature conservation	
James Street Link	0.14	Local Link	Linking space			
Jamieson Reserve	0.75	Local	Waterway	Linking space	Nature conservation	
Jeffery Street Reserve	0.22	Small Local	Nature conservation	Waterway		
Justina Street Reserve	0.15	Small Local	Linking space	Native character		
Kalang Park	8.65	Municipal	Waterway	Sporting	Nature conservation	Passive
Kinkora Road Retarding Basin (Melbourne Water)	0.72	Municipal	Service easement	Restricted	Native character	
Laburnum Lot	0.83	Local	Passive	Viewing	Railway easement/siding	Linear
Lithgow Avenue Reserve	0.13	Small Local	Botanical	Undeveloped	Viewing	
Masons Road Reserve	0.02	Neighbourhood	Linking space	Nature conservation		
Masons Road Retarding Basin (Melbourne Water)	2.91	Neighbourhood	Service easement	Nature conservation	Passive	Linking space
Masons Road Triangle	0.08	Small Local	Native character	Significant road reservation	Nature conservation	
McCubbin Park	0.77	Local	Nature conservation	Passive		
Morton Park	5.69	Municipal	Sporting	Nature conservation	Passive	
Naughton Grove Reserve	0.19	Small Local	Waterway	Undeveloped	Nature conservation	
Naughton Patch	0.18	Small Local	Play	Native character	Nature conservation	
Pope Square	0.19	Small Local	Passive	Play	Native character	
Railway Parade Reserve	0.04	Local Link	Linking space	Significant road reservation	Native character	
South Parade Reserve	0.14	Small Local	Railway easement/siding	Play		
Stanley Reserve	0.50	Local	Passive	Linking space	Service easement	
Terracotta Drive Reserve	0.20	Small Local	Passive	Linking space	Native character	Nature conservation
Wandinong Sanctuary	1.74	Neighbourhood	Nature conservation	Heritage	Passive	

Table 7.2b Number, hierarchy and size of open space excluding restricted open space in Blackburn

No.	Hierarchy	Area (Ha)	%
1	Regional	23.58	41%
4	Municipal	16.19	28%
0	Urban Civic	0.00	0%
5	Neighbourhood	11.19	20%
5	Local	3.52	6%
12	Small Local	2.05	4%
5	Local Link	0.31	1%
32	TOTAL	56.84	100%

Quantity

The total quantity of open space in Blackburn, excluding restricted open space, represents 9.5 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 11.1 per cent of the total land area. This is very similar to the municipal average.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Blackburn with the exception of Urban Civic. There is an opportunity for Urban Civic open space to be provided in the future associated with the proposed new Small Local open space between Whitehorse Road and the railway north of Blackburn Station. Refer to Figure 7.2-2 for the Hierarchy of existing open space in Blackburn.



Figure 7.2-2 Open Space Hierarchy Blackburn

Open space distribution and future open space needs in Blackburn

Whitehorse Road is a key east-west arterial road through Blackburn and forms a major physical barrier to safe and easy walking access to open space within the precinct along with the railway line. Blackburn Road and Surrey Road are north-south secondary arterials that also form barriers to safe and easy walking access to open space. The other barriers include the major and arterial roads to the perimeter including Canterbury Road to the south, Middleborough Road to the west and Springfield Road to the north.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.2-3. This figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Blackburn and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.2c Brief description of gap areas in Blackburn

Gap area	Description
BL1	Located in the north-west area of the suburb near the Springfield and Middleborough Road intersection. There is no significant forecast change proposed in this area and while the distance to walk to Stanley Street Reserve is further, it is accessible via the local access street network without the need to cross any major roads. Therefore no specific recommendations are proposed for this gap area.
BL2	Extends north of Whitehorse Road and east of Middleborough Road, in a location where forecast growth is proposed including high density development on the north side of Whitehorse Road. Given the growth proposed in this gap area a new Small Local open space is proposed.
BL3	South of the railway this gap area extends between Myrtle Grove and Blackburn Road. The Blackburn Creeklands open space network is accessible via the local street network to the south of this gap area and given the popularity and extensive parkland that is accessible via the local access street network, no additional open space is proposed to address this gap area. Additionally, there is the ancillary open space associated with the Blackburn Station entry and bus interchange area on South Parade, which also provides some greening and public space.
BL4	Located between Whitehorse Road and the railway and west of Blackburn Road, this gap area is in a location where urban densities have increased significantly since the 2007 Strategy was prepared and are likely to continue to increase. The 2007 Strategy identified the need for a new Small Local open space, however this has not yet been provided. With further increase in urban densities in this area, this Strategy is proposing a new Local open space be provided, with the potential for this to become an Urban Civic open space, pending the final location and configuration.

Gap area	Description
BL5	Located east of Blackburn Road and south of Whitehorse Road, this gap area is incorporate the non-residential office and manufacturing precinct, commercial precinct and new residential use. While there is access over the railway line to Morton Park, there is no local open space within a safe and easy walk of workers and residents. Further residential growth is forecast in this gap area, and therefore this Strategy recommends a new Small Local open space to complement Morton Park, which is located south of the railway line.

7.2.3 Ancillary open space

Within Blackburn there are four public schools that offer some open space and greening that complements the open space network. Additionally the commercial precincts offer some outdoor eating areas associated with cafes, notably including the Laburnum commercial precinct. Additionally, the recent Blackburn Station upgrade has established a civic space at the entry to the station and bus interchange area in South Parade.

Generally the pattern of subdivision layout allows for good permeability through the local street network in most of Blackburn.



Figure 7.2-3 Gap Analysis Blackburn

7.2.4 Existing Blackburn community

Demographics

There are 14,636 residents living in Blackburn as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 1,956 people living in Blackburn, which represents approximately a 15 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people from secondary schoolers to the young work force age groups (12 to 34 years) and a lower proportion of babies, young children, parents and homebuilders. There is also a higher proportion of people from the older workers, empty nesters, and elderly age groups (50 to 69 and 85 years over), however there are fewer seniors (70 to 84 years).

A higher proportion of the population now live in high-density housing compared with 2006. Since 2006, there is almost the same per centage of people residing in medium density housing. In 2006, approximately 76 per cent lived in separate houses, which decreased to 64 per cent to 2021.

The residential population is forecast to increase 26 per cent, with the continued trend of a decrease in children between the ages of 5 to 24 and older workers between the ages of 50 and 59. There is a forecast increase in the young work force and parents between the ages of 25 to 49, and empty nesters and seniors aged between 60 to 84 years.

Summary of community engagement outcomes

A total of 194 open space surveys were received from Blackburn, which represents 9 per cent of the total surveys received.

Blackburn Lake Sanctuary is the heart of this precinct and is the most visited open space within and beyond walking distance. The survey respondents in Blackburn value the abundance of bushlands and express the need to protect open space and vegetation. 'Connecting with nature' is the highest open space value in the precinct, which is higher than the municipal average, and there are many comments relating to the protection of and planting of additional trees and vegetation in Blackburn. This community had the most requests for additional active facilities to be provided in open space, and the lowest score for the use of play spaces compared to all precincts.

Values of open space (top five)

- 70% Connecting with nature
- 69% Trees
- 67% A place to relax and unwind
- 63% Native birds and wildlife
- 63% Just being outside

Types of open space used and frequency of use (top five)

- 88% Local streets for exercise
- 87% Large parks and reserves (non-sporting)
- 83% Small local parks
- 77% Waterway reserves
- 72% Linear reserve network for walking/cycling

Frequently visited types of open spaces (top five)

- 82% Local streets for exercise
- 57% Large parks and reserves (non-sporting)
- 55% Small local parks
- 40% Waterway reserves
- 33% Sporting reserves

Priority of facilities and amenities in open spaces (top five)

- 71% Seats
- 68% Additional greening for environmental health & wellbeing
- 63% Trees
- 60% Walking paths
- 55% Toilets

(Note that 29% Play space was listed seventeenth)

Table 7.2d Most frequently visited open space in Blackburn

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
78	Blackburn Creeklands (Including Kalang Park, Blacks Walk & Furness Park)	• Walking (34) • Enjoy nature (12) • Exercising (7) • Dog walking (6) • Cycling (2) • Social - meeting family / friends / parties (2) • Club based sport (2) • Play – children (2)	
68	Blackburn Lake Sanctuary	• Walking (16) • Dog walking (13) • Play – children (10) • Enjoy nature (8) • Social - meeting family / friends / parties (8) • Exercising (7) • Lake (5) • Access - close to home (4) • Bird watching (4) • Open space - ambience, beauty (4) • Relaxing (4)	

No	Name	Reasons to visit	Suggested improvements
		• Spending time outdoors (4) • Trees (4) • Bushland (3) • Open space – peaceful (3) • Jogging / Running (2)	
32	Cootamundra Walk	• Play – children (12) • Dog walking (5) • Exercising (4) • Walking (4) • Walking - travel through (4) • Access - close to home (2) • Picnics (2) • Relaxing (2)	• Toilet - additional required (2)
17	Morton Park	• Dog walking (6) • Access - close to home (2) • Exercising (2) • Social - meeting family / friends / parties (2) • Walking (2)	
10	Wandinong Sanctuary	• Enjoy nature (4)	
Open space beyond walking distance (top five)			
42	Blackburn Lake Sanctuary	• Walking (13) • Enjoy nature (8) • Play - children (7) • Exercising (4) • Social - meeting family / friends / parties (3) • Bird watching (2) • Dog walking (2) • Lake (2) • Picnics (2) • Relaxing (2)	• Access - provide safe pedestrian crossing over Blackburn Road near Heath Street (2) • Carpark - additional required
26	Blackburn Creeklands (Including Kalang Park, Blacks Walk & Furness Park)	• Walking (8) • Jogging / Running (2) • Exercising (4)	
17	Gardiners Creek	• Walking (9) • Cycling (3) • Enjoy nature (2) • Running (2)	
15	Morton Park	• Dog walking (6) • Club based sport (3) • Play – children (3) • Spending time outdoors (2)	• Dogs - owners to control dogs
9	Box Hill Gardens	• Play - children (5)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by people in each category:

Open space

- Additional required (11)
- Valued (10)
- Protection of existing open space (4)
- Improvements required (4)
 - Accessibility & facilities (2)

Maintenance and management

- Dogs (17)
 - More separate dogs off-leash areas (away from playgrounds/ sports fields) (5)
 - More fenced dog parks (5)
 - Owners to be responsible/control their dogs (3)
 - Do not provide more dog parks (2)
 - Dog-on lead regulations (2)
- Maintenance (4)
 - More regular rubbish removal (2)
 - Valued (2)
- Education to allow fauna/fauna protection (2)
- Management - sharing the use of open space beyond a single activity (2)
- Placemaking - promotion of open space and facilities (2)

Trees and vegetation

- Additional canopy trees required. (8)
- Increase trees and vegetation for habitat (5)
- Protect existing trees (2)

Park Infrastructure

- Active facilities - additional required (26)
 - BMX pump tracks and jumps (5)
 - Outdoor basketball court (3)
 - Skate Park (2)
 - Waterplay for all ages (2)
 - Outdoor facilities for teenagers (2)
- Social infrastructure - additional required (4)
 - Community gardens (2)
 - Cafe/kiosk (2)
- Park infrastructure - additional required (12)
 - Toilets - to allow for longer stays (3)
 - Seating (2)
 - Shelter (2)
 - Generally, more facilities needed for the increased density (2)
- Carpark (2)

Other

- Developments (6)
 - Must provide open space and connect into existing network (2)
 - Minimise impact on native vegetation/greening/open space (3)
- Overall Strategy (4)
- Streetscape improvements (3)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.2.5 Analysis of future change and open space needs

Forecast population change

Blackburn is currently forecast to reach a residential population of 18,467 by 2036, representing an additional 3,831 residents, or a 26 per cent increase compared to the 2021 population.

The table below includes the forecast population growth for the residential population through to 2036.

Table 7.2d Population forecasts for Blackburn 2021 - 2036

Blackburn	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	14,636	16,239	17,407	18,467	+3,831

Source: .id Forecast Whitehorse Community Profile, accessed 10/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 3,831 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of older adults in the 50+ age cohort and decrease in proportion of children under 11 years of age means there is a need to increase the range of facilities in open space in addition to play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.2.6 Blackburn Precinct Recommendations

Summary of overall intent

Provision and distribution

Blackburn will continue to change over the next 15 years with 3,831 additional residents forecast to be living in Blackburn by 2036, representing a 26 per cent increase. Blackburn Lake Sanctuary and Blackburn Creeklands are the most popular open spaces in Blackburn and provide a linked network of open space through the southern part of the precinct. North of Whitehorse Road, Cootamundra Walk is a connected system of open spaces along the valley of a tributary to Gardiners Creek. Further west of Cootamundra Walk is a linked network of open spaces that connect to Elmhurst Basin.

While there is excellent provision of open space in many parts of Blackburn, there are gaps in the provision of open space between Whitehorse Road and the railway where medium and high density development will continue in the future. An additional gap area is located north of Whitehorse Road near Middleborough Road in an area where growth is also forecast to continue. New open spaces are proposed primarily to meet the open space needs of the new population and assist to mitigate urban heat in these higher density settings. Additionally, two existing Small Local open spaces are proposed to be expanded in size. North of Whitehorse Road, Pope Square can be increased in size by potentially relocating the community facility out of the park to create more space and cater to forecast increased urban densities along Whitehorse Road. Other changes include investigating options to provide a future open space link along the waterway to provide an off road link between Cootamundra Walk and Surrey Road. Additionally, investigate improving pedestrian connectivity between Laburnum Lot and the Blackburn Creeklands.

Quality and design

The Strategy recommends continuing to protect and strengthen the nature conservation and biodiversity values in the existing open space network, while introducing a broader range of unstructured recreation and informal facilities to appeal to a greater diversity of age groups. The new open spaces provide an opportunity to introduce diversity of character in the network with a focus on informal recreational use and social spaces with a more exotic character. Major upgrades are proposed to the unstructured recreational facilities at Morton Park to primarily cater to the forecast new population. Other major upgrades focus on improving the existing network including Elmhurst Basin, Kalang Park and Cootamundra Walk.

7.2.7 Action Plan Blackburn

A Additional public open space

No.	Action	Responsibility	Priority
7.2A-1	New Local open space in Gap Area BL4 New Local open space in this gap area to cater to the existing and forecast population. Aim to achieve improved east-west connectivity in the street network with new open space.	WCC Developer	Very High
7.2A-2	New Small Local open space in Gap Area BL2 New Small Local open space within an easy walking distance of Whitehorse Road primarily for the forecast population.	WCC Developer	Very High
7.2A-3	New Small Local open space in Gap Area BL5 New Small Local open space for the forecast population to provide a high quality green space close to the density precinct for informal use and contribute to urban greening and cooling.	WCC Developer	Very High
7.2A-4	Cootamundra Walk (West) expansion (between Surrey Rd & Cootamaundra Cres) Investigate options to acquire future open space to provide an off road open space link between Surrey Road and Larch Street.	WCC Developer	High
7.2A-5	Lithgow Avenue Reserve expansion Investigate expansion to the open space to increase its size and function in the context of forecast growth.	WCC Developer	Very High
7.2A-6	Pope Square expansion Expand the existing open space by relocating the pre-school out of the open space and redesign it to primarily meet the needs of forecast community in high density development. Refer also to Action 7.2B-33.	WCC Developer	High
7.2A-7	Terracotta Drive Reserve expansion Investigate options to enlarge this open space to increase its function and role in the open space network.	WCC Developer	High
7.2A-8	New Local Link upstream Masons Road Retarding Basin to Forest Road In the future advocate to achieve adequate setback of future development along both sides of the waterway to achieve a pedestrian path connection between Forest Road and Masons Road Retarding Basin.	WCC MWC	Very High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.2B-1	Anjaya Court Reserve Continue to maintain and protect the remnant indigenous trees. <i>Additional information/rationale:</i> <i>In the longer term, option to improve recreational values with installation of path and seating to enjoy views.</i>	WCC	Ongoing
7.2B-2	Blackburn Bowling Club Continue to maintain.	WCC	Ongoing
7.2B-3	Blackburn Lake Sanctuary Minor upgrade to upgrade picnic area and improve universal access to this popular reserve.	WCC	Medium
7.2B-4	Blackburn Triangle Continue to maintain and protect overstorey tree canopy.	WCC	Ongoing
7.2B-5	Blacks Walk Minor upgrade to Blacks Walk to provide picnic facilities and additional unstructured recreation facilities with the recently installed play space. Refer also to Actions 7.2B-14 and 7.2B-21.	WCC	Medium
7.2B-7	Cootamundra Walk (East) – Ashlar Crescent to Elm Street Minor upgrade to provide additional facilities to complement the recent play space area to create a social gathering space. <i>Additional information/rationale:</i> <i>Primarily for the forecast population and changing demographics in the increased densities across the General Residential Zone and particularly given the gap area east of this location.</i>	WCC	Medium
7.2B-8	Cootamundra Walk (East) – Larch to Maple Streets Minor upgrade to provide additional facilities to complement the play space including informal facilities, and additional planting to the perimeter of the reserve. <i>Additional information/rationale:</i> <i>This play area is proposed to be retained and with minor upgrade when required due to the excellent visual access to it and proximity to other community facilities nearby.</i>	WCC	Low
7.2B-9	Cootamundra Walk (East) – Maple Street to Ashlar Crescent Continue to maintain.	WCC	Ongoing
7.2B-10	Cootamundra Walk (East) – Surrey Road to Larch Street Continue to maintain.	WCC	Ongoing
7.2B-11	Cootamundra Walk (West) – Williams Road to Cootamundra Crescent Major upgrade to include an improved picnic/barbecue facility and seating area along with a diversity of informal facilities. Investigate options to improve the interface to the adjoining Blackburn North Shopping Centre.	WCC	Medium

No.	Action	Responsibility	Priority
7.2B-12	Elmhurst Basin Major upgrade to increase the diversity of recreation and informal facilities for the community. This includes investigating options to designate a dog off lead area in the floor of the retarding basin and provision of additional recreation facilities in the elevated area overlooking the overland flow path adjacent to Elmhurst Road.	WCC (MWC)	High
7.2B-13	Elmore Walk Continue to maintain.	WCC	Ongoing
7.2B-14	Fuchsia Street Reserve Continue to maintain.	WCC	Ongoing
7.2B-15	Furness Park Minor upgrade to include a greater diversity of unstructured recreation facilities, picnic facilities near the play space and path access suitable for the local community nearby. <i>Additional information/rationale: Refer also to Action 7.2B-22 regarding a Landscape Masterplan for the Blackburn Creeklands system of open space. This location is preferred as a local destination given it has good passive surveillance from the adjoining local street.</i>	WCC	High
7.2B-16	Glen Ebor Reserve Continue to maintain with additional seating and vegetation management.	WCC	Ongoing
7.2B-17	Hally Street Reserve Minor upgrade to create a viewing space. This includes not replacing the play equipment and convert to a seating viewing space.	WCC	Low
7.2B-18	James Street Link Continue to maintain and plant additional canopy trees.	WCC	Ongoing
7.2B-19	Jamieson Reserve Minor upgrade to extend the path link through the reserve.	WCC	Medium
7.2B-20	Jeffery Street Reserve Minor upgrade to provide path access and revegetation to strengthen the nature conservation values.	WCC	High
7.2B-21	Justina Street Reserve Minor upgrade to provide path link and a seat.	WCC	High
7.2B-22	Kalang Park Undertake a Landscape Masterplan to identify a suitable location for a key destination facility in the Blackburn Creeklands system, where shared facilities including access to public toilets, car parking, fitness and sports facilities can be suitably established. The final location for this will be identified through a Masterplan process. Refer also to Actions 7.2B-15 and 7.2B-5.	WCC	High
7.2B-23	Kinkora Road Retarding Basin Continue to maintain.	MWC	Ongoing

No.	Action	Responsibility	Priority
7.2B-24	Laburnum Lot Continue to maintain this recently upgraded open space. Refer also to Action 7.2C-3 regarding improving access to Blackburn Creeklands.	WCC	Ongoing
7.2B-25	Lithgow Avenue Reserve Undertake a major upgrade protecting and celebrating mature trees on the site. Investigate expansion to the open space to increase its size and function in the context of forecast growth.	WCC Developer	High
7.2B-26	Masons Road Reserve Continue to maintain.	WCC	Ongoing
7.2B-27	Masons Road Retarding Basin Continue to maintain with minor additional tree planting and seating.	WCC (MWC)	Ongoing
7.2B-28	Masons Road Triangle Continue to maintain and protect the overstory tree canopy.	WCC	Ongoing
7.2B-29	McCubbin Park Minor upgrade to provide additional local open space facilities. <i>Additional information/rationale:</i> <i>Undertake a minor upgrade to improve the local community use of this conservation reserve including paths, seats, and potential facilities that encourage exercise/fitness in proximity to the adjoining aged care facility. The intent is for the park to be scaled to the local community needs as a point of difference from the regional facilities at Blackburn Lake Sanctuary.</i>	WCC	Very High
7.2B-30	Morton Park Prepare and implement a Landscape Masterplan to guide the future major upgrade for unstructured recreation and informal use primarily for the recent and forecast population to the north.	WCC Developer	Very High
7.2B-31	Naughton Grove Reserve Continue to protect the native vegetation with weed control and revegetation.	WCC	Ongoing
7.2B-32	Naughton Patch Minor upgrade to provide path access to the open space and play space.	WCC	Medium
7.2B-33	Pope Square Major upgrade including relocating pre-school out of the open space and redesign to primarily meet the needs of forecast community in high density development. Refer also to Action 7.2A-6.	WCC Developer	High
7.2B-34	Railway Parade Reserve Continue to maintain and protect mature overstory trees.	WCC	Ongoing
7.2B-35	South Parade Reserve Continue to maintain.	WCC DOTP	Ongoing
7.2B-36	Stanley Reserve Minor upgrade to improve planting to the perimeter of the reserve to complement recent play space.	WCC	Medium

No.	Action	Responsibility	Priority
7.2B-37	Terracotta Drive Reserve Major upgrade to encourage use of this reserve for workers during breaks from work. Investigate options to enlarge this open space to increase its function and role in the open space network.	WCC Developer	High
7.2B-38	Wandinong Sanctuary Continue to maintain.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.2C-1	Blackburn Square Shopping Centre interface to Cootamundra Walk Investigate opportunities to improve pedestrian/cycle access and the interface treatment between Blackburn Square Shopping Centre and Cootamundra Walk.	WCC	Ongoing
7.2C-2	Improve east-west pedestrian connectivity in Gap Area BL4 When reviewing development applications in Gap Area BL4, identify opportunities to improve east-west pedestrian connectivity between the north/south streets between Lithgow Avenue and Station Street.	WCC	Ongoing
7.2C-3	Laburnum Lot - improve access and connectivity to Blackburn Creeklands Investigate options to improve access between Laburnum Lot and Blackburn Creeklands via Fuschia Street Reserve and the local street network.	WCC	Ongoing
7.2C-4	Local access streets in Gap Area BL1 Investigate opportunities to improve pedestrian amenity in the local access streets in Gap Area BL1 to improve the safety and enjoyment of walking further to reach open space including to Stanley Reserve.	WCC	Ongoing

7.3 Blackburn North

7.3.1 Overview

Blackburn North is defined to the north by Koonung Creek, to the south by Springfield Road, to the west by Middleborough Road and the east by a number of local access streets which provides good pedestrian permeability via the local street network between Blackburn North and Nunawading.

Refer to *Figure 7.3-1* on the following page of the existing open space in Blackburn North.

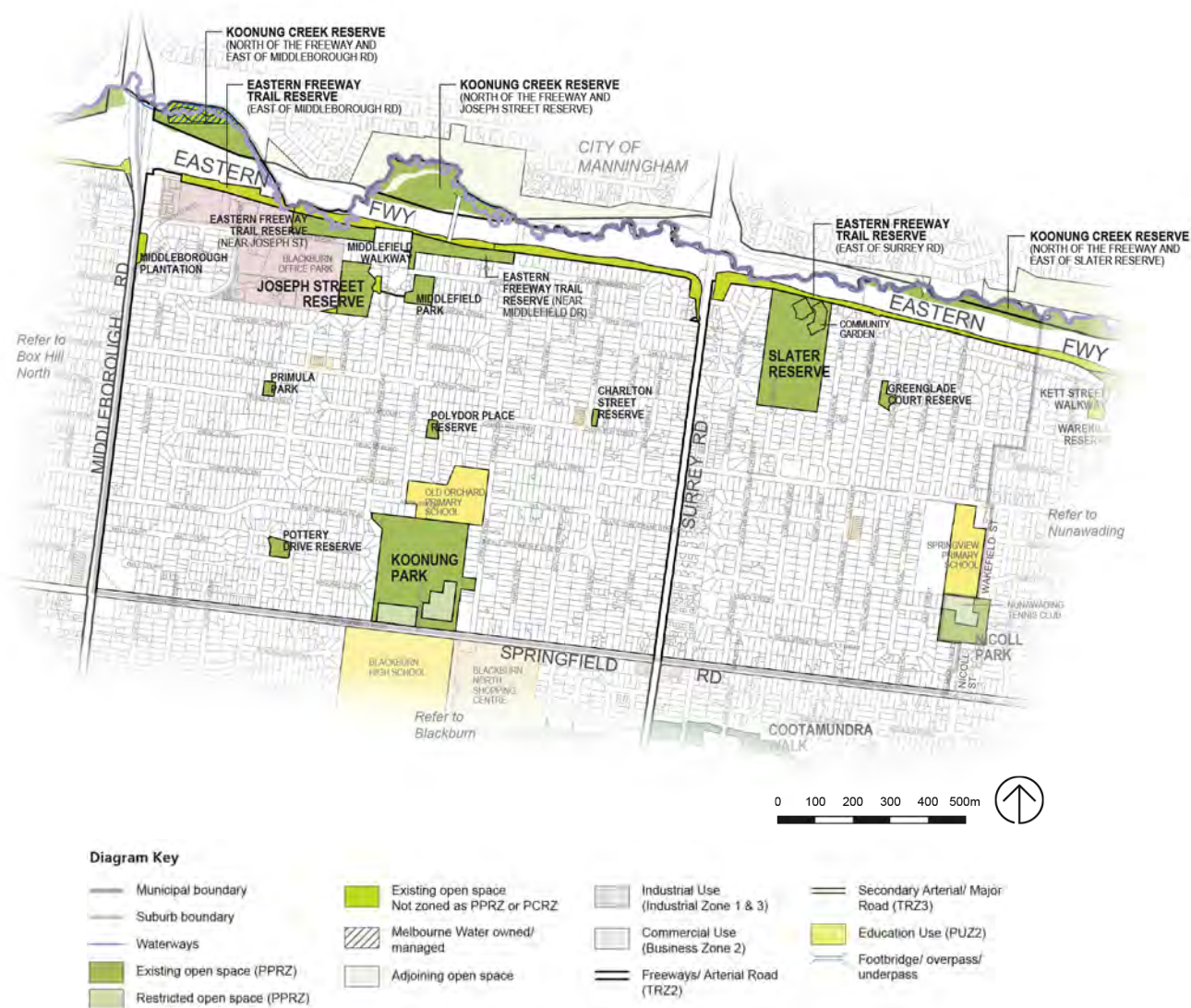


Figure 7.3-1 Existing Open Space Blackburn North

7.3.2 Existing open space

Overview

The Koonung Creek Trail along the Eastern Freeway Reserve provides excellent east-west connectivity and also access to the north into the City of Manningham. Koonung Creek weaves north and south of the Eastern Freeway and east-west connectivity is provided by both a combination of the Eastern Freeway Capital City trail on the south side of the Freeway and the shared path along Koonung Creek.

Koonung Park and Slater Reserve are the two major Municipal open spaces and are located on ridgelines with views to the north. Koonung Park includes outdoor sports fields while Slater Reserve includes an indoor sports stadium along with unstructured and informal recreation facilities including the popular Slater Street Community Gardens.

The open space network includes a diversity of Local and Small Local open spaces, with two Neighbourhood open spaces, one being Joseph Street Reserve in the north and the other Nicoll Park in the south-east, which is technically in Nunawading. There are a number of gaps in open space provision, with an option to expand Primula Park to improve connectivity, or else seek an additional new Small Local open space to the west of Primula Park. Middlefield Park is a good example of a Local open space that contains a diverse range of facilities that appeal to different age groups in the community.

Table 7.3a is a list of all the existing open spaces in Blackburn North in alphabetical order and Table 7.3b is a summary of the total number of open spaces by hierarchy.

Table 7.3a Existing open space in Blackburn North including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Charlton Street Reserve	0.07	Small Local	Play	Native character		
Eastern Freeway Trail Reserve (east of Surrey Road)	1.48	Regional	Linear	Significant road reservation		
Eastern Freeway Trail Reserve (east of Middleborough Road)	2.78	Regional	Linear	Significant road reservation		
Eastern Freeway Trail Reserve (near Joseph St)	0.97	Regional	Linear	Significant road reservation	Nature conservation	Waterway
Eastern Freeway Trail Reserve (near Middlefield Dr and west of Surrey Rd)	1.02	Regional	Linear	Nature conservation	Significant road reservation	
Greenglade Court Reserve	0.19	Small Local	Passive	Linking space	Nature conservation	
Joseph Street Reserve	1.21	Neighbourhood	Nature conservation	Passive		
Koonung Creek Reserve (Joseph St Reserve North)	3.32	Regional	Linear	Waterway	Nature conservation	Significant road reservation
Koonung Creek Reserve (North of Freeway and east of Middleborough Rd)	2.26	Regional	Waterway	Linear		
Koonung Creek Reserve (North of Freeway and east of Slater Reserve)	0.21	Regional	Waterway	Linear		
Koonung Park	6.27	Municipal	Sporting	Native character	Passive	

Table 7.3a Existing open space in Blackburn North including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Middleborough Plantation	0.16	Small Local	Significant road reservation	n/a		
Middlefield Park	0.47	Local	Passive	Linking space	Native character	Viewing
Middlefield Walkway	0.06	Local Link	Linking space			
Polydor Place Reserve	0.14	Small Local	Service easement	Native character		
Pottery Drive Reserve	0.26	Local	Service easement	Native character		
Primula Park	0.12	Small Local	Play	Nature conservation	Viewing	
Slater Reserve (excluding the Community Gardens)	4.97	Municipal	Passive	Sporting	Viewing	
Slater Reserve Community Gardens	0.05	Municipal	Community garden/Urban agriculture	Restricted sporting/recreation		

Table 7.3b Number, hierarchy and size of open space excluding restricted open space in Blackburn North

No.	Hierarchy	Area (Ha)	%
7	Regional	12.04	46%
2	Municipal	11.24	43%
0	Urban Civic	0.00	0%
1	Neighbourhood	1.21	5%
2	Local	0.73	3%
6	Small Local	0.68	3%
1	Local Link	0.06	0%
19	TOTAL	25.96	100%

Quantity

The total quantity of open space in Blackburn North, excluding restricted open space, represents approximately 9.6 per cent of the total land area. This is the same as the municipal average.

Hierarchy

The open space types in the open space hierarchy are currently provided in Blackburn North with the exception of Urban Civic. Refer to Figure 7.3-2 for the Hierarchy of existing open space in Blackburn North.

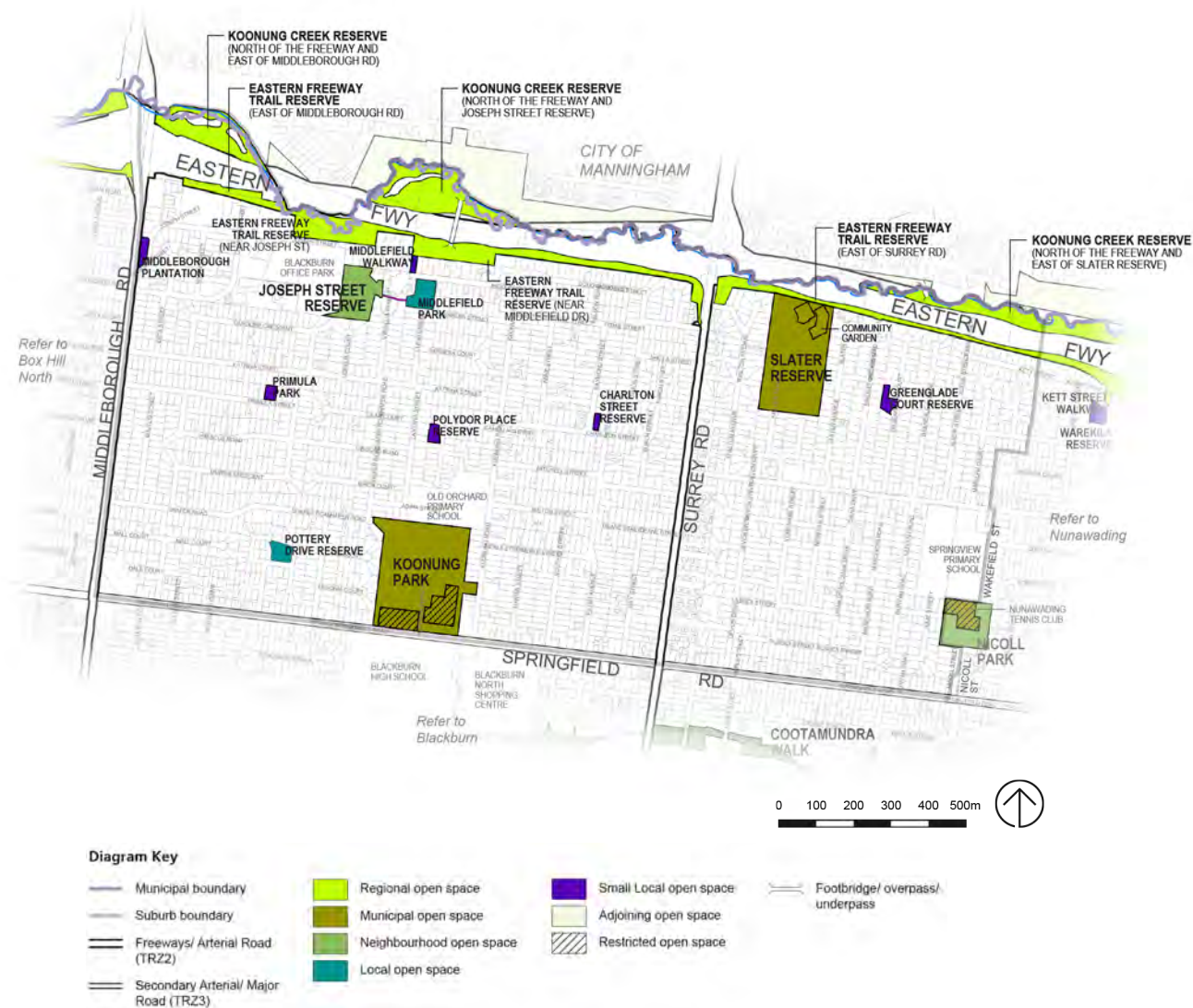


Figure 7.3-2 Open Space Hierarchy Blackburn North

Open space distribution and future open space needs in Blackburn North

Surrey Road is the key north-south arterial road through Blackburn North. It forms a major physical barrier to safe and easy east-west walking access to open space within the precinct. The Eastern Freeway in the north provides a barrier to north-south access, particularly into the adjoining municipality to the north.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.3-3. The figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Blackburn North and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.3c *Brief description of gap areas in Blackburn North*

Gap area	Description
BLN1	Located east of Middleborough Road and south of the Joseph Street Industrial precinct. The local street network does not have good permeability, and the recommendations to address this include investigating northward expansion of the existing Small Local open space of Primula Park to both expand the size and increase its walking catchment. Additionally, a new Small Local open space is recommended to be provided to the south-west of Primula Park to address the existing gap area.
BLN2	Located east of Surrey Road and north of Springfield Road, this gap area will be addressed with proposed improvements to the Neighbourhood level open space facilities in Slater Reserve. While this is further than 400 metre walking distance, residents can still walk via the local street network without the need to cross any major roads to reach Slater Reserve.

7.3.3 Ancillary open space

Within Blackburn North, the Old Orchard Primary School contributes to greening along its Koonung Road interface, particularly given Koonung Park is hidden from view from the street. The Springview Primary School site is largely hidden from view from the adjoining streets, with the main interface being Junction Road where the school buildings and car park are located.

The pattern of subdivision layout is quite disjointed meaning there is not good permeability through the local street network in some parts of Blackburn North. This is particularly noticeable in the gap area between the Joseph Street Precinct and the residential area. The recommendations for Blackburn North will assist to improve this gap area with expansion of entry points into existing open space and the future provision of new open space.

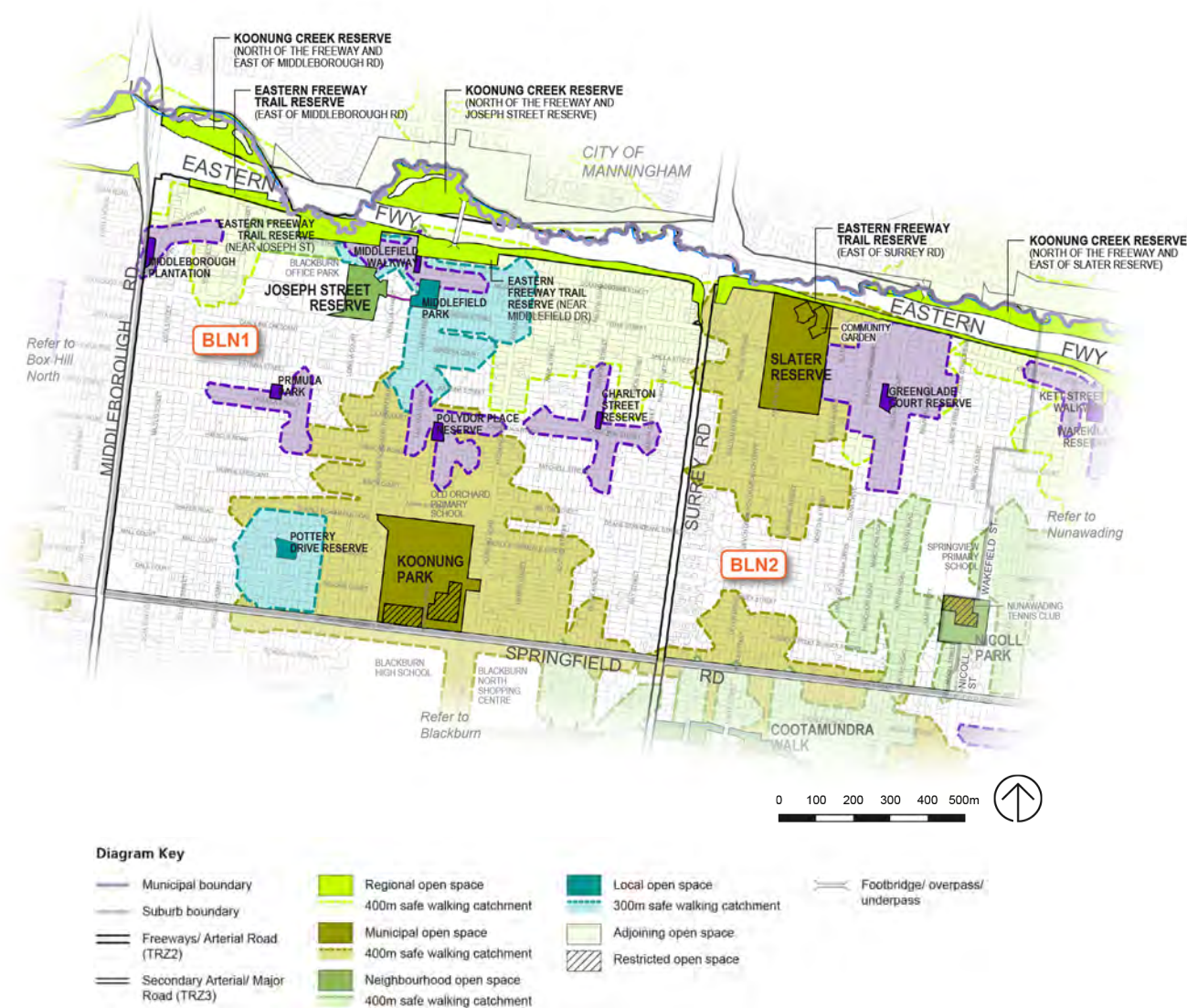


Figure 7.3-2 Gap Analysis Blackburn North

7.3.4 Existing Blackburn North community

Demographics

There are 7,724 residents living in Blackburn North as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 590 people living in Blackburn North, which represents approximately an 8 per cent increase in the population.

Compared to the City of Whitehorse, there is a higher proportion of primary schoolers to tertiary education age groups (5 to 24 years), increasing again with the 50 to 59 years age cohort and 85 and over age group. There is a lower proportion of babies (0 to 4 years), the young workforce and parent age groups (25 to 49 years) and the empty nesters (60- 84 years).

A higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006, approximately 76 per cent lived in separate houses and there were less than 1 per cent living in high-density dwellings. In 2021, approximately 62 per cent lived in separate houses, 28 per cent in medium density housing and 10 per cent in high density dwellings.

The residential population is forecast to increase by 6 per cent over the 15 year planning period, with the continued trend of a decrease in children under the age of 17 and an increase in the 50 to 84 age range.

Summary of community engagement outcomes

A total of 115 open space surveys were received from Blackburn North, which represents 6 per cent of the total surveys received.

The survey respondents in Blackburn North valued 'trees' the most, followed by 'walking and cycling' and 'native birds and wildlife'. 'A place for children to play' made it into the top five values, which is higher than the municipal average, where it was ranked eighth. The only other place where this value made it into the top five is in the Mont Albert North / Balwyn North precinct. Despite Blackburn Lake Sanctuary being located in Blackburn, it is still a popular destination for Blackburn North residents. Additional open space has been requested in civic areas.

Values of open space (top five)

- 57% Trees
- 50% Walking and cycling
- 49% Native birds and wildlife
- 48% Connecting with nature
- 47% Place for children to play

Types of open space used and frequency of use (top five)

- 72% Large parks and reserves (non-sporting)
- 67% Small local parks
- 67% Local streets for exercise

- 66% Sporting reserves
- 58% Linear reserve network for walking/cycling

Frequently visited types of open spaces (top five)

- 57% Local streets for exercise
- 48% Small local parks
- 45% Sporting reserves
- 22% Linear reserve network for walking/cycling
- 21% Neighborhood parks

Priority of facilities and amenities to provide in open spaces (top five)

- 68% Seats
- 52% Trees
- 52% Walking paths
- 50% Toilets
- 45% Picnic tables and seats

(Note that 32% Play space was listed ninth)

Table 7.3d Most frequently visited open space in Blackburn North

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people.

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
28	Koonung Park	• Play - children (6) • Dog walking (5) • Exercising (5) • Walking (5) • Access - close to home (2) • Active recreation (2) • Social - meeting family / friends / parties (2)	• Play space - upgrade (2)
18	Slater Reserve	• Play - children (6) • Walking (4) • Active recreation (2) • Exercising (2)	
17	Cootamundra Walk	• Active recreation (2) • Play - children (2) • Play space – with grand children (2) • Social - meeting family / friends / parties (2) • Walking - travel through (2)	
17	Eastern Freeway Linear Reserve	• Walking (8) • Cycling (5) • Dog walking (2) • Spending time outdoors (2)	
13	Middlefield Park	• Play - children (7) • Public tennis court (4)	

No	Name	Reasons to visit	Suggested improvements
		• Informal ball games – basketball (2)	
Open space beyond walking distance (top five)			
35	Blackburn Lake Sanctuary	• Enjoy nature (10) • Play - children (9) • Walking (5) • Exercising (2) • Social - meeting family / friends / parties (2)	
16	Koonung Park	• Walking (5) • Active recreation (4) • Club based sport (4) • Play - children (3)	• Play space - upgrade (2)
8	Eastern Freeway Linear Reserve	• Walking (4) • Dog walking (2)	
6	Cootamundra Walk	• Walking (2) • Play – children (2)	
5	Slater Reserve	• Walking (3)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Additional required (6)
 - Generally, more required (2)
 - Within 10mins for elderly people (2)
- Valued (2)

Maintenance and management

- Dogs (6)
 - Owner's to be responsible/control (3)

Park Infrastructure

- Play space - additional required (7)
 - Playgrounds near childcare and schools needed (2)
 - Play space upgrades needed (2)
- Social infrastructure - additional required (3)

Other

- Concern about development impacts on open space (2)
- Streetscapes - suggested improvements (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.3.5 Analysis of future change and open space needs

Forecast residential population change

The Blackburn North Precinct is currently forecast to reach a residential population of 8,156 by 2036, representing an additional 432 residents, or a 6 per cent increase compared to the 2021 population.

The table below shows figures for each 5 year period and are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.3e Population forecasts for Blackburn North 2021 - 2036

Blackburn North	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	7,724	8,123	8,156	8,156	+432

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 432 additional residents visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of demographic change, the higher proportion of adults and decrease in the proportion of children and young people under 17 years of age means there is a need to increase the range of facilities in open space in addition to play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters. Following the site assessment work, Middlefield Park stands out as providing a diverse range of unstructured recreation facilities, and it does appear to be well used for a Local open space.

7.3.6 Blackburn North Precinct Recommendations

Summary of overall intent

Provision and distribution

Blackburn North is forecast to continue to experience moderate forecast change over the next 15 years with 432 new residents forecast to be living here by 2036 representing a 6 per cent increase. Koonung Park and Slater Reserve are the two major existing open spaces in Blackburn North, with the Koonung Creek Trail along the Eastern Freeway Reserve providing east-west connectivity along the northern boundary. The open space network includes a diversity of Neighbourhood, Local and Small Local open spaces. There are a few gaps in the open space provision, with recommendations to expand Primula Park to improve connectivity or else seek an additional new Small Local open space to the west of Primula Park. In the longer term, both are likely to be required to fully address the open space gap area. Other gaps can be overcome with improved facility provision in the existing open space network as they are accessible via the local access street network without the need to cross major roads.

Quality and design

Middlefield Park is a good example of a Local open space that contains a diverse range of facilities that appeal to different age groups in the community. Both Koonung Park and Slater Reserve are proposed to receive major upgrades to improve the diversity of Neighbourhood level facilities, expanding the opportunities for the community to exercise and socialise. Nicoll Park, located in Nunawading, is proposed to be upgraded to meet the local open space needs of the community living in the south-east part of Blackburn North, along with the community in Nunawading. The predominantly native character of the existing open space network will be strengthened with additional planting. Remnant indigenous vegetation along the Koonung Creek corridor adjacent to the Eastern Freeway and in Joseph Street Reserve will continue to be protected and improved with ongoing weed management and revegetation where appropriate. Council will continue to advocate to the Victorian Government to protect the natural and recreational values of the Koonung Creek corridor during the North East Link/Eastern Freeway upgrade project.

7.3.7 Action Plan Blackburn North

A Additional public open space

No.	Action	Responsibility	Priority
7.3A-1	Primula Park Investigate opportunities to expand to increase connectivity to the north. Alternatively investigate provision of a new Small Local open space to address gap area to the west. <i>Additional information/rationale:</i> <i>It is likely in the longer term that both these actions will be required to address the gap area to the north and south, however given forecast growth is moderate, only one of the suggested actions is included in this Strategy.</i>	WCC	High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – will be prepared to guide major upgrades to Neighbourhood, Local and Small Local open space, this is not specified in the text of each action.
- Landscape Masterplan – will be prepared to guide major upgrades to Regional and Municipal open space, this is not specified in the text of each action.

No.	Action	Responsibility	Priority
7.3B-1	Charlton Street Reserve Continue to maintain. Minor upgrade with seating and garden bed planting in the longer term (beyond the timeframe of this Strategy).	WCC	Ongoing
7.3B-2	Eastern Freeway Trail Reserve (East of Middleborough Rd) Minor upgrade to improve shared path connectivity from Middleborough Road adjacent to private land and to the existing shared path link to Joseph Street Reserve. <i>Additional information/rationale:</i> <i>In the future, if the adjoining commercial precinct to the south redevelop, investigate options to provide better interface to the trail with the confirmation of fencing styles and setbacks and achieve an activated interface to the shared trail to improve passive surveillance.</i>	WCC	High
7.3B-3	Eastern Freeway Trail Reserve (East of Surrey Rd) Minor upgrade to investigate improvement to the shared path crossing over Surrey Road.	WCC	High

No.	Action	Responsibility	Priority
7.3B-4	Eastern Freeway Trail Reserve (Near Joseph St) Minor upgrade including review of trail alignment in relation to adequate sightlines and provide seating and improved planting where required. <i>Additional information/rationale:</i> <i>In the future, if the adjoining commercial precinct to the south redevelop, investigate options to improve facility provision.</i>	WCC	Low
7.3B-5	Eastern Freeway Trail Reserve (Near Middlefield Dr and West of Surrey Rd) Investigate potential for dog off-lead area on open grassed area between rear boundary fences and established garden beds. <i>Additional information/rationale:</i> <i>There is potential to use existing revegetation/garden beds to define the area without the need for fences.</i>	WCC	High
7.3B-6	Greenglade Court Reserve Continue to maintain and in the longer term, review need for play following upgrade of Slater Reserve.	WCC	Ongoing
7.3B-7	Joseph Street Reserve Continue to maintain in the short to medium term. If adjoining office park redevelops, investigate opportunities to improve interface to the reserve including complementary passive/ social facilities and use.	WCC	Low
7.3B-9	Koonung Creek Reserve (North of Freeway and east of Middleborough Rd) Continue to maintain.	WCC	Ongoing
7.3B-10	Koonung Creek Reserve (North of Freeway and east of Slater Reserve) Continue to maintain.	WCC	Ongoing
7.3B-11	Koonung Creek Reserve (North of Freeway and Joseph St) Minor upgrade to install additional seating and fitness station along the shared path.	WCC	Low
7.3B-12	Koonung Park Major upgrade to improve unstructured recreation and informal social facilities in the park. Opportunities include improved circuit path network and recreation facilities with adjoining picnic/BBQ area overlooking the oval.	WCC	Medium
7.3B-13	Middleborough Plantation Continue to maintain.	WCC	Ongoing
7.3B-14	Middlefield Park Continue to maintain this popular open space. <i>Additional information/rationale:</i> <i>This park is a good example of a local park with a diverse range of facilities.</i>	WCC	Ongoing
7.3B-15	Middlefield Walkway Continue to maintain.	WCC	Ongoing

No.	Action	Respons- ibility	Priority
7.3B-16	Polydor Place Reserve Continue to maintain.	WCC	Ongoing
7.3B-17	Pottery Drive Reserve Continue to maintain.	WCC	Ongoing
7.3B-18	Primula Park Refer action No. 7.3A-1. Undertake minor upgrade works with planting to the rear fence lines to strengthen the nature conservation values of the open space.	WCC	High
7.3B-19	Slater Reserve Major upgrade to improve the unstructured recreation facilities including opportunities to improve picnic/play/fitness and community gardens. This will be guided by the preparation and implementation of a Landscape Masterplan that investigates opportunities to improve the integration of unstructured recreation and informal facilities and the existing indoor stadium, car parking, the community gardens and the Eastern Freeway shared user path.	WCC	High
7.3B-20	Slater Reserve Community Gardens Continue to support the community gardens	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Respons- ibility	Priority
7.3C-1	Surrey Road/Eastern Freeway (intersection) Investigate improvement to shared path crossing over Surrey Road. Refer also to Action 7.3B-5.	WCC	High

7.4 Blackburn South

7.4.1 Overview

Blackburn South is defined to the north by Canterbury Road, to the south by Eley Road, in combination with a small section of Hawthorn Road; to the west by Middleborough Road and the east by a number of local access streets which provides good pedestrian permeability via the local street network between Blackburn South and Forest Hill.

Refer to *Figure 7.4-1* on the following page of the existing open space in Blackburn South.



Figure 7.4-1 Existing Open Space Blackburn South

7.4.2 Existing open space

Overview

Wurundjeri Walk, Mirabooka Reserve and Eley Park are the three major Municipal open spaces in Blackburn South. Wurundjeri Walk and Wurundjeri Wetlands (which is Neighbourhood size) contribute to the core bushland and nature conservation values at the heart of this suburb and are located along the valley form of a tributary to KooyongKoot / Gardiners Creek.

Eley Park, on the other hand, is located on a ridge line and provides elevated views from the oval and has a native character with overstorey trees. Edinburgh Patch is a popular Local open space with a diversity of facilities, and good passive surveillance and access. Nearby, Wardle Close Reserve contains significant remnant trees, which complement the character and uses of the nearby Edinburgh Patch and provide connectivity between an adjoining retirement village and the reserve.

There is a network of other Local and Small Local open spaces that have potential to play a greater role in the open space network and this Strategy recommends a range of improvements to them.

Table 7.4a Existing open space in Blackburn South including restricted open space

Open space	Area (Ha)	Use Classification	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Bindy Park	0.10	Small Local	Linking space	Native character	Passive	
Branksome Grove Reserve	0.26	Local	Passive	Native character		
Bright Place Walkway	0.03	Local Link	Native character			
Cornwell Street Retarding Basin (Melbourne Water, fenced)	1.22	Municipal	Restricted	Service easement	Native character	
Edinburgh Patch	0.66	Local	Passive	Linking space	Native character	
Eley Park	6.55	Municipal	Sporting	Passive	Viewing	Community facilities
Fulton Road (East) Reserve	0.22	Small Local	Native character	Passive		
Fulton Road (West) Reserve	0.22	Small Local	Native character	Passive		
Granya Court Reserve	0.15	Small Local	Undeveloped	Native character		
Holbury Reserve/Faulkner Street Park	0.37	Local	Play	Native character		
Holland Road Reserve	0.10	Small Local	Linking space	Undeveloped		
Hurter Street Link	0.55	Local	Linking space	Native character	Passive	Viewing
Hunters Knoll	0.73	Local	Passive	Native character		
Mansfield Street Walkway	0.03	Local Link	Linking space	n/a		
Mirabooka Reserve	2.09	Municipal	Sporting	Passive		
Reuben Court Walkway	0.11	Small Local	Passive	Linking space	Native character	
Rosslyn Street Reserve	0.06	Small Local	Undeveloped	Linking space	Native character	
School Street Walkway	0.03	Local Link	Linking space	n/a		
Wardle Close Reserve	0.23	Small Local	Nature conservation	Linking space		
Wurundjeri Walk	14.55	Municipal	Nature conservation	Passive	Waterway	
Wurundjeri Wetlands	3.09	Neighbourhood	Waterway/wetland	Service easement	Passive	Viewing
York Street Walkway	0.02	Local Link	Linking space	Service easement		

Table 7.4b Number, hierarchy and size of open space excluding restricted open space

No.	Hierarchy	Area (Ha)	%
0	Regional	0.00	0%
3	Municipal	23.20	77%
0	Urban Civic	0.00	0%
1	Neighbourhood	3.09	10%
5	Local	2.56	9%
8	Small Local	1.18	4%
4	Local Link	0.11	0%
21	TOTAL	30.14	100%

Quantity

The total quantity of open space in Blackburn South, excluding restricted open space, represents 8.4 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 8.7 per cent of the total land area. This is below the municipal-wide average of 9.6 per cent excluding restricted open space and below the 11.3 per cent including restricted open space.

Hierarchy

Most of the types of open space in the open space hierarchy are currently provided in Blackburn South with the exception of Regional and Urban Civic. The three Municipal open spaces are located centrally and south within the precinct, with Eley Park being accessible to the community living to the south in Burwood. East of Blackburn Road, which presents a major barrier to safe and easy east-west pedestrian access in the precinct, the community can access Mahoneys Reserve, which is a Municipal open space in Forest Hill.

Refer to Figure 7.4-2 for the Hierarchy of existing open space in Blackburn South.



Figure 7.4-2 Open Space Hierarchy Blackburn South

Open space distribution and future open space needs in Blackburn South

Blackburn Road is the key north-south arterial road through Blackburn South and forms a major physical barrier to safe and easy east-west walking access to open space within the precinct. Canterbury Road to the north creates a north-south barrier to access, and similarly, Middleborough Road to the west. Eley Road to the south is a major road, rather than an arterial, so while it does form a barrier, it can be more easily overcome with traffic signals.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.4-3. This figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Blackburn South and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.4c *Brief description of gap areas in Blackburn South*

Gap area	Description
BLS1	Located east of Middleborough Road and south of Canterbury Road, this gap area will be addressed by improving access for residents in the gap area to Branksome Grove Reserve, the existing Local open space east of the gap area. This includes the addition of footpath links through the Local Links.
BLS2	Located south of Canterbury Road and centrally between the two Local open spaces being Branksome Grove Reserve to the west and Hunters Knoll to the east. Expansion to the size of Hunters Knoll is recommended along with a major upgrade to diversity the range of facilities to be more inclusive. This, along with the minor upgrade to Branksome Grove Reserve, will improve both these existing open spaces for the population in the gap area. While these spaces are further than a safe and easy walk, they are accessible via the local street network.
BLS3	Located south of Canterbury Road and east of Hunters Knoll Reserve, this gap area does have two Local Links located in it. Both the Local Links directly adjoin Canterbury Road and are impacted by traffic movement and noise. Expansion of the two Local Links is not recommended due to their proximity to the major arterial road. As for BLS2, improvements to and expansion of Hunters Knoll Reserve will assist to overcome this gap area.

7.4.3 Ancillary open space

Orchard Road Primary School and the Aurora School, which is managed by the Victorian Deaf Education Network, directly adjoin Mirrabooka Reserve and make a significant contribution to the open space network. Two sports fields are located on the land zoned for education use, and the access road into the school and Mirrabooka Reserve is located between the sports fields. If in the future the public education use changes to a more urbanised use, it would potentially have a significant impact on the open space character and use in this precinct.

There is potential for the small retail area on Indra Road near the corner of Barata Street to be improved with better pedestrian connectivity and signage between Edinburgh Patch, Wardle Close Reserve and the retail area, particularly for the residents living in the two retirement and aged care facilities within this small precinct. Providing concrete path connections through these open spaces will improve universal access, particularly encouraging the older age groups to walk through the reserves to the local shops.

The pattern of subdivision layout is reasonably well connected, but if any further redevelopment occurs within Blackburn South, opportunities to improve connectivity via the local street network are recommended, particularly in the three gap areas noted in Table 7.4c.

Refer to the Ped Shed Analysis for Blackburn South on the following page.

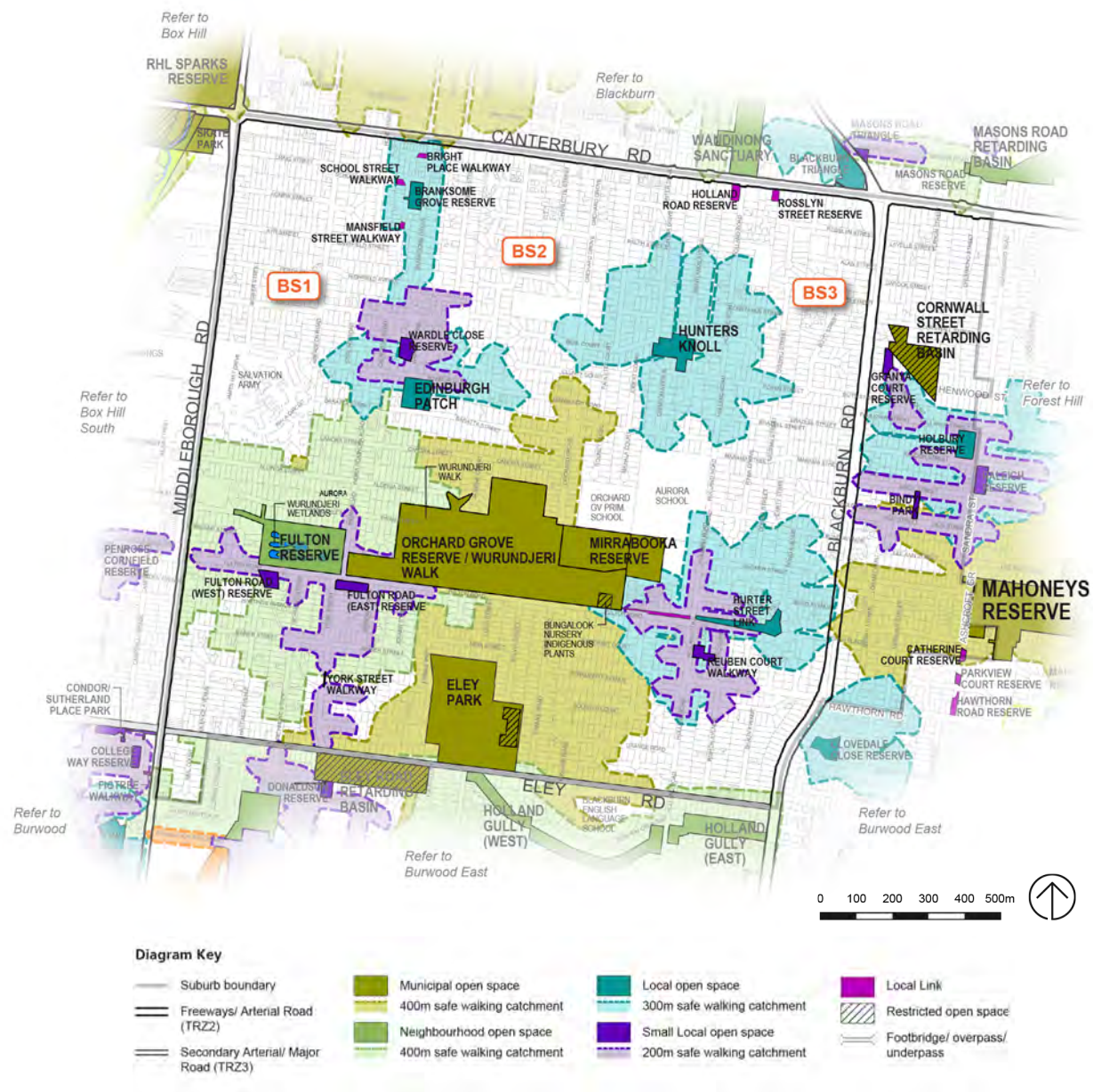


Figure 7.4-3 Gap Analysis Blackburn South

7.4.4 Existing Blackburn South community

Demographics

There are 11,022 residents living in Blackburn South as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 401 people living in Blackburn South, which represents approximately a 4 per cent increase in the population.

Compared to the City of Whitehorse, there is a higher proportion of primary schoolers to tertiary education age groups (5 to 24 years) and the 50 to 69 years age group, and a slight increase in the 85 and over age group. There is a lower proportion of babies and pre-schoolers (0 to 4 years), young workforce and parent age group (25 to 49 years) and the 70 to 84 year age group.

A higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006 approximately 76 per cent lived in separate houses and less than 1 per cent of the population lived in high-density dwellings. In 2021, approximately 62 per cent lived in the separate houses, with 28 per cent in medium density housing and 10 per cent in high-density dwellings.

The residential population is forecast to increase 8.5 per cent, with the continued trend of a decrease in children under the age of 17 and a forecast increase in the 18 to 84 age range.

Summary of community engagement outcomes

A total of 130 open space surveys were received from Blackburn South, which represents 6 per cent of the total surveys received.

The top values of Blackburn South survey respondents are similar to the combined municipal-wide top three values, however 'A place to relax and unwind' has been ranked slightly lower in Blackburn South. Orchard Grove Reserve / Wurundjeri Walk is the most popular destination for Blackburn South residents, particularly for walking within the local area. Blackburn Lake is the most frequently visited open space beyond walking distance.

The other distinct difference compared to the outcomes from the municipal-wide average is the type of the open space used. In Blackburn South, the use of local streets for exercise was not in the top 5, whereas it is the most frequently used type of open space in the majority of the other precincts.

Values of open space (top five)

- 68% Trees
- 65% Connecting with nature
- 62% A place to relax and unwind
- 61% Walking and cycling
- 58% Just being outside

Types of open space used and frequency of use (top five)

- 84% Large parks and reserves (non-sporting)
- 84% Small local parks
- 68% Waterway reserves
- 67% Medium parks
- 64% Neighbourhood parks

Frequently visited types of open spaces (top five)

- 75% Local streets for exercise
- 62% Small local parks
- 48% Large parks and reserves (non-sporting)
- 34% Sporting reserves
- 32% Waterway reserves

Priority of facilities and amenities in open spaces (top five)

- 75% Seats
- 63% Walking paths
- 58% Trees
- 55% Additional greening for environmental health & wellbeing
- 55% Picnic tables and seats

(Note that 31% Play space was listed thirteenth)

Table 7.4d Most frequently visited open space in Blackburn South

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
80	Wurundjeri Walk (incl. Orchard Grove Reserve, Fulton Reserve & Hurter-Finch Reserve)	• Walking (26) • Dog walking (21) • Play - children (12) • Trees (6) • Bird watching (3) • Enjoy nature (5) • Exercising (3) • Open space - peaceful (3) • Social - meeting family / friends / parties (3) • Jogging (2) • Open space (2) • Seeing people and activities (2) • Spending time outdoors (2) • Access - close to home (2)	
12	Hunters Knoll	• Play - children (5) • Dog walking (4) • Social - meeting family / friends / parties (2) • Walking (2)	

No	Name	Reasons to visit	Suggested improvements
9	Eley Park	• Play - children (5) • Dog walking (2) • Open space (2)	
9	Edinburgh Patch	• Play - children (3) • Walking (3)	
9	Mahoneys Reserve	• Dog walking (4) • Walking (3)	
Open space beyond walking distance (top five)			
44	Blackburn Lake Sanctuary	• Walking (11) • Play - children (7) • Dog walking (6) • Exercising (4) • Enjoy nature (3) • Open space – peaceful (3) • Trees (3) • Fresh air (2) • Social - meeting family / friends / parties (2) • Spending time outdoors	
23	Blackburn Creeklands (incl. Kalang Park, Blacks Walk & Furness Park)	• Walking (10) • Cycling (3) • Running (3) • Play - children (2)	
21	Gardiners Creek	• Dog walking (8) • Walking (6) • Exercising (3) • Play – children (3) • Social - meeting family / friends / parties (2) • Trees (2)	
8	Wattle Park	• Walking (3) • Exercising (2) • Social - meeting family / friends / parties (2)	
8	Wurundjeri Walk (incl. Orchard Grove Reserve)	• Walking (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by people in each category where 2 or more people made the comment:

Open space

- Valued (7)
- Additional required (5)

- Required as density increases (2)
- Layout and design (3)
 - Protect natural elements from hardscape (2)

Maintenance and management

- Dogs (10)
 - Dog park - close to playgrounds, for large dogs, with vegetation to walk through (5)
 - More dog off-leash areas (2)
 - Owners to be responsible/control their dogs (2)

Trees and Vegetation

- Additional trees needed (3)
- Protect the trees from developments (2)

Park Infrastructure

- 6no. Playgrounds - additional required (6)
 - Play space upgrades needed with more diverse character for different ages (2)
 - Water play - additional needed (2)
- Park infrastructure - additional required (4)
- Active facilities - additional required (2)

Paths

- Paths (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.4.5 Analysis of future change and open space needs

Forecast population change

Blackburn South is currently forecast to reach a residential population of 11,957 by 2036, representing an additional 935 residents, or an 8.5 per cent increase compared to the 2021 population.

The table below shows figures for each 5 year period and are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.4d Population forecasts for Blackburn South 2021 - 2036

Blackburn South	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	11,022	11,776	11,909	11,957	+935

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 935 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults is a key influence on the design of future open space, particularly in relation to the accessibility of the space and facilities that appeal to a broader age group. Recent research has indicated the importance of physical fitness for everyone, including for the older population. This includes links between the importance of physical strength building and mental health. Facilities such as outdoor fitness and gym equipment in open space can be used by people of all ages including the older age group - and appeal to those who may not be able to either afford to or want to go to indoor gyms. As noted earlier, there is a smaller precinct in Blackburn South that has two aged care facilities and this is an ideal location to provide facilities that directly appeal to this older age group.

7.4.6 Blackburn South Precinct Recommendations

Summary of overall intent

Provision and distribution

Blackburn South is forecast to change over the next 15 years with 935 new residents forecast to be living here by 2036, representing an 8 per cent increase. Orchard Grove Reserve / Wurundjeri Walk, Mirrabooka Reserve and Eley Park are the major existing open spaces in Blackburn South, located in the southern part of the precinct and close to where there has been recent substantial growth in the population in neighbouring Burwood at the Burwood Brickworks site. In the northern section of the precinct, the series of local open spaces provides reasonable access to open space, however there are gaps in the existing network. The gaps in open space provision will be addressed by improving the quality of the existing open spaces and improving the condition of the footpaths in the local street network and through the open spaces themselves to encourage walking between open spaces. Hunters Knoll will be upgraded to improve the diversity of facilities to appeal to a broader age group, along with investigating enlarging the entries to this reserve so it is easier to see and safer to use.

Quality and design

Key priority actions for this precinct include preparation of a Landscape Masterplan to guide the future upgrades to the structured sport and unstructured recreation facilities in the Mirrabooka Reserve and Orchard Grove Reserve / Wurundjeri Walk. This includes integration of unstructured recreational use and access that complements structured sporting uses including a circuit path that can be lit from the existing sports field lighting and connecting into the broader path network through Wurundjeri Walk. The other key priority is to prepare a Landscape Masterplan to guide a major upgrade to the structured sport and unstructured recreation and informal facilities at Eley Park. This includes integrating the recent installation of the multi-purpose court facility into the broader park context, path network and facilities. A major upgrade is proposed to the Fulton Road East Reserve to diversify facilities in this catchment to encourage exercise and outdoor enjoyment for all age groups. Other works include a major upgrade to Hunters Knoll to address the existing gap areas.

7.4.7 Action Plan Blackburn South

A Additional public open space

No.	Action	Responsibility	Priority
7.4A-1	Hunters Knoll expansion Major upgrade to improve diversity and quality of facilities and character to increase appeal of reserve, including potential to enlarge entry points into the reserve to improve passive surveillance and safety.	WCC	High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – will be prepared to guide major upgrades to Neighbourhood, Local and Small Local open space, this is not specified in the text of each action.
- Landscape Masterplan – will be prepared to guide major upgrades to Regional and Municipal open space, this is not specified in the text of each action.

No.	Action	Responsibility	Priority
7.4B-1	Bindy Park Minor upgrade to provide seats and picnic tables for use by nearby commercial precinct. <i>Additional information/rationale:</i> <i>There is potential for new seats and picnic tables to be positioned with views down the open space and planting to rear fence lines to provide greening.</i>	WCC	Medium
7.4B-2	Branksome Grove Reserve Minor upgrade to provide path access to existing play area and increase diversity of unstructured recreation facilities.	WCC	Medium
7.4B-3	Bright Place Walkway Continue to maintain.	WCC	Ongoing
7.4B-4	Catherine Court Reserve Continue to maintain	WCC	Ongoing
7.4B-5	Cornwell Street Retarding Basin (Melbourne Water, fenced) Continue to maintain. In the longer term, council to liaise with Melbourne Water regarding the potential removal of the perimeter fence and integration of pedestrian path access through the reserve, where appropriate, within the context of public safety in relation to its drainage function combined with the protection of environmental values. This could create a path link to Granya Court Reserve.	MWC WCC	Ongoing

No.	Action	Responsibility	Priority
7.4B-6	Edinburgh Patch Continue to maintain with minor works to provide a sealed walking path link through the reserve and improve planting to rear boundary fence lines.	WCC	High
7.4B-7	Eley Park Prepare and implement a Landscape Masterplan to identify and resolve successful integration of the range of community and structured sporting uses with unstructured recreation facilities and access. This design is to celebrate elevated views to the north and use of space and character. This is for the existing and forecast community.	WCC	High
7.4B-8	Fulton Reserve / Wurundjeri Wetlands Continue to maintain open space.	MWC WCC	Ongoing
7.4B-9	Fulton Road (East) Reserve Undertake major upgrade to provide social and exercise/ fitness facilities for a more diverse age range, primarily for the forecast population. This will complement the nearby play facilities in Wurundjeri Wetlands.	WCC	High
7.4B-10	Fulton Road (West) Reserve Continue to maintain with progressive improvements to environmental character with additional indigenous mid-storey planting to perimeter fence lines.	WCC	Ongoing
7.4B-11	Granya Court Reserve Continue to maintain in the short term. If feasible in the future, provide a pedestrian path link into Cornwall Street Retarding Basin.	WCC MWC	Ongoing
7.4B-12	Holbury Reserve Minor upgrade including path link to Raleigh Reserve in Forest Hill. Improve drainage and planting to improve character.	WCC	High
7.4B-13	Holland Road Reserve Continue to maintain and upgrade with additional planting.	WCC	Ongoing
7.4B-14	Hunters Knoll Major upgrade to improve diversity and quality of facilities and character to increase appeal of reserve, including potential to enlarge entry points into the reserve to improve passive surveillance and safety. Refer also to Action 7.4A-1 for expansion to the entry points.	WCC	High
7.4B-15	Hurter Street Link (East) Minor upgrade to include seating area with elevated views and review need for the play facility.	WCC	Low
7.4B-16	Hurter Street Link (West) Continue to maintain	WCC	Ongoing
7.4B-17	Mansfield Street Walkway Provide a footpath link.	WCC	Medium

No.	Action	Responsibility	Priority
7.4B-18	Mirrabooka Reserve Prepare and implement a Landscape Masterplan in combination with Orchard Grove Reserve/Wurundjeri Walk, to plan for the structured sporting facilities along with a diverse range of unstructured recreation facilities that complement the structured sporting use including consideration of a circuit path network that links to Wurundjeri Walk. Refer also Action 7.4B-18.	WCC	Very High
7.4B-19	Orchard Grove Reserve / Wurundjeri Walk Prepare and implement a Landscape Masterplan in combination with Mirrabooka Reserve and include upgrade to improve the picnic/BBQ facilities/public toilet facilities adjacent to the play space and other works including ongoing revegetation of the waterway through the reserve. Refer also to Mirrabooka Reserve, Action 7.4B-17.	WCC	Very High
7.4B-20	Reuben Court Walkway Continue to maintain. <i>Additional information/rationale:</i> <i>In the longer term, review whether the play space is required.</i>	WCC	Ongoing
7.4B-21	Rosslyn Street Reserve Continue to maintain and upgrade with additional planting.	WCC	Ongoing
7.4B-22	School Street Walkway Provide a footpath link.	WCC	Medium
7.4B-23	Wardle Close Reserve Minor upgrade to provide a sealed footpath link through the reserve and into the adjoining retirement village to the north, formalise the entry point to the retirement village and provide resting/social space.	WCC	High
7.4B-24	York Street Walkway Continue to maintain.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.4C-1	Future signalised pedestrian crossing over Blackburn Road Investigate options to install a signalised pedestrian crossing over Blackburn Road in the vicinity Finch Place/Forest Glen Avenue. This is to provide the broader east-west shared path link between KooyongKoot / Gardiners Creek and Dandenong Creek.	WCC VicRoads	High
7.4C-2	Upgrade pedestrian path/shared path access along Finch Place/Forest Glen Avenue Investigate opportunities to improve the pedestrian and cycle access along Finch Place and Forest Glen Avenue to provide improved east-west connectivity between Wurundjeri Walk and Mahoneys Reserve in Forest Hill as part of the broader east-west connection between KooyongKoot / Gardiners and Dandenong Creeks.	WCC	High

7.5 Box Hill

7.5.1 Overview

Box Hill is defined to the west by Elgar Road, the south by Canterbury Road, the east by Middleborough Road and to the north by a Thames Street and Margaret Street. It is noted that the extent of the Box Hill Metropolitan Activity Centre extends north into the southern extent of Box Hill North to Severn Street.

Refer to *Figure 7.5-1* on the following page for the existing open space in Box Hill.

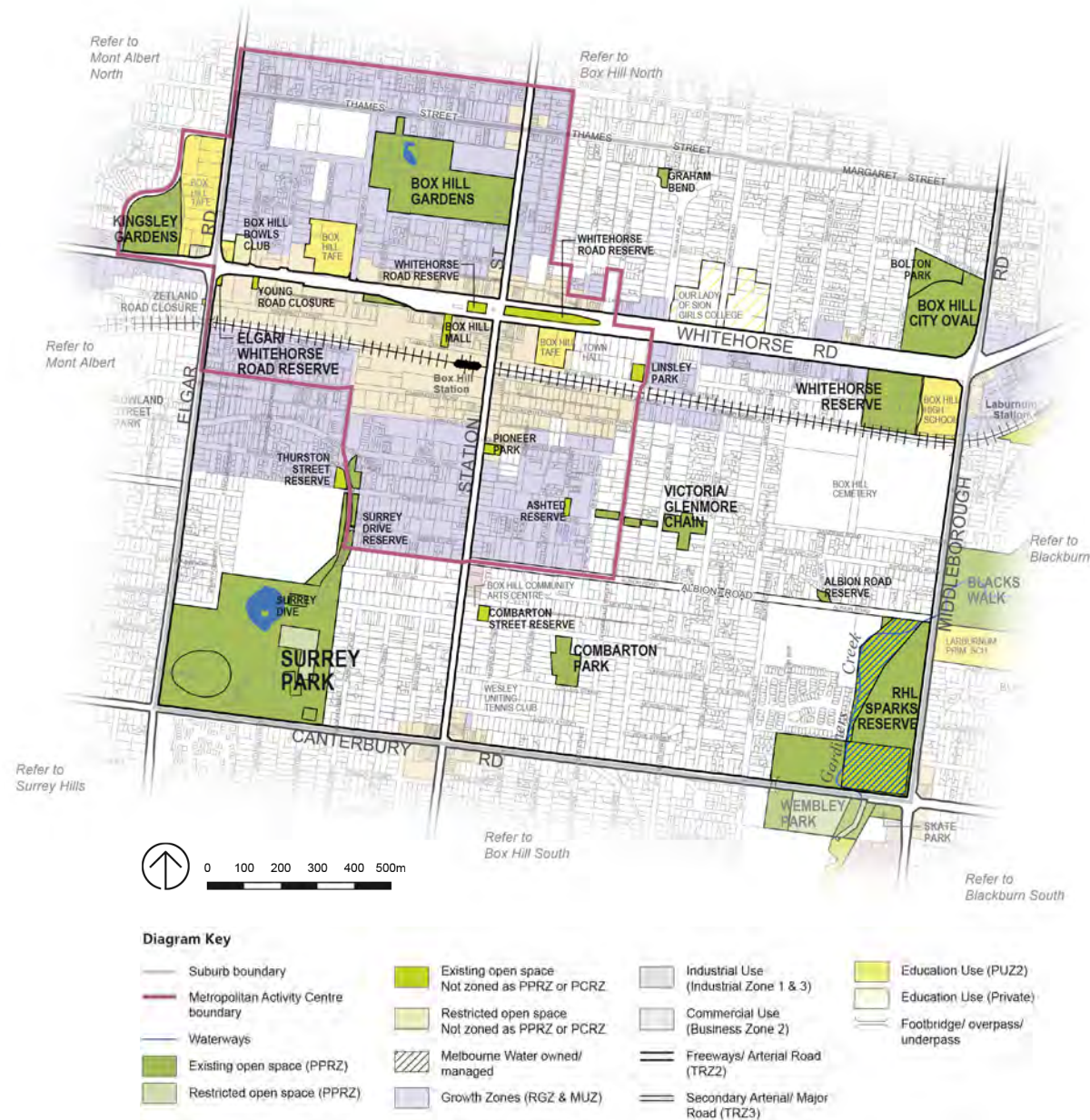


Figure 7.5-1 Existing Open Space Box Hill

7.5.2 Existing open space

Overview

Box Hill has a diverse open space network with six large open space reserves. Box Hill Gardens provides a comprehensive range of unstructured recreational facilities including multi-use activity area, circuit paths, a large play space, picnic area, informal open grassed areas and a small pond. Surrey Park is a popular open space in the south of the precinct and includes a range of structured sporting facilities including Aqualink Box Hill. There are unstructured informal facilities associated with Surrey Drive and the western area of the park including picnic and play.

RHL Sparks Reserve provides sports fields and is a designated dog off lead park. KooyongKoot / Gardiners Creek flows through the north-western side of Sparks Reserve and then downstream into Box Hill South. Box Hill City Oval is home to the VFL Club Box Hill Hawks and the sports field is fenced to restrict access.

Two Neighbourhood open spaces include Bolton Park directly adjoining Box Hill City Oval and Surrey Drive adjoining Surrey Park. There is potential for improvement to the Bolton Park to provide unstructured recreational facilities in the context of the adjoining Box Hill City Oval being fenced and not publicly accessible at all times.

Whitehorse Road Reserve East and West have been classified as Urban Civic open spaces due to the contribution these spaces make to the urban context and character of Box Hill. Additionally Box Hill Mall has been tentatively included as an Urban Civic open space in this Draft Strategy, pending further clarification from Council planners as to whether its transport function is no longer required, and it is appropriate to rezone this land as a public open space. It is noted that no works are proposed for Box Hill Mall in this Strategy as confirmation of its future role as public open space is not confirmed. The lack of public safety and passive surveillance of this space after hours is a key issue that is inherently due to it being a former road and not a public open space.

Pioneer Park is identified as an Urban Civic open space given the increasing urban densities around it. A number of key Local open spaces provide a diversity of characters including Combarton Park, Victoria Rose Reserve and Surrey Drive Reserve. A range of Small Local open spaces complement the Local open space network. Graham Bend has been added to the open space network since the 2007 Strategy and Box Hill Mall is tentatively included as an Urban Civic open space, however clarification is required as to whether this can be rezoned as public open space. The open space survey results note it as one of the least popular open spaces and our understanding of the space is that it still has primarily a transport function.

Table 7.5a is a list of all the existing open spaces in Box Hill in alphabetical order and Table 7.5b is a summary of the total number of open spaces by hierarchy.

Table 7.5a Existing open space in Box Hill including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Albion Road Reserve	0.08	Small Local	Passive	Linking space	Nature conservation	
Ashted Road Reserve	0.08	Small Local	Undeveloped	Linking space		
Bolton Park	1.01	Neighbourhood	Passive	Native character		
Box Hill Bowls Club	0.35	Municipal	Restricted sporting/recreation			
Box Hill City Oval	3.88	Municipal	Restricted sporting/recreation	Sporting		
Box Hill Gardens	6.45	Municipal	Public garden	Heritage		
Box Hill Mall	0.18	Urban Civic	Linking space	Events		
Clota Avenue Reserve	0.14	Small Local	Significant road reservation	n/a		
Combarton Park	0.82	Local	Heritage	Passive	Linking space	Botanical
Combarton Street Reserve	0.12	Small Local	Community garden / urban agriculture	Restricted community use		
Elgar/Whitehorse Road Reserve	0.03	Small Local	Significant road reservation	Native character		
Graham Place Reserve	0.13	Small Local	Passive	Viewing		
Linsley Park	0.20	Small Local	Passive	Linking space	Native character	
Pioneer Park	0.10	Urban Civic	Passive			
RHL Sparks Reserve	9.07	Municipal	Sporting	Linear	Service easement	Native character
Surrey Dive	2.00	Neighbourhood	Water feature	Passive	Native character	
Surrey Drive Reserves	0.93	Local	Significant road reservation	Linking space		
Surrey Park	13.42	Municipal	Sporting	Native character	Passive	
Thurston Street Reserve	0.15	Small Local	Play	Linking space	Native character	
Victoria/Glenmore Chain	0.91	Local	Linking space	Passive	Native character	
Whitehorse Reserve	2.37	Municipal	Sporting	Historical		
Whitehorse Road Reserves (VicRoads)	0.75	Urban Civic	Significant road reservation	Passive		
Young Street Closure	0.05	Local Link	Linking space	n/a		

Table 7.5b Number, hierarchy and size of open space excluding restricted open space in Box Hill

No.	Hierarchy	Area (Ha)	%
0	Regional	0	0%
4	Municipal	32.81	77%
4	Urban Civic	3.40	8%
2	Neighbourhood	3.00	7%
3	Local	2.66	6%
8	Small Local	0.94	2%
1	Local Link	0.05	0%
22	TOTAL	42.86	100%

Quantity

The total quantity of open space in Box Hill, excluding restricted open space, represents 12.2 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 12.3 per cent of the total land area.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Box Hill with the exception of Regional open space. Refer to Figure 7.5-2 for the Hierarchy of existing open space in Box Hill.



Figure 7.5-2 Open Space Hierarchy Box Hill

Open space distribution and future open space needs in Box Hill

Whitehorse Road is a key east-west arterial road through Box Hill and forms a major physical barrier to safe and easy walking access to open space within the precinct. Station Street is a north-south secondary arterial and forms a barrier to safe and easy east-west walking access to open space within the precinct. Elgar Road, Canterbury Road and Middleborough Roads are primary arterial roads along the boundaries of the precinct and also form major barriers to safe and easy pedestrian access. Albion Road and part of Thames Street / Nelson Street and Arnold Street are major roads and form barriers to the safe and easy access to Local and Small Local open space. Additionally, the railway forms a barrier to north-south pedestrian access in the precinct.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.5-3. This figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Box Hill and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.5c Brief description of gap areas in Box Hill

Gap area	Description
BH1	Located north of Whitehorse Road and just east of Elgar Road, this gap area is proposed to be addressed by the provision of a new Small Local open space. For further information refer to the Box Hill Open Space Strategy Review, 2019.
BH2	Located north of Whitehorse Road and east of Station Street, this gap area is proposed to be addressed by the provision of a new Local open space.
BH3	Located north of Whitehorse Road and east of Dorking Road, this gap area is proposed to be addressed with the provision of new east-west pedestrian links between the north south streets to improve pedestrian access to Bolton Park and Box Hill City Oval. This 2024 Strategy has identified this Gap Area as a location for all or part of the compensatory open space the Victorian Government needs to provide as a result of the loss of the Box Hill Gardens for at least the next 15 years.
BH4	Located south of the railway and immediately east of Elgar Road, this gap area is proposed to be addressed by the provision of the proposed new Large Local open space associated with the redevelopment of the Box Hill Central site.
BH5	Located south of Whitehorse Road between Young Road and Box Hill Mall, this is an area with high-density development. This gap area will be addressed by the proposed new Large Local open space as part of the redevelopment of the Box Hill Central site.

Gap area	Description
BH6	Located south of the railway and west of Station Street, this gap area is to be addressed by the proposed new Large Local open space as part of the redevelopment of the Box Hill Central site.
BH7	Located south of the railway and east of Station Street, this gap area is to be addressed by the proposed new Local open space on the existing Council owned Harrow and Ellingworth / Pippard Street car park.
BH8	Located south of Albion Road and east of Combarton Park, this gap area will be addressed with the major upgrade to Combarton Park and the proposed upgrades to RHL Sparks Reserve. These open spaces will be accessible to the gap area via the local access street network. If in the longer term urban densities increase in this area, then additional open space may be required.

7.5.3 Ancillary open space

Within Box Hill, ancillary open space includes the front of the Box Hill Town Hall and some of the outdoor forecourts to other buildings including churches and office buildings within the central business precinct of Box Hill. This includes the forecourt and internal open space associated with the Box Hill Community Arts Centre, which has an important function and role as part of the centre.

Box Hill Cemetery is also accessible to the community including via a footbridge over the railway providing a pedestrian connection between it and Whitehorse Reserve.

The pattern of subdivision layout is varied with some long street block lengths of 250 metres meaning pedestrian access is quite circuitous to reach open space. This occurs mainly to the north of Whitehorse Road and east of Station Street.



Figure 7.5-3 Gap Analysis Box Hill

7.5.4 Existing Box Hill community

Demographics

There are 14,603 residents living in Box Hill as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 5,866 people living there, which represents approximately a 67 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the tertiary education (18 to 24) and young workforce age group (25 to 34 years) and a lower proportion of population across all other age categories including under 17 and over 35 years of age.

A substantially higher proportion of the population now live in high-density housing compared with 2006. In 2006, approximately 43 per cent lived in separate houses, 49 per cent in medium density housing and 8 per cent in high-density housing. In 2021, 19 per cent lived in the separate houses, 30 per cent in medium density housing and 51 per cent in high-density housing. This is a significant change.

The residential population is forecast to increase 68 per cent, with the continued trend of increase in the proportion of the 35 to 69 age range and slight decrease in the 18 to 24 year age range. The other age groups remain relatively similar with a slight increase in the proportion of 0 to 4 year age range and slight decrease in the 5 to 17 year age group.

Summary of community engagement outcomes

A total of 103 open space surveys were received from Box Hill, which represents 5 per cent of the total surveys received.

The top three priorities of Box Hill survey respondents are very similar to the municipal average. "Native birds and wildlife", "Seeing people and activities" and "Cultural activities and events" were ranked higher than the municipal average, while "Walking and cycling", "Place for children to play", "Dog walking" and "Playing team/club-based sports" was ranked lower than the municipal average. Blackburn Lake Sanctuary is a popular destination for Box Hill residents especially for social gatherings. Box Hill Gardens has the highest levels of visitation for Box Hill residents, which contrasts with comments from survey respondents from other precincts that Box Hill Gardens was generally avoided due to the personal safety concerns and lack of carparking. Box Hill also had the highest ranked use of urban plaza / squares compared to other precincts given the proximity to Box Hill Mall.

Values of open space (top five)

- 67% Connecting with nature
- 65% Trees
- 63% A place to relax and unwind
- 63% Native birds and wildlife
- 60% Just being outside

Types of open space used and frequency of use (top five)

- 79% Local streets for exercise
- 77% Large parks and reserves (non-sporting)
- 73% Urban plazas/squares
- 72% Medium parks
- 69% Small local parks

Frequently visited types of open spaces (top five)

- 73% Local streets for exercise
- 59% Urban plazas/squares
- 57% Small local parks
- 42% Medium parks
- 40% Large parks and reserves (non-sporting)

Priority of facilities and amenities in open spaces (top five)

- 71% Seats
- 63% Additional greening for environmental health & wellbeing
- 63% Trees
- 59% Toilets
- 55% Walking paths

(Note that 24% Play space was listed sixteenth)

Table 7.5d Most frequently visited open space in Box Hill

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
27	Box Hill Gardens	• Walking (6) • Relaxing (5) • Dog walking (5) • Play - children (5) • Exercising (3) • Social - meeting family / friends / parties (3) • Enjoy nature (2) • Active recreation (2) • Spending time outdoors (2)	• Dogs - provide dog off leash area (2)
26	Surrey Park	• Walking (7) • Dog walking (6) • Aqualink (4) • Enjoy nature (4) • Social - meeting family / friends / parties (4) • Spending time outdoors (2) • Trees (2) • Relaxing (2)	
25	Blackburn Creeklands	• Walking (7) • Relaxing (4)	

No	Name	Reasons to visit	Suggested improvements
	(including Blacks Walk)	• Enjoy nature (3)	
13	Combarton Park	• Dog walking (4) • Play - children (4) • Walking (3) • Access - close to home (2) • Relaxing (2) • Spending time outdoors (2) • Trees (2)	
7	Sparks Reserve	• Play - children (2) • Relaxing (2)	
Open space beyond walking distance (top five)			
11	Blackburn Lake Sanctuary	• Social - meeting family / friends / parties (5) • Walking (3) • Enjoy nature (2)	
11	Box Hill Gardens	• Relaxing (2) • Social - meeting family / friends / parties (2)	
11	Surrey Park	• Relaxing (3) • Walking (3) • Aqualink (2) • Enjoy nature (2) • Lake (2) • Picnics (2) • Play – children (2)	• Lighting - additional required (2)
10	Blackburn Creeklands (including Blacks Walk and Furness Park)	• Dog walking (2)	
9	Wattle Park	• Enjoy nature (2) • Walking (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by people in each category:

Open space

- 13no. Additional required (13)
 - Municipal wide open space (4)
 - At Box Hill and Box Hill Brickworks (3)
 - High density areas (2)
 - Improve the quality of open space (2)
- Valued (2)

Maintenance and management

- Dogs (3)
 - More dog off-leash areas (3)

- Management - sharing the use of open space beyond a single activity (2)

Trees and vegetation

- Trees and vegetation - additional required (3)

Park Infrastructure

- Park infrastructure - additional required (3)

Other

- Streetscapes (4)
 - Canopy trees - additional required (2)
- 3no. Developments - concern of lack of setback and private open space resulting in more built form (3)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.5.5 Analysis of future change and open space needs

Forecast population change

Box Hill is currently forecast to reach a residential population of 24,499 by 2036, representing an additional 9,896 residents, or a 68 per cent increase compared to the 2021 population. These forecasts have not included consideration of the future construction of the Suburban Rail Loop (SRL) and the new train station to be located in Box Hill. Based on the trends elsewhere and the business case for the SRL, it is anticipated the urban densities will increase in proximity to the future station. This longer-term increase will be considered in the context of the more immediate recommendations for this precinct based on the population forecasts provided.

The table below includes the forecast residential population change through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.5e Population forecasts for Box Hill 2021 - 2036

Box Hill	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	14,603	19,613	22,364	24,499	+9,896

Source: *.id Forecast Whitehorse Community Profile*, accessed 10/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 9,896 additional residents visiting open space, and in the context of the increased urban densities, meaning people have less private open space. A significant influence in the central business area of Box Hill is the forecast change in the worker population. This was quantified and available at the time the Box Hill Open Space Strategy Review was undertaken in 2019. Therefore, this 2023 Strategy relies on the open space needs assessment undertaken for Box Hill in 2019 given both

the resident and worker population forecasts were taken into consideration in the recommendations for Box Hill.

In terms of the demographic change, the higher proportion of adults in the 24 to 69 age range over time along with the slight decrease in the 5 to 17 and 18 to 24 age ranges means there is a need to provide a diverse range of facilities in open space, along with a diversity of character types.

7.5.6 Box Hill Precinct Recommendations

Summary of overall intent

Provision and distribution

Substantial change is forecast in Box Hill over the next 15 years, with approximately 9,900 new residents living in the precinct representing a 67 increase by 2036, along with an expanded worker community. There is a need for more open space in the precinct. North of Whitehorse Road the larger open spaces are Box Hill Gardens, Box Hill City Oval and Bolton Park and Graham Place Reserve being a smaller local park. This Strategy has identified there is a need for a series of three new open spaces to be provided north of Whitehorse Road to add to the network and address the recent significant forecast growth. Additional open space is also needed to compensate for the loss of approximately one third of Box Hill Gardens while the Suburban Rail Loop Project is in construction over the next 15 years. The new open spaces will improve east-west connectivity in the local street network east of Station Street.

Between Whitehorse Road and the railway, significant change is forecast and upgrades are proposed to the existing open spaces, including expanding the size of Linsley Park to cater to the increased numbers of people living and working in this location. West of Station Street a new Local open space is proposed associated with the redevelopment of Box Hill Central. A new Local open space is proposed in the gap area east of Station Street within the core commercial area, along with expansion to the existing open space in the Victoria / Glenmore Chain.

Quality and design

Box Hill Gardens and Surrey Park significantly contribute to the open space character in Box Hill, with Box Hill Gardens and its predominantly exotic character with large deciduous trees, and the predominantly native and informal character of Surrey Park to the south. The diverse range of recreational facilities in both of these parks appeal to different age groups and contributes to their nominations as the most popular open spaces in Box Hill. Structured sport facilities are proposed to be upgraded in Box Hill City Oval, Whitehorse Reserve and RHL Sparks Reserve, along with the improved unstructured recreation and social facilities. Protecting existing and planting additional large canopy trees is a key aim for the existing and future open spaces given the increased urban densities Box Hill.

7.5.7 Action Plan Box Hill

A Additional public open space

No.	Action	Responsibility	Priority
7.5A-1	New Small Local open space in Gap Area BH1 Provide new Small Local open space primarily for the forecast population. <i>Additional information/rationale from the BHOSSR:</i> New Small Local open space in sub-precinct BH1b Provide a new Small Local open space west of Nelson Road and south of Arnold Street. This is to provide the local community in the precinct with an alternative open space to Box Hill Gardens within easy and safe walking distance.	WCC Developer	Very High
7.5A-2	New Small Local open space in Gap Area BH2 Provide new Small Local open space to address existing Gap Area BH2. Additionally, the DOTP is to provide a new open space to increase the size to a Local open space as compensation for the loss of the eastern extent of Box Hill Gardens as part of the Suburban Rail Loop project. <i>Additional information/rationale from the BHOSSR:</i> New Small Local open space in sub-precinct BH2a Provide a new Small Local open space in the area shown on Figure 5A, (BHOSSR) which is in the south-west portion of the sub-precinct. This is to provide open space that is within an easy and safe walk of both existing and forecast workers and residents, particularly in the south-west part of the sub-precinct where the density of forecast growth is greatest.	WCC DOTP	High
7.5A-3	New Local Link in Gap Area BH2 New Local Link to establish a new east-west link between Court Street and Kangerong Road to improve access to proposed new Small Local open space.	WCC	Medium
7.5A-4	2 new Local Links in Gap Area BH3 2 new Local Links to establish east-west connectivity to improve access to open space between Clota Ave and Pendle St.	WCC	High
7.5A-5	New Local open space - for SRL project only New Local open space within a one-kilometre catchment as part of the replacement open space for the Suburban Rail Loop project. This will be provided by the Victorian Government and will improve east-west connectivity.	WCC	Very High
7.5A-6	New Large Local open space in Gap Area BH4, BH5 and BH6 New Large Local open space on the Box Hill Central site as part of its future redevelopment to primarily cater to the forecast future worker and resident population. <i>Additional information/rationale from the BHOSSR:</i> New Local open space (min 0.5 hectares) in sub-precinct BH3 Provide a new large Local open space on the Box Hill Central site as part of its future redevelopment to primarily cater to the recent and forecast future worker and resident population in this precinct.	WCC Developer	Very High

No.	Action	Responsibility	Priority
7.5A-7	New Local open space in Gap Area BH7 New Local open space on the existing Council owned Harrow and Ellingworth/Pippard Street car park.	WCC	Very High
7.5A-8	Linsley Park Expansion Major upgrade to primarily cater to the forecast resident and worker population in the civic precinct. Investigate options to expand the size of Linsley Park as part of the major upgrade. <i>Additional information/rationale from the BHOSSR:</i> Expand Linsley Park <i>Investigate options to expand the size of Linsley Park as part of a major upgrade to improve passive surveillance, sunlight access and the diversity of facilities in the reserve to better cater to the forecast worker and resident population in the precinct BH4 in BHOSSR.</i>	WCC	High
7.5A-9	Victoria / Glenmore Chain expansion Continue to maintain in the short term. In the medium term investigate options to increase access points and passive surveillance and undertake a major upgrade to cater to the existing and forecast community. Refer also to Action 7.5B-17.	WCC	Medium
7.5A-10	Graham Bend expansion - long term In the longer term, investigate options to expand this reserve to increase the diversity of facilities and uses. Refer to 7.5B-10.	WCC	LT

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.5B-1	Albion Road Reserve Continue to maintain	WCC	Ongoing
7.5B-2	Ashted Reserve Undertake major upgrade to better meet the existing and forecast community open space needs. <i>Additional information/rationale from the BHOSSR:</i> <i>Prepare a Landscape Concept Plan for this Small Local open space to undertake a major upgrade to better meet existing and forecast future population needs. This includes a pedestrian path link, additional trees, seating and investigate options to improve the unstructured recreational values of the reserve.</i>	WCC	Medium

No.	Action	Responsibility	Priority
7.5B-3	Bolton Park Major upgrade to increase the diversity of unstructured recreation facilities and access to the park predominantly for the forecast community. <i>Additional information/rationale:</i> <i>Prepare a Landscape Masterplan as part of the Box Hill City Oval Masterplan to guide the major upgrade of this reserve to better meet the open space needs of the existing and forecast population. This includes improving pedestrian path access including consideration of a looped path to encourage uses for informal fitness, additional unstructured recreational facilities to encourage more people to use this open space reserve.</i>	WCC	Very High
7.5B-4	Box Hill City Oval Prepare and implement a Masterplan for this precinct to guide future upgrades to structured sporting use, including consideration of unstructured recreation needs for the adjoining Bolton Park.	WCC	Very High
7.5B-5	Box Hill Community Gardens / Combarton Street Reserve Continue to support the Box Hill Community Gardens.	WCC	Ongoing
7.5B-6	Box Hill Gardens Undertake a minor upgrade addressing lighting, additional fitness equipment, seating, trees and amenity improvements to the pond area.	WCC	High
7.5B-7	Box Hill Mall Continue to maintain due to disruptions to this area during the Suburban Rail Loop Project. In the long term, once the SRL Project is complete a major upgrade will be required. No costs have been included in the open space contribution rate for upgrades to this space.	WCC DOTP	Ongoing
7.5B-8	Combarton Park Major upgrade to diversify facilities and meet the needs of both the existing and forecast community. <i>Additional information/rationale from the BHOSSR:</i> <i>Prepare a Concept Plan to guide a future major upgrade to this reserve to better meet the open space needs of the existing and forecast population. This includes ensuring the ongoing protection of the historical character and the mature established trees in any future works. Facilities may include establishing a flat open grassed area for informal ball games and activities, improvements to the play space, picnic facilities and a more extensive path network and/or fitness equipment.</i>	WCC	High
7.5B-9	Glenmore Street Reserve Continue to maintain.	WCC	Ongoing
7.5B-10	Graham Bend Continue to maintain. In the longer term, investigate options to expand this reserve to increase the diversity of facilities and uses.	WCC	Ongoing

No.	Action	Respons- ibility	Priority
7.5B-11	Linsley Park Major upgrade to primarily cater to the forecast resident and worker population in the civic precinct. Investigate options to expand the size of Linsley Park as part of the major upgrade. Additional information/rationale from the BHOSSR: <i>Prepare a Landscape Concept Plan to guide a future major upgrade to this park to primarily cater to the forecast expanding worker population in the civic precinct. The future design of the reserve will need to focus on facilities that appeal to the worker population including encouraging them to be active during breaks from work. As part of the upgrade, investigate options for expanding the size of this open space as per Action 7.5A-8.</i>	WCC	High
7.5B-12	Pioneer Park Continue to maintain.	WCC	Ongoing
7.5B-13	RHL Sparks Reserve Undertake major upgrade to improve the unstructured recreation facilities in this reserve. Additional information/rationale: <i>Prepare a Masterplan to guide the future major upgrades to the structured sporting and unstructured recreational use of this reserve.</i>	WCC MWC	Medium
7.5B-14	Surrey Dive Undertake minor upgrades to provide additional social and informal facilities to cater to the forecast community.	WCC	Low
7.5B-15	Surrey Drive Reserve Continue to maintain.	WCC	Ongoing
7.5B-16	Surrey Park Undertake major upgrade to provide additional unstructured recreation and social facilities to cater to the forecast community. Additional information/rationale: <i>Prepare a Masterplan to guide the future major upgrades to the structured sporting and unstructured recreational use of this reserve.</i>	WCC	Very High
7.5B-17	Thurston Street Reserve Undertake minor upgrade to cater primarily to the forecast community needs, including to review and confirm whether a play facility is required given close proximity to Surrey Park.	WCC	Medium
7.5B-18	Victoria / Glenmore Chain Continue to maintain in the short term. In the medium term investigate options to increase access points and passive surveillance and undertake a major upgrade to cater to the existing and forecast community. Refer also to Action 7.5A-9.	WCC	Medium

No.	Action	Responsibility	Priority
7.5B-19	Whitehorse Reserve Major upgrade of unstructured recreation facilities to complement the structured sporting use. <i>Additional information/rationale from the BHOSSR:</i> <i>Prepare a Landscape Masterplan to guide the future major upgrade to this reserve with a focus on:</i> • Upgrade the structured sporting facilities as required • Increasing the diversity of unstructured recreation facilities and the landscape character. • Improve pedestrian access and circulation into and within the reserve including the interface between adjoining residential use and the reserve along Sagoe Lane. There is an opportunity to further strengthen and celebrate the historical planting and pedestrian link between Box Hill Cemetery and Whitehorse Reserve. • Improve passive surveillance of Whitehorse Reserve in the review of future planning permit applications for redevelopment of sites adjoining the western boundary of the reserve. <i>Encourage future development applications along Whitehorse Road to have an activated interface to the laneway to the west to improve pedestrian amenity, safety and access to Whitehorse Reserve.</i>	WCC	Medium
7.5B-20	Whitehorse Road Reserve (East) The SRL Authority is undertaking major works to this reserve including removal of the established mature trees that make a significant contribution, sense of place, urban greening and mitigating urban heat. Council to continue to advocate for excellent outcomes including establishing large canopy trees and urban cooling in this high density precinct.	WCC	Ongoing
7.5B-21	Whitehorse Road Reserve (South) Continue to maintain and undertake a major upgrade as part of the establishment of new open space in Box Hill Central as per Action 7.3A-6.	WCC Developer	Ongoing
7.5B-22	Whitehorse Road Reserve (West) Continue to protect the established mature trees and character recognising that this reserve makes a significant contribution to the sense of place, urban greening and mitigating urban heat	WCC	Ongoing
7.5B-23	William Street Reserve Continue to maintain.	WCC	Ongoing
7.5B-24	Young Road Closure Continue to maintain.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Respons- ibility	Priority
7.5C-1	Avon Street and Warrambine Lane Identify opportunities to improve pedestrian access to Hagenauer Reserve in Box Hill North from Box Hill Hospital and the residential area in the vicinity of Thames Street. This is to be in conjunction with the provision of a new Small Local open space as described in Box Hill North. Refer to Section 7.6.	WCC	Medium

7.6 Box Hill North

7.6.1 Overview

Box Hill North is defined to the north by Koonung Creek, to the south by Thames Street and Margaret Street, to the west by Elgar Road and the east by Middleborough Road.

Refer to *Figure 7.6-1* on the following page of the existing open space in Box Hill North.



Figure 7.6-1 Existing Open Space Box Hill North

7.6.2 Existing open space

Overview

The Koonung Creek Trail along the Eastern Freeway Reserve provides excellent east-west connectivity and also access to the north into the City of Manningham. Koonung Creek weaves north and south of the Eastern Freeway and east-west connectivity is provided by both a combination of the Eastern Freeway Capital City trail on the south side of the Freeway and the shared path along Koonung Creek. Eram Park located north of the Freeway is the key Regional open space in this precinct which offers excellent opportunity to cater to increased levels of use including options such as large dog off leash area, mountain bike paths and looped walking paths.

The linear open space along the Bushy Creek tributary is the most popular open space and links Memorial Park and Springfield Park. There is a great opportunity to create a highly valued Neighbourhood open space at Memorial Park with a diversity of facilities that encourage the community to meet, socialise, exercise and spend time in this open space.

Table 7.6a is a list of all the existing open spaces in Box Hill North in alphabetical order and Table 7.6b is a summary of the total number of open spaces by hierarchy.

Table 7.6a Existing open space in Box Hill North including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Amaroo Court Reserve	0.13	Regional	Linking space	Linear		
Bushy Creek Reserve (East)	2.12	Neighbourhood	Linear	Botanical	Nature conservation	Passive
Bushy Creek Reserve (West)	1.29	Neighbourhood	Linear	Native character	Service easement	
Eastern Freeway Trail Reserve (East of Amaroo Ct to Middleborough Rd)	2.50	Regional	Linear	Significant road reservation		
Elizabeth Street Reserve	0.03	Local Link	Linking space	n/a		
Eram Park (North of Fwy)	7.29	Regional	Waterway	Passive	Viewing	Significant road reservation
Eram Park (South of Fwy)	0.07	Local Link	Linking space	n/a		
Frank Sedgman Reserve	2.59	Regional	Waterway	Sporting	Passive	Linear
Hagenauer Reserve (Athletics, fenced)	3.89	Municipal	Restricted sporting/recreation	Native character		
Halligan Park	0.60	Local	Passive	Linking space	Native character	
Killara Street Reserve	0.18	Small Local	Nature conservation	Passive	Viewing	
Koonung Creek Reserve (West of Middleborough Road North of the Eastern Freeway)	0.58	Regional	Linear	Waterway	Nature conservation	
Koonung Creek Parklands (Between Station Street and Elgar Road)	1.05	Regional	Waterway	Linear	Nature conservation	
Luther Street Reserve	0.18	Small Local	Passive	Linking space		
Memorial Park	3.63	Neighbourhood	Passive	Linear	Native character	Viewing
Padgham Court Reserve	0.40	Regional	Linear	Linking space		
Springfield Park	4.23	Municipal	Sporting	Native character	Passive	
Tassells Park	0.87	Local	Passive			
Tranor Street Reserve	0.26	Local	Play	Native character	Viewing	
Tweedie Court Reserve	0.13	Small Local	Play	Native character	Linking space	Viewing
Willow Street Park	0.32	Local	Passive	Linking space		

Table 7.6b *Number, hierarchy and size of open space excluding restricted open space in Box Hill North*

No.	Hierarchy	Area (Ha)	%
7	Regional	14.54	51%
1	Municipal	4.23	15%
0	Urban Civic	0.00	0%
3	Neighbourhood	7.04	25%
4	Local	2.05	7%
4	Small Local	0.49	2%
2	Local Link	0.10	0%
21	TOTAL	28.45	100%

Quantity

The total quantity of open space in Box Hill North, excluding restricted open space, represents approximately 7.1 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 8.1 per cent of the total land area. This is below the municipal-wide average of 9.6 per cent excluding restricted open space and 11.3 per cent including restricted open space.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Box Hill North with the exception of Urban Civic. Refer to Figure 7.6-2 for the Hierarchy of existing open space in Box Hill North.



Figure 7.6-2 Open Space Hierarchy Box Hill North

Open space distribution and future open space needs in Box Hill North

Station Street is the key north-south major road through Box Hill North and forms a physical barrier to safe and easy east-west walking access to open space within the precinct. Koonung Creek and the Eastern Freeway to the north create a physical barrier to open space in the adjoining municipality. Elgar Road on the western precinct boundary forms a barrier to safe access west into Mont Albert North, and Middleborough Road to the east forms a barrier to safe access east into Blackburn North.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.6-3. This figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Box Hill North and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.6c *Brief description of gap areas in Box Hill North*

Gap area	Description
BHN1	Located just east of Elgar Road, Trainor Street Reserve is a Local open space to the north, and Willow Street Park and Hagenauer Reserve are located to the south of this gap area. Expansion to Trainor Street Reserve, and reconfiguration of Hagenauer Reserve to the south, are both intended to address this gap area. While the walking distance will still be further than the preferred distance, the expansion of the reserve size and facilities will improve their appeal.
BHN2	Located west of Station Street, this gap area will primarily be addressed by the improvements proposed to Hagenauer Reserve and Willow Street Park, for the same reasons noted as for Gap Area BHN1.
BHN3	Located west of Middleborough Road and north of Twyford Street, the gap area will be addressed with the proposed major upgrade to Tassells Park, along with potential future expansion to its size and improved access to the park, particularly from Woodhouse Grove. The community also has some after hours access to Kerrimuir Primary School grounds.
BHN4	Located in the Lexton Road area and south to Margaret Street, this gap area is proposed to be addressed with the provision of a new Local open space, which is for both the gap area and increased urban densities, and existing gap areas to the south in the Box Hill Precinct.

7.6.3 Ancillary open space

Within Box Hill North, the Kerrimuir Primary School grounds contribute to the greening and after-hours recreational facilities in the precinct. As noted, this ancillary open space is located in Gap Area BHN3 and contributes to the open space needs of the community. Box Hill North Primary School contributes to the sense of space and greening in the north-western area of the precinct. The school is located within the walking catchments of both Franke Sedgman Reserve and Bushy Creek Reserve (West).

The pattern of subdivision layout is generally reasonable well connected with good pedestrian permeability through the precinct. This is important in this precinct given there will continue to be some Gap Areas that will be overcome by improving existing open spaces that are accessible via the local access street network.

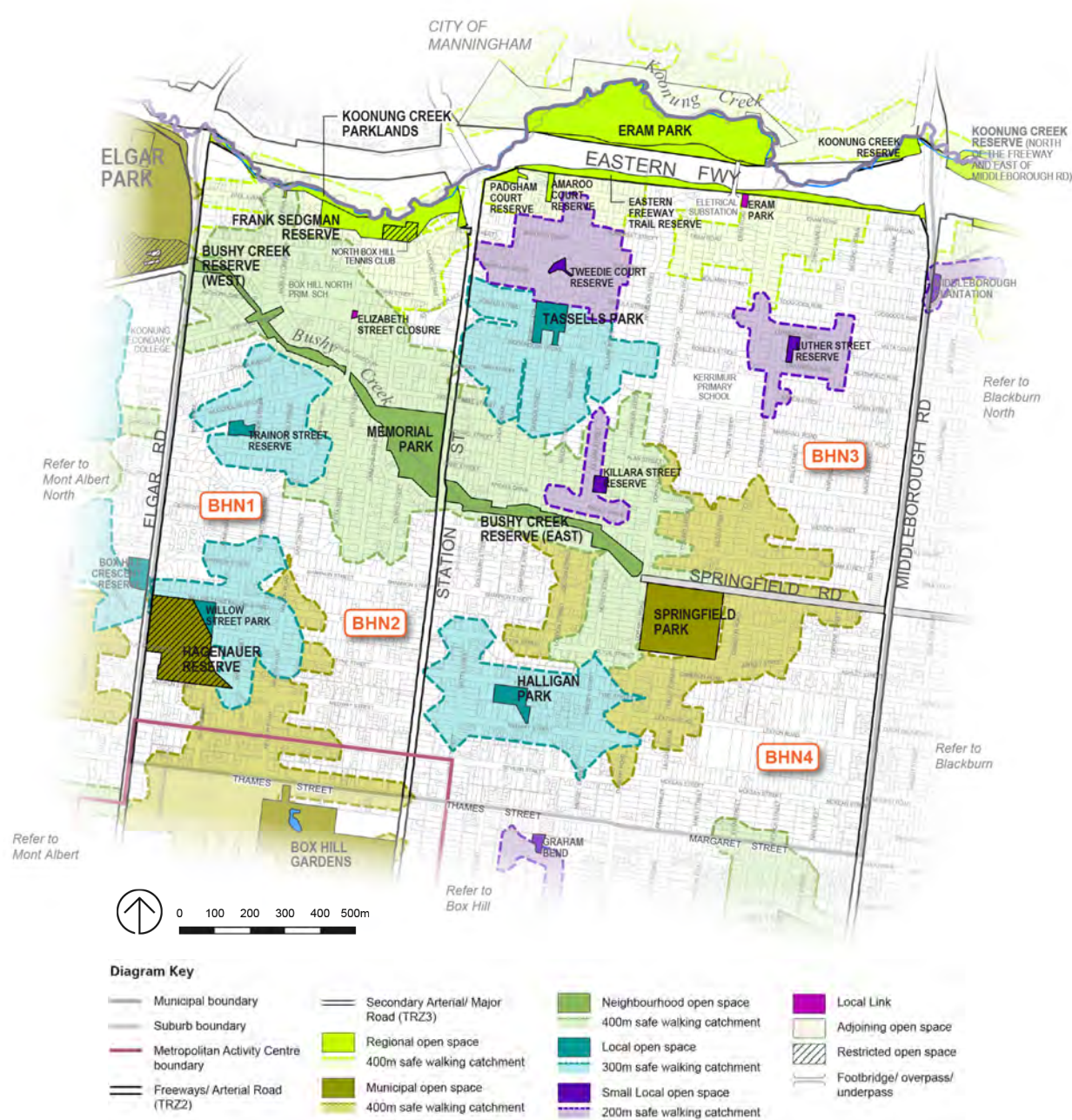


Figure 7.6-3 Gap Analysis Box Hill North

7.6.4 Existing Box Hill North community

Demographics

There are 12,467 residents living in Box Hill North as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 1,501 people living in Box Hill North, which represents approximately a 14 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in secondary school to the young workforce age groups (12 to 34 years), workers and empty nesters age group (50 to 69 years) and the 85 and over age group. Primary school aged children remained the same and there is a lower proportion of babies/pre-schoolers, parents, and seniors.

A higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006, approximately 76 per cent lived in separate houses and there were less than 1 per cent of the population living in high-density dwellings. In 2021, approximately 62 per cent lived in separate houses, 28 per cent in medium density housing and 10 per cent in high-density dwellings.

The residential population is forecast to increase 13 per cent, with the continued trend of a decrease in children under the age of 17, older workers and empty nesters in the 50-69 age range and an increase in the 18 to 49 age range.

Summary of community engagement outcomes

A total of 108 open space surveys were received from Box Hill North, which represents 6 per cent of the total surveys received.

The survey respondents of Box Hill North value their open space to relax and unwind. The other top values are similar to the municipal average. Despite Blackburn Lake Sanctuary being in Blackburn, it is still a popular destination for Box Hill North residents, especially for play for children and walking. The top amenities in Box Hill North are also similar to the municipal average in terms of what amenities people use. Survey respondents have requested better shared paths between pedestrians and cyclists and have commented the most on the impacts of development and North East Link projects.

Values of open space (top five)

- 68% A place to relax and unwind
- 67% Just being outside
- 65% Trees
- 62% Walking and cycling
- 57% Connecting with nature

Types of open space used and frequency of use (top five)

- 91% Local streets for exercise
- 84% Small local parks
- 82% Medium parks

- 81% Large parks and reserves (non-sporting)
- 74% Urban plazas/squares

Frequently visited types of open spaces (top five)

- 86% Local streets for exercise
- 64% Small local parks
- 47% Urban plazas/squares
- 44% Medium parks
- 41% Linear reserve network

Priority of facilities and amenities in open spaces (top five)

- 72% Seats
- 61% Trees
- 60% Walking paths
- 58% Toilets
- 57% Additional greening for environmental health & wellbeing

(Note that 31% Play space was listed fourteenth)

Table 7.6d Most frequently visited open space in Box Hill North

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
51	Bushy Creek Parklands (including Memorial Park, Bushy Creek Reserve West and Bushy Creek Reserve East)	• Walking (18) • Dog walking (9) • Cycling (3) • Play - children (7) • Enjoy nature (2) • Exercising (2) • Access - close to home (2)	• Bins - additional required (4) • Disability - hearing impaired unable to hear cyclists, walking buddy required (2)
26	Box Hill Gardens	• Walking (5) • Dog walking (3) • Access - close to home (2) • Exercising (2) • Picnics (2) • Running (2) • Walking - travel through (2)	• Increase trees and native vegetation (2)
25	Springfield Park	• Walking (6) • Dog walking (5) • Exercising (3) • Play - children (3) • Active recreation (2) • Club based sport (2)	
15	Koonung Creek Linear Reserve	• Walking (4)	

No	Name	Reasons to visit	Suggested improvements
	(including Eram Park, Frank Sedgman Reserve and Eastern Freeway Linear Reserve)		
9	Tassells Parks	• Play - children (3)	
Open space beyond walking distance (top five)			
20	Blackburn Lake Sanctuary	• Play - children (9) • Walking (7) • Enjoy nature (5)	
16	Box Hill Gardens	• Social - meeting family / friends / parties (3) • Dog walking (2) • Play - children (2)	
15	Koonung Creek Linear Reserve (including Eram Park and Eastern Freeway Linear Reserve)	• Walking (6) • Cycling (4) • Dog walking (7) • Exercising (2)	• Bins - additional required (2)
9	Elgar Park	• Walking (2)	
8	Wattle Park	• Walking (3) • Dog walking (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Additional required (7)
- Valued (3)
- Access - pedestrian access into open space needs improvement (3)
- Protect green open space(2)

Maintenance and management

- 5 Dogs - on and off leash areas (5)
- Activity (2)

Trees and vegetation

- Trees - more required and protect existing (2)

Park Infrastructure

- Park infrastructure - additional required (9)
- Active facilities - additional required (8)

Paths

- Shared Paths - wider and/or separate walking and cycling paths (5)

Other

- Developments - limit development and loss of trees(4)
 - Negative impacts - health & wellbeing/ wildlife (2)
- Streetscapes - suggested landscape and traffic improvements (2)
- NELP - Eram Park, minimise impacts on the park (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.6.5 Analysis of future change and open space needs

Forecast population change

The Box Hill North Precinct is currently forecast to reach a residential population of 14,053 by 2036, representing an additional 1,586 people, or an approximate 13 per cent increase compared to the 2021 population.

The table below includes the forecast population growth for the residential population through to 2036.

Table 7.6e Population forecasts for Box Hill North 2021 - 2036

Box Hill North	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	12,467	13,399	13,697	14,053	+1,586

Source: .id Forecast Whitehorse Community Profile, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 1,586 additional people visiting open space, and in the context of the increased urban densities, particularly in the southern part of the precinct, meaning people have less private open space.

In terms of the demographic change, the lower proportion of children under the age of 17 and the slightly higher proportion of adults in the 24-49 age range reinforces the need to increase the range of facilities in open space in addition to play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.6.6 Box Hill North Precinct Recommendations

Summary of overall intent

Provision and distribution

Box Hill North is forecast to continue to experience significant change over the next 15 years with 1,586 new residents forecast to be living in the precinct by 2036, representing a 13 per cent change. Bushy Creek Reserve provides a central linear spine of open space extending from Springfield Park in the east to Elgar Park in the west, located across the precinct boundary in Mont Albert North. With Koonung Creek and the Eastern Freeway forming the northern boundary to the precinct, this provides a second east-west linear open space link for the community. Between these two networks there is a series of Local and Small Local open spaces that meet local open space needs. There are some gaps in open space provision, with the key gap area being in the south-eastern part of the precinct, which directly adjoins a gap area to the south in Box Hill. This Strategy recommends providing a new Local open space to address the gap area and improve north-south pedestrian connectivity, and a new Small Local open space in the south-western area of the precinct. Other smaller gap areas are proposed to be addressed with proposed expansions to three existing open spaces to increase their role in the network.

Quality and design

Memorial Park, located on the popular Bushy Creek linear trail, is to become a major destination park for the precinct with a diverse range of unstructured recreational facilities, picnic and barbecue facilities, and strengthening of the landscape character of the reserve. Another major upgrade is proposed for Willow Street Park and the adjoining Hagenauer Reserve, with a proposed reconfiguration of these two reserves by changing the fence alignment to increase the areas that are available to be used by everyone. Following expansion to Tassels Park a major upgrade will increase the diversity of facilities and improve access. A series of other upgrades are proposed to improve the diversity of facilities and character of the open space network. Given the substantial increase in the population in Box Hill, the open spaces in the southern area of Box Hill North will be upgraded including Springfield Park and Halligan Park. Council will continue to advocate to the Victorian Government to protect the natural and recreational values of the Koonung Creek corridor during the North East Link/Eastern Freeway upgrade project.

7.6.7 Action Plan Box Hill North

A Additional public open space

No.	Action	Responsibility	Priority
7.6A-1	New Local open space in Gap Area BHN4 (west of Middleborough Road, north of Margaret Street) Provide a new Local open space in the existing gap area, located so that it contributes to improved north-south pedestrian connectivity and access through the gap area. <i>Additional information/rationale:</i> <i>This is primarily to address the forecast growth that is planned in Box Hill to the south combined with the existing gap area. The new Local open space needs to improve north-south pedestrian connectivity in the precinct and be embedded in local access street network.</i>	WCC Developer	High
7.6A-2	New Small Local open space east of Elgar Road, north of Thames Street New Small Local open space within an easy walk of forecast workers and residents in the south of the sub-precinct.	WCC Developer	High
7.6A-3	Luther Street Reserve to address Gap Area BHN3 Investigate options to expand the size of this reserve and undertake a major upgrade to cater to the existing and forecast population. Refer also to Recommendation 7.6B-14. <i>Additional information/rationale:</i> <i>The reason for the expansion is to primarily address the existing gap area BHN3 and the forecast population, particularly associated with the small retail/commercial land use to the north on Second Avenue.</i>	WCC	Medium
7.6A-4	Tassells Park expansion to address Gap Area BHN3 Investigate expanding the size of Tassells Park and a major upgrade to allow for a greater diversity including potential hardcourt and barbecue facilities to address both the existing and forecast population needs. Refer also to Action 7.6B-18.	WCC	High
7.6A-5	Trainor Street Reserve expansion to address Gap Area BHN1 Investigate the opportunity to expand the reserve to establish a minimum of two public road access points to improve passive surveillance and access. Undertake major upgrade to improve the diversity of facilities including consideration of longer views and vistas. Refer also to Action 7.6B-19. <i>Additional information/rationale:</i> <i>This is to primarily address the existing gap area BHN1 for the existing forecast new population.</i>	WCC	High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.6B-1	Amaroo Court Reserve Continue to maintain as a linking space into the Eastern Freeway Reserve.	WCC	Ongoing
7.6B-2	Bushy Creek Reserve (East) Continue to maintain. Improve nature conservation values with ongoing revegetation to boundary fence lines ensuring clear sightlines are retained along shared path.	WCC	Ongoing
7.6B-3	Bushy Creek Reserve (West) Continue to maintain. Progressively improve nature conservation values with additional vegetation to fence lines ensuring clear sightlines along path are retained.	WCC	Ongoing
7.6B-4	Eastern Freeway Reserve (between Station Street and Middleborough Road) Continue to maintain and retain linear connectivity.	WCC (VicRoads)	Ongoing
7.6B-5	Elizabeth Street Closure Continue to maintain.	WCC	Ongoing
7.6B-6	Eram Park (North of the Eastern Freeway) Minor upgrade to improve path connectivity through the reserve and create a circuit loop trail including closer to the creek corridor, and increase tree canopy cover ensuring longer views and vistas are retained. Investigate the potential to establish other active unstructured recreation facilities within the context of public safety in this remote site. <i>Additional information/rationale</i> <i>Pending any potential changes/impacts from the North East Link/Eastern Freeway upgrade work, this park provides a great opportunity to provide a large informal parkland with elevated views and sense of space.</i>	WCC	High
7.6B-7	Eram Park (South of the Eastern Freeway) Continue to maintain entry point to Eram Park and shared path network.	WCC	Ongoing

No.	Action	Respons- ibility	Priority
7.6B-8	Frank Sedgman Reserve Major upgrade to resolve car parking, picnic/BBQ area, pedestrian circulation and access to the structured sporting facilities. <i>Additional information/rationale:</i> <i>Prepare a Landscape Masterplan in consultation with the user groups to guide a future major upgrade to Frank Sedgman Reserve. This includes integrating a range of social and unstructured recreation facilities including picnic, BBQ and public toilets with the structured sporting facilities along with strengthening the nature conservation values.</i>	WCC	Medium
7.6B-9	Hagenauer Reserve Investigate options to realign the perimeter fence to enlarge Willow Street Park and create adequate space for perimeter circuit path trail that is accessible at all times. Refer also to Recommendation 7.6B-21. <i>Additional information/rationale:</i> <i>This is to increase the size and function of the adjoining Willow Street Park given the forecast increased densities in this area and in the adjoining Box Hill precinct.</i>	WCC	High
7.6B-10	Halligan Park Major upgrade to improve the quality and character of the reserve and review if this is the appropriate location for the Scout Hall in the context of forecast growth.	WCC	High
7.6B-11	Killara Street Reserve Minor upgrade to improve biodiversity values with additional revegetation to perimeter of reserve and retain an open grassed area with seating. Do not replace the play space in the longer term due to the close proximity to Bushy Creek Reserve.	WCC	Medium
7.6B-12	Koonung Creek Parklands (between Station Street and Elgar Road) Continue to maintain.	WCC	Ongoing
7.6B-13	Koonung Creek Reserve (west of Middleborough Road, north of the Eastern Freeway) Minor upgrade to include fitness equipment along the shared path. Continue to maintain and protect nature conservation values.	WCC	High
7.6B-14	Luther Street Reserve Investigate options to expand the size of this reserve and undertake a major upgrade to cater to the existing and forecast community. Refer also to Recommendation 7.6A-3. <i>Additional information/rationale:</i> <i>The expansion and upgrade is primarily to address the Gap Area BHN3 to the south.</i>	WCC	Medium

No.	Action	Responsibility	Priority
7.6B-15	Memorial Park Major upgrade to establish a new destination park for this area particularly in the context of the reduction in the size of Box Hill Gardens. The park will provide a diverse range of unstructured recreational facilities and picnic areas that promote social connectedness along with enhancement of the landscape character. <i>Additional information/rationale:</i> <i>Prepare and implement a Landscape Masterplan to guide the future facilities for Memorial Park including a diversity of facilities to establish it as a major destination park for the Box Hill North community, taking into consideration the sense of space, views and good visual access.</i>	WCC	High
7.6B-16	Padgham Court Reserve Continue to maintain a link into the Eastern Freeway Reserve.	WCC	Ongoing
7.6B-17	Springfield Park Minor upgrade to include perimeter circuit path that links to Bushy Creek shared trail and review the location of the play and picnic facility to better integrate into the park.	WCC	High
7.6B-18	Tassells Park Investigate expanding the size of Tassells Park and a major upgrade to allow for a greater diversity of unstructured recreation facilities including potential hardcourt and BBQ facilities to address both the existing and forecast population needs. Refer also to Action 7.6A-4 for expansion.	WCC	High
7.6B-19	Trainor Street Reserve Investigate opportunity to expand the reserve to establish a minimum of two public road access points to improve passive surveillance and access. Undertake major upgrade to improve the diversity of facilities including consideration of longer views and vistas. Refer also to Action 7.6A-5 for expansion.	WCC	Medium
7.6B-20	Tweedie Court Reserve Continue to maintain in short to medium term. In long term minor upgrade to remove play and strengthen viewing/seating space.	WCC	Low
7.6B-21	Willow Street Park Investigate option to expand by realigning the perimeter fence to Hagenauer Reserve and redesign the park to improve diversity of facilities to increase its function and use primarily for the forecast population. Refer also to Recommendation 7.6B-9.	WCC	High

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.6C-1	Springfield Road / Dorking Road intersection Investigate opportunities to improve pedestrian path connection between Bushy Creek Trail and the proposed circuit path around Springfield Park. Refer also to Recommendation 7.6B-16	WCC	High

7.7 Box Hill South

7.7.1 Overview

Box Hill South is defined to the north by Canterbury Road, the west by Elgar Road, the east by Middleborough Road, and the south by a combination of Eley Road, KooyongKoot / Gardiners Creek and Deakin University campus.

Refer to *Figure 7.7-1* on the following page of the existing open space in Box Hill South.

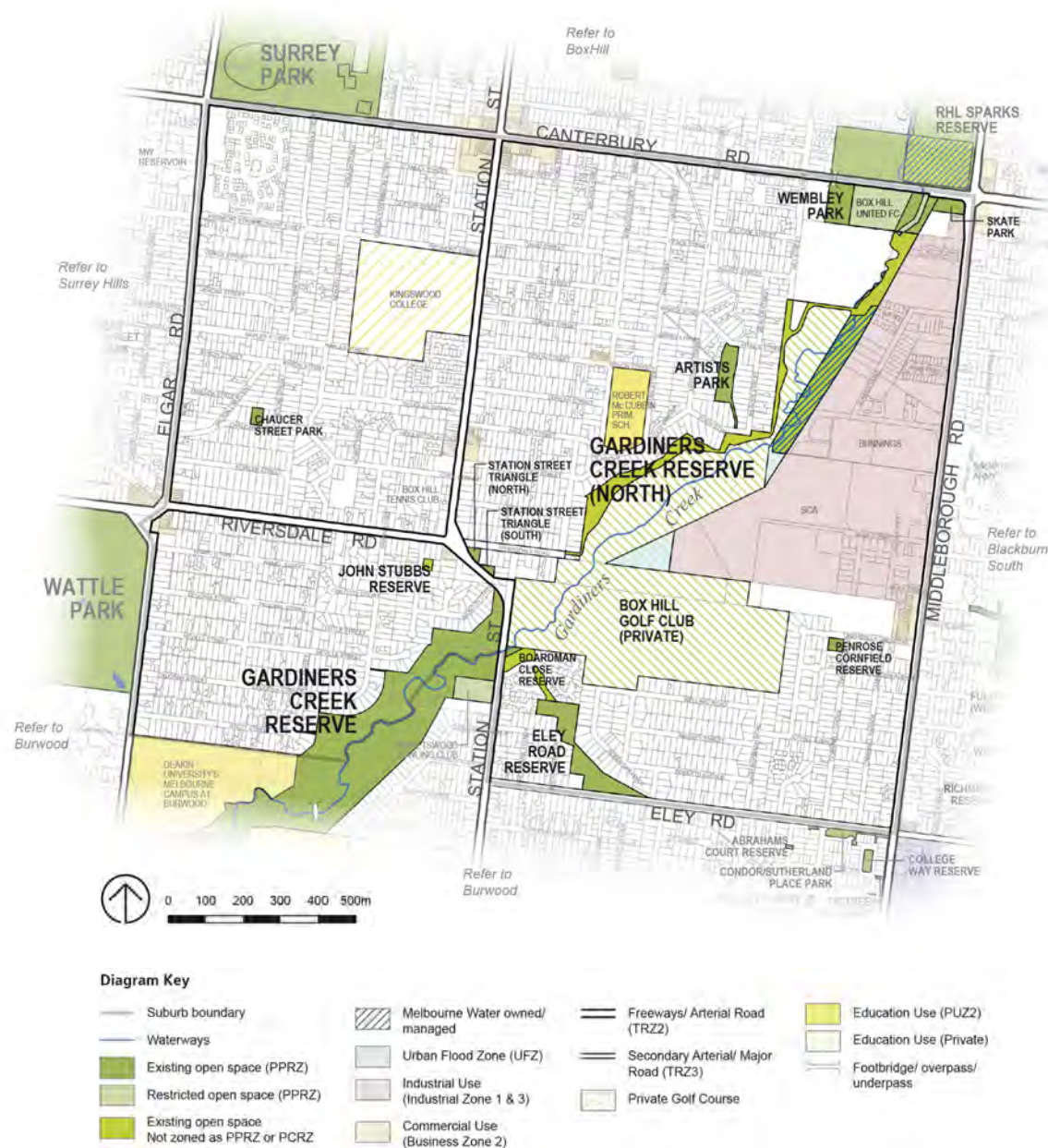


Figure 7.7-1 Existing Open Space Box Hill South

7.7.2 Existing open space

Overview

KooyongKoot / Gardiners Creek flows north to south through Box Hill South providing an important natural waterway corridor, a significant contribution to the native landscape character of the area and a Regional open space connection downstream. Wembley Park in the north-eastern area of the precinct is a combination of a restricted sporting reserve and an elevated undeveloped open space. The Skate Park near the corner of Canterbury Road and Middleborough Road is well located at a highly visible and accessible location with good passive surveillance. Eley Road Reserve is located in the south-east and is formed along the valley line of a tributary to KooyongKoot / Gardiners Creek, and it is the only Neighbourhood open space in the precinct.

Supplementing these open spaces are some scattered Local and Small Local open spaces distributed across the suburb, providing open space that is within safe and easy walking distance of residents. Table 7.7a is a list of all the existing open spaces in Box Hill South in alphabetical order and Table 7.7b is a summary of the total number of open spaces by hierarchy.

Table 7.7a Existing open space in Box Hill South including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Artists Park	0.70	Local	Passive	Linking space		
Boardman Close Reserve	0.36	Regional	Waterway	Linear	Undeveloped	
Chaucer Street Park	0.14	Small Local	Play	Viewing		
Eley Road Reserve	2.11	Neighbourhood	Linear	Nature conservation	Passive	Service easement
Gardiners Creek Reserve	4.98	Regional	Waterway	Linear	Nature conservation	Passive
Gardiners Creek Reserve (North) adjacent to Box Hill Golf Course	5.70	Regional	Linear	Waterway	Nature conservation	
John Stubbs Reserve	0.07	Small Local	Play			
Penrose Cornfield Reserve	0.14	Small Local	Native character			
Skate Park Box Hill	0.98	Municipal	Sporting	Waterway	Native character	
Station Street Triangle	0.07	Small Local	Significant road reservation			
Wembley Park (unrestricted)	2.34	Municipal	Undeveloped	Linking space	Waterway	
Wembley Park (fenced)	1.45	Municipal	Restricted sporting/recreation	Waterway		

Table 7.7b Number, hierarchy and size of open space excluding restricted open space in Box Hill South

No.	Hierarchy	Area (Ha)	%
3	Regional	11.05	63%
2	Municipal	3.32	19%
0	Urban Civic	0.00	0%
1	Neighbourhood	2.11	12%
1	Local	0.70	4%
4	Small Local	0.42	2%
0	Local Link	0.00	0%
11	TOTAL	17.59	100%

Quantity

The total quantity of open space in Box Hill South, excluding restricted open space, represents 5.1 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 5.5 per cent of the total land area. This is well below the municipal-wide average of 9.6 per cent excluding restricted open space and well below the 11.3 per cent including restricted open space.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Box Hill South with the exception Urban Civic as there are no key activity centres, and no Local Links, mainly due to the predominantly gridded local street network reducing the need for Local Links. Refer to Figure 7.7-2 for the Hierarchy of existing open space in Box Hill South.

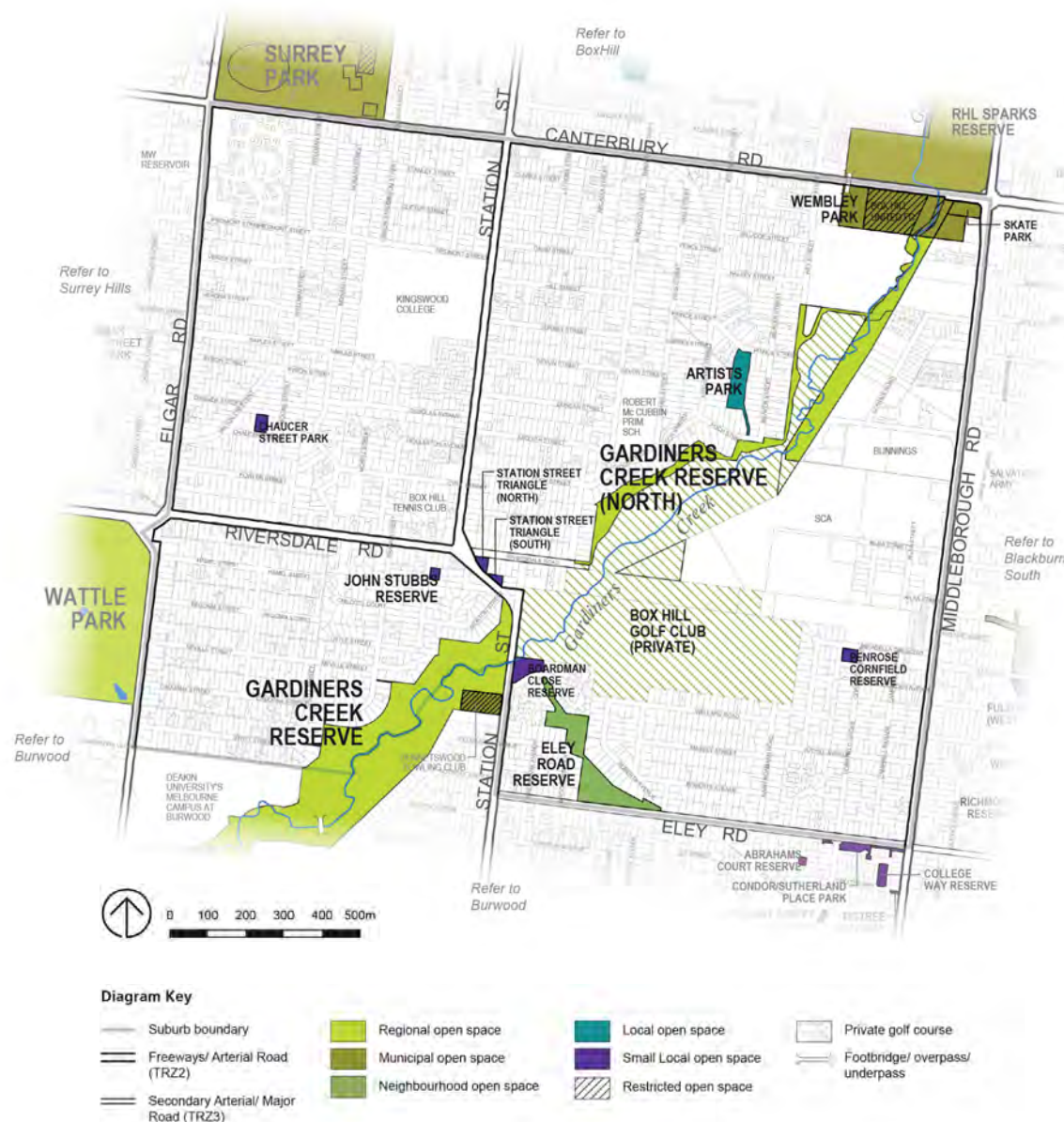


Figure 7.7-2 Open Space Hierarchy Box Hill South

Open space distribution and future open space needs in Box Hill South

Station Street is the key north-south major road through Box Hill South, and it forms a major physical barrier to safe and easy walking east west access to open space within the precinct. The urban layout and interface to KooyongKoot / Gardiners Creek also forms a barrier to easy and safe east-west pedestrian access within the precinct. Riversdale Road is an east-west major road that affects north-south pedestrian access within the precinct.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.7-3. This figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Box Hill South and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.7c Brief description of gap areas in Box Hill South

Gap area	Description
BHS1	Located west of Kingswood College in the vicinity of Naples Street, Wellman Street and Monash Street, this gap area will be addressed by a proposed new Small Local open space primarily for the existing population.
BHS2	Located south of Canterbury Road and east of Station Street, this existing gap area has poor connectivity within the local street network. The gap area will be addressed by identifying future opportunities for new Local Links between existing streets combined with a new Small Local open space, primarily for the existing population. Other projects including the proposed upgrade to Artists Park and Wembley Park will improve the quality of open space that is accessible via the local access street network, albeit further than preferred walking distances.
BHS3	Located east of KooyongKoot / Gardiners Creek and south of Canterbury Road, this non-residential precinct adjoins Gardiners Creek, however there are no access points from it into the creek corridor. This is proposed to be addressed with the provision of a linear open space corridor on the east side of the creek that is accessible from this gap area.
BHS4	Located south of Riversdale Road and east of Elgar Road, this gap area is proposed to be addressed by providing additional public access points into Gardiners Creek Reserve along interface with the adjoining residential land.
BHS5	Located west of Middleborough Road and north of Eley Road, this existing gap area will be addressed by expansion of Penrose Cornfield Reserve and increased access points into the Eley Road Reserve to make the existing open spaces more accessible.

7.7.3 Ancillary open space

Within Box Hill South, the Box Hill Private Golf Course contributes to the unbuilt character of the area and contributes to urban cooling. Robert McCubbin Primary School play space and oval can be used informally out of school hours. The school also contributes to the unbuilt character of the precinct as local access streets directly adjoin parts of the school site, so it is visible and accessible.

The pattern of subdivision layout is disjointed meaning there is not good permeability through the local street network in some parts of Box Hill South. This is particularly noticeable in the Gap Areas BHS2 and BHS5, and in the non-residential precinct. As part of future development applications, it is recommended that the City of Whitehorse proactively identify opportunities to improve pedestrian permeability in the local street network by requiring new Local Links.

This Strategy identifies opportunities to improve pedestrian connectivity, by identifying the need for the new Small Local open spaces and expansion to existing open spaces to improve pedestrian permeability.

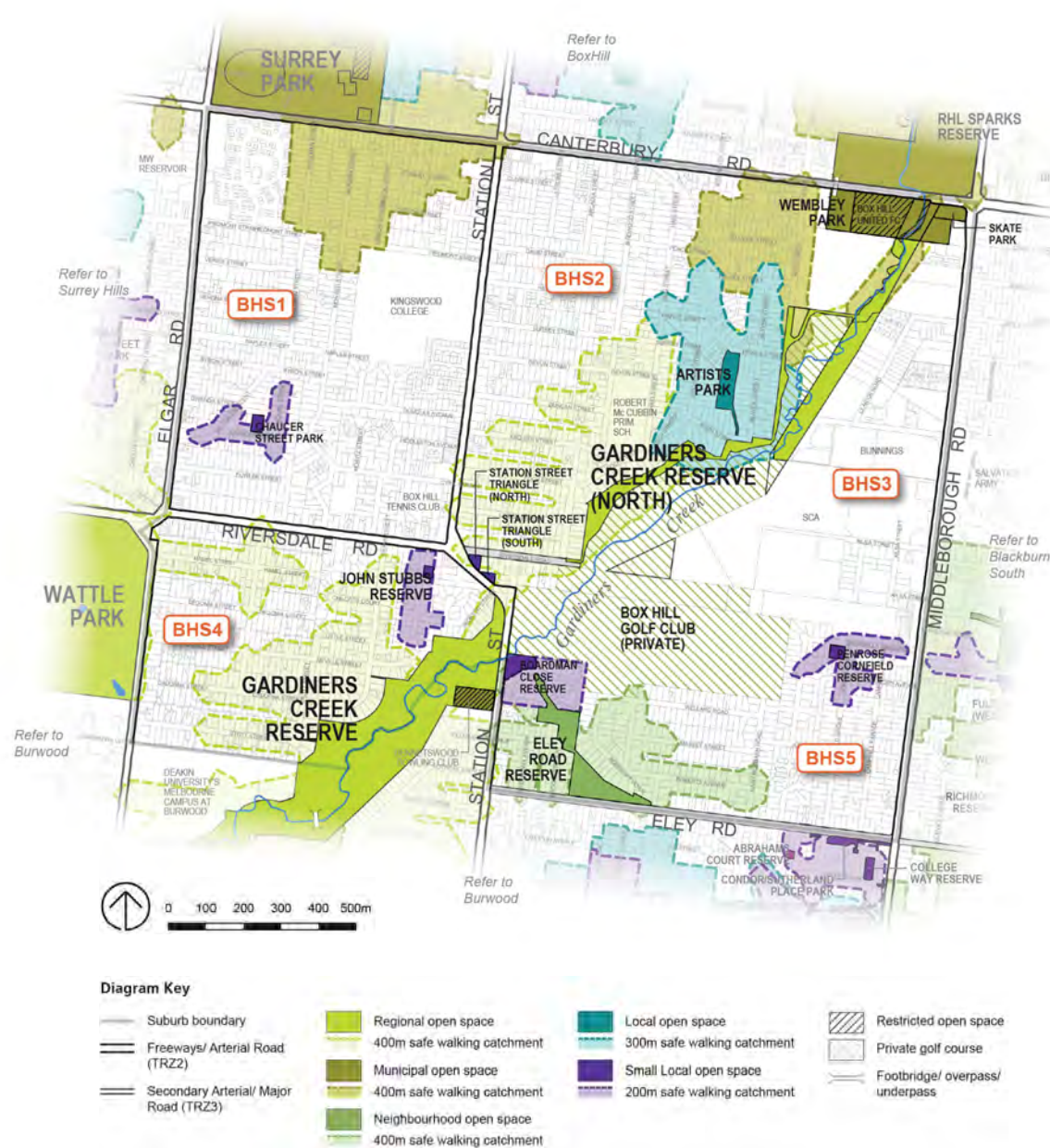


Figure 7.7-3 Gap Analysis Box Hill South

7.7.4 Existing Box Hill South community

Demographics

There are 8,629 residents living in Box Hill South as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 878 people living Box Hill South, which represents approximately an 11 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the primary schoolers to the young work force age groups (5 to 34 years) and the 50 to 69 year age group. There is a lower proportion of babies and pre-school age groups (0 to 4 years), parent and homebuilder age groups (35 to 49 years), and the 70 to 85 and over age groups.

A higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006, approximately 78 per cent lived in separate houses, 22 per cent in medium density dwellings and none of the population lived in high-density dwellings. In 2021, approximately 65 per cent lived in the separate houses, 31 per cent in medium density housing and 3 per cent in high-density dwellings.

The residential population is forecast to increase 8 per cent, with the continued trend of a decrease in children under the age of 17, and in the young workforce and parent age groups of 25 to 49. There is a forecast increase in the tertiary age group of 18 to 24 years due to the close proximity to Deakin University and an increase in those aged between 50 to 84 years.

Summary of community engagement outcomes

A total of 109 open space surveys were received from Box Hill South, which represents 6 per cent of the total surveys received.

The top three priorities of the respondents to the Box Hill South survey are very close to the municipal average. 'Walking and cycling' and 'Meeting people/friends' were ranked higher than the municipal average, while 'A place to relax and unwind' was ranked lower than the municipal average. Waterway reserves came in second as the most frequently used types of open space due to the presence of KooyongKoot / Gardiners Creek.

Values of open space (top five)

- 62% Trees
- 61% Walking and cycling
- 61% Connecting with nature
- 59% A place to relax and unwind
- 51% Just being outside

Types of open space used and frequency of use (top five)

- 86% Large parks and reserves (non-sporting)
- 80% Waterway reserves
- 78% Local streets for exercise
- 78% Small local parks
- 66% Medium parks
- 66% Urban plazas/squares
- 63% Neighbourhood parks

Frequently visited types of open spaces (top five)

- 70% Local streets for exercise
- 52% Waterway reserves
- 49% Small local parks
- 38% Large parks and reserves (non-sporting)
- 34% Neighbourhood parks

Priority of facilities and amenities in open spaces (top five)

- 70% Seats
- 63% Walking paths
- 59% Trees
- 59% Additional greening for environmental health & wellbeing
- 58% Picnic tables and seats
- 53% Toilets

(Note that 35% Play space was listed eleventh)

Table 7.7d Most frequently visited open space in Box Hill South

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
47	Gardiners Creek	• Walking (21) • Dog walking (11) • Enjoy nature (5) • Access - close to home (4) • Play - children (4) • Social - meeting family / friends / parties (4) • Active recreation (3) • Spending time outdoors (3) • Trees (3) • Open space - ambience, beauty (2) • Open space – peaceful (2) • Relaxing (2) • Running (2)	• Bins - additional required (3) • Maintenance - regular maintenance, cleaning & weeding required (3)

No	Name	Reasons to visit	Suggested improvements
23	Artists Park	• Play - children (10) • Walking (7) • Play - with grandchildren (3) • Active recreation (3) • Dog walking (2) • Green space (2) • Spending time outdoors (2)	
17	Surrey Park (including Surrey Dive)	• Dog walking (3) • Spending time outdoors (3) • Active recreation (2) • Aqualink (2) • Lake (2) • Seeing people and activities (2)	• Bins - additional required (2)
14	Box Hill South Skate Park	• Active recreation (13) • Social - meeting family / friends / parties (10)	
5	Eley Road Reserve	• Play - children (4) • Dog walking (2)	
Open space beyond walking distance (top five)			
20	Gardiners Creek	• Dog walking (8) • Walking (7) • Spending time outdoors (2)	
15	Blackburn Lake Sanctuary	• Play - children (5) • Walking (5) • Social - meeting family / friends / parties (3) • Cycling (2) • Spending time outdoors (2)	
14	Surrey Park	• Play - children (5) • Aqualink (2) • Dog walking (2) • Relaxing (2) • Social - meeting family / friends / parties (2) • Spending time outdoors (2)	
11	Wattle Park	• Play - children (2) • Relaxing (2) • Walking (2)	
9	Blackburn Creeklands (including Blacks Walk and Kalang Park)	• Dog walking (2) • Enjoy nature (2) • Play – children (2) • Walking (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two people or more in each category:

Open space

- Additional required (7), including one who noted they would like to see more parks with unique identity and character.
- Valued (3), including one who specifically noted the value of green open space.

Maintenance and management

- Dogs (6)
 - Regulations on dog behaviour (3)

Trees and vegetation

- Trees - additional required (4)

Park Infrastructure

- Park infrastructure - additional required (8)
 - Toilets (2)
- Active facilities - additional required (6)

Other

- Developments - concern regarding impacts of developments on trees and open space (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.7.5 Analysis of future change and open space needs

Forecast population change

Box Hill South is currently forecast to reach a residential population of 9,232 by 2036, representing an additional 694 residents, or an 8 per cent increase compared to the 2021 population.

Table 7.7e Population forecasts for Box Hill South 2021 - 2036

Box Hill South	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	8,629	9,263	9,272	9,323	+694

Source: .id Forecast Whitehorse Community Profile, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create an increased demand for open space. This is both in relation to the forecast increase of 694 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of young adults and the older age cohort in the 70+ age range, combined with a decrease in the proportion of children and young adults under the age of 17 means there is a need to continue to provide a range of facilities in open space in addition to play facilities. This also means that the existing skate park on the corner of Canterbury and Middleborough Roads is well placed in relation to the forecast change in demographics. The majority of the Local and Small Local open spaces in Box Hill South primarily cater to young children with play facilities and there will be a need to increase diversity to broaden the range of facilities provided.

7.7.6 Box Hill South Precinct Recommendations

Summary of overall intent

Provision and distribution

Box Hill South is forecast to experience moderate change with an additional 694 residents living in the precinct by 2036, representing an 8 per cent increase. The majority of this change is forecast to be in the north, in the vicinity of Hay Street and Canterbury Road, along with a level of distributed change across the area south of Box Hill Private Golf Course. Gardiners Creek Reserve is the key regional open space in Box Hill South and is popular for walking and cycling, providing good north-south connectivity. Eley Road Reserve is a linked network of open space that connects to Gardiners Creek Reserve in the south-eastern area of the precinct. Other key open spaces include Artists Park and Wembley Park in the north. There are significant gap areas in open space provision in Box Hill South including in the north-west and east. A new Small Local open space is recommended in the north-west gap area along with an expansion to Chaucer Street Park. To the east, improving access along the Gardiners Creek trail as part of any future redevelopment in the industrial precinct, and major upgrades and expansion to Eley Road Reserve and Penrose Cornfield Reserve, will improve accessibility, character and use, particularly in the context of forecast change. The private Box Hill Golf Club is located across a large section of KooyongKoot / Gardiners Creek north-east of Station Street. While this contributes an unbuilt natural character to the area, the Strategy recommends that if this land use changes in the future, there is an opportunity to secure a linked public open space corridor along KooyongKoot / Gardiners Creek as part of that change.

Quality and design

KooyongKoot / Gardiners Creek significantly contributes to the landscape character and nature conservation values of Box Hill South. Artists Park celebrates the Heidelberg School of artists who painted the native bushland character of Australia and the Strategy recommends improving the connection to KooyongKoot / Gardiners Creek to strengthen these values. Major upgrades are proposed along KooyongKoot / Gardiners Creek with a focus on increasing the diversity and quality of local facilities within the reserves in the south. In the north, the priority is to resolve and improve the shared path and local linkages into the KooyongKoot / Gardiners Creek corridor. Major upgrades and

expansions are proposed to Eley Road Reserve and the Penrose Cornfield Reserve. In the north-west, an expansion to the Chaucer Street Park will include a more diverse range of facilities to complement the recently established play facility. The elevated views from this reserve provide a point of difference from the other open spaces in Box Hill South, along with the more exotic landscape character away from the KooyongKoot / Gardiners Creek catchment.

7.7.7 Action Plan Box Hill South

A Additional public open space

No.	Action	Respons- ibility	Priority
7.7A-1	New Small Local open space in Gap Area BHS1 (south of Canterbury Rd, east of Elgar Rd) Provide new Small Local open space to primarily meet the needs of the existing community.	WCC	Very High
7.7A-2	New Small Local open space in Gap Area BHS2 (south of Canterbury Rd, east of Station St) Provide new Small Local open space to primarily meet the needs of the existing community.	WCC	High
7.7A-3	Artists Park expansion for Gap Area BHS2 Major upgrade including to investigate opportunities to widen the southern entry and improve connectivity to the Gardiners Creek Trail and potentially improve access to it from the western boundary, along with overall improvements to the connectivity and use of the reserve. Refer also to Action 7.7B-1	WCC	High
7.7A-4	Chaucer Street Park expansion for Gap Area BHS1 Investigate options to expand the size of this open space to allow for a greater diversity of activities, including larger grassed area. Refer also to Action 7.7B-2.	WCC	High
7.7A-5	Eley Road Reserve expansion for Gap Area BHS5 Undertake major upgrade to cater primarily for forecast growth in Burwood and Box Hill South. Increase the diversity of facilities, identify opportunities to expand to include additional entry points into the reserve to the north-east and improve the nature conservation values. Refer to Action 7.7B-4	WCC	Medium
7.7A-6	Gardiners Creek Reserve expansion in Gap Area BHS4 Major upgrade to the Neighbourhood level facilities including investigating options to expand entry points or provide additional entry points to improve passive surveillance and the contribution of this reserve to the landscape character and greening of the area. Refer to Action 7.7B-5.	WCC	High
7.7A-7	Penrose Cornfield Reserve expansion in Gap Area BHS5 Major upgrade to improve character and diversity of facilities and investigate options to expand its size for the existing and forecast population. Refer also to Action 7.7B-8.	WCC	Low

No.	Action	Responsibility	Priority
7.7A-8	Future redevelopment of industrial land in Gap Area BHS3 In future redevelopment of industrial land, provide a continuous open space corridor to each side of KooyongKoot / Gardiners Creek and achieve public road frontage to Gardiners Creek to improve passive surveillance and access. This land will comprise the minimum 30 metre development setback from the waterway drainage/waterway buffer and additional land where appropriate for recreational purposes in addition to the minimum 30 metre setback. Improve accessibility between industrial sites and the Trail.	WCC MWC Developer	Medium
7.7A-9	Future redevelopment of former Hays International College site south of Canterbury Road, east of Hay Street As part of the future redevelopment of this site, ensure an activated interface is achieved between the development and KooyongKoot / Gardiners Creek to provide excellent passive surveillance and public access directly adjoining the existing open space corridor.	WCC Developer	Very High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.7B-1	Artists Park Major upgrade including to investigate opportunities to widen the southern entry and improve connectivity to the Gardiners Creek Trail and potentially improve access to it from the western boundary, along with overall improvements to the connectivity and use of the reserve.	WCC	High
7.7B-2	Boardman Close Reserve Continue to maintain and improve signage to highlight linear path link between Eley Road Reserve, Boardman Close Reserve and Gardiners Creek Reserve.	WCC	Ongoing
7.7B-3	Chaucer Street Park Investigate options to expand the size of this open space to allow for a greater diversity of activities, including larger grassed area. <i>Additional information/Rationale:</i> <i>This is a recently established new Small Local open space however to increase its diversity of facilities it needs to be expanded in size. The elevated location of this open space affords long views and is a key feature of the existing and future expanded open space.</i>	WCC	High

No.	Action	Respons- ibility	Priority
7.7B-4	Eley Road Reserve Undertake major upgrade to cater primarily for forecast growth in Burwood and Box Hill South. Increase the diversity of facilities, identify opportunities to expand to include additional entry points into the reserve to the north-east and improve the nature conservation values. Refer also to Action 7.7A-5 for additional entry points. <i>Additional information/Rational</i> <i>Prepare a Landscape Concept plan to guide a major upgrade to provide a broad range of facilities. A key feature of this open space is the excellent passive surveillance from Eley Road.</i>	WCC	Medium
7.7B-5	Gardiners Creek Reserve Major upgrade to the Neighbourhood level facilities including investigating options to expand entry points or provide additional entry points to improve passive surveillance and the contribution of this reserve to the landscape character and greening of the area. Refer also to Action 7.7A-6 for expansion to entry points. <i>Additional information/Rationale:</i> <i>Prepare a Landscape Masterplan to guide the major upgrade of the neighbourhood level facilities in this regional open space. A key part of this includes investigating options to improve accessibility into Gardiners Creek Reserve by establishing additional entry points and improving existing ones.</i>	WCC	High
7.7B-6	Gardiners Creek Reserve (North) Major upgrade to improve the path links and increase connections and sightlines into and along the path, and protect and improve the nature conservation values.	WCC	Medium
7.7B-7	John Stubbs Reserve Continue to maintain play space and improve seating area overlooking play area. Rezone as public open space.	WCC	Ongoing
7.7B-8	Penrose Cornfield Reserve Major upgrade to improve character and diversity of facilities and investigate options to expand its size. Refer also to Action 7.7A-7 regarding expansion to size.	WCC	Low
7.7B-9	Skate Park Continue to maintain.	WCC	Ongoing
7.7B-10	Station Street Triangle (North) Remove the PPRZ from this site as currently there is a community facility (Lions Club) on the site and it is not preferred as open space due to the proximity to major arterial roads.	WCC	Medium
7.7B-11	Station Street Triangle (South) Continue to protect the mature tree.	WCC	Ongoing

No.	Action	Responsibility	Priority
7.7B-12	Wembley Park - Part outside the fenced structured sporting facility Undertake a major upgrade of the unstructured recreational facilities. Adjoining future development site to provide a public road and future open space land contribution along the southern boundary to expand the reserve and achieve passive surveillance and connectivity to the KooyongKoot / Gardiners Creek Corridor. <i>Additional information/Rationale:</i> <i>Prepare a Landscape Masterplan to guide a major upgrade of the western area of Wembley Park to provide neighbourhood level unstructured recreation facilities for both the existing and forecast community. Located along Canterbury Road, the open space is highly visible and could complement the Skate Park facilities provided on the east side of KooyongKoot / Gardiners Creek. There is potential for a future shared path connection to Gardiners Creek trail and improve the greening character and interface to KooyongKoot / Gardiners Creek.</i>	WCC	Medium
7.7B-13	Wembley Park - structured sporting facility Continue to maintain.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.7C-1	Eley Road - pedestrian crossing Investigate the potential to install a pedestrian crossing on Eley Road to provide safe pedestrian access to Eley Road Reserve from Gap Area BU5 in Burwood. Refer to Action 7.8C-3.	WCC	High
7.7C-2	Identify opportunities to improve pedestrian permeability in the local street network in Gap Areas BHS1 and BHS2.	WCC	Ongoing

7.8 Burwood

7.8.1 Overview

Burwood is defined to the west by Warrigal Road, the south by Highbury Road, the east by Middleborough Road and to the north by a combination of Riversdale Road, Deakin University, KooyongKoot / Gardiners Creek and Eley Road.

Refer to *Figure 7.8-1* on the following page of the existing open space in Burwood.

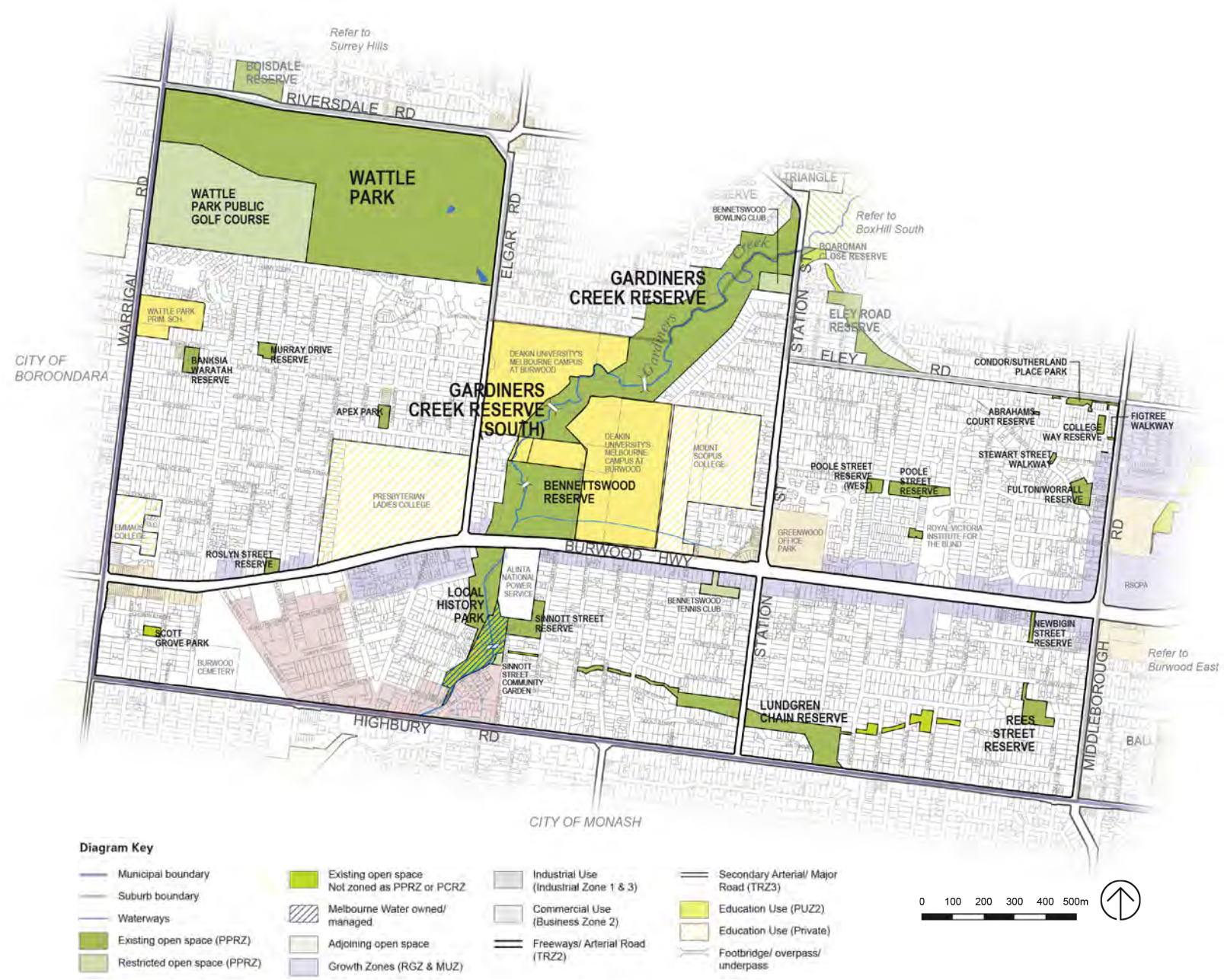


Figure 7.8-1 Existing Open Space Burwood

7.8.2 Existing open space

Overview

Wattle Park and KooyongKoot / Gardiners Creek are the two largest Regional open spaces in Burwood. Wattle Park is managed by Parks Victoria for the regional population and makes a significant contribution to the bushland and green character of Burwood. Wattle Park was originally established in 1917 as a recreational facility in conjunction with the opening of the electric tram route along Riversdale Road by the Melbourne Metropolitan Tramways Board. It remained under their ownership until 1983, when it was transferred to different Victorian Government transport agencies and then to Melbourne Water and now Parks Victoria. Wattle Park contains areas of natural bushland, exotic plantings, sporting facilities including the oval, tennis courts and golf course, two small creeks and the play space.

KooyongKoot / Gardiners Creek flows from the north-western area of Burwood and extends south of Highbury Road into Gardiners Reserve and Malvern East Golf Course in the adjoining municipality. Lundgren Chain is a linear open space that traverses east to west through Burwood south of Burwood Highway, following the valley line of a tributary to KooyongKoot / Gardiners Creek. There are different sized spaces within Lundgren Chain, some of which are larger and accommodate more facilities, while others accommodate the shared trail, seats and vegetation. The landscape character is influenced by the undulating topography, Wattle Park and remnant and planted indigenous vegetation. The undulating topography provides extended views and vistas from street frontages into the open space reserves.

Supplementing these open spaces are a series of Local and Small Local open spaces distributed across the suburb providing open space that is within safe and easy walking distance of residents. Table 7.8a is a list of all the existing open spaces in Burwood in alphabetical order and Table 7.8b is a summary of the total number of open spaces by hierarchy.

Table 7.8a Existing open space in Burwood including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Abrahams Court Reserve	0.04	Local Link	Linking space			
Apex Park	0.26	Local	Passive	Play		
Banksia Waratah Reserve	0.40	Local	Passive	Linking space		
Bennettswood Bowling Club	0.57	Municipal	Restricted sporting/recreation			
Bennettswood Reserve	5.26	Municipal	Sporting	Waterway		
Bennettswood Tennis Club (Closed)	0.51	Municipal	Restricted sporting/recreation	Undeveloped		
College Way Reserve	0.14	Small Local	Significant road reservation			
Condor/Sutherland Place Park	0.25	Local	Linking space	Passive		
Figtree Walkway	0.01	Local Link	Linking space			
Fulton/Worrall Reserve	0.47	Local	Passive	Play		
Gardiners Creek Reserve (South) - Between Station St and Burwood Hwy	14.21	Regional	Waterway	Linear	Nature conservation	Passive
Local History Park (on Gardiners Creek, south of Burwood Hwy, both sides of the creek)	4.06	Regional	Linear	Waterway		

Table 7.8a Existing open space in Burwood including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Lundgren Chain Reserve - Cumming St to Gillard St	4.33	Neighbourhood	Linear	Linking space		
Lundgren Chain Reserve - Finch St to Gracehill Ave		Neighbourhood	Linear	Passive		
Lundgren Chain Reserve - Gillard St to Peacock St		Neighbourhood	Linear	Linking space		
Lundgren Chain Reserve - Gracehill Ave to Sunhill Ave		Neighbourhood	Linear	Linking space		
Lundgren Chain Reserve - Peacock St to Station St		Neighbourhood	Linear	Native character	Passive	
Lundgren Chain Reserve - Sparks Ave to Malvina St		Neighbourhood	Linear	Linking space	Native character	
Lundgren Chain Reserve - Station St to Finch St		Neighbourhood	Linear	Native character	Play	
Lundgren Chain Reserve - Sunhill to Sparks Ave		Neighbourhood	Linear	Play		
Murray Drive Reserve	0.27	Local	Passive	Linking space		
Newbigin Street Reserve	0.13	Small Local	Linking space	Play		
Poole Street Reserve	0.76	Local	Nature conservation	Native character	Passive	Linking space
Poole Street Reserve 2 (west of Clanbrae Avenue)	0.21	Small Local	Nature conservation	Native character		
Rees Street Reserve	0.76	Local	Passive	Native character	Nature conservation	
Roslyn Street Reserve	0.22	Small Local	Significant road reservation	Play		
Scott Grove Park	0.17	Small Local	Play			
Sinnott Street Community Garden (Part of Gardiners Creek Reserve)	0.10	Municipal	Community garden / urban agriculture	Restricted	Waterway	
Sinnott Street Reserve	0.86	Local	Passive	Linking space		
Stewart Street Walkway	0.05	Local Link	Linking space	Nature conservation		
Wattle Park	39.92	Regional	Heritage	Passive	Nature conservation	Sporting
Wattle Park Golf Course	14.79	Regional	Restricted sporting/recreation	Nature conservation		

Table 7.8b Number, hierarchy and size of open space excluding restricted open space in Burwood

No.	Hierarchy	Area (Ha)	%
4	Regional	58.20	84%
1	Municipal	5.36	8%
0	Urban Civic	0.00	0%
1	Neighbourhood	4.33	6%
7	Local	3.26	1%
5	Small Local	0.87	1%
3	Local Link	0.11	0%
21	TOTAL	72.13	100%

Quantity

The total quantity of open space in Burwood, excluding restricted open space, represents approximately 14 percent of the total land area. When adding restricted open space, the total quantity of open space represents 17.4 percent of the total land area. This is above the municipal-wide average of 9.6 per cent excluding restricted open space and the 11.3 per cent including restricted open space.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Burwood with the exception of Urban Civic. There is an opportunity for Urban Civic open space to be provided in the longer term associated with the future Burwood Suburban Rail Loop Station. Alternatively, it may also be provided as part of the future increased urban densities along Burwood Highway. Refer to Figure 7.8-2 for the Hierarchy of existing open space in Burwood.

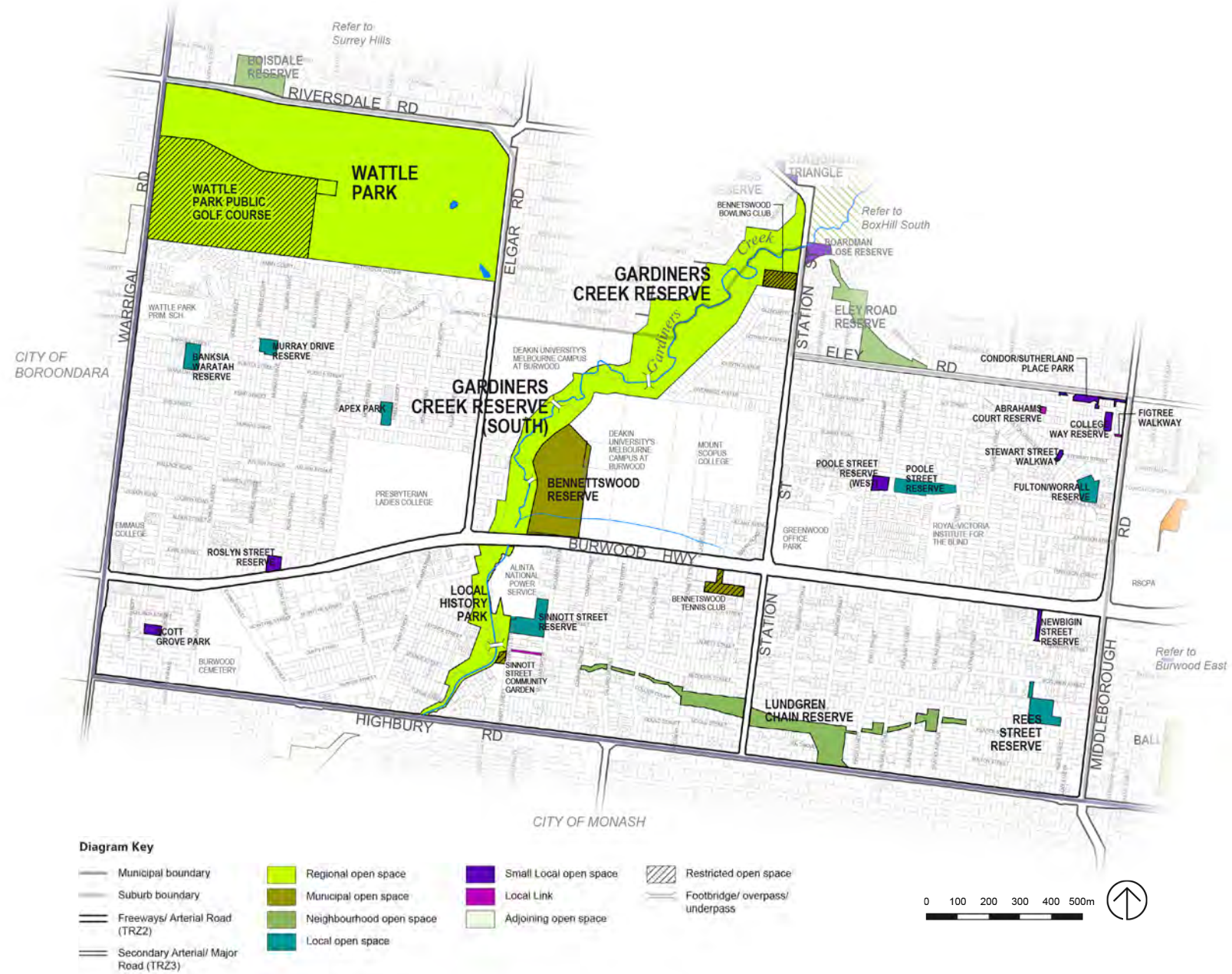


Figure 7.8-2 Open Space Hierarchy Burwood

Open space distribution and future open space needs in Burwood

Burwood Highway is a key east-west arterial road through Burwood and forms a major physical barrier to safe and easy walking access to open space within the precinct. Elgar Road and Station Street are north-south secondary arterials that also form barriers to safe and easy walking access to open space. The other barriers include KooyongKoot / Gardiners Creek and Burwood Cemetery.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.8-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Burwood and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.8c Brief description of gap areas in Burwood

Gap area	Description
BU1	Located south of Wattle Park Public Golf Course and extends over the Cameron Close Retirement Village. No specific recommendations are made for this area given it is in private ownership.
BU2	Located south of Wattle Park, the urban layout restricts access into Wattle Park from the residential area due to rear boundary lots directly adjoining Wattle Park. Any future redevelopment is recommended to incorporate access points into Wattle Park to address this gap area.
BU3	Located north of Burwood Highway and extending north to Donald Road / Alwyn Avenue and east to Parer Street. Roslyn Street Reserve is the only open space located in this gap area, and it has a major frontage to Burwood Highway, which impacts on its character and useability because of the high volumes of traffic. The configuration of this open space means it is only easily accessible from the eastern side. There is potential to investigate different options for establishing a new Local open space in a more accessible location within the local access street network in this gap area.
BU4	Located north of Burwood Highway and west of Station Street, this gap area extends over Mount Scopus College and residential properties. The community cannot reach any public open space without crossing or walking on arterial roads. Mount Scopus College grounds are not accessible to the public for informal unstructured recreational use. As identified in the 2007 Strategy, this gap area requires a new Small Local open space, which will ideally be co-located in the local retail centre in the vicinity of Barry Road and Delaney Avenue, with excellent sunlight access, urban greening and protected from traffic noise and movement on adjoining arterial roads
BU5	Located east of Station Street and south of Eley Road, this residential area has no open space within safe and easy walking distance without crossing a major road. Eley Road Reserve is located north of this gap area and will be more accessible with the provision of a signalised pedestrian crossing over Eley Road.

Gap area	Description
BU6	Located immediately north of Burwood Highway and west of Middleborough Road, this gap area can be addressed with reconfiguration of the existing road layout to expand an existing traffic island to convert it to a new Small Local open space. This will complement the ancillary private open space associated with the Burwood Community Presbyterian Church on Tennyson Street.
BU7	Located between Burwood Cemetery and Cromwell Street, this gap area extends over both an existing industrial and manufacturing precinct and the residential precinct. It is anticipated that this area will change in the future with the Suburban Rail Loop Project and the new Burwood Train Station. The Strategy has identified the long term need for a new Neighbourhood open space in this gap area to primarily address the open space needs of the forecast population.
BU8	Located east of Station Street and south of Burwood Highway, this gap area is associated with a series of north-south residential streets with block lengths of approximately 400 metres resulting in poor pedestrian permeability. A new Small Local open space is recommended to address this gap area and improve east-west connectivity as part of its future configuration.

7.8.3 Ancillary open space

Within Burwood, school and university grounds contribute to the sense of space and greening. The Burwood Cemetery has mature trees along its boundary which contribute to landscape character, however the cemetery itself forms a distinct east-west barrier within the precinct due to lack of public entry points, and defined and clear east-west pedestrian paths through the site.

The pattern of subdivision layout is quite disjointed meaning there is not good permeability through the local street network in some parts of Burwood. This is particularly noticeable in the area bounded by Station Street, Middleborough Road, Burwood Highway and Eley Road. In other parts of the Burwood, the local street network provides good connectivity between open spaces.

This Strategy identifies opportunities to improve pedestrian connectivity, by investigating options to increase permeability and access points into existing open space reserves, for example, into Lundgren Chain. The proposed new open spaces also provide opportunities to improve accessibility by providing links between the local access streets with long block lengths (greater than approximately 250 metres).

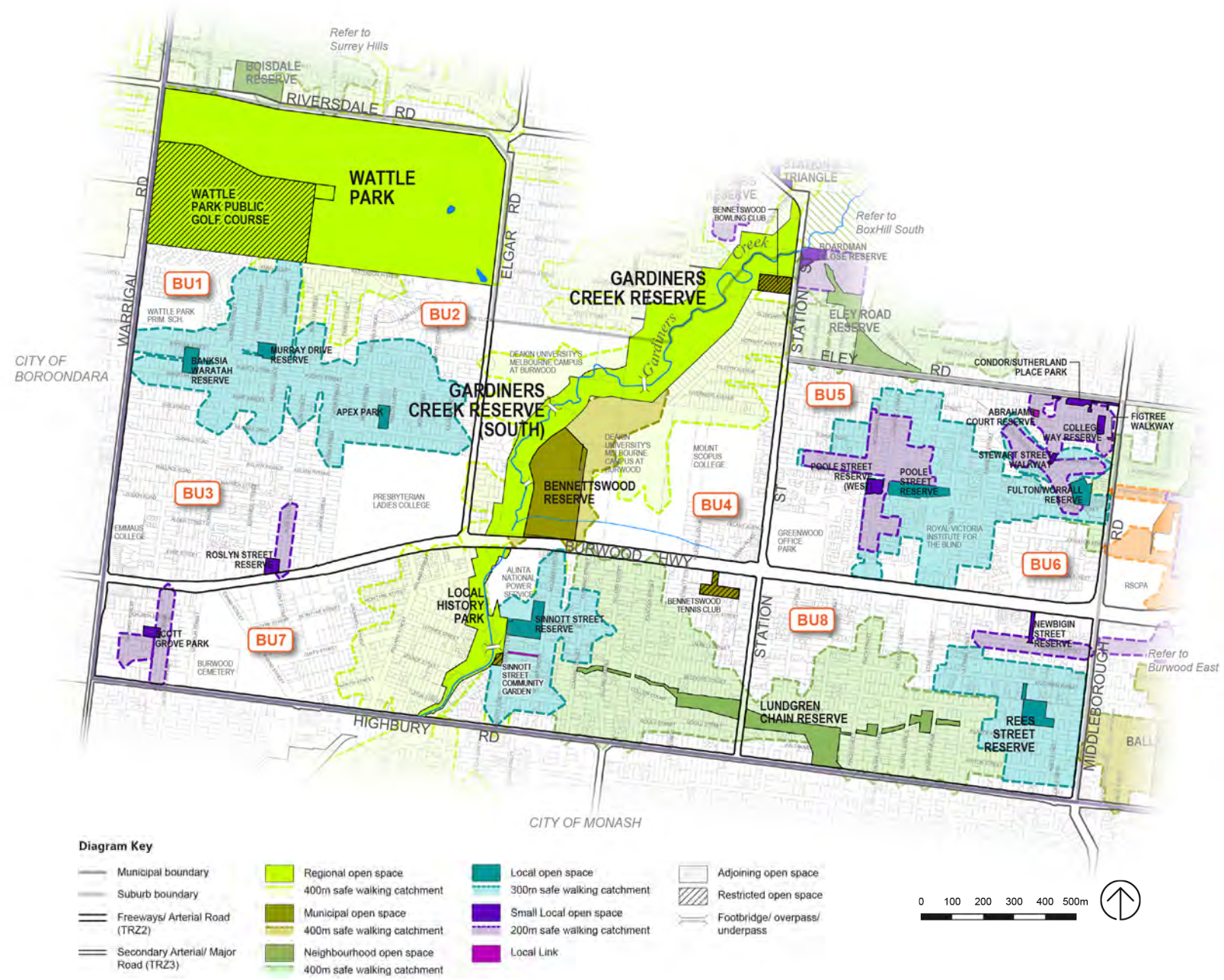


Figure 7.8-3 Gap Analysis Burwood

7.8.4 Existing Burwood community

Demographics

There are 12,543 residents living in Burwood as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 2,461 people living in Burwood, which represents approximately a 24 percent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the tertiary education and the young work force age groups (18 to 34 years) and a lower proportion of families with school age children. The proportion of people over 70 years of age is similar to the municipal average. With Deakin University located in Burwood, it is logical that there is a greater proportion of people in the 18 to 34 year age group.

A higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006, approximately 72 percent lived in separate houses and there were no high-density dwellings. In 2021, approximately 52 percent lived in separate houses, 34 percent in medium density housing and 15 percent in high-density dwellings.

The residential population is forecast to increase 18 percent, with the continued trend of a decrease in children under the age of 11, and an increase in the 35 to 69 age range.

Summary of community engagement outcomes

A total of 109 open space surveys were received from Burwood, which represents 5 percent of the total surveys received.

Overall, the survey respondents in Burwood value 'trees' and 'connecting with nature', which is similar to the overall municipal-wide results. The use of non-sporting parks and reserves and waterways is higher than the use of local streets for exercise compared to the municipal average and other precincts. The respondents value vegetation for its role in supporting wildlife and biodiversity. Burwood has the highest request for additional infrastructure to support social gatherings compared to other precincts.

Values of open space (top five)

- 64% Trees
- 55% Connecting with nature
- 52% Walking and cycling
- 51% Native birds and wildlife
- 48% A place to relax and unwind

Types of open space used and frequency of use (top five)

- 82% Large parks and reserves (non-sporting)
- 78% Waterway reserves
- 72% Local streets for exercise
- 63% Small local parks

- 58% Medium parks

Frequently visited types of open spaces (top five)

- 63% Local streets for exercise
- 50% Waterway reserves
- 45% Small local parks
- 41% Large parks and reserves (non-sporting)
- 33% Neighborhood parks

Priority of facilities and amenities in open spaces (top five)

- 62% Seats
- 54% Walking paths
- 50% Additional greening for environmental health & wellbeing
- 50% Trees
- 45% Picnic tables and seats

(Note that 26% Play space was listed twelfth)

Table 7.8d Most frequently visited open space in Burwood

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
37	KooyongKoot / Gardiners Creek (incl. Local History Park)	• Walking (15) • Dog walking (9) • Enjoy nature (8) • Relaxing (3) • Cycling (2) • Open space (2) • Play - children (2) • Running (2)	• Lighting - additional required (2) • Toilets - additional required (2)
21	Lundgren Chain Reserve	• Dog walking (6) • Enjoy nature (3) • Walking (3) • Active recreation (2) • Play - children (2) • Social - meeting family / friends / parties (2) • Spending time outdoors (2)	• Bins - additional required (3) • Dogs - owners to be responsible for waste (2) • Dogs - additional waste bag stations required (2)
21	Wattle Park	• Dog walking (5) • Play - children (3) • Walking (3) • Enjoy nature (2)	• Rubbish - remove litter (2)
6	Eley Road Reserve	• Play – children (2) • Walking (2)	
6	Fulton-Worrall Reserve	• Play - children (2) • Walking (2)	

No	Name	Reasons to visit	Suggested improvements
Open space beyond walking distance (top five)			
20	KooyongKoot / Gardiners Creek	• Dog walking (5) • Walking (4) • Enjoy nature (3) • Play – children (3) • Running (3)	• Carpark - additional required (2)
11	Wattle Park	• Walking (4) • Enjoy nature (3) • Play – children (3) • Dog walking (2) • Running (2)	• Carpark - additional required (2)
6	Box Hill Gardens	• Play - children (4) • Active recreation (2)	• Play space - valued (2)
5	Surrey Park	• Aqualink (2)	
4	Blackburn Lake Sanctuary	• Enjoy nature (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Critical to have open space (3)
- Valued (2)
- Well provisioned - open space (2)

Maintenance and management

- Dogs (5)
 - Fenced dog off-lead areas required (3)
 - No dog off-lead areas (2)
- Cyclists (2)
 - Concern about cyclist speed on paths (2)

Trees and Vegetation

- Vegetation (4)
 - Increase planting for wildlife/biodiversity (3)

Park Infrastructure

- Active facilities - additional required (6)
 - Skate Park (2)
 - Basketball/netball courts (2)
- Social infrastructure - additional required (6)
 - Community gardens (2)
 - Cafe/food truck new picnic areas (2)
 - Age friendly open space including teenagers (2)
- Park infrastructure - additional required (5)
 - Bins (3)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.8.5 Analysis of future change and open space needs

Forecast population change

The Burwood Precinct is currently forecast to reach a residential population of 14,863 by 2036, representing an additional 2,320 people, or an 18 percent increase compared to the 2021 population. These forecasts have not included consideration of the future construction of the Suburban Rail Loop (SRL) and the new train station to be located just south of Burwood Highway adjacent to KooyongKoot / Gardiners Creek. Based on the trends elsewhere and the business case for the SRL, it is anticipated the urban densities will increase in proximity to the future station. This longer-term increase will be considered in the context of the more immediate recommendations for this precinct based on the population forecasts provided.

The table below includes the forecast population growth for the residential and worker populations through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.8e Population forecasts for Burwood 2021 - 2036

Burwood	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	12,543	14,598	14,676	14,863	+2,320

Source: *.id Forecast Whitehorse Community Profile*, accessed 10/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 2,320 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults and decrease in the proportion of children under 11 years of age means there is a need to increase the range of facilities in open space in addition to play facilities. It is noted that the majority of existing open spaces in Burwood predominantly cater to young children with play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.8.6 Burwood Precinct Recommendations

Summary of overall intent

Provision and distribution

Wattle Park, KooyongKoot / Gardiners Creek, Bennettswood Reserve and Lundgren Chain Reserve are key areas of open space in Burwood. Burwood Highway runs east-west through the precinct and creates a distinct barrier to open space access. An additional 2,320 residents are forecast to be living in Burwood by 2036, which represents an 18 percent increase. The forecast change is mainly anticipated along the north and south sides of Burwood Highway and along Middleborough Road, where high density development is anticipated to continue. The Victorian Government recently confirmed the location of the future Suburban Rail Loop station in Burwood on the east side of KooyongKoot / Gardiners Creek, on the Alinta National Power Service site and Sinnott Street Reserve. The population forecasts noted above do not factor in the new station which is forecast to open by 2035. With the forecast change the existing gaps in open space in Burwood will be exacerbated, particularly between the Burwood Cemetery and KooyongKoot / Gardiners Creek, south of Burwood Highway. This Strategy has identified the need for new Local and Small Local open spaces over the next 15 years, and in the longer term, a new Neighbourhood open space may be required. The closed Bennettswood Tennis Club site and Roslyn Street Reserve are two existing open spaces in Burwood that are identified to be investigated for alternative configuration and use.

Quality and design

Gardiners Creek Reserve, Wattle Park and Lundgren Chain Reserve all significantly contribute to the predominantly native and natural open space character of Burwood. Major upgrades are proposed to the facilities in Gardiners Creek Reserve, Lundgren Chain Reserve and the smaller Rees Street Reserve and Murray Drive Reserve to better cater for forecast growth. The new open space reserves will provide an opportunity to introduce some diversity in character and facilities to primarily meet the open space needs of the forecast population living and working in higher density environments with less private open space.

7.8.7 Action Plan

A Additional public open space

No.	Action	Responsibility	Priority
7.8A-1	New Local open space in Gap Area BU3 New Local open space to address the gap area and potentially replace Roslyn Street Reserve, which has limited value and role in the open space network. <i>Additional information/ rationale:</i> <i>This gap area will see forecast growth particularly along Burwood Highway and Warrigal Road. Roslyn Street Reserve is the only existing open space and encumbered by traffic noise and movement from Burwood Highway, along with the steep grade change across the site. Therefore, it is recommended that a new Local open space is established in the local street network that has excellent visual and physical access to it and is not encumbered by traffic noise and movement. Only once a future site is secured would it be appropriate to investigate disposal of Roslyn Street Reserve to partially fund the establishment of a new Local open space.</i>	WCC DOT	Medium
7.8A-2	Expand traffic treatment to establish new Small Local open space in Gap Area BU6 Investigate the potential to reconfigure the existing road layout at the corner of Tennyson and Greenwood Streets to create a new Small Local open space for the existing and forecast community, given the close proximity of this to recent high density development along Burwood Highway.	WCC	High
7.8A-3	New Small Local open space in Gap Area BU8 New Small Local open space for the existing and forecast population in higher density development along Burwood Highway.	WCC	High
7.8A-4	New Local Link to complete Lundgren Chain Reserve Investigate options to establish a new linear open space reserve link to KooyongKoot / Gardiners Creek. <i>Additional information/rationale:</i> <i>This is primarily to continue the linear east-west link via Lundgren Chain Reserve through to KooyongKoot / Gardiners Creek. .</i>	WCC	High
7.8A-5	Long Term opportunity for new Neighbourhood open space south of Burwood Highway, between Burwood Cemetery and Ireland Street in Gap Area BU7 Investigate provision of new Neighbourhood open space in the longer term to address in part the existing gap area but more in order to address the forecast higher density development in anticipation of the proposed substantial change associated with the new station as part of the Suburban Rail Loop project. <i>Additional information/rationale:</i> <i>The cost for this project is not included in this Strategy as it is anticipated to be provided once forecast densities increase in this area following the opening of the proposed Burwood Station as part of the SRL Project by the Victorian Government. Timing for the station is 2035.</i>	WCC DOT	Ongoing

No.	Action	Respons- ibility	Priority
7.8A-6	Bennettswood Tennis Club (closed) Investigate two options for this reserve. The first is to expand its size and increase physical and visual access from the south and west into the site. The second is to dispose of this open space and provide a new Local open space in a more accessible location. <i>Additional information/rationale</i> <i>The reason for seeking improved access from the south and west is that this site has only a single narrow frontage to Burwood Highway and then surrounded by rear boundary fence lines. This does not meet the preferred criteria for new open space, which is to have public roads/laneways to at least two boundaries of the open space to ensure good physical and visual access to open space. This may not be feasible, in which case an alternative location should be investigated, and if this is identified. There is a need for open space in this location given increased urban densities are proposed along Burwood Highway in proximity to the Bennettswood Tennis Club and there is no existing open space within a safe and easy walk of the community living south of Burwood Highway and west of Station Street.</i>	WCC	Very High
7.8A-7	Lundgren Chain Reserve expansion - Peacock Street to Station Street Investigate options to expand the open space to the north to increase visual and physical access into the reserve. Refer also to Action 7.8B-17. <i>Additional information/rationale:</i> <i>This is the largest area of open space in this part of Burwood, particularly in the context of the loss of Sinnott Street Reserve. While a new Local Open Space will be provided in the north, there is an opportunity to improve the visual and physical access to this open space so it makes a greater contribution to the open space needs of the existing and forecast population.</i>	WCC	Medium
7.8A-8	Local History Park expansion - east side of KooyongKoot / Gardiners Creek, south of Sinnott Street Community Gardens If adjoining privately owned land redevelops, investigate opportunities to expand the linear open space reserve south to Highbury Road.	WCC (MWC) (TO)	Ongoing

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.8B-1	Abrahams Court Reserve Continue to maintain.	WCC	Ongoing
7.8B-2	Apex Park Continue to maintain recently upgraded play area and add seating to enjoy the views.	WCC	Ongoing
7.8B-3	Banksia Waratah Reserve Minor upgrade to add picnic facilities to complement the play space.	WCC	Medium
7.8B-4	Bennettswood Bowling Club Continue to maintain this use.	WCC	Ongoing
7.8B-5	Bennettswood Reserve Prepare masterplan to guide improvements in partnership with Deakin.	WCC	Very High
7.8B-6	Bennettswood Tennis Club (Closed) Refer to Action 7.8A-1.	Refer to 7.8A-1	Refer to 7.8A-1
7.8B-7	College Way Reserve Continue to maintain.	WCC	Ongoing
7.8B-8	Condor/Sutherland Place Park Minor upgrade to the improve the function of the open grassed area and the open space. <i>Additional information/rationale: Upgrade to also increase the diversity of use and improve sense of protection from vehicle movement on Eley Road while maintaining excellent visual and physical access.</i>	WCC	Low
7.8B-9	Figtree Walkway Continue to maintain.	WCC	Ongoing
7.8B-10	Fulton/Worrall Reserve Continue to maintain in the short term. In the medium term, minor upgrade to include picnic facilities and other features that encourage fitness and exercise for a broader age range.	WCC	Medium
7.8B-11	Gardiners Creek Reserve (South) - between Station Street and Burwood Highway Implement the outcomes of the existing Masterplan being prepared for this reserve in consultation with all agencies and Traditional Owners.	WCC (MWC) (TO)	High
7.8B-12	Local History Park (on Gardiners Creek south of Burwood Highway and both sides of creek) Review and update the existing Masterplan to address future change brought about by the proposed new Burwood station, incl. the use of urban agriculture.	WCC (MWC) (TO)	High

No.	Action	Responsibility	Priority
7.8B-13	Lundgren Chain Reserve - Cumming Street to Peacock Street Continue to maintain.	WCC	Ongoing
7.8B-14	Lundgren Chain Reserve - Finch Street to Gracehill Avenue Continue to maintain with additional seats and overstorey trees.	WCC	Ongoing
7.8B-15	Lundgren Chain Reserve - Gillard Street to Peacock Street Continue to maintain.	WCC	Ongoing
7.8B-16	Lundgren Chain Reserve - Gracehill to Sunhill Avenue Continue to maintain.	WCC	Ongoing
7.8B-17	Lundgren Chain Reserve - Peacock Street to Station Street Improve the quality of the open space with major upgrade to improve the sense of place, character and diversity of unstructured recreation and informal facilities. Refer to expansion to the reserve size in Action 7.8A-5.	WCC	Medium
7.8B-18	Lundgren Chain Reserve - Sparks Avenue to Malvina Street Continue to maintain.	WCC	Ongoing
7.8B-19	Lundgren Chain Reserve - Station Street to Finch Street Minor upgrade to increase the diversity of facilities including picnic area adjacent to play facility.	WCC	Ongoing
7.8B-20	Lundgren Chain Reserve - Sunhill to Sparks Avenue Continue to maintain with additional seats and overstorey trees. In the longer term, review the need for the play facility given the proposed upgrades to the play space in Rees Reserve.	WCC	Ongoing
7.8B-21	Lundgren Chain Reserve temporary expansion by DOTP - Cumming Street to Peacock Street Continue to liaise with DOTP regarding the potential expansion to this section of Lundgren Chain Reserve as part of the Suburban Rail Loop Project.	WCC DOTP	High
7.8B-22	Murray Drive Reserve Major upgrade to remove play and develop as a park that appeals to diverse age groups including a focus on fitness for adults, given the nearby Banksia Waratah Reserve has play facilities.	WCC	Low
7.8B-23	Newbigin Street Reserve Minor upgrade to improve path link and additional trees. In the longer term do not replace the play space. This is due to the small size of the linking space and proposed improvement to the nearby Rees Street Reserve.	WCC	Low
7.8B-24	Poole Street Reserve Continue to maintain.	WCC	Ongoing
7.8B-25	Rees Street Reserve Undertake major upgrade to provide a range of facilities in the open space including review of the Scout Hall. <i>Additional information/rationale:</i> <i>Protect the remnant indigenous trees including opportunities to improve the nature conservation values while ensuring that open sightlines and safety is maintained in the reserve.</i>	WCC	Medium

No.	Action	Responsibility	Priority
7.8B-26	Roslyn Street Reserve Continue to maintain in the short to medium term. Refer to Action 7.8A-3 regarding long term future options for this reserve.	WCC	Ongoing
7.8B-27	Sinnott Street Community Garden Continue to maintain this existing use.	WCC	Ongoing
7.8B-28	Sinnott Street Reserve This reserve has been acquired by the Victorian Government as part of the SRL Project. Council will continue to advocate for a new Local open space to be provided as a replacement.	WCC DOTP	Very High
7.8B-29	Stewart Street Walkway Continue to maintain.	WCC	Ongoing
7.8B-30	Wattle Park Council to continue to advocate to the Parks Victoria on behalf of the local community to maintain and where possible improve community access to Wattle Park, including the upgraded regional play facility and informal recreational use of the oval.	PV WCC	Ongoing
7.8B-31	Wattle Park Golf Course WCC to continue to liaise with Parks Victoria as required regarding the ongoing use of this reserve.	PV WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.8C-1	Future redevelopment of sites south of Wattle Park within Gap Area BU2 Investigate opportunities to redesign the interface to Wattle Park to provide public access into the park and address the existing gap area.	WCC	Ongoing
7.8C-2	Investigate improvements to the Bennettswood retail precinct to address Gap Area BU4 Improve the public realm associated with the retail precinct in and around Barry Road / Delaney Avenue west of Station Street and North of Burwood Highway. This is to provide local meeting place and improved urban greening given the lack of public open space in the small residential precinct.	WCC	Medium
7.8C-3	Investigate pedestrian crossing over Eley Road to address Gap Area BU5 Investigate potential to install a signalised pedestrian crossing over Eley Road in proximity to McGowans Lane to improve safe pedestrian access to Eley Road Reserve in the north for residents living in an open space gap area to the south.	WCC	High

7.9 Burwood East

7.9.1 Overview

Eley Road and Hawthorn Road define the northern boundary of Burwood East, while Highbury Road defines the southern boundary. Middleborough Road defines the west and a combination of Springvale Road and Mahoneys Road define the east.

Refer to *Figure 7.9-1* on the following page of the existing open space in Burwood East.



Figure 7.9-1 Existing Open Space Burwood East

7.9.2 Existing open space

Overview

The Melbourne Water Pipe Track Reserve provides an off road shared trail north-south linear connectivity through the precinct and into the City of Monash to the south. East Burwood Reserve is the largest Municipal open space in Burwood East containing a range of structured sporting facilities including athletics facility and velodrome. Highbury Park provides a combination of structured sporting, unstructured recreation and native bushland, which in combination represent the distinct characters of the open space network in the City of Whitehorse. It is a great example of an open space that makes a valuable contribution to the community, and the community survey results identified this as the most visited open space in Burwood East. Ballyshannassy Park is the other Municipal open space in the western part of the precinct with the potential for improvement to increase the unstructured recreational use of this reserve in the future to complement the structured sporting use.

Village Green is a new Neighbourhood open space recently established in the Burwood Brickworks site, providing picnic and barbecue facilities overlooking the open space with longer expansive views to the north. This adjoins Burwood Brickworks Plaza located in the commercial precinct and high density residential setting and is the precinct's Urban Civic open space.

Holland Gully is a linear open space along a former tributary to KooyongKoot / Gardiners Creek, providing east-west open space connectivity in the north of this precinct, and a direct link to Eley Park on the north side of Eley Road in Blackburn South. There is a great opportunity to provide a signalised pedestrian crossing to encourage access between these two open spaces and precincts.

Supplementing the key open spaces is a series of Local and Small Local open spaces distributed across the precinct, and this provides a diversity of spaces and character types within a safe and easy walk of the community. Table 7.9a is a list of all the existing open spaces in Burwood East in alphabetical order and Table 7.9b is a summary of the total number of open spaces by hierarchy.

Table 7.9a Existing open space in Burwood East including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Auburn Walk	0.07	Small Local	Linking space	Passive		
Ballyshannassy Park	3.58	Municipal	Sporting	Native character	Viewing	
Benwerrin Reserve	0.84	Local	Linking space	Native character	Passive	Service easement
Burwood Brickworks Plaza	0.44	Urban Civic	Events	Linking space	Viewing	Passive
Cam Street Reserve	0.02	Local Link	Linking space	Nature conservation		
Cloverdale Close Reserve	0.34	Local	Native character	Linking space	Passive	Viewing
Donaldson Reserve	0.14	Small Local	Passive	Linking space	Native character	Nature conservation
East Burwood Reserve	16.06	Municipal	Sporting	Restricted sporting / recreation	Events	Passive
Eley Road Retarding Basin (Melbourne Water, fenced)	2.36	Municipal	Restricted service easement	Service easement	Native character	
Feathertop Chase Reserve	0.35	Local	Service easement	Linking space	Native character	
Highbury Park	3.96	Municipal	Passive	Linking space	Native character	Nature conservation

Table 7.9a Existing open space in Burwood East including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Holland Gully	3.38	Neighbourhood	Linear	Linking space	Native character	Service easement
Hotham Retreat Reserve	0.03	Local Link	Local Link	Service easement		
Keats Street Reserve	0.46	Local	Native character	Play		
Lawrence Reserve	0.21	Small Local	Native character	Undeveloped		
Lincoln Street Reserve	0.20	Small Local	Native character	Linking space	Play	
Mudgee Flat	0.12	Small Local	Play	Linking space	Native character	Nature conservation
Narmara Street Reserve	0.07	Local Link	Native character	Linking space		
Northcote Circuit Reserve	0.07	Local Link	Linking space	N/A		
Pickford Paddock North	0.29	Local	Linking space	Nature conservation		
Pickford Paddock South	0.10	Small Local	Nature conservation	Undeveloped		
Pipe Track Reserve (Melbourne Water)	3.00	Regional	Service easement	Linear	Viewing	
Ramsey Street Reserve	0.08	Small Local	Undeveloped	Native character		
Reedwood Avenue Reserve	0.15	Small Local	Linking space	n/a		
Robinson Retarding Basin	0.54	Local	Service easement	Undeveloped		
Tainton Road Reserve	0.06	Small Local	Linking space	Passive		
Travers Track Reserve	0.24	Small Local	Play	Linking space	Native character	Viewing
Village Green Reserve	1.25	Neighbourhood	Passive	Views	Linking space	
Witchwood Gully	0.53	Local	Passive	Linking space	Native character	Service easement

Table 7.9b Number, hierarchy and size of open space excluding restricted open space in Burwood East

No.	Hierarchy	Area (Ha)	%
1	Regional	3.00	8%
3	Municipal	23.60	65%
1	Urban Civic	0.44	1%
2	Neighbourhood	4.63	13%
7	Local	3.36	9%
10	Small Local	1.37	4%
4	Local Link	0.18	0%
28	TOTAL	36.58	100%

Quantity

The total quantity of open space in Burwood East, excluding restricted open space, represents 8.3 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 8.8 per cent of the total land area. This is below the municipal-wide average of 9.6 per cent excluding restricted open space and the 11.3 per cent including restricted open space.

Hierarchy

All of the existing hierarchy types of open space are currently provided in Burwood East. Refer to Figure 7.9-2 for the Hierarchy of existing open space in Burwood East.

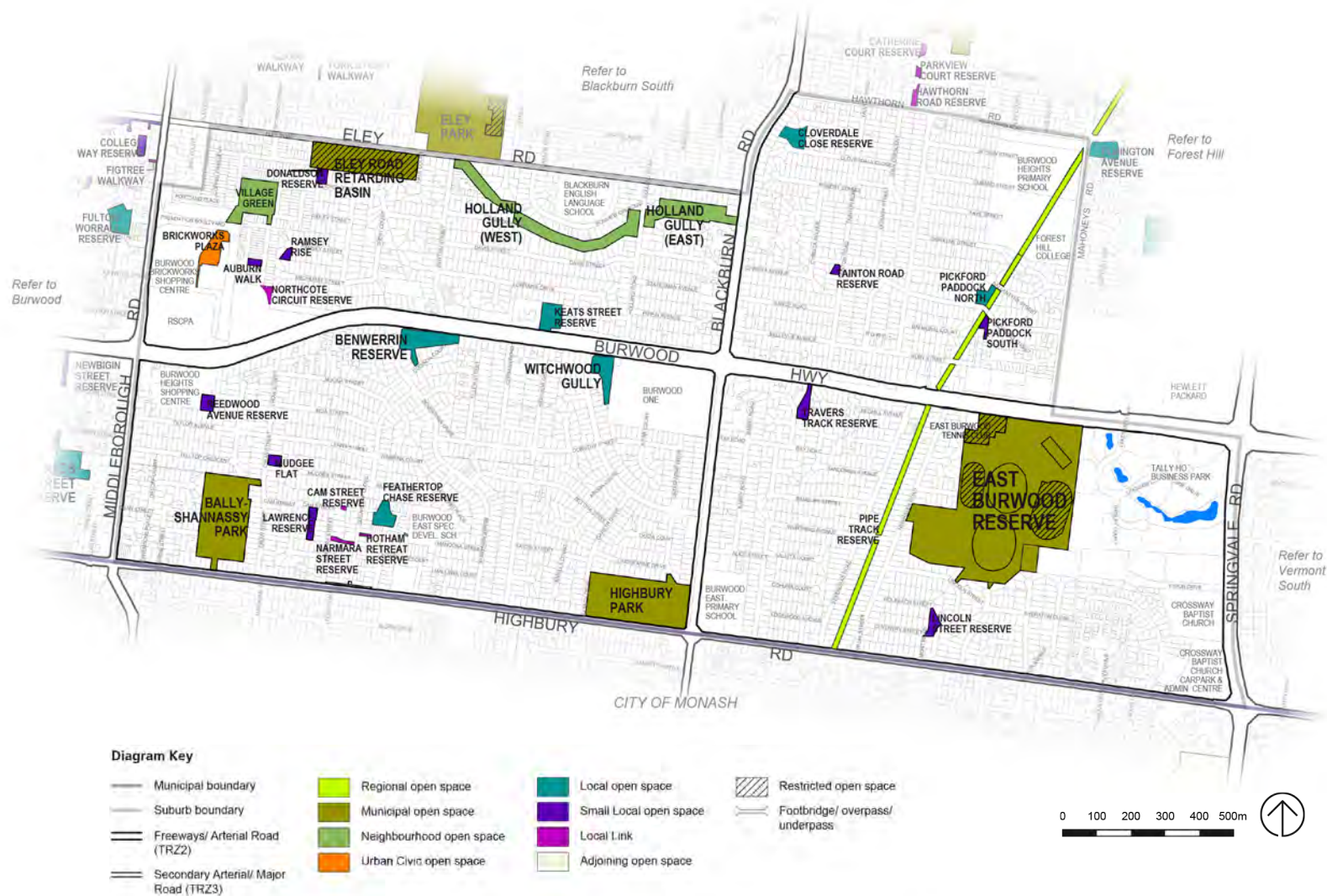


Figure 7.9-2 Open Space Hierarchy Burwood East

Open space distribution and future open space needs in Burwood East

Burwood Highway is a key east-west arterial road through Burwood East, and it forms a major physical barrier to safe and easy walking access to open space within the precinct. Blackburn Road is a key north-south arterial, and it also forms a barrier to safe and easy walking access to open space. The other access barriers to open space are related to the inherent historical subdivision layout where there is a lack of pedestrian connectivity in the local street network, or into the open space reserves. Opportunities to address this where it is feasible are described in the gap areas in Table 7.9c below.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.9-3. This figure illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Burwood East and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.9c Brief description of gap areas in Burwood East

Gap area	Description
BE1	Located north of Burwood Highway and west of Keats Street Reserve, this is an area where recent and forecast medium and high-density development is forecast to continue. The gap will be addressed by the proposed expansion to and upgrade of the existing Local open space - Keats Street Reserve.
BE2	Located east of Blackburn Road, the southern part of this gap area is where recent medium and high-density development is forecast continue. The gap area will be addressed with the expansion of the existing Small Local open space, Tainton Road Reserve.
BE3	Located north of Burwood Highway, east of Blackburn Road towards Burwood Heights Primary School, this gap area is forecast to receive an increase in medium density development. The gap area is addressed by a proposed new Small Local open space to be established in the longer term as urban densities increase.
BE4	Located south of Burwood Highway between Middleborough and Blackburn Roads. Recent increase in urban densities is forecast to continue in this area. This gap area is addressed by the proposed expansion, reconfiguration and upgrade of Witchwood Gully Reserve to address the interface with the Burwood One commercial precinct and improve its design and appeal to the adjoining community in the gap area. This expanded open space will be accessible via the local street network from the gap area without the need to cross any major roads.
BE5	Located in the south-eastern extent of the precinct, north of Highbury Road and west of Springvale Road, this gap area extends across the Tally-Ho Business Park and the Crossways Baptist site and the existing residential area west of it. As part of future redevelopment in this area, a new Local open space will be required to primarily meet the needs of the future population.

7.9.3 Ancillary open space

Within Burwood East, the four public schools provide ancillary open space, contributing to the unbuilt character and greening. The Burwood Heights Primary and Forest Hill College outdoor sports fields are visible from Mahoneys Road and the perimeter native trees contribute to overall greening and shading. Burwood East Primary School is located on the corner of two arterial roads and opposite Highbury Park. While there are mature trees along the perimeter of the school sites where they adjoin arterial roads, residential use directly adjoins the remaining perimeter of the site so that the contribution to the neighbourhood character and access is limited.

The Burwood East Special Development School located in the south-western part of Burwood East is proactive in the local community and keen to be involved. Residential properties surround the school with only the main entry being accessible and visible, however there is potential for Council to liaise with the school to undertake community projects in the nearby open spaces.

The historical pattern of subdivision layout is disjointed meaning there are areas without good pedestrian permeability through the local street network. The Strategy has identified opportunities to improve pedestrian connectivity, by investigating options to increase permeability and access points into existing open space reserves, for example, into Ballyshannassy Park. The proposed new open spaces provide opportunities to improve accessibility, by providing links between the local access streets.

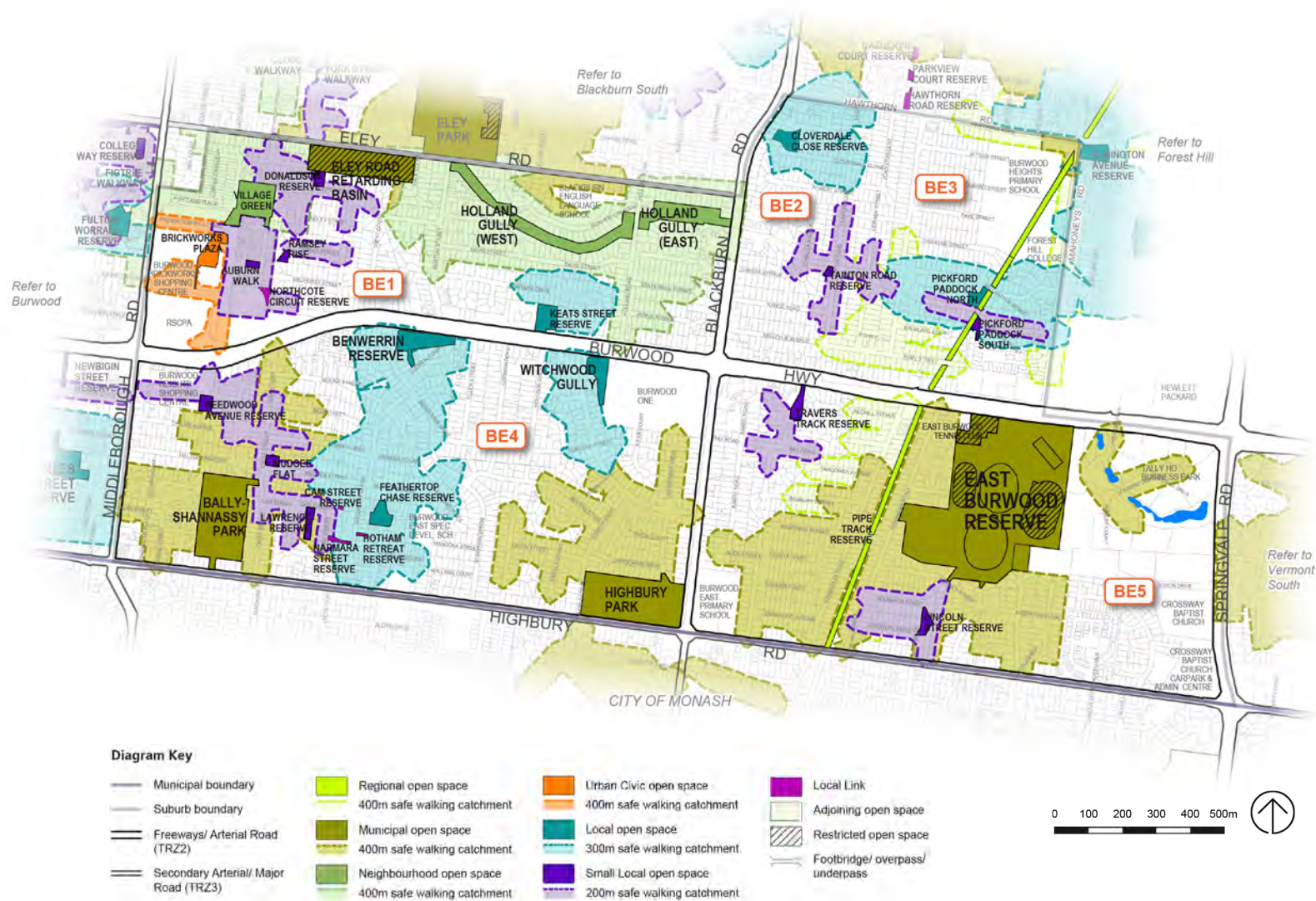


Figure 7.9-Gap Analysis Burwood East

7.9.4 Existing Burwood East community

Demographics

There are 10,778 residents living in Burwood East as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 663 people living in Burwood East, which represents approximately a 7 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the young work force age group (25 to 34 years), the 50 to 59 years age group and the 70 to 85 years and over age cohort. There is a lower proportion of the other age groups including people under the age of 24 years, parents (35 to 49 years) and empty nesters (60 to 69 years).

A higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006, approximately 79 per cent lived in separate houses and there were approximately 2 per cent of the population living in high-density dwellings. In 2021, approximately 72 per cent live in separate houses, 20 per cent in medium density housing and 8 per cent in high-density dwellings.

The residential population is forecast to increase 56 per cent, with the continued trend of a decrease in children under the age of 11, the 60 years and over age cohort and an increase in the 12 to 59 age range.

Summary of community engagement outcomes

A total of 123 open space surveys were received from Burwood East, which represents 7 per cent of the total surveys received.

The three top open space values for respondents of the Burwood East survey are very similar to the municipal average for the top three. 'Seeing people and activities' were ranked higher than the municipal average, while 'The feeling of space and serenity' and 'Urban greening/cooling' was ranked lower than the municipal average.

Values of open space (top five)

- 59% A place to relax and unwind
- 53% Trees
- 51% Walking and cycling
- 50% Just being outside
- 50% Connecting with nature

Types of open space used and frequency of use (top five)

- 81% Large parks and reserves (non-sporting)
- 80% Local streets for exercise
- 76% Medium parks
- 71% Small local parks
- 63% Urban plazas/squares

Frequently visited types of open spaces (top five)

- 71% Local streets for exercise
- 48% Small local parks
- 40% Sporting reserves
- 32% Medium parks
- 31% Large parks and reserves (non-sporting)

Priority of facilities and amenities in open spaces (top five)

- 74% Seats
- 60% Walking paths
- 59% Picnic tables and seats
- 53% Trees
- 52% Toilets

(Note that 33% Play space was listed eleventh)

Table 7.9d Most frequently visited open space in Burwood East

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
51	Highbury Park	• Play - children (11) • Dog walking (7) • Social - meeting family / friends / parties (5) • Enjoy nature (3) • Exercising (3) • Seeing people and activities (3) • Walking (3) • Access - close to home (2) • Relaxing (2) • Spending time outdoors (2)	
26	Ballyshannassy Park	• Dog walking (14) • Walking (9) • Play - children (5) • Running (3) • Social - meeting family / friends / parties (3) • Exercising (2) • Informal ball games (2)	• Play space - upgrade (3)
18	East Burwood Reserve	• Walking (7) • Play - children (5) • Club based sport (4) • Dog walking (3) • Access - close to home (2) • Cycling (2) • Open space (2)	• Play space - upgrade (2)

No	Name	Reasons to visit	Suggested improvements
		• Social - meeting family / friends / parties (2)	
12	Witchwood Gully	• Play - children (7) • Spending time outdoors (4) • Walking - travel through (2)	
7	Pipe Track Reserve	• Walking (5) • Dog walking (2)	• Active recreation facilities - required (2)
Open space beyond walking distance (top five)			
23	Blackburn Lake Sanctuary	• Enjoy nature (10) • Play - children (9) • Walking (7) • Social - meeting family / friends / parties (6) • Dog walking (2) • Picnics (2) • Relaxing (2)	
14	Gardiners Creek	• Enjoy nature (7) • Dog walking (6) • Walking (5)	
9	Box Hill Gardens	• Play - children (6) • Social - meeting family / friends / parties (6) • Active recreation (3)	
7	Wattle Park	• Enjoy nature (4) • Walking (2)	
5	Blackburn Creeklands (Including Blacks Walk and Kalang Park)	• Walking (3)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Valued (4)
- Additional required (5)
- Protect open space and its peacefulness (3)

Maintenance and management

- Maintenance (4)
 - Needs improvement (2)
 - Valued (2)
- Dogs, including more fenced dog parks, no dog off-leash areas and dog owners being responsible for waste (3)

- Placemaking - additional cultural events (2)
- Education - flora and fauna (2)

Trees and vegetation

- Trees, additional required (2)
- Ornamental plants - additional required (2)

Park Infrastructure

- Active facilities - additional required (9)
 - Additional required (3)
 - Calisthenics/Parkour Park equipment (2)
- Park infrastructure - additional required (9)
 - Lighting (3)
 - Toilets (3)
- Play space - additional required (8)
 - Universal equipment/inclusive (3)
- Social infrastructure - additional required including cultural, public art and sports facilities (4)

Other

- Streetscape improvements - suggested planting types (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.9.5 Analysis of future change and open space needs

Forecast population change

The Burwood East Precinct is currently forecast to reach a residential population of 10,778 by 2036, representing an additional 6,057 people, or a 56 per cent increase compared to the 2021 population.

The table below includes the forecast population growth for the residential population through to 2036.

Table 7.9e Population forecasts for Burwood East 2021 - 2036

Burwood East	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	10,778	13,680	15,420	16,835	+6,057

Source: .id Forecast Whitehorse Community Profile, accessed 26/07/23

Impacts of forecast change on open space

The forecast change across Burwood East is significant with a 56 per cent increase in the residential population. This is largely concentrated into the Burwood Highway corridor, including a substantial amount of new housing in the Burwood Brickworks site. The increased urban densities will increase the demand for open space. This is both in relation to the forecast increase of 6,057 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults and decrease in proportion of children under 11 years of age means there is a need to increase the range of facilities in open space in addition to play facilities. This is reflected in the community survey outcomes with many of the comments asking for a greater diversity of facilities. This Strategy identifies opportunities to improve the character and function of the existing open spaces as included in the Action Plan.

7.9.6 Burwood East Precinct Recommendations

Summary of overall intent

Provision and distribution

Burwood East is forecast to experience substantial change over the next 15 years with 6,047 new residents forecast to be living in the precinct by 2036, which represents a 56 per cent increase. The majority of this forecast change will primarily occur in the Burwood Brickworks site and along both sides of Burwood Highway. South of Burwood Highway, East Burwood Reserve is the largest existing open space and a major sporting reserve for Whitehorse. Highbury Park combines remnant indigenous vegetation with both sporting and unstructured informal recreational facilities, while Ballyshannassy Park is a sporting reserve that is also a popular dog off-lead reserve. North of Burwood Highway, Holland Gully provides a linear path link with a recently installed play space, and there are recently constructed new open spaces within the Burwood Brickworks site.

With higher density development forecast to continue on both the north and south sides of Burwood Highway, there is a need to undertake major upgrades to existing open spaces within the walking catchment of increasing densities. This includes investigating opportunities to improve public access into the reserves and activated interfaces as adjoining sites redevelop. Five existing open spaces are identified to be expanded in size with the longer term provision of a new Small Local open space in the gap area north of Burwood Highway and one new Local open space in the south-eastern area of the precinct.

Quality and design

Overall the existing open space network has a predominantly native and indigenous character, and this is to be strengthened and improved. The focus is to improve access to existing open space by increasing the diversity of facilities to broaden their appeal and contribution to the sense of place and community. Key priorities include implementing the recently completed Landscape Masterplan for Burwood East Reserve and upgrading the structured sport and unstructured recreation facilities at Ballyshannassy Park including investigating expanding the reserve to increase passive surveillance and entry points. Reconstructing the shared path along the Pipe Track will reinstate north-south linear connectivity through the eastern extent of the precinct and extending north to Forest Hill and south through the City of Monash. Major upgrades are proposed for the Witchwood Gully, Benwerrin Reserve and Travers Track Reserve, to respond to increasing urban densities and future community needs. The recommendations identify the opportunity for Council to advocate for activated interfaces and excellent passive surveillance with adjoining development sites.

7.9.7 Action Plan - Burwood East

A Additional public open space

No.	Action	Responsibility	Priority
7.9A-1	New Small Local open space in Gap Area BE3 In the longer term investigate opportunities for new Small Local open space as urban densities increase to assist with urban greening and strengthen sense of place.	WCC Developer	Medium
7.9A-2	New Local open space in Gap Area BE5 Investigate opportunities for a new Local open space as this area redevelops. This includes improving pedestrian connectivity to the existing open space network to the west including East Burwood Reserve.	WCC Developer	Low
7.9A-3	Ballyshannassy Park additional entry points Major upgrade to improve unstructured recreation use including circuit path, seating and play. Investigate increasing access points into the reserve. Refer to Action 7.9B-2 for upgrade.	WCC	High
7.9A-4	Keats Street Reserve expansion Continue to maintain in the short term. In the future when the adjoining site redevelops, undertake a major upgrade to expand the size, provide public road access to the western boundary, and increase the provision of a diverse range of facilities to meet a broad age range. Refer to Action 7.9B-15 for upgrade. <i>Additional information/rationale: Investigate options to increase the open space if the adjoining C1 site redevelops. Investigate options to increase accessibility into the reserve along the western boundary to expand the walking catchment to Gap Area BE1. Continue to protect and maintain native character and prepare a Landscape Concept Plan to guide the future upgrade of the reserve for informal unstructured recreational use.</i>	WCC	Ongoing
7.9A-5	Pickford Paddock North expansion Investigate expanding the size to accommodate increased recreation facilities and address gap area BE3 to the north. Refer to Action 7.9B-21 for upgrade.	WCC	High
7.9A-6	Reedwood Avenue Reserve expansion Major upgrade to improve interface between the shopping precinct and residential area including expanding its size and urban greening role. Refer to Action 7.9B-26 for upgrade.	WCC	Medium
7.9A-7	Tainton Road Reserve expansion Minor upgrade to include path link, additional planting and junior play, to complement facilities catering to older age group at Cloverdale Close Reserve. Investigate opportunity to expand the size of this reserve for the existing and forecast community. Refer to Action 7.9B-27 for upgrade.	WCC	Medium

No.	Action	Responsibility	Priority
7.9A-8	Witchwood Gully expansion Major upgrade to improve interface with adjoining commercial use and future high density development including expansion in size. Review the need for play and address future resident and worker needs. Refer to Action 7.9B-30 for upgrade.	WCC Developer	High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.9B-1	Auburn Walk Continue to maintain.	WCC	Ongoing
7.9B-2	Ballyshannassy Park Major upgrade to improve unstructured recreation use including circuit path, seating and play. Investigate increasing access points into the reserve. Refer to Action 7.9A-3 for additional entry points. <i>Additional information/rationale:</i> Prepare and implement a Landscape Masterplan to identify the preferred additional entry points, improve existing entries, investigate a circuit path, improve and where possible encourage passive surveillance at the interface to adjoining properties and incorporate neighbourhood level facilities.	WCC	High
7.9B-3	Benwerrin Reserve Major upgrade to reconfigure the open space to meet existing and forecast community needs. <i>Additional information/rationale:</i> Investigate options for the reconfiguration to increase the diversity of facilities, strengthen the native character and values.	WCC	Medium
7.9B-4	Brickworks Plaza Continue to maintain.	WCC	Ongoing
7.9B-5	Cam Street Reserve Continue to maintain.	WCC	Ongoing
7.9B-6	Cloverdale Close Reserve Minor upgrade to provide hard court or similar facilities for broad age range along with additional planting and paths.	WCC	Medium
7.9B-7	Donaldson Reserve Continue to maintain.	WCC	Ongoing

No.	Action	Responsibility	Priority
7.9B-8	East Burwood Reserve Implement the recently prepared Masterplan (2023).	WCC	High
7.9B-9	Eley Road Retarding Basin (Melbourne Water, fenced) Continue to maintain. In the longer term, council to liaise with Melbourne Water regarding the potential removal of the perimeter fence and integration of pedestrian/cycle path access through the reserve, where appropriate, within the context of public safety in relation to its drainage function combined with the protection of environmental values.	MWC	Ongoing
7.9B-10	Feathertop Chase Reserve Continue to maintain this retarding basin. Council to continue to liaise with the Burwood East Special Development School to identify if this site is appropriate to actively integrate participation in a community based project, given it is in close proximity to the school.	WCC (MWC)	Ongoing
7.9B-11	Highbury Park Minor upgrade to improve the picnic/barbecue facilities and public toilets near the recently upgraded play space and identify if other unstructured recreation facilities are required given the popularity of this park.	WCC	High
7.9B-12	Holland Gully (East of Holland Road) Continue to maintain. In the longer term, if urban densities increase in the catchment of this open space, then investigate options to expand its size to increase diversity of facilities and increase access points into the reserve. This long term recommendation is not included as part of the contribution rate calculation.	WCC	Ongoing
7.9B-13	Holland Gully (West of Holland Road) Continue to maintain with additional planting to reduce visual prominence of rear boundary fence lines.	WCC	Ongoing
7.9B-14	Hotham Retreat Reserve Continue to maintain.	WCC	Ongoing
7.9B-15	Keats Street Reserve Continue to maintain in the short term. In the future when the adjoining site redevelops undertake a major upgrade to expand the size, provide public road access to the western boundary and increase the provision of a diverse range of facilities to meet a broad age range. <i>Additional information/rationale:</i> <i>The changes proposed will address the increased urban densities directly adjacent to the reserve and also Gap Area BE1 to the west by improving access from the western boundary into the reserve.</i>	WCC	Ongoing
7.9B-16	Lawrence Reserve Minor upgrade to include path access, seating and open grassed area, including additional tree planting to the perimeter of the reserve.	WCC	Low

No.	Action	Responsibility	Priority
7.9B-17	Lincoln Street Reserve Minor upgrade to include seats, path connections, shelter and planting.	WCC	Medium
7.9B-18	Mudgee Flat Continue to maintain.	WCC	Ongoing
7.9B-19	Narmara Street Reserve Continue to maintain.	WCC	Ongoing
7.9B-20	Northcote Circuit Reserve Continue to maintain this linking space.	WCC	Ongoing
7.9B-21	Pickford Paddock North Investigate expanding the size to accommodate increased unstructured recreation facilities and address the existing Gap Area BE3 to the north. Refer also to Action 7.9A-5.	WCC	High
7.9B-22	Pickford Paddock South Minor upgrade to provide seating and improve the nature conservation values of remnant trees. In the longer term investigate the need for this open space, given the awkward configuration of the space.	WCC	Low
7.9B-23	Pipe Track Reserve - Mahoneys Road to Burwood Highway Investigate improving the pipe track shared link via Ballantyne Street and Mahoneys Road. Council to continue to advocate to Forest Hill College and Burwood Heights Primary School to explore off-road path option. Refer also to Action 7.9C-3.	MWC	High
7.9B-24	Pipe Track Reserve - Burwood Highway to Highbury Road Reinstate shared path and investigate other potential improvements with Melbourne Water, including the provision of additional signage to highlight the existing signalised crossing over Burwood Highway. Also refer to Action 5.4-12.	WCC MWC	High
7.9B-25	Ramsey Rise Continue to maintain. In the longer term investigate alternative locations for this open space to make it more accessible to the community and address the existing Gap Area BE1.	WCC	Ongoing
7.9B-26	Reedwood Avenue Reserve Major upgrade to improve interface between the shopping precinct and residential area including expanding its size and urban greening role. Refer to Action 7.9A-6 for expansion to its size and additional information/rationale.	WCC	Medium
7.9B-27	Tainton Road Reserve Minor upgrade to include path link, additional planting and junior play, to complement facilities catering to older age group at Cloverdale Close Reserve. Investigate opportunity to expand the size of this reserve for the existing and forecast community. Refer to Action 7.9A-7 for expansion in size.	WCC	Medium
7.9B-28	Travers Track Reserve Major upgrade to provide unstructured recreation facilities that take advantage of elevated views and cater to existing and forecast community.	WCC	High

No.	Action	Responsibility	Priority
7.9B-29	Village Green Reserve Continue to maintain. In the future, investigate the addition of more canopy trees for shade in the longer term.	WCC	Ongoing
7.9B-30	Witchwood Gully Major upgrade to improve interface with adjoining commercial use and future high density development including expansion in size. Review the need for play and address future resident and worker needs. Refer to Action 7.9A-8 for expansion in size.	WCC	High

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.9C-1	Eley Road Pedestrian Crossing Refer to Blackburn South Precinct for the proposed signalised pedestrian crossing point to provide a safe and easy connection between Holland Gully in this precinct and Eley Road Reserve to the north in Blackburn South.	WCC	High
7.9C-2	Improve pedestrian connectivity via the local street network As part of future development applications, identify opportunities to include open space links where the local street network is not well connected.	WCC	Ongoing
7.9C-3	Improved path link to Pipe Track via Ballantyne Street and Mahoneys Road Investigate improving the Pipe Track shared path link around the outside of Forest Hill Secondary College via the road reserves.	WCC	High

7.10 Forest Hill

7.10.1 Overview

Forest Hill is defined to the north by a series of local access streets which provide excellent pedestrian permeability into Nunawading in the north. To the east the boundary extends through local access streets, being Lasiandra Avenue north of Canterbury Road and Stevens Road south of Canterbury Road down to the former Healesville Freeway Reserve. South of the Healesville Freeway Reserve the eastern extent of Forest Hill is defined by Springvale Road. West of Springvale Road, Burwood Highway defines the southern boundary to Mahoneys Road, and then west of Mahoneys Road, Hawthorn Road defines the remaining southern boundary. The western boundary is defined by a series of local residential streets including Sandra Street and Drummond Street. There is good east-west pedestrian access across into open space in Blackburn South and Burwood East with these permeable boundaries.

Refer to *Figure 7.10-1* on the following page of the existing open space in Forest Hill.



Figure 7.10-1 Existing Open Space Forest Hill

7.10.2 Existing open space

Overview

Forest Hill Reserve and Mahoneys Reserve are the two largest Regional open spaces in Forest Hill with structured sporting facilities including the indoor aquatic centre at Forest Hill Reserve combined with the outdoor sports oval, and the soccer fields and facilities at Mahoneys Reserve. By contrast Old Strathdon Orchard has a unique heritage character with community facilities with a sustainability focus. Davy Lane is yet to be developed for structured sporting use on part of the former Healesville Freeway Reserve and this directly adjoins the Nunawading community gardens. Two fenced Melbourne Water retarding basins are located in Forest Hill, one is north-east of Canterbury Road being the Glen Valley Retarding Basin and the other is Lernes Street Retarding Basin that adjoins Forest Hill Recreation Reserve.

The Melbourne Water Pipe Track Reserve extends through Forest Hill provided off-road shared path trail connectivity. Felicia Dale as a linked open space system north of Canterbury Road that established along the valley line of an upper tributary to KooyongKoot/Gardiners Creek that flows through Forest Hill Reserve and downstream through Glen Valley Retarding Basin and on to masons Road Retarding basin Blackburn. There is a network of Local and Small Local open spaces across Forest Hill, with some being co-located with larger reserves including Glen Valley Park in the north and Sapphire/Willarah Reserve in the east, both of which have excellent potential to be upgraded and improved to improve their natural and recreational values.

The native character and natural values along with elevated views from some of the existing open space characterises Forest Hill and there is potential to strengthen this character and value over the next 15 years.

Table 7.10a is a list of all the existing open spaces in Forest Hill in alphabetical order and Table 7.10b is a summary of the total number of open spaces by hierarchy.

Table 7.10a Existing open space in Forest Hill including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Ansett Crescent Reserve	0.71	Local	Nature conservation	Viewing		
Brentford Square	0.06	Urban Civic	Linking space	Events		
Catherine Court Reserve	0.01	Local Link	Linking space			
Nunawading Community Gardens (fenced)	1.20	Municipal	Community garden/Urban agriculture	Restricted community use	Passive	
Davy Lane (incl additional area south of Old Strathdon Orchard and entry from Jolimont Road)	5.28	Municipal	Sporting	Passive	Nature conservation	Viewing
Elmington Avenue Reserve	0.37	Local	Native character	Passive	Linking space	
Felicia Dale	2.70	Neighbourhood	Passive	Linking space	Waterway	
Forest Hill Drain Reserve	0.28	Municipal	Waterway	Service easement		
Forest Hill Reserve	9.59	Municipal	Sporting	Restricted sporting/recreation	Waterway	Passive
Glen Valley Park	0.55	Local	Native character	Undeveloped	Viewing	
Glen Valley Retarding Basin (Melbourne Water, fenced)	1.78	Municipal	Restricted service easement	Nature conservation		
Gregory MWS Reserve	0.01	Local Link	Linking space	n/a		

Table 7.10a Existing open space in Forest Hill including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Hawthorn Road Reserve	0.08	Local Link	Linking space			
Heathcote Drive Reserve	0.35	Local	Passive	Nature conservation		
Jean Street Reserve	0.22	Small Local	Play	Native character	Nature conservation	
Lernes Street Retarding Basin (Melbourne Water, fenced)	2.69	Municipal	Restricted service easement	Nature conservation		
Mahoneys Reserve	9.69	Municipal	Sporting	Native character	Nature conservation	Passive
Mahoneys Road Reserve	0.06	Small Local	Undeveloped	n/a		
Matheson Road Reserve	0.19	Small Local	Play	n/a		
McKenna Road Reserve	0.04	Small Local	Linking space	Native character		
Mock Street Reserve	0.28	Local	Passive	Linking space		
Naramah Street Reserve	0.03	Small Local	Linking space	Native character	Nature conservation	
Old Strathdon Orchard	2.48	Municipal	Heritage	Botanical	Events	Passive
Parklands Place Reserve	0.06	Small Local	Linking space	Native character		
Parkview Court Reserve	0.04	Local Link	Linking space	n/a		
Pipe Track Reserve (Melbourne Water)	2.58	Regional	Service easement	n/a		
Raleigh Reserve	0.24	Small Local	Native character			
Sapphire/Willarah Reserve	1.71	Neighbourhood	Passive	Native character	Undeveloped	Viewing
Stringy-Bark Close Reserve	0.01	Local Link	Linking space	Native character		

Table 7.10b Number, hierarchy and size of open space excluding restricted open space in Forest Hill

No.	Hierarchy	Area (Ha)	%
1	Regional	2.58	7%
6	Municipal	27.32	73%
2	Urban Civic	4.41	12%
1	Neighbourhood	0.06	0%
5	Local	2.27	6%
7	Small Local	0.84	2%
5	Local Link	0.15	0%
27	TOTAL	37.63	100%

Quantity

The total quantity of open space in Forest Hill, excluding restricted open space, represents 10.1 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 11.2 per cent of the total land area.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Forest Hill. Refer to Figure 7.10-2 for the Hierarchy of existing open space in Forest Hill.

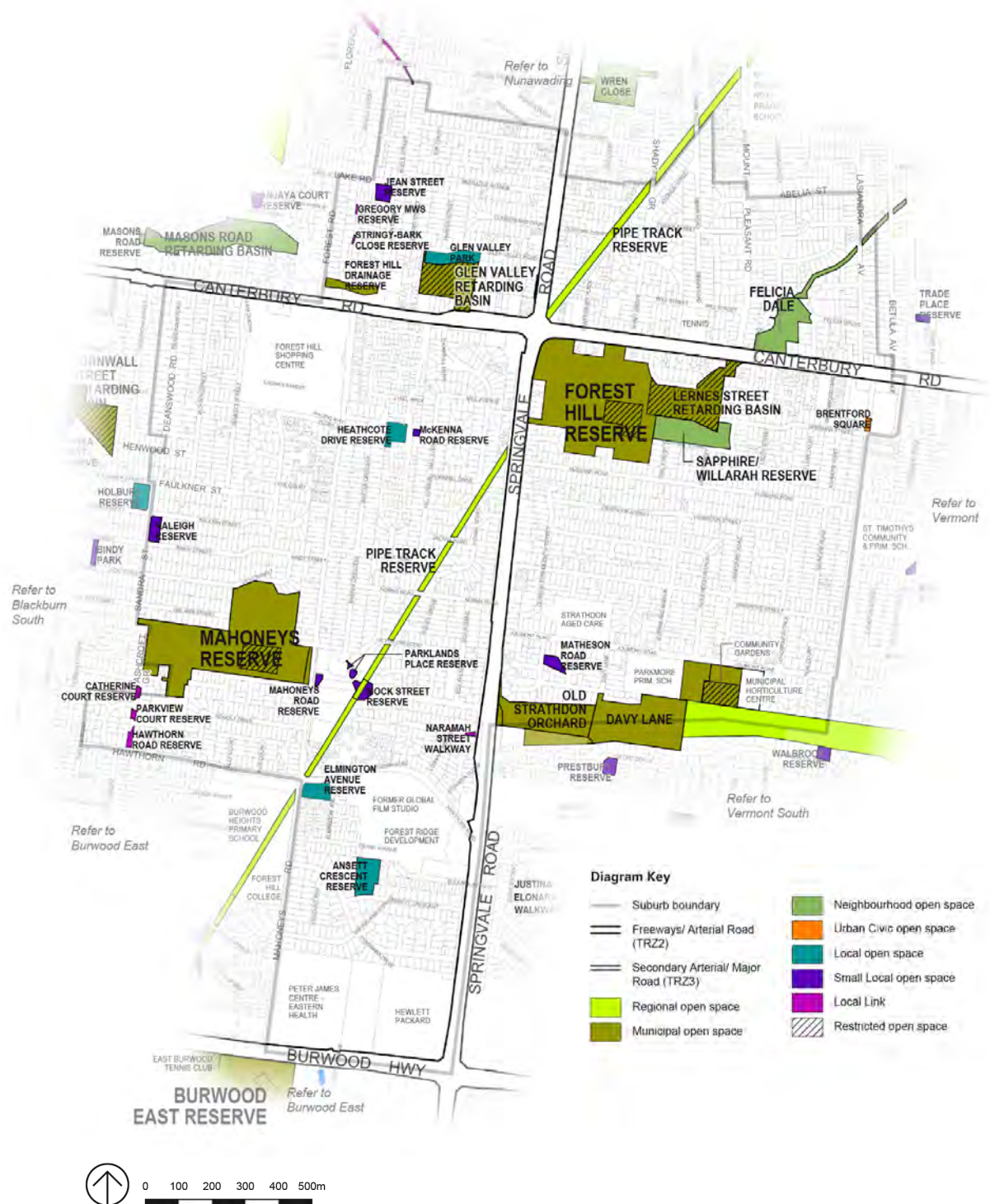


Figure 7.10-2 Open Space Hierarchy Forest Hill

Open space distribution and future open space needs in Forest Hill

Canterbury Road is a key east-west arterial road through Forest Hill and forms a major physical barrier to safe and easy walking access to open space within the precinct. Springvale Road is the key north-south arterial that also forms a barrier to safe and easy walking access to open space.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.10-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Forest Hill and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.10c Brief description of gap areas in Forest Hill

Gap area	Description
FH1	Located north of Bessazile Avenue and west of Springvale Road, this gap area extends north to into Nunawading as well. The gap area will be addressed with improvements to the quality of existing open space including upgrades to Glen Valley Park and Jean Street Reserve primarily for the existing population as minimal growth is forecast in this gap area.
FH2	Located south of Canterbury Road and west of Springvale Road, this gap area includes the Forest Hill Chase Shopping Centre. The pattern of subdivision layout in this gap area is disjointed and with Forest Hill Chase being an internally focussed shopping precinct with no forecast change, there are no specific actions to address this gap area. The Strategy does note that if the Forest Hill Chase Shopping Centre redevelops in the future, additional public open space will be required and the extent will depend on the scale and type of change.
FH3	Located east of Springvale Road and south of Canterbury Road, this gap area is centred around Ranfurlei Avenue. This gap area will be addressed by major upgrades to Sapphire/Willarah Reserve, Jolimont Road Reserve and Davy Lane, all of which can be reached via the local street network without the need to cross any major roads, albeit further than the stated walking distances. In the longer term, there will be a need to provide additional Small Local open space, however given the low level of change forecast for this area, it is not a priority within the timeframe of this Strategy.
FH4	Located west of Springvale Road, this gap area includes the Former Global Film Studio Site (Forest Ridge Development). The future public open space that will be provided as part of this development will address this gap area.
FH5	Located north of Burwood Highway and west of Springvale Road this gap area is centred around the non-residential land. The Strategy does not include forecasts for change in this location and therefore the Strategy recommends that while the existing forecasts do not identify any major growth in this gap area, if the sites redevelop in the future, additional public open space will be required and the type and location of new open space will be depend on the scale and type of change proposed.

7.10.3 Ancillary open space

Within Forest Hill, the Parkmore Primary School is located next to the Jolimont Road Reserve. While it potentially adds some tree canopy and greening to the precinct, there is already existing open space surrounding it which provides greening.

The pattern of subdivision layout is quite disjointed meaning there is not good permeability through the local street network in some parts of Forest Hill including in the gap area around Forest Hill Chase Shopping Centre.

This strategy identifies opportunities to improve pedestrian connectivity, by investigating options to increase permeability and access points into existing open space reserves, for example into Lundgren Chain. The proposed new open spaces also provide opportunities to improve accessibility by providing links between the local access streets with long block lengths (greater than approximately 250 metres).

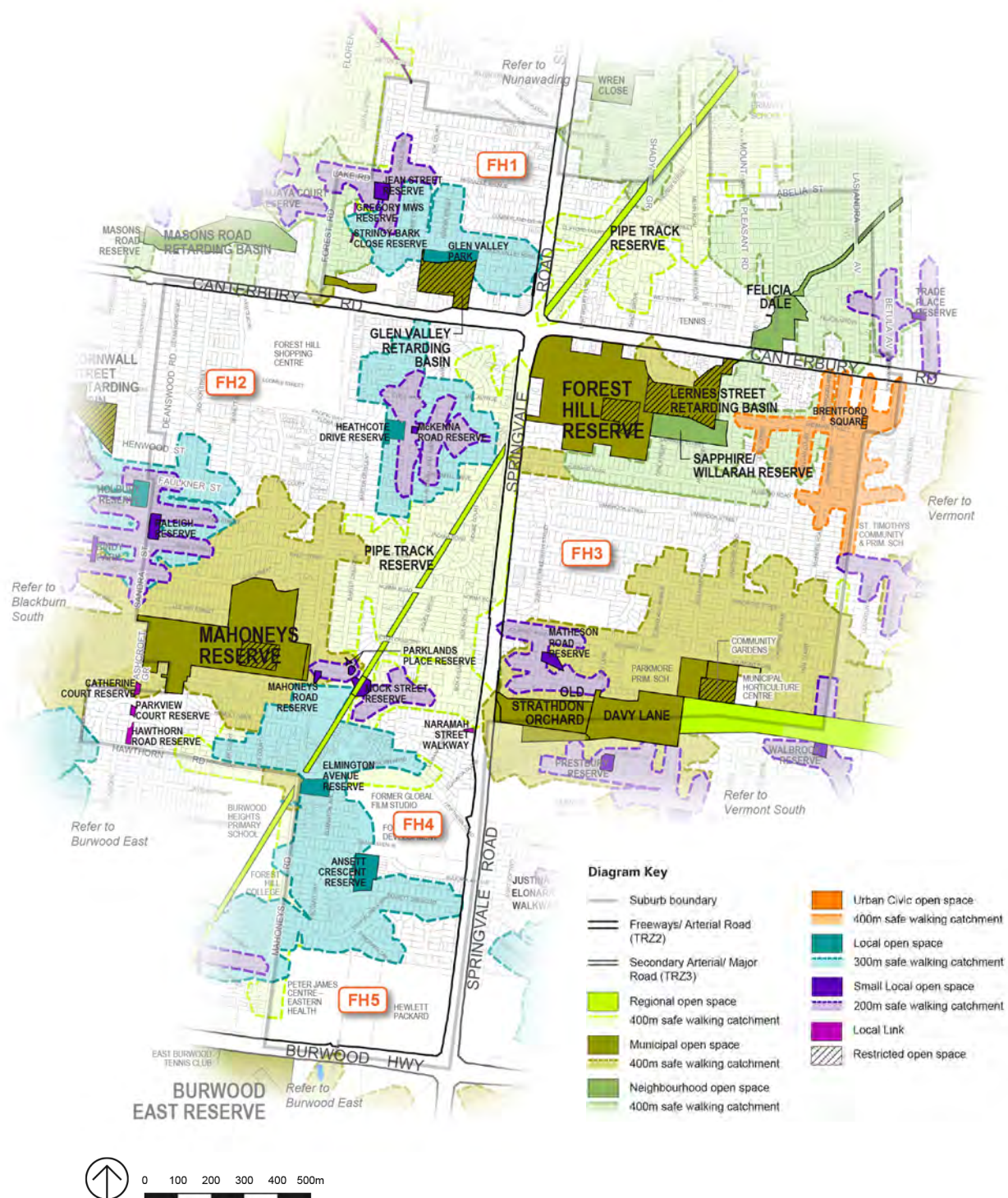


Figure 7.10-3 Gap Analysis Forest Hill

7.10.4 Existing Forest Hill community

Demographics

There are 10,866 residents living in Forest Hill as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 802 people living in Forest Hill, which represents approximately an 8 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the primary schoolers to tertiary education age group (5 to 24 years), workers (50 to 59 years) and the 85 years and over age cohort. There is a lower proportion of babies (0 to 4 years), young workforce to parent age group (25 to 49 years) and empty nester age group (60 to 69 years). The proportion of people between 70 to 84 years of age have remained the same.

A slightly higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006 approximately 79 per cent lived in separate houses and there was 0.3 per cent that lived in high-density dwellings. In 2021, approximately 71 per cent live in the separate houses, 27 per cent in medium density housing and 2.4 per cent in high-density dwellings.

The residential population is forecast to increase 14 per cent, with the continued trend of a decrease in children under the age of 11 and the young workforce (25 to 34) and increase in the 50 to 59 age group.

Summary of community engagement outcomes

A total of 166 open space surveys were received from Forest Hill, which represents 6 per cent of the total surveys received.

The top open space values for respondents of the Forest Hill survey are very similar to the municipal average for the top three. 'Meeting people/friends', 'Seeing people and activities' were ranked higher than the municipal average, while 'Connecting with nature' was ranked lower than the municipal average. Like Box Hill North, the survey respondents have ranked the highest use of local streets for exercise followed by small local parks over the other types of open space.

Values of open space (top five)

- 61% A place to relax and unwind
- 61% Trees
- 57% Connecting with nature
- 52% Just being outside
- 50% Native birds and wildlife

Types of open space used and frequency of use (top five)

- 91% Local streets for exercise
- 84% Small local parks
- 82% Medium parks

- 81% Large parks and reserves (non-sporting)
- 77% Linear reserve network for walking/cycling

Frequently visited types of open spaces (top five)

- 86% Local streets for exercise
- 64% Small local parks
- 47% Urban plazas/squares
- 44% Medium parks
- 41% Linear reserve network for walking and cycling

Priority of facilities and amenities in open spaces (top five)

- 66% Seats
- 60% Toilets
- 59% Trees
- 53% Additional greening for environmental health & wellbeing
- 50% Walking paths

(Note that 28% Play space was listed thirteenth)

Table 7.10d Most frequently visited open space in Forest Hill

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
27	Forest Hill Reserve	• Dog walking (9) • Social - meeting family / friends / parties (6) • Play - children (5) • Trees (5) • Aqualink (4) • Club based sport (4) • Exercising (3) • Access - close to home (2) • Active recreation (2)	
17	Blackburn Lake Sanctuary	• Play - children (6) • Enjoy nature (3) • Walking (3) • Dog walking (2) • Spending time outdoors (2)	
16	Mahoneys Reserve	• Walking (6) • Play - children (5) • Spending time outdoors (4) • Dog walking (3)	• Dogs - owners to be responsible for waste (2)
12	Davy Lane	• Dog walking (9) • Active recreation (3) • Spending time outdoors (2)	
10	Pipe Track	• Spending time outdoors (4)	

No	Name	Reasons to visit	Suggested improvements
	Reserve	• Walking (4) • Dog walking (2) • Play – children (2)	
Open space beyond walking distance (top five)			
31	Blackburn Lake Sanctuary (Including Clifton Street play space)	• Play - children (14) • Enjoy nature (11) • Walking (8) • Social - meeting family / friends / parties (6) • Dog walking (2) • Open space - ambience, beauty (2) • Relaxing (2) • Trees (2)	
8	Box Hill Gardens	• Social - meeting family / friends / parties (3) • Active recreation (2) • Play - children (2) • Trees (2)	
7	Davy Lane	• Walking (4) • Dog walking (3)	
5	Blackburn Creeklands 5 (Including Kalang Park)	• Enjoy nature (3)	
5	Terrara Park	• Dog walking (3)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Additional required (4)
- Valued (3)
- Protection of existing O/S (3)

Maintenance and management

- Dogs (7)
 - More dog off-leash areas (3)
 - Owners to control their dogs (2)
- Lawn (2)
 - More mowing required (2)
- Maintenance (3)
 - Graffiti removal/ cleaning (2)
- Placemaking - organise more community planting events/ Council supported social group (2)

Park Infrastructure

- Park infrastructure - additional required (8)
 - Seating (2)
 - Toilets (2)
- Active facilities - additional required (8)
 - Hockey courts (2)
- Play space - additional required (4)
 - Increase diversity for all ages/abilities (3)

Other

- Streetscapes, comments on tree species/provision (3)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.10.5 Analysis of future change and open space needs

Forecast population change

The Forest Hill Precinct is currently forecast to reach a residential population of 12,397 by 2036, representing an additional 1,531 people, or a 14 per cent increase compared to the 2021 population.

The table below includes the forecast population growth for the residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 26/07/23.

Table 7.10e Population forecasts for Forest Hill 2021 - 2036

Forest Hill	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	10,866	11,685	12,072	12,397	+1,531

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 1,531 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults in the 50 to 59 age cohort and decrease in 25 to 34 age range along with children under 11 years of age means there is a need to increase the range of facilities in open space in addition to play facilities.

7.10.6 Forest Hill Precinct Recommendations

Summary of overall intent

Provision and distribution

In Forest Hill there is forecast to be an additional 1,531 residents to be living in the precinct by 2036, representing a 14 per cent increase from the existing population. The majority of this change will occur south of Canterbury Road including in the Forest Ridge Development site (former Global Film Studio) where medium to high density development is proposed. In response to this, Ansett Court Reserve will be upgraded to improve the interface between the development site and the park. Unstructured recreation facilities will be provided as part of a major upgrade at Mahoneys Reserve to address the increased urban densities in this area. East of Springvale Road the major change is to provide new sporting fields at Davy Lane Reserve along with a linked path network and local unstructured recreational facilities as part of its integration into the newly created Healesville Freeway Linear Reserve. A priority project is to create a new Neighbourhood park at Sapphire/Willarah Reserve, with a broad range of unstructured recreation and social facilities to create a community focus for this part of Forest Hill.

The only gap area in the provision of open space in Forest Hill is in the north-west around the Forest Hill Shopping centre. If the shopping centre substantially redevelops and increases the employment and/or residential population on the site, then provision of new public open space as part of that redevelopment may be required.

Quality and design

Felicia Dale, Forest Hill Reserve and Sapphire/Willarah Reserve are all located along a tributary to KooyongKoot/Gardiners Creek which contributes to their nature conservation values. These, combined with large mature Eucalypts more elevated areas of open space across Forest Hill contribute to the native forest character of Forest Hill. The future upgrades will protect and strengthen this Forest Hill character, while increasing the diversity of facilities including for older age groups. The exotic and heritage character of Old Strathdon Orchard is unique in the precinct, and the future redevelopment of Davy Lane will strengthen this character with excellent path links to the site to increase its use and value as part of the open space network.

7.10.7 Action Plan - Forest Hill

A Additional public open space

No.	Action	Responsibility	Priority
7.10A-1	Future open space in Gap Area FH2 If the Forest Hill Chase Shopping Centre redevelops in the future, additional public open space will be required and the extent will depend on the scale and type of change.	WCC	Ongoing
7.10A-2	Future open space on the former Global Film Studio Site to address Gap Area FH4 Council to continue to liaise with the developer of this site to secure the new open space in accordance with the approved development plan.	WCC Developer	High
7.10A-3	Future open space in Gap Area FH5 When the land in Gap Area FH5 (north of Burwood Highway and west of Springvale Road) redevelops, additional public open space will be required and the type and location will depend on the scale and type of change.	WCC Developer	Ongoing
7.10A-4	New off-road path link west of Forest Road along the Forest Hill Drain alignment to Masons Road Retarding Basin Investigate future off-road path access along the Forest Hill Drain alignment downstream of Forest Road connecting to Masons Road Retarding Basin. It is assumed that this will be secured as a drainage reserve and is therefore not included in the open space contribution rate.	WCC MWC	Ongoing

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.10B-1	Ansett Crescent Reserve Major upgrade to provide improved access and interface to adjoining redevelopment site and upgrade to provide facilities that meet the existing and forecast community open space needs.	WCC Developer	Medium

No.	Action	Responsibility	Priority
7.10B-2	Brentford Square Major upgrade including improving and activating the interface to adjoining commercial use and adding canopy shade trees and facilities that appeal to the local resident and worker community. <i>Additional information/rationale:</i> <i>Prepare a Landscape Concept Plan to guide major upgrade to reconfigure open space to provide an attractive, green and inviting open space that significantly contributes to the identity and character of the shopping precinct including as an event space.</i>	WCC	High
7.10B-3	Catherine Court Reserve Continue to maintain.	WCC	Ongoing
7.10B-4	Davy Lane - including entry from Jolimont Road Implement the agreed Landscape Masterplan with sports fields and integrated unstructured recreation and informal facilities. This includes reviewing the extent and layout of car park provide excellent pedestrian access. Design of the area adjacent to Jolimont Road to focus on neighbourhood level unstructured recreation and informal facilities creating a social space with excellent passive surveillance associated with the school and Nunawading Community Gardens Refer also to Action 7.10B-13 for Jolimont Road Reserve.	WCC (PV)	Very High
7.10B-5	Elmington Avenue Reserve Continue to maintain.	WCC	Ongoing
7.10B-6	Felicia Dale Minor upgrade to include additional paths, seating and planting. <i>Additional information/rationale:</i> <i>In addition to the paths and planting, there is an opportunity to improve the waterway values including water quality and revegetation.</i>	WCC	Medium
7.10B-7	Forest Hill Drain Reserve Continue to maintain in the short term. In the longer term investigate potential for path access when connectivity downstream to Masons Road Retarding Basin is provided.	MWC	Ongoing
7.10B-8	Forest Hill Reserve As part of overall Landscape Masterplan for the Reserve, include minor upgrade to improve pedestrian access through the reserve and connectivity along with improving the nature conservation values including revegetation along the waterway corridor. Refer also to Action 7.10B28 in relation to the proposed major upgrade to Sapphire/Willarah Reserve. <i>Additional information/rationale:</i> <i>Prepare a Masterplan primarily to guide the structured sporting facility upgrades and to identify opportunities to improve the unstructured recreational use. It is recommended that the Masterplan area be expanded to include the adjoining Sapphire/Willarah Reserve to achieve successful integration of this underutilised area of open space with Forest Hill Reserve.</i>	WCC	Very High

No.	Action	Respons- ibility	Priority
7.10B-9	Glen Valley Park Major upgrade to include path and seating to enjoy views over the adjoining retarding basin and integrate unstructured recreation facilities to address the gap area FH1 to the north.	WCC	Medium
7.10B-10	Glen Valley Retarding Basin (Melbourne Water, fenced) Continue to maintain. In the longer term, council to liaise with Melbourne Water regarding the potential removal of the perimeter fence and integration of pedestrian/cycle path access through the reserve, where appropriate, within the context of public safety in relation to its drainage function combined with the protection of environmental values.	MWC WCC	Ongoing
7.10B-11	Gregory MWS Reserve Continue to maintain including ensuring the large tree at entry is protected.	WCC	Ongoing
7.10B-12	Hawthorn Road Reserve Continue to maintain.	WCC	Ongoing
7.10B-13	Heathcote Drive Reserve Continue to maintain.	WCC	Ongoing
7.10B-14	Jean Street Reserve <i>Minor upgrade to install some fitness equipment.</i> Additional information/rationale: <i>The park is in good condition and the minor upgrade is to broaden the facility provision beyond play to meet a broader demographic.</i>	WCC	High
7.10B-15	Lernes Street Retarding Basin Continue to maintain. In the longer term, council to liaise with Melbourne Water regarding the potential removal of the perimeter fence and integration of pedestrian/cycle path access through the reserve, where appropriate, within the context of public safety in relation to its drainage function combined with the protection of environmental values.	MWC	Ongoing
7.10B-16	Mahoneys Reserve Major upgrade of unstructured recreation facilities, including circuit path to improve access and protect nature conservation values. Additional information/rationale: <i>Prepare and implement a Landscape Masterplan for this reserve to guide the provision of additional unstructured recreation and social facilities along with improving the landscape character, protecting the existing remnant indigenous trees and providing east-west shared path access through the reserve as part of the broader east-west link between Kooyong/Koot/Gardiners Creek and Dandenong Creek.</i>	WCC	Very High
7.10B-17	Mahoneys Road Reserve Continue to maintain and protect the remnant trees. In the future, continue to strengthen nature conservation values and plant additional trees.	WCC	Ongoing
7.10B-18	Matherson Road Reserve Continue to maintain.	WCC	Ongoing

No.	Action	Responsibility	Priority
7.10B-19	McKenna Road Walkway Continue to maintain. In the longer term review the need for this open space given the close proximity to the recently created Former Healesville Freeway Reserve.	WCC	Ongoing
7.10B-20	Mock Street Reserve Minor upgrade to provide improved play, if this is determined to be needed in this location by the community, seating area adjacent to shared path and strengthen east-west path link to Mahoneys Reserve.	WCC	High
7.10B-21	Naramah Street Walkway Continue to maintain.	WCC	Ongoing
7.10B-22	Nunawading Community Gardens Continue to support the Nunawading Community Gardens. <i>Additional information/rationale:</i> <i>The gardens are located in the former Healesville Freeway Reserve, and the future extent and size to be confirmed as part of the future Masterplan for Davy Lane Reserve. Refer to Action 7.10B-4.</i>	WCC	Ongoing
7.10B-23	Old Strathdon Orchard Continue to maintain.	WCC	Ongoing
7.10B-24	Parklands Place Reserve Continue to maintain, including protecting the remnant trees.	WCC	Ongoing
7.10B-25	Parkview Court Reserve Continue to maintain.	WCC	Ongoing
7.10B-26	Pipe Track Reserve – east of Springvale Road Provide shared path and investigate other potential improvements with Melbourne Water. Also refer to Action 5.4-12.	WCC MWC	High
7.10B-27	Pipe Track Reserve – west of Springvale Road Provide shared path and investigate other potential improvements with Melbourne Water, including improvement to transition between the Pipe Track Reserve and on-road link via Mahoneys Road and Ballantyne Street in Burwood East. Also refer to Action 5.4-12.	WCC MWC	High
7.10B-28	Raleigh Reserve Minor upgrade with path link to connect to Holbury Reserve in Blackburn South and improve drainage.	WCC	Low
7.10B-29	Sapphire/ Willarah Reserve Major upgrade to provide a range of unstructured recreation and social facilities including picnic and BBQ area along with path network and additional planting to complement the native character and nature conservation values. <i>Additional information/rationale:</i> <i>In conjunction with the Masterplan for Forest Hill Reserve, undertake a Master Plan to guide major upgrade works to reconfigure Sapphire/ Willarah Reserve to provide a defined character for the local community. Refer to Action 7.10B-8.</i>	MCC	Very High

No.	Action	Responsibility	Priority
7.10B-30	Stringybark Close Reserve Continue to maintain.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Responsibility	Priority
7.10C-1	Future signalised pedestrian crossing on Springvale Road Investigate the potential to install a signalised pedestrian crossing over Springvale Road where Old Strathdon Orchard / Former Healesville Freeway Reserve linear open space adjoins the road. This will strengthen the east-west open space link between KooyongKoot/Gardiners Creek and Dandenong Creek as identified in the 2007 Open Space Strategy.	WCC	Medium
7.10C-2	Cycle/pedestrian path improvements through streetscapes west of Springvale Road to link to Mahoneys Reserve Investigate options to improve the cycle/pedestrian priority link west of Springvale Road including along Mock Street, through Mock Street Reserve, along Parkland Place to Mahoneys Road, and into and through Mahoneys Reserve.	WCC	Ongoing
7.10C-3	Future shared path crossing point over Mahoneys Road As part of improving the east-west link between KooyongKoot/Gardiners Creek and Dandenong Creek, investigate options to provide a clear and safe shared path crossing point over Mahoneys Road in the vicinity of Mahoneys Reserve and Parkland Place.	WCC	Ongoing
7.10C-4	Forest Hill Shopping Centre If this retail site redevelops in the future additional public open space may be required and the type and location will depend on the scale and type of change.	WCC	Ongoing
7.10C-5	Hewlett Packard Site If this site redevelops in the future additional public open space will be required and the type and location will depend on the scale and type of change.	WCC	Ongoing

7.11 Mitcham

7.11.1 Overview

Mitcham is located in the north-east area of the Municipality. Mitcham Road combined with Chippewa Avenue and Mullum Mullum Creek form the northern boundary. The east is defined by Mullum Mullum Creek and Heatherdale Road, the south by Dennis Street and Premier Avenue east of Mitcham Road, and Redland Drive west of the Mitcham Road. The western boundary is made up of a number of local access streets which includes Hedge End Road and Dunlavin Road north of Whitehorse Road and Rooks Road south of the Whitehorse Road.

Refer to *Figure 7.11-1* on the following page of the existing open space in Mitcham.

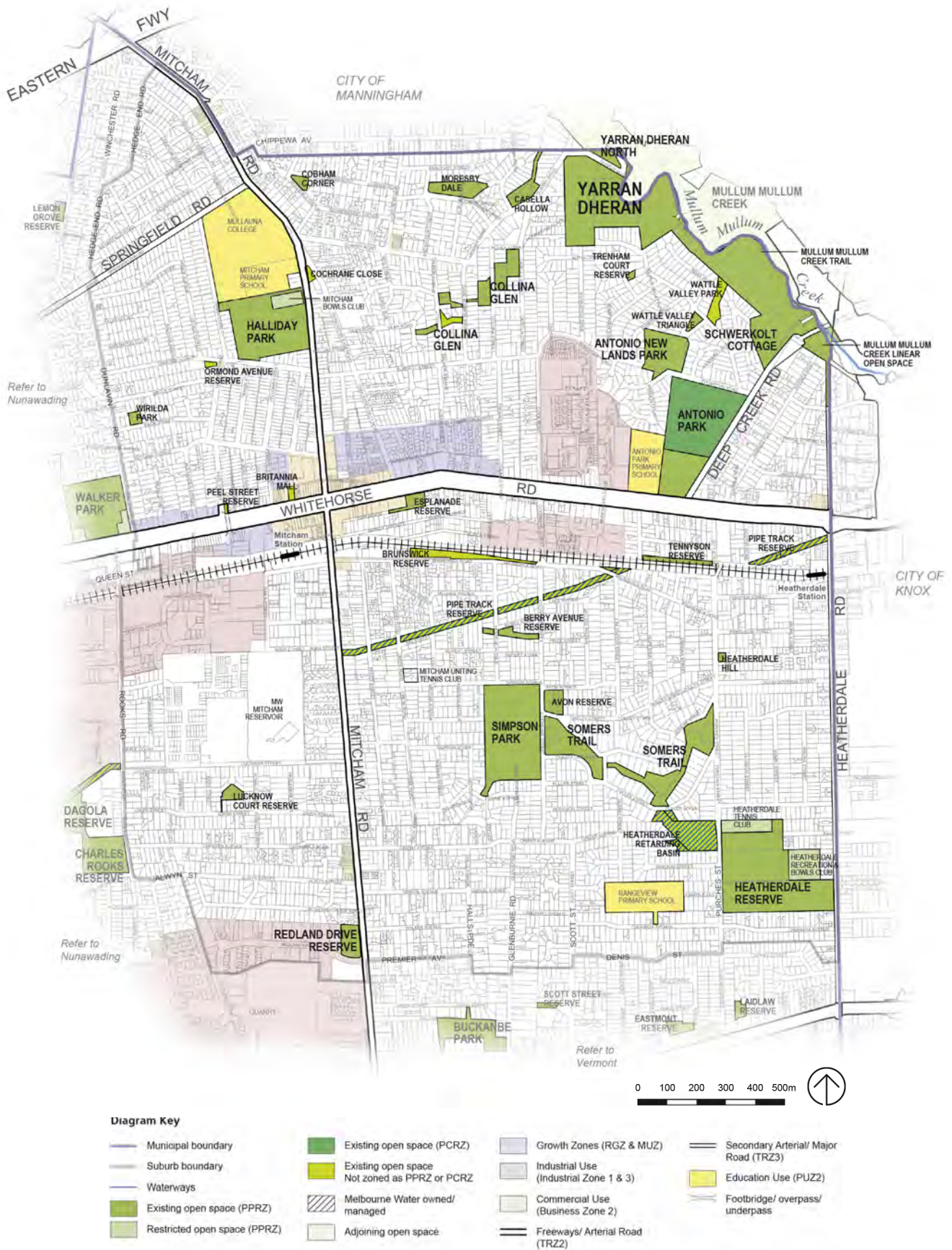


Figure 7.11-1 Existing Open Space Mitcham

7.11.2 Existing open space

Overview

Yarran Dheran Reserve and Schwerkolt Cottage are the major Regional open space in Mitcham adjoining the Mullum Mullum Creek. The Mullum Mullum Creek shared path extends through Yarran Dheran Park providing regional connectivity into the City of Maroondah to the east and City of Manningham in the north.

Mitcham has three key Municipal open spaces including Halliday Park, which is a popular non-sporting park that is a key destination open space with barbecue and picnic facilities along with a large play area. Antonio Park just north of Whitehorse Road contains remnant indigenous bushland with a picnic area adjoining it that needs improvement. The Heatherdale Parklands system of open spaces south of Whitehorse Road include structured sporting and unstructured recreation facilities. This system includes Simpson Park with the outdoor sports field, Somers Trail and Heatherdale Reserve with outdoor sports fields and the Heatherdale Tennis Club and Heatherdale Recreation and Bowling Club. The Melbourne Water Pipe Track Reserve traverses east-west through the precinct east of Mitcham Road.

The north east part of Mitcham is steeply undulating the there are open space reserves located generally in the valley form of these tributaries and are connected including Collina Glenn, Moresby Dale, Casella Hollow and Antonio New Lands park. While some of these reserves are large, the presence of the remnant bushland and the steep grades means many are primarily for walking access only. There is potential to undertake a major upgrade to Casella Hollow to provide a space with a broader range of unstructured recreational facilities in a location which has good passive surveillance.

South of Whitehorse Road and east of the Mitcham Road, is a series of Local and Small Local open spaces that provide facilities and spaces within walking distance of the local community. Some of these spaces are encumbered by their proximity to major roads and railways with potential for improvement.

Table 7.11a is a list of all the existing open spaces in Mitcham in alphabetical order and Table 7.11b is a summary of the total number of open spaces by hierarchy.

Table 7.11a Existing open space in Mitcham including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Antonio New Lands Park	1.92	Neighbourhood	Nature conservation	Passive	Service easement	
Antonio Park	7.22	Municipal	Nature conservation	Passive		
Avon Avenue Reserve	0.52	Local	Nature conservation	n/a		
Berry Avenue Reserve	0.38	Local	Play	Linking space	Nature conservation	
Britannia Mall	0.09	Urban Civic	Linking space	Passive		
Brunswick Reserve	0.75	Local	Linear	Nature conservation	Passive	
Casella Hollow	0.66	Local	Nature conservation	Play	Service easement	
Cobham Corner	0.19	Small Local	Play	Native character		
Cochrane Close	0.12	Small Local	Road reserve	Linking space	Nature conservation	

Table 7.11a Existing open space in Mitcham including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Collina Glen (main reserve)	1.24	Neighbourhood	Nature conservation	Service easement	Linking space	Play
Collina Glen (small reserve with play)	0.17	Small Local	Play	Linking space		
Collina Glen (west, 2 small individual reserves)	0.33	Small Local	Linking space	Nature conservation		
Esplanade Reserve	0.28	Local	Native conservation	Passive		
Halliday Park	4.85	Municipal	Public garden	Civic	Play	Service easement
Heatherdale Hill	0.08	Small Local	Native character	Undeveloped		
Heatherdale Recreation and Bowls Club (located in Heatherdale Reserve)	1.33	Municipal	Restricted sporting/recreation	n/a		
Heatherdale Reserve	7.35	Municipal	Sporting	Nature conservation	Passive	
Heatherdale Reserve Retarding Basin (Melbourne Water)	1.89	Municipal	Service easement	Linking space	Nature conservation	Passive
Heatherdale Tennis Club (located in Heatherdale Reserve)	0.90	Municipal	Restricted sporting/recreation			
Lucknow Court Reserve	0.32	Local	Passive	Nature conservation		
Moresby Dale	0.88	Local	Nature conservation	n/a		
Mullum Mullum Creek Linear Open Space	5.12	Regional	Waterway	Linear	Linking space	Nature conservation
Mullum Mullum Creek Linear Open Space (east of Deep Creek Road)	1.04	Regional	Waterway	Linear	Nature conservation	
Ormond Avenue Reserve	0.07	Small Local	Linking space	Native character	Undeveloped	
Peel Street Reserve	0.04	Local Link	Linking space	n/a		
Pipe Track Reserve (Melbourne Water)	2.50	Regional	Service easement	Linear		
Redland Drive Reserve	0.72	Local	Passive	n/a		
Schwerkolt Cottage	2.24	Regional	Heritage	Nature conservation	Public garden	
Simpson Park	6.43	Municipal	Sporting	Nature conservation	Passive	
Somers Trail	4.52	Municipal	Passive	Linking space	Nature conservation	Waterway
Tennyson Reserve	0.37	Local	Service easement	Linking space		
Trenham Court Reserve	0.07	Small Local	Nature conservation	Play		
Wattle Valley Triangle	0.17	Small Local	Service easement	Nature conservation	Road Reserve	
Wattle Valley Park	0.47	Regional	Linking space	Passive		
Wirilda Park	0.18	Small Local	Native character	Undeveloped	Viewing	
Yarran Dheran	8.14	Regional	Nature conservation	Linear		
Yarran Dheran North	0.32	Regional	Waterway	Linear	Nature conservation	

Table 7.11b Number, hierarchy and size of open space excl. restricted open space in Mitcham

No.	Hierarchy	Area (Ha)	%
7	Regional	19.83	32%
6	Municipal	32.26	52%
2	Urban Civic	3.16	5%
1	Neighbourhood	0.09	0%
9	Local	4.88	9%
9	Small Local	1.37	2%
1	Local Link	0.04	0%
35	TOTAL	61.61	100%

Quantity

The total quantity of open space in Mitcham, excluding restricted open space, represents 9.3 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 9.6 per cent of the total land area. This is below the municipal-wide average of 9.6 per cent excluding restricted open space and below the 11.3 per cent including restricted open space.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Mitcham. Refer to Figure 7.11-2 for the Hierarchy of existing open space in Mitcham.



Figure 7.11-2 Open Space Hierarchy Mitcham

Open space distribution and future open space needs in Mitcham

Maroondah Highway is a key east-west arterial road through Mitcham and forms a major physical barrier to safe and easy walking access to open space within the precinct. The railway which runs east-west through Mitcham just south of Whitehorse Road also forms a major barrier to safe and easy north-south walking access to open space. Mitcham and Heatherdale Roads are north-south secondary arterials and form barriers to safe and easy east-west walking access to open space. Affecting access to the Local and Small Local open space, Springfield Road and Deep Creek Road are major roads which form barriers to these smaller areas of open space.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.11-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Mitcham and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.11c Brief description of gap areas in Mitcham

Gap area	Description
MI1	Located north of Springfield Road this gap area is addressed by the presence of a Local open space, Oxford Steet Reserve in the adjoining Manningham City Council area.
MI2	Located immediately north of Whitehorse Road in the vicinity of the Peel Street Reserve, this gap area is addressed by proposed new Small Local open space which is proposed in this area, not only to address the gap area but to also provide additional open space in a location where there is a chance to high density housing and increase urban densities.
MI3	Located north of Whitehorse Road and east of Mitcham Road, this gap area is to be addressed by with the provision of a new Local open space. This is to address the gap in provision and the increase in urban densities in this area in the future.
MI4	Located north of Whitehorse Road in the non-residential land use area east of Cook Road. A new Small Local open space is proposed to meet the existing and future worker open space needs and to assist with urban cooling.
MI5	Located south of Whitehorse Road and west of the Mitcham Road both north and south of railway, this gap area will be addressed with the provision of a new Local open space. This will meet the needs of the recent and forecast population who are living and working in high density developments.
MI6	Located south of Mitcham Reservoir west of Mitcham Road, this existing gap area will be addressed with the proposed expansion to Lucknow Reserve, making it more accessible to residents living to the south of reserve. This will be combined with identifying opportunities to improve north-south pedestrian connectivity in the precinct, where the long block lengths make walking access to existing open space circuitous.

Gap area	Description
MI7	Located east of Mitcham Road north of Dennis Street, this gap area does not have any specific recommendations made for it. This is due to quality of the existing open space network to the north of the gap area that is accessible via the local access street network without crossing any major roads. This area is with the Neighbourhood Residential Zone and is therefore any forecast change will be minimal.

7.11.3 Ancillary open space

Within Mitcham, some of the school grounds contribute to the sense of the space and greening. Mitcham Primary School and the adjoining Mullauna Collage have mature canopy trees and outdoor grassed and areas and sports fields that contribute to greening. Antonio Park Primary School directly adjoins Antonio Park and does not on its own make a significant contribution to additional greening and ancillary open space use in the precinct.

Rangeview Primary School is located in the Gap Area MI7 is not visible from the adjoining street network with only two entry points into it off the local street network. There is a small sports field with mature canopy trees to the perimeter, and can be accessed after hours, however it lacks passive surveillance.

Additionally the railway reserve, which includes a new shared path extending east-west through the precinct provides improved off-road cycling and walking opportunities within the precinct.

The pattern of subdivision layout is quite disjointed particularly between the non-residential and residential land uses meaning there is not good pedestrian permeability through some parts of the local street network.



Figure 7.11-3 Gap Analysis Mitcham

7.11.4 Existing Mitcham community

Demographics

There are 16,935 residents living in Mitcham as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 2,152 people living in Mitcham, which represents approximately a 15 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the primary school to secondary school age group (5 to 17 years) and people over the age of 35 years. There is a lower proportion in the 0 to 4 years age range and in the tertiary education and young workforce age groups (18 to 34 years).

There is a higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006 approximately 74 per cent lived in separate houses and there were approximately 25 per cent of the population living in medium density and 0.2 per cent in high density dwellings. In 2021, approximately 62 per cent live in the separate houses, 33 per cent in medium density housing and 5 per cent in high density dwellings.

The residential population is forecast to increase 14 per cent, with the continued trend of a decrease in children under the age of 17 and with the elderly that are in the 85 years and over age group. There is a forecasted increase in the 18 to 84 age range.

Summary of community engagement outcomes

A total of 199 resident surveys were received from Mitcham, which represents 10 per cent of the total surveys received.

The survey respondents in Mitcham value 'Connecting with nature' with a higher percentage compared to the other precincts.

Values of open space (top five)

- 71% Connecting with nature
- 68% A place to relax and unwind
- 67% Trees
- 65% Walking and cycling
- 62% Native birds and wildlife

Types of open space used and frequency of use (top five)

- 86% Local streets for exercise
- 86% Large parks and reserves
- 80% Medium parks
- 78% Small local parks
- 76% Linear reserve network

Frequently visited types of open spaces (top five)

- 77% Local streets for exercise

- 50% Small local parks
- 48% Large parks and reserves
- 39% Medium parks
- 35% Waterway reserves

Priority of facilities and amenities in open spaces (top five)

- 68% Seats
 - 66% Walking paths
 - 60% Trees
 - 59% Toilets
 - 59% Additional greening for environmental health & wellbeing
- (Note that 38% Play space was listed eleventh)

Table 7.11d Most frequently visited open space in Mitcham

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
106	Heatherdale Creeklands (Including Simpson Park, Somers Trail, Heatherdale Reserve and Heatherdale Ponding Basin)	• Dog walking (44) • Walking (44) • Running (9) • Social - meeting family / friends / parties (9) • Trees (9) • Bird watching (7) • Play – children (7) • Open space - ambience, beauty (5) • Club based sport (5) • Access - close to home (4) • Green space (4) • Cycling (4) • Active recreation (3) • Exercising (3) • Open space - peaceful (2) • Open space (2) • Enjoy nature (2) • Informal ball games (2)	• Drainage - improvement required (3) • Dogs - owners responsible for the removal of waste (2) • Picnic facilities – required i.e. BBQ (2) • Dogs - over use (2) • Seating - additional required (2) • Seating under shade - additional required (2)
53	Halliday Park	• Play - children (15) • Walking (13) • Social - meeting family / friends / parties (8) • Dog walking (6) • Spending time outdoors (6) • Active recreation (4) • Open space (4)	

No	Name	Reasons to visit	Suggested improvements
		• Access - close to home (3) • Open space - ambience, beauty (3) • Diverse range of activities (2) • Enjoy nature (2) • Exercising (2) • Green space (2) • Picnics (2) • Relaxing (2) • Walking - travel through (2)	
26	Yarran Dheran Reserve (Including Yarran Dheran)	• Walking (7) • Cycling (2) • Open space - ambience, beauty (2) • Dog walking (6) • Enjoy nature (5) • Exercising (4) • Access - close to home (2) • Nature play (2) • Open space – peaceful (2) • Play – children (2) • Relaxing (2)	
15	Antonio Park	• Play - children (5) • Dog walking (3) • Exercising (3) • Access - close to home (2) • Walking (2)	
11	Charles Rooks Reserve	• Play - children (4) • Walking (4) • Dog walking (3) • Access - close to home (2)	
Open space beyond walking distance (top five)			
32	Heatherdale Creeklands (Including Simpson Park, Somers Trail and Heatherdale Reserve)	• Dog walking (11) • Walking (8) • Exercising (3) • Club based sport (3) • Play - children (3) • Social - meeting family / friends / parties (2) • Cycling (2)	
29	Yarran Dheran Reserve (Including Yarran Dheran)	• Walking (9) • Enjoy nature (7) • Wildlife (4) • Enjoy nature (3)	

No	Name	Reasons to visit	Suggested improvements
		• Cycling (3) • Dog walking (2)	
18	Blackburn Lake Sanctuary	• Play - children (5) • Walking (4) • Diverse range of activities (2) • Open space - ambience, beauty (2) • Social - meeting family / friends / parties (2) • Picnics (2) • Trees (2)	
15	Halliday Park	• Play - children (9) • Active recreation – basketball (3) • Social - meeting family / friends / parties (2) • Trees (2)	
14	Antonio Park	• Enjoy nature (4) • Open space - ambience, beauty (2) • Play – children (2) • Walking (2) • Wildlife (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by people in each category:

Open space

- 15no. Valued (15)
 - Additional required (11)
 - Improvements required (2)
- Better distribution types of open space (5)
- Protection of existing open space (7)

Maintenance and management

- Dogs (13)
 - More designated dog areas (10)
 - No additional dog areas (2)
- 6no. Maintenance of open space and facilities (6)
- 4no. Waste/graffiti removal (4)
- Education to allow fauna/fauna protection and history in Mitcham (3)
- Placemaking (i.e. events/fitness classes) (2)
- Shared space - conflicts between sporting clubs and dog owners (2)

Trees and vegetation

- Additional canopy trees. Valued (4)
- Increase indigenous vegetation for habitat (2)

Park Infrastructure

- Active facilities - additional required (11)

- Fitness Equipment - diverse types for different ages (5)
- Pump track (2)
- Park infrastructure - additional required (13)
 - Toilets (5)
 - Bins and dog bin/bags (2)
 - BBQ (2)
- Play space - additional required (9)
 - Waterplay (3)
 - Play spaces for junior and senior play (2)
- Social infrastructure - additional required (7)
 - Generational spaces - for youth/seniors (5)

Paths

- Shared paths (3)
 - Separate cyclists from pedestrians (3)
- Bike paths (3)
 - Additional connected cycling network (2)

Other

- Developments - avoid overdevelopment (2)
- Street lights - concern about too little and too much (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.11.5 Analysis of future change and open space needs

Forecast population change

The Mitcham Precinct is currently forecast to reach a residential population of 19,263 by 2036, representing an additional 2,328 people, or a 14 per cent increase compared to the 2021 population. The table below includes the forecast population growth for the residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.11e Population forecasts for Mitcham 2021 - 2036

Mitcham	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	16,935	17,717	18,461	19,263	+2,328

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 2,328 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults and decrease in proportion of children and young adults under 18 years of age means there is a need to increase the range of facilities in open space in addition to play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.11.6 Mitcham Precinct Recommendations

Summary of overall intent

Provision and distribution

Mitcham is forecast to experience change over the next 15 years with 2,321 new residents forecast to be living here by 2036 which represents a 14 per cent increase. The forecast change is mainly anticipated in the Mitcham Activity Centre that extends along Whitehorse Road and includes the Mitcham Station precinct. Within the core area where most change will occur, there is a lack of existing open space with Britannia Mall and Peel Street Reserve being the only two existing open spaces. There is a need to provide new green Small Local open space west of Mitcham Road and a new Local open space to the east in the higher density mixed use area. Further east in the Cooks Road Industrial Precinct a new Local open space is proposed for the existing and forecast employment community. South of Whitehorse Road and west of the Mitcham Road a new Local open space is proposed for the recent and forecast community.

Outside of the gap areas, Halliday Park is one of the City's major destination parks for unstructured and informal recreational use. Yarran Dheran Reserve and Schwerkolt Cottage are major regional destination open spaces adjacent to Mullum Mullum Creek with heritage and nature conservation values. Heatherdale Parklands is a major linked network of open space along the valley line of Heatherdale Creek. The community survey identified this system of open space as being the most popular in Mitcham. It provides a diversity of spaces ranging from sporting facilities, dog off-lead areas, remnant bushland, playgrounds, picnic facilities and shared trail network. As a contrast, the area south-west of the railway lacks a diversity of open space with Lucknow Court Reserve being difficult to access and Redland Drive Reserve being located fronting a main road.

Quality and design

With Mullum Mullum Creek defining the northern boundary of this precinct and Heatherdale Creek Parklands, waterways and natural bushland character significantly contribute to Mitcham's inherent character and sense of place. As a contrast, Halliday Park has a more formal public parkland character with a combination of exotic and native vegetation, which offers diversity of character for the community. Upgrades to Halliday Park along with Heatherdale Creek Parklands focus on increasing the diversity of recreation and social facilities.

For the proposed new open spaces, the focus will be on diversity, ranging from quiet spaces for people to relax and enjoy nature to encouraging exercise and fitness. Throughout the precinct mature trees are a key feature in open space and protecting these and increasing canopy cover is a key outcome as urban densities increase.

7.11.7 Action Plan - Mitcham

A Additional public open space

No.	Action	Responsibility	Priority
7.11A-1	Provide new Small local open space in Gap Area MI2 Provide new Small Local open space away from the commercial precinct and include unstructured recreation facilities and urban greening.	WCC Developer	Medium
7.11A-2	New Local open space in Gap Area MI3 Provide new Local open space to meet existing and forecast community recreation and open space needs.	WCC Developer	High
7.11A-3	New Local open space in Gap Area MI4 Provide a new Local open space to encourage workers outdoors to socialise and participate in physical activity and assist with urban cooling.	WCC Developer	Medium
7.11A-4	New Local open space in Gap Area MI5 Provide a new Local open space in the Mitcham Station Precinct for the recent and forecast population in high density precincts.	WCC Developer	Very High
7.11A-5	Lucknow Court Reserve expansion Investigate opportunities to expand existing open space to improve access and passive surveillance. Once expansion/additional entry points are confirmed undertake a major upgrade to include a range of unstructured recreation facilities. Refer also to Action 7.11B-20.	WCC	Very High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.11B-1	Antonio New Lands Park Continue to maintain.	WCC	Ongoing
7.11B-2	Antonio Park Continue to protect nature conservation values in the north. In the south undertake a major upgrade to improve play, picnic, and provide additional facilities. <i>Additional information/rationale:</i> <i>Prepare a Landscape Masterplan for the southern portion of Antonio Park to guide the reconfiguration of the open space including consultation with the adjoining Antonio Park Primary School.</i>	WCC	Medium

No.	Action	Responsibility	Priority
7.11B-3	Avon Reserve Continue to protect remnant vegetation and strengthen biodiversity values.	WCC	Ongoing
7.11B-4	Berry Avenue Reserve - east of Cochrane Road Continue to maintain.	WCC	Ongoing
7.11B-5	Berry Avenue Reserve - west of Cochrane Road Investigate if this open space is required in the future.	WCC	Ongoing
7.11B-6	Britannia Mall Major upgrade to increase the urban cooling greening role of this open space and identify opportunities to improve activation of the eastern boundary.	WCC	Medium
7.11B-7	Brunswick Reserve Continue to maintain in the short term and in the longer term, minor upgrade to install fitness station to improve activities for the forecast community.	WCC	Low
7.11B-8	Casella Hollow Major upgrade to reset play space and include facilities for a diverse age range, along with picnic and seating to overlook the open space.	WCC	Medium
7.11B-9	Cobham Corner Minor upgrade to include path, seating and other unstructured recreation facilities eg fitness station.	WCC	Medium
7.11B-10	Cochrane Close Continue to maintain.	WCC	Ongoing
7.11B-11	Collina Glen (main reserve) Minor upgrade to paths and improve environmental values with weed management and revegetation, retaining open sightlines from paths and entries.	WCC	Medium
7.11B-12	Collina Glen (small reserve with play) Continue to maintain and undertake weed control works.	WCC	Ongoing
7.11B-13	Esplanade Reserve Minor upgrade to protect the environmental character and improve access and unstructured recreation facilities to make the open space more accessible and appealing for the existing and forecast community to use.	WCC	Medium
7.11B-14	Halliday Park Minor upgrade to the quality of picnic area infrastructure and provide additional unstructured recreation and informal facilities for older adults.	WCC	High
7.11B-15	Heatherdale Hill Continue to maintain with additional planting, seating and path.	WCC	Medium
7.11B-16	Heatherdale Recreation and Bowls Club (Restricted) Continue to maintain.	WCC	Ongoing

No.	Action	Responsibility	Priority
7.11B-17	Heatherdale Reserve Continue to maintain.	WCC	Ongoing
7.11B-18	Heatherdale Retarding Basin (Melbourne Water) Continue to maintain including sporting use of the basin for cricket.	WCC (MWC)	Ongoing
7.11B-19	Heatherdale Tennis Club (Restricted) Continue to maintain.	WCC	Ongoing
7.11B-20	Lucknow Court Reserve Investigate opportunities to expand existing open space to improve access and passive surveillance. Once expansion/additional entry points are confirmed undertake a major upgrade to include a range of unstructured recreation facilities. Refer also to Action 7.11A-5.	WCC	High
7.11B-21	Moresby Dale Continue to maintain.	WCC	Ongoing
7.11B-22	Mullum Mullum Creek Linear Open Space Continue to maintain.	WCC	Ongoing
7.11B-23	Mullum Mullum Creek Linear Open Space (east of Deep Creek Road) Continue to maintain.	WCC	Ongoing
7.11B-24	Ormond Avenue Reserve Continue to maintain to protect the mature trees and strengthen planting if required. Given the close proximity to Halliday Park it is not necessary to provide recreational infrastructure.	WCC	Ongoing
7.11B-25	Peel Street Reserve Continue to maintain.	WCC	Low
7.11B-26	Pipe Track Reserve (Melbourne Water) Provide shared path and investigate potential improvements with Melbourne Water. Review the need for the play facility in the longer term. Also refer to Action 5.4-12.	WCC MWC	High
7.11B-27	Redland Drive Reserve Major upgrade to improve character and design to increase its appeal to both the employment and resident community.	WCC	High
7.11B-28	Schwerkolt Cottage Undertake a major upgrade to improve visitor facilities. Investigate option to include community gardens in the orchard area of this site as an appropriate adaptive reuse of this heritage site as part of the Masterplan process.	WCC	High
7.11B-29	Simpson Park Minor upgrade to include a circuit path and upgrade existing path surfaces to improve accessibility.	WCC	Medium
7.11B-30	Somers Trail Continue to maintain.	WCC	Ongoing
7.11B-31	Tennyson Reserve Continue to maintain.	WCC	Ongoing

No.	Action	Respons- ibility	Priority
7.11B-32	Trenham Court Reserve Continue to maintain.	WCC	Ongoing
7.11B-33	Wattle Valley Park Major upgrade to include unstructured recreation and social facilities for the local community and improved landscape character.	WCC	High
7.11B-34	Wattle Valley Triangle Continue to maintain including vegetation management and installation of seats.	WCC	Ongoing
7.11B-35	Wirilda Park Minor upgrade to include park seating and add additional planting.	WCC	Medium
7.11B-36	Yarran Dheran Continue to maintain.	WCC	Ongoing
7.11B-37	Yarran Dheran North Continue to maintain.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Respons- ibility	Priority
7.11C-1	New open space links in future development in Gap Area MI6 Council to require new north-south pedestrian links through future redevelopment sites in Gap Area MI6 to improve access to the existing Local open space to the north of the gap area.	WCC	Ongoing

7.12 Mont Albert

7.12.1 Overview

Mont Albert is the western part of the Municipality. It is defined to the west by series of local access streets including Wilson Street, York Street, Barloa Road and Carrick Street. It is defined to the south by Windsor Crescent, the north by Kenmare Street and the east by Elgar Road.

Refer to *Figure 7.12-1* below.



Figure 7.12-1 Existing Open Space Mont Albert

7.12.2 Existing open space

Overview

Kingsley Gardens is the largest Neighbourhood open space in Mont Albert, with excellent mature established trees and undulating topography to the north-east. There is potential for the Gardens to be substantially improved including consideration of traffic noise attenuation given this is a key issue. South of Whitehorse a series of Local open spaces meet the local open space needs of the existing population, however there are gaps in their distribution and a need to potentially expand some of these and improve the quality and character of others. The recently established Rowland Street Park includes a play facility and seating with mature trees, and this Strategy recommends expanding the park size in the future to increase the diversity of facilities and improve access and passive surveillance.

Lorne Parade Reserve is undergoing a major change as part of the new Union Station as part of the Level Crossing Removal Project, and Beaty Street Reserve is located on the north side of the railway, and again has potential to be significantly improved.

St Johns Avenue Park and Windsor/St George Reserve both have the potential to be expanded in size to improve their role in the network.

Table 7.12a is a list of all the existing open spaces in Mont Albert in alphabetical order and Table 7.12b is a summary of the total number of open spaces by hierarchy.

Table 7.12a Existing open space in Mont Albert including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification
Beatty Street Reserve	1,895	Small Local	Linking space	Service easement	Viewing
Kingsley Gardens	23,893	Neighbourhood	Public garden	Heritage	Passive
Lorne Parade Reserve	6,244	Local	Railway easement/siding	Linking space	Passive
Rowland Street Park	1,390	Small Local	Passive		
St Johns Avenue Park	381	Small Local	Botanical	Passive	
Windsor/St George Reserve	938	Small Local	Passive	Viewing	
Wolseley Close Reserve	257	Local Link	Linking space		
Zetland Road Closure	137	Local Link	Linking space		

Table 7.12b Number, hierarchy and size of open space in Mont Albert

No.	Hierarchy	Area (Ha)	%
0	Regional	0	0%
0	Municipal	0	0%
0	Urban Civic	0	0%
1	Neighbourhood	2.39	68%
1	Local	0.62	18%
4	Small Local	0.46	13%
2	Local Link	0.04	1%
8	TOTAL	3.51	100%

Quantity

The total quantity of open space in Mont Albert, excluding restricted open space, represents approximately 2 per cent of the total land area. There is no restricted open space in Mont Albert.

Hierarchy and distribution

Mont Albert does not have any Regional, Municipal or Urban Civic open space. Refer to Figure 7.12-2 below the Hierarchy of existing open space in Mont Albert.



Figure 7.12-2 Open Space Hierarchy Mont Albert

Open space distribution and future open space needs in Mont Albert

Whitehorse Road is a key east-west arterial road through Mont Albert that forms a major physical barrier to safe and easy north-south walking access to open space within the precinct. The railway forms a barrier to access along with Mont Albert Road which forms a barrier to safe and easy walking access to Local and Small Local open space.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.12-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Mont Albert and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.12c Brief description of gap areas in Mont Albert

Gap area	Description
MA1	Located north of Whitehorse Road and west of the walking catchment to Kingsley Gardens, this Gap Area will be addressed by the provision of a new Small Local open space.
MA2	Located south of Whitehorse Road and west of Beatty Street Reserve, this gap area will be addressed by investigating expansion to the size of Beatty Street Reserve and improving the quality of it. If expansion to the reserve is not viable, then a new Small Local open space will be required west of the Beatty Street Reserve to address this gap area.
MA3	Located north of Mont Albert Road, this gap area is proposed to be addressed by both an expansion to the size of Rowland Street Park and a new Small Local open space preferably in the centre of the Mont Albert commercial precinct or nearby.
MA4	Located south of Mont Albert Road this gap area will be addressed by the proposed expansion to the two existing Small Local open spaces being St Johns Avenue Park and Windsor/St

7.12.3 Ancillary open space

Within Mont Albert, Mont Albert Primary School provides some ancillary open space including a small sports field to the north adjoining Kenmare Street and informal sports courts that could potentially be available for after hours use. Many of the streetscapes in Mont Albert contain avenues of mature trees which contribute to the overall urban greening and amenity. The pattern of subdivision layout is generally of gridded streets with good connectivity, except for the barriers to access as noted above.



Figure 7.12-3 Gap Analysis Mont Albert

7.12.4 Existing Mont Albert community

Demographics

There are 4,879 residents living in Mont Albert as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 148 people living in Mont Albert, which represents approximately a 3 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the tertiary education and the young workforce age groups (18 to 34 years) and in the 50 to 85 years and over age cohort. There is a lower proportion of young people under the age of 17 years old and parent age group (35 to 49 years).

A higher proportion of the population now live in medium and high-density dwellings compared with 2006. In 2006 approximately 59 per cent lived in separate houses, 38 per cent lived in medium-density housing and 3 per cent lived in high-density dwellings. In 2021, approximately 51 per cent live in the separate houses, with 41 per cent in medium-density housing and 8 per cent in high-density.

The residential population is forecast to increase 17 per cent, with the continued trend of a decrease in the younger demographics and the slightly the 50 to 69 age cohort. There is a forecast increase in the 0 to 4 year age group, parents (35 to 49 years) and people over the age of 70 years.

Summary of community engagement outcomes

A total of 103 open space surveys were received from Mont Albert, which represents 5 per cent of the total surveys received.

The top value of open space for survey respondents in Mont Albert was 'A place to relax and unwind' which is the same as the municipal average. Compared to the other precincts, more respondents identified the need for additional open space.

Values of open space (top five)

- 67% A place to relax and unwind
- 62% Connecting with nature
- 58% The feeling of space and serenity
- 57% Native birds and wildlife
- 55% Trees

Types of open space used and frequency of use (top five)

- 89% Local streets for exercise
- 82% Large park and reserves (non-sporting)
- 78% Small local parks
- 70% Medium parks
- 66% Waterway reserves

Frequently visited types of open spaces (top five)

- 86% Local streets for exercise
- 56% Small local parks
- 30% Large parks and reserves
- 30% Sporting reserves
- 25% Medium parks

Priority of facilities and amenities in open spaces (top five)

- 69% Additional greening for environmental health & wellbeing
- 63% Trees
- 60% Seats
- 60% Walking paths
- 50% Open grassed areas for informal use
- 49% Toilets

(Note that 37% Play space was listed tenth)

Table 7.12d Most frequently visited open space in Mont Albert

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
24	Mont Albert Reserve	• Walking (5) • Dog walking (4) • Play - children (3) • Running (3) • Access - close to home (2)	
21	Kingsley Gardens	• Dog walking (5) • Play - children (5) • Picnics (3)	
14	Surrey Park	• Dog walking (4) • Play - children (3)	
11	Lorne Parade Reserve	• Play - children (3)	
11	Rowland Street Reserve	• Play - children (4) • Dog walking (2) • Spending time outdoors (2)	
Open space beyond walking distance (top five)			
14	Surrey Park	• Dog walking (3) • Play - children (2) • Walking (2)	
13	Box Hill Gardens	• Play - children (3) • Running (3) • Dog walking (2) • Exercising (2)	

No	Name	Reasons to visit	Suggested improvements
13	Wattle Park	• Play - children (2) • Running (2) • Walking (2)	
11	Elgar Park	• Dog walking (2) • Running (2) • Social - meeting family / friends / parties (2) • Walking (2)	
10	Koonung Creek Linear Reserve	• Cycling (3)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by people in each category:

Open space

- Additional required (29)
 - No open space within 400m - Additional required (19)
 - General - additional required (5)
 - Box Hill Brickworks - new open space (3)

Maintenance and management

- Dogs (6)
 - More dog friendly areas (2)
- Maintenance - cleaning including waterways (2)
- Community involvement (2)

Park Infrastructure

- Active facilities - additional required (7)
- Park infrastructure - additional required (7)
 - Bins (3)
- Play space - additional required (2)

Other

- Developments (4)
 - Limit large developments (2)
- LXRP (4)
 - Loss of Lorne Parade with limited replacement facilities (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.12.5 Analysis of future change and open space needs

Forecast population change

The Mont Albert Precinct is currently forecast to reach a residential population of 5,692 by 2036, representing an additional 813 people, or a 17 per cent increase compared to the 2021 population. The table below includes the forecast population growth for the

residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.12e Population forecasts for Mont Albert 2021 - 2036

Mont Albert	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	4,879	5,444	5,549	5,692	+813

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 813 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of young families combined with adults in the 70 plus age groups means there is a need to increase the range of facilities in open space. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters, particularly given the overall limited amount of public open space in Mont Albert as a proportion of the total land area.

7.12.6 Mont Albert Precinct Recommendations

Summary of overall intent

Provision and distribution

Mont Albert is forecast to experience some change over the next 15 years with 831 new residents forecast to be living here by 2036 which represents a 17 per cent increase. Kingsley Gardens is the key existing open space located north of Whitehorse Road next to the Box Hill TAFE. The forecast change is mainly anticipated along Whitehorse Road and in the vicinity of the Mont Albert commercial centre. While the streetscapes provide good connectivity between open spaces and have avenue street tree planting, overall there is a low amount public open space and there are gap areas that require new open space, particularly close to higher-density development. This includes provision of a new Small Local open space in the north-west area of the precinct, centrally located with the Mont Albert shopping precinct and expansion to existing open spaces. Kingsley Gardens to the east provides a diversity of facilities so the new open space will focus on urban greening. South of Whitehorse Road, Beatty Street Reserve will be upgraded to address the forecast growth, while a new Small Local open space is proposed in the heart of the retail area as a social space for workers and residents. South of Mont Albert Road the upgraded Lorne Parade Reserve, combined with an enlarged Windsor/St George Reserve will meet the open space needs of the existing and forecast population.

Quality and design

There is potential to strengthen and improve the predominantly exotic landscape character of the open space in Mont Albert. Major upgrades are proposed to Kingsley Gardens to increase the diversity of facilities and overall quality and character of the reserve. This will increase its prominence and role in the context of the significant growth forecast in the adjoining Box Hill Metropolitan Activity Centre. Major upgrades are also proposed to the Beatty Street Reserve primarily for active unstructured recreation to provide a clear point of difference to Rowland Street Park, which is for younger play and picnics and seating. A major upgrade to Windsor/St George Reserve to incorporate increased facilities will complement the St Johns Avenue Park, where tree protection and urban greening is the key value of this park.

For the proposed new open space reserves, the focus will be on providing a diversity of spaces that have combined roles of urban greening and unstructured recreational use, particularly being located in proximity to higher-density development in Box Hill. Throughout the precinct mature exotic trees are a key feature in open space and protecting these and increasing canopy cover is a key outcome being sought in this precinct as urban densities increase.

7.12.7 Action Plan – Mont Albert

A Additional public open space

No.	Action	Respons- ibility	Priority
7.12A-1	New Small Local open space in Gap Area MA1 Provide a new Small Local open space to meet the needs of the forecast population along the north side of Whitehorse Road.	WCC Developer	Very High
7.12A-2	New Small Local open space in Gap Area MA3 Provide a new Small Local open space as a green square in the centre of the commercial precinct to contribute to urban greening and social space for existing and forecast community. This can potentially adjoin the recently constructed deck over the railway on the former Mont Albert Station site, or be located elsewhere in the precinct.	WCC Developer	High
7.12A-3	Beatty Street Reserve expansion or New Small Local open space in Gap Area MA2 Investigate opportunity to expand the reserve to substantially increase its size to address the gap area MA2 to the west. If this is not feasible, investigate opportunity to provide a new Small Local open space in the gap area MA2. Refer also to Action 7.12B-1.	WCC Developer	Very High
7.12A-4	Rowland Street Park expansion Investigate opportunity to expand the reserve to the north to increase size, prominence and access.	WCC	Medium
7.12A-5	St Johns Avenue Park expansion Investigate the opportunity to expand the size of the park by utilising part of the road reserve or additional adjoining land and upgrade the reserve to provide additional facilities to increase its use. Refer also to Action 7.12B-5.	WCC	Medium

No.	Action	Responsibility	Priority
7.12A-6	Windsor/St George Reserve Major upgrade including investigating expansion to the size utilising the existing road reserve. Upgrade to improve condition and character, taking advantage of elevated views. Refer also to Action 7.12B-6.	WCC	High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.12B-1	Beatty Street Reserve Major upgrade to improve the character and use including unstructured recreation facilities close to the railway, primarily for the forecast population. Refer also to Action 7.12A-3 for proposed expansion to this reserve. <i>Additional information/rationale:</i> Following investigation into the expansion of this reserve, prepare and implement a Landscape Concept Plan to guide a major upgrade.	WCC	Very High
7.12B-2	Kingsley Gardens Major upgrade to increase the diversity of uses with a focus on picnic/play and enjoyment of parkland character, primarily for the forecast population in Box Hill and Mont Albert. <i>Additional information/rationale:</i> Prepare a Landscape Masterplan to guide a major upgrade to improve diversity of use in Kingsley Gardens for the forecast increased population in both Mont Albert and Box Hill. Investigate options to provide sound attenuation from the Whitehorse Road, which impacts on the quality of this open space and improve the interface with Box Hill TAFE.	WCC	High
7.12B-3	Lorne Parade Reserve Continue to maintain this recently constructed reserve following the Level Crossing Removal Project.	WCC DOTP	Ongoing
7.12B-4	Rowland Street Park Investigate opportunity to expand the reserve to the north to increase size, prominence and access. <i>Additional information/rationale:</i> If there is an opportunity to expand the park size then increase the diversity of facilities provided in the reserve, while protecting the mature trees.	WCC	Medium

No.	Action	Respons- ibility	Priority
7.12B-5	St Johns Avenue Park Investigate the opportunity to expand the size of the park by utilising part of the road reserve or additional adjoining land and upgrade the reserve to provide additional facilities to increase its use.	WCC	Medium
7.12B-6	Windsor / St George Reserve Major upgrade including investigating expansion to the size utilising the existing road reserve. Upgrade to improve condition and character, taking advantage of elevated views. Refer also to Action 7.12A-5.	WCC	High
7.12B-7	Wolseley Close Reserve Continue to maintain.	WCC	Ongoing
7.12B-8	Zetland Road Closure Continue to maintain.	WCC	Ongoing

7.13 Mont Albert North / Balwyn North

7.13.1 Overview

Mont Albert North is defined to the north by Koonung Creek, the east by Elgar Road the south by Kenmare Street and west by a number of local streets Evelin Street, Kinsale Crescent and Winfield Reserve.

The area of Balwyn North included in the City of Whitehorse are the properties on the east side of the Winfield Road and south-east side of Sweyn Street.

Refer to *Figure 7.13-1* on the following page of the existing open space in Burwood.



Figure 7.13-1 Existing Open Space Mont Albert North | Balwyn North

7.13.2 Existing open space

Overview

Koonung Creek Reserve provides east-west regional shared path connectivity through the northern boundary of Mont Albert and Balwyn North. Valda Avenue Wetlands in the Koonung Creek Reserve includes a boardwalk access over the wetland that connects to a footbridge that links north over the freeway into Doncaster and the City of Manningham. Koonung Creek Reserve directly adjoins Elgar Park which is the largest Municipal open space reserve in the precinct, providing outdoor sports fields, a recently constructed synthetic hockey facility, shared path connection to Bushy Creek Trail and the Box Hill North Mini Steam Rail facility. While this is the largest Municipal open space, it is not the most popular according to the community survey. Mont Albert Reserve is the other Municipal open space in the precinct and includes an outdoor sports field, play space and multi-purpose courts, with elevated views to the east from the oval which is popular for unstructured recreation use including dog walking.

Gawler Chain is the most popular open space according to the community survey and extends east to west through the precinct comprising seven open spaces linked together with a shared path. The central open spaces in the connected chain of space are the largest and contain a range of facilities including play, picnic and a scout hall, however there is an excellent opportunity to undertake a major upgrade in the largest of these spaces to improve the character, quality and diversity of the facilities.

A series of Local and Small Local open spaces distributed across the precinct providing open space that is within safe and easy walking distance of residents. Table 7.13a is a list of all the existing open spaces in Mont Albert North/Balwyn North in alphabetical order and Table 7.13b is a summary of the total number of open spaces by hierarchy.

Table 7.13a Existing open space in Mont Albert North/ Balwyn North including restricted open space

Open space	Area Ha	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Ashmole Park	0.18	Small Local	Passive	Native character	Play	Viewing
Belmore Road Reserve	0.13	Small Local	Passive	Linking space	Service easement	
Box Hill Crescent Reserve	0.48	Local	Undeveloped			
Elgar Park	11.39	Municipal	Sporting	Restricted recreation	Native character	Waterway
Gawler Chain	4.07	Neighbourhood	Linear	Native character	Passive	Service easement
Jackson Avenue Reserve	0.65	Local	Passive	Linking space	Service easement	
Koonung Creek Reserve (including Valda Ave Wetlands)	8.26	Regional	Waterway	Linear	Nature conservation	Passive
Manniche Reserve	0.09	Small Local	Play			
Mont Albert Reserve	3.52	Municipal	Sporting	Passive	Viewing	
Winfield Reserve	0.93	Regional	Linking space	Native character	Nature conservation	Service easement

Table 7.13b Number, hierarchy and size of open space excluding restricted open space in Mont Albert North / Balwyn North

No.	Hierarchy	Area (Ha)	%
2	Regional	9.19	31%
2	Municipal	14.91	50%
0	Urban Civic	0.00	0%
1	Neighbourhood	4.07	14%
2	Local	1.13	4%
3	Small Local	0.41	1%
0	Local Link	0.00	0%
10	TOTAL	29.71	100%

Quantity

The total quantity of open space in Mont Albert North/Balwyn North, excluding restricted open space, represents 13.3 per cent of the total land area. There is no restricted open space in this Mont Albert North/Balwyn North. This is above the municipal-wide average of 9.6 per cent excluding restricted open space.

Hierarchy

The majority of existing hierarchy types of open space are currently provided in Mont Albert North/Balwyn North with the exception of Urban Civic and Local Links. Refer to Figure 7.13-2 for the Hierarchy of existing open space in this precinct.



Figure 7.13-2 Open Space Hierarchy Mont Albert North | Balwyn North

Open space distribution and future open space needs in Mont Albert North / Balwyn North

Belmore road is the key east-west arterial road through Mont Albert North/Balwyn North and forms a major physical barrier to safe and easy walking north-south access to open space within the precinct. Elgar Road is the major north-south secondary arterial and forms a barrier to safe and easy walking access to open space to the east of the precinct.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.13-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these areas need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Overall, there is good access to open space across this precinct, with only one minor gap areas described in Table 7.13c below.

Table 7.13c Brief description of gap areas in Mont Albert North / Balwyn North

Gap area	Description
MN1	Located north of Belmore Road, the north south street layout and lack of east-west local access street connectivity results in this minor gap area. The undulating topography contributes to the difficulty of access to the east. The gap area will be addressed with a minor upgrade to Winfield Reserve to provide local facilities that can be reached via the local street network for residents in this gap area.

7.13.3 Ancillary open space

Within Mont Albert North, two public school grounds contribute to the unbuilt character and greening. The northern oval in Koonung Secondary College is generally available to access out of school hours, however the southern area of the site is a fenced synthetic sports field surface. Box Hill Senior Secondary College directly adjoins Mont Albert Reserve and does have some mature trees to the perimeter of the site, however the campus is mainly built and tennis courts do not appear to be available for after hours informal use.

The pattern of subdivision layout is generally well connected with only the long north south blocks in Gap Area MN1 providing difficulty of access through the local access street network.

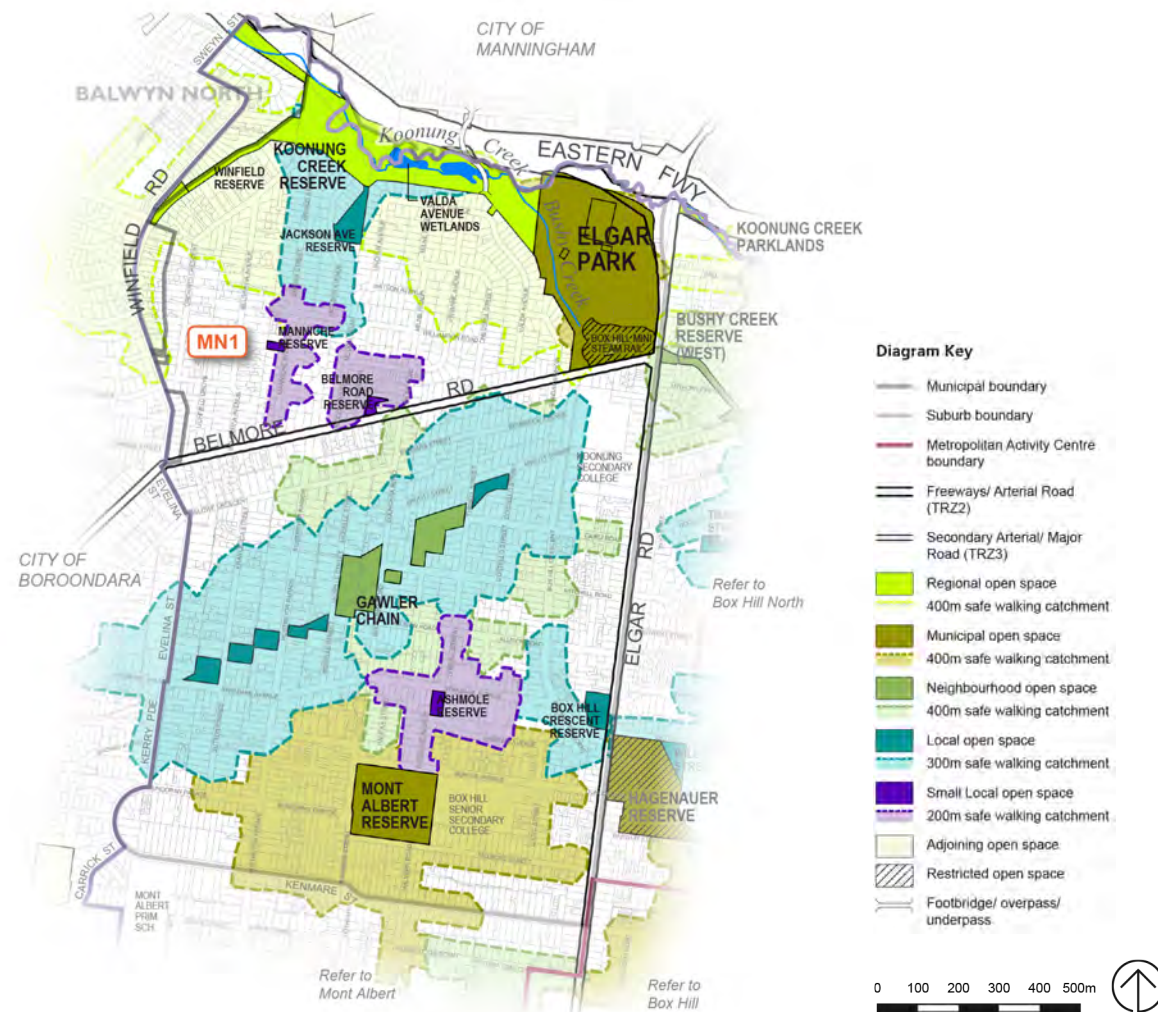


Figure 7.13-3 Gap Analysis Mont Albert North | Balwyn North

7.13.4 Existing Mont Albert North / Balwyn North community

Demographics

There are 5,805 residents living in Mont Albert North / Balwyn North as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 459 people living in Mont Albert North/Balwyn North, which represents approximately a 9 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of primary school to secondary school age group (5 to 17 years) and the a higher proportion of people over 50 years of age. There is a lower proportion of the 0 to 4 year age group and the 18 to 49 years age cohort.

A higher proportion of the population now live in medium-density housing compared with 2006. In 2006 approximately 73 per cent lived in separate houses, 27 per cent lived in medium-density housing and there were no high-density dwellings. Now in 2021, approximately 63 per cent live in the separate houses, with 37 per cent in medium-density housing and there were no high-density dwellings recorded.

The residential population is forecast to increase 5 per cent, with the continued trend of a decrease of the younger demographics under the age of 24, and the 50 and 59 age cohort. It is forecasted that parents in the 35 to 49 age range will continue in the same proportion with an increase of the young workforce between the ages of 25 to 34 and the older demographics over the age of 60 years of age.

Summary of community engagement outcomes

A total of 100 open space surveys were received from Mont Albert North / Balwyn North, which represents 4 per cent of the total surveys received.

The open space survey respondents for Mont Albert North / Balwyn North's values of 'Walking and cycling', 'Native birds and wildlife' and 'Place for children to play' are ranked higher than the municipal average, while 'Connecting with nature' and the 'The feeling of space and serenity' was ranked lower than the municipal average.

Values of open space (top five)

- 51% Walking and cycling
- 47% Native birds and wildlife
- 46% A place to relax and unwind
- 44% Trees
- 43% Place for children to play

Types of open space used and frequency of use (top five)

- 69% Small local parks
- 67% Local streets for exercise
- 60% Large park and reserves (non-sporting)
- 58% Linear reserve network for walking and cycling

- 55% Neighbourhood parks

Frequently visited types of open spaces (top five)

- 61% Local streets for exercise
- 57% Small local parks
- 44% Neighbourhood parks
- 43% Linear reserve network for walking and cycling
- 27% Sporting reserves

Priority of facilities and amenities in open spaces (top five)

- 57% Seats
- 45% Trees
- 43% Additional greening for environmental health & wellbeing
- 43% Picnic tables and seats
- 41% Walking path

(Note that 37% Play space was listed seventh)

Table 7.13d Most frequently visited open space in Mont Albert North / Balwyn North

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
44	Gawler Chain	• Play - children (11) • Walking (7) • Play - with grandchildren (3) • Dog walking (3) • Picnics incl. BBQ (3)	• Play space upgrade (3) • Access - improve pedestrian connections across the streets between the linear reserve segments (2)
23	Mont Albert Reserve	• Dog walking (6) • Walking (4) • Informal ball games/sport (3) • Play – children (3) • Play - with grandchildren (3) • Jogging (2)	
18	Koonung Creek Parklands (Including Koonung Creek Linear Reserve, Koonung Creek Reserve and Eastern Freeway Linear Reserve)	• Walking (6) • Dog walking (3) • Cycling (2)	• Paths - surface needs improvements (2)
16	Elgar Park	• Walking (5) • Dog walking (3) • Club based sport – cricket (2) • Play – children (2)	

No	Name	Reasons to visit	Suggested improvements
6	Ashmole Reserve	• Dog walking (2) • Walking (2)	
Open space beyond walking distance (top five)			
15	Koonung Creek Parklands (Including Koonung Creek Linear Reserve, Koonung Creek Reserve and Eastern Freeway Linear Reserve)	• Walking (5) • Dog walking (3)	
11	Box Hill Gardens		
11	Elgar Park	• Walking (2)	
5	Mont Albert Reserve	• Play - children (2)	
4	Blackburn Lake Sanctuary	• Enjoy nature (2) • Walking (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Additional required (5)
 - For environment & wildlife (3)
- Valued (4)
- Protection of existing open space (2)

Maintenance and management

- Dogs (9)
 - Dog fenced parks - additional required (5)
- Placemaking (2)
 - More free community activities/events (2)

Trees and Vegetation

- Additional required (4)
 - Indigenous trees and vegetation (2)
- Replacements required (2)

Park Infrastructure

- Park infrastructure - additional required (7)
 - Shade (2)
- Play space - additional required (5)
 - Upgrades/improvements (3)
- Social infrastructure - additional required (4)

- Community gardens (3)
- Active facilities - additional required (3)
- Areas for teenagers to exercise (2)

Other

- NELP - concern regarding loss of and damage to open space (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.13.5 Analysis of future change and open space needs

Forecast population change

The Mont Albert North/Balwyn North Precinct is currently forecast to reach a residential population of 6,074 by 2036, representing an additional 269 people, or a 5 per cent increase compared to the 2021 population. It was noted on the site visit that there is some high-density housing now in construction in Mont Albert North in the

The table below includes the forecast population growth for the residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.13e Population forecasts for Mont Albert North / Balwyn North 2021 - 2036

Mont Albert North	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	5,805	5,971	6,006	6,074	+269

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create an increased demand for open space, however the overall scale of growth is low at 5 per cent. It is anticipated that the proportion of population living in medium density dwellings may also rise slightly, continuing that trend which means people will have less private open space.

In terms of the demographic change, the proposed minor changes mean that there will continue to be a need for a diversity of facilities with a slightly lower need to cater to toddlers/young children's play.

7.13.6 Mont Albert North / Balwyn North Precinct Recommendations

Summary of overall intent

Provision and distribution

In Mont Albert North | Balwyn North there is forecast to be minimal change with an additional 269 residents living here by 2036, representing a 5 per cent increase from the existing population. The forecast change is mainly anticipated to be distributed through the residential area south of Belmore Road. Koonung Creek and Bushy Creek in the north provide excellent linear open space connectivity, with entry points into the network at Winfield Reserve, Jackson Avenue Reserve and Elgar Park. This, combined with two smaller open spaces provided reasonable access to open space. South of Belmore Road, Gawler Chain provides excellent east west connectivity through the heart of the precinct, and further south is Mont Albert Reserve. The community survey outcomes identify that Gawler Chain is the most popular open space in this precinct, most likely due to its connectivity, diversity and central location. Box Hill Crescent Reserve is identified as not being well used with poor amenity located adjacent to an arterial road. While there are small gaps in accessibility, these can generally be addressed via improving pedestrian amenity in the local street network to improve access to the existing open spaces.

Quality and design

The Koonung and Bushy Creeks contribute to the nature conservation values and character of the open space in the northern area of this precinct, with Elgar Park located directly adjoining both waterways. Future upgrades to the unstructured facilities in Elgar Park will protect and complement the nature conservation character. Council will continue to advocate to the Victorian Government to protect the natural and recreational values of the Koonung Creek corridor during the North East Link/Eastern Freeway upgrade project. Gawler Chain is located along the valley of a former waterway and has a predominantly native character, which will be strengthened in the future with a major upgrade to the largest section of Gawler Chain to increase the diversity of play and unstructured recreation facilities in this core part of the reserve. Ashmole Crescent Reserve is located in the heart of an area experiencing some higher density development and is identified to be expanded to increase its size to cater to the growing community in the immediate vicinity of it. By contrast the nearby Box Hill Crescent Reserve is not well used due to its proximity to Elgar Road and may be more suitable to accommodate indoor recreation or community facilities potentially relocated out of the Gawler Chain. Mont Albert Reserve to the south provides excellent facilities and elevated views to the east, with additional shade trees proposed to the multipurpose court area.

7.13.7 Action Plan – Mont Albert North / Balwyn North

A Additional public open space

No.	Action	Responsibility	Priority
7.13A-1	Ashmole Reserve Major upgrade including investigating option to enlarge the open space to provide increased urban greening and expand diversity of uses for the higher density housing in the immediate catchment of this open space. <i>Additional information/rationale:</i> It was noted on the site visits there are high density dwellings in construction directly adjoining this reserve, along with recent high density dwellings in nearby streets. Opportunities to increase the size of this Small Local open space in order to increase the diversity of facilities and improve its character is proposed.	WCC Developer	Very High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.13B-1	Ashmole Reserve Major upgrade including investigating option to enlarge the open space to provide increased urban greening and expand diversity of uses for the higher density housing in the immediate catchment of this open space. Refer also to Action 7.13A-1.	WCC Developer	Very High
7.13B-2	Belmore Road Reserve Major upgrade and review character, use and the need for a play space in the longer term in consultation with the community.	WCC	Medium
7.13B-3	Box Hill Crescent Reserve Investigate future use and role of this open space in the network including consideration of consolidating the local scout facilities in this location and relocated out of Gawler Chain.	WCC	Very High
7.13B-4	Elgar Park Minor upgrade to the unstructured recreation facilities, including a circuit path network and upgrade to the picnic and play facilities. <i>Additional information/rationale:</i> Council to prepare a Masterplan primarily to guide the future upgrade of structured sporting facilities. As part of the masterplan, integrate improved unstructured recreational use and facilities including an improved picnic/barbecue, play and fitness facility.	WCC	Medium

No.	Action	Respons- ibility	Priority
7.13B-5	Gawler Chain (between Boondara Rd and Mitchell Rd) Continue to maintain.	WCC	Ongoing
7.13B-6	Gawler Chain (between Francesca St and Rostrevor Pde) Minor upgrade to improve the landscape character and play space.	WCC	Medium
7.13B-7	Gawler Chain (between Mitchell Rd and Tyrrell St) Continue to maintain with ongoing improvement to planting perimeter of park.	WCC	Ongoing
7.13B-8	Gawler Chain (between Moselle St and Boondara Rd) Major upgrade to expand and increase the diversity of play facilities for a broad age range along with picnic facilities and an integrated path network. Investigate opportunity to consolidate scout groups into a single multi-purpose facility located here or in an alternative site.	WCC	Medium
7.13B-9	Gawler Chain (between Rostrevor Pde and Moselle St) Continue to maintain.	WCC	Ongoing
7.13B-10	Gawler Chain (between Strabane Ave and Francesca St) Continue to maintain.	WCC	Ongoing
7.13B-11	Gawler Chain (between Tyrrell St and Costello St) Minor upgrade to improve path alignment, seating and planting.	WCC	Low
7.13B-12	Jackson Avenue Reserve Continue to maintain.	WCC	Ongoing
7.13B-13	Koonung Creek Reserve Minor upgrade to expand the pedestrian path network, provide seating and other facilities to improve the recreational use, along with protecting and improving the environmental values.	WCC	Medium
7.13B-14	Manniche Reserve Continue to maintain and review need for replacing play space in the longer term.	WCC	Ongoing
7.13B-15	Mont Albert Reserve Continue to maintain with ongoing planting of additional canopy trees to shade hard court area.	WCC	Ongoing
7.13B-16	Winfield Reserve Minor upgrade to improve path surface and establish and install seating to enjoy the views.	WCC	Medium

7.14 Nunawading

7.14.1 Overview

Nunawading is defined to the north by Koonung Creek west of Springvale Road, and the property line between Worrell Street and Ashwood Drive to east, which then extends back north at Lemon Grove and meets back up to the Eastern Freeway/Mitcham Road junction. The eastern boundary is defined by a combination of Hedge End Road and Dunlavin Road north of Whitehorse Road, and Rooks Road south of Whitehorse Road. The boundary weaves through a range of local streets just north of Canterbury Road to the south in the vicinity of Abelia Street east of Springvale Road and Milton Street west of Springvale Road. To the west it includes Forrest Road, King Street, Pearcedale Grove, Almer Avenue, Wakefield Street. The western boundary is a combination of local access streets and permeable to pedestrian access in to adjoining precincts including Blackburn North, Blackburn and Forest Hill.

Refer to *Figure 7.14-1* on the following page of the existing open space in Nunawading.

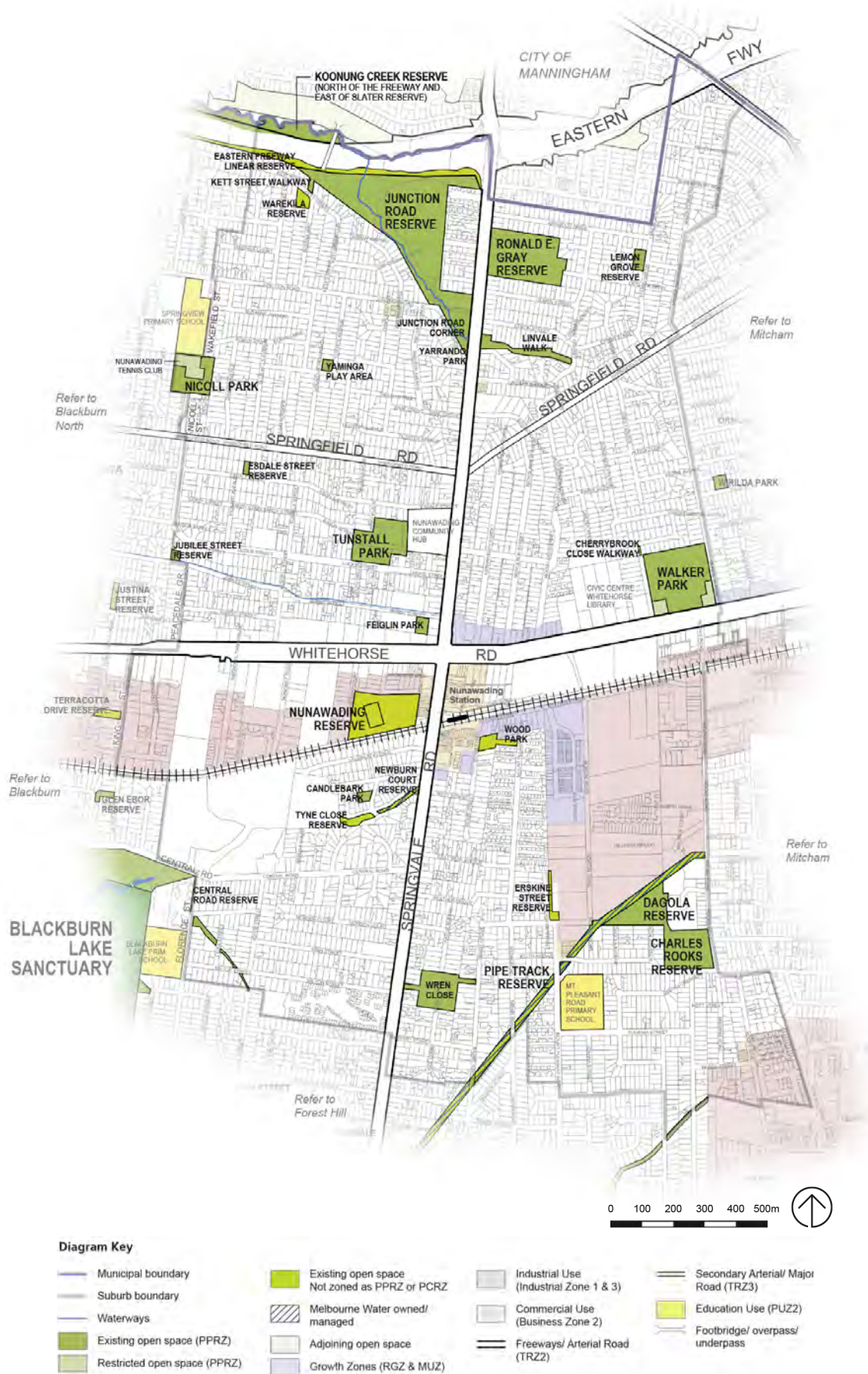


Figure 7.14-1 Existing Open Space Nunawading

7.14.2 Existing open space

Overview

Junction Road Reserve is the largest Regional open space which directly adjoins the Eastern Freeway Reserve and Koonung Creek Reserve to form part of this important regional east-west shared path link along the northern boundary of the municipality. While Junction Road Reserve is large, it is predominantly undeveloped with a tributary of Koonung Creek flowing through it and is significantly impacted by traffic noise from both the Eastern Freeway and Springvale Road.

Walker Park, Tunstall Park and Nunawading Reserve are the three Municipal open spaces in Nunawading. Walker Park has structured sporting facilities including an oval and tennis club, while Tunstall Park directly adjoins the Nunawading Community Hub and is and will be used more in the future to hold major events that attract visitors from across the municipality. Nunawading Reserve included structured sporting facilities in the past including tennis and indoor recreational facilities, however these have closed and the site is currently in a state of disrepair. Given its close proximity to the recently updated Nunawading Station, it is anticipated that urban densities will increase around this reserve in the future and it is an excellent opportunity to reconfigure this open space to meet the needs of the future change. As noted later in this chapter, this open space is even more important in the context of the existing gap area to the south of the railway.

Ronald E Gray Reserve and Nicoll Park are Neighbourhood open spaces north of Whitehorse Road that are well used by the local community, with Ronald E Gray Reserve dominated by indigenous bushland. To the south, Charles Rooks Reserve and Dagola Reserve are linked and have nature conservation values and the potential to become a key destination open space for the local community. These two reserves are also accessible from the Pipe Track Reserve. Wren Close contains important nature conservation values and while it provides some recreational use it has limited access points.

Nunawading is experiencing change associated with the recent upgrade works to the station, and there is potential for Wood Park to be redesigned and improve its use in the future as high density development continues to occur in its catchment.

South of the railway and west of Springvale Road is a series of small linear open spaces along a tributary to Blackburn Lake. While the 2007 Strategy identified an opportunity to extend this linear open space system downstream to connect to Blackburn Lake, this has not occurred with the recent redevelopment of some of the area and this opportunity is no longer viable. There are a range of other Local and Small Local open spaces in the precinct within safe and easy walking distance of the local community.

Refer to the list of existing open space reserves in Table 7.14a and the total quantity of open space by hierarchy in Table 7.14b.

Table 7.14a Existing open space in Nunawading including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Candlebark Park	0.14	Small Local	Passive	n/a		
Central Road Reserve (North of Patterson St)	0.04	Local Link	Linking space			
Central Road Reserve (South of Patterson St)	0.26	Local Link	Linking space	Service easement		
Charles Rooks Reserve	1.85	Neighbourhood	Nature conservation	Passive		
Cherrybrook Close Walkway	0.02	Local Link	Linking space	n/a		
Dagola Reserve	1.57	Neighbourhood	Native character	Nature conservation	Passive	
Eastern Freeway Linear Reserve	1.24	Regional	Linear	Major Road Reservation		
Erskine Walk	0.23	Small Local	Native character	n/a		
Esdale Street Reserve	0.08	Small Local	Native character	Passive		
Feiglin Park	0.20	Small Local	Passive	Native character		
Jubilee Street Reserve	0.09	Small Local	Play	Native character		
Junction Road Corner	0.64	Local	Nature conservation	Linear	Native character	Waterway
Junction Road Reserve	9.03	Regional	Waterway	Linking space	Linear	
Kett Street Walkway	0.08	Local Link	Linking space	Native character		
Koonung Creek Reserve (North of Freeway)	1.16	Regional	Waterway	Linear	Nature conservation	
Lemon Grove Reserve	0.24	Small Local	Native character	n/a		
Linvale Walk	0.63	Local	Linear	Native character	Service easement	
Newburn Court Reserve	0.19	Small Local	Waterway	Linear		
Nicoll Park	1.01	Neighbourhood	Sporting	Linking space	Native character	Passive
Nunawading Reserve	2.63	Municipal	Sporting	n/a		
Pipe Track Reserve (Melbourne Water)	1.64	Regional	Service easement	Linear		
Ronald E Gray Reserve	3.62	Neighbourhood	Nature conservation	Passive	Viewing	
Tunstall Park	2.18	Municipal	Passive	Events	Native character	
Tyne Close Reserve	0.24	Small Local	Waterway	Nature conservation		
Walker Park	3.57	Municipal	Sporting	Restricted Sporting	Passive	
Warekila Reserve	0.21	Small Local	Passive	Linear	Native character	
Wood Park	0.36	Urban Civic	Passive	Linking space	Service easement	
Wren Close	1.60	Neighbourhood	Native character	n/a		
Yaminga Play Area	0.12	Small Local	Play	Nature conservation		
Yarrando Park	0.05	Small Local	Road reserve	Service easement		

Table 7.14b Number, hierarchy and size of open space excluding restricted open space in Nunawading

No.	Hierarchy	Area (Ha)	%
4	Regional	13.08	37%
3	Municipal	8.38	24%
5	Urban Civic	9.65	28%
1	Neighbourhood	0.36	1%
2	Local	1.27	4%
11	Small Local	1.78	5%
4	Local Link	0.39	1%
30	TOTAL	34.91	100%

Quantity

The total quantity of open space in Nunawading, excluding restricted open space, represents approximately 7 per cent of the total land area. There are no restricted open space reserves in Nunawading. This is below the municipal-wide average of 9.6 per cent excluding restricted open space.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Nunawading. Refer to Figure 7.14-2 for the Hierarchy of existing open space in Nunawading.

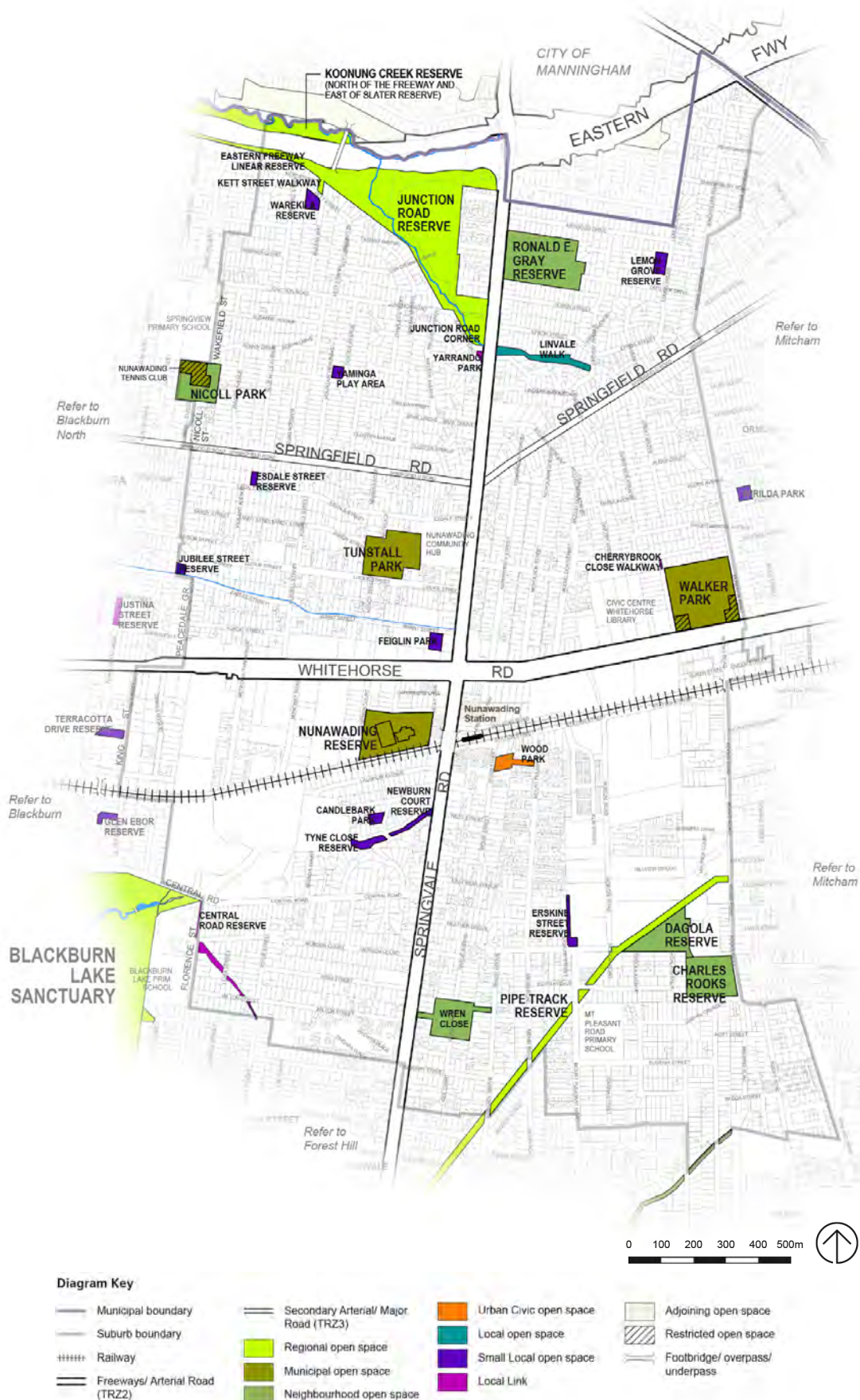


Figure 7.14-2 Open Space Hierarchy Nunawading

Open space distribution and future open space needs in Nunawading

Whitehorse Road is a key east-west arterial road through Nunawading and forms a physical barrier to safe and easy north-south walking access to open space within the precinct. The railway also forms a key east-west barrier to access, while Springvale Road is a major north-south arterial road and forms a key barrier to safe and easy east-west walking access to open space. Springfield Road is a major road that also creates a barrier to north-south access to open space in Nunawading.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.14-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Nunawading and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.14c Brief description of gap areas in Nunawading

Gap area	Description
N1	Located south of Whitehorse Road and west of Springvale Road, the lack of east-west local access street network creates this gap area, even though Nunawading Reserve is located immediately west of Springvale Road. The Strategy recommends that Council requires east-west pedestrian links as part of future redevelopment of sites in this gap area in the future to facilitate improved access to the existing open space network.
N2	Located south of Whitehorse Road and east of Springvale Road this Gap Area is part of the large box retail where there is currently no need for new open space. If this land use changes in the future to include residential use, new open space will be required. This is not anticipated to occur within the timeframe of this Strategy, so no specific actions are included.
N3	Located west of Springvale Road and south of Adventcare Site in the vicinity of Central Road. The Strategy recommends provision of a new Small Local open space to address this gap area.
N4	Located south of the railway and east of Norcal Road in the predominantly non-residential precinct. The Strategy recommends a new Local open space that improves east-west connectivity in this gap area.

7.14.3 Ancillary open space

Within Nunawading, Mt Pleasant Road Primary School grounds contribute to the sense of the space and greening. The shared trail along with the railway line also provides east-west connectivity through the precinct, however it is recognised that this link is encumbered by lack of passive surveillance, particularly for pedestrians. It is also subject to change pending the Department of Transport and Planning needs and requirements. The pattern of subdivision layout is quite disjointed and there are street block lengths of more than 250 metres leading to poor pedestrian permeability. This is particularly an issue in the non-residential areas in Nunawading.

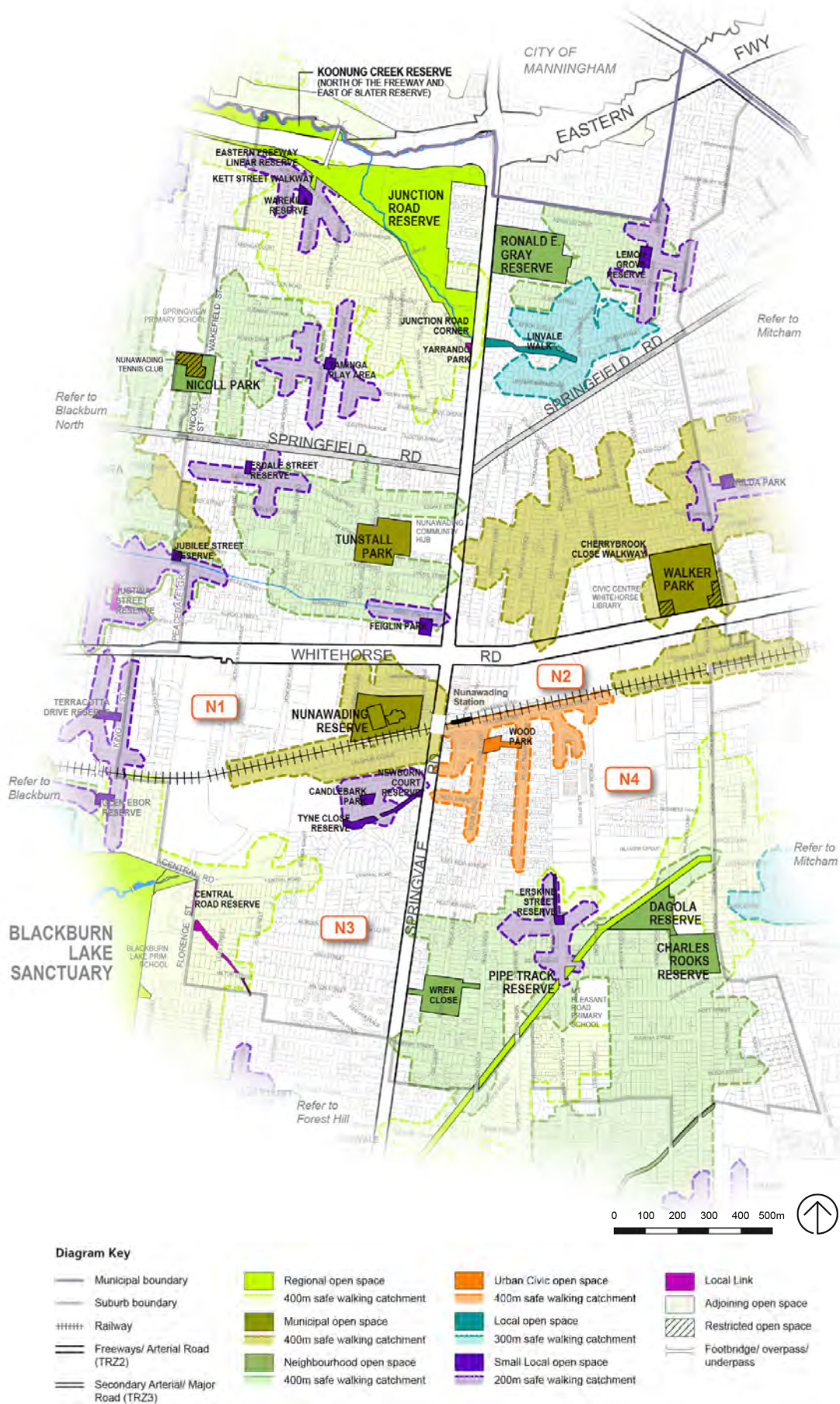


Figure 7.14-3 Gap Analysis Nunawading

7.14.4 Existing Nunawading community

Demographics

There are 12,203 residents living in Nunawading as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 1,606 people living in Nunawading, which represents approximately a 15 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in primary school to secondary school age group (5 to 17 years), young workforce to empty nester age group (35 to 69 years) and the 85 and over age cohort. There is a lower proportion of 0 to 4 years age range, tertiary to the young workforce age group (18 to 34 years) and seniors (70 to 84 years).

A slightly higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006 approximately 72 per cent lived in separate houses, 28 per cent in medium density housing and 0.1 per cent lived in high-density dwellings. Now in 2021, approximately 66 per cent live in the separate houses, with 30 per cent in medium density housing and 4 per cent in high density.

The residential population is forecast to increase 24 per cent, with the continued trend of a decrease of young people under the age of 17, workers between the ages of 50 to 59 years and people over the age of 70 years. There is a forecasted increase of the 18 to 49 age range and empty nesters between the ages of 60 and 69 years old.

Summary of community engagement outcomes

A total of 138 open space surveys were received from Nunawading, which represents 7 per cent of the total surveys received.

Nunawading survey respondent's top values of open space are very similar to the municipal average for the top three. 'Meeting people/friends', 'Seeing people and activities' and 'Casual recreation' were ranked higher than the municipal average, while 'Connecting with nature' was ranked lower than the municipal average. Respondents had the highest number of comments about improvements to walking paths and shared paths.

Values of open space (top five)

- 67% A place to relax and unwind
- 64% Trees
- 61% Walking and cycling
- 59% Just being outside
- 58% Connecting with nature

Types of open space used and frequency of use (top five)

- 87% Local streets for exercise
- 84% Large parks and reserves (non-sporting)
- 80% Small local parks
- 78% Medium parks

- 77% Neighbourhood parks

Frequently visited types of open spaces (top five)

- 77% Local streets for exercise
- 52% Small local parks
- 49% Neighbourhood parks
- 39% Large parks and reserves
- 33% Linear reserve network for walking and cycling

Priority of facilities and amenities in open spaces (top five)

- 80% Seats
- 66% Toilets
- 62% Walking paths
- 60% Picnic tables and seats
- 57% Trees

(Note that 39% Play space was listed thirteenth)

Table 7.14d Most frequently visited open space in Nunawading

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
26	Tunstall Park	• Play - children (9) • Dog walking (6) • Nunawading Community Hub (3) • Social - meeting family / friends / parties (3) • Spending time outdoors (3) • Walking (2) • Relaxing (2)	• Informal recreational facilities - basketball court and skate area required (3)
22	Blackburn Lake Sanctuary (Including Clifton St Playground)	• Enjoy nature (5) • Access - close to home (4) • Walking (4) • Play - children (3) • Spending time outdoors (3) • Open space - ambience, beauty (2) • Relaxing (2)	
17	Ronald E Gray Reserve	• Play - children (5) • Social - meeting family / friends / parties (5) • Walking (3) • Green space (2) • Open space (2) • Spending time outdoors (2)	• Toilet - required (2)

No	Name	Reasons to visit	Suggested improvements
14	Eastern Freeway Linear Reserve	- Walking (10) - Dog walking (2) - Spending time outdoors (2)	
12	Charles Rooks Reserve	- Play - children (6) - Access - close to home (2) - Walking (2)	
Open space beyond walking distance (top five)			
32	Blackburn Lake Sanctuary	- Enjoy nature (11) - Play - children (10) - Walking (10) - Social - meeting family / friends / parties (6) - Relaxing (3) - Dog walking (2) - Open space - escape from the built environment (2) - Open space – peaceful (2) - Wildlife (2)	
26	Halliday Park	- Play - children (16) - Social - meeting family / friends / parties (9) - Walking (3) - Active recreation – basketball (2) - Open space (2) - Picnics (2) - Running (2)	
11	Box Hill Gardens	- Play - children (4) - Active recreation (3) - Social - meeting family / friends / parties (3)	Carpark - additional required (2)
6	Blackburn Creeklands (Including Blacks Walk and Kalang Park)	- Walking (3) - Enjoy nature (2) - Walking - travel through (2)	
6	Mullum Mullum Creek	- Walking (5) - Enjoy nature (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two people or more in each category:

Open space

- Valued (9)

- Additional required (8)
 - Additional required in Nunawading (4)
 - Additional required in other precincts (2)
- Improvements required including connectivity and greening (4)
 - Naturalise waterways and drainage reserves for habitat (2)
- Protection of existing open space (2)

Maintenance and management

- Dogs (3)

Park Infrastructure

- Park infrastructure - additional required (6)
 - Toilets (3)
 - Lighting – more (2)
- 6no. Active facilities - additional required (6)
 - Informal sporting facilities – additional required (i.e. stake park, pump track, netball/ basketball court) (4)
- Social infrastructure in open space - additional required (5)
- Play space - additional required (2)
 - Water play required (2)

Paths

- Walking paths (4)
 - Additional required (2)
- Shared paths - improvements (3)

Other

- Developments (4)
 - Avoid over developments (3)
- Streetscape - improvements required (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.14.5 Analysis of future change and open space needs

Forecast population change

The Nunawading Precinct is currently forecast to reach a residential population of 15,074 by 2036, representing an additional 2,871 people, or a 24 per cent increase compared to the 2021 population. The table below includes the forecast population growth for the residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.14e Population forecasts for Nunawading 2021 - 2036

Nunawading	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	12,203	13,251	14,158	15,074	+2,871

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 2,871 additional residents visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults and decrease in proportion of children under 17 years of age means there is a need to increase the range of facilities in open space in addition to play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.14.6 Nunawading Precinct Recommendations

Summary of overall intent

Provision and distribution

Nunawading is forecast to experience substantial change over the next 15 years with 2,871 new residents forecast to be living here by 2036 which represents a 24 per cent increase. The forecast change is mainly anticipated in the Nunawading Megamile Activity Centre that extends along Whitehorse Road and includes Nunawading Station and the former Daniel Robertson Brickworks site. South of Whitehorse Road, Nunawading Reserve also referred to as Silver Grove, provides a key opportunity to develop a vibrant, green open space at the heart of this activity centre. Improving east-west pedestrian connectivity to the west of the reserve will address the existing open space gap area.

South of the railway, Wood Park is the only existing open space in the core part of the activity centre east of Springvale Road, and this is recommended to be expanded and upgraded. A future open space is proposed on the Daniel Robertson Brickworks site and further east in the Rooks Road industrial precinct, a new Local open space is proposed primarily for the worker community. West of Springvale Road, a new Small Local open space will address the gap area. The provision and distribution of open space north of Whitehorse Road is adequate, and upgrades are proposed to improve the capacity of the open space network to accommodate the forecast population change.

Quality and design

There is a strong native and nature conservation character to the open space network in Nunawading. Recommendations to improve these values are combined with the need to also improve the range of recreational facilities to address the diverse demographics and growing population. North of Whitehorse Road, Junction Road Reserve is identified to receive a major upgrade with investigation to include structured sport fields and unstructured recreation facilities. Council will continue to advocate to the Victorian Government to protect the natural and recreational values of the Koonung Creek corridor during the North East Link/Eastern Freeway upgrade project. Walker Park is also identified to be upgraded to better meet the unstructured recreation and informal open space needs of the existing and forecast community. West of Springvale Road, the recent Nunawading Hub adjoining Tunstall Park has provided a new focus and a major upgrade will respond to this change. The urban context will be reset around Feiglin Park to improve connectivity and passive surveillance. North of Springfield Road, Nichol Park, Junction Road Reserve and Ronald Gray Reserve provide a diverse open space network

and minor upgrades are proposed to better cater to community needs and strengthen biodiversity values.

South of Whitehorse Road, Charles Rooks Reserve will be upgraded to include unstructured recreation and picnic facilities along with improvements to the nature conservation values. Other upgrades include improving connectivity with new shared paths along the Pipe Track easement and through the linking spaces that lead to Blackburn Lake Sanctuary.

7.14.7 Action Plan – Nunawading

A Additional public open space

No.	Action	Responsibility	Priority
7.14A-1	New Small Local open space in Gap Area N3 Provide new Small Local open space in this gap area for both the existing and forecast population. <i>Additional information/rationale:</i> <i>The disjointed urban layout means that it is not possible for the community to reach the existing Small Local open space to the north without walking via Springvale Road, which is a major arterial road, or crossing Springvale Road to reach the neighbourhood open space to the east.</i>	WCC	Medium
7.14A-2	New Local open space in Gap Area N4 Provide new Local open space in the future that improves east-west connectivity and addresses the existing gap area.	WCC Developer	Medium
7.14A-3	Esdale Street Reserve expansion Investigate opportunities to increase the size of this reserve to increase its function and use. Refer also to Action 7.14B-8.	WCC	Low
7.14-4	Wood Park expansion Major upgrade to cater to the changing open space needs of the existing and forecast community in high density development. Refer also to Action 7.14B-28. <i>Additional information/rationale:</i> <i>Expansion is to improve the visual and physical accessibility of the reserve and increase its size to better cater to the catchment of users who are working and living in high density settings.</i>	WCC Developer	Very High
7.14-5	Future open space on the former Daniel Robertson Brickworks site (size to be confirmed) Council to assess the future design of the new open space to maximise urban greening and large canopy trees given the lack of greening.	WCC Developer	Very High

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Respons- ibility	Priority
7.14B-1	Candlebark Park Continue to maintain.	WCC	Ongoing
7.14B-2	Central Road Reserve (North of Patterson Street) Extend footpath link into Blackburn Lake Reserve.	WCC	Medium
7.14B-3	Central Road Reserve (South of Patterson Street) Investigate removal of fencing and install path link. <i>Additional information/rationale: This land is currently zoned PPRZ and is therefore assumed to be publicly owned and intended to be used as a path link.</i>	WCC	Medium
7.14B-4	Charles Rooks Reserve Major upgrade to provide combined facilities including play, picnic/BBQ, public toilet, unstructured recreation facilities and paths connecting into Dagola Reserve nature conservation area and the Pipe Track Reserve. Refer also to Action 7.14B-6, Dagola Reserve. <i>Additional information/rationale: The reason major destination facilities are located in Charles Rooks Reserve is due to its good visual and physical access with public road frontages to two sides of the reserve.</i>	WCC	Very High
7.14B-5	Cherrybrook Close Walkway Continue to maintain.	WCC	Ongoing
7.14B-6	Dagola Reserve Minor upgrade to improve path connection and bushland revegetation works. Refer also to Action 7.14B-4, Charles Rooks Reserve.	WCC	Very High
7.14B-7	Eastern Freeway Linear Reserve Continue to maintain.		Ongoing
7.14B-8	Erskine Street Reserve Continue to maintain and if well used, add seats that overlook the open grassed area.	WCC	Low
7.14B-9	Esdale Street Reserve Investigate opportunities to increase the size of this reserve to increase its function and use. <i>Additional information/rationale: If the option to increase the size of the reserve is successful, undertake a minor upgrade to provide seating and path links and . continue to protect canopy trees.</i>	WCC	Medium

No.	Action	Responsibility	Priority
7.14B-10	Feiglin Park Investigate opportunities to establish a public roadway/path interface to at least three boundaries to improve safety. In the longer term, upgrade once access and passive surveillance is improved.	WCC	High
7.14B-11	Jubilee Street Reserve Continue to maintain. In the longer term review the need for this open space given close proximity to Cootamundra Walk East.	WCC	Medium
7.14B-12	Junction Road Corner Continue to maintain and improve nature conservation values.	WCC	Ongoing
7.14B-13	Junction Road Reserve Undertake a major upgrade to improve the role and function of this open space including investigating the potential for structured sporting field/s, designated dog off-lead area, unstructured recreation facilities for all ages and a major picnic destination including consideration of traffic noise attenuation to be undertaken by Department of Transport and Planning as part of the future North East Link/Eastern Freeway upgrade project.	WCC DOTP	Very High
7.14B-14	Kett Street Walkway Continue to maintain.	WCC	Ongoing
7.14B-15	Koonung Creek Reserve (north of Freeway) Continue to maintain.	WCC MWC	Ongoing
7.14B-16	Lemon Grove Reserve Continue to maintain.	WCC	Ongoing
7.14B-17	Linvale Walk Minor upgrade to improve path entry point and path surface and overall condition of the reserve, including review of the continued use of the reserve by the Bill Waters Rover Scouts.	WCC	Medium
7.14B-18	Newburn Court Reserve Continue to maintain.	WCC	Ongoing
7.14B-19	Nicoll Park Major upgrade to improve the quality and character of the park including the interface to the Tennis Club.	WCC	Medium
7.14B-20	Nunawading Reserve Subject to the Strategic Property Program Investigation, repurpose the former Silver Grove site to provide a public open space primarily for the forecast community. This site is an excellent opportunity to provide a green heart to the future redevelopment of this area, primarily providing unstructured recreation and informal/social facilities.	WCC	Very High
7.14B-21	Pipe Track Reserve (Melbourne Water) Provide shared path and investigate other potential improvements with Melbourne. Refer to Action 5.4-12.	WCC MWC	High

No.	Action	Responsibility	Priority
7.14B-22	Ronald E Gray Reserve Minor upgrade to increase the diversity of unstructured recreation facilities and upgrade picnic/barbecue facilities.	WCC	Medium
7.14B-23	Tunstall Park Major upgrade to provide additional unstructured recreation facilities such as hard court areas and picnic/BBQ facilities.	WCC	High
7.14B-24	Tyne Close Reserve Continue to maintain.	WCC	Ongoing
7.14B-25	Walker Park Minor upgrade to improve pedestrian connectivity between the Civic Centre and Walker Park, establish a circuit path around the reserve, and provide additional seating overlooking the oval. <i>Additional information/rationale:</i> <i>The proposed minor upgrade works to the unstructured recreational use will be guided by a Landscape Masterplan that is being prepared primarily for the structured sporting use and integration with the adjoining Whitehorse Civic Centre Precinct.</i>	WCC	Very High
7.14B-26	Warekila Reserve Continue to maintain.	WCC	Ongoing
7.14B-28	Wood Park Major upgrade to cater to the changing open space needs of the existing and forecast community in high density development. Refer also to Action 7.14A-4.	WCC Developer	Very High
7.14B-29	Wren Close Continue to maintain.	WCC	Ongoing
7.14B-30	Yaminga Play Area Continue to maintain.	WCC	Ongoing
7.14B-31	Yarrando Park Continue to maintain and improve nature conservation values.	WCC	Ongoing

C Streetscapes and ancillary open space

No.	Action	Respons- ibility	Priority
7.14C-1	New open space links in future development in Gap Area N1 Council to require new east-west pedestrian links through future redevelopment sites in Gap Area N1 to provide access to the existing Nunawading Reserve.	WCC	Very High and Ongoing
7.14C-2	Future development in Gap Area N2 Although not currently anticipated, if the large box retail sites in the Gap Area N2 were to redevelop to high density use, new public open space is likely to be required. The type and location would need to be determined at that time.	WCC	Ongoing
7.14C-3	Identify opportunities to improve pedestrian connectivity in Gap Area N3 Council to investigate opportunities to improve north-south pedestrian connectivity within the precinct as part of any future development applications in the precinct.	WCC	Ongoing

7.15 Surrey Hills

7.15.1 Overview

Surrey Hills is located in the western area of the municipality. It is defined to the west by Warrigal Road, combined with Alexandra Crescent, to the south by Riversdale Road, the east by Elgar Road and to the north by a combination of Windsor Crescent.

Refer to *Figure 7.15-1* below for the existing open space in Surrey Hills.



Figure 7.15-1 Existing Open Space Surrey Hills

7.15.2 Existing open space

Overview

Bluebell Hill Reserve is the stand-out open space in Surrey Hills. Whilst only local in size, it includes a diverse range of facilities including the Bluebell Hill Tennis Club, a play space, open grassed area, picnic facilities and a viewing area overlooking the reserve and to the city skyline beyond.

Boisdale Reserve is a Neighbourhood Park in the southern part of Surrey Hills directly adjoining Riversdale Road with views over to Wattle Park. There is potential for this open space to have a more diverse range of facilities and to strengthen its landscape character. Russell Street Reserve directly adjoins Warrigal Road and is impacted by traffic movement and noise and includes a play space which appears to be well used. The two other Small Local open spaces are within safe and easy walking distance of the local community.

Table 7.15a is a list of all the existing open spaces in Surrey Hills in alphabetical order and Table 7.15b is a summary of the total number of open spaces by hierarchy.

Table 7.15a Existing open space in Surrey Hills including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Boisdale Street Reserve	1.31	Neighbourhood	Passive	Native character	Significant road reservation	Viewing
Florence Reserve	0.07	Small Local	Passive	Viewing		
Bluebell Hill Reserve	0.67	Local	Passive	Restricted sporting/	Viewing	
Bluebell Hill Tennis Club (Located in Bluebell Hill Reserve)	0.13	Local	Restricted sporting/recreation			
Oak Street Park	0.10	Small Local	Passive	Play	Viewing	
Russell Street Reserve	0.54	Local	Passive	Linking space	Service easement	

Table 7.15b Number, hierarchy and size of open space excluding restricted open space in Surrey Hills

No.	Hierarchy	Area (Ha)	%
0	Regional	0	0%
0	Municipal	0	0%
0	Urban Civic	0	0%
1	Neighbourhood	1.30	48%
2	Local	1.21	45%
2	Small Local	0.18	7%
0	Local Link	0	0%
5	TOTAL	2.69	100%

Quantity

The total quantity of open space in Surrey Hills, excluding restricted open space, represents 1.6 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 1.7 per cent of the total land area. This is well below the municipal-wide average of 9.6 per cent excluding restricted open space and below the 11.3 per cent including restricted open space.

Hierarchy and distribution

Given the small quantity of open space, not all hierarchy types are provided in Surrey Hills. Only Neighbourhood, Local and Small Local open space is represented. Wattle Park is a major Regional open space directly adjoining the southern boundary of Surrey Hills, however the community needs to cross a major arterial road to reach it. Refer to Figure 7.15-2 for the Hierarchy of existing open space in Surrey Hills.

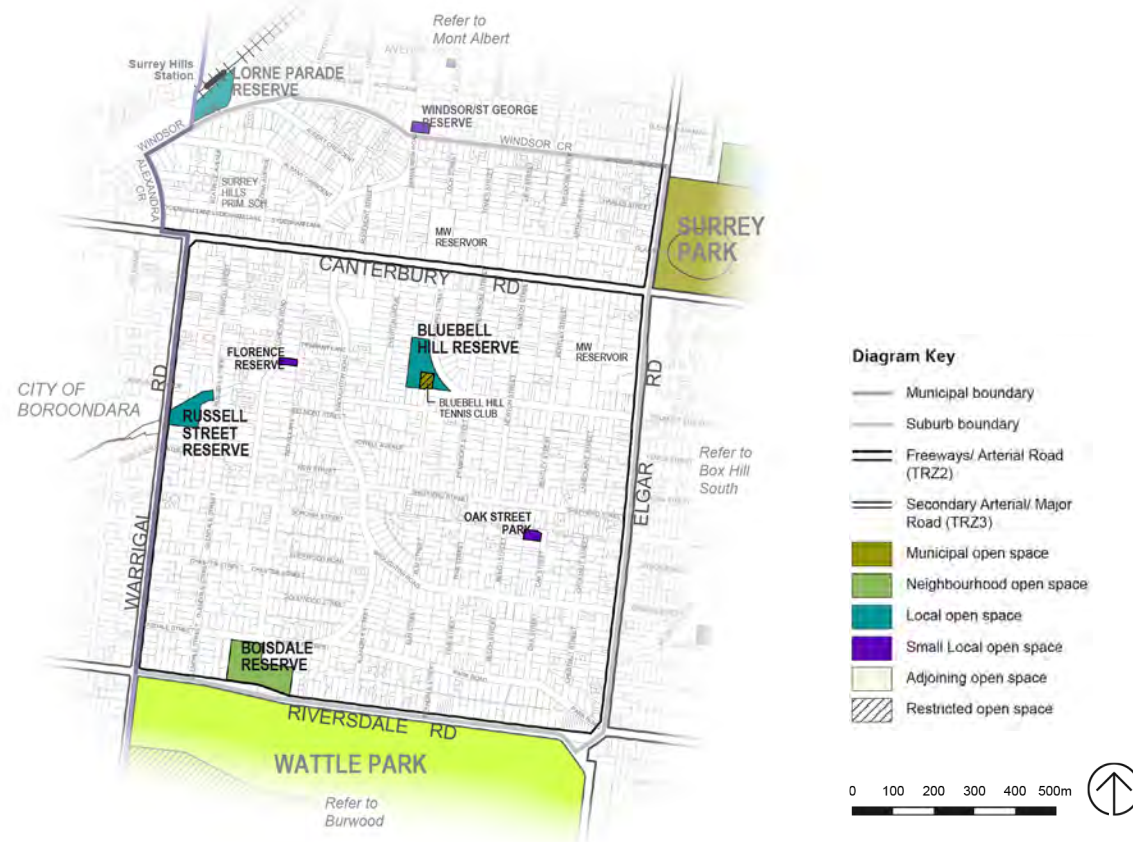


Figure 7.15-2 Open Space Hierarchy Surrey Hills

Open space distribution and future open space needs in Surrey Hills

Canterbury Road is a key east-west arterial road through Surrey Hills and forms a major physical north-south barrier to safe and easy walking access to open space within the precinct. Warrigal Road and Elgar Road define the west and east extents of Surrey Hills and form major barriers to east-west safe and easy pedestrian access to open space in adjoining suburbs. As noted above Riversdale Road is an arterial road on the southern boundary and forms a barrier to safe and easy pedestrian access to Wattle Park from Surrey Hills. As the community survey outcomes note, the community visit Wattle Park and other open space in adjoining area, however with the major roads forming barriers it makes it more difficult for everyone to easily and safely access them.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.15-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Surrey Hills and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.15c Brief description of gap areas in Surrey Hills

Gap area	Description
SH1	Located north of Canterbury Road, and east of the Melbourne Water Reservoir, this gap area will be addressed by the recommendations to expand the Windsor/St George Reserve in Mont Albert, refer to Action 7.12A-5.
SH2	Located south of Canterbury Road, this gap area will be addressed by the provision of an additional Small Local open space, ensuring it has excellent access and visibility.
SH3	Located centrally within the precinct, which will be addressed with the major upgrades to the Boisdale Reserve and the proposed Small Local open space in Gap Area SH2.

7.15.3 Ancillary open space

Within Surrey Hills, Surrey Hills Primary School is located north of Canterbury Road in the catchment of the Lorne Parade open space. While the mature trees to the perimeter of the school grounds contributes to the overall greening and shadings, there is limited access to the limited space in the school grounds out of school hours.

The pattern of subdivision layout is relatively well connected many of the streets having avenues of mature street trees contributing the to the greening and pedestrian amenity when using the local street network to access open space.

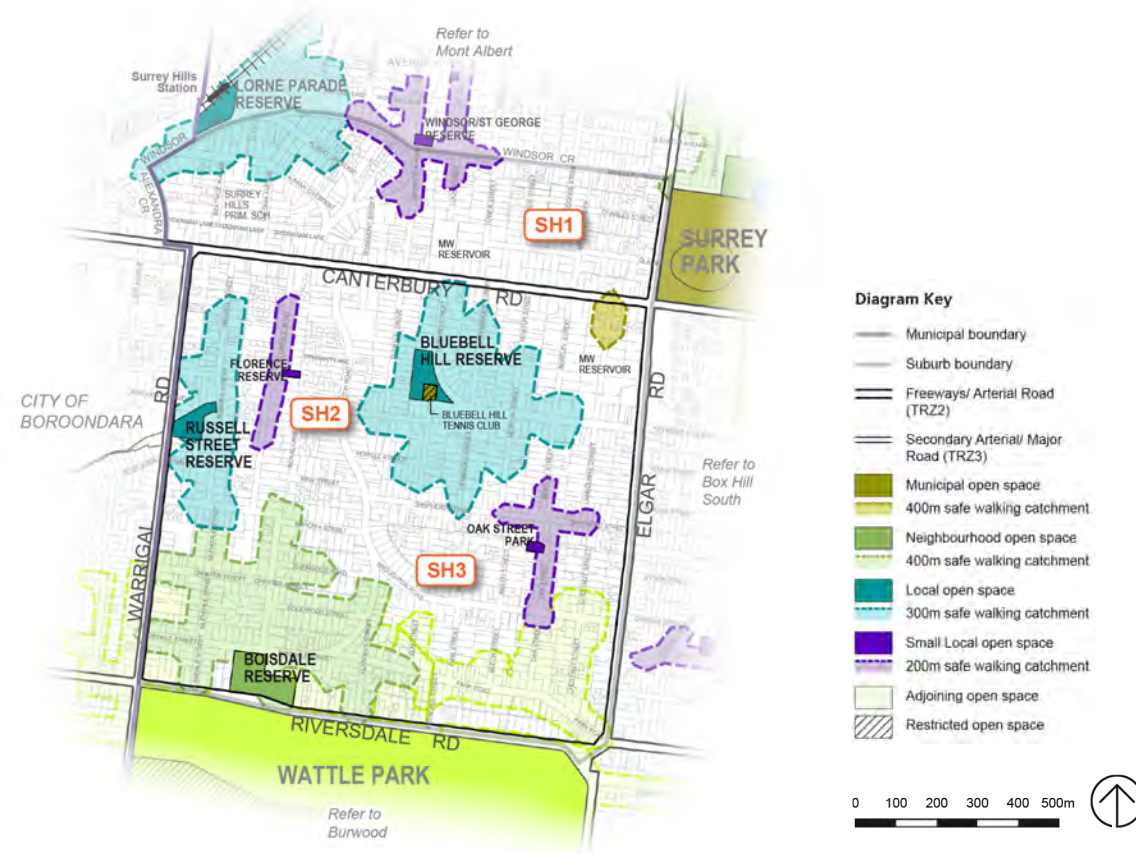


Figure 7.15-3 Gap Analysis Surrey Hills

7.15.4 Existing Surrey Hills community

Demographics

There are 5,415 residents living in Surrey Hills as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 216 people living in Surrey Hills, which represents an approximately 4 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in the tertiary education and the young workforce age groups (18 to 34 years) and the empty nesters from 60 to 84 years, and a lower proportion of families with school age children.

There has been minimal change in the type of dwellings in Surrey Hills compared to 2006. Overall there has been a 2 per cent decline in separate houses and a 3 per cent increase in medium-density housing and no high-density housing.

The residential population is forecast to increase by 3 per cent, with the continued trend of a decrease in children under the age of 17 the 50 to 59 year age cohort. There is a forecast increase in the 18 to 49 year age group and for those in the 70 plus age group.

Summary of community engagement outcomes

A total of 102 open space surveys were received from Surrey Hills, which represents 5 per cent of the total surveys received.

Surrey Hills survey respondents are closely aligned with the municipal average regarding the top three open space priorities. 'Meeting people/friends' and 'Casual feeling of space and serenity' was ranked lower than the municipal average. Like Vermont, the most popular open space in the precinct is Large parks and reserves (non-sporting) followed by Local streets for exercise. After Mont Albert, Surrey Hill survey respondents have the second highest request for additional open space in the precinct.

Values of open space (top five)

- 64% Trees
- 53% A place to relax and unwind
- 53% Connecting with nature
- 51% Just being outside
- 50% Walking and cycling

Types of open space used and frequency of use (top five)

- 89% Large parks and reserves (non-sporting)
- 78% Local streets for exercise
- 76% Small local parks
- 72% Waterway reserves
- 66% Neighbourhood parks

Frequently visited types of open spaces (top five)

- 73% Local streets for exercise
- 63% Small local parks
- 48% Large parks and reserves (non-sporting)
- 39% Neighbourhood parks
- 29% Sporting reserves

Priority of facilities and amenities in open spaces (top five)

- 70% Seats
- 60% Trees
- 55% Walking paths
- 54% Additional greening for environmental health & wellbeing
- 53% Picnic tables and seats

(Note that 36% Play space was listed ninth)

Table 7.15d Most frequently visited open space in Surrey Hills

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
32	Bluebell Hill Reserve	• Dog walking (12) • Play - children (8) • Enjoy nature (4) • Social - meeting family / friends / parties (4) • Access - close to home (3) • Walking (3) • Active recreation 2) • Spending time outdoors	
24	Wattle Park	• Walking (7) • Dog walking (6) • Play - children (5) • Enjoy nature (4) • Social - meeting family / friends / parties (4)	
22	Boisdale Street Reserve	• Play - children (8) • Dog walking (6) • Social - meeting family / friends / parties (6) • Walking (5) • Trees (3) • Active recreation (2)	• Fence the reserve boundary along Riversdale Road (2)
19	Surrey Park	• Play - children (5) • Dog walking (4) • Active recreation (3)	

No	Name	Reasons to visit	Suggested improvements
		• Club based sport (3) • Walking (3) • Open space (2) • Social - meeting family / friends / parties (2)	
9	Lorne Parade Reserve	• Play - children (3) • Dog walking (2) • Spending time outdoors (2)	
Open space beyond walking distance (top five)			
28	Wattle Park	• Enjoy nature (9) • Dog walking (5) • Play - children (3) • Walking (3) • Social - meeting family / friends / parties (2)	
22	Surrey Park	• Play - children (8) • Aqualink (3) • Dog walking (3) • Club based sport (2) • Play - with grandchildren (2) • Trees (2)	
15	KooyongKoot/ Gardiners Creek	• Walking (3) • Enjoy nature (2) • Play - children (2)	
8	Blackburn Lake Sanctuary	• Walking (3) • Enjoy nature (2) • Play - children (2)	
5	Bluebell Hill Reserve	• Play - children (3) • Dog walking (2)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Additional required (13)
 - Only one park in 400m distance (4)
 - larger parks than pocket parks (4)
 - Generally, additional required (2)
 - In Surrey Hills (2)

Maintenance and management

- Dogs (7)
 - More fenced dog parks (3)

Trees and Vegetation

- Additional canopy trees (2)

Park Infrastructure

- Park infrastructure - additional required (6)
- Active facilities - additional required (2)
- Play space - additional required (3)

Other

- Developments - negative impacts (2)
- LXRP - Lorne Parade Reserve (5)
 - Has caused loss of open space (3)
 - Has reduced ability to spend time outdoors (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.15.5 Analysis of future change and open space needs

Forecast population change

Surrey Hills is currently forecast to reach a residential population of 5,574 by 2036, representing an additional 159 people, or a 3 per cent increase compared to the 2021 population. The table below includes the forecast population growth for the residential and worker populations through to 2041. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.15e Population forecasts for Surrey Hills 2021 - 2036

Surrey Hills	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	5,415	5,589	5,549	5,574	+159

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create a minor increased demand for open space. In terms of the demographic change, the higher proportion of adults and decrease in proportion of children under 17 years reinforces the need for a diversity of facilities in addition to play areas.

7.15.6 Surrey Hills Precinct Recommendations

Summary of overall intent

Provision and distribution

Surrey Hills is forecast to experience minimal change over the next 15 years with 159 new residents forecast to be living here by 2036 which represents a 3 per cent increase. The forecast change is mainly anticipated along Canterbury Road and Riversdale Road. The most popular open space is Bluebell Hill Reserve, which is centrally located in Surrey Hills with an excellent diversity of facilities and features. While there is not a large amount of open space in Surrey Hills it is distributed across the area and connected via the local street network without major barriers to access. An additional Small Local open space is proposed to address the gaps in open space provision south of Canterbury Road primarily for the existing population. Expansion to the size of existing open spaces and a series of major upgrades that focus on increasing access and a diversity of facilities and features will improve accessibility and useability of open space network for the community. The proposed expansion of both Florence Reserve and Windsor/St George Reserve (in Mont Albert) will assist to increase the capacity of that reserve to cater to increased levels of use for the community north of Canterbury Road. Wattle Park adjoins the southern boundary of Surrey Hills and while Riversdale Road forms a barrier to safe walking access, it does contribute to the open space character.

Quality and design

The undulating topography of Surrey Hills significantly contributes to the character of the existing open space network. Expansive views from within Bluebell Hill Reserve add to the sense of space and character. Similarly the expansive views over Boisdale Reserve to Wattle Park provide an excellent setting and context for the future major upgrade to this neighbourhood park. The major upgrades will focus on the significantly improving the diversity of facilities and improvement to the quality of spaces for the local community.

7.15.7 Action Plan – Surrey Hills

A Additional public open space

No.	Action	Respons- ibility	Priority
7.15A-1	New Small Local open space in Gap Area SH2 Provide a new open space in this gap area with excellent visibility and access in this gap area primarily for the existing community.	WCC	Very High
7.15A-2	Florence Reserve expansion Major upgrade and investigate expansion of the open space to incorporate part of the road reserve and open up the space so it is more accessible and protects and celebrates the mature trees. Refer also to Action 7.15B-4.	WCC	High

No.	Action	Responsibility	Priority
7.15A-3	Oak Street Park expansion Continue to maintain. Investigate options to expand this open space in the longer term to improve its character, function and use. This will assist to address Gap Area SH3. Refer also to Action 7.15B-5.	WCC	Low

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.15B-1	Bluebell Hill Reserve Continue to maintain this popular Local open space which is an excellent example of a diverse range of facilities in a small sized reserve.	WCC	Ongoing
7.15B-2	Bluebell Hill Tennis Club (Restricted) Continue to maintain.	WCC	Ongoing
7.15B-3	Boisdale Reserve Major upgrade to improve the character and increase diversity of facilities, celebrating the elevated views over the reserve to Wattle Park. This upgrade will assist to address Gap Area SH3.	WCC	High
7.15B-4	Florence Reserve Major upgrade and investigate expansion of the open space to incorporate part of the road reserve and open up the space so it is more accessible and protects and celebrates the mature trees. Refer also to Action 7.15A-2.	WCC	High
7.15B-5	Oak Street Park Continue to maintain. Investigate options to expand this open space in the longer term to improve its character, function and use. This will assist to address Gap Area SH3. Refer also to Action 7.15A-3.	WCC	Medium
7.15B-6	Russell Street Reserve Major upgrade to relocate the play facility away from Warrigal Road and include seating and picnic area along with more planting to improve the character and use of the open space.	WCC	High

7.16 Vermont

7.16.1 Overview

Vermont is located east of Forest Hill and a number of local access streets form the western boundary of the precinct including Stevens Road south of Canterbury Road and near Betula Avenue north of Canterbury Road. To the north Vermont adjoins Mitcham with the boundary former by a number of local access streets including Premier Avenue and Denis Street north of Canterbury Road. The eastern boundary is defined Heatherdale Road and the Dandenong Creek and the southern boundary is defined by the former Healesville Freeway Reserve.

Refer to *Figure 7.16-1* on the following page of the existing open space in Vermont.



Figure 7.16-1 Existing Open Space Vermont

7.16.2 Existing open space

Overview

Bellbird Dell is the largest and most popular Municipal open space in Vermont and contributes to the unique bushland character of Vermont. The Regional open space along Dandenong Creek also makes a significant contribution to Vermont. Campbells Croft has some unique heritage values and large significant trees that has the potential to become a future major destination accessible via the Dandenong Creek shared trail. Abbey Walk extends to the north contains wetlands and strong environmental qualities and character. Dandenong Valley Parklands south of Boronia Road connects into the former Healesville Freeway Reserve and combined forms a significant regional open space network to be managed by Parks Victoria.

Stephens Reserve and Vermont Reserve are the other two Municipal open spaces that include structured sporting facilities along with remnant bushland qualities and values at Stephens Reserve. North of Canterbury Road Buckanbe Park is a Neighbourhood open space reserve, which while large in size, does not appear to be well used due to limited access points into the reserve. There is a network of other Local and Small Local open spaces both north and south of Canterbury, many of which have the potential to be improved by increasing access points into them.

Table 7.16a is a list of all the existing open spaces in Vermont in alphabetical order and Table 7.16b is a summary of the total number of open spaces by hierarchy.

Table 7.16a Existing open space in Vermont including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification
Abbey Walk	3.74	Regional	Waterway	Nature conservation	Passive
Adrian Danaher Reserve	0.31	Local	Undeveloped		
Bellbird Dell Reserve (north section only)	6.84	Municipal	Waterway	Passive	Nature conservation
Buckanbe Park	1.79	Neighbourhood	Passive	Native character	Nature conservation
Campbells Croft	11.56	Regional	Nature conservation	n/a	
Cobradah Reserve	0.35	Local	Native character	n/a	
Dandenong Valley Parklands	4.13	Regional	Undeveloped	Nature conservation	
Eastmont Reserve	0.33	Local	Play	Native character	
Frank Way	0.27	Local	Undeveloped	Linking space	Native character
Healesville Freeway Reserve (Morack Rd to Dandenong Valley Parklands)	8.66	Regional	Linear	n/a	
Healesville Freeway Reserve (Restricted, 2 individual sites on Morack Rd)	0.50	Regional	Restricted	n/a	
Kingsley Croft	0.07	Small Local	Play	n/a	
Laidlaw Reserve	0.20	Small Local	Nature conservation	Play	
Manhattan Square	0.09	Small Local	Undeveloped	Significant road reservation	

Table 7.16a Existing open space in Vermont including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification
Nurlendi Road Reserve	0.09	Local Link	Linking space	Nature conservation	
Park Close Reserve	0.25	Small Local	Passive		
Scott Street Reserve	0.13	Small Local	Play		
Stephens Reserve	5.80	Municipal	Nature conservation	Passive	Sporting
Thatcher Reserve	0.60	Local	Passive		
Trade Place Reserve	0.09	Small Local	Service easement	Linking space	Native character
Trove Park	0.23	Small Local	Nature conservation	Linking space	Road reservation
Vermont Reserve	2.84	Municipal	Sporting	Native character	Passive
View Park	0.21	Small Local	Service easement	Linking space	Nature conservation

Table 7.16b Number, hierarchy and size of open space excluding restricted open space in Vermont

No.	Hierarchy	Area (Ha)	%
4	Regional	28.09	57%
3	Municipal	15.48	32%
0	Urban Civic	0.00	0%
1	Neighbourhood	1.79	4%
5	Local	1.87	4%
8	Small Local	1.26	3%
1	Local Link	0.09	0%
22	TOTAL	48.58	100%

Quantity

The total quantity of open space in Vermont, excluding restricted open space represents 11.1 per cent of the total land area. When adding restricted open space, the total quantity of open space represents 11.2 per cent of the total land area. This is above the municipal-wide average of 9.6 per cent excluding restricted open space and just below 11.3 per cent municipal average including restricted open space.

Hierarchy

All of the types of open space in the open space hierarchy are currently provided in Vermont with the exception of Urban Civic. Refer to Figure 7.16-2 for the Hierarchy of existing open space in Vermont.

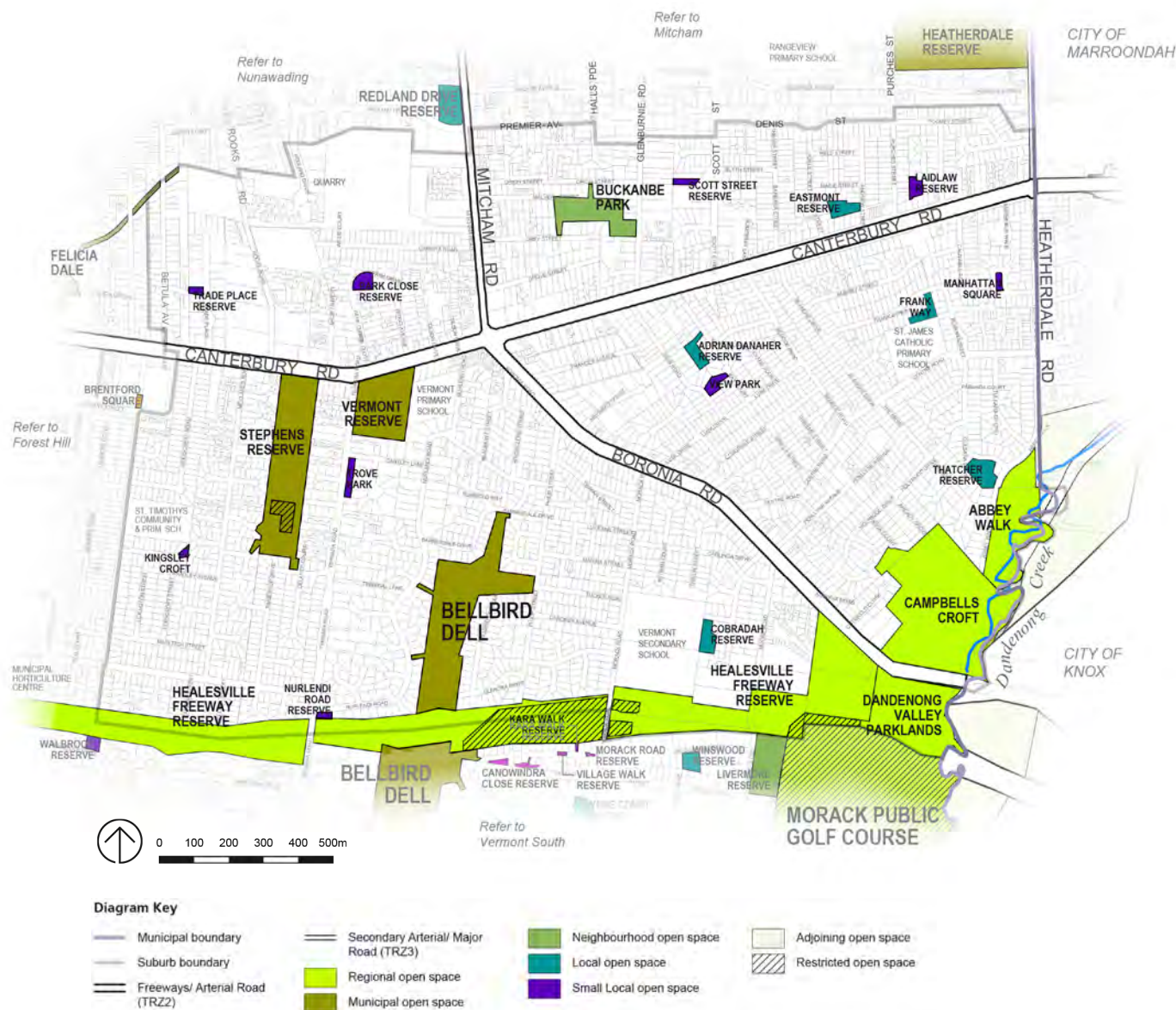


Figure 7.16-2 Open Space Hierarchy Vermont

Open space distribution and future open space needs in Vermont

Canterbury Road is a key east-west arterial road through Vermont and forms a major physical barrier to safe and easy walking access to open space within the precinct. Boronia Road/Mitcham Road crosses through generally in north-south direction and forms a barrier to safe and easy walking access to open space. The other barriers include Dandenong Creek and Heatherdale Road to the eastern boundary of the precinct.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.16-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Vermont and the solutions to address them.

Table 7.16c Brief description of gap areas in Vermont

Gap area	Description
V1	Located north of Canterbury Road the west of Mitcham Road, this gap area includes both residential and industrial land use. Given the industrial land zoning in the non-residential land use and that minimal residential change is forecast in this gap area, no additional open space is proposed in this Strategy. The Strategy does propose to undertake minor upgrades to the existing open spaces and long term expansion to Trade Place Reserve.
V2	Located south of Canterbury Road and north of Boronia Road this gap area is in the local residential area between Cosgrove Street and Holyrood Drive, extending east to Blanche Drive. This gap area is proposed to be addressed by an expansion to View Park and Adrian Danaber Reserve including linking them together to improve connectivity into the existing open space. Additionally, the open spaces will be upgraded to improve the character and recreational facility provision.

7.16.3 Ancillary open space

Vermont Primary School and Vermont Secondary College at two public schools in Vermont that make some contribution to ancillary open space. The function and use of Cobradah Reserve is influenced by the adjoining Vermont Secondary College, including providing access to the school and also potentially a social space after school. Currently access between the school and reserve is not restricted. Vermont Primary School directly adjoins Vermont Reserve and makes a contribution to the urban greening with some large native trees around the boundary of the school grounds and after school hours access via pedestrian gates near the play space to the south.

The pattern of subdivision layout is disjointed meaning there is not good permeability through the local street network in some parts of Vermont. This is particularly noticeable in Gap Area V1 and to the south of Canterbury Road and east of Stevens Road. This open space needs assessment identifies opportunities to improve the pedestrian connectivity, by investigating options to increase permeability and access points into existing open space reserves, including Trade Place Reserve in Gap Area V1 and Adrian Danaber Reserve in Gap Area V2.



7.16.4 Existing Vermont community

Demographics

There are 10,618 residents living in Vermont as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 1,400 people living in Vermont, which represents an approximately 15 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in primary and secondary school age groups (5 to 27), parents (35 to 49), and people over 70 years of age. There is a lower proportion of babies (0 to 4 years), tertiary education and young workforce age group (18 to 34 years) and the older workers to the empty nesters age group (50 to 69) years of age.

A slightly higher proportion of the population now live in medium density housing compared with 2006. In 2006 approximately 81 per cent lived in separate houses, 19 per cent in medium-density housing and there were no high-density dwellings. Now in 2021, approximately 78 per cent live in the separate houses, with 22 per cent in medium-density housing, and still 0 per cent in high-density.

The residential population is forecast to increase 8 per cent, with the continued trend of a decrease in children between the age of 5 and 17 and the older demographics between the ages of 60 and 84 years of age. There is a forecast increase in the 35 to 69 age range.

Summary of community engagement outcomes

A total of 104 open space surveys were received from Vermont, which represents 6 per cent of the total surveys received.

The survey respondents in Vermont's top values of open space are very similar to the municipal average - except for 'walking' and 'cycling' being ranked higher than the municipal average. The most popular open spaces in the precinct correlate with the survey outcomes identifying Large parks and reserves (non-sporting) as the most popular type of open space used, followed by Local streets for exercise and Small local parks reflecting the range of open space present in the precinct.

Values of open space (top five)

- 75% A place to relax and unwind
- 69% Walking and cycling
- 67% Connecting with nature
- 66% Trees
- 63% Just being outside

Types of open space used and frequency of use (top five)

- 89% Large parks and reserves (non-sporting)
- 88% Local streets for exercise
- 88% Small local parks

- 75% Waterway reserves
- 72% Medium parks

Frequently visited types of open spaces (top five)

- 80% Local streets for exercise
- 66% Small local parks
- 44% Large parks and reserves (non-sporting)
- 39% Sporting reserves
- 37% Neighbourhood parks

Priority of facilities and amenities in open spaces (top five)

- 78% Seats
- 63% Walking paths
- 59% Picnic tables and seats
- 57% Trees
- 55% Toilets

(Note that 39% Play space was listed tenth)

Table 7.16d Most frequently visited open space in Vermont

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
34	Bellbird Dell	• Walking (18) • Dog walking (9) • Enjoy nature (8) • Play - children (7) • Social - meeting family / friends / parties (3) • Access - close to home (2) • Cycling (2) • Open space – peaceful (2) • Running (2)	• Toilets - additional required (2)
24	Heatherdale Creeklands (Including Heatherdale Reserve and Somers Trail)	• Dog walking (5) • Play - children (2) • Social - meeting family / friends / parties (2) • Walking (4)	• Large scale play space required (2)
14	Vermont Recreation Reserve	• Play - children (6) • Walking (3) • Club based sport - football (3) • Club based sport (2) • Dog walking (2) • Social - meeting family / friends / parties (2)	

No	Name	Reasons to visit	Suggested improvements
13	Abbey Walk	• Walking (5) • Enjoy nature (3) • Dog walking (2) • Open space - ambience, beauty (2)	
11	Stephens Reserve	• Dog walking (4) • Access - close to home (2) • Play - children (2) • Social - meeting family / friends / parties (2) • Walking (2)	
Open space beyond walking distance (top five)			
18	Heatherdale Creeklands (Including Heatherdale Reserve, Simpson Park, Somers Trail and Heatherdale Ponding Basin)	• Dog walking (6) • Walking (4) • Club based sport - cricket (2) • Play - children (2)	
15	Blackburn Lake Sanctuary	• Walking (12) • Social - meeting family / friends / parties (4) • Enjoy nature (3)	
12	Dandenong Creek Trail	• Walking (8) • Dog walking (3) • Enjoy nature (2) • Social - meeting family / friends / parties (2)	• Toilets - additional required (2)
8	Halliday Park	• Play - children (7) • Social - meeting family / friends / parties (3) • Informal ball games (2)	
7	Bellbird Dell	• Dog walking (4)	

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by people in each category:

Open space

- Better distribution types of open space (4)
- Additional open space required (4)
- Improvements required including connectivity between them and increase their attractiveness and social facilities. (4)

- Valued (3)

Maintenance and management

- Dogs (9)
 - More designated dog areas (5)
 - Regulations for dogs (4)
 - Education to allow fauna/fauna protection (3)
 - Public access and equality in sport field/clubs (2)

Trees and Vegetation

- Additional canopy trees (2)

Park Infrastructure

- Park infrastructure - additional required (10)
 - Toilets (3)
 - Bins (2)
 - Lighting (2)
- Play space - additional required (7)
 - Large scale (2)
 - Improved design including universal access, creative and shade (4)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.16.5 Analysis of future change and open space needs

Forecast population change

Vermont is currently forecast to reach a residential population of 11,484 by 2036, representing an additional 866 people, or an 8 per cent increase from the existing population.

The table below includes the forecast population growth for the residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.16e Population forecasts for Vermont 2021 - 2036

Vermont	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	10,618	10,807	11,101	11,484	+866

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is mainly in relation to the forecast increase of 866 additional people visiting open space, and also in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, there is a trend to a higher slightly higher proportion of families with older children and parents in the 50 to 59 age range. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.16.6 Vermont Precinct Recommendations

Summary of overall intent

Provision and distribution

Vermont is forecast to experience minimal to moderate change over the next 15 years with 866 new residents forecast to be living here by 2036 which represents an 8 per cent increase. The forecast change is anticipated to be distributed mainly in the area west of Terrara Road in the vicinity of Stephens Reserve and Vermont Reserve. Bellbird Dell is the most popular open space according to the community survey outcomes followed Vermont Reserve, Abbey Walk, Stephens Reserve and Campbells Croft. Other than Vermont Reserve, the other spaces are located along waterway corridors with linear open space connectivity that is popular for walking and running. The distributed network of Neighbourhood and Local open spaces are nominated as being well used and include Buckanbe Park, Eastmont Reserve, Thatcher Reserve and Terrara Park. Gaps in the distribution of open space are mainly north of Canterbury Road and west of Mitcham Road where there is an industrial precinct and the urban layout is quite disjointed. Improved connectivity via the local street network is recommended as further redevelopment occurs in this area, along with a proposed expansion to Trade Place Reserve. Other gaps south east of the Canterbury Road will be addressed by expanding the existing open spaces to create larger reserves.

The future Healesville Freeway Reserve linear park will strengthen the diversity and overall provision of open space in Vermont and Vermont South.

Quality and design

With Dandenong Creek defining the eastern boundary of this precinct and the tributary flowing through Bellbird Dell, waterways and natural bushland character significantly contribute to Vermont's inherent character and sense of place. This is reinforced with other remnant indigenous trees and bushland in other open spaces including Stephens Reserve, Buckanbe Park and Vermont Reserve. Campbells Croft has unique parkland qualities and is proposed to be upgraded to establish a major destination park in this precinct. A major upgrade of neighbourhood facilities in Stephens Reserve is proposed near the tennis club area to provide a diversity of facilities for both the existing and forecast population. Key changes to the quality and design of open space in Vermont is to focus on expanding some selected open spaces to improve visual and physical access into them, particularly where they are almost completely surrounded by rear boundary fences. The proposed upgrades also focus on increasing the diversity of facilities to encourage more people to exercise and socialise in open space, while protecting and improving the canopy tree cover and nature conservation values.

7.16.7 Action Plan – Vermont

A Additional public open space

No.	Action	Responsibility	Priority
7.16A-1	Adrian Danaher Reserve expansion Investigate opportunity to combine these two reserves so they form a linking space and undertake a major upgrade to create a highly values Local open space. This will address existing Gap Area V2. Refer to Actions 7.16B-2 and 7.16B-23.	WCC	High
7.16A-2	Eastmont Reserve expansion Investigate option to expand the size of this reserve to the west and increase accessibility to it and passive surveillance. Increase diversity of facilities when expansion occurs, with the potential to not require Scott Street Reserve in the longer term. Refer to also to Action 7.16B-8.	WCC	Medium
7.16A-3	Frank Way expansion Major upgrade including investigate options to expand the reserve to improve access and passive surveillance. Refer also to Action 7.16B-9.	WCC	Medium
7.16A-4	Trade Place Reserve expansion Minor upgrade in short term to provide path and seating. In longer term investigate option to expand the reserve and improve activated interface with adjoining properties, to assist to address Gap Area V1. Refer also to Action 7.16B-20.	WCC	Low

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.16B-1	Abbey Walk Minor upgrade to improve path network including link to Thatcher Reserve.	WCC	High
7.16B-2	Adrian Danaher Reserve Investigate opportunity to combine Adrian Danaher Reserve with View Park so they form a linking space and undertake a major upgrade to create a highly valued Local open space. Refer also Action 7.16B-23 and 7.16A-1.	WCC	High
7.16B-3	Bellbird Dell Reserve (north section only) Continue to maintain.	WCC	Ongoing

No.	Action	Responsibility	Priority
7.16B-4	Buckanbe Park Continue to maintain.	WCC	Ongoing
7.16B-5	Campbells Croft Major upgrade to establish a key destination park with visitor facilities for both the local and regional community. <i>Additional information/rationale: Prepare a Landscape Masterplan to guide the major upgrade including Investigate options to strengthen connectivity and accessibility to Abbey Walk and south the former Healesville Freeway Reserve and Dandenong Valley Parklands. The future design is to protect and celebrate the unique the qualities of the heritage and natural conservation values of this reserve, create a key municipal and regional visitor destination point for the local community to enjoy.</i>	WCC	Medium
7.16B-6	Cobradah Reserve Major upgrade to improve path layout, seating, and recreation facilities, interface to the adjoining school and protect the nature conservation values.	WCC	Medium
7.16B-7	Dandenong Valley Parklands Liaise with Parks Victoria regarding future use of this part of Dandenong Valley Parklands in the context of the new Healesville Freeway Reserve Linear Park. This could include additional structured sporting fields.	WCC PV	Medium
7.16B-8	Eastmont Reserve Investigate option to expand the size of this reserve to the west and increase accessibility to it and passive surveillance. Minor upgrade to increase diversity of facilities when expansion occurs. Refer to Action 7.16A-2 for expansion to the reserve.	WCC	Medium
7.16B-9	Frank Way Major upgrade including investigate options to expand the reserve to improve access and passive surveillance. Refer also to Action 7.16A-3. <i>Additional information/rationale: Prepare and implement a Landscape Concept Plan to guide the future major upgrade to Frank Way in consultation with the community including St James Primary School and Eastmont Preschool.</i>	WCC	Low
7.16B-10	Healesville Freeway Reserve - Morack Rd to Dandenong Valley Parklands Council to continue to liaise with Parks Victoria regarding the ongoing implementation of the Masterplan. Refer also to Vermont South for the former Healesville Freeway Reserve recommendations west of Morack Road.	PV WCC	Ongoing
7.16B-11	Healesville Freeway Reserve - restricted open space east of Morack Road Council to continue to liaise with Parks Victoria regarding the ongoing implementation of the Masterplan.	PV WCC	Ongoing

No.	Action	Responsibility	Priority
7.16B-12	Kingsley Croft Continue to maintain with minor improvements to planting to soften the perimeter of the reserve and improve sightlines at entry.	WCC	Ongoing
7.16B-13	Laidlaw Reserve Continue to maintain and progressively improve nature conservation values with additional revegetation along fence lines.	WCC	Ongoing
7.16B-14	Manhattan Square Minor upgrade to include path and seating to enjoy the views.	WCC	Low
7.16B-15	Nurlendi Road Reserve Minor upgrade including weed control, path link and seating as an entry to the future Healesville Freeway Reserve linear open space.	WCC	Medium
7.16B-16	Park Close Reserve Minor upgrade to improve the character of the open space including path link, seating and perimeter planting.	WCC	High
7.16B-17	Scott Street Reserve Continue to maintain. In medium term investigate if this open space is required in context of expanding nearby Eastmont Reserve.	WCC	Ongoing
7.16B-18	Stephens Reserve Major upgrade to provide more social recreation facilities including dog park and a new picnic/barbecue facility with expanded play facility near the tennis club for existing and forecast community. <i>Additional information/rationale: Prepare and implement a Landscape Masterplan to guide the future major upgrade to create a local community destination picnic area including BBQs, complementary exercise/fitness facilities, dog park and taking advantage of the bushland setting combined with existing infrastructure associated with the community facilities/structured sporting facilities.</i>	WCC	Medium
7.16B-19	Thatcher Reserve Minor upgrade to expand path network and create a direct link to Abbey Walk.	WCC	Ongoing
7.16B-20	Trade Place Reserve Minor upgrade in short term to provide path and seating. In longer term investigate option to expand the reserve and improve activated interface with adjoining properties. Refer also to Action 7.16A-4.	WCC	High
7.16B-21	Trove Park Continue to maintain nature conservation values.	WCC	Ongoing
7.16B-22	Vermont Reserve Undertake a minor upgrade of the unstructured recreation facilities in conjunction with the Masterplan being prepared for the reserve primarily to guide the sporting facility upgrades.	WCC	Low

No.	Action	Respons- ibility	Priority
7.16B-23	View Park Investigate opportunity to combine Adrian Danaher Reserve with View Park so they form a linking space and undertake a major upgrade to create a highly valued Local open space. Refer to Action 7.16B-2 and 7.16A-1.	WCC	High

7.17 Vermont South

7.17.1 Overview

Vermont South is the most south-eastern extent of the municipality. It is defined to the west by Springvale Road, the south by Highbury Road, the east by Dandenong Creek and the north by the proposed new former Healesville Freeway Reserve linear open space.

Refer to *Figure 7.17-1* on the following page of the existing open space in Vermont South.



Figure 7.17-1 Existing Open Space Vermont South

7.17.2 Existing open space

Overview

The system of Regional open space located along the Dandenong Creek corridor is the largest and most extensive area of open space in Vermont South. A large component of this is the Morack Public Golf Course, which is restricted open space. South of Burwood Highway the Dandenong Creek corridor includes a number of different facilities including the Nunawading and District Moto Cross Club which is restricted open space, the Whitehorse Recycling Waste Centre, the Vermont South Skate Ramp, Lookout Trail Park and Bushy Park. None of these spaces are identified as being well used in the open space survey outcomes, which may be partly due to the difficulty reaching them and their variable condition and character. There is potential to improve the quality of these spaces including the facilities, character and passive surveillance.

The other key Regional open space is the proposed linear open space along the former Healesville Freeway Reserve, that will be managed by Parks Victoria. Bellbird Dell, Terrara Park and Billabong Park are major Municipal open spaces which distinct characters and uses. Bellbird Dell and Terrara Park are nominated in the survey as the most popular open spaces in Vermont South, while Billabong Park is not identified as being well used. This is likely due to the more central location of Bellbird Dell and Terrara Park within the precinct and the quality and provision of facilities in them that attracts the community to visit them. Billabong Park is located south of Burwood Highway and has limited unstructured recreation facilities and is also a retarding basin which limits the variety of uses and the character.

Five Neighbourhood open spaces are located across the precinct, with Tyrol Park and Charlesworth Park nominated as being well used in the survey. Tyrol Park has excellent passive surveillance which gives it visual prominence with local access streets adjoining two of the five boundaries to the reserve. Hanover, Licola and Livermore Reserves all have the potential to be better used but currently have none or limited facilities located in them. With the provision of additional unstructured recreational facilities to make them more accessible, this will increase their level of use and appeal to the community.

The network of Local and Small Local open spaces is generally well distributed, however there are some gaps in the provision of open space and other areas where there is an overlap in the walking catchments.

Table 7.17a is a list of all the existing open spaces in Vermont South in alphabetical order and Table 7.17b is a summary of the total number of open spaces by hierarchy.

Table 7.17a Existing open space in Vermont South including restricted open space

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Ballina Terrace Reserve	0.64	Local	Passive	Linking space	Native character	Viewing
Barossa Reserve	0.20	Small Local	Native character	Linking space		
Bellbird Dell	19.28	Municipal	Waterway	Nature conservation	Passive	
Billabong Park	1.03	Municipal	Sporting	Native character	Service easement	Viewing
Bushy Park	2.36	Regional	Undeveloped	Native character	Service easement	
Canowindra Close Reserve	0.14	Local Link	Service easement	Linking space		

Table 7.17a Existing open space in Vermont South including restricted open space (continued)

Open space	Area (Ha)	Hierarchy	Primary Character Classification	Secondary Character Classification	Secondary Character Classification	Secondary Character Classification
Charlesworth Park	1.65	Neighbourhood	Restricted sporting/recreation	Native character	Passive	
Dalroy Bend Reserve	0.55	Local	Native character	Linking space	Undeveloped	Viewing
Dandenong Creek Linear Park (south of Burwood Highway, Council)	10.19	Regional	Waterway	Nature conservation		
Dandenong Valley Parklands (Parks Victoria, north of Burwood Highway)	2.58	Regional	Waterway	Nature conservation	Passive	
Delacombe Reserve	0.59	Local	Nature conservation	Viewing		
Galea Court Reserve	0.38	Local	Native character	Linking space	Viewing	
Hanover Reserve	1.94	Neighbourhood	Passive	Nature conservation	Viewing	
Hartland Park	0.19	Small Local	Native character	Play		
Hatfield Court Reserve	0.30	Local	Viewing	Native character	Undeveloped	
Healesville Freeway Reserve (Restricted area Terrara Rd to Morack Rd)	4.21	Regional	Restricted community use			
Healesville Freeway Reserve (Section between Davy Lane and Terrara Rd)	9.48	Regional	Linear			
Healesville Freeway Reserve (Terrara Rd to Morack Rd, excluding the Restricted Area)	4.77	Regional	Linear	Nature conservation		
Justina Elonara Walkway	0.05	Local Link	Linking space	Native character		
Kara Walk Reserve	0.02	Local Link	Linking space	n/a		
Licola Reserve	1.57	Neighbourhood	Passive	Linking space	Native character	Viewing
Livermore Reserve	1.62	Neighbourhood	Undeveloped	Viewing		
Lookout Trail Park (including MWC land adjacent to the creek)	12.56	Regional	Waterway	Linear	Nature conservation	Passive
Melissa Reserve	0.25	Small Local	Service easement	Linking space	Native character	
Morack Golf Course (Restricted)	59.98	Regional	Restricted sporting/recreation	Native character	Nature conservation	Waterway
Morack Road Reserve	0.01	Local Link	Linking space	n/a		
Nunawading & District Moto Cross Club (included in the Dandenong Creek Linear Park)	2.78	Regional	Restricted sporting/recreation			
Pioneer Close Reserve	0.42	Local	Native character	Play		
Prestbury Reserve	0.18	Small Local	Passive	Viewing	Deciduous character	
Scarborough Park	0.25	Small Local	Native character	Play	Viewing	
Spark Rise	0.20	Small Local	Viewing	Linking space		
Stanley Doreen	0.23	Small Local	Native character	Play		
Talarno George Walkway	0.05	Local Link	Linking space	Service easement		
Terrara Park	8.13	Municipal	Sporting	Linking space	Native character	Service easement
Tyrol Park	2.05	Neighbourhood	Passive	Linking space	Native character	Viewing
Vermont South Skate Park (included in the Dandenong Creek Linear Park total)	1.03	Regional	Sporting	Nature conservation		
Vermont South Tennis Club, located in Charlesworth Park	0.86	Municipal	Restricted sporting/recreation	n/a		
Village Walk Reserve	0.03	Local link	Linking space	n/a		
Walbrook Reserve	0.15	Small Local	Native character	Linking space	Play	
Winswood Reserve	0.26	Local	Passive	Viewing	Play	
Wynne Court Reserve	0.36	Local	Play	Linking space	Viewing	

Table 7.17b Number, hierarchy and size of open space excluding restricted open space in Vermont South

No.	Hierarchy	Area (Ha)	%
6	Regional	38.13	48%
3	Municipal	28.44	36%
0	Urban Civic	0.00	0%
5	Neighbourhood	7.98	10%
8	Local	3.51	4%
8	Small Local	1.65	2%
6	Local Link	0.29	0%
36	TOTAL	80.00	100%

Quantity

The total quantity of open space in Vermont South, excluding restricted open space, represents 12.9 per cent of the total land area. Where adding restricted open space, the quantity of total open space represents 24 per cent of the total land area. This substantial difference between adding restricted open space back in is the large land size of Morack Public Golf Course.

Hierarchy

All of the existing hierarchy types of open space are currently provided in Vermont South with the exception of Urban Civic. Refer to Figure 7.17-2 for the Hierarchy of existing open space in Vermont South.



Figure 7.17-2 Open Space Hierarchy Vermont South

Open space distribution and future open space needs in Vermont South

Burwood Highway is a key east-west arterial road through Vermont South and it forms a major physical barrier to safe and easy walking access to open space within the precinct. In addition, Terrara Road and Hawthorn Road form barriers to safe and easy walking access to Local and Small Local open space.

A ped-shed assessment has been undertaken for the precinct based on the barriers to safe and easy walking access to open space. This is shown in Figure 7.17-3. This illustrates the actual walking distances along the street network, and the areas shown in white are referred to as gap areas, meaning that people living and working in these precincts need to walk further than the nominated walking distances to reach open space. These plans are prepared to inform the open space needs assessments as to where new open space may be required. Below is a summary of the key gap areas in Vermont South and the solutions to address them. The solutions are included in the Action Plan at the end of the precinct chapter.

Table 7.17c Brief description of gap areas in Vermont South

Gap area	Description
VS1	Located north of Hawthorn Road in the residential precinct between Stanley Doreen and Walbrook Reserves. This Gap Area will be addressed with improvements to future access into the former Healesville Freeway Reserve linear open space and upgrades to the Walbrook Reserve.
VS2	Located east of Terrara Park and north of Burwood Highway, near Morack Public Golf Course in the vicinity of Minchinbury Drive. While the community does not have physical access to open space, the unbuilt character of Morack Public Golf Course provides some greening and natural character in this gap area. Improvements to the quality of the existing local open spaces nearby and Terrara Park will improve the quality of open space network that is accessible via the local access street network.
VS3	Located south of Burwood Highway in the vicinity of Charlnet Drive, this gap area does have access to ancillary open space with Weeden Heights Primary School. The nearby open spaces including Licola Reserve and Hartland Park will be upgraded to broaden their appeal and use, and are both accessible via the local access street network from the gap area. If substantial future change occurs within proximity to this gap area, additional open space would be required, however this is not anticipated to occur within the timeframe of this Strategy.



Figure 7.17-3 Gap Analysis Vermont South

7.17.3 Ancillary open space

Within Vermont South, some of the school grounds contribute to the sense of the space and greening. As noted above, Weeden Heights Primary School is located in Gap Area V3 and provides after school hour access and use of the school grounds and also has mature canopy trees that contribute to urban greening. North of Burwood Highway, Livingstone Primary School also offers some ancillary open space. This is in conjunction with the ancillary open space associated with the Vermont South Library and community facilities. There is a popular pedestrian link through this site between the community facility, the school and the shopping centre.

In some locations the pattern of subdivision layout is disjointed meaning there is not good permeability through some of the local street network. Pedestrian connectivity to the open space network is particularly poor south of Burwood Highway and accessing the regional open space network along Dandenong Creek.

7.17.4 Existing Vermont South community

Demographics

There are 12,044 residents living in Vermont South as at 2021 (using the Estimated Resident Population based on the 2021 Census, published on the .id Consulting Community Profile website, accessed July 2023). The population has increased since the 2007 Strategy was prepared with an additional 430 people living there, which represents an approximately 4 per cent increase in the population.

In terms of the population, compared to the City of Whitehorse, there is a higher proportion of people in from the age of 70 years and over. The young workforce proportion has remained the same and a lower proportion of the other demographics.

A slightly higher proportion of the population now live in medium and high-density housing compared with 2006. In 2006 approximately 94 per cent lived in separate houses and there were no high-density dwellings. Now in 2021, approximately 87 per cent live in the separate houses, with 10 per cent in medium-density housing and 4 per cent in high-density.

The residential population is forecast to increase 19 per cent through to 2036. The demographic change from 2006 to 2021 has seen a substantial increase in the older demographics in the 70 to 84 year age groups, while other age groups are proportionally slightly lower than in 2006, including young families with a slight increase in empty nesters in the 60 to 69 age group.

Summary of community engagement outcomes

A total of 111 open space surveys were received from Vermont South, which represents 7 per cent of the total surveys received.

The top three open space values of open space in Vermont South are very close to the municipal average. 'Walking and cycling', 'Place for children to play' and 'Dog walking' were ranked higher than the municipal average, while 'Urban greening/cooling' was

ranked lower than the municipal average. Compared to the other precincts, survey respondents in Vermont South have the highest request for open space improvements supported by the a higher proportion of requests for additional active facilities and park infrastructure.

Values of open space (top five)

- 63% A place to relax and unwind
- 57% Walking and cycling
- 55% Trees
- 54% Just being outside
- 51% Connecting with nature

Types of open space used and frequency of use (top five)

- 82% Local streets for exercise
- 78% Small local parks
- 76% Large parks and reserves (non-sporting)
- 61% Medium parks
- 57% Sporting reserves

Frequently visited types of open spaces (top five)

- 74% Local streets for exercise
- 60% Small local parks
- 38% Sporting reserves
- 32% Neighbourhood parks
- 31% Large parks and reserves (non-sporting)

Priority of facilities and amenities in open spaces (top five)

- 65% Seats
- 56% Walking paths
- 53% Picnic tables and seats
- 50% Trees
- 49% Additional greening for environmental health & wellbeing

(Note that 34% Play space was listed tenth)

Table 7.17d Most frequently visited open space in Vermont South

This table includes a summary of the 'Reasons to visit' and 'Suggested improvements' made by two or more people

No	Name	Reasons to visit	Suggested improvements
Open space within walking distance (top five)			
28	Terrara Park	• Dog walking (13) • Club based sport (5) • Walking (5) • Play - children (4) • Cycling (2) • Relaxing (2)	
25	Bellbird Dell	• Walking (10) • Dog walking (5) • Enjoy nature (3)	• Safety - improve passive surveillance (2)

No	Name	Reasons to visit	Suggested improvements
		• Open space - ambience, beauty (3) • Exercising (2) • Open space – peaceful (2) • Social - meeting family / friends / parties (2)	
9	Tyrol Park	• Walking (3) • Access - close to home (2) • Dog walking (2)	
8	Charlesworth Park	• Play - children (3)	
7	Davy Lane	• Walking (3) • Dog walking (2)	
Open space beyond walking distance (top five)			
18	Bellbird Dell	• Walking (10) • Play - children (5) • Cycling (3) • Dog walking (3) • Enjoy nature (3) • Exercising (2)	• Play space - upgrade (3)
13	Blackburn Lake Sanctuary	• Walking (8) • Play - children (5) • Dog walking (4) • Enjoy nature (3)	
13	Dandenong Creek Trail	• Walking (6) • Cycling (4) • Jogging (2)	
8	Terrara Park	• Dog walking (4) • Spending time outdoors (3) • Social - meeting family / friends / parties (2) • Walking (2)	
4	East Burwood Reserve		

General comments

This was an open-ended section of the survey where respondents could write any additional comments. The following list are comments made by two or more people in each category:

Open space

- Valued (5)
- Additional required (2)
- Improvements required (8)
 - Universal accessibility (2)
 - Protect and enhance open spaces (2)

Maintenance and management

- Dogs (4)
 - More designated dog parks (2)
 - Owners to be responsible for their dogs (2)
- Play space – required (4)
 - Better maintenance (2)
- Education – required (2)

Trees and Vegetation

- Greening - additional required (3)

Park Infrastructure

- Active facilities - additional required (14)
 - Fitness equipment (4)
 - Active recreation facilities (2)
 - Increase variety of play and recreation facilities (2)
 - Multi-purpose courts (2)
 - Waterplay (2)
- Park infrastructure - additional required (14)
 - Bins (3)
 - Seating under shade (2)
 - Bird/wildlife nesting boxes (2)
- Play space - additional required (3)
- Social infrastructure - additional required (4)
 - Youth area (2)

For further details on resident survey outcomes refer to the Report on Consultation Outcomes in Appendix A.

7.17.5 Analysis of future change and open space needs

Forecast population change

The Vermont South Precinct is currently forecast to reach a residential population of 14,296 by 2036, representing an additional 2,252 people, or a 19 per cent increase compared to the 2021 population.

The table below includes the forecast population growth for the residential population through to 2036. These figures are sourced from the *.id Forecast* website as part of the City of Whitehorse Community Profile, accessed 22/02/23.

Table 7.17e Population forecasts for Vermont South 2021 - 2036

Vermont South	2021	2026	2031	2036	Total change between 2021 and 2036
Residential population	12,044	13,152	13,722	14,296	+2,252

Source: *.id Forecast Whitehorse Community Profile*, accessed 26/07/23

Impacts of forecast change on open space

The forecast change will create increased demand for open space. This is both in relation to the forecast increase of 2,252 additional people visiting open space, and in the context of the increased urban densities, meaning people have less private open space.

In terms of the demographic change, the higher proportion of adults combined with the community survey feedback means there is a need to increase the range of facilities in open space in addition to play facilities. Providing a diversity of facilities also means there needs to be a diversity of different open space sizes and characters.

7.17.6 Vermont South Precinct Recommendations

Summary of overall intent

Provision and distribution

Vermont South is forecast to experience moderate change over the next 15 years with 2,252 new residents forecast to be living here by 2036 which represents a 16 per cent increase. The forecast change is mainly anticipated to be distributed along both sides of Burwood Highway. Terrara Park and Bellbird Dell are the most popular open spaces. Tyrol Park and Charlesworth Park are also nominated as being well used in the community survey. The Dandenong Valley Parklands and open space along Dandenong Creek was not well used, which reflects the lack of access and this Strategy recommends improvements to this. Open space is generally well distributed across the precinct with some overlap in the provision in the north-east area and a review of this in the longer term is recommended once the former Healesville Freeway Reserve is developed by Parks Victoria.

Quality and design

With the former Healesville Freeway Reserve defining the northern boundary, combined with the Dandenong Creek along the eastern boundary, the natural bushland character significantly contributes to Vermont South's landscape character. This is reinforced with other remnant bushland areas including Bellbird Dell, Hanover Park, Terrara Park, Tyrol Park and Licola Reserve. Priority projects include a major upgrade to Terrara Park to increase the diversity of unstructured and informal recreation facilities given it is a popular destination and has recent upgrades to the sporting pavilion. Other key priorities include a major upgrade to Bushy Park, Lookout Trail Park and the Dandenong Creek Linear Park as a major regional and neighbourhood destination open space corridor in consultation with Parks Victoria. Dalroy Bend Reserve, Hartland Park and Billabong Park are also identified for future major upgrades in response to their close proximity to forecast change along Burwood Highway. Livermore Reserve has excellent potential to become a key open space for this local neighbourhood as it benefits from expansive views over Morack Public Golf Course. In the longer term, once Livermore Reserve is upgraded, there is an opportunity to potentially reduce the overlap in provision of open space in this part of the precinct. Other changes include a major upgrade to Hanover Reserve which offers expansive elevated views and is located close to Livingstone Primary School.

7.17.7 Action Plan – Vermont South

A Additional public open space

No additional public open space is proposed in Vermont South.

B Existing open space

- The individual reserves are listed in alphabetical order.
- For Agency abbreviations, please refer to the Glossary in this Technical Report.
- Landscape Concept Plan – prepared to guide major upgrades to Neighbourhood, Local and Small Local open space.
- Landscape Masterplan – prepared to guide major upgrades to Regional and Municipal open space.

No.	Action	Responsibility	Priority
7.17B-1	Ballina Terrace Reserve Continue to maintain.	WCC	Ongoing
7.17B-2	Barossa Reserve Continue to maintain.	WCC	Ongoing
7.17B-3	Bellbird Dell (Vermont South side) Major upgrade to provide unstructured recreation facilities in Bellbird Dell including the potential to relocate them north within the reserve. <i>Additional information/rationale:</i> <i>Prepare a Landscape Concept Plan to guide the location and future design of minor upgrade works. The future location for facilities is to have good passive surveillance for safety reasons.</i>	WCC	Medium
7.17B-4	Billabong Park Prepare and implement a Landscape Masterplan to guide future upgrades to the structured sporting and unstructured recreation use and facilities in context of forecast change. Note that the open space contributions are to fund the unstructured recreation facilities only.	WCC	Very High
7.17B-5	Bushy Park Prepare and implement a Landscape Masterplan for Bushy Park, Lookout Trail Park and Dandenong Creek Linear Park to guide future major upgrade to provide circuit path and connections into the Lookout Park path network, interpretive signage and picnic area away from noise impacts of the Transfer Station. Refer also to Action 7.17B-9 and Action 7.17B-23.	WCC MWC PV	High
7.17B-6	Canowindra Close Reserve Continue to maintain.	WCC	Ongoing
7.17B-7	Charlesworth Park Minor upgrade to include paths, picnic and seating area along with other improvements primarily for the forecast community.	WCC	Medium

No.	Action	Respons- ibility	Priority
7.17B-8	Dalroy Bend Reserve Major upgrade to improve diversity of facilities and the landscape character primarily for the forecast community. <i>Additional information/rationale:</i> Undertake a major upgrade to improve the diversity of facilities and to strengthen the native character with perimeter planting to screen the high rear fence lines while retaining long views and vistas. In the longer term review the need to replace the play space given a new play space has been installed at Scarborough Park. This open space is anticipated to receive higher levels of use as forecast development occurs in its catchment.	WCC	Very High
7.17B-9	Dandenong Creek Linear Park (South of Burwood Highway) Major upgrade to be guided by the Landscape Masterplan prepared for this precinct as described in Action 7.17B-5. This will confirm the potential upgrade or relocation of the Vermont South Skate Facility, car parking and shared path access.	WCC MWC PV	Medium
7.17B-10	Dandenong Valley Parklands (North of Burwood Highway) Council to continue liaising with Parks Victoria to improve future access and management of this wetland as the existing boardwalk access is currently closed.	WCC PV	Ongoing
7.17B-11	Delacombe Reserve Minor upgrade to improve tree canopy cover and path network to the provide access.	WCC	Medium
7.17B-12	Galea Court Reserve Minor upgrade to install path link through the reserve, add seating areas and additional planting.	WCC	Medium
7.17B-13	Hanover Reserve Major upgrade to improve the play and picnic facilities along with protecting and enhancing the natural biodiversity values including the scattered remnant trees and key elevated location and views as a major destination open space. <i>Additional information/rationale:</i> Prepare and implement a Landscape Concept Plan to guide the future major upgrade including provision of social facilities to facilitate longer stays and take advantage of the elevated aspect, expansive views and good passive surveillance. Path links to the adjoining schools will improve the use and contribute to the character of this reserve.	WCC	Medium
7.17B-14	Hartland Park Minor upgrade to improve character and unstructured recreation facilities to meet local community needs, to address Gap Area VS3.	WCC	High
7.17B-15	Hatfield Court Reserve Continue to maintain.	WCC	Ongoing
7.17B-16	Healesville Freeway Reserve (Restricted area Terrara Road to Morack Road) Continue to liaise with Parks Victoria regarding finalisation and implementation of the Masterplan for this Reserve.	PV WCC	Ongoing

No.	Action	Respons- ibility	Priority
7.17B-17	Healesville Freeway Reserve (Section between Davy Lane and Terrara Rd) Identify opportunity to improve north-south link at Stevens Road to Wallbrook Reserve. Continue to liaise with Parks Victoria regarding finalisation and implementation of the Masterplan for this Reserve.	PV WCC	High
7.17B-18	Healesville Freeway Reserve (Terrara Rd to Morack Rd, excluding the Restricted Area) Continue to liaise with Parks Victoria regarding finalisation and implementation of the Masterplan for this Reserve.	PV WCC	Ongoing
7.17B-19	Justina Elonara Walkway Continue to maintain.	WCC	Ongoing
7.17B-20	Kara Walk Reserve Liaise with Parks Victoria regarding access into the Healesville Freeway Reserve from Kara Walk.	WCC PV	Medium
7.17B-21	Licola Reserve Major upgrade with unstructured recreation facilities to suit the demographics. <i>Additional information/rationale: This reserve is currently largely undeveloped with potential for it to be progressively improved. Prepare a Landscape Concept Plan to guide the future major upgrade and staging of works.</i>	WCC	Low
7.17B-22	Livermore Reserve Major upgrade to establish a community park overlooking the Golf Course with excellent sense of space and character. <i>Additional information/rationale: This reserve has excellent passive surveillance and potential. Prepare a Landscape Concept Plan to guide the future major upgrade once there is clear direction regarding priorities for the former Healesville Freeway Reserve Masterplan has been finalised. In the interim, Council to continue to maintain.</i>	WCC	Low
7.17B-23	Lookout Trail Park Major upgrade to improve the condition and grading of the path network, nature conservation values and investigate the potential to significantly upgrade the lookout as a key destination in the Dandenong Creek precinct. Refer also to Action 7.17B-5. <i>Additional information/rationale: The major upgrade works is to be guided by the Landscape Masterplan to be prepared for the precinct and described in Action 7.17B-5 for Bushy Park.</i>	WCC MWC PV	High
7.17B-24	Melissa Reserve Continue to maintain.	WCC	Ongoing
7.17B-25	Morack Public Golf Course (Restricted) Continue to maintain as a public golf course.	WCC	Ongoing
7.17B-26	Morack Road Reserve Continue to maintain.	WCC	Ongoing

No.	Action	Responsibility	Priority
7.17B-27	Nunawading and District Moto Cross Club (included in the Dandenong Creek Linear Park) - Restricted Continue to maintain.	WCC	Ongoing
7.17B-28	Pioneer Close Continue to maintain.	WCC	Ongoing
7.17B-29	Prestbury Reserve Continue to maintain.	WCC	Ongoing
7.17B-30	Scarborough Park Continue to maintain.	WCC	Ongoing
7.17B-31	Spark Rise Continue to maintain. In the longer term once upgrade of Hanover Reserve is complete, there is no need to replace the play facilities..	WCC	Ongoing
7.17B-32	Stanley Doreen Minor upgrade to provide, additional facilities to complement the play space and cater to a broader diversity of age groups. <i>Additional information/rationale: This reserve is located opposite a secondary college so there is potential for this open space to include facilities that appeal to secondary school students, in addition to the play space.</i>	WCC	Medium
7.17B-33	Talarno George Walkway Continue to maintain.	WCC	Medium
7.17B-34	Terrara Park Major upgrade to improve unstructured recreation use including play space upgrade, picnic facilities and circuit path. <i>Additional information/rationale: Prepare a Landscape Masterplan to guide a major upgrade to improve the neighbourhood unstructured recreation and informal social facilities including the provision of a picnic and BBQ area for social gatherings, upgrade the play space to a major play space along with a diversity of fitness/recreation facilities to appeal to all age demographics. Other facilities to consider include a perimeter path utilising the existing sports lighting. This is to include facilities and character that is distinctly different from the nearby Bellbird Dell.</i>	WCC	High
7.17B-35	Tyrol Park Minor upgrade to include a picnic facility and additional unstructured recreation facilities. <i>Additional information/rationale: Prepare a Landscape Concept Plan to guide the future upgrades to this reserve, in the context of future directions as part of the recommended Landscape Masterplan for Bushy Park/Lookout Trail Park/ Dandenong Creek Linear Park network. Refer to Action 7.17B-5.</i>	WCC	High
7.17B-36	Vermont South Skate Ramp Major upgrade to be guided by the Landscape Masterplan prepared for this precinct as described in Action 7.17B-5. This will confirm the potential upgrade or relocation of the skate facility, car parking and shared path access.	WCC	Medium

No.	Action	Respons- ibility	Priority
7.17B-37	Village Walk Reserve Continue to maintain.	WCC	Ongoing
7.17B-38	Walbrook Reserve Major upgrade as a key entry point for local community into the former Healesville Freeway Reserve.	WCC PV	High
7.17B-39	Winswood Reserve Continue to maintain in the short term. In the long term, review the need to retain this open space reserve given proximity to Livermore Reserve.	WCC	Ongoing
7.17B-40	Wynne Court Reserve Investigate option to reduce the size of this open space to retain a local link function, given overlap in open space provision.	WCC	Ongoing

8. Public open space contributions and funding

8.1 Overview

The Whitehorse City Council recognises in its Council Plan that green space is an essential part of the city's infrastructure. Please refer to Section 3 of this Strategy for a description of the open space network.

The Strategy includes actions to acquire and develop new land for open space, and to expand and/or upgrade existing open space reserves. The funding framework will assist the Council to achieve these projects.

8.2 Use of the 2024 Strategy in the Whitehorse Planning Scheme

The Strategy analysis, conclusions and recommendations provide the strategic justification for planning scheme amendments and other actions that support the City of Whitehorse's open space program.

A summary of the Strategy's key strengths and policy directions are recommended to be included in the Whitehorse MPS and policy sections of the Whitehorse Planning Scheme so that the rationale for subsequent Council decisions is clear. Refer to Recommendation 9.1-1.

8.3 Clause 53.01 subdivision contributions

The City of Whitehorse currently uses the *Victorian Subdivision Act 1988* and *Planning and Environment Act 1987* as the statutory basis for Council's levy of a public open space contribution. The Council requires a contribution at the time of subdivision to help pay for the open space needs of the occupants of the development. This is a per centage rate that is levied on the site value of the land on which the subdivision will take place. The City of Whitehorse proposes to continue with this approach.

The Council can levy a public open space contribution as land or the equivalent value in cash (or a combination of both). The value and form of the contribution is included as a condition of the subdivision permit and is paid by the site developer or, in the case of a

land contribution, transfer of the land to the City of Whitehorse. A land contribution enables the Council to acquire land at the equivalent cost of site value only.

8.3.1 Current schedule of Clause 53.01 public open space contribution rates

The City of Whitehorse already has a schedule of mandatory public open space contribution rates. These are included in the schedule to Clause 53.01 of the Whitehorse Planning Scheme. The current rate schedule was included in the planning scheme as shown in Table 8a by Amendment C99 on 18 February 2010 following adoption of the 2007 Strategy.

Table 8a Whitehorse Planning Scheme schedule to Clause 53.01.

SCHEDULE TO CLAUSE 53.01 PUBLIC OPEN SPACE CONTRIBUTION AND SUBDIVISION

1.0 Subdivision and public open space contribution

Type or location of subdivision	Amount of contribution for public open space
The subdivision of land on a strategic site (as defined by the Whitehorse Open Space Strategy or Council or State Government).	Minimum 4% Contribution rate greater than 4% subject to negotiation of a development plan
All other land	4%

Note: a strategic site is usually defined as a site with 10 or more dwellings.

The current 4 per cent public open space contribution rate is based on the apportioned cost of the eligible projects contained in the 2007 Strategy. The eligible projects include unstructured and informal recreation facilities and upgrades to open space, along with the provision of new Neighbourhood, Local and Small Local open space.

The scheduled contribution rate is considered to be a strategically based rate because it uses a strategic assessment of the open space needs of the Whitehorse community. The rate is averaged across all open space planning precincts and was calculated using the open space projects adopted in the 2007 Strategy, which included an analysis of the community's open space needs at the time and into the future. This method was endorsed by the Planning Panel that considered the C99 amendment.

8.3.2 Public Open Space Reserve

All cash contributions received by the City of Whitehorse are required to be quarantined in a Reserve account and the Reserve's movements published in the Council's Annual Report. Subdivision contributions are held in the Public Open Space Reserve. The funds must be spent on land acquisition for new or expanded open space reserves, establishment costs and capital works to upgrade existing reserves. The Reserve account cannot be used for maintenance. However, using the Reserve account to upgrade the quality of existing open space reserves and ensure the quality of new open space facilities aims to reduce maintenance costs in the longer term.

The Public Open Space Reserve has been divided into a general and land acquisition Reserve for accounting purposes. This division was created by the Council at its meeting of 15 March 2010 when the Council adopted the following resolution:

That Council follow the acquisition methodology as outlined in the Whitehorse Open Space Strategy, acquiring new open space as development opportunities occur over the 15 year timeframe of the Whitehorse Open Space Strategy subject to the following substantial changes;

1. *That interest generated by the Open Space Reserve shall be compounded.*
2. *That 60 per cent of the predicted new Open Space Contributions received annually, be held within the Open Space Reserve for the purpose of acquiring open space and committed as opportunities arise.*
3. *That resulting shortfalls for upgrades to existing open space be referred to the annual budget process.*

The Reserve income and expenditure reporting for previous financial years reflects this division. The Council recently decided to eliminate the division in the Reserve account, so reporting for the 2023 financial year is slightly different. Reporting over the five previous financial years is shown in Table 8b.

Table 8b City of Whitehorse Public Open Space Reserve (Clause 53.01)

Public Open Space Reserve - Financial year (\$ '000)	2023	2022	2021	2020	2019
Balance at beginning of financial year	20,807	20,340	19,035	18,176	14,973
Balance at beginning of financial year - land acquisition	32,771	29,743	25,381	23,827	18,262
Transfers from accumulated surplus [additional funds]	7,125	2,022	2,925	2,826	3,784
Transfers from accumulated surplus - land acquisition	-	3,028	4,362	4,174	5,565
Transfers to accumulated surplus [expenditure of funds]	- 2,909	- 1,555	- 1,620	- 1,967	- 581
Transfers to accumulated surplus - land acquisition				- 2,620	
Balance at end of financial year	57,794	20,807	20,340	19,035	18,176
Balance at end of financial year - land acquisition	-	32,771	29,743	25,381	23,827

Source: City of Whitehorse Annual Reports.

Collection of cash contributions by the City of Whitehorse (primarily since gazettal of Amendment C99) has resulted in the current Public Open Space Reserve balance. The Reserve holds the multi-year subdivision contributions of 4 per cent of site value. Currently about \$57.8 million in funds is available to be spent.

Contribution funds to date are intended to part fund the open space projects contained in the 2007 Strategy for the population arriving after 2006. Expenditure of the Reserve shows that between one and three million dollars were allocated for capital projects in recent years. Only one year shows expenditure for land acquisition. Not all the projects in the 2007 Strategy have been implemented, which is one reason that the Reserve holds the reported balance.

Going forward, this Strategy incorporates projects that are still required to be completed from the 2007 Strategy and funded from the existing funds in the Reserve. The Strategy also plans ahead for the next 15 years and identifies new projects that will be required to meet the needs of the forecast population in response to population growth and development in the City of Whitehorse.

8.3.3 Reasons the Clause 53.01 contribution rate should be updated

The current public open space contribution rate is based on the 2007 Strategy projects and the forecast population change at that time. There have been a great many changes that have taken place since 2007 that are recognised in this Strategy and that influence this Strategy's open space planning for the next 15 year period. This includes greater emphasis on local access to open space, especially during the COVID-19 lockdowns, the urban heat island effect requiring more green spaces for urban cooling, and the changing climate that is challenging human and species resilience. There have also been changes in planning policy and development trends in relation to population growth, land use, built form and densities, and economic and demographic changes. The analysis and recommended actions in the 2024 Strategy compared to the 2007 Strategy indicate that a review and recalculation of the contribution rate is appropriate.

8.3.4 Principles used in recalculating a new Clause 53.01 contribution rate

In undertaking a recalculation of the public open space contribution rate, the City of Whitehorse has reviewed the purpose of a Clause 53.01 contribution, which is to provide for the open space needs of those who will occupy the development from which the contribution is collected. Accordingly, use of the contributions will be directed to local facilities that are accessible and designed to meet the needs of the new residents and workers who will locate in the municipality.

The collected contribution funds must be spent on open space land acquisition and capital works within the City of Whitehorse – open space establishment or expansion and park improvements but not like-for-like replacement and maintenance.

Principles for calculating a new contribution rate can be summarised as follows.

- An effective and accepted method is used to determine the schedule of public open space contribution rates. The same method used for the 2007 Strategy will be used for the revised, averaged rate calculation.
- Open space capital projects and land acquisitions that are to be included in the rate calculation must meet the following criteria:
 - The land is reserved or zoned for public open space or is capable of being included in one of the open space zones
 - The land is owned by the City of Whitehorse or the Victorian Government including Crown land managed by the Council
 - Access is not restricted, and no fee is required for general public use.
- Projects to be included in the revised rate have been developed with reference to the *Subdivision Act 1988*.
- Land acquisition costs used in the rate calculation are to be based on average Capital Improved Value for the local area. Capital works costs may include a small percentage value for project design, survey work and contingency.
- Sufficient funds can be raised over the 15 year planning period of the 2024 Strategy to assist delivery of the recommendations in each part of the municipality, recognising that projects in existing urban areas will be funded by a mix of funding sources.
- The apportioned value of eligible projects for the new population will form the basis for calculating the updated public open space contribution rate. Open space costs will be apportioned fairly and equitably to the new population (based on population data for 2021 to 2036) and the existing population (those present by 2021). The apportionment will reflect both the need for new open space created by population growth and the benefits to the new population.
- Flexibility allows for changes in open space precincts, such as changes in the anticipated rate of development and fluctuations in property values or open space project costs.
- Once implemented, the schedule of contribution rates is straightforward to administer and will provide financial benefits to Council.
- There is a reasonable rate on development that balances development industry considerations with public policy and best practice for public open space.
- Projects are not being funded through another contribution mechanism such as a Development Contributions Plan (DCP).

8.3.5 Proposed Clause 53.01 public open space contribution rate

An averaged public open space contribution rate, based on the analysis, conclusions and recommendations in this Strategy, will be in the order of 7 per cent. Once included in the Whitehorse Planning Scheme, this rate will apply to all eligible subdivision in the City of Whitehorse with the exceptions of the following locations.

The Box Hill precinct contains a significant amount of non-residential floorspace. The forecast is for 4,995 dwellings, which does not account for the effect of the Suburban Rail Loop railway station. There is no current forecast for the 15 year increase in non-residential floor space and its distribution in the precinct. The last review of a public open

space contribution rate was undertaken in 2020. Council will rely on this rate calculation – 10.7 per cent.

There are three major strategic development sites in the City of Whitehorse that are currently under development. These include the two former brickwork sites and the former film studio site. The public open space contribution for each of these sites has been included in their endorsed development plans. The value of the land contributions and capital works provided by the developer for these sites is not included in the averaged rate calculation.

	Recommendation	Responsibility	Priority
8.3-1	Amend the schedule to the Whitehorse Planning Scheme Clause 53.01 Amend the schedule as follows: - Box Hill precinct – 10.7 per cent public open space contribution rate subject to SRL Authority precinct plans - Former Burwood Brickworks site as shown on the development plan titled and approved on - Former Daniel Robertson Brickworks site as shown on the development plan titled and approved on - Former Global Film Studio site (Forest Ridge) as shown on the development plan titled and approved on - All other precincts – in the order of a 7 per cent public open space contribution rate.	WCC	Very High

8.4 Clause 45.06 Development Contributions Plans

8.4.1 Overview

Development Contributions Plans (DCP) have a different statutory basis than the subdivision public open space contributions levy. The statutory basis for a DCP is found in Part 3B Development Contributions of the *Planning and Environment Act 1987*. The DCP can fund a range of physical and community infrastructure that extends well beyond projects in public open space.

A DCP contribution is based on a dollar contribution amount per dwelling or floor space area. It is collected at either the time of subdivision / development approval or building approval. Timing is set out in the DCP.

The requirements for establishing a DCP and delivering the projects contained within the plan are different than for subdivision public open space contributions. A DCP requires

the City of Whitehorse to commit to implementing defined projects in advance of receiving the contribution funds, with no flexibility to change the project mix over the life of the plan.

DCP requirements are set out in the Development Contributions Guidelines, the Ministerial Direction on Preparation and Content and Reporting Requirements for Development Contributions Plans, and in the adopted DCP.

A DCP is implemented through an amendment to the Whitehorse Planning Scheme and the use of Clause 45.06 Development Contributions Plan.

8.4.2 The Whitehorse Development Contributions Plan (DCP)

The City of Whitehorse has adopted a municipal wide Development Contributions Plan (Amendment C241). The plan is incorporated in the Whitehorse Planning Scheme and through use of the Development Contributions Plan Overlay.

The DCP only includes projects that are not currently being funded by subdivision public open space contributions. All open space projects are construction works (improvements to existing open space reserves) with a focus on renewal / upgrades of sporting pavilions, club rooms and play spaces. Land acquisition for new open space has not been included in the DCP.

8.5 Clause 45.01 Public acquisition

Using Victoria's Planning System (October 2022) explains the use of the Public Acquisition Overlay (PAO).

This overlay identifies land that is proposed to be acquired for a public purpose. It has the effect of reserving the land under the Land Acquisition and Compensation Act 1986. The authority acquiring the land and the purpose of the acquisition must be set out in the schedule. Once land is acquired by a public authority, it should be rezoned to an appropriate zone.

The City of Whitehorse can use the PAO to purchase land for public open space. Alternatively, the Council can purchase land opportunistically when it comes on the market for sale or by negotiation with the landowner. Note that land purchase is an option when an appropriate parcel of land cannot be acquired through a public open space land contribution.

When considering land purchase, the City of Whitehorse should determine if there is strategic support for the site selection. This should include confirming that there is an identified need for expanding or creating a new open space reserve in that particular location and ensuring the land in question meets the criteria for open space reserves set out in Section 5 of the Strategy.

The main advantage of the PAO is that the City of Whitehorse has confidence that it can secure the land for public open space. The disadvantage is that the Council has to

commit early to a specific land purchase and to do this through a planning scheme amendment. Once the PAO is in place, land acquisition can be triggered at any time by the buyer (the City of Whitehorse) or seller (landowner). There are usually additional relocation and related costs paid to the seller with the PAO.

The PAO may lock the City of Whitehorse into land purchase in locations where the forecast development has not arrived as quickly as was anticipated at the time that the PAO was put in place. This is not necessarily a problem if the Council is not forced into purchase by the landowner before it is necessary.

The main advantage of an opportunistic purchase of land is that the City of Whitehorse can usually purchase at market value with the additional costs being confined to the normal costs of property purchase. This approach also allows the Council to respond more readily in locations where development is occurring and there is an influx of new population that is putting additional pressure on the open space network.

The disadvantage of opportunistic purchase is that affordable land parcels may become scarce as the City of Whitehorse waits for the forecast population to arrive before acting. Property prices generally increase in areas undergoing renewal. If the Council has available funds, then it should purchase land for new public open space as early as possible in those established areas where significant change in built form density and population numbers is encouraged.

A PAO is included in the Whitehorse Planning Scheme with use of Clause 45.01 Public Acquisition Overlay. It is noted that the current schedule to Clause 45.01 includes a PAO1 for the City of Whitehorse to acquire public open space. At this point the PAO1 overlay does not appear on the planning scheme maps.

8.6 Other funding sources

Options available in the Whitehorse Planning Scheme are covered in Sections 8.2 to 8.5. It is noted that even where contributions are available, Council will need to contribute a proportion of funding from other sources to the project budget on behalf of the existing population (with reference to the original cost apportionment).

8.6.1 Conversion of Council land

Conversion of City of Whitehorse land from a non-open space use to an open space reserve qualifies as a contribution on behalf of the existing population. This form of contribution is recognised in the method for calculating the public open space contribution rate. Any land contribution from the City of Whitehorse has the same weight and cost value as a developer land contribution.

8.6.2 Council revenue and grants

The open space program will continue to be funded through property rates and other forms of revenue, as well as external funding grants from the Commonwealth and Victorian Government. When apportioning open space costs, these funding sources are counted as contributions on behalf of the existing population.

8.7 Funding framework for open space

The Clause 53.01 and Clause 45.06 contributions funding options should operate together as shown in Table 8c. Funding should also include grants and City of Whitehorse revenue.

Table 8c *Funding framework for open space*

Funding source	Use funds for these items
Clause 53.01 Public Open Space Contribution and Subdivision	As the contribution to open space budgets on behalf of the new population for: - Land acquisition for new open space reserves – Neighbourhood, Urban Civic, Local and Small Local. - Neighbourhood level facilities (i.e. not structured sport and recreation facilities) in Regional and Municipal open space. - Unstructured and informal recreation facilities including paths, shelters, drinking taps, picnic tables/settings, barbecues, waste bins, public toilets, seating, lighting, trees, garden beds, plantings, open grassed areas for informal use, dog off-lead areas and sustainable water supply.
Clause 45.06 Development Contributions Plan	As the contribution to open space budgets on behalf of the new population for: - Outdoor structured (organised) sporting facilities including sports fields, sports pavilions, sports field lighting, sports courts, etc. - Indoor sport and recreation/leisure facilities such as indoor playing courts/stadiums and aquatic facilities. - Regional cycling paths. - Regional structured sport and recreation / leisure facilities. - Drainage infrastructure (encumbered open space).
Grants and Council revenue	As the contribution to open space budgets on behalf of the existing population.

9. Implementation

9.1 Governance Framework

A Governance Framework should be adopted for decisions about the implementation of the 2024 Strategy and the use of the Public Open Space Reserve.

Successful Strategy implementation will require commitment from a wide range of Council functional areas across multiple years. Coordination from a Steering Group comprising the CEO and Council's Executive Leadership Team would be an advantage.

Under the leadership of the CEO or their designate and supported by the Executive Leadership Team and relevant Council officers, the Steering Group would undertake the actions described in Table 9a.

Table 9a ***Scope of responsibilities for proposed Steering Group***

Action	Description
Strategic open space implementation plan	Prepare a strategic 5 year open space implementation plan based on the information, analysis, Actions, Recommendations and priorities contained in this Strategy. Focus on Very High and High priority projects for inclusion in early implementation plans.
Sub-precinct open space needs assessments	Include at least 5 annual sub-precinct open space needs assessments as outlined in Section 5.2.2.
Land acquisition for open space	In line with the findings of the sub-precinct assessments, identify opportunities to acquire land for new open space and expand existing open space, including: - land purchase - public open space land contribution - conversion of Council or other public land to open space.
Nominate project leads	Nominate the functional manager responsible as project lead for each item in the strategic 5 year open space implementation plan. Identify other functional areas of the Council expected to contribute to successful implementation.
Council open space budgets	Input into annual Council budgets for the open space program with reference to the strategic 5 year open space implementation plan. There should be a focus on Very High and High priority projects during early implementation years.
Public open space reserve	Oversee the best use of the Public Open Space Reserve in annual Council budgets with reference to statutory requirements on how Reserve monies may be spent and the funding apportionment to residents and workers on whose behalf a public open space contribution is made.

Action	Description
Six monthly reviews of Strategy implementation	Undertake regular reviews identified in Section 9.4.2 and Section 9.4.3 to inform Steering Group decisions.

No.	Recommendation	Responsibility	Priority
9.1-1	Adopt a governance framework for implementation of the Strategy based on Table 9a, including a system to monitor and track projects, actions and responsibilities.	WCC	Very High

9.2 Responsibilities and actions

The functional area of the Council responsible for open space planning should have lead day to day responsibility for implementations of the Strategy. A number of other areas of the Council will also be responsible for implementing key actions and recommendations. Refer to Table 9b.

Table 9b *Implementation responsibilities of the different functions of Council*

Council function	Responsibilities
Open space, leisure and recreation planning	• Monitor and record the status and completion date of the individual Actions in the precincts for reporting to the Steering Group. • Undertake open space sub-precinct assessments for the sub-precincts identified as requiring additional open space in the Strategy. Proactively flag public and private land opportunities for potential future acquisition of land for new open space consistent with the Strategy recommendations for consideration by the Steering Group. • Review the open space component of development applications, including within the context of the open space precinct assessments, to determine where open space land contributions are to be requested in consultation with strategic city planning and statutory approvals. • Provide input to the open space component of Structure Plans and other planning documents. • Prepare briefs for Landscape Masterplans to ensure that the design considers the open space hierarchy and character classification; Strategy precinct / sub-precinct analysis and recommendations; community consultation results; planning and built form context; residential and employment growth occurring or forecast to occur within the Strategy sub-precinct; and the Strategy Design and Management Guidelines. • Prepare and implement Landscape Masterplans and Landscape Concept Plans for open space reserves in accordance with a brief, the Design and Management Guidelines in this Strategy and in

Council function	Responsibilities
	consultation with the parks, natural environment and asset managers. • Prepare and implement the recommendations included in Section 6, Design and Management Guidelines in this Strategy, in coordination with the relevant areas of Council. • Determine the structured sport and recreation facility provision in open space in the context of the recommendations in the Strategy. Responsible for structured sport and recreation facility provision and management in open space including the annual sports facility and ground allocations. • Responsible for the provision and ongoing management of the leisure facilities in open space.
Strategic city planning and statutory approvals	Ensure the Whitehorse Planning Scheme and other strategic documents guiding future development are consistent with the Strategy including: • Amend the planning scheme to implement key strategic elements of public open space, especially Council's open space objectives and strategies and its public open space program as contained in this Strategy • Update Clause 02 consistent with this Strategy, e.g. contributions policy, criteria for new open space • Introduce guidelines for development adjoining/intruding on public open space and guidelines for sunlight access to public open space • Include requirements for new open space in Urban Design Frameworks, Structure Plans, development plans and related planning scheme amendments consistent with the Strategy recommendations. Include detailed direction on built form and sunlight access for open space located in medium and high density precincts through provisions for development on private land (e.g. Design and Development Overlay provisions) • Continue to administer the public open space contributions program through Clause 53.01 of the Whitehorse Planning Scheme • Liaise with developers in the initial development application stage to achieve desired outcomes for land for open space as set out in this Strategy and seek internal referral advice from open space planning regarding the outcomes • Consider if use of the Public Acquisition Overlay is warranted in specific circumstances • Coordinate activities and conduct referrals and coordination of outcomes between open space planning, city strategic planning and statutory approvals • Ensure that existing reserves and land added to the public open space network is zoned Public Park and Recreation Zone or Public Conservation and Resource Zone.

Council function	Responsibilities
Liaison with the Victorian Government	• Integrate the outcomes of this Strategy with major projects including external liaison with the Victorian Government. • Coordinate / assist negotiations to acquire identified parcels of Victorian Government land for open space.
Property	• Develop a program to purchase land for new open space in line with the decisions of the Steering Group and consistent with the spatial needs analysis in the Strategy and the criteria for new open space. • Refer land purchases to strategic city planning and statutory approvals for rezoning to the Public Park and Recreation Zone or Public Conservation and Resource Zone. • Refer land purchases for addition to the Council's asset register. • Oversee leasing or similar use arrangements in open space.
Parks and natural environment management	• Implement the capital works program in open space to deliver upgrades to existing and new open space. • Prioritise the works in the renewal program to complement the capital works program and priorities in this Strategy. • Annual budget for operational and maintenance expenditure in open space. • Responsible for implementing the Urban Forest Strategy and management of trees in open space. • Responsible for gaining input from open space planners in relation to proposed works in open space.
Delivery of major capital projects and asset management	• Deliver open space improvement projects in partnership with open space, leisure and recreation planning. • Provide engineering and infrastructure design investigation and advice, particularly for improving on-road pedestrian and bicycle links and road crossings and car parks. • Provide input to the open space planners regarding opportunities for future road closures that provide new or expand existing open space. • Provide technical advice and assistance regarding sustainable water use in open space. • Ensure new open space and upgrades to existing open space are updated in the Levels of Service Asset Management System. • Ensure new parcels of open space are added to the asset register.
Financial and corporate management	• Contribute to achievement of the Strategy through the annual budget process. • Allocate public open space contributions as a percentage of open space project budgets in accordance with Strategy costings. • Maintain an effective recording system for public open space contributions to assist appropriate recording of contributions and spending of funds.

Council function	Responsibilities
Community safety	• Domestic animal management. • Development and enforcement of regulations in and adjoining open space.
Engagement with communities including Aboriginal and Torres Strait Island people	• To guide the community consultation methods to be implemented for any open space improvement or development works. • To inform the implementation of open space improvement and development works in sites of cultural significance and other relevant sites to the Wurundjeri Woi-wurrung and Aboriginal and Torres Strait Islander people.
Arts and culture planning and events	• Responsible for scheduling and managing festivals and events in open space in consultation with open space planning. • Responsible for delivery of public art in open space in partnership with open space planning.

Statutory changes to the Whitehorse Planning Scheme described in Table 9b and shown in Recommendation 9.2-2 will be needed to successfully implement the Strategy.

No.	Recommendation	Responsibility	Priority
9.2-2	Amend the Whitehorse Planning Scheme • Amend policies, objectives and guidance to support the City of Whitehorse's implementation of the Strategy. Include a summary of this Strategy's key strengths and policy directions in the MPS and other local policies as appropriate. • Amend the schedule to Clause 53.01 as shown in Recommendation 8.3-1. • Update local policies and objectives relating to the open space network to support planning decisions. • Acknowledge the impacts of significant future change on open space, such as the Suburban Rail Loop project with significant population growth and development being planned near future stations. • Include criteria for new open space to be met for land that is levied or accepted as a public open space contribution. • Include guidelines for development adjoining and nearby public open space. • Include the buffer zone requirement along waterways and drainage reserves. • Update requirements for sunlight access to Winter sun in open space reserves. • Update open space zonings – land to be in public ownership and eligible for zoning as public open space.	WCC	Very High

9.3 Prioritisation Framework

9.3.1 Overview

The prioritisation framework provides a guide for the implementation of the Strategy over the next 15 year period and can be referenced when preparing or updating the strategic 5 year open space implementation plan referred to in Section 9.1. The recommended priorities for implementing the Recommendations and Actions in this Strategy are informed by a range of factors including:

- The quantity and distribution of existing open space
- The extent of forecast change
- Existing urban context and proposed urban form
- The individual open space site assessments
- The hierarchy, role and character of the open space
- Community feedback.

It is recognised that there will be influences on the timing and implementation of each Recommendation and Action that is outside the scope of the Strategy, including:

- The annual allocation of funding as part of the whole of Council budget process
- Implementation of the public open space renewal program
- Condition assessments of facilities and assets including safety audits
- The actual rate and location of urban growth and change
- Influence of other major projects or changes in the strategic direction that may arise in the future.

9.3.2 Timeframe

The Strategy is intended to be implemented over a 15 year period. It is based on the analysis of forecast change over a 15 year period - taken from 2021 to 2036, which are ABS Census years and allow for regular monitoring and review of the forecasts with actual census data at the end of each 5 year period. The actual start date is expected to be after adoption of the Strategy which is anticipated to be in 2024. In the meantime, the 2007 Strategy will continue to be relevant.

The timeframe applied to each recommendation has been done at a strategic level and is based on the influences that are researched and included in the Strategy.

Priority	Timeframe to commence Action
Very High	Years 1 to 4
High	Years 5 to 7
Medium	Years 8 to 10
Low	Years 11 to 15
Long Term (LT)	Beyond 15 years
Ongoing	All years

Some of the Actions may take a one to two year timeframe to implement, whereas others may take four to five years to implement from start to finish. For example, a major upgrade of a large open space will take a number of steps including preparation of the masterplan, detailed construction drawings for works, tendering the work and building the works.

Where new open space is proposed, the sub-precinct assessment of suitable open space locations is intended to be undertaken first. The new open space actions have Very High or High priorities on them so that the sub-precinct assessment work is undertaken early in the Strategy implementation process. The timing for delivery of the new open space on the ground will generally be at least three years from the commencement of the sub-precinct assessment. In summary, the priority relates to commencing the project, acknowledging the completion date will vary significantly depending on the scale and size of the project.

9.3.3 Factors that influence the prioritisation framework

(i) Quantity and distribution of public open space

Priorities vary from the top priority being in a gap area with no available open space within a safe and easy walk of the population to areas with access to existing open space.

Priority	Description
1	Gap area with no open space available within a safe and easy walk
2	Gap areas with no open space available but where the nearest public open space is accessible via the local street network without having to cross barriers (i.e. major roads/railways/waterways)
3	Gap area with no open space available within a safe and easy walk, but where there is some ancillary open space (e.g. school grounds or church grounds that are open to the public).

(ii) Extent of forecast change

Areas with higher levels of forecast change will generally have a higher priority for new projects compared to those without forecast change. This is due to the impact that increased numbers of people using open space have on the condition and availability of open space.

Priority	Description
1	More than a 20 per cent increase in population
2	Between 10 and 19 per cent increase in population
3	Between 0 and 9 per cent increase in population

(iii) Individual open space site assessments

The condition of the existing open space, its character, and the diversity and condition of facilities influences the priority of a project. If the facilities are in poor repair or do not exist, then these projects are given a higher priority than those in better condition. Similarly, if the open space lacks a defined character and appears poorly used.

Priority	Description
1	Facilities and/or the open space is in poor condition or there is a lack of facilities in the reserve where they would normally be required.
2	Facilities and/or the open space is in moderate condition but will need some future work to meet contemporary and future open space needs.
3	Facilities and/open space are in adequate condition, however they will need improvement in the medium to longer term.

(iv) Hierarchy, role and character the open space

Priority	Description
1	Where the open space design and character does not meet its identified hierarchy and role.
2	Where the open space design and character partially meets its identified hierarchy and role.
3	Where the open space design and character meets its identified hierarchy and role but could be improved to improve its contribution.

(v) Community feedback

The review of the consultation outcomes via the community survey have been factored into the recommendations and actions. Where there are specific repeated requests for upgrades by the community which also correlate with the site assessment work, then the priority is increased.

9.3.4 How the prioritisation framework is applied

Each individual project is considered in the context of the five key factors described in this chapter. There is also a degree of professional judgement applied to the assessment, for example, ensuring there is a distribution of projects across all precincts.

Step	Analysis
1	Identify which precinct/suburb the open space project is located in.
2	Review the precinct summary to understand the following: - The total quantity and distribution of open space including whether it is in a gap area and what type of gap area. - Open space hierarchy and the context of the other open spaces around it and the catchment of users.

Step	Analysis
	• The presence of other ancillary open space. • The extent and location of forecast change including the anticipated density - i.e. standard, medium or high density. • The quality and character of the existing open space in the precinct / suburb • The location of the proposed project / open space relative to all items noted above.
3	Based on review of items in Step 2, assign the appropriate priority in the precinct.

9.4 Monitoring and review

9.4.1 Overview

The goal of the monitoring and review program is to identify how well the objectives, Actions and Recommendations of the Strategy are being met and to ensure that the Strategy remains on track. In particular this will involve monitoring the number of new open space reserves added to the open space network, the number of expanded reserves, the open space capital works program and the City of Whitehorse allocation of resources to achieve the Strategy as a whole-of-Council project. The review of how successfully the Strategy is being implemented should be tied to the responsibilities and actions, and the priorities for implementation, that are covered in the previous sections.

9.4.2 Information to be collected to support monitoring and review

It is recommended that the Council organisation document the following information. The functional area of the Council to collect this information is noted for each heading.

(i) Public open space network (Open space planning, Property, Finance)

- City of Whitehorse data base with the quantity of open space area as a proportion of the total land area of the city at both a municipality-wide level and a precinct level.
- Land acquisition for new open space reserves – number of reserves acquired against number of new open space reserves required in the precinct. Acquisition includes conversion of City of Whitehorse or other public land from another use to public open space, a developer land contribution or land purchase.
- The establishment of new open space reserves – the status of ongoing establishment and completed projects.
- The number of capital works projects – list of budgeted projects and their status for the financial year including whether the Strategy designates them as a priority project.
- To be developed: establish qualitative measures for design, community use, events, etc.

- (ii) **Public open space contributions program (Strategic city planning, Statutory approvals, Subdivision officer, Valuations)**
 - The street address, open space planning precinct, site area (sqm) and site value of each land contribution from development.
 - The street address, open space planning precinct, site area (sqm), site value and contribution dollar amount for each subdivision contributing a cash contribution.
 - The total dollar value of the land and cash contributions received each financial year.
- (iii) **Open space budgets/expenditure (Open space planning, Finance)**
 - Expenditure of funds for each land purchase and capital works project with the dollar amount for each source of funding by open space planning precinct – City of Whitehorse revenue, grants, public open space contributions.
 - Expenditure of public open space cash contributions as a proportion of project budgets (with reference to the funding apportionment to residents and workers on whose behalf a public open space contribution is made).
- (iv) **Development and policy trends (Strategic planning, Statutory planning, Rates)**
 - The private developments completed during the financial year, with basic information about the development, e.g. land use type, dwelling numbers, commercial floor area.
 - Location and number of dwellings in residential developments that do not subdivide, e.g. student housing and build to rent developments.
 - Victorian Government policy, Major Transport Infrastructure Authority, Suburban Rail Loop Authority, Planning Panels Victoria and VCAT decisions that could affect how the City of Whitehorse implements the public open space contributions program, including requiring land contributions at the time of subdivision.

9.4.3 **Steering Group monitoring and review**

Six monthly monitoring of the collected information will be helpful in reviewing the timing of Strategy implementation, the number of projects that are able to be funded and completed, and barriers and solutions for difficult sites. For example:

- Status of budget allocations and progress of the scheduled Actions and Recommendations
- Yearly and cumulative number of new reserves acquired and established in relation to Strategy priorities and Actions at the precinct level and by financial year
- Yearly and cumulative number of expansions to existing reserves acquired and established in relation to Strategy priorities at the precinct level and by financial year
- Yearly and cumulative number of capital works projects completed in line with Strategy priorities
- Yearly and cumulative public open space contributions received, comparison to forecast income, and any significant deviations with reasons why
- Yearly and cumulative development compared to Strategy forecasts. If over time the patterns of development within the City of Whitehorse differ from the development forecasts used to prepare this Strategy, then the prioritisation and timing of Strategy actions may need to be revised

- Development trends affecting the level of public open space cash contributions being collected, e.g. build to rent, student housing
- Policy and statutory changes affecting Strategy implementation and the public open space contributions program.

9.5 Reporting

Council uses its Annual Report to communicate the programs it delivers to a wide audience and includes notable achievements during the financial year. There is the opportunity to provide an overview of this Strategy's adoption and implementation in future Annual Reports.

Council reports annual cash contributions to the Public Open Space Reserve account in the notes to the Annual Report. The text that accompanies the financial tables should also note any land contributions received during the year.

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11. Glossary

The abbreviations and terms are listed in alphabetical order

Abbreviation/Term	Definition in this Strategy
ABS	Australian Bureau of Statistics
Activity Centre	A physical urban location that provides a mix of land use activities including goods, services and facilities within walkable distances of local communities and accessible public transport modes.
Ancillary open space	Public land that contributes to open space, is often perceived as open space, but is not primarily reserved for recreation and/or nature conservation purposes and is therefore not included in the definition of public open space used in this Strategy. Refer to Section 1.2 of this Strategy for a more detailed description.
Biodiversity	Biodiversity (biological diversity) is the variability among living organisms from all sources (including terrestrial, aquatic, marine and other ecosystems and the ecological complexes of which they are part), at all levels of organisation, including genetic diversity, species diversity and ecosystem diversity.
CPTED	Crime Prevention Through Environmental Design (CPTED) is a crime prevention strategy that focuses on reducing the incidence and fear of crime in planning and design of cities and neighbourhoods.
Cultural heritage	Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects. Places may have a range of values for different individuals or groups. <i>Source: Definition from The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 1999 edition</i>
DOTP	Department of Transport and Planning in the Victorian Government.
Encumbered open space	Land that can be used as open space, but this use is restricted by other values or purposes such as presence of underground services water bodies, flood management etc.
ESD	Environmentally Sustainable Development
Informal use	This refers to the casual use of open space including sitting in the open space, picnicking, meeting people, reading a book, enjoying the ambience, relaxing etc.
MAC	Major Activity Centre
MPS	This is the Municipal Planning Strategy, which is concise description of overall strategic policy directions for the municipality in the Planning Scheme.
MWC	Melbourne Water Corporation

Abbreviation/Term	Definition in this Strategy
Public realm	Public realm is a term referring to all public open space, along with other publicly owned land between buildings including streets. Refer to Section 1.2 for a more detailed description of this term.
RAP	Registered Aboriginal Party
Structured sport and recreation	The activity is organised by a club, association, school or community group and participation is by becoming a member of the club or on a fee-paying basis.
Universal Design	Universal Design is defined as the designing of environments for people of all ages and abilities.
Unstructured recreation	The activity is not organised by a club or other group, where participation is initiated by individuals.
Urban heat island effect (UHI)	Is the cumulative effect of modifying the natural environment through urbanisation including the covering of the soil surface, causing a rise in temperature of any urban area. This results in a defined, distinct "warm island" among the "cool sea" of lower temperatures of the surrounding nearby natural landscape. The urban surfaces are prone to store and release large quantities of heat.
VPA	Victorian Planning Authority
WCHAC	Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation, which is the Registered Aboriginal Party (RAP) for the City of Whitehorse.
WHO	World Health Organization
WSUD	Water sensitive urban design

Attachments

Drawings – A3 size

Dwg No.	Drawing Title	Date
WOSS-01	Existing Open Space, Whitehorse Open Space Strategy 2024	22/02/24
WOSS-02	Open Space Hierarchy, Whitehorse Open Space Strategy 2024	22/02/24
WOSS-03	Ped Shed Analysis, Whitehorse Open Space Strategy 2024	22/02/24

Appendix A

Report on Community Open Space Survey Outcomes

Prepared by City of Whitehorse,